5.7 BIOLOGICAL RESOURCES

This section describes existing biological resources within the Los Angeles River Master Plan area which includes the River and adjacent lands within one-half mile of the River. This description includes the regulatory framework that guides management of biological resources and the assessment of possible impacts on those resources.

5.7.1 Regulatory Framework

This section describes the federal, state, and local statutes and regulations related to biological resources that must be considered by the decision-maker in rendering a decision on the site-specific project improvements identified in the proposed *Los Angeles River Master Plan*.

Federal

The federal statutes and regulations that pertain to this project include the Rivers and Harbors Act, Section 404 of the Clean Water Act, the Coastal Zone Management Act, the federal Endangered Species Act of 1973, and the Migratory Bird Treaty Act.

Section 10 of the River and Harbors Act of 1899

Under Section 10 of the Rivers and Harbors Act of 1899, the construction of structures in, over, or under; excavation of material from; or deposition of material into 'navigable waters' are subject to regulation by the U.S. Army Corps of Engineers.

Section 404 of the Clean Water Act of 1977, as amended

Section 404 of the Clean Water Act and 33 CFR Parts 320-330, which is administered by the U.S. Army Corps of Engineers (Corps), regulates the discharge of dredged and fill material in waters of the United States. The Corps has established a series of Nationwide Permits that authorize certain activities in waters of the United States, provided that the proposed activity can demonstrate compliance with the standard conditions. The Corps has jurisdiction over all projects that result in impacts on waters of the United States. For projects greater than 10 acres, an individual permit is required. However, projects with less than 10 acres of impact may qualify for a Nationwide Permit.

Coastal Zone Management Act of 1972, as amended

The federal Coastal Zone Management Act of 1972 created a broad program based on land development controls within coastal zones, States are required to establish comprehensive programs to designate and manage development within the coastal zone. Under the California Coastal Act, California has promulgated a state management program that encourages local agencies to develop Local Coastal Programs (LCPs). For projects affecting wetlands in the coastal zone, the project proponent must certify to the Corps that the proposed activity complies with the Coastal Zone Management Act, the California Coastal Act, and the Local Coastal Program.

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Federal Endangered Species Act

Section 9 of the federal Endangered Species Act (ESA) prohibits the "taking" of species listed by the U.S. Fish and Wildlife Service (USFWS) as threatened or endangered. As defined in the ESA, "taking" means "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct." In recognition that "take" cannot always be avoided, Section 7 and Section 10(a) of the ESA includes provisions for takings that are incidental to, but not the purpose of, otherwise lawful activities.

The Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess ,or attempt to do the same, to any migratory bird or part, nest, or egg of such bird listed in wildlife protection treaties between the United States and Great Britain, Mexico, Japan, and the countries of the former Soviet Union. As with the federal ESA, the MBTA also authorizes the Secretary of the Interior to issue permits for take.

State of California

The State of California statutes and regulations that pertain to this project include CEQA, Section 1600 of the State Fish and Game Code, California Endangered Species Act, and Native Plant Protection Act.

California Environmental Quality Act

CEQA requires a review of the potential impacts of proposed projects on plant or wildlife resources defined as rare, threatened, or endangered.

Section 1600 of the State Fish and Game Code

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that support fish or wildlife resources is subject to the regulatory authority of the California Department of Fish and Game pursuant to Sections 1600 through 1603 of the State Fish and Game Code. Section 1601 of the Code governs public agency projects. Under State Code, a stream is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Included are watercourses with surface or subsurface flows that support or has supported riparian vegetation. The Department's jurisdictions within altered or artificial waterways is based on the value of those waterways to fish and wildlife. The Department must be contacted for a streambed alteration agreement for any project that may impact a stream bed or wetland. The Department has maintained a "no net loss" policy regarding potential impact and has required replacement of lost habitats on at least an acre for acre ratio.

State Endangered Species Act

The State Endangered Species Act (ESA) prohibits the taking, importation, or sale of state-listed species. The California Department of Fish and Game (CDFG) is authorized to enter into memoranda of understanding with individuals, public agencies, universities, zoological gardens, and scientific or

educational institutions to import, export, take, or possess listed species for scientific, educational or management purposes. The State ESA requires state lead agencies to consult with the CDFG on projects with potential impacts on state-listed species. These sections also require the CDFG to coordinate consultations with the USFWS for actions involving federally as well as state-listed species.

Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The definitions of rare and endangered differ from those contained in the State ESA; however, the list of native plants afforded protection pursuant to this Act includes those listed as rare and endangered under the State ESA. This Act provides limitations on "take" as follows: "...no person will import into this state, or take, possess, or sell within this State" any rare or endangered native plant, except in compliance with provisions of the Act. Individual land owners are required to notify the Department at least 10 days in advance of changing land uses to allow the Department to salvage any rare or endangered native plant material.

County

The County of Los Angeles has adopted policies and ordinances that govern planning and project evaluation in areas designated as Significant Ecological Areas (SEA). In addition, the County Oak Tree Ordinance affords protection to mature oak trees.

General Plan

The Special Management Area Map of the County of Los Angeles General Plan (Los Angeles County Department of Regional Planning 1993, 1991f, and 1980a) designates Significant Ecological Areas (SEA). It is a goal of the Conservation and Open Space Element of the County of Los Angeles General Plan (Los Angeles County Department of Regional Planning 1993 and 1980a) to preserve forests, fisheries, significant ecological areas and other bird resources. The Land Use Element of the County of Los Angeles General Plan (Los Angeles County Department of Regional Planning 1993 and 1980a) encourages more efficient use of land, compatible with and sensitive to natural ecologic and scenic resources. As documented in Los Angeles County Significant Ecological Area Study (England and Nelson 1976), a total of sixty-two areas were designated as significant ecological areas in Los Angeles County. The total number of SEAs has been reduced to twenty-nine through annexation of unincorporated County areas into individual cities. SEAs are ecologically important or fragile land or water areas valuable as plant and animal communities requiring preservation and protection.

Oak Tree Ordinance

Title 22 of the Los Angeles County Code, Ordinance for the Conservation of Oak Trees, recognizes the importance of conserving oak trees and provides for an oak tree permit program. The purpose of the ordinance is to recognize oak trees as significant historical, aesthetic and valuable ecological resources. The ordinance specifically requires an individual to obtain a permit to remove any tree of the oak genus which is 25 inches in circumference (or a combined circumference of 38 inches for any two stems on a multi-stem tree).

