4.6 Biological Resources

Information contained in this section is summarized from the *Grantville Redevelopment EIR – Biological Opportunities and Constraints Analysis* (Rocks Biological Consulting, Inc., 2004). This document is provided in Volume II Appendix F of this EIR.

4.6.1 Existing Conditions

The Grantville Redevelopment Project Area and surrounding lands primarily consists of urban development (682.5 acres); however, native habitat is present in the Project Area, a majority of which is located in or near the San Diego River.

4.6.1.1 Botanical Resources-Flora

A. Vegetation Communities

A total of 11 vegetation communities/land uses as described by Holland (1986) and/or Oberbauer (1996) have been delineated within the Project Area and are presented in Figures 4.6-1, 4.6-2, 4.6-3, and 4.6-4. The following are brief descriptions of the 11 vegetation communities, for a detailed description please refer to the Biological Opportunities and Constraints Analysis (Volume II, Appendix F of this EIR).

Native Upland Communities

Diegan Coastal Sage Scrub (Holland Code 32500; Tier II habitat type) occupies approximately 109.4 acres throughout the Project Area, of which, 9.0 acres occur in Subarea A, 100.0 acres in Subarea B, and 0.4 acres in Subarea C (Table 4.6-1). This habitat is comprised primarily of low, soft-woody subshrubs of approximately one meter (3 ft) in height, many of which are facultatively drought-deciduous.

Large patches of Diegan Coastal Sage Scrub within the Project Area have been disturbed because of mechanical clearing and grading and support a high abundance of non-native, weedy grasses and forbs amongst the native shrubs.

Wetland Communities

Riparian Forest (Holland Code 61000) occupies approximately 65.0 acres within the Project Area including 26.0 acres in Subarea A and 39.0 acres in Subarea B. There is no Riparian Forest in Subarea C (Table 4.6-1). This habitat is an open or closed canopy forest that is generally greater than 6 m (20 ft) high and occupies relatively broad drainages and floodplains supporting perennially wet streams.

Southern Riparian Scrub (Holland Code 63300) occupies approximately 18.0 acres within the Project Area, of which, 1.9 acres occur in Subarea A and 16.1 acres in Subarea B (Table 4.6-1). There is no Southern Riparian Scrub in Subarea C. This habitat varies from a dense, broad-leafed, winter-deciduous association dominated by several species of willow to an herbaceous scrub dominated by mulefat.

Freshwater Marsh (Holland Code 52400) occupies approximately 1.8 acres within the Project Area, of which, 1.4 acres in Subarea A and 0.4 acres are in Subarea B (Table 4.6-1). There is no Freshwater Marsh in Subarea C. Freshwater Marsh occurs in wetlands that are permanently flooded or saturated with fresh water (Rocks Biological Consulting, 2004).

Open Water (Oberbauer Code 13140) occupies approximately 37.0 acres within the Project Area, of which, 11.0 acres occur in Subarea A and 26.0 acres are in Subarea B (Table 4.6-1). There is no Open Water in Subarea C. There are large ponds within the San Diego River that reduce water flow velocity of the River and contain water throughout the year. The Open Water areas often support Freshwater Marsh or Southern Riparian Scrub along its margins and in some instances are being invaded by the weedy Uruguay Marsh Purslane.

Non-Native Vegetation

Non-native Grassland (Holland Code 42200, Tier IIIB habitat type) occupies approximately 5.9 acres within the Project Area, of which, 0.3 acres occur in Subarea A and 5.6 acres occur in Subarea B (Table 4.6-1). There is no Non-native Grassland in Subarea C. Non-native Grassland is characterized by a dense to sparse cover of annual grasses, often with native and non-native annual forbs (Rocks Biological Consulting, 2004).

Eucalyptus Woodland (Oberbauer Code 11100; Tier IV habitat type) occupies approximately 1.8 acres of land only within Subarea B (Table 4.6-1). There are scattered Eucalyptus trees throughout the Project Area. Eucalyptus Woodland is characterized by dense stands of gum trees.

Disturbed habitat (Oberbauer Code 11300; Tier IV habitat type) occupies approximately 34.0 acres within the Project Area, of which, 1.0 acre occurs within Subarea A and 33.0 acres within Subarea B (Table 4.6-1). Disturbed habitat is any land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a plant association (e.g. disturbed Diegan Coastal Sage Scrub).

Giant Reed occupies approximately 1.6 acres in Subarea A (Table 4.6-1). Giant Reed is a robust, perennial grass that can grow from 9 to 30 feet in height and spreads rapidly from horizontal rootstocks in the soil (Rocks Biological Consulting, 2004). Giant Reed is a California Department of Fish and Game (CDFG)-listed noxious weed and is listed by the California Invasive Plant Council (Cal-IPC) as a List A-1 "Most Invasive Wildland Pest Plant." Within Subareas A and B, this species has invaded areas along the San Diego River and Alvarado Creek degrading Southern Riparian Scrub and Riparian Forest habitats.

Ornamental (Oberbauer Code 11000) vegetation occupies approximately 13.0 acres within the Project Area including 8.0 acres in Subarea A, 30.0 acres in Subarea B, and 2.0 acres in Subarea C and typically consists of non-native landscape and/or garden plantings that have been planted in association with buildings, roads, or other development (Table 4.6-1).

Legend

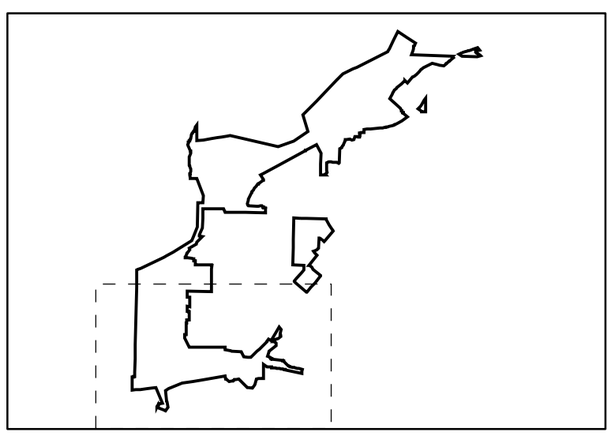
- Redevelopment Project Area
- Creeks and Rivers
- Freeways
- Major Roads
- Roads
- Multiple Habitat Planning Area

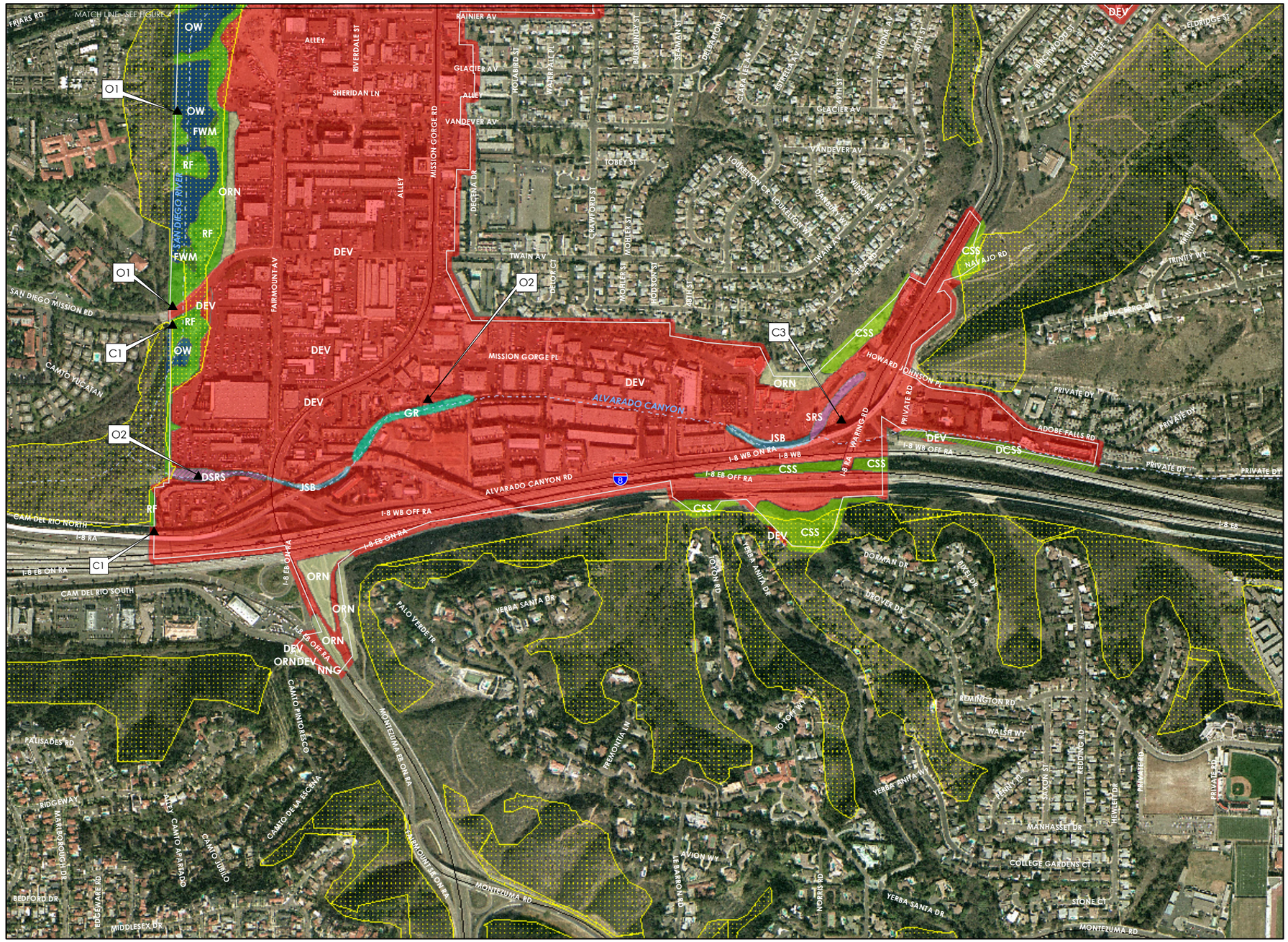
C1-C9 Potential Biological Constraints to Redevelopment

O1-O5 Mitigation Opportunities of Potential Redevelopment Impacts

Vegetation Communities

Riparian Forest	RF
Southern Riparian Scrub	SRS
Disturbed Southern Riparian Scrub (Giant Reed Dominated)	DSRS
Freshwater Marsh	FM
Jurisdictional Streambed	JSB
Open Water	OW
Giant Reed *(Arundo donax)*	GR
Diegan Coastal Sage Scrub	CSS
Disturbed Diegan Coastal Sage Scrub	DCSS
Non-native Grassland	NNG
Disturbed Habitat	DH
Eucalyptus	EUC
Ornamental	ORN
Urban/Developed	DEV





SOURCE: Rocks Biological Consulting, Landiscor (1/14/04), SANDAG, SanGIS and BRG Consulting, Inc., 2004

9/30/04

BRG CONSULTING, INC.

