SCH#2013101008

City of Los Angeles

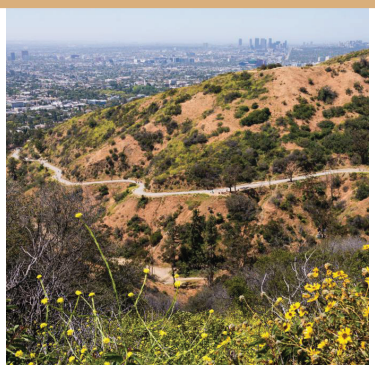
Citywide Cat Program

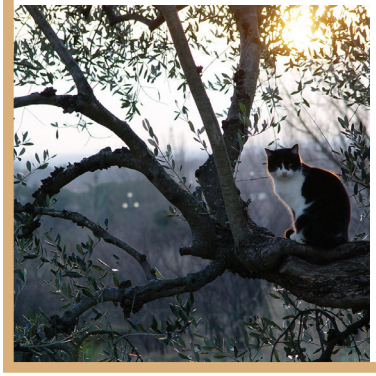
Draft Environmental Impact Report

August 2019

ENGINEERING
CITY OF LOS ANGELES

ANIMAL SERVICES





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Acronyms and Abbreviations

Acronyms	Definition
AB	Assembly Bill
ACM	asbestos-containing materials
AQMP	Air Quality Management Plan
Basin Plans	water quality control plans
BMPs	best management practices
Board	Board of Animal Services Commissioners
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of Los Angeles
CLM	cutaneous larva migrans
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
County	Los Angeles County
CTR	California Toxics Rule
CWA	Clean Water Act
DACC	Department of Animal Care and Control
dB	decibel
DDT	dichlorodiphenyltrichloroethane
Department	Department of Animal Services

Acronyms	Definition
DPH	Los Angeles County Department of Public Health
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ESA	Environmentally Sensitive Area
FeLV	feline leukemia virus
FESA	federal Endangered Species Act
FHV	Feline herpesvirus
FIP	Feline Infectious Peritonitis Virus
FIV	Feline Immunodeficiency Virus
FPV	feline panleukopenia virus
FVC	Feline calicivirus
FVR	Feline viral rhinotracheitis
FVRCP	feline viral rhinotracheitis, calicivirus, and panleukopenia virus
GHG	greenhouse gas
HUC	Hydrologic Unit Code
I-	Interstate
IPAC	Information for Planning and Consulting
L.A. CEQA Thresholds Guide	City of Los Angeles CEQA Thresholds Guide
LA Sanitation	City of Los Angeles Bureau of Sanitation
LAAC	Los Angeles Administrative Code
LAAS	Los Angeles Animal Services
LABOE	Los Angeles Department of Public Works, Bureau of Engineering
LAFD	Los Angeles Fire Department
LAMC	Los Angeles Municipal Code
LARWQCB	Los Angeles Regional Water Quality Control Board
LOS	level of service
MBTA	Migratory Bird Treaty Act

Acronyms	Definition
MGD	million gallons a day
MMPA	Marine Mammal Protection Act
MND	mitigated negative declaration
MPAs	Marine Protected Areas
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSA	Magnuson-Stevens Fisheries Conservation and Management Act
$MTCO_2e$	metric tons of carbon dioxide per year
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NTR	National Toxics Rule
PAWs	Potential Protection Areas for Wildlife
PCBs	polychlorinated biphenyls
Project or proposed Project	Citywide Cat Program
RARE	Rare, Threatened, or Endangered Species
RV	rabies virus
RWQCBs	Regional Water Quality Control Boards
SA	Special Animal
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SEA	Significant Ecological Area
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
TATTN	Tongva Ancestral Territorial Tribal Nation
TMDLs	total maximum daily loads
TNR	trap, neuter, and return
USC	United States Code

Acronyms	Definition
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled
WCP	working cat program
WRP	Water Reclamation Plant

ES.1 Introduction and Background

This Environmental Impact Report (EIR) evaluates implementation of the proposed Citywide Cat Program (proposed Project) in the City of Los Angeles (City). Per the California Environmental Quality Act (CEQA), the City of Los Angeles is the lead agency. This executive summary provides an overview of the proposed Project and its environmental effects. All impacts would be less than significant with adherence to standard regulatory and permit requirements. The proposed Project also includes publication and implementation of program guidelines and ecological conservation measures intended to minimize environmental and public health impacts of the existing population of free-roaming cats, and creation of a City Working Cat Program to facilitate the relocation of free-roaming cats from the streets and into indoor/enclosed sites.

The City's Department of Animal Services (Los Angeles Animal Services [LAAS]) operates six animal services centers in the City, which serve approximately 60,000 animals annually and respond to 20,000 emergency calls each year involving animals or people in danger. Currently, LAAS has contracts with five privately operated low-cost spay and neuter clinics and three mobile spay and neuter clinics that provide vaccinations and other low-cost assistance to the community, including spay and neuter services to owned cats of the general public and also to stray cats that are past their holding period at the animal services centers. They accept vouchers from the City to provide these services, which are rendered before the animals are released from the animal services centers. Funds for payment toward the clinic contracts and vouchers as well as the citizen vouchers come from the Animal Sterilization Fund. LAAS also implements the City's no-kill policy, which had a target date of 2008; however, it has not yet been achieved.

In 2006, the City proposed implementation of a "trap, neuter, return" (TNR) program to help address potential environmental and public health impacts associated with the existing population of free-roaming cats in the City. In 2008, a CEQA-based legal challenge to the TNR program was filed against the City, and, in 2010, as a result of the legal challenge, a permanent injunction was entered by the court that, in general, prohibits the City from engaging in TNR, or facilitating others to engage in TNR, until such activities are analyzed as required by CEQA. The City has now prepared this EIR to analyze the Citywide Cat Program under CEQA.

The EIR process, as defined by CEQA, requires preparation of an objective, full-disclosure document to (a) inform agency decision makers and the general public of the direct and indirect environmental effects of a proposed project, (b) identify, where feasible, mitigation measures to reduce or eliminate any identified significant adverse impacts, and (c) identify and evaluate alternatives to the proposed project that might lessen or avoid some or all of the identified significant impacts of the project.

ES.2 Proposed Project Summary

The proposed Citywide Cat Program would apply to all areas within the boundaries of the City of Los Angeles. The City comprises approximately 465 square miles. Domestic cats and free-roaming cats (stray and feral cats) exist throughout the City, including in natural habitat areas. Free-roaming cats exist as individuals and in aggregations, and may or may not receive regular care. The proposed

Project would be implemented throughout the City by LAAS, principally through the City's six animal services centers (see Figure ES-1):

1. North Central Animal Services Center
   3201 Lacy Street
   Los Angeles, CA 90031

2. *South Los Angeles Animal Services Center, Chesterfield Square
   1850 West 60th Street
   Los Angeles, CA 90047

3. *West Los Angeles Animal Services Center
   11361 West Pico Boulevard
   Los Angeles, CA 90064

4. *Harbor Animal Services Center
   957 North Gaffey Street
   San Pedro, CA 90731

5. *East Valley Animal Services Center
   14409 Vanowen Street
   Van Nuys, CA 91405

6. *West Valley Animal Services Center
   20655 Plummer Street
   Chatsworth, CA 91311

** Animal services centers with spay and neuter clinics on site*

The proposed Project analyzed in this EIR would be implemented citywide (see Figure ES-1) and is guided by actions by the Board and the Los Angeles City Council (see Appendix D). The proposed Project would enable the following actions and policies to be administered under the Citywide Cat Program:

a. Directly engage in spaying or neutering, or make the spaying or neutering of cats more affordable by allowing the City to provide funds by means of free or discounted spay or neuter coupons or other City, public, or grant funds to subsidize the spaying and neutering of any cat in the City of Los Angeles to prevent them from having litters of kittens, regardless of the cat's status as either owned pet, stray, or feral. This includes spay and neuter of free-roaming cats that may be returned by their caretakers or a rescue organization to where they were found, relocated to a working cat program,[1] or adopted.

b. As part of changing the Los Angeles Administrative Code (LAAC) (Section 5.199), broaden the permitted use of Animal Sterilization Fund monies from "pet sterilization" (current language) to "animal sterilization." Currently, Section 5.199 of the LAAC limits the use of funds for sterilization of "pets." The proposed amendment would allow use of funds to sterilize pet, stray, or feral cats. The proposed Project would allow the LAAC's Animal Sterilization Fund to also be used to spay or neuter free-roaming cats in the City. However, no monies intended to spay or neuter pet cats in the City would be reduced.

[1] The placement of cats in warehouses and barns with rodents is commonly referred to as a "working cat program," with many being indoor cats only.

c. Implement a modified TNR program that includes the following elements:

   i. Declaring that TNR is the preferred method of dealing with the free-roaming cat population and the City's official policy.

   ii. Collaborating with organizations experienced and engaged in TNR and using animal services centers to provide information and training to citizens who wish to participate in TNR.

   iii. Implementing outreach by including links to TNR organizations on the LAAS website and directly referring the public to organizations for information on TNR.

   iv. Implementing a policy regarding free-roaming cat complaints that involves informing the complainant about the benefits of TNR and referring them to TNR organizations. LAAS will encourage that cats not be brought into local animal services centers, except if the cat is injured or sick, the cat has bitten someone, the cat's welfare is in jeopardy, there is a public health hazard, or the potential exists for harm to people or companion animals.

   v. Using incentives, vouchers, and waived cat trap rental fees to encourage the capture, sterilization, and release of free-roaming cats.

d. Release free-roaming cats that have been spayed and neutered from animal services centers' custody to TNR groups that may have the intent of returning the animal to free-roaming status. In order to encourage more adoptions and meet the City's no-kill goals, the currently permitted number of cats per household would be changed from three cats to five. This would involve an amendment to the Los Angeles Municipal Code (LAMC) regarding the definition of "cat kennel" to exclude any location where five or fewer cats are kept (the current limit is three cats). Currently, LAMC Section 53.50 requires a permit from the City to "conduct or operate within the City of Los Angeles any dog kennel, cat kennel, zoo, animal rental establishment, animal grooming parlor, riding academy, livery stable, boarding stable, pony ring or pony ride, horse market, mule market, circus, rodeo, etc." Any household with more than three cats would be subject to the following restrictions (this action would require an amendment to the LAMC):

   - All the cats must be kept indoors at all times,
   - All the cats must be microchipped and sterilized, and
   - The household must be registered with the Department as having more than three cats.

e. Publish and implement program guidelines and ecological conservation measures that are intended to minimize the environmental and public health impacts of the existing population of free-roaming cats; guidelines include restricting release of free-roaming cats into environmentally sensitive areas (ESAs) as feasible.

f. Create a City of LA Working Cat Program to facilitate the relocation of free-roaming cats from the streets and into indoor/enclosed sites. The City's Working Cat Program would prioritize admission of cats found in or near environmentally sensitive areas, in unsafe locations, or when it is undesirable to return a free-roaming cat to its found location.

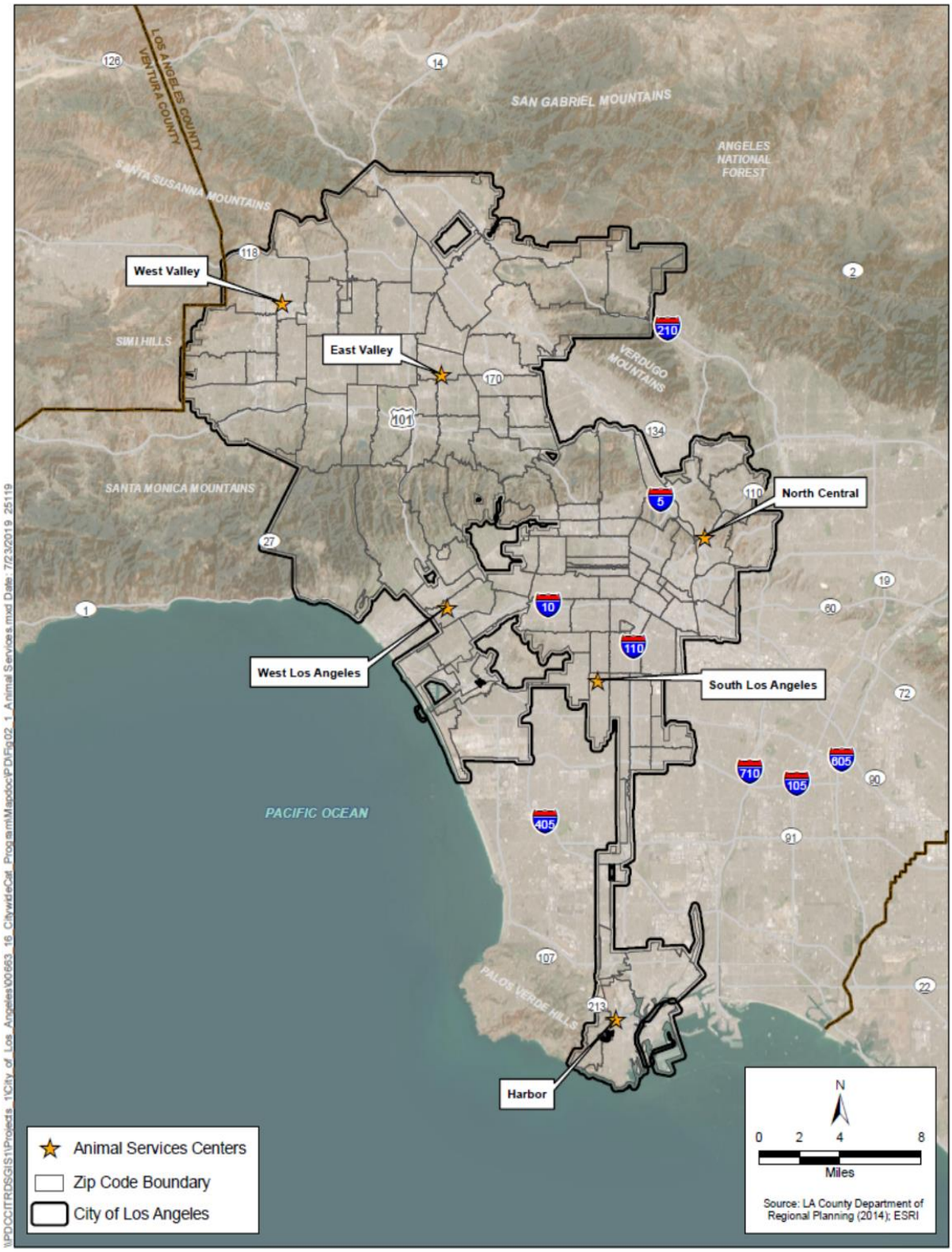


Figure ES-1

Citywide Cat Program Project Location

ES.2.1 Project Objectives

Broadly stated, the purpose of the Project is to assist in achieving the City's no kill goal and support the City's adoption of TNR as the preferred method of dealing with free-roaming cat populations as well as the City's official policy for reducing the relative number of free-roaming cats in the City of Los Angeles.

The objectives of the proposed Citywide Cat Program include (not in order of priority):

- Facilitate spaying and neutering of cats in the City.
- Reduce the relative number of free-roaming cats in the City over time.
- Facilitate more public and community education on animal-related topics, including free-roaming cats.
- Train animal services center staff members on cat management programs and engage in collaborative efforts with local rescue groups to help respond to and address free-roaming cat issues.
- Further implement the City's no-kill policy by reducing the rate of euthanasia of cats in City animal services centers.
- Adopt TNR as the preferred policy to humanely address free-roaming cats.

ES.3 Required Project Approvals

Table ES-1 identifies the approvals that are likely to be required for the proposed Project.

Table ES-1: Anticipated Permits and Approvals for the Citywide Cat Program

Agency	Required Approval or Permit	Issue
Los Angeles City Council	Approve EIR in compliance with CEQA and approve the proposed Project	Approve proposed Project, including modified TNR program and working cat program elements.
Los Angeles City Council	Amend City of Los Angeles Municipal Code and Administrative Code	Amend municipal and administrative codes to implement the proposed Project, including an increase in the number cats per household from three to five; broaden definition of "animal sterilization" to include feral, stray, or free-roaming cats; and amend definition of "cat kennel" to exclude any location where five or fewer cats are kept and a permit is required.

ES.4 Comments Received on the Notice of Preparation

In accordance with Section 15082 of the State CEQA Guidelines, the City prepared a Notice of Preparation (NOP) for the proposed Project on August 31, 2017. The NOP was circulated for over 45 days. The comment period ended on October 30, 2017.

The NOP was made available for review online at: https://eng.lacity.org/citywide-cat-program-e1907610. Over 550 comments were received from agencies, tribes, interested organizations, and the public. Scoping meetings were held on September 28 (East Valley Shelter), October 17 (South LA, Chesterfield Square Shelter), and October 23, 2017 (Ramona Hall Community Center) throughout the City. See Chapter 1 for the scoping comment summary table, and Appendix B for scoping comments received. The NOP public comments are included in Appendix C of this EIR.

ES.5 Areas of Controversy

State CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the lead agency be stated in the EIR summary. The City distributed the NOP to solicit agency and public comments on the scope and content of the environmental analysis to be included in the Draft EIR. Public and agency comments submitted during the scoping period expressed concerns regarding the following issues:

- Potential impacts from the proposed Project on biological resources, public health/human health, and water resources in the City.
- Alternatives to the proposed Project that would effectively reduce the feral cat population in the City.

ES.6 Issues to Be Resolved

The issues to be resolved by the lead agency include whether and how to mitigate the significant effects of the proposed Project, consideration of the various mitigation measures and alternatives recommended in the Draft EIR by the City, whether the benefits of the proposed Project outweigh their unavoidable environmental impacts, and whether the discretionary approvals required to implement the proposed Project should be granted. No significant and unavoidable impacts have been identified in this EIR for the proposed Project; therefore, a Statement of Overriding Considerations would not be required for the proposed Project. A detailed evaluation of alternatives to the proposed Project is presented in Chapter 5 of this EIR.

ES.7 Summary of Environmental Impacts

ES.7.1 Impacts Determined to Require No Further Consideration in this EIR

As discussed in Chapter 3, *Screening Analysis,* of this Draft EIR, the following environmental resources areas are not analyzed in this Draft EIR because it was determined that the proposed Project would have no impact on them:

- Aesthetics and Visual Resources
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Land Use
- Noise
- Population and Housing
- Public Services
- Transportation
- Public Utilities
- Greenhouse Gas Emissions
- Tribal Cultural Resources
- Wildfire Hazards

ES.7.2 Impacts Determined to Be Less than Significant

The analyses presented in Chapter 4, *Environmental Impact Analysis,* of this Draft EIR concluded that the proposed Project would result in less-than-significant impacts, without any required mitigation, for the following resource areas:

- Biological Resources
- Water Resources
- Human Health Hazards

ES.7.3 Significant Unavoidable Impacts

Section 15126.2(b) of the State CEQA Guidelines states that the EIR must describe any significant impacts, including those that can be mitigated but not reduced to a less-than-significant level. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons the project is being proposed, notwithstanding their effect, should be described.

Considering the projected net decrease in the free-roaming cat population and the anticipated net reduction in cat care over the 30-year timeframe as a result of the declining free-roaming cat population citywide, the proposed Project would not result in significant environmental effects that cannot be avoided if the proposed Project is implemented. The proposed Project has been determined to result in no impacts or less-than-significant impacts for all resource areas.

ES.7.4 Cumulative Impacts

Based on the analysis included in the Draft EIR, the Project would not result in any cumulatively considerable impacts. All potential impacts from the proposed Project would be less than significant.