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5.7.2 Existing Conditions

Existing biological resources of the Los Angeles River within the Los Angeles River Master Plan area are described here primarily based upon information provided in previously prepared environmental documents. The information on biological conditions of the Los Angeles River found within the Master Plan itself is derived primarily from The Biota of the Los Angeles River (CDFG 1993) supplemented by site visits. The Biota of the Los Angeles River study was conducted for the California Department of Fish and Game by the Los Angeles County Museum of Natural History. The Los Angeles County Drainage Area Project Master Environmental Impact Report (LACDPW 1994a), the Los Angles County Drainage Area Review: Final Feasibility Study Interim Study and Environmental Impact Statement (ACOE 1991a), and two Planning Aid Reports on biological resources of the river drainage area developed by the U.S. Fish and Wildlife Service for the U.S. Army Corps of Engineers (USFWS 1987; USFWS 1984) were also consulted. Field reconnaissance of the Los Angeles River was also undertaken in support of this Environmental Assessment; the entire length of the river was surveyed, with an emphasis on reviewing sites where parks are proposed or where other potentially ground-disturbing activities may take place. Areas where habitat restoration is called for by the Master Plan were also targeted. The California Natural Diversity Data Base (CNDDB) was consulted for information related to sensitive plant and wildlife resources that potentially occur in the region (CDFG 1995).

General descriptions of plant communities follow the definitions provided in *Preliminary Descriptions* of the Terrestrial Natural Communities of California (Holland 1986), supplemented with habitat descriptions provided in the *Biota of the Los Angeles River* (CDFG 1993). Botanical names follow taxonomy according to *The Jepson Manual: Higher Plants of California*, (Hickman, 1993). Common names not available from Hickman are taken from Munz (1974), Dale (1986), McAuley (1985), or Roberts (1989). Ornamental plant species not found in those sources are taken from the *Sunset Western Carden Book* (Hogan 1989).

Plant Communities

The Los Angeles River officially begins where Calabasas Creek meets Bell Creek near Owensmouth Avenue in Canoga Park; it ends 51 miles later in Long Beach where it enters the Pacific Ocean. The portion of Tujunga Wash included in the Master Plan area begins at Hansen Dam in the Lake View Terrace area and continues nine miles in a southerly direction to its confluence with the river. The entire 51 mile reach of the river has been channelized, as has the nine miles of Tujunga Wash. Three soft- or stone-bottom stretches exist within the concrete walled and floored channel: approximately 2.4 miles within the Sepulveda Basin, approximately 6 miles from the Burbank/Western Channel confluence near Victory Boulevard downstream to just above the confluence with the Arroyo Seco (near the Golden State Freeway [I-5]/Pasadena Freeway [110] junction); and approximately 2.6 miles from Willow Street to the river's mouth in Long Beach. River modification for flood control purposes began as early as 1910, by the 1960s channelization was essentially complete (Van Wormer [1991] in CDFG [1993]). This long history of extensive alteration and disturbance has led to extensive changes in the plant and animal life associated with the river.

The following descriptions of existing plant communities and habitats within the Los Angeles River Master Plan area follow those provided in *The Biota of the Los Angeles River* (CDFG 1993). CDFG

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(1993) identifies some 25 contemporary biotic communities within the Los Angeles River drainage. Several are communities that fall outside the Master Plan study area. However, others of the additional habitat types are important to a discussion of the biological resources of the Los Angeles River because they recognize that even highly disturbed and artificial systems may have biological value.

The following resource assemblages described in *The Biota of the Los Angeles River* (CDFG 1993) occur within the *Los Angeles River Master Plan* area:

Brackish channel water. Where ocean water moves upstream from Queensbury Bay due to tidal flows brackish water conditions are created. Tidal influence extends from the mouth of the river north approximately 2 km to approximately mid-way between Anaheim Street and Pacific Coast Highway. The general lack of vegetation below Pacific Coast Highway is indicative of the influence of salt water.

Wet concrete channel bottom with algal growth. Occurs along the lower river channel, especially between Willow Street and Rosecrans Avenue, where the concrete is covered with a shallow sheet of water. Similar pockets are also near the Ventura Freeway and downstream from the Pasadena Freeway. During the summer months the warm water supports algal growth on which invertebrates thrive. Shore-birds use this habitat particularly during their fall migration from July to September.

Clean concrete channel. Most of the Los Angeles River is composed of concrete channel sides and bottom. Only a few weedy vascular plants are found in occasional cracks in the concrete, for the most part the channel is devoid of vegetation. Little algal growth occurs as well.

River bank. Earthen river banks formerly constituted a specialized wildlife habitat along the river that has been almost completely eliminated. Some areas remain around the edges of flood control basins, especially behind Hansen Dam.

Freshwater marsh/cienega. Freshwater marshes dominated by *Typha* and *Scirpus* species were once widespread in the Los Angeles River area. Most have been eliminated by draining and fill for development and through flood control activities. Small patches of *Typha* or *Scirpus* still occur within some of the soft-bottom areas of the river, especially in the Glendale Narrows and the Sepulveda Basin.

Open freshwater reservoirs. Constructed reservoirs/lakes within the Los Angeles River watershed offer feeding and resting habitat to migrating birds. Locations include Silver Lake, Encino, Los Angeles, Pacoima and Tujunga Reservoirs and spreading basins.

Soft bottom channel with annually flooded riparian growth. Three areas of the River do not have a concrete bottom. These areas are floored either sediment, cobbles, or boulders or a mix of the these. The lack of a solid bottom allows growth of willows and other riparian vegetation. The three areas are: (1) from Willow Street north to the Pacific Coast Highway; (2) in the Glendale Narrows from the Burbank/Western Channel confluence (Victory Boulevard) with the river to just above the Arroyo Seco confluence; and (3) in the Sepulveda Flood Control Basin from the dam to above Balboa Boulevard. In general, vegetation in the these reaches only persists until scoured by floods or removed as a result of channel clearing for flood control purposes.