0 400 800 1,600 Feet

1" = 800'

Grantville EIR

Vegetation Communities and Opportunities and Constraints - Subarea A

FIGURE 4.6-1

Legend

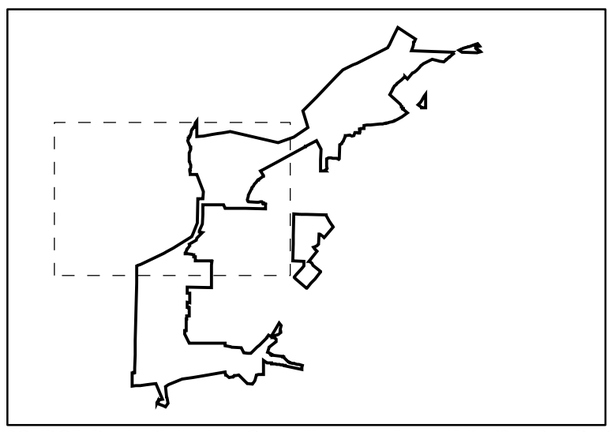
- Redevelopment Project Area
- Creeks and Rivers
- Freeways
- Major Roads
- Roads
- Multiple Habitat Planning Area

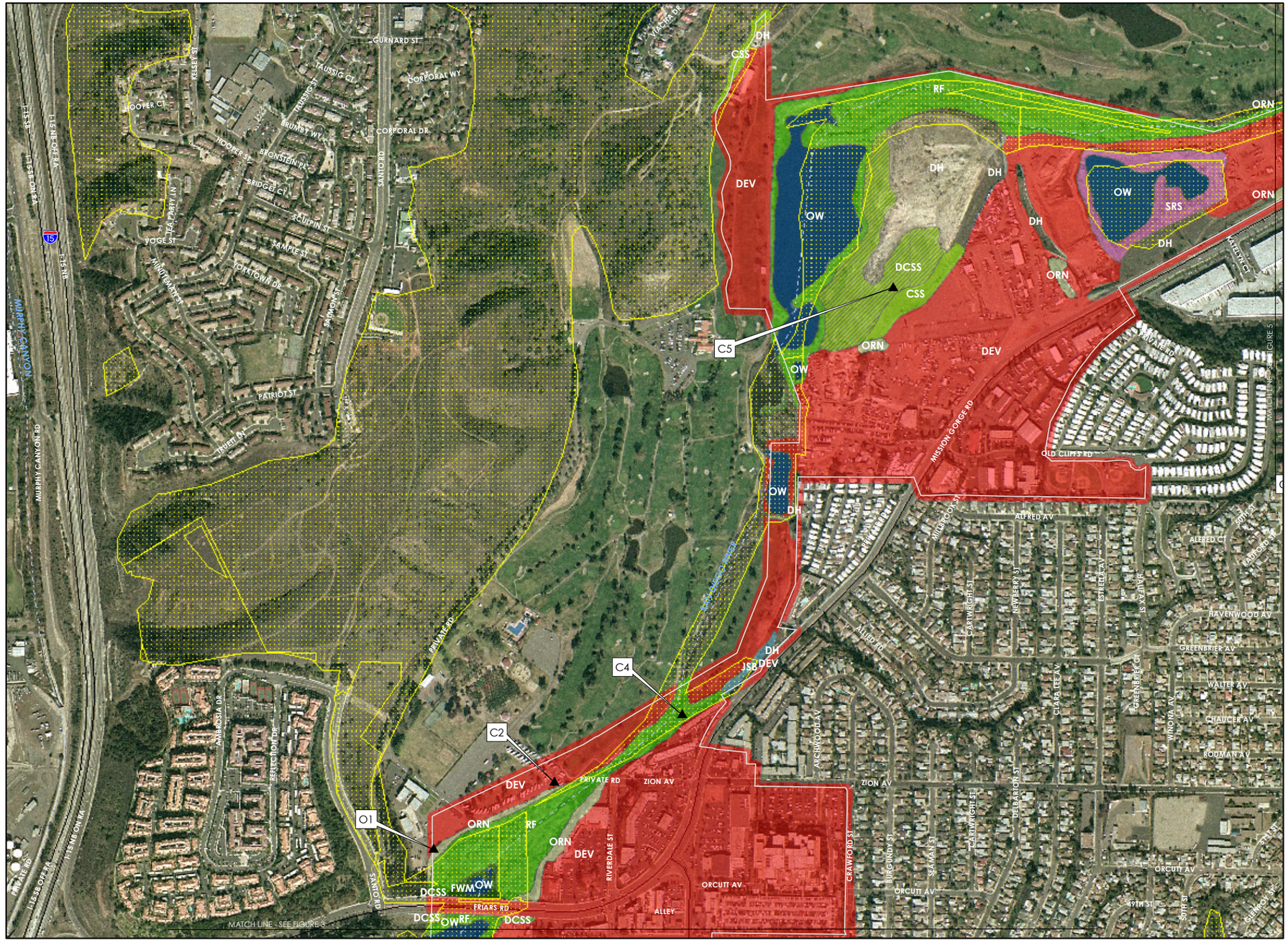
C1-C9 Potential Biological Constraints to Redevelopment

O1-O5 Mitigation Opportunities of Potential Redevelopment Impacts

Vegetation Communities

Riparian Forest	RF
Southern Riparian Scrub	SRS
Disturbed Southern Riparian Scrub (Giant Reed Dominated)	DSRS
Freshwater Marsh	FM
Jurisdictional Streambed	JSB
Open Water	OW
Giant Reed *(Arundo donax)*	GR
Diegan Coastal Sage Scrub	CSS
Disturbed Diegan Coastal Sage Scrub	DCSS
Non-native Grassland	NNG
Disturbed Habitat	DH
Eucalyptus	EUC
Ornamental	ORN
Urban/Developed	DEV





SOURCE: Rocks Biological Consulting, Landiscor (1/14/04), SANDAG, SanGIS and BRG Consulting, Inc., 2004

9/30/04

BRG CONSULTING, INC.

0 400 800 1,600 Feet

1" = 800'

Grantville EIR

Vegetation Communities and Opportunities and Constraints - Subareas A and B

FIGURE 4.6-2

Legend

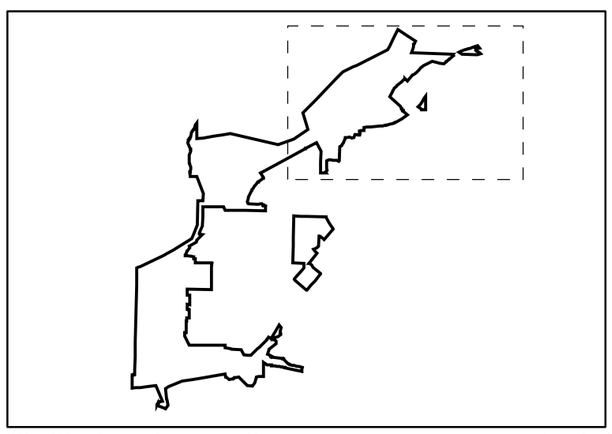
- Redevelopment Project Area
- Creeks and Rivers
- Freeways
- Major Roads
- Roads
- Multiple Habitat Planning Area

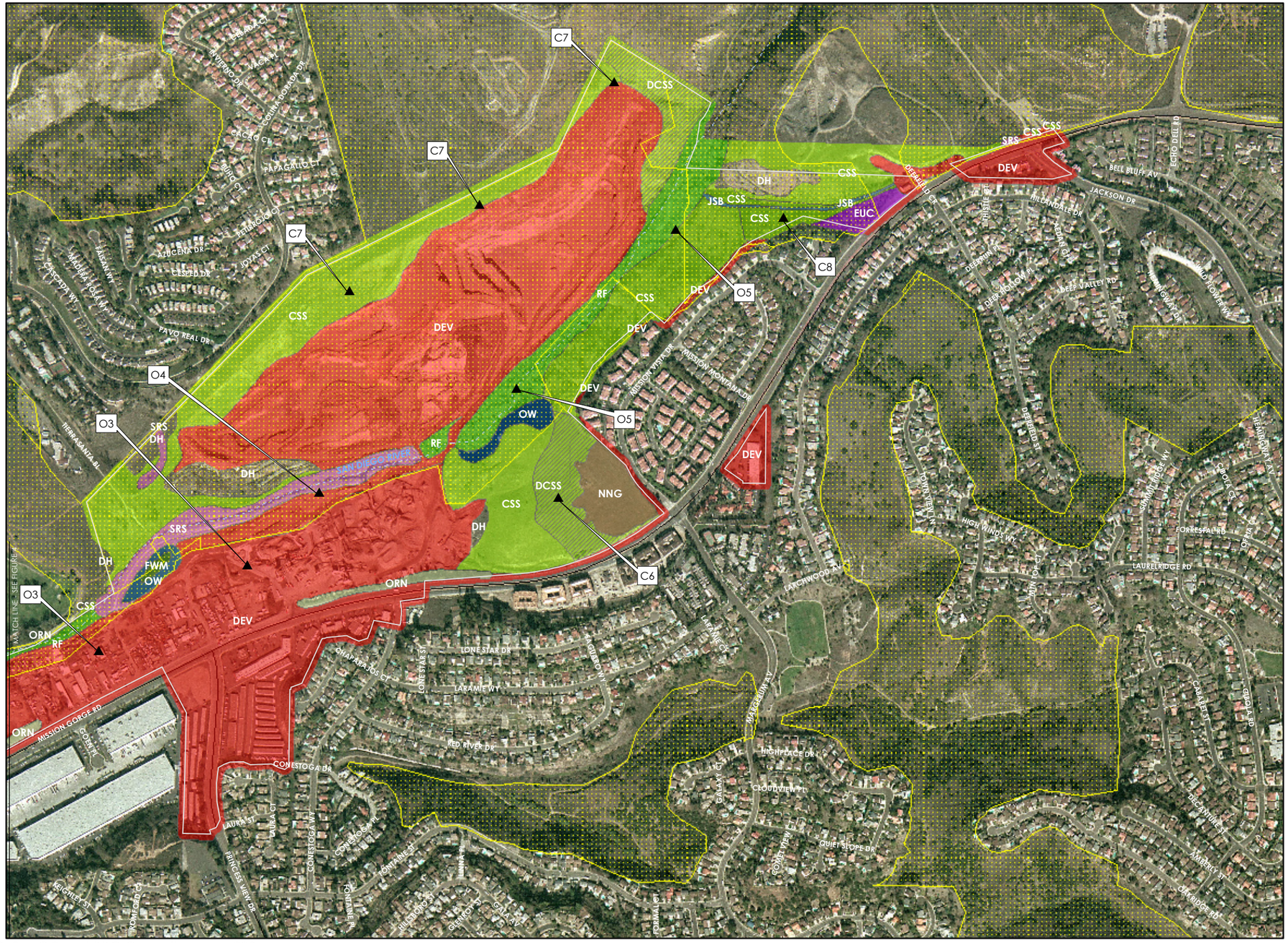
C1-C9 Potential Biological Constraints to Redevelopment

