

4.11 BIOLOGICAL RESOURCES

A survey of existing biological resources was conducted by Lettieri-McIntyre and Associates. The results of the survey are summarized below. The biological resources inventory is contained in Appendix D.

Existing Conditions

A. Survey Methodology

The area within the City boundaries was surveyed by Lettieri-McIntyre and Associates. The purpose of the survey was to identify remaining native biological resources in Lemon Grove. Most of the original native vegetation has been removed through past agricultural and development activities.

Undeveloped, accessible properties in the City were observed during the survey. The vegetation communities and sensitive plant populations were then mapped onto an aerial photograph (1 inch = 200 feet scale). The size of sensitive plant populations were estimated using visual counts. The scientific nomenclature used in this report is from the following standard references: vascular plants (Hickman, 1993; Munz, 1974); vegetation communities (Holland, 1986); wildlife habitats (Mayer, et al. 1988); amphibians and reptiles (Jennings, 1983 and Stebbins, 1966); birds (American Ornithologists' Union 1983, 1989); and mammals (Jones, et al. 1982).

B. Distribution of Biological Resources

Vegetation Communities

Vegetation types or communities are assemblages of plant species that usually coexist in the same area. The following categories of vegetation communities conform to the Holland (1986) categories. In some instances, there may be an assemblage of plant species for which there is not an adequate description in Holland (1986). In these cases, a category is selected which reflects both the floristics and physiognomy of that assemblage. Three vegetation communities occur within the City, and the distribution of the communities is illustrated in Figure 4.11-1.

Diegan Coastal Sage Scrub. Coastal sage scrub is one of the major shrub-dominated (scrub) communities within California. This community occurs on xeric sites with shallow soils. Sage scrub species are typically drought-tolerant plants with shallow root systems. Both of these adaptations allow for the occurrence of sage scrub species on xeric sites.

In Lemon Grove, three remnant patches of Diegan coastal sage scrub totalling 0.7 acre were observed. All three patches exhibit varying levels of disturbance (invasive weeds and/or physical

damage), and all three are isolated from any larger, intact communities of Diegan coastal sage. The condition of the habitat in these areas is described below.

- **Area One.** This area (0.5 acre) is located on the slopes above and to the east of Federal Boulevard and west of MacArthur Drive. The disturbed sage scrub within this area is currently dominated by laurel sumac, flat-topped buckwheat, and non-native annual grasses and weeds;
- **Area Two.** This area (0.1 acre) is located on a hillside north and opposite of San Miguel Avenue and east of Federal Boulevard. The presence of non-native species is minimal in this area. Although somewhat disturbed, this area represents the best example of Diegan coastal sage scrub remaining within the City boundaries. In addition, this small remnant patch of sage also contains at least two sensitive sage scrub plant species: San Diego sunflower (*Viguiera laciniata*) and coastal barrel cactus (*Ferocactus viridescens*); and
- **Area Three.** This area (0.1 acre) is located on the south-facing cut/fill slopes west of El Prado Avenue. The sage scrub plant species represented within this very small patch are flat-topped buckwheat and white sage. This particular patch of sage scrub is probably present as a result past hydroseeding. The seed mixture probably contained the sage scrub plants observed.

Disturbed Wetlands. Disturbed wetlands are communities that are dominated by exotic wetland species. These species have invaded sites that had been previously disturbed or are periodically disturbed. This disturbance has resulted in the displacement of native wetland species and the subsequent colonization of these areas by exotic species. The disturbed wetlands within the City are almost exclusively dominated by Bermuda grass (*Cynodon dactylon*), occasional patches of soft flag (*Typha domingensis*), scattered mulefat, castor bean (*Ricinus communis*), goldenbush (*Isocoma menziesii*), and cocklebur (*Xanthium strumarium* var. *canadense*). This community occupies approximately 0.7 acre, and was observed within the unmaintained earthen drainages located north of Central Avenue, east of Federal Boulevard, and the area west of the trolley tracks and south of San Miguel Avenue. The hydrology supporting these two wetlands appears to be the result of run-off from the adjacent development (streets, irrigated landscapes, etc.).