ES.7.5 Summary of Environmental Impacts of the Project

Table ES-2 at the end of this Executive Summary contains a summary of impacts by environmental resource area. The following are provided for each impact: the significance determination before mitigation, required mitigation measures (if any), and any remaining impacts after the implementation of mitigation.

ES.8 Summary of Project Alternatives Analysis

The City considered several alternatives to the proposed Project during the development of this Draft EIR for the proposed Project. Potential alternatives were developed to identify means other than the proposed Project to attain key project objectives while lessening or avoiding potentially significant environmental impacts caused by the proposed Project. The proposed Project would not result in significant impacts on the environment (Sections 4.2, 4.3, and 4.4); accordingly reduction of significant impacts was not a factor considered in the development of alternatives to the Project. Scoping comments received for this EIR inform the identification and development of alternatives to the proposed Project.

ES.8.1 Alternatives Considered

Based on initial consideration, the following represent a reasonable range of alternatives to the proposed Project and have been identified by the City for consideration in this EIR.

- **No Project Alternative**. Under the No Project Alternative, the City would not be able to engage in TNR nor would it be able to facilitate others to engage in TNR in any way, such as through funding, outreach, education, or collaboration with organizations that engage in TNR. The City will continue to operate in accordance with its current regulatory approach wherein the City provides traps and trapping permits for City residents wishing to trap nuisance cats (which could include owned or free-roaming cats) and take them to one of the six City animal services centers that accepts trapped cats. Once the cats are received, they would be scanned for a microchip to determine if they are owned, in an attempt to reunite them with their owners. If no owner can be identified, they would typically be held at the animal services center for the 4-day holding period and then made available for adoption at the center. Any cats that are not adopted, transferred to a nonprofit, animal rescue, or adoption organization organizations (who have signed the aforementioned affidavit), or returned to their owners, would be humanely euthanized. There would be no City-funded sterilization of all cats in the City, regardless of the

cat's status as either owned pet, stray, or feral, nor would there be any spay and neuter of free-roaming cats that would be returned by their caretakers or a rescue organization to where they were found, relocated to a working cat program, or adopted. The Animal Sterilization Funds would continue to be used for sterilization of "pets" only per Section 5.199 of the LAAC; no funds would be used toward sterilization of free-roaming cats. The definition of *cat kennel* would exclude any location where three or fewer cats are kept; anything above that would require a permit in accordance with LAMC Section 53.50

- **Alternative 1: Use of resources (for approximately 20,000 spay/neuter vouchers) for free/low-cost sterilization of owned cats instead of unowned cats.** Additional LAAS resources would be used to subsidize the sterilization of owned cats only and would not be used for free-roaming cats as being proposed under the Citywide Cat Program. This would provide an additional 20,000 free/discounted sterilization vouchers to the public for owned cats.
- **Alternative 2: Enact a no-roaming ordinance for owned cats.** A no-roaming ordinance for owned cats or enacting limits on roaming of owned cats would prohibit or restrict roaming of owned cats outside their owner's property.
- **Alternative 3: Require licensing for owned cats**. Required licensing for owned cats would entail registering all owned cats with LAAS and the cats being issued a unique identification number on a license tag that can be worn on a collar. The issued license tag would also identify the owner of the cat. Under this alternative, people who find a cat with a tag would be able to call LAAS on the number printed on the tag for identification of the owner, so the cat can be reunited with its owner. If a lost cat with a license tag is brought into one of the City's animal services centers, LAAS staff can identify the registered owner by the tag number and contact them; during this time the animal would be held at the animal services center.
- **Alternative 4: Enact a City ban on outdoor feeding of owned or free-roaming cats.** Enacting an express ban on outdoor feeding of owned and free-roaming cats would reduce access to human-subsidized food by banning feeding of all cats outdoors or in an unenclosed space. At present, except as permitted by the California Department of Fish and Wildlife, no person may "feed or, in any manner, provide food or cause to be fed any non-domesticated mammalian predator, including, but not limited to, coyotes, foxes, possums, raccoons, and skunks" (LAMC Section 53.06.5). Cats are domestic animals and not considered to be non-domesticated mammalian predators, and thus feeding cats is not currently banned in the City.
- **Alternative 5. Enforce mandatory spay/neuter of owned cats.** The City of Los Angeles already requires owned cats to be spayed or neutered; this alternative proposes increased enforcement activities to ensure compliance of the existing mandatory spay/neuter ordinance, which was approved by City Council on February 12, 2008, and requires all cats and dogs in the City to be spayed or neutered after the age of 4 months, with some specific exemptions allowed (LAMC Section 53.15.2).
- **Alternative 6: Facilitate free trapping/certified trapping and streamlined permitting to surrender stray/feral cats to shelter without return to the environment/direct removal.** Free-roaming cat trapping would be streamlined and/or facilitated, and trapped cats would not be returned to the environment; they would either be adopted out, transferred to a City partner who signs an affidavit noting they will not release the cat back to the environment, transferred to a working cat program or a cat sanctuary, or, as a last choice, euthanized if none of the aforementioned options are feasible. Streamlining and/or facilitating trapping efforts would aim to increase trapping rates relative to the No Project Alternative conditions.

- **Alternative 7: Reduce the number of permissible cats per residence in the City of Los Angeles.** This alternative would reduce the number of cats permitted per residence in the City to less than the currently permitted three. Beyond this number of cats, in accordance with LAMC Section 53.50, a permit is required from the City to "conduct or operate within the City of Los Angeles any dog kennel, cat kennel, zoo, animal rental establishment, animal grooming parlor, riding academy, livery stable, boarding stable, pony ring or pony ride, horse market, mule market, circus, rodeo, etc."
- **Alternative 8: Enact dusk-to-dawn curfews for owned cats so that they are kept in at night when most predation occurs.** This alternative would enact a City ban on owned cats being allowed outdoors by their owners during the hours between dusk and dawn (typically between sunset and sunrise). During this time, pet owners would not allow their cats to roam outdoors and would keep them indoors or in an enclosed space within their property.
- **Alternative 9: Limit number of permissible cats based on residence square footage (Minimum square footage required per cat)**. The City of Los Angeles currently allows up to three cats per residence in the City irrespective of the square footage of the residence. This alternative would link the number of owned cats allowed per residence in the City to the size or square footage of the residence.
- **Alternative 10. Ban pet owners from allowing their animals to trespass on the private property of another person without the consent of such person, any unenclosed private property or any public property.** This alternative would ban pet owners from allowing their cats to be outdoors and trespass on the private property of another person without the express consent of such a person; it would also ban cats on any unenclosed private property or public property. Currently, spayed or neutered cats can be indoor, indoor/outdoor, or outdoor cats (LAMC Section 53.06). Cats that have not been spayed or neutered that are also not in heat or season are exempted from the general proscription against allowing animals to roam at large, as follows: "No person owning or having possession, charge, custody, or control of any animal, except cats that are not in heat or season, shall cause, permit, or allow the animal to stray, run, or, in any manner, be at large in or upon any public street, sidewalk, or park, except as otherwise expressly provided in Section 63.44 of this code, or in the bed of the Los Angeles River or upon any unenclosed lot or land" (LAMC Section 53.06).
- **Alternative 11**: **Alternative locations in areas with lower resource sensitivity where appropriate.** This alternative would implement the Citywide Cat Program in alternative locations to the City of Los Angeles.
- **Alternative 12: Trap and euthanize free-roaming cats.** This alternative proposes trapping and euthanizing free-roaming cats in the City. Under this alternative there would be no options to euthanasia such as adoption, or transfer to a nonprofit, animal rescue, or adoption organization; a working cat program; or a cat sanctuary for cats impounded at the animal services centers and whose owner cannot be identified.

ES.8.2 Analysis of Alternatives Carried Forward

In accordance with the State CEQA Guidelines (Section 15126.6(d)), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the proposed Project. The following provides a comparative analysis of the impacts associated with

each of the alternatives carried forward (Alternatives 1 and 6) relative to the proposed Project. Additional detailed analysis is provided in Chapter 5, Alternatives

Alternative 1: Use of resources (for approximately 20,000 spay/neuter vouchers) for free/low-cost sterilization of owned cats instead of unowned cats.

Under Alternative 1, additional LAAS resources would be used to subsidize the sterilization of owned cats only and would not be used for free-roaming cats as being proposed under the Citywide Cat Program. This would provide an additional 20,000 free/discounted sterilization vouchers to the public for owned cats. Under Alternative 1, over the 30-year horizon period, the free-roaming cat population would be larger than under the proposed Project, increasing from 808 cats in year 2 to 29,476 cats in year 30. The larger free-roaming cat population over the 30-year horizon period under Alternative 1 compared to the proposed Project would result in greater impacts on biological resources and water resources from free-roaming cats in the study area. In addition, the increase in the population of free-roaming cats under Alternative 1 compared to the proposed Project could increase the potential risk of exposure to zoonotic diseases associated with free-roaming cats, and the larger population under Alternative 1 could result in an incremental increase in the frequency and severity of exposure to human health hazards resulting from zoonotic diseases transmitted directly or indirectly by free-roaming cats. This increase in the frequency and severity of exposure to human health hazards would apply to all populations in the City, including across all susceptible human groups.

Alternative 6. Facilitate free trapping/certified trapping and streamlined permitting to surrender stray/feral cats to shelter without return to the environment/direct removal.

Under Alternative 6, free-roaming cat trapping would be streamlined and/or facilitated, and trapped cats would not be returned to the environment; they would either be adopted out, transferred to a City partner who signs an affidavit noting they will not release the cat back to the environment, transferred to a working cat program or a cat sanctuary, or, as a last choice, euthanized if none of the aforementioned options are feasible. Streamlining and/or facilitating trapping efforts would aim to increase trapping rates relative to the No Project Alternative conditions. Under Alternative 6, larger numbers of annual trapping events and subsequent non-returns/direct removals from the environment would result in larger population declines than smaller efforts (e.g., trapping and removal of 5,000 versus 20,000 free-roaming cats annually). The population model estimated that with 20,000 free-roaming cat trapping and removal events (used as a comparison point for 20,000 spay/neuter surgeries being proposed under the Project), in year 30 the citywide free-roaming cat population would decline to about 155,051 cats compared to 197,363 cats under the proposed Project and 228,077 cats under the future baseline without Project. Thus, under Alternative 6 there would be 42,312 fewer cats compared to the Project and 73,026 fewer cats compared to the future baseline without Project over the 30-year horizon period.

The smaller free-roaming cat population over the 30-year horizon period under Alternative 6 compared to the proposed Project would result in reduced impacts on biological resources and water resources from free-roaming cats in the study area. In addition, the decrease in the population of free-roaming cats under Alternative 6 (by 42,312 cats in year 30) compared to the proposed Project could decrease the potential risk of exposure to zoonotic diseases associated with free-roaming cats over the 30-year horizon period. This could result in an incremental decrease in the

frequency and severity of exposure to human health hazards resulting from zoonotic diseases transmitted directly or indirectly by free-roaming cats. This decrease in the frequency and severity of exposure to human health hazards would apply to all populations in the City, including across all susceptible human groups.

ES.8.3 Environmentally Superior Alternative

In addition to the discussion and comparison of impacts of a proposed project and its alternatives, Section 15126.6 of the State CEQA Guidelines requires that an "environmentally superior" alternative be identified and the reasons for such a selection be disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of adverse impacts. As detailed in Sections 4.2, 4.3, and 4.4, the proposed Project would not have any significant impacts on the environment related to biological resources, water resources, and human health hazards; the remaining environmental issues were screened out in Chapter 3 as clearly having less-than-significant or no adverse impacts. Accordingly, the context for the comparison of potential impacts of the No Project Alternative, Alternative 1, and Alternative 6 over the 30-year horizon period is the relative increasing or decreasing degree of their impacts compared to those under the proposed Project, with all impacts being less than significant (Table 5-2 in Chapter 5). Therefore, the alternatives would not lessen any significant impacts because there are none that would result from the proposed Project; rather, with the larger or smaller free-roaming cat population under the alternatives, their comparative impacts should be evaluated in the context of increased or decreased degree of effects compared to the proposed Project's less-than-significant impacts.

In this case, as detailed above and presented in Table 5-2, Alternative 6—with 20,000 free-roaming cat trapping and removal events that would result in 42,312 fewer free-roaming cats over the 30-year horizon period—would result in relatively reduced impacts related to biological resources and water resources, and could result in an incremental decrease in the frequency and severity of exposure to human health hazards compared to the proposed Project. Therefore, because Alternative 6 would result in relatively reduced impacts compared to the proposed Project, the No Project Alternative, and Alternative 1 over the 30-year horizon period, it would be considered the environmentally superior alternative, even though it would impede to some degree the attainment of project objectives, as discussed in Chapter 5.

Table ES-2. Summary of Impacts and Mitigation Measures

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Biological Resources			
BIO-1: The proposed Project would not result in the loss of individuals, or the reduction of existing habitat, of a state- or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or federally listed critical habitat.	Less than significant	No mitigation measures required	Not applicable
BIO-2: The proposed Project would not result in the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community.	Less than significant	No mitigation measures required	Not applicable
BIO-3: The proposed Project would not result in interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species.	Less than significant	No mitigation measures required	Not applicable
BIO-4: The proposed Project would not result in alteration of an existing wetland habitat.	Less than significant	No mitigation measures required	Not applicable
BIO-5: The proposed Project would not result in interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.	Less than significant	No mitigation measures required	Not applicable
Water Resources			
HyWQ-1: The proposed Project would not result in discharges that could create pollution, contamination, or a nuisance, or cause regulatory standards to be violated for the receiving water body.	Less than significant	No mitigation measures required	Not applicable

Environmental Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Human Health Hazards			
HAZ-1: The proposed Project would not increase the probable frequency and severity of consequences to people from exposure to the health hazard,	Less than significant	No mitigation measures required	Not applicable

Table ES-3. Summary of Citywide Cat Program Implementation Guidelines and Ecological Conservation Measures

Focus Area	Guideline/Measure
Trap Neuter and Return	• The City will create partnerships with third parties who offer free-roaming cat trapping trainings so people can learn how to trap responsibly. • Traps should be monitored at all times and partially covered once occupied. • The City recommends release generally where cats are found, or as close as possible, but does not recommend release of free-roaming cats within 1 mile (estimated free-roaming cat home range; see Appendix E and H) of ESAs. If a free-roaming cat is trapped in or within 1 mile of an ESA, it is recommended the cat be placed in a working cat program or relocated, based on availability. • Maps of ESAs in the City will be provided for reference in the City shelters and on the Animal Services website for downloading and printing.
Responsible Feeding and Care	• No feeding within 1 mile of ESA, except when used for baiting traps for TNR purposes. Feeding should also not occur at locations where vulnerable human populations are present (children, the elderly, and those with compromised immune systems). • To avoid attracting wildlife and discourage overfeeding, feeding should be supervised and limited to 30 minutes. No free access to any food should occur or be facilitated. • Feeding times should only occur between 6 a.m. and 8 p.m. to help avoid conflicts with nocturnal wildlife. • Feeding locations should be kept clean so that no traces of food or refuse are left behind after feeding events. • Fecal matter accumulation near feeding or shelter areas should be monitored and removed. Contaminated surfaces should be disinfected as needed to help maintain cleanliness and contain the potential spread of disease.

Focus Area	Guideline/Measure
Medical Treatment	• Free-roaming cats should be sterilized and ear tipped. Microchipping is recommended if funding is available. Free-roaming cats that will be placed in a working cat program will be microchipped. • The rabies and feline viral rhinotracheitis, calicivirus, and panleukopenia virus (FVRCP) vaccine should be administered, along with flea treatment and deworming, at the time of sterilization. Participants are requested to provide ongoing flea treatments and vaccination updates as feasible.
Public Education/Engagement/Outreach	• Noticing efforts about the CCP—including code updates, TNR program, working cat program, and related conservation and responsible management guidelines—could occur through press releases, posting on the LAAS website, posters at City shelters, fliers, mailers, radio advertisements, and social media posts and ads. The information shared will be multilingual as needed. • Community engagement can occur through community meetings hosted by local City shelters and prior to mobile clinics. City shelter volunteers will learn about the CCP and conservation measures through shelter orientations and the volunteer onboarding process. • The City will collaborate with non-profit organizations, including wildlife and cat advocacy groups, to share information about how the CCP can reduce the existing free-roaming cat population and their effects on sensitive biological resources present in the City.

Chapter 1
Introduction

1.1 Background and Project Overview

For the Citywide Cat Program (proposed Project) the City of Los Angeles (City) would:

- Directly engage in or make available funds for the spay/neuter of free-roaming cats that may be returned to where they were found, relocated to a working cat program, or adopted.
- Make amendments to the City of Los Angeles Administrative Code (LAAC) to broaden the permitted use of Animal Sterilization Funds and to the City of Los Angeles Municipal Code (LAMC) regarding the definition of a cat kennel.
- Implement a modified trap, neuter, and return (TNR) program that includes facilitation of trapping, neutering, and returning; TNR-related community education and outreach and collaboration with TNR organizations; and use of incentives to encourage the capture, sterilization, and release of free-roaming cats, including to TNR groups who may return the cats to free-roaming status.
- Publish and implement program guidelines.
- Create a working cat program.

As part of these Project elements, the City estimates an annual provision of 20,000 vouchers and accompanying sterilization surgeries for free-roaming cats. In addition, under the proposed Project, to encourage adoptions and meet the City's no-kill goals, the LAMC amendment regarding the definition of *cat kennel* would exclude any location where five or fewer cats are kept (the current limit is three cats) with the restriction that all cats must be kept indoors at all times, cats must be microchipped and sterilized, and households must be registered with LAAS as having more than three cats. The proposed Project would be implemented citywide and is guided by actions by the Board of Animal Services Commissioners (Board) and the Los Angeles City Council. A description of the proposed Project is provided in Chapter 2 of this Draft EIR.

Broadly stated, the purpose of the Project is to assist in achieving the City's no-kill[1] goal and support the City's adoption of TNR as the preferred method of dealing with free-roaming cat populations and as the City's official policy.

Because of a prior court order (see Section 2.1.1), the City is presently restricted from undertaking certain actions affecting feral cats unless and until the City complies with the California Environmental Quality Act (CEQA). To address the potential environmental impacts of the City's proposed actions, the City has prepared this environmental impact report (EIR), in compliance with CEQA.

[1] In 2003, Los Angeles Mayor James Hahn set a goal for the City to become a no-kill city by 2008. Although 2008 did not find Los Angeles a no-kill city, the City has continued efforts to achieve that goal. At a no-kill shelter, at least 90% of the dogs and cats entering the shelter are expected to be a released alive to the owner (if lost), a new home, or a rescue partner. The City of Los Angeles' no-kill statistics are based on total noses in and total noses out. Additional information is available at http://www.laanimalservices.com/no-kill/.