O1-O5 Mitigation Opportunities of Potential Redevelopment Impacts

Vegetation Communities

Riparian Forest	RF
Southern Riparian Scrub	SRS
Disturbed Southern Riparian Scrub (Giant Reed Dominated)	DSRS
Freshwater Marsh	FM
Jurisdictional Streambed	JSB
Open Water	OW
Giant Reed *(Arundo donax)*	GR
Diegan Coastal Sage Scrub	CSS
Disturbed Diegan Coastal Sage Scrub	DCSS
Non-native Grassland	NNG
Disturbed Habitat	DH
Eucalyptus	EUC
Ornamental	ORN
Urban/Developed	DEV





SOURCE: Rocks Biological Consulting, Landiscor (1/14/04), SANDAG, SanGIS and BRG Consulting, Inc., 2004

9/30/04

BRG CONSULTING, INC.

0 400 800 1,600 Feet

1" = 800'

Grantville EIR

Vegetation Communities and Opportunities and Constraints - Subarea B

FIGURE 4.6-3

Legend

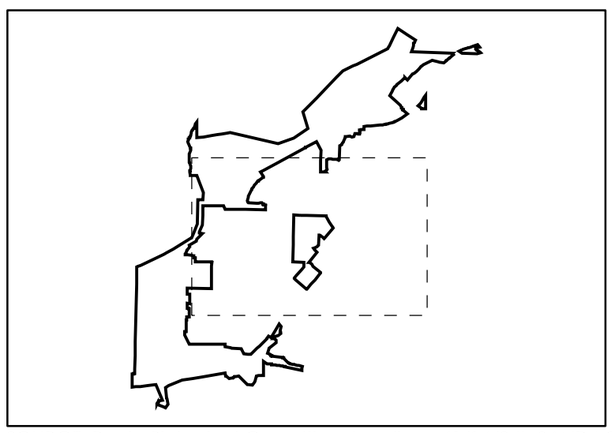
- Redevelopment Project Area
- Creeks and Rivers
- Freeways
- Major Roads
- Roads
- Multiple Habitat Planning Area

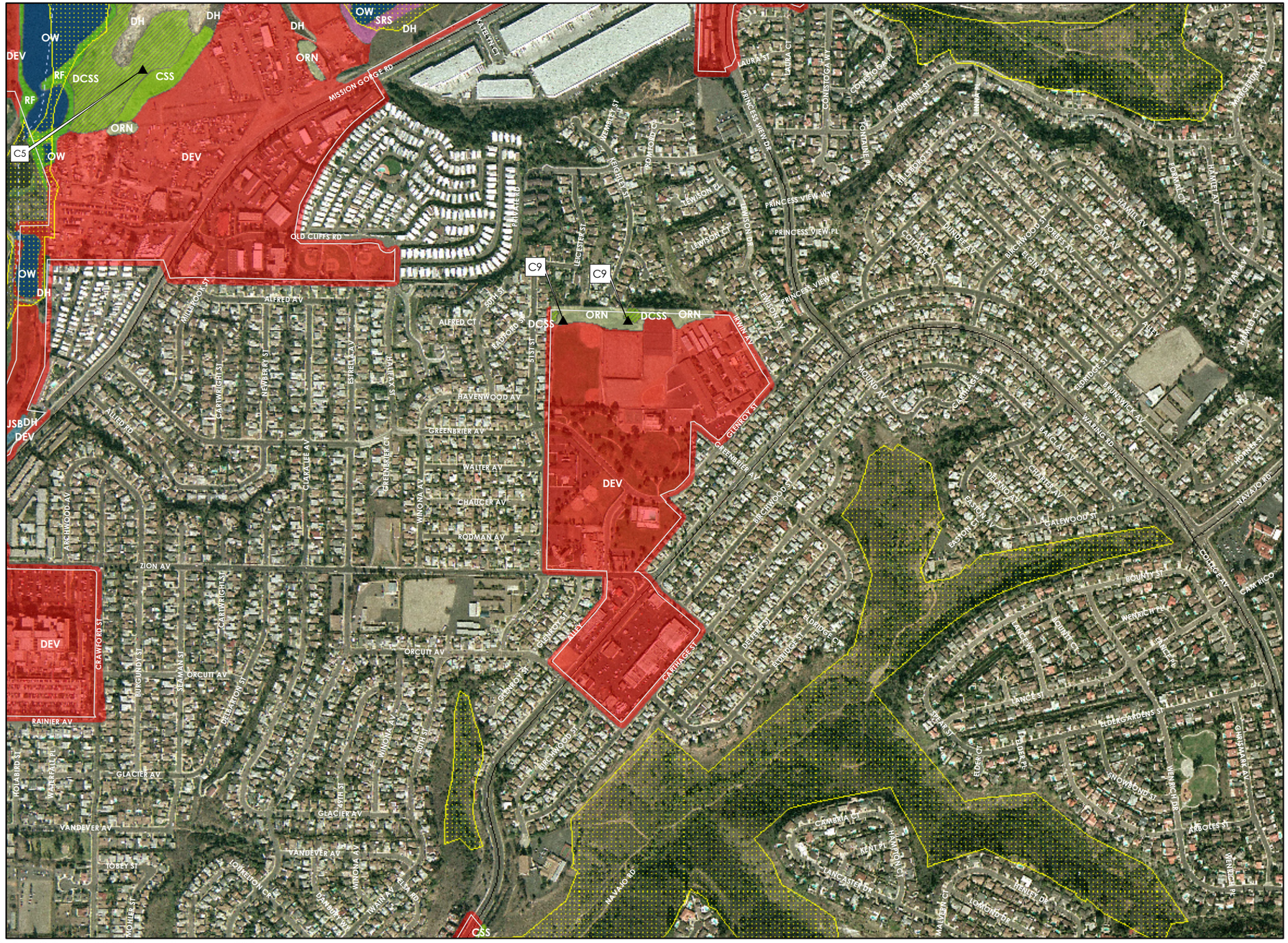
C1-C9 Potential Biological Constraints to Redevelopment

O1-O5 Mitigation Opportunities of Potential Redevelopment Impacts

Vegetation Communities

Riparian Forest	RF
Southern Riparian Scrub	SRS
Disturbed Southern Riparian Scrub (Giant Reed Dominated)	DSRS
Freshwater Marsh	FM
Jurisdictional Streambed	JSB
Open Water	OW
Giant Reed *(Arundo donax)*	GR
Diegan Coastal Sage Scrub	CSS
Disturbed Diegan Coastal Sage Scrub	DCSS
Non-native Grassland	NNG
Disturbed Habitat	DH
Eucalyptus	EUC
Ornamental	ORN
Urban/Developed	DEV





SOURCE: Rocks Biological Consulting, Landiscor (1/14/04), SANDAG, SanGIS and BRG Consulting, Inc., 2004

9/30/04

BRG CONSULTING, INC.

0 400 800 1,600 Feet

1" = 800'

Grantville EIR

Vegetation Communities and Opportunities and Constraints - Subarea C

FIGURE 4.6-4

TABLE 4.6-1
Vegetation Communities Subarea Acreages

Habitat	Subarea A	Subarea B	Subarea C	Total
Diegan Coastal Sage Scrub	9.0	100.0	0.4	109.4
Riparian Forest	26.0	39.0	0.0	65.0
Southern Riparian Scrub	1.9	16.1	0.0	18.0
Freshwater Marsh	1.4	0.4	0.0	1.8
Open Water	11.0	26.0	0.0	37.0
Non-native Grassland	0.3	5.6	0.0	5.9
Eucalyptus Woodland	0.0	1.8	0.0	1.8
Disturbed	1.0	33.0	0.0	34.0
Giant Reed	1.6	0.0	0.0	1.6
Ornamental	8.0	3.0	2.0	13.0
Urban/Developed	339.8	280.1	62.6	682.5
Total Site				**970**

Source: Rocks Biological Consulting, 2004.

Urban/Developed (Oberbauer Code 12000; Tier IV habitat type) areas occupy the majority of the Project Area (approximately 682.5 acres or 70 %) including 339.8 acres in Subarea A, 280.1 acres in Subarea B, and 62.6 acres in Subarea C (Table 4.6-1). Urban/Developed areas support no native vegetation because of the presence of buildings or roads.

B. Plants

The Project Area supports limited native floral diversity throughout much of the area because the majority of the Project Area is Urban/Developed. The Diegan Coastal Sage Scrub within the Project Area is mostly of moderate to low species diversity because many of these patches have been disturbed or degraded to some degree or are adjacent to Disturbed Habitat or Urban/Developed areas. The areas of highest native species diversity occur within and adjacent to the habitat along the San Diego River. The Riparian and Freshwater Marsh habitats in Subareas A and B support a moderate to high level of native species diversity and the Diegan Coastal Sage Scrub that buffers the San Diego River from adjacent Urban/Developed areas are of higher quality than isolated patches that occur away from the River.