Ruderal Vegetation. Ruderal communities are areas of high disturbance that are dominated by non-native weedy forbs (herbaceous, non-grass species). Many of the exotic weeds now present in California originated from the Mediterranean region. The ruderal areas within the City are dominated by mustard (*Brassica* sp.), red-brome (*Bromus rubens*), turkey mullein (*Eremocarpus setigerus*), horehound (*Marrubium vulgare*), and tocalote (*Centaurea melitensis*). Ruderal areas occur throughout the remaining undeveloped or unlandscaped portions of the City.



- Legend**
- D-Wet Disturbed wetlands
 - DCSS Diegan coastal sage scrub
 - D-DCSS Disturbed Diegan coastal sage scrub

Source: Lantieri-Medynov and Associates, 1995.



Figure 4.11-1
 Vegetation Communities

Botanical Resources

A comprehensive inventory of individual plant species was not completed. However, given the disturbed and isolated nature of the existing natural habitats, undeveloped areas within the City are expected to support a low biological diversity and a high ratio of non-native to native species.

Zoological Resources

Similarly, a comprehensive inventory of animals was not completed. As with plant species, undeveloped areas of the City are expected to support a low biological diversity, mostly consisting of animals that can survive in an urban environment (i.e. house finches, house sparrows, Anna's hummingbirds, etc.).

C. Sensitive Resource Policy and Management

Because Lemon Grove is primarily developed and few native biological resources occur, the City has not adopted local policies to manage biological resources. Federal and state regulations pertaining to biological resources are consequently relied upon for identifying and protecting sensitive species and habitat.

Federal Policies

The Federal Endangered Species Act of 1973 provides for the designation of threatened and endangered species, and encourages the states and other interested parties to develop and maintain conservation programs to safeguard the nation's wildlife heritage. The Act prohibits any person subject to the jurisdiction of the United States from import, export, sale, or possession of any threatened or endangered species of fish and wildlife. The Act does not provide similar prohibitions on plant species, except where located on federal lands. All federal agencies must seek to conserve threatened and endangered species, and must use their authority to further this purpose. Candidate species are not protected under this Act, although some federal agencies such as the Forest Service, National Park Service, Bureau of Land Management (BLM) and the U.S. Fish and Wildlife Service (USFWS) grant some level of security or management consideration to federal candidate species.

Wetlands are under the jurisdiction of the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. Impacts to wetlands from development may require the issuance of a Section 404 Permit. Because of the federal policy of "no net loss" of wetlands, any impacts to wetlands must be mitigated at a replacement ratio of at least one-to-one.

State Policies

The California Endangered Species Act, with revisions enacted by AB 3309 and AB 3270, provides for the definition of rare, threatened, and endangered species of plants and animals, and prohibits the import, taking possession, or sale of any such species determined by the State to meet these definitions. In addition, certain species of invertebrates or parts thereof are fully protected and may not be taken or possessed at any time. The Act requires that State agencies formally consult with the California Department of Fish and Game (CDFG) on every project that they propose that is subject to the provisions of the CEQA.

Riparian habitat is regulated by the CDFG, pursuant to Section 1600 of the California Fish and Game Code. Drainages shown on USGS 7.5 minute quadrangles which are designated as "blue line" streams normally fall within the jurisdiction of CDFG. Streambed Alteration Agreements must be obtained for any work which is proposed within a drainage falling within CDFG's jurisdiction.

D. Sensitive Resources

Sensitive habitats are those which are considered rare within the region; are considered sensitive by the CDFG (Holland 1986); or, support sensitive plants or animals.

Sensitive Habitats

Coastal Sage Scrub. Coastal sage scrub is considered a sensitive habitat by several agencies, including the City of San Diego (1991a), the County of San Diego (1991) and CDFG (Holland 1986) because this community supports a number of sensitive species. Oberbauer and Vanderwier (1991) estimate that only about 130,000 acres of sage scrub remain in San Diego County. This represents a 69 percent loss of this community in the County since the pre-European era. These estimates were based on 1988 vegetation coverage estimates, and additional losses have accrued since. Loss of sage scrub within California is primarily the result of grazing and urbanization.

Riparian and Wetland Habitats. Riparian and wetland communities are considered sensitive by the City of San Diego (1991b) and the County of San Diego (1991). Riparian communities are situated along stream courses and adjacent stream banks. Wetland habitat is defined by certain hydrological, vegetation and soil criteria. Wetland habitat is under the jurisdiction of the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act of 1972, as amended in 1977 and 1984. Riparian habitat is regulated by the CDFG, pursuant to Section 1600 of the California Fish and Game Code.