1.2 Purpose and Intended Use of This EIR

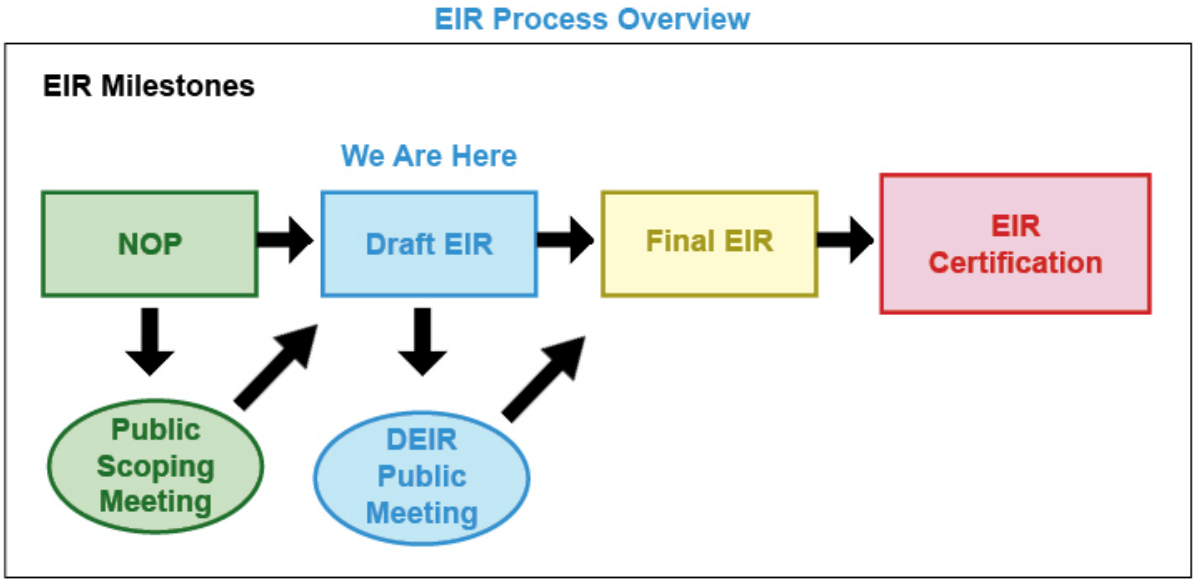
The purpose of this EIR is to inform decision-makers and the general public of the potential environmental impacts that could result from the proposed Project. An EIR is the most comprehensive form of environmental documentation under CEQA. EIRs are intended to provide an objective, factually supported full-disclosure analysis of the environmental consequences associated with a project that has the potential to result in significant, adverse environmental impacts.

CEQA requires the decision-making body to balance, as applicable, the economic, legal, social, or other benefits of the project against the unavoidable environmental risks when determining whether to approve the project. The EIR is prepared by and under the direction of the Los Angeles Department of Public Works, Bureau of Engineering (LABOE), which also has primary responsibility for recommending approval of the proposed Project, which will primarily be implemented by the City of Los Angeles Animal Services Department (LAAS). The proposed Project requires certain discretionary approvals (see below and Chapter 2). Therefore, the proposed Project is subject to environmental review requirements under CEQA.[2] The City of Los Angeles is the lead agency under CEQA for the proposed Project.

As shown in Figure 1-1, an EIR is prepared in three key stages. The CEQA process is initiated when the lead agency identifies a project. The lead agency then prepares a Notice of Preparation (NOP) to identify the preliminary environmental impacts of the project and solicit public input as to the scope of the EIR. A Draft EIR public meeting, although not mandatory under CEQA, will be conducted to solicit comments on the Draft EIR, and then a Final EIR will be prepared, which will contain public comments, responses to comments, and revisions to the Draft EIR, before the EIR is considered for certification and the proposed Project is approved by the City.

[2] Public Resources Code Sections 21000 et seq.

Figure 1-1. EIR Process Overview



1.3 Scope and Content of the Draft EIR

The City did not prepare an Initial Study for the proposed Project. Therefore, a screening analysis has been included in Chapter 3 of this EIR in accordance with the *L.A. CEQA Thresholds Guide* and Appendix G of the State CEQA Guidelines. The intent of the screening analysis is to help focus the detailed analysis presented in Chapter 4, which includes environmental topics that could have potentially significant impacts.

1.4 Public Outreach Efforts

1.4.1 Notice of Preparation

An NOP was issued on August 31, 2017 (Appendix A), and included background, key components of the proposed Project, and potential environmental effects of the proposed Project. The comment period for the scoping process was from August 31, 2017 to October 30, 2017. During this review period, the lead agency requested comments on the scope and content of the environmental information to be included in the Draft EIR.

Approximately 3,850 notices were sent by direct mail and/or email to community residents, stakeholders, and local agencies about the availability of the NOP and the opportunity to attend a public meeting to learn more about the proposed Project and provide comments on the NOP. A notice was also placed in the LA Times, through the Empower LA newsletter to City neighborhood councils, and in coordination with Animal Services neighborhood council liaisons.

Three public scoping meetings were held to obtain input on the NOP/IS and the scope and contents of the EIR:

- Thursday, September 28, 2018, 5:30 p.m.–7:30 p.m., at East Valley Shelter, 14409 Vanowen Street, Van Nuys, CA 91405
- Tuesday, October 17, 2018, 11:00 a.m.–1:00 p.m., at South LA, Chesterfield Square Shelter, 1850 W. 60th St., Los Angeles, CA 90047
- Monday, October 23, 2018, 5:30 p.m.–7:30 p.m., at Ramona Hall Community Center, 4580 N. Figueroa St, Los Angeles, CA 90065

More than 500 comments were received by LABOE; these comments are provided in Appendix B and summarized in a matrix at the end of this chapter (Table 1-1). All comments were considered by LABOE during preparation of the Draft EIR.

1.5 Key Principles Guiding Preparation of This Draft EIR

Sections presented here from the State CEQA Guidelines serve as key principles that guide the preparation of this EIR. They are included here to allow a complete understanding of the environmental context, impacts analysis methods, and conclusions presented in this EIR. These principles are intended to inform the reader and facilitate objective and sound interpretation of the analyses and conclusions presented in the EIR by decision makers. The scientific research and literature review methods (Appendix I), population modeling approach (Appendix J), and impacts analysis in the EIR (Chapters 3 and 4), are guided by these key principles.

1.5.1 Forecasting

State CEQA Guidelines Section 15144 notes that drafting an EIR necessarily involves some degree of forecasting, and while foreseeing the unforeseeable is not possible, an agency must use its best efforts to discover and disclose all that it reasonably can. Section 15144 limits the requirement for forecasting to that which could be reasonably expected under the circumstances and is part of the effort to provide a general "rule of reason" for EIR contents.

1.5.2 Speculation

State CEQA Guidelines Section 15145 notes that if, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact. This section deals with a difficulty in forecasting where a thorough investigation is unable to resolve an issue and the answer remains purely speculative. Once an agency finds that a particular effect is too speculative for evaluation, discussion of that effect should be terminated. This section provides authority to do so.

1.5.3 Disagreement among Experts

State CEQA Guidelines Section 15151 notes that an EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision that intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make

an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts look for adequacy, completeness, and a good faith effort at full disclosure.

1.6 Review of the Draft EIR

CEQA requires a Draft EIR to be submitted to the State Clearinghouse for circulation and for a 45-day review and comment period. This provides agencies and the general public an opportunity to review and comment on the adequacy of the analysis and the findings regarding potential environmental impacts of a proposed Project. The circulation period for the Draft EIR is August 29 through October 28, 2019. One public meetings will be held at Ramona Hall Community Center (4580 N. Figueroa St, Los Angeles, CA 90065) on Monday, October 7, 2019, from 6:00 pm to 7:30 pm.

An extended review period is being provided for the proposed Project. After the close of the 60-day review and comment period, responses to all comments received on the Draft EIR will be prepared. The lead agency will then prepare a Final EIR, which will incorporate the Draft EIR or a revision to the Draft EIR, Draft EIR comments and a list of commenters, and responses to comments. In addition, the lead agency must prepare the Findings of Fact, and if necessary a Statement of Overriding Considerations if there are significant impacts that cannot be mitigated, as well as a Mitigation Monitoring Program if there are mitigation measures that must be incorporated and adopted. These are the components of a Final EIR.

The Board of Animal Services Commissioners will consider the Final EIR and make a recommendation to the City Council, as the governing body of the City of Los Angeles, regarding certification of the Final EIR and the Citywide Cat Program approval. Approval of the Final EIR and Citywide Cat Program are at the discretion of the City Council.

1.7 Organization of the Draft EIR

A list of the document's chapters, including and a brief description of their content, is provided below to assist the reader in locating information.

Executive Summary: Located at the front of this document, the *Executive Summary* provides a brief description of the proposed Project, including an overview of the impact analysis, recommended mitigation measures, and net residual impact.

Chapter 1. Introduction: The *Introduction* provides general background information regarding Project development and the need for the proposed Project, along with information regarding the purpose of CEQA and this Draft EIR, including the Draft EIR scoping process, the availability of documents, and the Draft EIR review process.

Chapter 2. Project Description: Chapter 2 presents a statement of the proposed Project's objectives, a description of the location and setting of the proposed Project, a detailed description of the proposed Project's physical characteristics, and related information on phasing and implementation.

Chapter 3. Screening Analysis: This chapter includes the City of Los Angeles' initial screening analysis for the Citywide Cat Program, which is based on the City's 2006 *L.A. CEQA Thresholds Guide* and Appendix G of the State CEQA Guidelines. Based on the results of the screening analysis,

Biological Resources, Water Quality, and Human Health Hazards are analyzed in further detail in this EIR in Chapter 4.

Chapter 4. Environmental Impact Analysis: This chapter analyzes the potential impacts (direct and indirect) that could occur as a result of implementation of the proposed Project. The impact discussion is organized by topical issue (i.e., issues that have been found to have the potential to result in significant impacts).

Chapter 5. Comparison of Alternatives: The *Comparison of Alternatives* includes a discussion of the proposed alternatives and provides the comparative merits of each alternative.

Chapter 6. Other Environmental Considerations: Chapter 6 evaluates the contextual impacts related to growth-inducing effects and cumulative growth. Impacts found not to be significant and unavoidable adverse impacts are also summarized.

Chapter 7. Persons Consulted: This chapter lists those persons who were consulted to obtain the information that was used in the preparation of this Draft EIR.

Chapter 8. List of Preparers: This chapter lists the persons who prepared this Draft EIR.

Chapter 9. References: This chapter lists the sources of information that were referenced for the analyses contained within this Draft EIR.

Table 1-1. Scoping Comments Matrix

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
State Agencies					
1.	Betty Courtney	California Department of Fish and Wildlife	11-1-2017	• California Department of Fish and Wildlife (CDFW) has jurisdiction over conservation of wildlife and is charged by law to provide expertise. • Comments for EIR o States that cats are "non-native" and a threat to wildlife. o Expresses concern that the program may contribute to the persistence of free-roaming cats. ▪ Feeding of free roaming cats is considered wildlife harassment. ▪ Subsidizing cat colonies results in increased predation. ▪ Cat colonies compete with natural predators. o Recommends DEIR include info on natural open space resources that may be affected. o Suggests that an emphasis be placed on return to owner, adoption, and euthanasia, especially in sensitive areas. o DEIR should contain scientifically justified discussion of the effectiveness of TNR in reducing cat population. o DEIR should discuss disease implication, especially sea otter. • General Comments o CESA requires authorization to "take" endangered species; therefore, permitting, mitigation monitoring, and code alteration may be necessary. o DEIR should contain a complete project description.	Biological Resources Alternatives Appendix I: Systematic Literature Review Methods Appendix J: Domestic Cat Population Modeling Appendix L: Sensitive Biological Resources in the City of Los Angeles

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				○ A range of feasible alternatives should be provided. • Biological Resources ○ Complete wildlife assessment is needed. ▪ Regional assessment is required pursuant to CEQA. ▪ Thorough assessment following CDFW protocols is recommended, including adjoining areas. ▪ CDFW's database should be consulted in order to inventory sensitive species. • Analysis of Potential Project Impacts on Biological Resources ○ Recommends looking at lighting, drainage, and water table issues. ○ Recommends looking at indirect impacts. ○ Recommends looking at zoning areas adjacent to natural areas. ○ Recommends looking at cumulative effects per CEQA. • Recommended Mitigation ○ Avoid rare natural communities. ○ If on-site mitigation is not available, off-site mitigation should be pursued. ○ Special attention should be paid to nesting birds.	
2.	Gayle Totton, Associate Gov. Program Analyst	Native American Heritage Commission	9-7-2017	• CEQA was amended in 2014 to include a separate category for cultural resources. • AB 52 applies to all projects filing an NOP, ND, or MND. • Recommends lead agencies consult with California Native American tribes. • Provides description of AB 52 and SB 18 requirements.	Appendix G: AB52 Consultation Documentation

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				Local Agencies	
3.	Barbara Ferrer	LA County Public Health	11-08-2017	• Does not feel CCP adequately addresses public health issues resulting from free roaming cats and feces and requests these issues be investigated in the EIR. • States that the presence of free roaming cats is not a violation but if fleas, feces, and disease become an issue DPH must protect the public health and may issue a Notice of Violation to the party causing the conditions. • States that TNR does not address fecal accumulation and cat colonies may effect up to 15 residential homes surrounding the feeding area. • States that DPH regularly receives complaints from residents experiencing flea-born nuisance. • Has concerns about wildlife attraction due to cat colony feeding, which could exacerbate flea issues. • Recommends banning of feeding near vulnerable human populations. • Recommends that cat feces not be washed down storm drain due to concerns regarding Toxoplasmosis and transmission to sea otters. • Reports that since 2006 LA County has had 176 reported cases of flea-borne typhus. • Toxoplasmosis, Cryptosporidiosis, Salmonella, and Campylobacter are associated with cat feces and can be life-threatening to immuno-compromised persons. • If DPH issues a Notice of Violation they do not trap and remove cats; they only require the responsible party to eliminate the harmful conditions.	Project Description Human Health Hazards Water Resources
4.	Dr. Emily Beeler	Los Angeles County Public Health	10-17-2017	• Raises concerns about flea-borne disease and cited materials. Suggests that any cat management plan take these concerns seriously.	Human Health Hazards

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
5.	Jon Cicirelli	Animal Care Services, San Jose CA	10-17-2017	• Supports TNR. • Presents two papers he has co-authored on the topic. • Contends that local government does not have legal mandate for the state to address "healthy" stray cats, only sick or injured cats. • Points out laws relevant to cats in order to clarify legal baseline. • Estimates that around 3% of free roaming cats end up in shelters; therefore, euthanasia would have minimal impact. • Admits that TNR in environmentally sensitive areas is not a good idea. • Warns of bad science regarding wildlife impacts. • Offers argument that environmental and public health effects from cats are minimal.	Biological Resources Appendix I: Systematic Literature Review Methods Appendix J: Domestic Cat Population Modeling
Organizations/Individuals					

6.	Travis Longcore	Urban Wildlands Group	10-30-2017	• Points out that NOP neglected to mention the City's legally pervasive implementation of CCP in 2008.
				• States that project objectives are not clearly identified; therefore, project alternatives and project efficacy will be impossible to identify.
				• States EIR must address legal conflicts.
				  o TNR violates Cat Kennel ordinances.
				  o Promoting TNR supports illegal activity (wildlife feeding).
				  o Release of free roaming cats violates state law.
				• States mathematical model of cat population is needed.
				  o Suggests dividing total cat population into four subgroups: owned, stray, shelter, and feral.
				  o The dynamics between various groups should be analyzed, as well as birth and death rates for each group.
					Project Description
					
					Biological Resources
					
					Alternatives
					
					Human Health Hazards
					
					Appendix J: Domestic Cat Population Modeling
					
					Appendix I: Systematic Literature Review Methods

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				○ Model should establish baseline then evaluate how project elements will affect each group variable. • Suggest alternative analysis should test a range of policies that can be evaluated through the mathematical model. • States an analysis on greenhouse gasses and natural resource impacts is needed. • Voices concerns about fleas and feces. • Wildlife impact concerns ○ Impacts on sensitive bird species ○ Impacts on migratory birds ○ Impacts on behavior ○ Take of federally listed species ○ Coyote conflicts associated with cat feeding • Suggested mitigation measures ○ Reduction of the number of permissible cats per residence ○ Limits on roaming of owned cats ○ Dusk to dawn curfew to reduce night predation ○ Linking number of permissible cats to square footage of residence ○ Ordinance that bans cats from "trespassing" on others property • Offers criticism of the clarity, logic, and enforcement of cat regulation.	
7.	Lisa Lange	PETA	10-26-2017	• Does NOT support TNR and CCP. • Feels "returning" sterilized animals is essentially abandoning them to suffer alone. • Voices wildlife concerns. • Criticizes LAAS slow response times. • Feels TNR results in higher cat populations. • Voices water quality concerns.	Project Description Biological Resources Water Resources

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				• Suggests limiting the number of cats, whether they're owned or not, allowed to be harbored or fed at any one property. • Suggests requiring feeders to register and regularly (no less than monthly) report statistics, including the numbers and causes of deaths, the numbers of cats found dumped at the sites, etc. • Suggests requiring that cats be restricted to registered properties for their own safety and to limit the destruction of native wildlife. • Suggests requiring regular veterinary care, including parasite prevention and treatment as well as the full scope of veterinarian-recommended feline vaccinations. • Suggest requiring feeders to remove all new cats abandoned at a feeding site within 24 hours by taking them to a city animal shelter (cat feeders have been found hoarding cats, and experts agree that feeding large numbers of cats outdoors is often the first step to indoor animal hoarding). • Suggest limiting feeding times and requiring that food be removed overnight to reduce the attraction of wildlife. • Suggests removing language in the proposed program that allows for the abandonment of cats who are not feral. • Suggests requiring LAAS to respond to calls and complaints about homeless and stray cats by transporting the animals to a shelter, rather than allowing calls to be referred to private, sometimes all-volunteer groups or encouraging callers to get animals sterilized and then re-abandon them. (Free-roaming stray cats must not be dumped at feral cat colonies that have been assigned to a registered feeder.)	