Rare, Threatened, Endangered, Narrow Endemic and/or Sensitive Species or MSCP Covered Species

Regulatory authority over sensitive species listed as threatened or endangered is issued under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). The City of San Diego has several regulations governing biological resources within the City. These include the Multiple Species Conservation Program (MSCP) Subarea Plan, the Environmentally Sensitive Lands regulations, and the Biology Guidelines.

Tables 4.6-2 and 4.6-3 summarize the Narrow Endemic Species and Non-Narrow Endemic Sensitive flora that are expected or have potential to occur within the Project Area. Narrow endemic species are those with a very restricted habitat and occur only in the San Diego region. Specific protections apply to Narrow Endemic species pursuant to the MSCP.

TABLE 4.6-2
Potential for Narrow Endemic Plant Species to Occur Within the Grantville Redevelopment Project Area

Species	Potential to Occur/Comments
San Diego Thornmint	Moderate. An MSCP monitored population of this species occurs in the western portion of Mission Trails Park near the community of Tierrasanta.
San Diego Ambrosia	Moderate. Species have been reported along the San Diego River within Mission Trails Regional Park.
Encinitas baccharis	Very low. Species occur in southern maritime and southern mixed chaparrals on sandstone soils, typically in north San Diego County.
Short-leave Live-Forever	Very low. Soil formation and habitat of species do not occur within the Project Area.
Variegated Dudleya	Low-moderate. There is very little suitable habitat for this species within the Project Area.

Source: Rocks Biological Consulting, 2004.

TABLE 4.6-3
Potential for Non-Narrow Endemic Sensitive Plant Species to Occur Within the Grantville Redevelopment Project Area

Common Name	Habitat	ESA Status	CESA Status	CNPS Status	MSCP Status	Project Area Potential
California adolphia	Chprl, CoScr	None	None	2	Not Covered	Potentially Present
Orcutt's Brodiaea	Chrpl, CmWld, Medws, VFGrs, VnPla/clay	None	None	1B	Covered	Potentially Present
Slender-pod Jewel Flower	Chprl, CoScr	None	SR	None	Covered	Potentially Present
Water-stemmed Ceanothus	Chprl	None	None	2	Covered	Low Potential to Occur Due to Lack of Suitable Habitat
Summer Holly	Chprl	None	None	1B	Not Covered	Low Potential to Occur Due to Lack of Suitable Habitat
Western Dichondra	Chprl, CoScr	None	None	4	Not Covered	Potentially Present
Palmer's Ericameria	RpWld	None	None	2	Covered	Low Potential to Occur Due to Lack of Suitable Habitat
Coast Barrel Cactus	CoScr, Chprl	None	None	2	Covered	Expected
Palmer's Grappling	CoScr, Chprl	None	None	4	Not Covered	Expected
Graceful Tarplant	VFGrs	None	None	4	Not Covered	Low Potential to Occur Due to Lack of Suitable Habitat

TABLE 4.6-3
Potential for Non-Narrow Endemic Sensitive Plant Species to Occur Within the Grantville Redevelopment Project Area
(cont'd.)

Common Name	Habitat	ESA Status	CESA Status	CNPS Status	MSCP Status	Project Area Potential
San Diego Marsh Elder	RpWld, intermittent creeks, streambeds	None	None	2	Not Covered	Potentially Present
Southwestern Spiny Rush	RpMarsh, Medws (Alkali)	None	None	4	Not Covered	Potentially Present
Small-flowered Microseris	VFGrs/clay	None	None	4	Not Covered	Potentially Present
Willowy Monardella	RpScr, sandy floodplains	FE	SE	1B	Covered	Low Potential to Occur Due to lack of Suitable Habitat
San Diego Goldenstar	Chprl, CoScr (openings)	None	None	1B	Covered	Potentially Present
Torrey Pines	Chprl, CCFrs	None	None	1B	Covered	Not Present as Native
Nuttall's Scrub Oak	Chprl	None	None	1B	Not Covered	Low Potential to Occur Due to lack of Suitable Habitat
Engelmann Oak	Chprl, CmWld, RpWld, VFGrs	None	None	4	Not Covered	Low Potential to Occur Lack of Suitable Habitat
San Diego Viguiera	CoScr	None	None	4	Not Covered	Observed in Project Area

Notes: **Habitat Codes:** CCFrs = Closed-cone Conifer Forest, Chprl = Chaparral, CoScr = Coastal Scrub, CmWld = Cismontane Woodland, Medws = Meadows, RpWld = Riparian Woodland, VFGrs = Valley and Foothill Grassland, VnPlas = Vernal Pools
FE = Federally Endangered, **FT** = Federally Threatened, **SE** = California ESA, **SR** = State Rare, Endangered.
CNPS Status: List 1B – Plants rare, threatened, or endangered in California or Elsewhere; List 2 – Plants rare or endangered in California, but more common elsewhere; List 3 – Plants about which more information is needed; List 4 – Plants of limited distribution.

Source: Rocks Biological Consulting, 2004.

4.6.1.3 Zoological Resources - Fauna

A. Wildlife Habitats

Wildlife habitat refers to the land and water that provide the food, shelter and opportunities for reproduction that wild animals need to survive. The following section summarizes the characteristics of the vegetation communities within the Project Area and lists some of the common or sensitive wildlife species that often use these habitats.

Diegan Coastal Sage Scrub

Within the Project Area, this vegetation community is likely to support several locally common species of birds, mammals, reptiles, and butterflies as well as sensitive wildlife species. The Diegan Coastal Sage Scrub

within the Project Area is disturbed or fragmented in many areas, but large patches exist that are connected or adjacent to Mission Trails Regional Park and would be expected to support a moderately diverse collection of wildlife species. The Diegan Coastal Sage Scrub is of high enough quality that the federally listed threatened California Gnatcatcher, a sage scrub obligate species, has been observed in several locations within the Project Area (Rocks Biological Consulting, 2004) (Table 4.6-4). Please refer to the Biological Opportunities and Constraints Analysis (Volume II, Appendix F of this EIR) for a detailed discussion on specific species found in the Diegan Coastal Sage habitat.

Riparian Habitat

Riparian habitat refers to the trees, other vegetation and physical features normally found on the banks and floodplains of rivers, streams, and other bodies of freshwater (Rocks Biological Consulting, 2004). Riparian habitat occupies a small amount of total land area, but supports a disproportionately large number of fish and wildlife species. Several locally common wildlife species are expected to use the riparian areas along the San Diego River. Please refer to the Biological Opportunities and Constraints Analysis (Volume II, Appendix F of this EIR) for a detailed discussion on specific species found in the Riparian Habitat.

The Riparian Habitat within the Project Area has been disturbed and reduced in size from its historic extent because of residential, commercial, and industrial development and alteration of its hydrologic regime. However, extensive, high quality Riparian Habitat exists along many stretches of the San Diego River within the Project Area. Within the City of San Diego, Riparian Habitat of the River extends from Mission Bay Park near the Pacific Ocean to Mission Trails Regional Park and provides a regional habitat linkage between these two City parks.

Freshwater Marsh

Freshwater Marshes are among the most productive wildlife habitats. They provide food, cover, and water for more than 160 species of birds, and numerous mammals, reptiles, and amphibians (Rocks Biological Consulting, 2004). Many species rely on Freshwater Marsh for their entire life cycle. Many of the species listed as occurring in riparian habitats are likely to use Freshwater Marshes in some capacity for foraging, cover, or breeding. There are large areas of Freshwater Marsh and open water in the San Diego River because of alteration of landform and hydrologic regime that has created large ponds within the River's channel.

Non-Native Vegetation

The Non-native Grassland, Eucalyptus Woodland, and Disturbed Habitat within the Project Area provide some biological value to native wildlife species, but the value is far below that of native vegetation communities. Non-native Grassland provides foraging opportunities for raptors such as red-tailed hawk, red-shouldered hawk, and owl species because it is an open, low growing community that typically supports an abundance of small mammals such as deer mice, gophers, and rats. Locally common species of birds and butterflies will also use Non-native Grassland and Disturbed Habitat for foraging and cover.

TABLE 4.6-4
Sensitive Species Expected or With a Potential to Occur in the Redevelopment Project Area

Common Name	Habitat	ESA Status	CESA Status	MSCP Status	Project Area
Quino Checkerspot Butterfly	Open Grassland and openings of Coastal Scrub and Chaparral that support Dotseed Plantain	FE	SA	Not Covered	Low Potential to occur due to lack of suitable habitat, historical occurrences in Project Area have been extirpated. Not reported since 1960.
Hermes Copper	Openings in Chaparral, associated with the larval host plant Spiny Redberry, adults feed on nectar from California Buckwheat	FSC	SA	Not Covered	Low Potential to occur due to lack of suitable habitat. Known from Mission Trails Regional Park.
Western Spadefoot Toad	Sandy or gravelly soil in grasslands, Coastal Scrub, open Chaparral, and pine-oak woodlands. Openings with shallow, temporary pools are optimal.	FSC	CSC Protected	Not Covered	Potentially Present
Southwester Pond Turtle	Quiet, permanent stream pools and ponds	FSC	CSC	Covered	Expected
San Diego Horned Lizard	Friable soils in Chaparral, Coastal Scrub, Oak Woodlands, and old dirt roads with native ant species	FSC	CSC Protected	Covered	Potentially Present
Coronado Shink	Various habitats including grasslands, Coastal Scrub, and woodlands	FSC	CSC	Not Covered	Expected
Orangethroat Whiptail	Coastal Scrub, Chaparral, sandy floodplains with patches of brush and rock	FSC	CSC Protected	Covered	Expected
Silvery Legless Lizard	Leaf litter and sandy substrates	FSC	CSC	Not Covered	Potentially Present
Coastal Western Whiptail	Coastal Scrub, Chaparral, and grasslands	FSCC	SA	Not Covered	Potentially Present
Coast Patchnosed Snake	Chaparral and Coastal Scrub; may require mammal burrows or woodrat nests for overwintering	FSC	CSC Protected	Not Covered	Potentially Present
San Diego Ringneck Snake	Chaparral, forest and grasslands	None	SA	Not Covered	Potentially Present
Coastal Rosy Boa	Rocky outcrops within Chaparral and Coastal Scrub	FSC	SA	Not Covered	Low Potential to occur due to lack of suitable habitat
Two-striped Garter Snake	Semi-permanent and permanent bodies of water in variety of habitats. Requires riparian border	None	CSC Protected	Not Covered	Expected
Northern Red Diamondback Rattlesnake	Rocky outcrops and areas of heavy brush or rugged terrain on slopes of chaparral, sage scrub, and desert scrub, usually below 400 feet	FSC	CSC	Not Covered	Expected
Turkey Vulture	Open Habitats with large trees	FSC	CSC	Not Covered	Observed in Project Area
Golden Eagle	Nests in cliffs or trees in mountainous or hilly terrain	None	CSC Fully Protected	Covered	Low Potential to occur due to lack of suitable habitat

TABLE 4.6-4
Sensitive Species Expected or With a Potential to Occur in the Redevelopment Project Area
(cont'd.)