Wetlands serve many functions including flood and sediment control, providing habitat for rare and common species, corridors for wildlife movement, and control of water quality and erosion.

Oberbauer and Vanderwier (1991) report a reduction of 91 percent of freshwater marsh (100 acres from an original estimate of 1,100 acres) and a reduction of 61 percent in riparian woodland (13,600 acres from an original estimate of 34,600 acres) in San Diego County since the pre-European era.

Sensitive Botanical Resources

Sensitive plants include those listed by the USFWS (1992) and CDFG (1994a), candidates for listing (USFWS, 1993 and CDFG, 1994a), and/or considered sensitive by the CDFG (1994b) and/or CNPS (Skinner and Pavlik, 1994). Two sensitive plant species were observed during the survey. Given the disturbed nature of the remaining remnant patches, no other sensitive species are expected to occur. These species and their status within the City are described below. Refer to Appendix D for the sensitivity status descriptions.

Coast Barrel Cactus (*Ferocactus viridescens*). Coast barrel cactus is a perennial within the cactus family (Cactaceae). This small, columnar species is restricted to San Diego County and Baja California, and is generally associated with coastal sage scrub. Beauchamp (1986) reports this species in the following locations: San Luis Rey River in Oceanside, Del Mar, Poway, Kearny Mesa, Rose Canyon, National City, Point Loma, Casa de Oro, Sunnyside, Otay Mesa and the Initial Boundary Monument. Major (greater than 200 individuals), known extant populations have been identified in Carmel Mountain, Santee (Oak Canyon-Little Sycamore Canyon-Sycamore Canyon), Mission Trails Regional Park, Point Loma, Sweetwater Reservoir, Otay River Valley, Otay Mesa and Marron Valley (Ogden, 1993).

Coast barrel cactus was formerly widespread throughout coastal areas of San Diego County but now exists in numerous fragmented populations. This species is seriously threatened by urbanization, off-road vehicles and horticultural collecting (Ogden, 1993 and Skinner and Pavlik, 1994).

Listing: USFWS Category 2; CNPS List 2; R-E-D: 1-3-1

Status Within the City: A total of seven individuals were identified within the remnant patch of Diegan coastal sage scrub located north of San Miguel Avenue.

San Diego Sunflower (*Viguiera laciniata*). San Diego sunflower a perennial shrub in the sunflower family (Asteraceae) that occurs in southwestern San Diego County, Baja, California, and Sonora, Mexico. This species is a co-dominant within the southern Diegan coastal sage scrub, especially on xeric slopes. Beauchamp (1986) identifies these species in Mission Gorge, Mission Valley, Flynn Spring, Potrero, Tecate, Telegraph Canyon, Barrett, Dehesa, Spring Valley, Mission Hills, Otay Lake, La Mesa, Dulzura, San Onofre and Bonsall.

San Diego sunflower is locally common in San Diego County, but is threatened by development (Skinner and Pavlik, 1994).

Listing: CNPS Rating: List 4; R-E-D: 1-2-1

Status Within the City: This plant species occurs as a co-dominant within the remnant patch of Diegan coastal sage scrub located north of San Miguel Avenue.

Sensitive Zoological Resources

Sensitive animals are species or subspecies listed as threatened, endangered, or being evaluated (proposed) for listing by the USFWS (1992) and/or by the CDFG (1992b, 1992c). No sensitive zoological species were observed during the survey of the remnant patches of native vegetation.

Potentially Occurring Sensitive Species

As part of the biological assessment conducted by Lettieri-McIntyre and Associates, sensitive plant and animal species that might occur in the City were considered. Appendix D lists the sensitive species that potentially could occur within the City, based upon the types and distribution of existing habitats within the City. Due to the disturbed and isolated state of the Diegan coastal sage scrub and wetlands, the potential for sensitive species to occur in the City is very low. Please note that none of these species were observed during the survey.

Threshold of Significance

Based on the CEQA Guidelines, a project will normally have a significant effect on biological resources if it will:

- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; and/or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

Impacts

A. Plan-wide

The sensitive biological resources that potentially could be impacted are: 0.7 acre of Diegan coastal sage scrub, 0.7 acre of disturbed wetland, and two sensitive plant species, the coast barrel cactus and the San Diego sunflower.