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
8.	Gregory Castle	Best Friends Animal Society	10-27-2016	• BFAA has a strong pro-TNR stance and launched the NKLA (No-Kill Los Angeles) initiative. • States that NKLA has reduced kill rate by 82% in the last 4 years. • Feels CCP's primary objective is sterilization; therefore, the program can only lessen the environmental impacts associated with pre-existing conditions. • States that even if the population of cats may rise, the birth rate will decrease; therefore, DPW is lessening the pre-existing conditions. • Provides data that shows LAAS intake of cats has remained steady during years of CCP injunction. Uses this as evidence to show that non-profits do not have the sterilization power to reduce cat population alone. • States that "eradication" campaigns have not been shown to be effective at controlling population. • Refers to case studies in Rome and Randolph County, NC as evidence of the effectiveness of TNR. • Provides a list of institutions that support TNR. • Provides a well cited "Literature Snapshot" to support TNR efficacy and downplay public health concerns. • Provides evidence to support the idea that TNR reduces nuisance complaints by reducing sex hormones and therefore reducing loud aggressive behavior in cat populations.	Biological Resources Alternatives Appendix J: Domestic Cat Population Modeling Appendix I: Systematic Literature Review Methods
9.	Babak Naficy	Urban Wildlife Group	10-30-2017	• Feels the project description does not adequately identify project objectives. • States that without clear project objectives it will be impossible to identify alternatives and mitigation measure.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				• States that without clear project objectives the public will not be able to make an informed decision about the project.	
10.	Eric Strauss	Center for Urban Resilience	10-30-2017	• Reiterated their 2013 MND concerns. • Supports efforts to sterilize cats. • Supports education funding. • Supports trapping subsidies. • Has concerns about cat colony definition. • Has concerns about the definition of "environmentally sensitive areas." • Would like update to the list of "species of concern." • Would like code to clarify that feeders may not attract birds and insects, as well as other animals.	Project Description Biological Resources Appendix L: Sensitive Biological Resources in the City of Los Angeles
11.	Becky Robinson	Alley Cat Allies	10-30-2017	• Supports TNR and CCP. • Feels that CCP is a sterilization program for cats that are already present in the environment; therefore, the program will lessen environmental impacts. • Feels euthanasia is not effective due to the "vacuum effect." • Feels feeding cats does NOT create cat colonies. • Has concerns that LAAS is not effective at educating the public on TNR issues and non-lethal deterrent options. • States that "sanctuaries" are not a realistic alternative. • Offers evidence to refute the claim that cats may contribute to biological resources, public health, and wildlife impacts. • Offers several case studies of successful TNR programs.	Project Description Biological Resources Appendix J: Domestic Cat Population Modeling
12.	Jason Gallegos	BHNC Planning & Land Use Committee	10-6-2017	• Asks if EIR addresses issue of rogue trappers.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
13.	Jeff Mauser	Tarzana Neighborhood Council	10-6-2017	• Has filed a Community Impact Statement in support of EIR to reconsider CCP.	Project Description
14.	Elizabeth Pollock	Del Rey Residents Association	10-3-2017	• Requests EIR to fully analyze biological impacts of free roaming cats and advocates a "no roaming policy." • Requests impacts to public health be fully analyzed. States residents' experience nuisance from fleas, feces, etc. • Considers feeding unacceptable, as they have had negative experiences in the past and have witnessed overfeeding result in rise of population of cat colonies. • Suggests mandatory licenses and microchipping so that animal officers can better monitor unauthorized cats. • Voices opposition to the concept of community cats because their community has not agreed to take responsibility. • Strongly voices that they want to retain the ability to bring unwanted cats to the shelter and not have them returned.	Project Description Biological Resources Human Health Hazards Appendix J: Domestic Cat Population Modeling
15.	Jay H. Son.	Galloway Cat Clinic	9-17-2017	• Supports TNR on moral grounds.	Project Description
16.	John Popoch	Councilmember Bob Blumenfield	10-17-2017	• Supports TNR as a humane and economical approach to cat management.	Project Description Appendix J: Domestic Cat Population Modeling
17.	Mollie Holmes	Sitter4PawsLA	9-12-2017	• Supports CCP and TNR as method to control population.	Project Description
18.	Dan Silver	Endangered Habitats League	9-5-2017	• Received NOP. • Desires future correspondence.	Project Description
19.	B. Bernwald	LA Community Cats	9-28-2017	• Supports higher number of feral cats for community rodent control.	Biological Resources

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
20.	Bill Crowe	The Pet Care Foundation	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
21.	Patricia A. M. Winters	Purrfect Solutions Feline Rescue	10-11-2017	• Supports TNR.	Project Description
22.	Karn Myers	FixNation	10-21-2017	• Supports CCP. • Feels injunction causes TNR non-profits financial inconvenience.	Project Description
23.	Keri	Hideaway Kennels	10-21-2017	• Supports TNR.	Project Description
24.	Leslie Neff	Peter Zippi Memorial Fund	10-24-2017	• Supports TNR. • Understands the need for an EIR and respects the legal process. • Offers algebraic analysis to support the conclusion that TNR has no net effect on the environment.	Project Description Appendix J: Domestic Cat Population Modeling
25.	Katie Lisnik	Humane Society	10-26-2017	• Voices concerns about establishing an accurate baseline.	Project Description Appendix J: Domestic Cat Population Modeling
26.	Deborah Ackerman	Stray Cat Alliance	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
27.	Aimee Gilbreath	Michelson Found Animals	10-30-2017	• Supports CCP. • Feels that the existing population of free roaming cats should be used to establish baseline.	Project Description Appendix J: Domestic Cat Population Modeling
28.	Christi Metrpole	Stray Cat Alliance	10-30-2017	• Supports CCP and TNR. • Cites J.K. Levy controlled study, published in *The Veterinary Journal,* May 1, 2014 as supporting evidence of TNR effectiveness.	Project Description Appendix I: Systematic Literature Review Methods
29.	JeanMarie Wisniewski	DAWS of Atwater Village	10-30-2017	• Supports TNR and CCP.	Project Description
30.	Katie Larkin	Angel City Pit Bulls	10-30-2017	• Supports TNR and CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
31.	Jackie Eco	Sierra Club's Young Sierrans Executive Committee	10-30-2017	• Supports TNR and CCP. • States that Los Angeles ranks #3 in rodent population in the country thus cats have value in rodent control. • States that animal rescue workers have the highest suicide rate among American workers.	Project Description Biological Resources
32.	Jess Joswick	Individual	9-4-2017	• Supports TNR to reduce cat population.	Project Description
33.	Ashley Long	Individual	9-4-2017	• Supports TNR to reduce cat population. • Concerned about effective enforcement and education.	Project Description
34.	Monika Cozlin	Individual	9-4-2017	• Supports CCP and wants to end cat deaths.	Project Description
35.	Amanda Taylor	Individual	9-4-2017	• Supports CCP but thinks adoption is more humane than re-release.	Project Description
36.	Sam Hamer	Individual	9-4-2017	• Supports spay and neuter of strays.	Project Description
37.	Casey Christopher	Individual	9-4-2017	• Cat rescuer supporting TNR to reach no-kill status.	Project Description
38.	Paula Archinaco	Individual	9-5-2017	• Supports CCP. • Against euthanizing cats.	Project Description
39.	Laura Huffman	Individual	9-5-2017	• Supports CCP.	Project Description
40.	Reneda Baer	Individual	9-5-2017	• Supports CCP and TNR to reduce euthanasia.	Project Description
41.	Anya Soydova	Individual	9-12-2017	• Supports CCP. • Feels injunction has led to cat population growth.	Project Description
42.	Anastacia	Individual	9-12-2017	• Supports TNR. • Against euthanasia of cats.	Project Description
43.	Janice Nowinski	Individual	9-12-2017	• Supports CCP. • Against euthanasia of cats and injunction.	Project Description
44.	Toochis Rose	Individual	9-14-2017	• Participates in TNR and supports CCP.	Project Description
45.	Marisa Persaud	Individual	9-14-2017	• Supports CCP and no-kill shelters.	Project Description
46.	Daniel McLellan	Individual	9-15-2017	• Supports TNR and education.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
47.	Ava Tramer	Individual	9-15-2017	• Supports TNR and CCP. • Against euthanasia of cats.	Project Description
48.	Catlyn Wylde	Individual	9-15-2017	• Supports CCP. • Against euthanasia of cats.	Project Description
49.	Kimberly Ellen Lowe	Individual	9-17-2017	• Participates in and supports TNR. • Feels cat threat to birdlife is not creditable and real threat is habitat loss and climate change.	Project Description
50.	Cathy M. Thornburn	Individual	9-17-2017	• Participates in and supports TNR. • Feels cat threat to birdlife is not creditable and real threat is habitat loss and climate change.	Biological Resources
51.	Julie Fiener	Individual	9-18-2017	• Participates in and supports TNR. • Feels cat threat to birdlife is not creditable and real threat is habitat loss and climate change.	Biological Resources
52.	Robin Sigal	Individual	9-18-2017	• Participates in and supports TNR. • Feels cat threat to birdlife is not creditable and real threat is habitat loss and climate change.	Biological Resources
53.	Nancy Tracy	Individual	9-18-2017	• Participates in and supports TNR. • Feels cat threat to birdlife is not creditable and real threat is habitat loss and climate change.	Biological Resources
54.	Larry Bock	Individual	9-17-2017	• Participates in and supports TNR. • Feels cat threat to birdlife is not creditable and real threat is habitat loss and climate change.	Biological Resources
55.	Nancy MacLeod	Individual	9-19-2017	• Participates in and supports TNR. • Feels cat threat to birdlife is not creditable and real threat is habitat loss and climate change.	Biological Resources
56.	Monika Ressel	Individual	9-19-2017	• Supports the “changes” in the NOP and supports CCP.	Project Description
57.	Amy Caffero-Tolemy	Individual	10-2-2017	• Participates in and supports TNR.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
58.	Martha Caffin	Individual	10-1-2017	• Feels the population of feral cats has grown recently. • Supports "overturning the ban on TNR."	Project Description Appendix J: Domestic Cat Population Modeling
59.	Janice Hutchins	Individual	10-1-2017	• Supports TNR to reduce feral cat population.	Project Description
60.	Tera Borden	Individual	9-30-2017	• Supports TNR to reduce feral cat population.	Project Description
61.	Terri Hamel	Individual	9-30-2017	• Supports TNR.	Project Description
62.	Tracy Lopez	Individual	9-26-2017	• Supports TNR. • Against euthanasia of cats.	Project Description
63.	Janel Barlongo	Individual	9-26-2017	• Supports CCP. • Feels injunction has led to cat population growth.	Project Description Appendix J: Domestic Cat Population Modeling
64.	Monique Gonzalez	Individual	9-24-2017	• Supports CCP.	Project Description
65.	Nansi Aluka	Individual	9-24-2017	• Concerned about number of feral cats and euthanasia.	Project Description
66.	Melodie Conrad	Individual	9-23-2017	• Supports TNR. • Against euthanasia.	Project Description
67.	Nancy DaLavergne	Individual	9-23-2017	• Supports CCP and TNR.	
68.	Mathew Ohan	Individual	9-22-2017	• Against TNR and CCP. • Considers feral and pet cats to be pests and is concerned about associated fleas, feces, and property damage. • Suggests that cat owners be mandated to keep cats indoors and walk cats on leash. • Would like more animal shelters to manage the problem of strays.	Biological Resources Human Health Hazards Alternatives Appendix J: Domestic Cat Population Modeling

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				• Concerned about using taxpayer money for TNR and education programs that are ineffective.	
69.	Jorge Vargas	Individual	9-22-2017	• Supports the "changes" presented in the NOP. • Supports CCP.	Project Description
70.	Kate Dube	Individual	9-19-2017	• Supports the "changes" presented in the NOP. • Supports CCP.	Project Description
71.	Madeleine Kern	Individual	9-21-2017	• Supports all aspects of CCP.	Project Description
72.	Katie Larkin	Individual	9-21-2017	• Supports CCP. • Feels injunction has taken too long. • Feels CCP will improve cat colony health.	Project Description
73.	Raymond Radi	Individual	9-21-2017	• Supports TNR as a humane way to lower feral cat population.	Project Description
74.	Sarita Carden	Individual	9-19-2017	• Supports TNR.	Project Description
75.	Jeffrey Mausner	Individual	10-7-2017	• Supports TNR on moral grounds. • Offers criticism of Longcore letter.	Project Description
76.	Anne Katata & Eric Randolph	Individual	10-11-2017	• Supports TNR and CCP code change.	Project Description
77.	Mark Crane	Individual	10-11-2017	• Supports TNR and CCP.	Project Description
78.	Cheri Shankar	Individual	10-11-2017	• Supports TNR on moral grounds.	Project Description
79.	D'Arlynn (Dee) Carey	Individual	10-11-2017	• Supports TNR on moral grounds.	Project Description
80.	Lori Meehan	Individual	10-11-2017	• Supports CCP.	Project Description
81.	Karen Rodecki	Individual	10-11-2017	• Supports CCP on moral grounds.	Project Description
82.	Kathleen Kinsey	Individual	10-11-2017	• Believes TNR is an effective method of population control.	Appendix J: Domestic Cat Population Modeling
83.	Gary S. Herwig,	Individual	10-11-2017	• Supports CCP on moral grounds (Stray Cat Alliance form letter).	Project Description
84.	Kate Kenner	Individual	10-11-2017	• Supports TNR.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
85.	Caitlin Mendoza-Price	Individual	10-11-2017	• Supports TNR and CCP.	Project Description
86.	Christopher Wong	Individual	10-11-2017	• Supports TNR and CCP and education.	Project Description
87.	Stephanie Albrycht	Individual	10-11-2017	• Supports TNR and CCP and education.	Project Description
88.	Sandra Zaninovich	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
89.	Jacob Wiesel	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
90.	Joanne Kwast	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
91.	Dona LaSchiava	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
92.	Jean-Louis Rodrigue	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
93.	Natalie Birman,	Individual	10-10-2017	• Supports CCP.	Project Description
94.	Janet Powers	Individual	10-10-2017	• Supports TNR and education.	Project Description
95.	Victoria Risko	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
96.	Valerie Woodward	Individual	10-10-2017	• Supports TNR and CCP.	Project Description
97.	Carol Schafer	Individual	10-10-2017	• Supports TNR and has seen success in AZ.	Project Description
98.	Jon Pelletier	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
99.	Lisa Lacatena	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
100.	Samantha Solomon	Individual	10-10-2017	• Supports TNR and has seen success in WA.	Project Description
101.	Kate Corsmeier	Individual	10-10-2017	• Supports TNR and CCP and feels cats lead to a balanced ecosystem.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
102.	Tara Browner	Individual	10-10-2017	• Supports TNR and CCP and feels cats lead to a balanced ecosystem.	Project Description
103.	Amy Nicole Purpura	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
104.	Kristine Riccardi	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
105.	Christine Jira	Individual	10-10-2017	• Supports TNR and CCP.	Project Description
106.	Thomas Kirby	Individual	10-10-2017	• Supports TNR and CCP.	Project Description
107.	Anthony Montapert	Individual	10-10-2017	• Supports TNR and CCP.	Project Description
108.	Jill Landefeld	Individual	10-10-2017	• Supports TNR and CCP.	Project Description
109.	Rymann Winter	Individual	10-10-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
110.	Sen Zhang	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter)	Project Description
111.	Scott T Watanabe	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
112.	Tammy O'Neill	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
113.	Sau Tsang	Individual	10-11-2017	• Supports TNR and CCP.	Project Description
114.	Carey Gosa	Individual	10-11-2017	• Supports TNR.	Project Description
115.	Amy Halloran	Individual	10-11-2017	• Supports TNR and education about cat management.	Project Description
116.	Bill Pollock	Individual	10-11-2017	• Supports TNR.	Project Description
117.	Janet Canaday	Individual	10-11-2017	• Supports funding for spay and neuter.	Project Description
118.	Cindy Marinangel	Individual	10-11-2017	• Supports CCP and against euthanasia of cats.	Project Description
119.	Ben Kull	Individual	10-11-2017	• Supports CCP.	Project Description
120.	Joann Gregg	Individual	10-11-2017	• Supports TNR.	Project Description
121.	Kelly Thomas,	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
122.	Marcie Rich	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
123.	Kelly Bettinger	Individual	10-11-2017	• Support CCP and feels program is successful even if free roaming cat population is not affected.	Project Description
124.	Diem Ta	Individual	10-11-2017	• Supports TNR.	Project Description
125.	Kerry Jones	Individual	10-11-2017	• Does not support euthanasia. • Feels bird groups are similar to climate change deniers.	Project Description
126.	Jill M. Heins	Individual	10-11-2017	• Supports TNR. • Does not identify with the cause of bird groups.	Project Description Project Description
127.	Joann Contino	Individual	10-11-2017	• Supports TNR. • Feels wildlife concerns are based on flawed studies.	Project Description Appendix I: Systematic Literature Review Methods
128.	Jeff Meyers	Individual	10-11-2017	• Supports TNR and CCP (SCA Form Letter).	Project Description
129.	Susan M. Farrell	Individual	10-11-2017	• Supports TNR. • Feels humans are the real threat to birds.	Project Description Biological Resources
130.	Jo Ventresca	Individual	10-11-2017	• Supports CCP.	Project Description
131.	Susan Esposito	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
132.	Brittan Taylor	Individual	10-11-2017	• Supports TNR.	Project Description
133.	Gabriella B. Platner	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
134.	Maria Garcia	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
135.	Madeline Bailey	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
136.	Robert Gustafson	Individual	10-11-2017	• Supports TNR.	Project Description
137.	Mechelle Lee	Individual	10-11-2017	• Supports TNR.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				• Feels cats do not threaten birds.	
138.	Jennifer Valentine	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
139.	Melissa Renzi	Individual	10-11-2017	• Supports TNR and CCP.	Project Description
140.	Patricia Marinaccio	Individual	10-11-2017	• Supports TNR. • Feels cats do not harm birds but do help control rodents.	Project Description Biological Resources
141.	Elizabeth Greer	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
142.	Karen Eyres	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
143.	Jeane_e Koustenis	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
144.	Marina Misraje	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
145.	Marie Ballenger	Individual	10-11-2017	• Supports TNR. • Feels humans are the real threat to birds.	Project Description
146.	Candace Rocha	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
147.	Debra Cunningham	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
148.	Cindy Mc Naughton	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
149.	Dennis Lyday	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
150.	Kara Lipson	Individual	10-11-2017	• Supports CCP.	Project Description
151.	Janet Ghio	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
152.	Sandra Mason	Individual	10-11-2017	• Supports cat population control.	Project Description
153.	Janet Rhodes	Individual	10-11-2017	• Supports TNR.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				• Believes human influence contributes to bird population decline. • States that several bird species populations in urban areas are on the rise; therefore, cats cannot have a negative effect on their population.	Biological Resources
154.	Dostana Ljusic	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
155.	Edward Macan	Individual	10-11-2017	• Supports TNR. • Offers a criticism of the methodology used in "The impact of free-ranging domestic cats on wildlife of the United States," January 29, 2013 by Scott R. Loss, Tom Will, and Peter P. Marra. • Feels the authors' true agenda is extermination of cats. • Offers anecdotal evidence of TNR efficacy.	Project Description Appendix I: Systematic Literature Review Methods Appendix J: Domestic Cat Population Modeling
156.	Linda Brown Crisp	Individual	10-11-2017	• Supports TNR. • Feels bird advocacy groups are making false statements.	Project Description Biological Resources Appendix I: Systematic Literature Review Methods
157.	Valerie Cameron	Individual	10-11-2017	• Supports TNR.	Project Description
158.	Kevin Braid	Individual	10-11-2017	• Feels TNR cats are not hurting anyone and birds can go wherever they want.	Biological Resources
159.	P. Schultze	Individual	10-11-2017	• Supports TNR.	Project Description
160.	Andrea Vogel	Individual	10-11-2017	• Supports TNR and CCP.	Project Description
161.	Lisa Coffey	Individual	10-11-2017	• Supports TNR and CCP.	Project Description
162.	Cori Newlander	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
163.	Ginny Prescott	Individual	10-11-2017	• Supports CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
164.	Kimberly Miller	Individual	10-11-2017	• Supports TNR.	Project Description
165.	Marilyn Evenson	Individual	10-12-2017	• Supports TNR. • Feels bird advocacy groups make false claims.	Project Description Biological Resources Appendix I: Systematic Literature Review Methods
166.	Kitty Bubs Kennedy	Individual	10-12-2017	• Supports TNR. • States that TNR cats are proactively trapped; therefore, they would not otherwise be euthanized. Therefore, the TNR does not contribute to population growth.	Appendix J: Domestic Cat Population Modeling
167.	Diego Gavilanes	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
168.	Meghan Sweeney	Individual	10-12-2017	• Supports CCP. • Feels cats contribute to rodent control.	Project Description Biological Resources
169.	Donna Pfeffer	Individual	10-12-2017	• Supports TNR.	Project Description
170.	Dorothy Magallon	Individual	10-12-2017	• Supports CCP.	Project Description
171.	Chris de Zorzi	Individual	10-12-2017	• Supports TNR.	Project Description
172.	Marcia King Agraphiotis	Individual	10-12-2017	• Supports TNR.	Project Description
173.	Carrie J Nichols	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
174.	Claire Daigle	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
175.	Rene Succa-Ruston	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
176.	Joy Denton	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
177.	Erin Reynolds	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
178.	Lily Sipan	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
179.	Steve Delgadillo	Individual	10-12-2017	• Supports CCP.	Project Description
180.	Anita Kuhn	Individual	10-12-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
181.	Joan Kaplan	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
182.	Jack Jennings	Individual	10-13-2017	• Supports TNR.	Project Description
183.	Joan green	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
184.	Elyse K. Paterson	Individual	10-13-2017	• Supports TNR.	Project Description
185.	Laura Beth Heisen	Individual	10-13-2017	• Has questions about length and cost of litigation.	Project Description
186.	Christine Hein	Individual	10-13-2017	• Supports TNR.	Project Description
187.	Megan Utley	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
188.	Lorie Obal	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
189.	Cannon Jaquish	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
190.	Kelly Norwood	Individual	10-13-2017	• Supports TNR. • Feels opposition groups want to kill cats.	Project Description
191.	Lisa Juarez	Individual	10-13-2017	• Supports TNR.	Project Description
192.	Carolyn Seeman	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
193.	Cindy Koch	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
194.	Katie O'Shaughnessy	Individual	10-13-2017	• Supports TNR.	Project Description
195.	Paula Tasner	Individual	10-13-2017	• Supports TNR and CCP.	Project Description
196.	Patti Packer	Individual	10-13-2017	• Supports TNR.	Project Description
197.	Wilma Mottin	Individual	10-13-2017	• Supports TNR and CCP.	Project Description
198.	Lisa Buono	Individual	10-13-2017	• Supports TNR.	Project Description
199.	Sandra Couch	Individual	10-13-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description Project Description
200.	Sam Ward	Individual	10-14-2017	• Supports TNR.	Project Description
201.	Debra Yanko	Individual	10-14-2017	• Supports TNR. • Offers evidence of successful TNR programs in Washington and Baltimore.	Project Description
202.	Mary Wynne	Individual	10-14-2017	• Supports TNR. • Against non-spayed pets.	Project Description
203.	Cathy M. Thornburn	Individual	10-14-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
204.	Kevin Anderson,	Individual	10-14-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
205.	Lynn Langley	Individual	10-14-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
206.	Mary Williams	Individual	10-14-2017	• Supports CCP.	Project Description
207.	Teresa Sanders	Individual	10-14-2017	• Supports TNR. • Wants to humanly control cat population.	Appendix J: Domestic Cat Population Modeling
208.	Alyssa Clark	Individual	10-14-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
209.	Bill Woodbridge	Individual	10-14-2017	• Supports CCP and TNR and no-kill.	Project Description
210.	Nancy Flores	Individual	10-14-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
211.	Keri Hofland	Individual	10-14-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
212.	Carryl Lynn	Individual	10-14-2017	• Supports TNR as population control.	Project Description
213.	Amy Wolberg	Individual	10-14-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
214.	Marc Margulis	Individual	10-14-2017	• Supports CCP.	Project Description
215.	Gail	Individual	10-15-2017	• Supports TNR. • Feels CCP will help bird populations because it will legitimize colony feeding and therefore birds will not be hunted by cats.	Project Description Biological Resources
216.	Sabina Magliocco	Individual	10-15-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
217.	J. Strom	Individual	10-15-2017	• Supports CCP.	Project Description
218.	Stephanie Stephens	Individual	10-15-2017	• Supports CCP. • Questions Longcore analysis.	Project Description Appendix J: Domestic Cat Population Modeling
219.	Stephanie Stephens	Individual	10-15-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
220.	Stephen W. Roos	Individual	10-15-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
221.	Odette Deleers	Individual	10-15-2017	• Supports CCP.	Project Description
222.	Stacey McRae	Individual	10-15-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
223.	Danielle Meierotto	Individual	10-15-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
224.	Bill Paxton	Individual	10-15-2017	• Supports CCP.	Project Description
225.	R. Lopez	Individual	10-16-2017	• Supports CCP. • Feels trap and kill is not effective because of the “vacuum” effect.	Project Description Human Health Hazards