Common Name	Habitat	ESA Status	CESA Status	MSCP Status	Project Area
American Peregrine Falcon	Coastal areas	FE	CE	Covered	Low potential to occur due to lack of suitable habitat
Sharp-shinned Hawk	Mixed woodlands near open areas, riparian habitats	None	CSC	Not Covered	Potentially Present
Cooper's Hawk	Oak, riparian deciduous or other woodland habitats, often near water	None	CSC	Covered	Observed in Project Area
Northern Harrier	Marsh and open terrain	None	CSC	Covered	Expected
Ferruginous Hawk	Dry, open terrain	FSC	CSC	Covered	Potentially Present
Osprey	Near lagoons, bays, and lakes	None	CSC	Not Covered	Potentially Present
Loggerhead Shrike	Grassland or open habitats with bare ground and spar shrub and/or tree cover	FSC	CSC	Not Covered	Potentially Present
Tricolored Blackbird	Near ponds	None	CSC	Covered	Expected
Least Bell's Vireo	Riparian woodlands, typically nests in immature Salix spp. (willow) stands	FE	SA SE	Covered	Expected. This species has been covered in the Project Area
California Horned Lark	Grasslands, disturbed habitat and open areas with sparse, low vegetation	None	CSC	Not Covered	Expected
Burrowing Owl	Grasslands, generally those occupied by other burrowing animals	None	CSC	Covered	Low potential to occur due to lack of suitable habitat
California Gnatcatcher	Coastal Scrub	FT	CSC	Covered	Observed in Project Area in several locations
Western Bluebird	Open woodlands, farmlands and orchards	None	None	Covered	Potentially Present
Yellow Warbler	Riparian woodlands with Salix spp. (willow) component	None	CSC	Not Covered	Expected
Yellow-breasted Chat	Riparian woodland/scrub with dense undergrowth	None	CSC	Not Covered	Expected
Coastal Cactus Wren	Coastal Scrub with patches of *Cylindropuntia prolifera* (coastal cholla) and other cacti	None	CSC	Covered	Low potential to occur due to lack of suitable habitat
Southern California Rufous-crowned Sparrow	Rocky hillsides with sparse, low Coastal Scrub or Chaparral, sometimes mixed with grassland	FSC	CSC	Covered	Expected
Grasshoper Sparrow	Grasslands and pastures	None	SA	Not Covered	Potentially Present
Southern Willow Flycatcher	Summer resident; riparian woodland with Salix spp. (willow) component	FE	CSC	Covered	Low-moderate potential to occur
American Badger	Open grasslands near native habitat	None	None	Covered	Very low potential to occur due to lack of habitat
San Diego Black-tailed Jackrabbit	Open Chaparral, Coastal Scrub and grasslands	FSC	CSC	Not Covered	Expected

TABLE 4.6-4
Sensitive Species Expected or With a Potential to Occur in the Redevelopment Project Area
(cont'd.)

Common Name	Habitat	ESA Status	CESA Status	MSCP Status	Project Area
Dulzura California Pocket Mouse	Coastal Scrub with fine sandy soils	FSC	CSC	Not Covered	Expected
Northwestern San Diego Pocket Mouse	Coastal Scrub	FSC	CSC	Not Covered	Expected
San Diego Woodrat	Chaparral, often in rock outcrop areas	FSC	CSC	Not Covered	Potentially Present
Yuma Myotis	Primarily woodlands and forests; forages over water	FSC	CSC	Not Covered	Potentially Present
Long-eared Myotis	Multiple habitats; forages in oak/coniferous forests	FSC	None	Not Covered	Potentially Present
Fringed Myotis	Multiple habitats; forage in coniferous forests	FSC	None	Not Covered	Potentially Present
Long-legged Myotis	Multiple habitats; forages in coniferous forests	FSC	None	Not Covered	Potentially Present
Small-footed Myotis	Multiple habitats; strongly associated with openings in woodlands, brush and riparian habitats	FSC	None	Not Covered	Potentially Present
Spotted Bat	High rocky cliffs; forages in riparian and edge habitats	FSC	CSC	Not Covered	Potentially Present
Pallid Bat	Multiple habitats; forages in open forest and grasslands	None	CSC	Not Covered	Potentially Present
Pocketed Free-tailed Bat	Cliffs	None	CSC	Not Covered	Potentially Present – Known From San Diego River in Mission Gorge (CNDDB 2004)
Big Free-tailed Bat	Cliffs; strong association with rugged, rocky canyons	None	CSC	Not Covered	Potentially Present

Source: Rocks Biological Consulting, 2004.

The abundance of Urban/Developed areas within the Project Area has eliminated habitat connectivity and fragmented habitats to a great degree. This results in a reduction in the diversity and abundance of wildlife species in the Project Area.

B. Rare, Threatened, Endangered, Narrow Endemic and/or Sensitive Species or MSCP Covered Species

Table 4.6-4 summarizes the sensitive fauna expected or with potential to occur within the Project Area.

C. Sensitive Biological Resources

The Project Area supports sensitive habitats including wetland habitats, Riparian and Freshwater Marsh and the upland communities Diegan Coastal Sage Scrub and Non-native Grassland. Several sensitive species use Riparian Habitat and are known from the Project Area including the federally listed endangered Least Bell's Vireo and CDFG sensitive Cooper's Hawk (Rocks Biological Consulting, 2004). Riparian habitats have extremely high wildlife value because of the availability of water and cover and the abundance of forage in the form of vegetation and other animals.

Several sensitive species also inhabit Diegan Coastal Sage Scrub including the threatened California Gnatcatcher and CDFG sensitive rufous-crowned sparrow that are known from the Project Area. Both Riparian and Diegan Coastal Sage Scrub habitats are naturally limited in distribution and have been depleted substantially in Southern California by development and other disturbance activities. See Table 4.6-4 for a listing of sensitive species and their potential for occurrence in the Project Area.

D. Wildlife Corridors

A wildlife corridor, or linkage, is often defined as a landscape feature that allows animal movement between two patches of habitat or between habitat and other important habitat features such as water (Rocks Biological Consulting, 2004).

The MSCP preserve was designed to maintain connections between core habitat areas, including linkages between coastal lagoons and more inland habitats, and linkages between different watersheds. In addition to allowing for demographic and genetic exchange by all species between core preserve areas, linkages are intended to allow larger predators (mountain lions, coyotes, and bobcats) to move among conserved habitat blocks and reach coastal habitats.

The Project Area is located within the City of San Diego's MSCP with much of the Riparian Habitat and adjacent, undeveloped upland vegetation communities contained within the City's Multi-Habitat Planning Area (MHPA). The MSCP identifies the San Diego River corridor as a Core Biological Habitat Linkage between the Pacific Ocean and Mission Trails Regional Park. The San Diego River corridor is important because it provides a linkage between habitats that allows wildlife to disperse to larger areas of native habitat in the region and help increase or maintain biological diversity. The MHPA boundary is depicted on Figures 4.6-1 through 4.6-4.

4.6.1.4 Regulatory Background

The project is subject to the biological regulations of the City San Diego as well as state and federal agencies.

A. City of San Diego

The City of San Diego has several regulations governing biological resources within the City. These include the MSCP, the Environmentally Sensitive Lands regulations, and the Biology Guidelines.

The MSCP is a comprehensive habitat conservation-planning program for southwestern San Diego County. The program targets areas for preservation (labeled MHPA in the City of San Diego) in exchange for local agency 'take' authority over covered federal and state-listed species. The City's MSCP Subarea Plan, Biology Guidelines, and Environmentally Sensitive Lands Regulations are the implementing regulations of the City's MSCP pursuant to its implementing agreement with the USFWS and CDFG.

The MSCP identifies the MHPA, or preserve of the MSCP, and is intended to link all core biological areas into a regional wildlife preserve. Any development project in the City of San Diego that proposes impacts to native habitat must provide mitigation for such impacts pursuant to the Biology Guidelines. For projects

located outside the MHPA, habitat must either be acquired as mitigation or monies must be paid into a habitat acquisition fund. For developments located wholly within the MHPA, a 25 percent development area is allowed for each parcel, and the remainder of the site is preserved as mitigation. For developments located partially within the MHPA, all lands outside the MHPA may be developed; if lands outside the MHPA total less than 25 percent of the parcel, development within the MHPA is allowed in order to achieve 25 percent development of the parcel. Any development within the MHPA must be located in the least biologically sensitive portion of the site.

Within the City of San Diego, wetlands are regulated under the Municipal Code's Environmentally Sensitive Lands Ordinance (ESL) and Biology Guidelines. According to the City of San Diego Municipal Code, wetlands are defined as areas characterized by naturally occurring hydrophytic, or wetland vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools. The city also takes jurisdiction over areas that have hydric soils or wetland hydrology but lack naturally occurring wetland vegetation due to human activities or because of catastrophic or recurring natural events, such as flooding or fire.

Pursuant to the ESL, impacts to wetlands should be avoided. Unavoidable impacts must be minimized to the maximum extent practicable. Whether or not an impact is unavoidable is determined on a case-by-case basis. Only impacts necessary to allow reasonable use of a parcel are allowed under the ESL. Examples of such cases include properties entirely constrained by wetlands, roads where the only access to the developable portion of the site results in impacts to wetlands, and essential public facilities (essential roads, sewer, water lines, etc.) where no feasible alternative exists. The city also requires that a wetland buffer adequate to protect the functions and values of the wetland be maintained.