The proposed General Plan will not affect any of the biological resources within the City of Lemon Grove as all natural areas are located outside of the areas where the Land Use Plan proposes a change in permitted land use or density. However, future development in those areas where no land use changes are being proposed may occur and could impact biological resources.

Impacts to the Diegan coastal sage scrub will not be considered significant because of the limited amount of habitat within the City and its highly fragmented and isolated condition. Although within the NCCP study area, Lemon Grove is not a participant of the NCCP because of the lack of any significant habitat within the City limits. Furthermore, no portion of the Multiple Species Conservation Program (MSCP) Preserve will occur within the City limits. If, however, during the course of project-level environmental review, the resource agencies do deem that this loss of sage scrub will constitute a significant impact and require mitigation, mitigation will occur outside of the City limits, within the boundaries of the MSCP Preserve.

Impacts to the disturbed wetlands which could occur from individual projects will require appropriate permitting with the U.S. Army Corps of Engineers and the CDFG.

Impacts to the two sensitive plant species will not be significant because of their low sensitivity status, small population size and isolation from other populations.

B. STAs and Other Development Areas

Downtown Village (STA I)

No sensitive biological resources occur within this STA. Therefore, no impacts to sensitive biological resources will occur within this STA from implementation of the proposed General Plan.

Massachusetts Station (STA II)

No sensitive biological resources occur within this STA. Therefore, no impacts to sensitive biological resources will occur within this STA from implementation of the proposed General Plan.

Regional Commercial (STA III)

No sensitive biological resources occur within this STA. Therefore, no impacts to sensitive biological resources will occur within this STA from implementation of the proposed General Plan.

West Central Residential (STA IV)

No sensitive biological resources occur within this STA. Therefore, no impacts to sensitive biological resources will occur within this STA from implementation of the proposed General Plan.

Federal Boulevard Automobile Sales District (STA V)

No sensitive biological resources occur within this STA. Therefore, no impacts to sensitive biological resources will occur within this STA from implementation of the proposed General Plan.

Skyline Commercial Center (STA VI)

No sensitive biological resources occur within this STA. Therefore, no impacts to sensitive biological resources will occur within this STA from implementation of the proposed General Plan.

Troy Street/SR-125 Planning Area (STA VII)

No sensitive biological resources occur within this STA. Therefore, no impacts to sensitive biological resources will occur within this STA from implementation of the proposed General Plan.

Other Development/Land Use Changes

Multiple-Family Residential Development. No sensitive biological resources occur within the areas proposed for multi-family development. Therefore, no impacts to sensitive biological resources will occur from implementation of the proposed General Plan in this area of the City.

Industrial and Commercial Areas. Impacts to disturbed wetlands could occur as the result of development of industrial and commercial areas south of Federal Boulevard.

Skyline Neighborhood Commercial Area. No sensitive biological resources occur within the Skyline Neighborhood Commercial Area. Therefore, no impacts to sensitive biological resources will occur from implementation of the proposed General Plan in this area of the City.

Civic Center Concept Area. No sensitive biological resources occur within the Civic Center Concept Area. Therefore, no impacts to sensitive biological resources will occur from implementation of the proposed General Plan in this area of the City.

Mitigation Measures

The following mitigation measures are required to reduce impacts to biology to less than significant. The mitigation measures correspond to applicable programs of the General Plan Implementation Manual, as noted.

A. Plan-wide

Mitigation Measure 4.11-1: For future development within the City limits that would affect the 0.7 acre of coastal sage scrub or the 0.7 acre of disturbed wetlands, the City shall require an impact assessment and appropriate mitigation according to the requirements of applicable local, State, and Federal policies and regulations related to the impacted biological resources. Impacts shall be avoided wherever possible, or off-site mitigation shall be implemented. (General Plan Implementation Manual, Conservation and Recreation Program #9).

B. STAs and Other Development Areas

Mitigation Measure 4.11-1 addresses the impacts to wetlands within the industrial and commercial area to the south of Federal Boulevard. No other mitigation measures are required for these specific areas of the City.

Level of Significance After Mitigation

With implementation of the mitigation measures identified above, impacts related to biological resources will be reduced to below significance.