Sapphos Environmental Page 5-46 Floodplain forest. This habitat is characterized by willows and cottonwoods, often with dense shrubby undergrowth of *Rubus*, *Urtica*, and *Vitus* and other species. Once common along the river, remnants now occur primarily in Whittier Narrows and in the Sepulveda and Hansen Flood Control Basin (and thus outside the Master Plan area).

Valley oak savanna. Valley oak savannas were once found in the western area of the river drainage, though they were more common to the west and north of the Los Angeles River drainage. Scattered valley oaks remain in the San Fernando Valley adjacent to the Chatsworth Reservoir basin and within the Sepulveda Basin but without their native plant understory.

California walnut woodland. Found on slopes flanking the Los Angeles River floodplain in the Glendale Narrows area and along the southern flank of the San Fernando Valley.

Urban/suburban. Urban and suburban development occupies the vast majority of the LA River Master Plan area outside of the river channel itself. The vegetation of these areas is almost completely non-native, consisting of both intentionally planted ornamental species and an array of non-native weedy species adapted to urban/suburban conditions.

Aerial. Species that feed on insects such as bats, swallows and swifts, are common throughout the Los Angeles River watershed. Aerial habitats are also important for migrating birds. Aerial habitat occurs when conditions of vegetation, wind, and topography serve to concentrate insects and the species that feed on them.

Four of the plant assemblages described in *The Biota of the Los Angeles River* correspond to natural plant communities described in *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). These native plant communities includes:

Freshwater marsh/cienega: Coastal and Valley Freshwater Marsh (CNDDB Element Code

52410)

Floodplain forest: Southern Cottonwood-Willow

Riparian Forest (CNDDB Element Code:61330)

Southern Willow Scrub (CNDDB Element Code:63320)

Mulefat Scrub (CNDDB Element Code: 63310

Valley oak savanna: Valley oak woodland (CNDDB Element Code:71130)

California walnut woodland: California walnut woodland (CNDDB Element Code 71210)

Detailed descriptions of these plant communities that historically occurred in greater abundance in the Los Angeles River Master Plan and are provided in Appendix A. These descriptions are provided to assist in the development of tree planting and environmental enhancement projects.

Wildlife Resources

The Los Angeles River within the Los Angeles River Master Plan area has been completely channelized. This has caused a severe displacement and fragmentation of natural habitat associations. However, there continues to be wildlife habitat in certain soft-bottomed channel areas and flood control basins within the study area. Wildlife resources present are concentrated in these three areas: Sepulveda Basin, Glendale Narrows, and Lower Los Angeles River Channel.

Lower Los Angeles River Channel

From the vicinity of the Pasadena Freeway in the Glendale Narrows area south to Long Beach, the Los Angeles River channel is a Clean Concrete Channel. This portion of the Los Angeles River contains no foraging or nesting habitat for any wildlife species. It may, however, be used by some avian species for bathing and drinking when the water flow is relatively light. From the city of Compton south to the Long Beach area during warm, low-water months (normally May through October), the wet or submerged portions of the Los Angeles River channel supports an algal growth (Wet Concrete Channel Bottom With Algal Growth). This growth is attractive to invertebrates, which in turn are attractive to a large number of shorebirds (Charadriiformes) and other bird species. In Long Beach a soft bottom section from Willow Street downstream has allowed the growth of some willows and seasonally abundant annual vegetation between Willow Street and a point midway between Pacific Coast Highway and Anaheim Street (Soft Bottom Channel With Annually Flooded Riparian Growth). The vegetation in this area is periodically removed by the Los Angeles County Public Works Department. Portions of the channel in this area from Del Amo Boulevard to the San Diego Freeway (I-405), are bordered by overflow basins which also have a growth of willows and annual vegetation and may retain some water from periodic rains. Various degrees of tidal influence (Brackish Channel Water) reach upstream to an area just below the Pacific Coast Highway bridge (CDFG 1993).

Periodic surveys of this portion of the lower Los Angeles River since 1982 (CDFG 1993) has produced much information on bird species using these habitat types. The most abundant species in terms of numbers are migrants. The single most abundant species is the western sandpiper (Calidris mauri). Other migrant species which occur in large numbers include least sandpiper (Calidris minutilla), black-necked stilt (Himantopus mexicanus), long-billed dowitcher (Limnodromus scolopaceus), short-billed dowitcher (Limnodromus griseus), semipalmated plover (Charadrius semipalmatus) and black-bellied plover (Pluvialis squatarola). American peregrine falcons (Falco peregrinus anatum) may prey on these shorebirds when they are most abundant during migration. Black-necked stilts and American avocets (Recurvirostra americana) nest in small numbers on small, sparsely vegetated islands just south of Willow Street. Other common riparian species observed and potentially present in this area include great blue heron (Ardea herodias), black-crowned night heron (Nycticorax nycticorax), killdeer (Charadrius vociferus), red-winged blackbird (Agelaius phoeniceus), black phoebe (Sayornis nigricans), and common yellowthroat (Geothlypis trichas). California brown pelicans (Pelecanus occidentalis californicus) and California least terns (Sterna antillarum browni) may use the lower River and the River mouth as foraging habitat.

The channelized portions of the Los Angeles River are unsuitable for most native mammal species. Localized areas that do have potential suitable habitat support those mammals that are generalists and

Sapphos Environmental Page 5-48 common urban species. Those species include California ground squirrel (Spermophilus beecheyi), Botta's pocket gopher (Thomomys bottae), raccoon (Procyon lotor), striped skunk (Mephitis mephitis), and two introduced species, the house mouse (Mus musculus) and Virginia opossum (Didelphis virginiana) (CDFG 1993).

The herpetofauna present or potentially present in the lower River portion of the study area consist of species that are commonly found in riparian areas. These include western toad (*Bufo boreas*), Pacific chorus frog (*Pseudacris regillus*, formerly *Hyla regilla*), the introduced bullfrog (*Rana catesbeiana*), western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), coastal western whiptail (*Cnemidophorus tigris multiscutatus*), two-striped garter snake (*Thamnophis hammondii*), and gopher snake (*Pituophis melanoleucus*) (CDFG 1993).