B. California Department of Fish and Game

Wetlands within the state of California are also subject to California Department of Fish and Game (CDFG) jurisdiction pursuant to Section 1600 of the California Fish and Game Code. State regulations define the CDFG jurisdiction for the purpose of administering Sections 1601 and 1603 of the Fish and Game Code as within the bed, bank, and channel of stream, including intermittent streams.

The State also regulates impacts on rare plant and animal species through the California Endangered Species Act. State listed species with potential to occur in the Project Area are listed in Tables 4.6-2, through 4.6-4. However, the City of San Diego has take authority over many of the areas' State-listed species through the MSCP. Impacts to MSCP-covered listed species outside the MHPA are allowed through permits issued by the City of San Diego. Take of MSCP covered species within the MHPA is not allowed. Any impacts to non-covered listed species would require a permit from CDFG (Rocks Biological Consulting, 2004).

C. U.S. Fish and Wildlife Service

The Federal government also regulates impacts on rare plant and animal species through the Endangered Species Act. Federally listed species with potential to occur in the Project Area are listed in Tables 4.6-2 through 4.6-4. Note; however, that the City of San Diego has take authority over many of the areas'

federally-listed species through the MSCP. Impacts to MSCP-covered listed species outside the MHPA are allowed through permits issued by the City of San Diego. Take of MSCP covered species within the MHPA is not allowed. Any impacts to non-covered listed species would require a Section 7 or 10 consultation before a permit may be issued by the U.S. Fish and Wildlife Service (USFWS).

D. U.S. Army Corps of Engineers

Waters of the U.S., including wetlands, are subject to U.S. Army Corps of Engineers (ACOE) jurisdiction pursuant to Section 404 of the federal Clean Water Act. Non-wetland waters of the U.S. are defined by the ACOE based on the presence of an ordinary high water mark (OHWM) as defined at 33 CFR 328.3(e).

In addition to wetlands, ACOE has jurisdiction over other Waters of the U.S. that include non-wetland areas such as unvegetated channels that exhibit a clear OHWM and are considered to be, or are directly connected to, a navigable waterway. Impacts on ACOE jurisdictional wetlands or other Waters of the U.S. would require a Section 404 permit.

4.6.2 Impact Threshold

For purposes of this EIR, a significant biological resources impact would occur, according to the City of San Diego Significance Determination Guidelines under CEQA, if implementation of the project would result in:

- *Direct impacts greater than 0.10 acre to Diegan Coastal Sage Scrub (Tier II upland community) would be considered significant.*
- *Direct impacts greater than 0.01 acre to Riparian Habitat or Freshwater Marsh (Tier I wetland communities) would be considered significant.*
- *Direct impacts to all federal and state listed species and narrow endemic species would be considered significant.*
- *Direct impacts to individual sensitive species may be considered significant, based on the species rarity and extent of the impacts.*
- *Indirect impacts may be considered significant depending upon the sensitivity of the biological resource impacted and anticipated magnitude of the impact.*
- *Indirect impacts to lands included within the MHPA would be considered significant.*

4.6.3 Impact

4.6.3.1 Development Constraints

Future redevelopment activities carried out within the Project Area would need to be in conformance with City of San Diego regulations and would also need to conform to state and federal regulations if wetlands impacts or impacts on non-MSCP covered species would result.

For projects that would not impact any City of San Diego Tier I-III habitats or wetlands (including wetland buffers), no biological resource impacts would be anticipated. For areas that do have Tier I and Tier II

habitats, a site-specific analysis of biological resources should be conducted using the data included herein as a basis.

A majority of redevelopment would occur within areas containing no sensitive biological resources. However, redevelopment activities within the portion of the Project Area in, or in proximity to the San Diego River have the potential to result in a significant impact to biological resources.

For parcels located outside of the MHPA, there is no limit on encroachment into sensitive biological resources, with the exception of wetlands, narrow endemics, and federally or state listed species that are not covered by the MSCP. However, impacts to sensitive biological resources must be assessed, and mitigation, where necessary, must be provided as described in Table 4.6-5. Impacts to Tier II or III communities may be achieved through preservation within the equivalent tier or higher. Land with the appropriate habitat may be preserved in perpetuity, or payment into the City's habitat acquisition fund may be made to satisfy the mitigation requirements. Currently, an acre of habitat acquisition fund mitigation land costs $25,000.

Impacts to wetlands must be avoided to the maximum extent practicable both within and outside of the MHPA. Impacts on Narrow Endemic species must be avoided to the maximum extent practicable outside the MHPA. If impacts cannot be avoided, then management, enhancement, or transplantation would be required. Within the MHPA, impacts on Narrow Endemic species must be avoided.

For parcels located within or partially within the MHPA, limits on encroachments in to MHPA lands are set forth in the City's ESL and Biology Guidelines. For parcels located entirely within the MHPA, up to 25 percent of the parcel may be developed and development must be sited within the least biologically sensitive portions of the parcel.

For parcels located partially within the MHPA, the portion of the site outside of the MHPA may be developed, and encroachment into the MHPA is allowed if necessary in order to achieve a 25 percent development area on the entire parcel. For projects developed in conformance with the MSCP, impacts on biological resources on properties entirely constrained by the MHPA is achieved through preservation of the undeveloped portion of the parcel through: 1) Granting the land to the City; 2) A conservation easement; or 3) A covenant of easement.

For parcels partially constrained by the MHPA, biological impacts would require mitigation at the ratios set forth in Table 4.6-5. Note that undeveloped portions of any specific project site may be used toward any required mitigation.

TABLE 4.6-5
City of San Diego Mitigation Requirements for Habitat Impacts Outside and Inside of the MHPA

TIER	HABITAT TYPE	REQUIRED MITIGATION RATIOS
TIER 1: (rare uplands)	Southern Foredunes Torrey Pines Forest Coastal Bluff Scrub Maritime Succulent Scrub Maritime Chaparral Scrub Oak Chaparral Native Grassland Oak Woodlands	**Impact Outside of MHPA** Preservation Inside MHPA: 1:1 Preservation Outside MHPA: 2:1 **Impact Inside of MHPA** Preservation Inside MHPA: 2:1 Preservation Outside MHPA: 3:1
TIER II: (uncommon uplands)	Coastal Sage Scrub (CSS) CSS/Chaparral	**Impact Outside of MHPA** Preservation Inside MHPA: 1:1 Preservation Outside MHPA: 1.5:1 **Impact Inside of MHPA** Preservation Inside MHPA: 1:1 Preservation Outside MHPA: 2:1
TIER III A: (common uplands)	Mixed Chaparral Chamise Chaparral	**Impact Outside of MHPA** Preservation Inside MHPA: 0.5:1 Preservation Outside MHPA: 1:1 **Impact Inside of MHPA** Preservation Inside MHPA: 1:1 Preservation Outside MHPA: 1.5:1
TIER III B: (common uplands)	Non-native Grasslands	**Impact Outside of MHPA** Preservation Inside MHPA: 0.5:1 Preservation Outside MHPA: 1:1 **Impact Inside of MHPA** Preservation Inside MHPA: 1:1 Preservation Outside MHPA: 1.5:1
TIER IV: (other uplands)	Disturbed Land Agriculture Eucalyptus Woodland Ornamental Plantings	Impacts to these areas are less than significant; no mitigation required.

Source: City of San Diego, 1997.

4.6.3.2 Direct Impacts

A. Vegetation Community Impacts

Implementation of future redevelopment activities could result in direct impacts to the vegetation communities/land uses that occur within the Project Area. It is not currently possible to quantify the extent of habitat that may be affected by redevelopment activities because these activities will vary and are not presently defined. To better understand where impacts on biological resources may occur within the Project Area, the following sections assess areas within each Subarea where future development pursuant to the Community Plan Land Uses may have an impact on existing sensitive biological resources if new development is proposed. Impacts on Diegan Coastal Sage Scrub, Diegan Coastal Sage Scrub/Chaparral, Riparian Habitat, Freshwater Marsh, and Non-native Grassland would be considered significant. These potential impacts could be constraints to proposed redevelopment activities. In the

following sections, specific areas of interest have been labeled C1-C9 with the "C" denoting a potential "Constraint." Implementation of Mitigation Measures BR1 through BR8 will reduce impacts to these vegetation communities to a level less than significant on a project specific basis.

Subarea A

Subarea A, at the southern end of the Project Area, is comprised primarily of Urban/Developed land uses (339.8 acres), but also includes significant areas of Riparian (26.0 acres) and Freshwater Marsh Habitat (1.4 acres) along the San Diego River in the western portion of the Subarea.

FIGURE 4.6-1 – C1

Within the area labeled 'C1' in Subarea A (Figure 4.6-1), the Community Plan Land Use allows for Industrial use. These parcels consist primarily of Urban/Developed land and would not be impacted by redevelopment of this area with future industrial uses; however, there is also Riparian and Freshwater Marsh habitat associated with the San Diego River that is within the MHPA. Before specific redevelopment activities could be implemented that may affect these sensitive vegetation communities, a site-specific biological resources report including a wetland delineation would be required by the City of San Diego. Direct impacts on Riparian or Freshwater habitat would be considered significant.

FIGURE 4.6-2 – C2

Within the area labeled 'C2' in Subarea A (Figure 4.6-2), the Community Plan Land Use allows for commercial use. This parcel consists of Urban/Developed land and would not be impacted by redevelopment of this area with commercial use, but this parcel also includes Riparian Habitat, some of which is within the MHPA. Before specific redevelopment activities could be implemented that may affect this sensitive vegetation community, a site-specific biological resources report including a wetland delineation would be required by the City of San Diego. In addition, wetland impacts would be subject to the jurisdiction of the ACOE, CDFG, RWQCB, and the City. Direct impacts on Riparian Habitat or encroachment into the MHPA beyond that allowed by the City of San Diego regulations would be considered significant.