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
				• Feels feral cats are not a real health threat.	Appendix J: Domestic Cat Population Modeling
226.	Corinna Cechi	Individual	10-16-2017	• Supports CCP. • Feels trap and kill is not effective because of the "vacuum" effect. • Feels feral cats are not a real health threat.	Project Description Human Health Hazards Appendix J: Domestic Cat Population Modeling
227.	M.C. Francis	Individual	10-16-2017	• Supports CCP. • Feels trap and kill is not effective because of the "vacuum" effect. • Feels feral cats are not a real health threat.	Project Description Human Health Hazards Appendix J: Domestic Cat Population Modeling
228.	Jim Lunsford	Individual	10-16-2017	• Supports CCP.	Project Description
229.	Deborah Johnson	Individual	10-16-2017	• Supports CCP. • Feels injunction is harming LA.	Project Description
230.	Eden Kennan	Individual	10-16-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
231.	Susan Weinstein	Individual	10-16-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
232.	David A. Weinstein	Individual	10-16-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
233.	Sherry Roberts	Individual	10-16-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
234.	Cheri Shankar	Individual	10-11-2017	• Supports CCP.	Project Description
235.	Cheryl Pickett	Individual	10-16-2017	• Supports CCP.	Project Description
236.	Barbara Lee-Gelman	Individual	10-16-2017	• Supports TNR. • Feels cats do not threaten birds because they only prey on birds that would not have survived.	Biological Resources

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
237.	Barbara Malin	Individual	10-16-2017	• Supports TNR. • Feels cats offer beneficial rodent control.	Biological Resources
238.	Doris Sachs	Individual	10-16-2017	• Supports TNR. • Feels cats offer beneficial rodent control.	Biological Resources
239.	Marian Yoshiki Kovinick	Individual	10-16-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
240.	Frances Doel	Individual	10-16-2017	• Supports TNR. • Feels TNR is effective at controlling the population.	Appendix J: Domestic Cat Population Modeling
241.	Adam Bush	Individual	10-16-2017	• Supports CCP.	Project Description
242.	Anita Szafran	Individual	10-18-2017	• Supports CCP.	Project Description
243.	Lyn Bradford	Individual	10-18-2017	• Supports CCP.	Project Description
244.	Rebecca Stone	Individual	10-18-2017	• Supports CCP.	Project Description
245.	Preston DeFrancis	Individual	10-18-2017	• Supports TNR.	Project Description
246.	Sabine Ganezer	Individual	10-18-2017	• Supports CCP.	Project Description
247.	R. Lilly	Individual	10-18-2017	• Supports CCP.	Project Description
248.	Lisbet Brook	Individual	10-11-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
249.	Ann Wallace	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
250.	David Weinstein	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
251.	Daisy Anderson	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
252.	Susan Weinstien	Individual	10-18-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
253.	Chrys Frantz	Individual	10-18-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
254.	Lorna Brown	Individual	10-18-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
255.	Chanel McNair	Individual	10-18-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
256.	Cassandra Wilson	Individual	10-18-2017	• Supports TNR. • Has seen cat populations rise without sterilization.	Appendix J: Domestic Cat Population Modeling
257.	Jennifer van Zyl	Individual	10-18-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
258.	Chris Palladino	Individual	10-19-2017	• Feels cat population has gone up in the last 10 years. • Has concerns about fleas, feces, and property damage.	Biological Resources Human Health Hazards Appendix J: Domestic Cat Population Modeling
259.	Jane Parker	Individual	10-19-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
260.	Blythe Leatherman	Individual	10-19-2017	• Supports CCP. • Acknowledges that cats impact wildlife and supports population control.	Biological Resources
261.	Louise Adams	Individual	10-19-2017	• Supports CCP.	Project Description
262.	Lauren Andrews	Individual	10-19-2017	• Supports CCP.	Project Description
263.	Mary Holmes	Individual	10-19-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
264.	Lauren Andrews	Individual	10-19-2017	• Supports CCP.	Project Description
265.	Mary Holmes	Individual	10-19-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
266.	Laura Woods	Individual	10-19-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
267.	Tammy Lynn Cervera	Individual	10-19-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
268.	Theresa Larkin	Individual	10-19-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
269.	Rebecca Reid	Individual	10-19-2017	• Supports CCP.	Project Description
270.	Barbara Eisenberg	Individual	10-20-2017	• Supports CCP. • Feels cats provide valuable rodent control. • Cites "vacuum effect" as evidence trap and kill is not effective.	Project Description Biological Resources Appendix J: Domestic Cat Population Modeling
271.	Judy Bergeron	Individual	10-20-2017	• Supports TNR and CCP (Stray Cat Alliance form letter)	Project Description
272.	Tammy Wexler	Individual	10-20-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
273.	Stephanie Tanaka	Individual	10-20-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
274.	Karen Lisson	Individual	10-20-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
275.	Michelle Naden	Individual	10-20-2017	• Supports TNR and CCP.	Project Description
276.	Roy Eisenberg	Individual	10-20-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
277.	Katelyn Anderson	Individual	10-20-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
278.	Dan Schwartz	Individual	10-20-2017	• Supports CCP.	Project Description
279.	Susan Ellis	Individual	10-20-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
280.	Nancy Ono	Individual	10-20-2017	• Supports CCP. • Feels injunction causes trappers financial inconvenience.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
281.	Diane Venberg	Individual	10-21-2017	• Supports TNR.	Project Description
282.	Meybel C. Pagan	Individual	10-21-2017	• Supports TNR.	Project Description
283.	Barbara Malin	Individual	10-21-2017	• Supports TNR. • Feels cats contribute to rodent control.	Project Description
284.	Suzanne Amato	Individual	10-21-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
285.	Janine Hicks	Individual	10-21-2017	• Supports TNR. • Is concerned about feral cat populations.	Project Description
286.	Cindye Friedman	Individual	10-21-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
287.	Maureen Kemp	Individual	10-21-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
288.	Joel Chiodi	Individual	10-21-2017	• Supports CCP.	Project Description
289.	Sandra Siepak	Individual	10-22-2017	• Supports TNR.	Project Description
290.	Roxanne Rico	Individual	10-22-2017	• Supports TNR.	Project Description
291.	Nancy Misensol	Individual	10-22-2017	• Supports TNR.	Project Description
292.	Kate Wilson	Individual	10-22-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
293.	Kendra Johnson	Individual	10-22-2017	• Supports TNR and CCP.	Project Description
294.	Anne Hakes	Individual	10-22-2017	• Supports TNR.	Project Description
295.	Deirdre Morrissey	Individual	10-22-2017	• Supports TNR.	Project Description
296.	Rina Rubenstein	Individual	10-22-2017	• Supports TNR. • Feels cat population has gone up in the past few years.	Project Description Appendix J: Domestic Cat Population Modeling
297.	Suzanne Cooper	Individual	10-22-2017	• Supports TNR and CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
298.	Lee Turner	Individual	10-22-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
299.	Margaret (Rita) Khrabrovitsky	Individual	10-22-2017	• Supports TNR and CCP.	Project Description
300.	Alexandra Heinemann	Individual	10-23-2017	• Supports TNR.	Project Description
301.	Gwen Wetzler	Individual	10-23-2017	• Supports TNR.	Project Description
302.	Janiece Richard	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
303.	Christine Keesee	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
304.	Sonja Flemming	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
305.	L. J. Sanchez	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
306.	Linda Van Gelder	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
307.	Jenny Park	Individual	10-23-2017	• Supports TNR. • Against euthanasia.	Project Description
308.	Stephane Richard	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
309.	Savange O'Coyle	Individual	10-23-2017	• Supports TNR.	Project Description
310.	Mary Catalano	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
311.	Brandon Lightbourne	Individual	10-23-2017	• Supports TNR.	Project Description
312.	Michele Wytko	Individual	10-23-2017	• Supports TNR.	Project Description
313.	Esther Lee	Individual	10-23-2017	• Supports TNR. • Concerned that feral cat population may adversely affect homeless and mentally ill people.	Human Health Hazards

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
314.	Kim Delgado King	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
315.	Angie Meng	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
316.	Steven Weber	Individual	10-23-2017	• Supports TNR. • Feels euthanasia leads to higher cat populations.	Project Description Appendix J: Domestic Cat Population Modeling
317.	Silvia	Individual	10-23-2017	• Supports TNR.	Project Description
318.	Leigh Manacher	Individual	10-23-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
319.	Ann Zumwinkle	Individual	10-23-2017	• Supports funding for spay/neuter. • States West Adams has many cat colonies that are a problem.	Project Description
320.	Mary Power	Individual	10-23-2017	• Supports TNR.	Project Description
321.	Bryan T. Pauquette	Individual	10-24-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
322.	Kristina Kontor	Individual	10-24-2017	• Supports TNR and CCP.	Project Description
323.	Elizabeth Woros	Individual	10-24-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
324.	Gitane Serrato	Individual	10-24-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
325.	Janice Grundeman	Individual	10-24-2017	• Supports funding for spay/neuter.	Project Description
326.	Rich Thigpen	Individual	10-24-2017	• Supports CCP.	Project Description
327.	Jaclyn Grau	Individual	10-24-2017	• Supports CCP.	Project Description
328.	Cheryl Rene Leigh	Individual	10-24-2017	• Supports CCP.	Project Description
329.	Gail Molen	Individual	10-24-2017	• Supports CCP.	Project Description
330.	Sunny Shelton	Individual	10-24-2017	• Supports CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
331.	Lui Faelten	Individual	10-25-2017	• Supports TNR.	Project Description
332.	Joseph Emerling	Individual	10-25-2017	• Supports CCP.	Project Description
333.	Boice Bowman	Individual	10-25-2017	• Supports CCP.	Project Description
334.	Shellie Anderson	Individual	10-25-2017	• Supports TNR.	Project Description
335.	Rosemary M. Jones	Individual	10-25-2017	• Supports TNR.	Project Description
336.	Jordan A. Gropack	Individual	10-25-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
337.	Tri La	Individual	10-25-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
338.	Karen Pedersen	Individual	10-25-2017	• Supports TNR.	Project Description
339.	Kathleen Campbell	Individual	10-25-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
340.	Ronni Louie	Individual	10-25-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
341.	Edward A. Munoz	Individual	10-25-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
342.	Mickey Fielding	Individual	10-25-2017	• Supports CCP.	Project Description
343.	Christian Bocher	Individual	10-25-2017	• Supports TNR.	Project Description
344.	DG Pontius	Individual	10-25-2017	• Supports CCP.	Project Description
345.	Nicole Volz	Individual	10-25-2017	• Supports TNR and education.	Project Description
346.	Nayaira Garcia	Individual	10-25-2017	• Supports TNR.	Project Description
347.	Rebecca Espinoza	Individual	10-25-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
348.	Patty Naegely	Individual	10-25-2017	• Supports TNR and CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
349.	Rain Eventoff	Individual	10-25-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
350.	Gretchen Legaspi	Individual	10-26-2017	• Supports TNR.	Project Description
351.	Zarah Hedge	Individual	10-26-2017	• Supports TNR and CCP.	Project Description
352.	Valerie Palmer	Individual	10-26-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
353.	Yolanda Sitjar	Individual	10-26-2017	• Supports TNR.	Project Description
354.	Cindy Ann Bader Lindy	Individual	10-26-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
355.	Barbera M. Kappendal	Individual	10-26-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description Appendix J: Domestic Cat Population Modeling
356.	Mary Proteau	Individual	10-26-2017	• Supports TNR. • Concerned that some people who use trap vouchers may have bad intentions.	Project Description
357.	Jaime Rabb	Individual	10-26-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
358.	Natalie Cueva	Individual	10-26-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
359.	Janine Sperandeo	Individual	10-26-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
360.	Erin Cummings	Individual	10-26-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
361.	Brittany Morales	Individual	10-26-2017	• Supports TNR.	Project Description
362.	Jo Ann Niedermayer	Individual	10-26-2017	• Supports TNR and CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
363.	Judith Sivic	Individual	10-27-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
364.	Inez Espriu	Individual	10-27-2017	• Supports TNR and CCP.	Project Description
365.	Sigrid Ramos	Individual	10-27-2017	• Supports TNR and CCP.	Project Description
366.	David Weinstien	Individual	10-27-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
367.	Christine Venegas	Individual	10-27-2017	• Supports TNR and CCP.	Project Description
368.	Christine Anderson	Individual	10-27-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
369.	Jimmie Anderson	Individual	10-27-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
370.	Sylvia Caris	Individual	10-27-2016	• Supports TNR.	Project Description
371.	Liza de Weerd	Individual	10-27-2016	• Supports TNR and CCP and education.	Project Description
372.	John Garvin	Individual	10-27-2016	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
373.	Catherine Seymore	Individual	10-27-2016	• Supports CCP and no-kill.	Project Description
374.	Ashley Fondrevay	Individual	10-28-2017	• Supports CCP.	Project Description
375.	Marla Bradley	Individual	10-28-2017	• Supports TNR and CCP and education.	Project Description
376.	Juliet Cesario	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
377.	James Jarzynski	Individual	10-28-2017	• Supports spay and neuter programs.	Project Description
378.	Alexis Erlbaum	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
379.	Marissa Pocius-Hess	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
380.	Victoria Risko	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
381.	Jacob Wiesel	Individual	10-28-2017	• Would like to protect community cats.	Project Description
382.	Valarie Rom-Hawkins	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
383.	Lauren A. Ross	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
384.	Maggi Wright	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
385.	Jennifer Valentine	Individual	10-28-2017	• Supports CCP.	Project Description
386.	Sandra Willard	Individual	10-28-2017	• Supports TNR and CCP and cat code changes.	Project Description
387.	Lynn Marks	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
388.	Kathy Paz	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
389.	Michael Truly	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
390.	Dani Niekerk	Individual	10-28-2017	• Supports CCP.	Project Description
391.	Erin Olsen	Individual	10-28-2017	• Supports TNR and CCP. • States that "baseline" for EIR should be current cat population.	Appendix J: Domestic Cat Population Modeling
392.	Heather Twiss	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
393.	Ricki Weinberger	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
394.	Lorrie Madden	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
395.	Sandra J Nitchman	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
396.	Mike Lorrig	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
397.	Olivia Meiring	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
398.	Irv Gershenz	Individual	10-28-2017	• Supports TNR and CCP. • Feels cats help control rodent problems.	Biological Resources
399.	Nina Gelbart	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
400.	Andres Echeverria	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
401.	Lauren Gardiner	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
402.	Susan W Grey	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
403.	Heidi Miller	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
404.	Danielle Lescure	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
405.	Kathy Polanco	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
406.	Dawn Guthrie-Clark	Individual	10-28-2017	• Supports Stray Cat Alliance.	Project Description
407.	Sarah P.	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
408.	Gerald Freedman	Individual	10-28-2017	• Supports TNR.	Project Description
409.	Martine Monaghan	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
410.	Dana Beisel	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
411.	Nadene Mcintyre	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
412.	Pamela Kelly	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
413.	Sarena Snider	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
414.	Michelle Oliver	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
415.	Peggy Kennedy	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
416.	JoAnne Klein	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
417.	Francine Fisher	Individual	10-28-2017	• Supports CCP. • Supports keeping cats indoors.	Project Description
418.	Barbranne Herrera	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
419.	Kathy von Reubendale	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
420.	Yvonne LeGrice	Individual	10-28-2017	• Supports TNR and CCP.	Project Description
421.	Francisco Javier Rodriguez	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
422.	Mary Lei	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
423.	Michael Olson	Individual	10-28-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
424.	Barbara Lasley	Individual	10-28-2017	• Supports CCP.	Project Description
425.	Anthony Clark	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
426.	Lisa Jaime	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
427.	Susan Teixeira	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
428.	Val and Ellis Bereman	Individual	10-29-2017	• Feels cats help control rodent problems.	Biological Resources
429.	MaryLou Gale	Individual	10-29-2017	• Supports TNR and CCP.	Project Description
430.	Pauline Walton-Flath	Individual	10-29-2017	• Supports TNR and CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
431.	Krista Switzer	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
432.	George M. Schmiedeshoff	Individual	10-29-2017	• Supports TNR and education. • Against euthanasia.	Project Description
433.	JiJi Thedford	Individual	10-29-2017	• States that she has trapped 157 cats in the past two years using social security income and the cost has become prohibitive. • Supports CCP.	Project Description
434.	Diane DeJoie	Individual	10-29-2017	• Supports CCP. • Feels poor communities need financial assistance to control cat population.	Project Description
435.	Phyllis Johnston Sorter	Individual	10-29-2017	• Supports TNR and CCP. • Feels feral cats catch more rodents than birds.	Project Description
436.	Camille Weiner	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
437.	Christine Borje	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
438.	Kimberley J. Pryor	Individual	10-29-2017	• Supports caring for cat population on moral grounds. • Feels a monitored and managed cat population is healthier and less damaging.	Project Description
439.	Stefan Jacobs	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
440.	Susan Esposito	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
441.	Marianne Gadhia	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
442.	Hugh King	Individual	10-29-2017	• Supports TNR.	Project Description
443.	Charley Price	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
444.	Elisabeth Calla	Individual	10-29-2017	• Supports TNR. • Offers scholarly examples of TNR effectiveness. • Feels euthanasia will not ever achieve public support and therefore is not a feasible option.	Project Description
445.	Ronald Thomas	Individual	10-29-2017	• Supports funding to control cat population.	Project Description
446.	Sila Shakeri	Individual	10-29-2017	• Supports TNR and CCP.	Project Description
447.	Suzanne Fontaine	Individual	10-29-2017	• Supports CCP.	Project Description
448.	Wendy Chrisman	Individual	10-29-2017	• Supports TNR and CCP and education.	Project Description
449.	Fariba Hashemi	Individual	10-29-2017	• Supports TNR and CCP.	Project Description
450.	Lyn Williams	Individual	10-29-2017	• Supports TNR and CCP. • Supports codes changed and education. • Feels TNR fosters a positive relationship between the community and public agencies.	Project Description
451.	Emily Ford	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
452.	Erika Guiza	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
453.	Emilia Chiuzzi	Individual	10-29-2017	• Supports TNR. • Feels that since free roaming cats are already present then doing TNR cannot have any negative environmental effects. • Feels euthanasia is not cost effective and not effective at controlling the cat population.	Project Description Alternatives Appendix J: Domestic Cat Population Modeling
454.	Milli Barton	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
455.	Valerie Ellis	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
456.	Adam Trujillo	Individual	10-29-2017	• Supports TNR.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
457.	Claudia Glenn Barasch	Individual	10-29-2017	• Supports TNR and CCP. • Agrees with the need to evaluate environmental impacts but feels that other animals also contribute to flea and feces problems. • Would like clarification of trap waivers and subsidies. • Feels that trappers should have adequate training. • Feels that since free roaming cats are already present then doing TNR cannot have any negative environmental effects.	Project Description Biological Resources Appendix J: Domestic Cat Population Modeling
458.	Dawn Elliott	Individual	10-29-2017	• Would like all Los Angeles county cities to participate in the CCP. • Would like the city and all cat organizations to coordinate. • Would like to see LA cats shipped to states with cat shortages. • Feels TV and radio stations should have less car advertising and should dedicate air time to cat education. • Feels animal abusers should get same jail time as child abusers.	Project Description
459.	Thea Stevens	Individual	10-29-2017	• Supports TNR and CCP.	Project Description
460.	Jesec Griffin	Individual	10-29-2017	• Supports TNR and CCP and no-kill.	Project Description
461.	Barbara Murad	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
462.	Sylvia Hornidge	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
463.	Melody Feige	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
464.	Karen Hartland	Individual	10-29-2017	• Supports TNR and CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
465.	Vicki Torres	Individual	10-29-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
466.	Lorraine Gardner	Individual	10-29-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
467.	Donna Fisher	Individual	10-29-2017	• Supports CCP and TNR. • Feels animal shelter should save animals not euthanize them.	Project Description
468.	Aurora de Blas	Individual	10-29-2017	• Supports CCP and TNR.	Project Description
469.	Carlos Sosa	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
470.	Leilani Webster	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
471.	Catherine Ricci	Individual	10-30-2017	• Supports TNR and CCP.	Project Description
472.	Gretchen Lanham	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
473.	Suzann Janvrin	Individual	10-30-2017	• Supports TNR and CCP.	Project Description
474.	Liz Hernandez	Individual	10-30-2017	• Supports TNR and CCP.	Project Description
475.	Alison Holden	Individual	10-30-2017	• Supports TNR and CCP.	Project Description
476.	Angela Hill	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
477.	David Welch	Individual	10-30-2017	• Supports CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
478.	Gabriela Palafox	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
479.	Georgia Brewer	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
480.	Laurie A. McRae	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
481.	Greyden Opio	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
482.	Martin Daniels	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
483.	Jamie Catino	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
484.	Cozy C	Individual	10-30-2017	• Supports TNR and CCP.	Project Description
485.	Billy Silverman	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
486.	Lenore Zeuthen	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
487.	Kevin Ford	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
488.	Rachel V. Olivier	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
489.	Dora Sesler	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
490.	Gina Kuloszewski	Individual	10-30-2017	• Supports CCP.	Project Description
491.	Lisa Shubb	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
492.	Becca Scheuer	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
493.	Gail Raff	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
494.	Alexandra Stein	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
495.	Marcie Kramer	Individual	10-30-2017	• Supports TNR. • Points to Cook County, IL as TNR case study. • Feels removing cats is ineffective because of "vacuum effect."	Biological Resources Appendix J: Domestic Cat Population Modeling