The area of the lower River near its mouth would be expected to have many of the same fish species found in the adjacent Queensway Bay. These include northern anchovy (Engraulis mordax), queenfish (Seriphus politus), white croaker (Genyonemus lineatus), slough anchovy (Anchoa delicatissima), deepbody anchovy (Anchoa compressa), barred sand bass (Paralabrax nebulifer), shiner surfperch (Cymatogaster aggregata), and young California halibut (Paralichthys californicus). Further upriver where the salinities are more varied, topsmelt (Atherinops affinis), Pacific staghorn sculpin (Leptocottus armatus), arrow goby (Clevelandia ios), longjaw mudsucker (Gilichthys mirabilis), and diamond turbot (Hypsopsetta guttulata) can be found along with northern anchovy, shiner surfperch, and young California halibut (LACDPW 1994a).

Between Pacific Coast Highway and Willow Street, where the River becomes predominantly freshwater, fish species that also occur further upriver can be found. These species include catfish and bullhead (*Ictalurus* spp.), carp (*Cyprinus carpio*), western mosquitofish (*Gambusia affinis*), and African perch (*Tilapia* spp.). The presence of these species is dependent on the flow of water in the River. After a heavy rain storm, when there is a large volume of water in the River, most freshwater species would probably be washed out to sea (LACDPW 1994a).

Invertebrates living on rocks near the sides of the channel near its mouth would probably include sea urchin (*Stronglyocentrotus purpuratus*), snails and barnacles (*Balanus* spp.). Polychaete worms, clams, anemones, and tunicates would probably occur on the soft bottom (LACDPW 1994a).

Glendale Narrows

The Glendale Narrows is the portion of the Los Angeles River Master Plan project area from the Burbank/Western Channel confluence near Victory Boulevard downstream to a point just north of the confluence of the Arroyo Seco, near the junction of the Pasadena (#110) and Golden State (I-5) Freeways. It consists of Soft-bottom Channel With Annually Flooded Riparian Growth with some Freshwater Marsh/Cienega and is surrounded by Urban/Suburban development.

Weekly surveys of the Glendale Narrows portion of the project area were conducted between 13 September 1991 and 10 September 1992 (CDFG 1993). These surveys found a total of 116 bird species. Nine of these species were exotics that do not have established breeding populations, five were introduced species that have established breeding populations, and 102 were native species.

Many of the species recorded during the survey were rare or represent birds for which the River provides marginal or poor habitat, or are uncommon migrants or vagrants in the region.

Ten species were recorded on all 52 surveys. They were red-winged blackbird, house finch (Carpodacus mexicanus), mallard (Anus platyrhynchos), song sparrow (Melospiza melodia), mourning dove (Zenaida macroura), American crow (Corvus brychyrhynchos), and the following introduced species: house sparrow (Passer domesticus), rock dove (Columbia livia), European starling (Sturnus vulgaris), and spotted dove (Streptopelia chinensis).

Thirteen species were documented as nesting in the River channel at the Glendale Narrows study area. These were pied-billed grebe (Podilymbus podiceps), mallard, cinnamon teal (Anas cyanoptera), American coot (Fulica americana), killdeer, black phoebe, barn swallow (Hirundo rustica), common raven (Corvus corax), common yellowthroat, song sparrow, red-winged blackbird, brown-headed cowbird (Molothrus ater), and the introduced northern red bishop (Euplectes franciscanus). Several other species undoubtedly nest in the adjacent urban area and forage in the River channel. They include mourning dove, Anna's hummingbird (Calypte anna), scrub jay (Aphelocoma coerulescens), american crow, northern mockingbird (Mimus polyglottos), hooded oriole (Icterus cucullatus), Brewer's blackbird (Euphagus cyanocephalus), and house finch. The introduced spotted dove, European starling, and house sparrow can also be included in this list.

The Glendale Narrows area has enough suitable riparian growth in non-flood or non-heavy flow years to potentially provide cover for those mammals that can be considered generalists and whose food and shelter needs can be met in many ways. Common urban species may also be found in this area. These species include California ground squirrel, Botta's pocket gopher, desert cottontail (Sylvilagus audubonii), raccoon, striped skunk, and the introduced fox squirrel (Sciurus griseus), black rat (Rattus rattus), house mouse and Virginia opossum (CDFG 1993).

The herpetofauna present or potentially present in the Glendale Narrows portion of the study area consists of species that are commonly found in riparian areas. These include western toad, Pacific treefrog, the introduced bullfrog, western fence lizard, side-blotched lizard, coastal western whiptail, two-striped garter snake, and gopher snake (CDFG 1993).

The fish species that occur or potentially occur in the Glendale Narrows area are species that occur in many of the other freshwater areas of the project area. Five species have been collected in the Glendale Narrows area (CDFG 1993). These species are western mosquitofish, Mozambique tilapia (Tilapia mossambica), common carp (Cyprinus carpio), fathead minnow (Pimephales promelas), and goldfish (Carassius auratus). All of these species accept the common carp are introduced. The presence of these species is dependent on the flow of water in the River. After a heavy rain storm, when there is a large volume of water in the River, most freshwater species would probably be washed out to sea (CDFG 1993).

Sepulveda Basin

The Sepulveda Basin is a large flood control basin in the southern San Fernando Valley and includes the Los Angeles river channel from the Sepulveda Dam upstream to a point just above Balboa

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Boulevard. It consists of **Soft-bottom Channel With Annually Flooded Riparian Growth** and is surrounded by recreational areas (e.g. golf courses, etc.) and open weedy or stubble fields. There is a remnant of **Floodplain Forest** remaining, there are also several ponds near the channel, and some marshy areas (**Freshwater Marsh/Cienega**) are present.

The habitats available in the Sepulveda Basin area support a number of locally resident, breeding, migrating, and overwintering bird species. Common locally resident and breeding birds potentially present include: pied-billed grebe (Podilymbus podiceps), snowy egret (Egretta thula), great egret (Casmerodius albus), great blue heron, American avocet, black-necked stilt, mallard, american coot, killdeer, turkey vulture (Carthartes aura), red-tailed hawk (Buteo jamaicensis), American kestrel (Falco sparverius), mourning dove, Anna's hummingbird, black phoebe, barn swallow, scrub jay, American crow, marsh wren (Cistothorus palustris), loggerhead shrike (Lanius ludovicianus), northern mockingbird, common yellowthroat (Geothlypis trichas), blue grosbeak (Guiraca caerulea), song sparrow, western meadowlark (Sturnella neglecta), red-winged blackbird, brown-headed cowbird, Brewer's blackbird, lesser goldfinch (Carduelis psaltria), house finch, and the introduced house sparrow and European starling. Common migrating and overwintering birds potentially present include: eared grebe (Podiceps nigricollis), Canada goose (Branta canadensis), American widgeon (Anas americana), northern pintail (Anas acuta), northern shoveler (Anas clypeata), ruddy duck (Oxyura jamaicensis), bufflehead (Bucephala albeola), long-billed curlew (Numenius americanus), long-billed dowitcher, western sandpiper, least sandpiper, white-crowned sparrow (Zonotrichia leucophrys), and American goldfinch (Carduelis tristis) (Kahane 1993).