FIGURE 4.6-1 – C3

In the eastern portion of Subarea A near Alvarado Canyon and Adobe Falls Road, there are small patches of Diegan Coastal Sage Scrub immediately south of Interstate 8 and adjacent to Waring Road, both of which are designated as MHPA land. Also, there is a portion of Alvarado Creek and an unnamed tributary within Subarea A at 'C3' (Figure 4.6-1). Alvarado Creek conveys water west, roughly parallel to Interstate 8 from Lake Murray and into the Project Area. The streambed is sparsely vegetated at the east end of the Project Area and has been directed underground into a culvert near commercial businesses and parking lots. The creek then "daylights" into a concrete lined channel with dense patches of the invasive Giant Reed before flowing under Mission Gorge Road and into the San Diego River. This portion of Alvarado Creek and its tributary are designated for office, commercial, and multi-family residential use in the Community Plan Land Use and are not within the MHPA. Impacts on the streambed or wetland vegetation may be subject to the jurisdiction of the ACOE, CDFG, RWQCB, and the City. Before specific

redevelopment activities could be implemented that may affect Alvarado Creek, its tributary or the Diegan Coastal Sage Scrub, a site-specific biological resources report including a wetland delineation would be required by the City of San Diego. Direct impacts on jurisdictional drainages, wetland vegetation or Diegan Coastal Sage Scrub or encroachment into the MHPA beyond that allowed by the City of San Diego regulations would be considered significant.

Other vegetation communities or land uses that occur within Subarea A include landscape plantings of horticultural specimens along roads and interchanges and Disturbed Habitat that lacks vegetation or supports only non-native vegetation. Impacts on these vegetation communities/land uses would not be considered significant.

Within Subarea A, there are also significant opportunities for creation, restoration, or preservation of sensitive vegetation communities. Such measures could serve as mitigation measures to reduce potential future redevelopment project impacts to less than significant. These opportunities are discussed in the Mitigation Measures section.

Subarea B

Subarea B is located in the central to northern portion of the proposed Grantville Redevelopment Project Area, primarily along the San Diego River to Mission Trails Regional Park (Figures 4.6-2 and 4.6-3). Subarea B supports large areas of Disturbed Habitat because of sand and gravel extraction operations. There are also patches of well-developed Riparian Habitat and highly disturbed, Giant Reed infested portions of the San Diego River. On the slopes above the River are large patches of Diegan Coastal Sage Scrub that are connected with the large open space area of Mission Trails Regional Park.

FIGURE 4.6-2 – C4

Along the San Diego River, Subarea B includes a large Urban/Developed area and extensive habitat within the River and adjacent uplands. Riparian and Freshwater Marsh habitats and large open water ponds are present within the River's influence and patches of Diegan Coastal Sage Scrub are present on slopes on both sides of the River. These habitats are within the City of San Diego's MHPA except for a patch of disturbed Diegan Coastal Sage Scrub along the east side of the River. Specifically, within the area labeled 'C4' in Subarea B, the Community Plan Land Use allows for Commercial use. This parcel consists of Urban/Developed land and a small area of Riparian Habitat that appears to be within the MHPA. Before specific redevelopment activities could be implemented that may affect this sensitive vegetation community, a site-specific biological resources report including a wetland delineation would be required by the City of San Diego. In addition, wetland impacts would be subject to the jurisdiction of the Corps, CDFG, RWQCB, and the City. With any change in site usage, the area would be required to come into conformance with MSCP regulations. No development beyond that allowed pursuant to MSCP regulations would be allowed. Direct impacts on Riparian Habitat would be considered significant.

FIGURE 4.6-2 AND 4.6-4 – C5

Also, within the area labeled 'C5' in Subarea B (Figure 4.6-2), the Community Plan Land Use allows for Industrial use. This parcel consists of disturbed Diegan Coastal Sage Scrub and Disturbed habitat that is not within the MHPA. Before specific redevelopment activities could be implemented that may affect Diegan Coastal Sage Scrub, a site-specific biological resources report would be required by the City of San Diego. Direct impacts on Diegan Coastal Sage Scrub would be considered significant. Direct impacts on Disturbed Habitat would not be a significant impact on biological resources.

FIGURE 4.6-3 – C6

Within the area labeled 'C6' (Figure 4.6-3), there is a vacant, undeveloped lot that is designated as Industrial and Sand and Gravel use in the Community Plan. This lot supports a large slope with Diegan Coastal Sage Scrub that is within the MHPA and Non-native Grassland that is outside the MHPA. Before specific redevelopment activities could be implemented that may affect these vegetation communities, a site-specific biological resources report would be required by the City of San Diego. No development beyond that allowed pursuant to MSCP regulations would be allowed. Direct impacts on Diegan Coastal Sage Scrub and/or Non-native Grassland would be considered significant.

FIGURE 4.6-3 – C7

The area labeled 'C7' (Figure 4.6-3) is currently being used for Sand and Gravel extraction and is designated as such in the Community Plan Land Use. Most of this area is Disturbed Habitat because of mining activities, but extensive patches of Diegan Coastal Sage Scrub within the MHPA are still present. The redevelopment of the currently disturbed mining areas would not result in a significant impact on biological resources. However, before specific redevelopment activities could be implemented that may affect Diegan Coastal Sage Scrub, a site-specific biological resources report would be required by the City of San Diego and, as with constraint area 'C4', with any change in site usage, the area would be required to come into conformance with MSCP regulations. No development beyond that allowed pursuant to MSCP regulations would be allowed. Direct impacts on Diegan Coastal Sage Scrub would be considered significant.

FIGURE 4.6-3 – C8

Within the area labeled 'C8', near the boundary with Mission Trails Regional Park, is a large slope with Diegan Coastal Sage Scrub/Chaparral within the MHPA that is designated as Single Family Residential housing in the Community Plan Land Use. Before specific redevelopment activities could be implemented that may affect Diegan Coastal Sage Scrub/Chaparral, a site-specific biological resources report would be required by the City of San Diego. Direct impacts on Diegan Coastal Sage Scrub/Chaparral would be considered significant, and development beyond that allowed within the MHPA would be precluded.

Other vegetation communities or land uses that occur within Subarea B include landscape plantings of horticultural specimens along roads and interchanges and Disturbed Habitat that lacks vegetation or supports only non-native vegetation. Impacts on these vegetation communities/land uses would not be considered significant.

Within Subarea B, there are also opportunities for creation, restoration, or preservation of sensitive vegetation communities. These opportunities are discussed under Mitigation Measures.

Subarea C

FIGURE 4.6-4 – C9

Subarea C occurs in the eastern portion of the Project Area and is not contiguous with the rest of the Project Area (Figure 4.6-4). Subarea C is almost all Urban/Developed and includes a shopping center; retail uses and community facilities; and the Allied Gardens Community Park. The biological resources in this Subarea are limited to two small patches of disturbed Diegan Coastal Sage Scrub and Ornamental vegetation ('C9') that are not within the MHPA.

The Community Plan Land Use designates the areas that currently support disturbed Diegan Coastal Sage Scrub as Schools, Colleges, and Universities. If further improvements to this area were proposed that might impact disturbed Diegan Coastal Sage Scrub, a site-specific biological resources report would be required by the City of San Diego. Direct impacts on Diegan Coastal Sage Scrub would be considered significant and mitigation pursuant to Table 4.6-5 would be required for any impacts to Tier I-III habitats.

Table 4.6-6 provides a summary of potential direct impacts to vegetation communities/land uses for the Proposed Redevelopment Project.

B. Wildlife Corridor Impacts

The San Diego River and associated Riparian and upland vegetation communities within the valley and on the slopes provides a regional wildlife corridor that links Mission Trails Regional Park with Mission Bay Park. Impacts to sensitive vegetation communities in the Project Area such as Riparian, Freshwater Marsh, Diegan Coastal Sage Scrub, or Non-native Grassland would also be considered an impact on the regional wildlife corridor. Direct impacts on native vegetation communities within this corridor would be considered significant. However, consistency with the MSCP and City wetland regulations would also generally avoid impacts to wildlife corridors.

C. Sensitive Species Impacts

Future redevelopment activities have the potential to result in temporary and/or direct impacts to sensitive flora and fauna species within the Project Area. Temporary impacts could result from construction activities that occur in close proximity to potential nesting habitat of sensitive species. Impacts could include adversely affecting individuals during the breeding season causing them to abandon nests thereby increasing the potential for nest predation or neglect and reducing fecundity (potential reproductive capacity) of the species.

TABLE 4.6-6
Summary of Potential Impacts to Vegetation Communities

Vegetation Community (MSCP Tier Habitat Type)	Project Area Acreage	Potential Impacts	Biological Significance Determination
Diegan Coastal Sage Scrub (Tier II) or Diegan Coastal Sage Scrub/Chaparral (Tier II)		**Subarea A** – Potential direct impacts from redevelopment of the area into Office land use. **Subarea B** - Potential direct impacts from redevelopment of area into Single Family Housing or Sand and Gravel mine or other Industrial use. **Subarea C** – Potential direct impacts from redevelopment of area for Schools, Colleges, and University use.	Significant
Riparian Habitat (Tier I Wetland)		**Subarea A** – Potential direct impacts from redevelopment of the area into Office land use. **Subarea B** – Potential direct impacts from redevelopment into Commercial land use.	Significant
Freshwater Marsh (Tier I Wetland)		**Subarea A** – Potential direct impacts from redevelopment of the area into Industrial land use.	Significant
Non-native Grassland (Tier IIIB)		**Subarea B** – Potential direct impacts from redevelopment of area into Sand and Gravel mine land use.	Significant
Disturbed Habitat (Tier IV)		**Subarea A** - Potential direct impacts from redevelopment of the area into Office land use. **Subarea B** - Potential direct impacts from redevelopment of the area into Industrial land use.	Not Significant
Ornamental		**Subareas A-C** Potential direct impacts from redevelopment of the area into numerous land uses including conversion to open space.	Not Significant
Urban/Developed (Tier IV)		**Subareas A-C** Potential direct impacts from redevelopment of the area into numerous land uses including conversion to open space.	Not Significant

Source: City of San Diego, 1997.

Redevelopment activities could also result in permanent direct impacts through destruction of sensitive plants and animals including sensitive birds and their nests and eggs, aestivation sites for sensitive amphibians, and eggs and larvae of sensitive butterfly species occurring within these habitat areas. It is not possible to determine that significant impacts to sensitive species would occur from proposed redevelopment activities; however, direct impacts on non-MSCP covered federal and state listed sensitive species or narrow endemics outside the MHPA would be considered significant. Impacts to covered or non-covered listed species or to narrow endemic species within the MHPA would be considered significant.