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
496.	Alexandra Stien	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling
497.	Cori Cue	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
498.	Nicole Ralston	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
499.	Crystal Hill	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
500.	Dani Messerschmidt	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
501.	Michelle Welk	Individual	10-30-2017	• Supports TNR and CCP.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
502.	Kate Ryan	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards
503.	Jill Hoffman	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
504.	Judy Marsh	Individual	10-30-2017	• Supports CCP.	Project Description
505.	Nicole Piehl	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
506.	Sharon Trapp	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
507.	Mikaela Euro	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
508.	Roger Mathison	Individual	10-30-2017	• Is concerned about feral cat issues. • States that Harvard Heights has seen positive results from TNR.	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
509.	Mikaela Euro	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
510.	Erin Sullivan	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
511.	Peggy Kennedy	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
512.	Trevor Swearingen	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
513.	Natasha Paulson	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
514.	Robiee Ziegler	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
515.	Sara Alvarado	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
516.	Ron Thomas	Individual	10-30-2017	• Supports TNR.	Project Description
517.	Donna Hubbard	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
518.	Amy Arce	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
519.	Sarah Graham	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
520.	Cathleen Gilbert	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
521.	Ava Sadripour	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
522.	Priya Gehm	Individual	10-30-2017	• Supports TNR and CCP. • Has concerns about trappers and possible misconduct.	Project Description
523.	Sarah Boldt	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
524.	Lesley Lee	Individual	10-30-2017	• Supports TNR and CCP. • Feels TNR will lessen environmental impact from cats.	Project Description Biological Resources
525.	Sasha Patsenka	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
526.	Margarita Jones	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
527.	Alana Reed	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
528.	Felicia Reynolds	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
529.	Sheila Purcell	Individual	10-30-2017	• Supports TNR and CCP.	Project Description
530.	Annette Goode-Parker	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
531.	Paula Lauren Gibson	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
532.	Gwendolyn Barriac	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
533.	Kristin Chaney	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
534.	Gasser Customs	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
535.	Gasser Customs	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
536.	Shannah Tenner	Individual	10-30-2017	• Supports TNR and CCP.	Project Description
537.	Rick Posten	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
538.	Jennifer Lauricella	Individual	10-30-2017	• Supports TNR and feels EIR will show that TNR is effective. • Points out that San Jose has had success with TNR. • Feels euthanasia is not effective. • Feels other animals contribute to flea issues.	Biological Resources Appendix J: Domestic Cat Population Modeling Human Health Hazards Alternatives
539.	Jessica Kaplan	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
540.	Vanessa Waltz	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
541.	Ellen Waggoner	Individual	10-30-2017	• Supports TNR and CCP. • Has concerns about misuse of trap subsidies.	Project Description
542.	Joe Mussari	Individual	10-30-2017	• Supports CCP.	Project Description
543.	Apolonio Chavez	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
544.	Rachel Huckins	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

No.	Commenter	Agency/Interested Party	Date	Summary of Issues	Section of EIR Where Issue Will Be Addressed
545.	Nina L. Dabbieri	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
546.	Armaiti May	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
547.	Gwen Carlson	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
548.	Rain Eventoff	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
549.	Lionel Cone	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description
550.	Stephanie Medranogh	Individual	10-30-2017	• Supports TNR and CCP (Stray Cat Alliance form letter).	Project Description

Chapter 2
Project Description and Environmental Setting

This chapter presents the project description for the proposed Citywide Cat Program (Project), including:

- Introduction and Overview
- Los Angeles Animal Services Background and Relevant Operations
- Project Location and Existing Conditions
- Project Objectives
- Proposed Project
- Potential Responsible Agencies and Project Approvals

Helpful definitions in relation to the Project include:

Domestic cats – The domestic cat (*Felis catus*) first domesticated 5,000 to 10,000 years ago from the African/Arabian wildcat (*Felis silvestris lybica*). Domestic cats include feral, stray, and pet cats. In this environmental impact report (EIR), general references to the species as a whole use the term domestic cat.

Free-roaming cats – all unowned, roaming cats, including feral cats and stray cats.

Feral cats – cats with temperaments that are completely unsocialized to humans, although frightened or injured tame pet cats may appear to be feral.

Stray cats – former pets that are abandoned or have been lost.

Pet cats – cats owned as pets. The currently permitted number of cats per household is three.

TNR – trap, neuter, and return. "Neuter" includes spay and means sterilization. "Return" means returning the free-roaming cat to the outdoor location where the cat was found.

Cat kennel – any lot, building, structure, enclosure, or premises where four or more cats are kept or maintained for any purpose (as defined in current Los Angeles Municipal Code [LAMC] 53.00).

2.1 Introduction and Overview

Broadly stated, the purpose of the Project is to assist in achieving the City of Los Angeles' (City's) no-kill[1] goal and support the City's adoption of TNR as the preferred method of dealing with free-roaming cat populations and as the City's official policy (see Section 2.5, below).

[1] In 2003, Los Angeles Mayor James Hahn set a goal for the City to become a no-kill city by 2008. Although 2008 did not find Los Angeles a no-kill city, the City of Los Angeles has continued efforts to achieve that goal. At a no-kill shelter, at least 90% of the dogs and cats entering the shelter are expected to be released alive to the owner (if lost), a new home, or a rescue partner. The City of Los Angeles' no-kill statistics are based on total noses in and total noses out. Additional information is available at http://www.laanimalservices.com/no-kill/.

To assist in the implementation of the City's no-kill policy and reduce the relative population of free-roaming cats in the City, the Department of Animal Services (Department; Los Angeles Animal Services [LAAS]) proposes to:

- Directly engage in, or provide funds[2] for others to engage in, the spaying and neutering of free-roaming cats to prevent them from having litters of kittens.
- Change the *Los Angeles Administrative Code* (LAAC) (LAAC Section 5.199) to allow certain funds[3] to be used for spaying or neutering free-roaming cats.
- Use City facilities, including community rooms in LAAS centers, to provide educational programming on any animal-related topic, including free-roaming cats, and allow a free and balanced exchange of information and ideas with regard to free-roaming cats.
- Implement a modified TNR program through funding for spay or neuter surgeries for free-roaming cats and education related to best practices for the release and management of feral cats.
- Allow an increase in the currently permitted number of cats per household from three to five to encourage more adoptions. This would involve certain restrictions and be accomplished by amending the definition of "cat kennel" in the *Los Angeles Municipal Code* (LAMC Section 53.00) and any other code amendments determined to be necessary.

Because of a prior court order (see Section 2.1.1), the City is presently restricted from undertaking certain actions affecting feral cats unless and until the City complies with the California Environmental Quality Act (CEQA). To address the potential environmental impacts of the City's proposed actions, the City has prepared this EIR, in compliance with CEQA.

In general, several areas of potential environmental and public health impacts are associated with the existing population of free-roaming cats in the City:

1. The impact of free-roaming cat predation on wildlife, especially as it relates to species listed under the state and federal *Endangered Species Acts* and the *Migratory Bird Treaty Act*;

[2] The Los Angeles Administrative Code (LAAC) sets up various funds for animal care and control. A special trust fund known as the "Animal Sterilization Fund" is among those funds (LAAC Section 5.199). It can be used only to spay or neuter dogs, cats, and rabbits that are owned by a resident of the City of Los Angeles. As a result of this restriction, the LAAS has been unable to use the Animal Sterilization Fund to spay or neuter free-roaming cats. The Animal Sterilization Fund currently has an unused balance in excess of $4 million in funding. The Los Angeles City Council regularly appropriates $1.1 million toward this fund; however, because of the court order and current surplus, the funding level has decreased in recent years.

[3] Historically, up to fiscal year 2012, the City allocated $1.1 million to the Animal Sterilization Fund as well as $2 from every license sold for an altered dog. The funds were used to pay service partners who accept City-issued vouchers to spay/neuter cats. The accumulation of funds in the Animal Sterilization Fund prompted the City to reduce the annual allocation. Because the City has a mandatory spay/neuter ordinance and a significant population of community members who are at the poverty level or below, it is logical to assume that the City would return to the original allocation or even increase it because of the rising cost of spay/neuter surgeries. This money would be distributed in the form of vouchers through City vendors who operate spay/neuter clinics at the six LAAS centers, mobile spay/neuter vans that target low-income communities, or the City's service partners who accept these vouchers as a form of payment. At the end of each year, these vouchers would be redeemed by the vendors, clinics, and service partners by submission to LAAS. The payment of these vouchers would come from the Animal Sterilization Fund. Most of the vendors who operate spay/neuter clinics do not use their annual allotment. After this Project is fully implemented, it is anticipated that 20,000 of the altered cats would be free roaming.

2. Public health concerns associated with zoonotic diseases, such as typhus,[4] and potential water quality impacts related to free-roaming cat feces and urine;
3. The possibility of diseases spreading from pet cats to other animals, such as toxoplasmosis transmission to sea otters, as well as the possibility of free-roaming cats competing with local predators for food, including raptors, coyotes, etc.;
4. Free-roaming cat health and welfare; and
5. Nuisance problems caused by cats fighting, mating, spraying urine, etc.

The exact magnitude of each area of concern varies depending on the specific location, number of free-roaming cats present, and human perceptions and tolerance related to free-roaming cats.

2.1.1 Court Order

In 2006, the City proposed implementation of a TNR program to help address issues, including some of the aforementioned concerns, related to feral cats. TNR programs include trapping, neutering/spaying, vaccinating, ear-tipping (surgical cut of the ear), and returning the cats to where they were trapped. In 2008, a CEQA-based legal challenge to the TNR program was filed against the City by the Urban Wildlands Group and other organizations. In 2010, as a result of the legal challenge, a permanent injunction was entered by the court that, in general, prohibits the City from engaging in TNR, or facilitating others to engage in TNR, until such activities are analyzed as required by CEQA. The injunction is attached as Appendix C to this EIR.

2.1.2 Previous and Proposed CEQA Documentation

In 2013, the City prepared and circulated an initial study/mitigated negative declaration (MND) for a different citywide cat program. The MND was never adopted, and the 2013 project has been abandoned by the City. The MND for the 2013 project is available for download at http://eng.lacity.org/citywide-cat-program-e1907610. The City has now prepared this EIR to analyze the revised Citywide Cat Program under CEQA.

2.1.3 Introduction to Domestic Cats and their Ecology

The domestic cat was first domesticated 5,000 to 10,000 years ago from the African/Arabian wildcat, a solitary, nocturnal, territorial, carnivorous predator. Domestic cats are introduced, nonnative predators and have evolved a simple, female-based social system, although they are still largely solitary, territorial, and generally unfriendly toward other cats (Bradshaw 2018). As pets, domestic cats are affectionate, smart, small, and easy to care for, and provide meaningful companionship to their caretakers, making them one of the most common pets in American households and households around the world (Bradshaw 2018). Despite thousands of years of domestication, domestic cats still maintain inherited tendencies of hunting and territoriality. Their innate hunting behavior is often considered to be playfulness in pets, although the behavior is known to be influenced by hunger and inherited hunting instincts (Bradshaw 2018).

[4] Zoonotic diseases are defined as diseases that can be transmitted from animals to humans or from humans to animals, including domestic animals and wildlife. Source: Minnesota Department of Health. Available: http://www.health.state.mn.us/divs/idepc/dtopics/zoo/. Accessed December 12, 2018.

Although many domestic cats are pets that have been raised, socialized, and cared for by humans, many are born and raised without human interaction and socialization, resulting in a feral (i.e., unsocialized or untamed) state. Pet cats have variable access to the outdoor environment, with some pet cats kept strictly indoors at all times and others allowed to freely roam indoors or outdoors as they please, while others are allowed limited outdoor access (e.g., indoors at night, supervised outdoor time, or with access to a screened-in patio). Unowned cats, such as abandoned (formerly owned stray cats) and feral cats, freely roam with unlimited outdoor access. For the purposes of this analysis and discussion, unowned domestic cats with free access to the outdoors are referred to as **free-roaming cats** and are the focus of the discussion in this EIR. Owned domestic cats are referred to as **pet cats** and are not the primary focus of this CEQA analysis; general references to the species as a whole use the term **domestic cat**.

Pet cats with access to outdoors focus their home range around their home where they acquire resources such as food, water, shelter, and companionship with their owner. Free-roaming cats have versatile and adaptable diets and may focus their home ranges on areas with access to food provided by humans, garbage, prey, or a combination thereof (Eberhard 1954; Meckstroth et al. 2007; Mirmovitch 1995; Biro et al. 2004; Turner et al. 2000; Coleman et al. 1997; Grant and Longnecker 1999). Free-roaming cat spatial distribution is highly variable and is largely dependent on resource availability. Domestic cats exhibit substantial variability in habitat use and may occupy a variety of land cover and habitat types; in addition to having strong preferences for areas inhabited by humans, domestic cats have been documented utilizing and exhibiting preferences for covered woodlands, riparian forest, and scrublands; and open grasslands, wetlands, and barren/disturbed areas including areas that are intensely burned and disturbed (Nogales et al. 2004; Harper 2005; McGregor et al. 2017; McGregor et al. 2014; Flockhart and Coe 2018; Davies et al. 2017). Pet domestic cats can live long lives, with some individuals reaching 20 plus years. In contrast, life spans for free-roaming cats average 2–3 years (Andersen et al. 2004). Domestic cats have high reproductive rates with litters averaging 3.6 kittens, have short gestation periods (62–71 days), may have up to two litters per year, and reach sexual maturity at the age of 7 months (Andersen et al. 2004). This high reproductive rate, coupled with their adaptability and subsidization by humans, has resulted in large free-roaming cat populations throughout the City of Los Angeles and the world.