The Sepulveda Basin area has a significant amount of riparian, old field, and disturbed non-native grassland habitat potentially providing cover for many mammals species, especially those that are well adapted to urban influenced environments. Some species that may be found in this area include California ground squirrel, Botta's pocket gopher, deer mouse (*Peromyscus maniculatus*), harvest mouse (*Reithrodontomys megalotis*), desert cottontail, black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), raccoon, striped skunk, and the introduced Virginia opossum, fox squirrel, black rat, house mouse and red fox (*Vulpes vulpes*) (CDFG 1993).

The herpetofauna present or potentially present in the Sepulveda Basin portion of the study area consists of species that are commonly found in riparian, disturbed grassland, and urban habitats. These include Pacific slender salamander (Batrachoseps pacificus), western toad, Pacific chorus frog, the introduced bullfrog, western fence lizard; side-blotched lizard, coastal western whiptail, southern alligator lizard (Gerrhonotus multicarinatas), common kingsnake (Lampropeltis getulus), two-striped garter snake, gopher snake and western rattlesnake (Crotalus viridis) (CDFG 1993).

The fish species that occur or potentially occur in the Sepulveda Basin area are all introduced species. They are western mosquitofish, Mozambique tilapia, and goldfish. All of these species seem to do well in degraded aquatic habitats (CDFG 1993).

Migration and Movement Corridors

The Los Angeles River is important as one of several key regional habitats for wildlife. Resident mammals and birds use major river systems as movement corridors in undisturbed areas. Such river

systems are more important in large urban localities, such as Los Angeles, where there are fragmented habitat surrounded by urban sprawl. Migratory and resident birds move along major flyways between the river, nearby Significant Ecological Areas, and other sites with surface water. Together these sites form a system of habitats that are critical to the wildlife of this region. The wintering Canada geese of the Sepulveda Basin are a good example of this type of system. These birds feed in the grassy areas of the Sepulveda Basin and roost on nearby open bodies of water, especially the Encino Reservoir. This daily pattern of movements illustrates the importance of safe open water areas to wetland birds such as geese, ducks, gulls and shorebirds, even when they are miles from the river channel or flood control basin.

Sensitive Species

A query of the California Department of Fish and Game's California Natural Diversity Database was performed to obtain records of sightings of sensitive species and plants and wildlife along the Los Angeles River. The query was conducted for the 7.5 minute topographic quadrangles in which the Los Angeles River occurs: San Fernando, Van Nuys, Canoga Park, Burbank, Hollywood, Los Angeles, South Gate, and Long Beach. Additionally, the Database was queried for one quadrangle adjacent to the quadrangle in which the River flows, the Pasadena quadrangle.

The query returned sightings for seven species of plants and 17 species of wildlife. Of these, seven species of wildlife were identified as having the potential to occur in the Los Angeles River Master Plan area (within one-half mile of the Los Angeles River) based on the presence of potential habitat (see Appendix B for a discussion of these species). Those wildlife species are: monarch butterfly (Danaus plexippus), San Diego horned lizard (Phrynosoma coronatum blainvillei), brown pelican (Pelecanus occidentalis californicus), California least tern (Sterna antillarum browni), least Bell's vireo (Vireo bellii pusillus), western yellow-billed cuckoo (Coccyzus americanus occidentalis), and tricolored blackbird (Agelaius tricolor).

Three additional sensitive species of wildlife not recorded on the database have been reported as occurring at the Sepulveda Basin. Two bird species, the ferruginous hawk, (Buteo regalis), a federal Category 2 candidate for listing and a State Species of Special Concern, and prairie falcon (Falco mexicanus), a State Species of Special Concern, have been observed as winter residents (CDFG 1993). The arroyo chub (Gila orcutti), a State Species of Special Concern, was observed occasionally from 1988-1993 (Swift and Siegel 1993 in CDFG 1993) (see Appendix B). The California gnatcatcher (Polioptila californica californica) was returned by the database and is listed in both the Los Angeles County Drainage Area Review: Final Feasibility Study Interim Report and Environmental Impact Statement (ACOE 1991a) and the Master Environmental Impact Report: Los Angeles County Drainage Area (LACDPW 1994a) sensitive species tables. No appropriate coastal sage scrub habitat occurs within the LA River Master Plan area, and the species is not further considered here.

None of the plant species recorded on the database are considered to have a potential to occur in the Master Plan area. The seven plant species returned for the quadrangles that contain the Master Plan area were Nevin's barberry (Berberis nevinii), Davidson's bush mallow (Malocothamnus davidsonii), slender-horned spineflower (Dodecahema leptoceras), Parish's smallscale (Atriplex parisii), salt marsh bird's beak (Cordylanthus maritimus ssp. maritimus), Los Angeles sunflower (Helianthus nuttallii ssp.

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parishii), and Ventura marsh milk-vetch (Astragalus pychnostachyus var. lanosissimus). None of the locations recorded for these sensitive plant species fall within the Master Plan area and, based upon the heavily disturbed and urbanized condition of that area, none are expected to occur. The Master Environmental Impact Report: Los Angeles County Drainage Area (LACDPW 1994a) which involves a larger study area than the Master Plan, reported slender-horned spineflower and Nevin's barberry, as well as the San Fernando Valley spineflower (Chorizanthe parryi var. fernandina) as sensitive species. The San Fernando Valley spineflower was last seen in 1940 and is presumed extinct (Skinner and Pavlik 1994) and was not reported from the Master Plan study area. Slender-horned spineflower is known from the Tujunga Wash above Hansen Dam, but has never been seen in the heavily disturbed areas below the dam. Nevin's barberry is a rare shrub of sandy and gravelly places below 2000 feet in chaparral or coastal sage scrub (Munz 1974). It is known from Arroyo Seco on the Pasadena quadrangle and was once recorded in Pacoima (1932). The heavily disturbed conditions of the alluvial wash below Hansen Dam make it unlikely that Nevin's barberry occurs there. The Master Environmental Impact Report: Los Angeles County Drainage Area (LACDPW 1994) considers only the lower reach of the LA River, and lists no sensitive plant species.