Implementation of Mitigation Measures BR1 through BR-8 would reduce the potential impact to less than significant for impacts outside the MHPA. Impacts within the MHPA should be avoided.

4.6.3.3 Indirect Impacts

Indirect Impacts are defined in the CEQA Guidelines as "effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable." Indirect impacts can result in a temporary or permanent impact that causes a biologically significant change in the environment (California Resources Agency 2001: §15358)

A. Vegetation Community Impacts

There is the potential for the following indirect impacts to occur on vegetation communities from redevelopment activities:

- Noise, dust and associated construction activity could affect animals during construction.
- The introduction of invasive exotic plant species into native habitats from disturbance or removal of native vegetation communities.
- Excessive irrigation of landscaping adjacent to native vegetation communities could alter the localized natural moisture regime and increase weediness and susceptibility of plants to disease, pests, and fungus.
- Increased urban runoff and pollution into native vegetation communities through use of herbicides, pesticides, and fertilizers.
- Increase of human disturbance of native vegetation through trampling and introduction of non-native, weedy species.

These potential permanent indirect impacts would be considered significant. However, implementation of Mitigation Measures BR1 through BR8 would reduce the potential impact to less than significant.

B. Wildlife Corridor Impacts and Sensitive Species Impacts

The San Diego River and adjacent upland habitats serve as a regional habitat linkage or wildlife corridor throughout its length within the Project Area. Permanent indirect impacts could occur from an increase in the amount of edge habitat, night illumination of vegetation communities, and an increase in human intrusion into the corridor. An increase in the amount of edge habitat can increase opportunities for invasive species to spread and colonize new areas and degrade the quality of habitat for plant and

wildlife species. The introduction of additional lighting into the wildlife corridor could cause physiological and behavioral changes in wildlife species and disproportionately increase opportunities for predation on vulnerable species. Increases in human disturbance to the corridor could occur from an increase in human intrusion in areas adjacent to redevelopment. Human disturbance could include trampling, harassing of wildlife, introduction of domestic animals such as cats and dogs, and an increase in litter. Domestic cats and dogs are known to prey on reptiles, passerine birds, and small mammals. These potential indirect impacts on the wildlife corridor in the MHPA would be considered significant. Implementation of Mitigation Measures BR1 through BR8 would reduce potential indirect impacts to less than significant.

C. MSCP Consistency Issues

Redevelopment actions that are consistent with the City's MSCP would provide for the long-term viability of wildlife and sensitive habitats. Portions of the project lie within or adjacent to the MHPA and these areas could incur indirect impacts from redevelopment activities. These indirect impacts include allowable compatible uses within the MHPA, such as passive recreation, utility line and road maintenance, and essential public facility improvement. Since redevelopment activities are not well defined, it is not currently possible to address required compliance with detailed MSCP planning and MHPA land use adjacency guidelines. Implementation of Mitigation Measures BR1 through BR9 would reduce the potential impact to less than significant.

4.6.4 Significance of Impact

Future redevelopment activities have the potential to impact sensitive habitats and species located within, and adjacent to portions of the Project Area. Sensitive habitats potentially impacted include Diegan coastal sage scrub, riparian, and freshwater marsh habitats. Potential direct and indirect impacts to biological resources located within the Project Area are considered significant.

4.6.5 Mitigation Measures

In addition to biological constraints, the Project Area includes several opportunities for habitat restoration, creation, or conservation. The following are redevelopment project mitigation requirements as well as a discussion of potential biological restoration and enhancement opportunities.

4.6.5.1 Project Mitigation Requirements

The following measures would provide mitigation for impacts on biological resources within the Project Area. All future redevelopment activities will be required to be incompliance with City of San Diego MSCP Subarea Plan and its implementing regulations.

BR1 The redevelopment project policies shall include a requirement to make use of project designs, engineering, and construction practices that minimize impacts to sensitive habitats and wildlife corridor /MHPA preserve areas.

BR2 Further environmental review shall be conducted in accordance with appropriate CEQA documentation requirements where specific actions would result in impacts to sensitive habitats and/or wildlife corridor/MHPA preserve areas. These reviews shall be conducted at the earliest

possible period of tiered project review to ensure the most flexibility in planning and project design, and resolve conflicts with significant biological resources.

BR3 Prior to any project impacts occurring within areas under the jurisdiction of federal, state, or local biological resource regulatory agencies, the project applicant for the specific work shall obtain any and all applicable resource agency permits which may include, but are not limited to, Clean Water Act 404 and 401 permits and California Department of Fish and Game Code 1601 and 1603 Streambed Alteration Agreements.

BR4 Significant impacts to City of San Diego Tier I-III habitats shall be mitigated as shown in Table 4.6-5 and as described in Section 4.6.1.4 above.

BR5 Any significant wetland resource impacts to the San Diego River identified during lower tier environmental review shall be mitigated within the immediate area of the impact action.

BR6 Where potential impacts to non-MSCP covered federal and/or state listed sensitive species and/or narrow endemic species may occur as a result of proposed project actions, coordination with responsible listing agencies (USFWS and/or CDFG) shall be completed as early as practicable and in conjunction with, or prior to, the CEQA process for actions that may affect these species. Specific actions necessary to protect these sensitive species shall be determined on a case-by-case basis.

BR7 Project actions resulting in impacts to nesting migratory birds (as defined under the Migratory Bird Treaty Act [MBTA]) shall incorporate seasonal timing constraints for any wetland habitat clearing or shall require work corridor surveys for nesting birds. Where active nests are identified, these shall be avoided if practical, and if necessary, a MBTA Special Purpose Permit (50 CFR §21.27) shall be completed before removal of active nests of MBTA covered species.

BR8 All future specific actions undertaken at or near the San Diego River shall be reviewed for consistency with the MSCP preserve and development requirements, as well as the MHPA Land Use Adjacency Guidelines.

4.6.5.2 Biological Mitigation Opportunities and the San Diego River Park Master Plan

The Draft San Diego River Park Master Plan is a comprehensive planning document. As specific redevelopment actions are implemented and impacts on biological resources occur, mitigation within the San Diego River Park and adjacent habitats will likely be necessary. There appear to be many opportunities to mitigate redevelopment impacts within the Project Area that would be consistent with the goals of the San Diego River Park. Potential mitigation opportunities within each Subarea are presented below and are identified as 'O1-O5' with 'O' denoting a potential 'Opportunity.'

A. Subarea A

The San Diego River Park Master Plan has identified areas along the River at 'O1' (Figure 4.6-1) that are recommended for addition to the adjacent open space areas. These parcels abut the River and are currently Urban/Developed, but are classified as Open Space in the Community Land Use Plan. An opportunity may be available along the River in these areas to mitigation impacts from redevelopment projects through creation of wetland habitats and wetland buffer habitats within these Urban/Developed areas.

Another potential opportunity for mitigation of redevelopment impacts and identified as a "Key Site" in the San Diego River Park Master Plan is at the confluence of Alvarado Creek and the San Diego River ('O2')(Figure 4.6-1). Mitigation opportunities include day lighting, or uncovering, and dechannelizing Alvarado Creek and removing large areas of Giant Reed to enhance existing Riparian Habitat. These areas are not within the MHPA, but provide significant biological opportunities and, if restored, may be candidates for inclusion in the MHPA.

Within Subarea A generally, opportunities for mitigation exist such as removal of Ornamental vegetation along development parcels that abut the River.

B. Subarea B

The San Diego River Park Master Plan identifies several opportunities for enhancement, restoration, creation, or protection of native habitats along the River within Subarea B that could be used to mitigate impacts from redevelopment activities or could be pursued by the City of San Diego for enhancement of the River Park.

Specifically, portions of the area labeled 'O3' in Subarea B (Figure 4.6-3) in the Community Plan Land Use are currently being used for Industrial purposes, but are designated as Open Space. These parcels are immediately adjacent to the San Diego River and, if necessary, there may be opportunities for mitigation of redevelopment impacts through creation or restoration of Riparian, Freshwater and/or Diegan Coastal Sage Scrub habitats in areas that are currently under Industrial land use.

There is a long stretch of the River that is infested with the invasive Giant Reed within the Superior Mine ('O4')(Figure 4.6-3). Mitigation could include removal of Giant Reed and re-planting with native riparian species. This area is within the MHPA.

Several of the Open Water areas of the River are also infested with the invasive Uruguay Marsh Purslane. Mitigation could include removal of this species.

Another 'Key Site' identified in the San Diego River Park Master Plan that can be incorporated into mitigation for redevelopment impacts are the Disturbed Habitats in, and adjacent to, Superior Mine ('O5')(Figure 4.6-3). Opportunities include acquiring habitat for enhancement and/or protection or removal of non-native, invasive species within native habitats. These areas are within the MHPA.

There is also an opportunity to enhance disturbed Diegan Coastal Sage Scrub and Riparian Habitat in areas currently designated as Open Space at the point where the River turns sharply south along the Admiral Baker Golf Course (Figure 4.6-2). This area is not within the MHPA, but is adjacent and may be a candidate for inclusion in the preserve if restored.

C. Subarea C

There are limited opportunities for mitigation of redevelopment impacts in Subarea C. There are two small patches of disturbed Diegan Coastal Sage Scrub that could be enhanced or enlarged, but these areas are not classified as Open Space and are low quality patches that are not worthy of extensive mitigation efforts. These patches are not within the MHPA.

4.6.5.3 Protection and Notice Element

BR9 Assurance that mitigation areas will be adequately protected from future development shall be provided through 1) the dedication of fee title for the mitigation land to the City of San Diego; or 2) the establishment of a conservation easement relinquishing development rights to a conservation entity; or 3) a recorded covenant of easement against the title of the property for the remainder area, with the USFWS and CDFG named as third party beneficiaries, where a project has utilized all of its development area potential as allowed under the OR-1-2 zone.

4.6.6 Conclusion

Future redevelopment activities have the potential to result in direct and indirect impacts to sensitive species, depending on the type, size, and location of proposed activities. Implementation of Mitigation Measures BR1 through BR9 will reduce the significant biological resources impacts to a level less than significant.