2.2 LAAS Background and Relevant Operations

LAAS was founded 153 years ago. It operates six animal services centers in the City and has 77 officers citywide to serve the community. The animal services centers are award-winning facilities that have been built within the past 10 to 12 years. LAAS is one of the largest municipal shelter systems in the United States. Its six animal services centers serve approximately 60,000 animals annually and respond to 20,000 emergency calls each year involving animals or people in danger.

LAAS is governed by the Board of Animal Services Commissioners (Board), pursuant to the Los Angeles City Charter and the LAAC. The Board is authorized to supervise, control, regulate, and manage the LAAS; make and enforce the rules and regulations necessary to exercise the powers conferred upon the LAAS by the Los Angeles City Charter; and provide instructions to the Department's general manager. The general manager, as the chief administrative officer of LAAS, manages day-to-day activities and makes and enforces the rules and regulations necessary to exercise the powers conferred on LAAS.

LAAS provides a variety of animal services, including microchipping, information on spay and neuter resources, licensing, pet care, adoption, animal statistics, and volunteer programs. LAAS animal services centers are located throughout the City (see Figure 2-1).

Under its current regulatory approach, the City provides traps and trapping permits for City residents wishing to trap nuisance cats (which could include owned or free-roaming cats) and take them to one of the six City animal services centers that accepts trapped cats. Once the cats are received, they are scanned for a microchip to determine if they are owned, in an attempt to reunite them with their owners. If no owner can be identified, they are held at the animal services center for 4 days and then made available for adoption. If they are not adopted, transferred to rescue organizations, or returned to their owners, they are humanely euthanized.

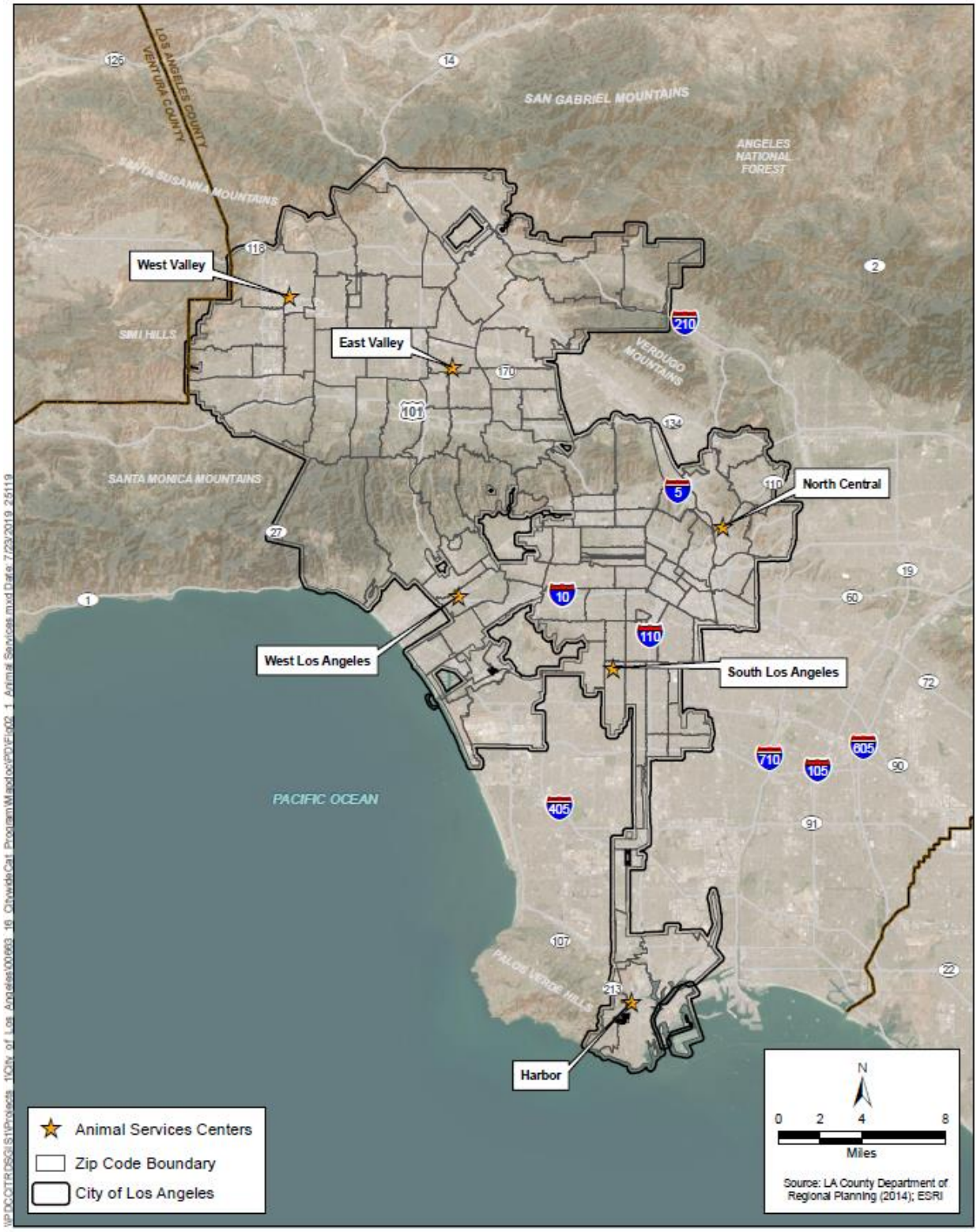


Figure 2-1. Citywide Cat Program Project Location

At present, some cats are held in animal services centers for 9 to 10 months for socialization and possible adoption. Table 2-1 provides historical data on the number of cats taken in by the City's

animal services centers and the number euthanized. Cats may be euthanized for behavioral or medical issues as well as a lack of resources. Note that it is very difficult to determine which cats in an animal services center are truly feral.

Table 2-1: Number of Cats Taken in by City of Los Angeles Animal Services Centers

Fiscal Year	Total Intake of Cats	Adopted or Release to 501c3 Rescue or Returned to Owner	Euthanized
2018–2019	**23,645**	**19,938**	**2,739**
2017–2018	21,558	17,732	3,151
2016–2017	19,902	14,827	4,325
2015–2016	19,302	12,806	6,003
2014–2015	19,960	11,315	7,856
2013–2014	19,924	10,857	8,019
2012–2013	21,083	9,098	10,738
2011–2012	21,880	8,300	12,563

Source: City of Los Angeles 2018

Currently, LAAS has contracts with five low-cost spay and neuter clinics and also three mobile spay and neuter clinics. These spay and neuter clinics are privately operated in five of the City's six animal services centers and provide vaccinations and other low-cost assistance to the community; they are not full-service veterinary clinics. These clinics provide spay and neuter services to owned cats of the general public and also to stray cats that are past their holding period at the animal services centers. They accept vouchers from the City to provide spay/neuter services, which are rendered before the animals are released from the animal services centers. Each contract for the spay and neuter clinics is awarded for $500,000 annually and, with one exception, these contractors do not end up using all of the funds they are allotted. There are also funds set aside for free spay and neuter vouchers for citizens. Funds for payment toward the clinic contracts and vouchers as well as the citizen vouchers come from the Animal Sterilization Fund. The Animal Sterilization Fund currently has an unused balance in excess of $4 million that is available to be used. In addition, money is deposited in the Animal Sterilization Fund regularly through donations from individuals or grants, Los Angeles City Council allotments, and a portion of the fees from dog licensing.

LAAS also implements the City's no-kill policy (see Section 2.1, above), which had a target date of 2008; however, it has not yet been achieved. As described in Section 2.1, the term "no-kill" has been accepted widely among much of the national animal welfare community to mean that 90% of the dogs and cats entering a shelter leave by being adopted by a new family, were returned to their family, or were pulled by a private nonprofit animal rescue agency that works collaboratively with the City to find these dogs and cats new homes of their own. According to self-reported data compiled by Best Friends Animal Society, no-kill has been achieved in about 4,300 communities in the county; California has 118 communities that have achieved no-kill status (Best Friends 2019). They are small, large, rural, and urban. Some are wealthy communities, and some are communities that are poor. LAAS has been taking the following steps toward implementation of the no-kill policy:

- Increasing pet adoptions,
- Returning more lost pets to owners,

- Collaborating more effectively with private animal groups and the community,
- Providing free and discounted spay/neuter surgeries,
- Increasing volunteer and foster care programs, and
- Providing services for low-income community members who have or want a companion animal.

As presented in Table 2-2, below, in fiscal year 2011-2012, the LAAS live-release[5] rate for dogs and cats was only 59.50%. At the end of the 2017–2018 fiscal year, the live-release rate was 93.18%. This is a total count of noses in and noses out. In the 2011–2012 fiscal year, 21,880 cats were taken in and 12,563 euthanized. Although the live-release rate for dogs during that fiscal year was 72.32%, the live-release rate for cats was only 38.93%. In the 2017–2018 fiscal year, the live-release rate for cats was 82.25% (93.18% for dogs).

Table 2-2: LAAS Live-Release Rates – Cats and Dogs

Year	Dogs Only Live-Release Rate	Cats Only Live-Release Rate	Overall Live-Release Rate
2017–2018	93.18%	82.25%	87.87%
2016–2017	90.40%	74.50%	83.29%
2015–2016	88.44%	66.35%	78.74%
2014–2015	82.12%	54.98%	70.92%
2013–2014	80.70%	54.46%	70.30%
2012–2013	76.25%	43.15%	65.51%
2011–2012	72.32%	38.93%	59.50%

Source: City of Los Angeles 2018

Each animal services center has at least one veterinarian as well as several registered "vet techs."[6] The veterinary team has training and experience involving orthopedic surgery, wildlife, high-volume spay and neuter, and more. The LAAS field staff includes a world-class Specialized Mobile Animal Rescue Team, one of only two in the country. The animal control officers are recognized experts in handling animal cruelty cases as well as permits and all code enforcement involving animals.

2.3 Project Location and Existing Conditions

The proposed Citywide Cat Program would apply to all areas within the boundaries of the City of Los Angeles. The City comprises approximately 465 square miles and exists in a geographically, topographically, and biologically unique and diverse landscape. The northern portion of the City is cradled by pristine coastal mountain ranges, which centrally traverse the City from the sea extending to the Hollywood Hills, separating the San Fernando Valley in the north and the Los Angeles Basin in the south. The City encompasses mountains, rivers, foothills, canyons, valleys, diversified wilderness areas, native scrublands, and the sandy beaches and rocky intertidal areas of

[5] The live release or save rate is the percentage of animals leaving the shelter alive no matter what their health or behavior status. This could be through adoption, return to owner, or transfer.

[6] Veterinary technologists and technicians perform medical tests under the supervision of a licensed veterinarian to assist in diagnosing animal injuries and illnesses. Source: U.S. Bureau of Labor Statistics. Available: https://www.bls.gov/ooh/healthcare/veterinary-technologists-and-technicians.htm. Accessed: December 12, 2018.

the Pacific Ocean coastline. This distinct natural landscape supports the region's rich biodiversity, with the City supporting a wide variety ecosystems, habitats, and native wildlife and plant species. In addition to native wildlife species, nonnative species, including domestic cats, are present throughout the study area, including natural habitat areas. Free-roaming cats exist as individuals and in aggregations, which may or may not receive regular care. Pet cats are owned family pets, and the Department encourages keeping them indoors for safety.

The proposed Project would be implemented throughout the City by LAAS, in partnership with third-party organizations and veterinarians within the City, principally through the City's six animal services centers (see Figure 2-1):

1. North Central Animal Services Center
   3201 Lacy Street
   Los Angeles, CA 90031
2. *South Los Angeles Animal Services Center, Chesterfield Square
   1850 West 60th Street
   Los Angeles, CA 90047
3. *West Los Angeles Animal Services Center
   11361 West Pico Boulevard
   Los Angeles, CA 90064
4. *Harbor Animal Services Center
   957 North Gaffey Street
   San Pedro, CA 90731
5. *East Valley Animal Services Center
   14409 Vanowen Street
   Van Nuys, CA 91405
6. *West Valley Animal Services Center
   20655 Plummer Street
   Chatsworth, CA 91311

** Animal services centers with spay and neuter clinics on site*

There is no totally reliable estimate of the number of free-roaming cats in the City or Los Angeles County. Some news articles estimate there are 1 to 3 million feral cats in the City and county. However, these articles do not give any rationale for their numbers, and it is not clear how many are in the City and how many are in the county. Furthermore, it is not known how many of these cats were properly identified as feral or if stray cats were mistakenly counted. Feral cats generally do not allow handling by humans and flee upon approach; therefore, they generally are not suitable for adoption as a pet. They are most often the offspring of outdoor cats that were not socialized to humans as kittens. Stray cats, on the other hand, are previously owned cats that have become lost or been abandoned. Stray cats can usually be re-homed as pets. However, sometimes it can be difficult to clearly separate feral from stray cats in the field. Often, a stray cat will need to be trapped and held for a short time to determine whether or not it is a feral cat. Nonetheless, as discussed in Chapter 4, data and information exist that are used to estimate the potential distribution and population of free-roaming cats (includes feral and stray cats) in the study area.

Both feral and stray cats have home territories that are determined by the availability of food and shelter. They also have preferences for certain types of habitats; therefore, they are not distributed

uniformly across the landscape. In some cases, existing food sources, such as dumpsters, may be plentiful and lead to larger groups of cats. Because cats are flexible with respect to their food sources, they may congregate around these garbage dumpsters where rodents and discarded food are abundant. In areas where food and shelter are scarcer, cats live in larger areas at lower densities so they can find food. When humans consistently feed these cats, the feeding location becomes a central point of their territory. If there is a stable and reliable food source, cats tend to spend more of their time in the area around that food source. Feral and stray cats generally seek shelter in crawl spaces and/or local structures in urban environments.

Female cats will typically have one to three litters[7] per year, with the mean number of litters being 1.4 per year. The number of kittens per litter ranges from one to six, with a median of three. Kitten mortality by 6 months of age is typically about 50%.

2.3.1 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and easily disturbed or degraded by human activities and developments (see California Public Resources Code Section 30107.5). The City has various ESAs that contain sensitive biological resources within their boundaries. ESAs are defined in LAMC Section 64.70.01A, and a detailed description of the natural habitat areas and ESAs is provided in the *L.A. CEQA Thresholds Guide* (2006). ESAs are discussed in detail in Section 4.2.2.1 in Section 4.2, *Biological Resources*, and depicted on Figures 4.2-2a and 4.2-2b.

As noted above and discussed in Chapter 1, domestic cats, including free-roaming cats in particular, are present throughout the study area. While both pet and free-roaming cats are territorial, pet cats tend to stay near their homes and are closely associated with the humans they live with, while free-roaming cats center their territory (home range) around food, water, and shelter, which are typically found in higher abundance in human-dominated landscapes (Liberg et al. 2000). Due to this behavior, domestic cats, regardless of owned status, are often found in highest densities in human-dominated landscapes (Normand et al. 2018). Free-roaming cat spatial distribution is highly variable and is largely dependent on resource availability. Free-roaming cats can survive in rural and undeveloped areas and in areas lacking human subsidies by hunting natural prey and seeking natural shelter, although they are likely to exist at lower densities in these contexts relative to areas with higher human density or resource availability (Liberg et al. 2000; Liberg 1980). Less-developed areas may also support a higher density of native predators, such as coyotes, that prey on cats, resulting in instances of lower cat abundance in such areas due to cats selecting areas away from predators (Gehrt et al. 2013), although it should be noted that coyotes in the study area and surrounding region are increasingly known to take advantage of developed areas due to easy access to food sources such as garbage, pet food, and pets. Considering this, it is anticipated that free-roaming cats are present in ESAs, though likely at lower densities than more urban and developed areas, and have the potential to affect sensitive biological resources in ESAs.

2.3.2 CEQA Baseline

An EIR assesses the significance of a project's impacts in comparison to a baseline, *normally* (emphasis added) consisting of the existing physical environmental conditions at or near a project

[7] A litter is a group of young animals born to an animal at one time.

site. As stated in the State CEQA Guidelines, Section 15125(a), CEQA provides that the existing environmental setting at the time of publication of the notice of preparation *normally* (emphasis added) establishes the baseline for determining whether the proposed project's environmental impacts may be significant. The City published the notice of preparation for the proposed Project on August 31, 2017. However, recent changes to Section 15125 of the State CEQA Guidelines in 2018, consistent with prevailing case law, provide that where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing conditions expected when the project becomes operational. In addition, a lead agency may use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record to avoid misleading information and to provide the most informative value for the public and decision-makers to understand the project's likely and potential near-term and long-term impacts.

Cats are predators with various levels of interest, skill, and prey preferences. The effects of free-roaming cats on wildlife are documented for some locations and a cause of legitimate concern to wildlife agencies, non-profit groups, and various members of the public at large. However, it is important to draw a distinction among such concerns, the existing baseline conditions under CEQA, the appropriate baseline conditions under CEQA including expected future conditions in a future baseline without the proposed Project (hereafter referred to as future baseline without Project in this EIR), and the proposed Project. The presence of free-roaming cats living alone or in aggregations throughout the City (including natural habitat areas and ESAs) and the existing effects of domestic cats on the environment is the pre-existing condition that forms the baseline for CEQA analysis, including the existing conditions baseline and thes expected future conditions in a future baseline without Project. As detailed below, to provide an accurate analysis of impacts of the proposed Project in this EIR, potential impacts are analyzed compared to the existing conditions baseline and a future baseline without the proposed Project.

The proposed Project represents an initial 5-year implementation period and a horizon period of 30 years, with the City recognizing that the effects of the program will take time to ramp up and be fully realized. Therefore, the analysis of environmental impacts throughout this EIR uses the baseline at the time of publication of the Notice of Preparation, as well as a future baseline without Project (and interim years) to understand the long-term effects of the program. In essence, both the existing conditions relative to the free-roaming cat population and its existing environmental effects, as well as the expected changes in the free-roaming cat population and their environmental effects without the proposed project over time and 30 years in the future, compose the baseline in the analysis of the proposed Project impacts.

As part of the CEQA baseline, in accordance with the City's mandatory spay/neuter ordinance, LAAS provides spay/neuter services for owned cats of the general public and also to stray cats that are past their holding period at the animal services centers. It does not facilitate implementation of TNR in any way. California law requires the City to release any impounded stray cat to any nonprofit animal rescue or adoption organization if requested by the organization prior to the scheduled euthanasia of that animal. However, as part of the CEQA baseline, LAAS cannot release to a nonprofit animal rescue or adoption organization a cat that has been determined to be feral unless the organization signs an affidavit with the City that it will not return the feral cat back to the environment and will sterilize it within 30 days of taking it in and produce a veterinary certification. Public animal control agencies or shelters, Society for the Prevention of Cruelty to Animals shelters, Humane Society shelters, and rescue groups cannot sell or give away to a new owner any cat that

has not been spayed or neutered (California Civil Code Sections 1815, 1816, 1834, 1834.4, 1845, 1846, 1847 and 2080; and California Food & Agricultural Code Division 14.5, Regulation of Cats).

Furthermore, under the CEQA baseline, the Animal Sterilization Fund is used toward spay and neuter services for pets only and the indoor owned cat limit is three.

Chapter 4 presents the existing environmental setting relevant to the environmental resources analyzed in detail in this EIR.

2.3.3 Applicable Local Ordinances/Regulations

The City regulates cats under Chapter V, Article 3 (Section 53.00 et seq.), of the LAMC. Section 53.00 defines "cat" as a cat of any sex and any age; "cat kennel" is defined as any lot, building, structure, enclosure, or premises where four or more cats are kept or maintained for any purpose. The City's spay/neuter law, passed in 2008, requires all cats and dogs in the City to be spayed or neutered after the age of 4 months, with some specific exemptions allowed. Spayed or neutered cats can be indoor, indoor/outdoor, or outdoor cats (LAMC Section 53.06).