5.7.3 Significance Thresholds

This section analyzes the potential for significant impacts on biological resources that would occur from implementation of the recreation and restoration improvements proposed in the Los Angeles River Mater Plan. The threshold for determining if significant impacts on biological resources would occur is based on Appendix G of the California Environmental Quality Act Statutes and Guidelines. The likelihood for significant impacts on biological resources to occur was evaluated based on the potential for the proposed project to:

- Substantially affect a rare or endangered species of animal or plant or the habitat of the species
- Interfere substantially with the movement of any resident or migratory fish or wildlife species
- Substantially diminish habitat for fish, wildlife, or plants

5.7.4 Impacts

There are no anticipated significant negative impacts on sensitive plant or wildlife species or on general plant or wildlife resources as a result of the actions proposed in the Los Angeles River Master Plan.

Improvements proposed in the Los Angeles River Master Plan are detailed by river reach and map sheet number in Figure 2.2-1 (Index of Project Elements). Aesthetic and environmental quality improvements proposed as a part of the Master Plan include tree planting along much of the river right-of-way, wildflower plantings in the downtown Los Angeles area, planting of both native and non-native (but non-invasive) grasses, shrubs and wildflowers on levee slopes, and a program of riparian and upland habitat restoration and enhancement in areas where appropriate sites are available. Native tree planting and habitat restoration will be conducted using native species appropriate to the ecology and former

natural communities of each particular area. Before habitat restoration is undertaken, surveys will be undertaken to characterize to the extent possible the former biological communities of the area. In highly urban sites, such as near bridges downtown, or in highly disturbed and modified sites, such as some levee slopes, some use of non-native species may be appropriate. If non-native species are used, they will be carefully selected to ensure that invasive, weedy, problem species are not used. If these guidelines are followed, no significant negative impacts on sensitive species or on general plant and wildlife resources are expected.

Some of the recreation improvements recommended in the Master Plan, for example, construction of parks, have the potential to require ground-disturbing activities. However, recommended locations are all within areas either highly disturbed or already developed. As a consequence, there are no anticipated significant impacts on sensitive plant or wildlife species or on general plant or wildlife resources.

5.7.5 Mitigation Measures

There are no anticipated significant impacts on plant or wildlife resources; therefore, there are no recommended mitigation measures.

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5.8 ENERGY AND MINERAL RESOURCES

This section of the environmental analysis describes energy and mineral resources that are potential issues at the various project sites identified in the Los Angeles River Master Plan Final Report (Los Angeles County Departments of Public Works, Parks and Recreation, and Regional Planning 1996) including: the regulatory framework; existing conditions; thresholds for determining significance; impacts; and, if necessary, mitigation measures.

5.8.1 Regulatory Framework

State

The California Department of Conservation, Division of Mines and Geology, provides a special publication, *Mines and Mineral Producers Active in California* (1988-89) (California Division of Mines and Geology 1990) that contains the names, addresses, commodities, and locations of 1012 mines believed to have produced mineral commodities in California during 1988-89.

Regional

Southern California Association of Governments (SCAG) provides guidelines for energy efficiency options which can be applied to the proposed project elements of the Los Angeles River Master Plan Final Report. These include infill construction; increased compliance with existing Title 24 building standards; implementing supplemental building efficiency measures such as day-lighting and solar heating; increased vehicle occupancy; pedestrian, bicycle, and mass-transit emphasis (school buses); increased composting; and improved recycling efficiency (SCAG 1995).

County

The Open Space and Conservation Element of the County of Los Angeles General Plan includes a policy to conserve energy resources and encourage the development and utilization of new energy sources including geothermal, thermal waste, solar, wind, and ocean-related sources; to promote the use of solar energy to the extent possible; and to protect and conserve existing mineral resources, and evaluate the extent and value of additional deposits (Los Angeles County Department of Regional Planning 1993 and 1980a). The Special Management Area Map of the County of Los Angeles General Plan (Los Angeles County Department of Regional Planning 1991f) designates known mineral resource areas.

5.8.2 Existing Conditions

There are no designated "mineral resource areas" on property immediately adjacent to the Los Angeles River according to the Special Management Area Map of the County of Los Angeles General Plan (Los Angeles County Department of Regional Planning 1991f). However, an oil pipeline bridge crosses the Los Angeles River in the City of Paramount and three oil pipeline bridges cross the River in the City of Long Beach.

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5.8.3 Significance Threshold

The threshold for determining if significant impacts on energy and mineral resources would occur is based on Appendix G of the California Environmental Quality Act Statutes and Guidelines. The likelihood for significant impacts on energy and mineral resources to occur was evaluated based on the potential for the proposed project to result in:

- Conflict with adopted energy conservation plans
- Use non-renewable resources in a wasteful or inefficient manner
 Result in the loss of availability of a known mineral resource that would be of future value to the region and residents of California

5.8.4 Impact Analysis

This section analyzes the potential for significant impacts on energy and mineral resources that would occur from implementation of the proposed project elements. The proposed action is not expected to result in significant impacts on energy or mineral resources. Conservation of energy resources, consistent with the policies of the Conservation and Open Space Element of the County of Los Angeles General Plan (Los Angeles County Department of Regional Planning 1993 and 1980a) and applicable Title 24 Building Standards in accordance with the SCAG Regional Comprehensive Plan and Guide (SCAG 1995), will be incorporated in the proposed project.

The proposed project elements will not use non-renewable resources in a wasteful or inefficient manner. The proposed project will promote energy efficiency in other ways as well. Construction will comply with Title 24 building standards. Trail development and improvements are part of the proposed project elements, which will promote bicycle use and encourage other non-vehicle activities, such as jogging and/or walking. The security lighting for the trails will use high-efficiency non-glare high pressure sodium lamps.

Proposed park and recreation enhancements will not result in the loss of availability of known mineral resources that would be a future value to residents of California. Underlying oilfields are known and are the expected mineral resource located within the adjacent lands of the Los Angeles River.

5.8.5 Mitigation

The proposed project elements are not expected to encourage activities which result in the use of large amounts of fuel, water or energy, or use fuel, or energy in a wasteful manner; therefore, no mitigation methods are needed.

5.9 HAZARDS

This portion of the environmental analysis describes: hazardous conditions potentially present within areas recommended for implementation of site specific projects as part of the proposed Los Angeles River Master Plan (Los Angeles County Department of Public Works, Parks and Recreation and Regional Planning, National Park Service, Rivers, Trails and Conservation Assistance Program and the Los Angeles River Advisory Committee, 1996); thresholds for assessing the significance of the likelihood of the proposed project to expose people to hazards; and an assessment of the potential for proposed Los Angeles River Master Plan to expose people to significant impacts related to hazards.

The analysis of hazards is based on previous environmental compliance documentation prepared in support of the Final Feasibility Report and Final Environmental Impact Statement for the Los Angeles County Drainage Area Review Study (U.S. Army Corps of Engineers 1991a) and the Master Environmental Impact Report for the Los Angeles County Drainage Area Project (County of Los Angeles Department of Public Works 1994a), including the Hazardous Materials Summary prepared by Vista Environmental Information, Inc.

5.9.1 Regulatory Framework

Federal

The Resource Conservation and Recovery Act of 1974 was the first major federal Act regulating the potential health and environmental problems associated with solid hazardous and non-hazardous waste. The Resource Conservation and Recovery Act of 1974, and the regulations developed by U.S. Environmental Protection Agency to implement it, provide the general framework of the national hazardous waste management system, including the determination of whether hazardous waste are being generated, techniques for tracking wastes to eventual disposal, and the design and permitting of hazardous waste management facilities. Resource Conservation and Recovery Act of 1974 amendments enacted in 1984 began the process of eliminating land disposal as the principal hazardous waste disposal method.

County

The Safety Element of the County of Los Angeles General Plan (Los Angeles County Department of Regional Planning 1993 and 1980a) assesses threats to public health and safety from a variety of hazards, and recommends strategies to reduce these threats. The Safety Element of Los Angeles County has policies to: maintain and strengthen the review of projects and development proposals, and upgrade County fire prevention standards and mitigation measures in areas of and urban fire hazard; review proposed development projects involving the use or storage of hazardous materials, and disapprove proposals which cannot properly mitigate unacceptable threats to public health and safety to the satisfaction of responsible agencies; and, strengthen the capability of County agencies to effectively respond to emergencies.

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5.9.2 Existing Conditions

The assessment of the potential for hazardous materials and waste to be present in the LACDA study area was based on a review of known sites recorded on databases and a visual site assessment using a search radius of 0.5 mile (approximately 0.25 mile east and 0.25 mile west of the River) to identify the potential presence of hazardous materials or waste along the Los Angeles River below its confluence with the Rio Hondo. As a result of the database search, the following environmental concerns related to the potential for hazardous materials to be present were identified in the Master Environmental Impact Report for the Los Angeles County Drainage Area Project (County of Los Angeles Department of Public Works 1994a):

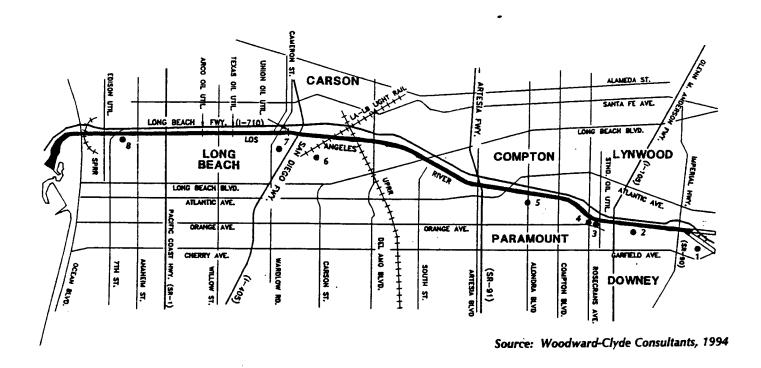
- Numerous businesses and industries that may use or store hazardous materials are located adjacent to the project reaches;
- Numerous indications of above-ground and underground oil and gas pipelines exist in the project reaches;
- Pesticides, insecticides, and fertilizers may be used at the numerous golf courses, nurseries, tree farms, and other cultivated land areas adjacent to the Los Angeles River;
- Railroad crossings and right-of-ways are present in the project reaches; and
- Oil pumping, storage, and conveyance facilities are located adjacent to large areas of the Los Angeles River. Eight known potential hazardous waste locations were identified near the Los Angeles River between the Pacific Ocean and Imperial Highway (Figure 5.9-1):
 - Location north of SR-90 and east of LAR
 - 2. Location between SR-90 and I-105, east of LAR
 - 3. Location north of Rosecrans Avenue, east of LAR
 - 4. Location south of Rosecrans Avenue, east of LAR
 - 5. Location near Alondra Blvd., east of LAR
 - 6. Location northeast of Los Angeles-Long Beach Light Rail, east of LAR
 - 7. Location north of Carson St., east of LAR
 - 8. Location north of 7th St., east of LAR

The Los Angeles County Department of Public works will be conducting Phase I Site Assessments in large portions of the right of way of the Los Angeles River and Tujunga Wash for the Los Angeles County Drainage Area (LACDA) Project. The site-specific project areas for the proposed Los Angeles River Master Plan will be able to tier off of these Phase I Site Assessments.

5.9.3 Significance Thresholds

The threshold for determining if significant impacts on hazards would occur is based on Appendix G of the California Environmental Quality Act Statutes and Guidelines. The likelihood for significant impacts on people as a result of exposure to hazards to occur was evaluated based on the potential for the proposed project to result in:

- Create a potential public health hazard or involve the use, production, or disposal of materials which pose a hazard to people or animal or plant populations in the area affected; or
- Interfere with emergency response plans or emergency evacuation plans.



LEGEND

Los Angeles River

Potential Hazardous Waste Location (Keyed to Table in Section 5.9.2)

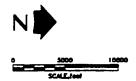




FIGURE 5.9-1

POTENTIAL HAZARDOUS WASTE LOCATIONS/LOS ANGELES RIVER

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5.9.4 Impact Analysis

This section analyzes the potential for significant impacts on people as a result of exposure to hazards that would occur from implementation of site specific project recommendations that involve ground disturbing activities. The proposed Los Angeles River Master Plan improvements do not include the construction of aboveground or underground storage tanks containing hazardous substances (such as petroleum products), nor are facilities proposed that are designed for the use, storage, or generation of hazardous materials of any kind, including explosives, hazardous chemicals, pesticides, or radioactive materials. Construction of the proposed improvements will entail a temporary increased use of petroleum powered machinery and vehicles. With the operation of the proposed improvements, there may be some increases in commonly used hazardous chemicals, herbicides or pesticides, and some increase in the use of petroleum powered vehicles. These increases are expected to be temporary, and sufficient safety measures are expected be taken to prevent any accidental explosions or release of hazardous materials.

The high potential for hazardous materials and waste to be present with the Los Angeles River Master Plan study area revealed by the database search and site investigations conducted in support of the Master Environmental Impact Report for the Los Angeles County Drainage Area Project indicate the need for conducting Phase I Site Assessments for site-specific project areas requiring ground disturbing activities that would have the potential to expose construction, people, and wildlife to hazardous materials and waste. Possible sources of contamination include petroleum hydrocarbons, pesticides and herbicides, transported that may be present in the study area as a result of "midnight dumping" of wastes or subsurface migration waste from surrounding source areas. Soils would be tested at the time of excavation to determine whether contamination levels exceed State and federal regulatory thresholds. It is feasible to provide in situ treatment of contaminated soils through a variety of methods including: vacuum extraction, bioremediations, soil flushing and washing, thermal desorption, rotary kiln incineration, above-ground bio-remediations, and remediation for pesticides and herbicides. Containerization and disposal of contaminated soils at designated landfills classified for receipt of hazardous materials would is also likely to be feasible given the limited nature of anticipated grading required in support of the proposed site-specific project recommendations.

5.9.5 Mitigation Measures

The responsibility for ensuring that a Phase I Site Assessment is completed prior to implementation of all projects involving ground-disturbing activities will rest with the local jurisdiction within which the project occurs. Projects within the Sepulveda Basin in the City of Los Angeles and the right of way of the Los Angeles River located between 700 feet downstream of Lankershim Boulevard and Southern Avenue in the City of South Gate will be subject to review and oversite by the Corps. The County of Los Angeles Department of Public Works will have responsibility for review and oversight within the remainder of the right of way of the Los Angeles River and Tujunga Wash within the study area. The appropriate jurisdiction will also be responsible for ensuring that remediation or removal of contaminated soils is accomplished in accordance with the recommendations of the Phase I Site Assessment. Successful accomplishment of site remediation will be sufficient to ensure that

construction and implementation of the site-specific recommended projects will not result in exposure of people or property to major hazards; create a potential public health hazard or involve the use, production, or disposal of materials which pose a hazard to people or animal or plant populations in the area affected; or interfere with emergency response plans or emergency evacuation plans. The recommended measures are sufficient to reduce impacts below the level of significance.

5.10 NOISE

This section of the environmental analysis describes noise issues for the proposed project including: the regulatory framework; existing conditions; thresholds for determining significance; impact analysis; and, if necessary, mitigation measures.

5.10.1 Regulatory Framework

Noise loudness is measured in terms of decibels, abbreviated as dB. Decibels are generally measured with a sound-level meter incorporating an "A"-weighted electronic network with a resulting measure called dBA or dB(A). Although the frequency of intermittent noise is difficult to measure without complex equipment, high frequencies are subjectively recognizable as whines, screeches, whistles, squeals, etc. Subjective evaluations are used to support or verify objective measurements.

State and local governments have established noise standards and guidelines to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise. The applicable standards and guidelines for this study area are discussed below.

State of California

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, freeway noise affecting classrooms, set standards for sound transmission control, occupational noise control, and identify noise insulation standards. The state also developed land use compatibility guidelines for community noise environments. In Guidelines for the Preparation and Content of Noise Elements of the General Plan (California Department of Health 1976), the state provided guidance for the acceptability of projects within specific CNEL contours. The State standard establishes that park uses are normally unacceptable in areas exceeding 70 dBA CNEL, and normally acceptable between 0 and 70 dBA CNEL. Figure 5.10-1 (follows page 5-62) shows the County standard acceptable noise levels for various land use categories.

County of Los Angeles Noise Control Ordinance

The County does not set land use standards for noise in its Noise Element of the General Plan (Los Angeles County Department of Regional Planning 1993 and 1980a). However, the County has adopted the Noise Control Ordinance of the County of Los Angeles (Title 12, Chapter 12.08 1995) which specifies exterior noise standards as shown in Table 5.10-1. The exterior noise levels presented in the final column of the Table 5.10-1 indicate average hourly dBA to be maintained for designated noise zone level use.

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TABLE 5.10-1 EXTERIOR NOISE STANDARDS, L₅₀ County of Los Angeles

Noise Zone	Designated Noise Zone Land Use	Time Interval	Exterior Noise Level		
I	Noise Sensitive Area	Anytime	45 dBA		
II	Residential Area	10 pm - 7 am 7 am - 10 pm	45 dBA 50 dBA		
111	Commercial Area	10 pm - 7 am 7 am - 10 pm	55 dBA 60 dBA		
IV	Industrial Area	Anytime	70 dBA		
Source: County of Los Angeles 1995					

The County Noise Control Ordinance of the County of Los Angeles includes the following construction noise restrictions:

- Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7 pm and 7 am, or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited.
- Construction activities will be conducted in such a manner that the maximum noise levels at residential structures will not exceed 60 dBA for single-family dwellings, daily, except Sundays and legal holidays, 7 am to 8 pm. Maximum noise levels will not exceed 50 dBA daily, 8 pm to 7 am and all day Sunday and legal holidays.
- All mobile or stationary internal-combustion-engine powered equipment or machinery will be equipped suitable exhaust and air-intake silencers in proper working order.
- In case of a conflict between this noise ordinance and any other ordinance regulating construction activities, provisions of any specific ordinance regulating construction activities will control.

The County of Los Angeles noise guidelines restrict construction hours to between the hours of 7 a.m. and 7 p.m. of any working day, except Sundays and holidays.