Cats that have not been spayed or neutered that are also not in heat or season are exempted from the general proscription against allowing animals to roam at large, as follows: "No person owning or having possession, charge, custody, or control of any animal, except cats that are not in heat or season, shall cause, permit, or allow the animal to stray, run, or, in any manner, be at large in or upon any public street, sidewalk, or park, except as otherwise expressly provided in Section 63.44 of this code, or in the bed of the Los Angeles River or upon any unenclosed lot or land (LAMC Section 53.06)." The City regulates animal trapping through the issuance of permits (LAMC Section 53.06.3).

Except as permitted by the California Department of Fish and Wildlife, no person may "feed or, in any manner, provide food or cause to be fed any non-domesticated mammalian predator, including, but not limited to, coyotes, foxes, possums, raccoons, and skunks" (LAMC Section 53.06.5). Cats are domestic animals and not considered to be non-domesticated mammalian predators.

2.4 Project Objectives

The objectives of the proposed Citywide Cat Program include (not in order of priority):

- Facilitate spaying and neutering of cats in the City,
- Reduce the relative number of free-roaming cats in the City over time,
- Facilitate more public and community education on animal-related topics, including free-roaming cats,
- Train animal services center staff members on cat management programs and engage in collaborative efforts with local rescue groups to help respond to and address free-roaming cat issues,
- Further implement the City's no-kill policy by reducing the rate of euthanasia of cats in City animal services centers, and
- Adopt TNR as the preferred policy to humanely address free-roaming cats.

2.5 Proposed Project

The proposed Project analyzed in this EIR would be implemented citywide (see Figure 2-1) and is guided by actions by the Board and the Los Angeles City Council (see Appendix D). In summary, the proposed Project would enable the following actions and policies to be administered under the Citywide Cat Program:

a. Directly engage in spaying or neutering, or make the spaying or neutering of cats more affordable by allowing the City to provide funds by means of free or discounted spay or neuter coupons or other City, public, or grant funds to subsidize the spaying and neutering of any cat in the City of Los Angeles to prevent them from having litters of kittens, regardless of the cat's status as either owned pet, stray, or feral. This includes spay and neuter of free-roaming cats that may be returned by their caretakers or a rescue organization to where they were found, relocated to a working cat program (WCP),[8] or adopted.

b. As part of changing the LAAC (Section 5.199), broaden the permitted use of Animal Sterilization Fund monies from "pet sterilization" (current language) to "animal sterilization." Currently, Section 5.199 of the LAAC limits the use of funds for sterilization of "pets." The proposed amendment would allow use of funds to sterilize pet, stray, or feral cats. The proposed Project would allow the LAAC's Animal Sterilization Fund to also be used to spay or neuter free-roaming cats in the City. However, no monies intended to spay or neuter pet cats in the City would be reduced.

c. Implement a modified TNR program that includes the following elements:

    i. Declaring that TNR is the preferred method of dealing with the free-roaming cat population and the City's official policy.

    ii. Collaborating with organizations experienced and engaged in TNR and using animal services centers to provide information and training to citizens who wish to participate in TNR.

    iii. Implementing outreach by including links to TNR organizations on the LAAS website and directly referring the public to organizations for information on TNR.

    iv. Implementing a policy regarding free-roaming cat complaints that involves informing the complainant about the benefits of TNR and referring them to TNR organizations. LAAS will encourage that cats not be brought into local animal services centers, except if the cat is injured or sick, the cat has bitten someone, the cat's welfare is in jeopardy, there is a public health hazard, or the potential exists for harm to people or companion animals.

    v. Using incentives, vouchers, and waived cat trap rental fees to encourage the capture, sterilization, and release of free-roaming cats.

d. Release free-roaming cats that have been spayed and neutered from animal services centers' custody to TNR groups that may have the intent of returning the animal to free-roaming status. In order to encourage more adoptions and meet the City's no-kill goals, the currently permitted number of cats per household would be changed from three cats to five. This would involve an amendment to the LAMC regarding the definition of "cat kennel" to exclude any location where

[8] The placement of cats in warehouses and barns with rodents is commonly referred to as a "working cat program," with many being indoor cats only.

five or fewer cats are kept (the current limit is three cats). Currently, LAMC Section 53.50 requires a permit from the City to "conduct or operate within the City of Los Angeles any dog kennel, cat kennel, zoo, animal rental establishment, animal grooming parlor, riding academy, livery stable, boarding stable, pony ring or pony ride, horse market, mule market, circus, rodeo, etc." Any household with more than three cats would be subject to the following restrictions (this action would require an amendment to the LAMC):

- All the cats must be kept indoors at all times,
- All the cats must be microchipped and sterilized, and
- The household must be registered with the Department as having more than three cats.

e. Publish and implement program guidelines and ecological conservation measures that are intended to minimize the environmental and public health impacts of the existing population of free-roaming cats; guidelines include restricting release of free-roaming cats into ESAs as feasible.

f. Create a City of Los Angeles WCP to facilitate the relocation of free-roaming cats from the streets and into indoor/enclosed sites. The City's WCP would prioritize admission of cats found in or near ESAs, in unsafe locations, or when it is undesirable to return a free-roaming cat to its found location.

2.5.1 Modified TNR Program Implementation

LAAS currently does not perform targeted spay and neuter services on free-roaming cats. Any stray cats that are past their holding period and altered by LAAS must be friendly and able to be handled; otherwise they are not fixed. LAAS does not sterilize feral cats.

Upon implementation of the modified TNR Program, LAAS will release a Task Order Solicitation to an existing list of pre-qualified spay and neuter veterinarians for those willing and able to participate in the spay/neuter program for free-roaming cats. Upon selection of service providers, LAAS will issue a notice to proceed with funding authorization for at least 20,000 free-roaming cat sterilizations and related medical treatments (based on availability of additional funding) annually. LAAS currently has a voucher program in place for owned cats, which will be adjusted to include the free-roaming cat spay/neuter program. Each voucher will cover the costs associated with spaying or neutering a free-roaming cat. The City Council has assigned the value of $70 to the free vouchers, reimbursable to the City's veterinary partners for spaying and neutering shelter cats per surgery (C.F. 16-0114). If additional City funding is available, the rabies and feline viral rhinotracheitis, calicivirus, and panleukopenia virus (FVRCP) vaccine should be administered, along with flea treatment, at the time of sterilization. If City funds are not available to cover these additional services, participants in the modified TNR Program will be encouraged to cover these services.

Individuals and organizations wishing to participate in the LAAS free-roaming cat spay/neuter program must register with LAAS as an authorized participant. This will entail signing an agreement stating that each cat the participant submits for a free spay/neuter voucher had been trapped and released within the City of Los Angeles limits. A unique identifier will be provided to each cat submitted under the program to receive a spay/neuter voucher. This unique identifier will be alphanumeric and begin with the letters FR, which will serve as an abbreviation for the term free-roaming. The newly implemented unique identifier specific to this program will allow for fiscal and data analysis, which will enable LAAS to monitor and track data specific to the free-roaming cat

spay/neuter program. Each free-roaming cat should be sterilized and ear-tipped. Microchipping, vaccinations, deworming, and flea treatment are also recommended if funding is available.

The City understands that working with free-roaming cats requires special expertise, and while individuals are encouraged to participate, responders to the Task Order Solicitation on behalf of organizations will be asked to demonstrate their expertise by sharing their experience in participating in TNR work and facilitating the sterilization of free-roaming cats. These organizations will be asked to document the number of free-roaming cats in the City that they have sterilized annually through TNR efforts in the past. If selected, these organizations will be asked to commit through an affidavit to sustain this level of effort to help ensure that the City vouchers would be additive to free-roaming cat sterilizations occurring within the City.

2.5.2 Program Implementation Guidelines and Ecological Conservation Measures

This section presents the guidelines developed for implementation of the Citywide Cat Program. Based on the comprehensive literature review completed in support of this EIR and taking into consideration potential effects of free-roaming cats on sensitive environmental resources, the City has developed these guidelines to serve as conservation measures and best practices as part of the proposed Project.

As set forth in the analysis of environmental impacts, no significant environmental impacts were identified in the analysis of the proposed Project. The program implementation guidelines and ecological conservation measures are intended to address existing impacts from the free-roaming cat population and protecting the health, safety, and welfare of wildlife and people. LAAS will distribute a copy of these guidelines to those who receive vouchers under the proposed Project, publish them on its website, and include a map of ESAs mentioned herein to educate the public and facilitate implementation of these conservation measures and best practices. Note that as these guidelines are part of the proposed Project, they are not mitigation measures as defined under CEQA.

The proposed Program Implementation Guidelines and Ecological Conservation Measures aim to protect ESAs, special-status species, and public health. They will facilitate and communicate recommendations on how to conduct TNR and free-roaming cat care and maintenance in a manner that does not adversely affect sensitive biological resources and public health. Recipients who receive vouchers from the City for free-roaming cat medical and spay and neuter services will be expected to commit to the guidelines by signing an affidavit declaring their intent.

2.5.2.1 Free-Roaming Cat Trap/Neuter/Return Guidelines

- The City shall create partnerships with third parties who offer free-roaming cat trapping trainings so people can learn how to trap responsibly.
- Traps should be monitored at all times and partially covered once occupied.
- The City recommends release generally where cats are found, or as close as possible, but does not recommend release of free-roaming cats within 1 mile (estimated free-roaming cat home range; see Appendices J and M) of ESAs. If a free-roaming cat is trapped in or within 1 mile of an ESA, it is recommended the cat be placed in a WCP or relocated, based on availability.

- Maps of ESAs in the City shall be provided for reference in the City shelters and on the LAAS website for downloading and printing.

2.5.2.2 Responsible Feeding and Care Guidelines

- No feeding within 1 mile of ESA, except when used for baiting traps for TNR purposes. Feeding should also not occur at locations where vulnerable human populations are present (children, the elderly, and those with compromised immune systems).
- To avoid attracting wildlife and discourage overfeeding, feeding should be supervised and limited to 30 minutes. No free access to any food should occur or be facilitated.
- Feeding times should only occur between 6 a.m. and 8 p.m. to help avoid conflicts with nocturnal wildlife.
- Feeding locations should be kept clean so that no traces of food or refuse are left behind after feeding events.
- Fecal matter accumulation near feeding or shelter areas should be monitored and removed. Contaminated surfaces should be disinfected as needed to help maintain cleanliness and contain the potential spread of disease.

2.5.2.3 Free-Roaming Cat Medical Treatment Guidelines

- Free-roaming cats should be sterilized and ear tipped. Microchipping is recommended if funding is available. Free-roaming cats that will be placed in a WCP will be microchipped.
- The rabies and FVRCP vaccine should be administered, along with flea treatment and deworming, at the time of sterilization. Participants are requested to provide ongoing flea treatments and vaccination updates as feasible.

2.5.2.4 Public Education/Engagement/Outreach Efforts

- Noticing efforts about the Citywide Cat Program, including code updates, TNR program, WCP, and related conservation and responsible management guidelines, could occur through press releases, posting on the LAAS website, posters at City shelters, fliers, mailers, radio advertisements, and social media posts and ads. The information shared will be multilingual as needed.
- Community engagement can occur through community meetings hosted by local City shelters and prior to mobile clinics. City shelter volunteers will learn about the Citywide Cat Program and conservation measures through shelter orientations and the volunteer onboarding process.
- The City will collaborate with non-profit organizations, including wildlife and cat advocacy groups, to share information about how the Project can reduce the existing free-roaming cat population and its effects on sensitive biological resources present in the City.

2.5.3 Proposed City of Los Angeles Working Cat Program

2.5.3.1 Existing Efforts

Currently, several non-profits within the City of Los Angeles (e.g., Best Friends, Kitty Bungalow, Paw Mission, and others) work to facilitate the placement of free-roaming cats that are not good

candidates for traditional adoptions into "working cat" situations where they serve as rodent and pest deterrents. Such arrangements aim to help to reduce the rate of euthanasia in homeless cats in Los Angeles. These efforts would benefit from additional support (e.g., funding, dedicated staff, advertising) to help create additional opportunities to relocate free-roaming cats. The City of Los Angeles proposes a WCP to facilitate the relocation of free-roaming cats from the streets and into indoor/enclosed sites. The City's WCP would prioritize admission of cats found in or near ESAs, in unsafe locations, or when it is undesirable to return a free-roaming cat to its found location.

2.5.3.2 Working Cat Opportunity Sites

Potential working cat opportunity sites within the City that could host working cats include residential backyards with enclosed structures (including catios), barns, stables, warehouses, factories, industrial parks, churches, wineries, breweries, and City facilities, such as police stations, libraries, and fire stations.

2.5.3.3 Criteria for Appropriate Locations

Ideal locations for working cats would be:

- Sites that are not within known ESAs;
- Enclosed spaces that do not include routine interactions with vulnerable populations, such as children, the elderly, or those with compromised immune systems; and
- Sites where a caregiver is available to provide daily food and water and refresh a litter box.

2.5.3.4 Adoption Process

Placements through the City's WCP would be treated as no-fee adoptions. Free-roaming cats placed through the program would be sterilized, ear-tipped, microchipped, vaccinated for rabies and FVRCP, treated for fleas, dewormed, and placed in pairs.

Adopters would complete an adoption agreement to host the cats within an enclosed space and provide daily food and water and future medical treatment as needed, including regular treatments for fleas and parasites. Food would be provided in compliance with responsible feeding guidelines and at an indoor location to minimize attraction of wildlife. A litter box must also be provided. Adopters would be trained regarding the rehoming process and commit to spending the suggested time helping the cats become familiar with their new home.

2.5.3.5 Program Placement Targets

Once the program is established (within the first 3 years of implementation of the Project), the City would initially target placing approximately 75 cats per year, utilizing support from non-profits, volunteers, and social media advertising (Facebook, NextDoor, etc.). The City would aim to increase the capacity for working cat placements through the program over time.

2.6 Potential Responsible Agencies and Project Approvals

Table 2-3 identifies the approvals that are likely to be required for the proposed Project.

Table 2-3. Anticipated Approvals for the Citywide Cat Program

Agency	Required Approval or Permit	Issue
Los Angeles City Council	Approve EIR in compliance with CEQA and approve the proposed Project	Approve the proposed Project, including modified TNR program and WCP elements.
Los Angeles City Council	Amend City of Los Angeles Municipal Code and Administrative Code	Amend municipal and administrative codes to implement the proposed Project, including an increase in the number cats per household from three to five; broaden definition of "animal sterilization" to include feral, stray, or free-roaming cats; and amend definition of "cat kennel" to exclude any location where five or fewer cats are kept and a permit is required.

Source: City of Los Angeles 2018

Chapter 3
Screening Analysis

3.1 Introduction

This chapter includes the City of Los Angeles' (City's) initial screening analysis for the Citywide Cat Program, which is based on the City's 2006 *L.A. CEQA Thresholds Guide: Your Resource for Preparing CEQA Analyses in Los Angeles* (*L.A. CEQA Thresholds Guide*) and Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The *L.A. CEQA Thresholds Guide* provides two sets of criteria to evaluate project impacts: the screening criteria and the significance thresholds. The screening criteria and the significance thresholds are based on a variety of factors, including existing local, state, and federal regulations; administrative practices of other public agencies; and commonly accepted professional standards. In addition to serving as a tool for identifying the appropriate level of environmental document (i.e., Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report [EIR]), the screening criteria are intended to help determine when further study is needed to decide whether a significant impact could occur and thus provide assistance in narrowing the focus of analysis in an EIR to those environmental resource areas where there is potential for significant environmental impacts. The City has determined that the proposed Project could result in potentially significant impacts on certain environmental resources; therefore, this EIR is being prepared to analyze and disclose the potential environmental impacts associated with the proposed Citywide Cat Program. Because an Initial Study was not prepared for the proposed Project, the screening analysis presented in this chapter has been included to help focus the detailed analysis presented in Chapter 4, which includes environmental topics that could have potentially significant impacts.

Section 15128 of the State CEQA Guidelines states:

> An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of the project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study.

The analysis in this chapter uses the screening analysis presented in the *L.A. CEQA Thresholds Guide* to establish the basis for more detailed analysis for only those environmental resource topics where there is potential for significant impacts while screening out environmental topics from further consideration when it is determined that there is normally no potential for significant impacts. Criteria are phrased as yes/no questions, and when one or more questions for a given topic are answered with a "yes," further study is recommended. A "no" response to all questions of a given topic indicates that further study is not required, and there would normally be no significant impacts from the proposed Project related to the subject topic.

For each environmental topic, yes/no responses to each screening criterion are provided with a brief explanation of the reasoning behind the response, based on the methodology and guidance included in the *L.A. CEQA Thresholds Guide*. For topics that have screening criteria with "yes" responses, the associated significance thresholds addressing the affirmative screening criteria are analyzed in greater detail in Chapter 4. Topics with screening criteria that have "no" responses are considered unlikely to result in a significant impact and are screened out in this chapter from

further analysis in the EIR. Finally, a conclusion is present on whether a given topic warrants further study in this EIR.

Greenhouse gas (GHG) emissions and tribal cultural resources are topics that are not covered in the *L.A. CEQA Thresholds Guide*; therefore, the screening analysis relies on Appendix G of the State CEQA Guidelines for the evaluation of these topics.

3.2 Aesthetics and Visual Resources

The *L.A. CEQA Thresholds Guide* organizes Aesthetics and Visual Resources to include aesthetics, obstruction of views, shading, and nighttime illumination. *Aesthetics* generally refer to the identification of visual resources and the quality of what can be seen, or overall visual perception of the environment. *Obstruction of views* refers to visual access and obstruction, or whether it is possible to see a focal point or panoramic view from an area. *Shading* issues are concerned with effects of shadows cast by existing or proposed structures on adjacent land uses. *Nighttime illumination* addresses the effects of a project's exterior lighting upon adjoining uses.

3.2.1 Screening Criteria

3.2.1.1 Aesthetics

- Does the proposed Project include a proposed zone change or variance that would increase density, height, and bulk in areas where there is a consistent theme, style, or building height and setbacks?
- Does the proposed Project include a proposal to develop or allow development in an existing natural open space area (not including previously developed or infill lots)?
- Would the proposed Project result in the removal of one or more features that contribute to the valued aesthetic character or image of the neighborhood, community, or localized area?
- Would the proposed Project introduce features that would detract from the existing valued aesthetic quality of a neighborhood, community, or localized area by conflicting with important aesthetic elements or the quality of the area (such as theme, style, setbacks, density, massing, etc.) or by being inconsistent with applicable design guidelines?

3.2.1.2 Obstruction of Views

- Would the proposed Project occur within or adjacent to a valued focal or panoramic vista or within view of any designated scenic highway, corridor, or parkway?
- Would the proposed Project obstruct, interrupt, or diminish a valued focal and/or panoramic view?
- Does the proposed Project propose standards for height and bulk of structures and other elements that inadequately protect existing visual resources and/or views?

3.2.1.3 Shading

- Would the proposed Project include light-blocking structures in excess of 60 feet in height above the ground elevation that would be located within a distance of three times the height of the proposed structure to a shadow-sensitive use on the north, northwest, or northeast?

3.2.1.4 Nighttime Illumination

- Would the proposed Project introduce light likely to increase ambient nighttime illumination levels beyond the property line of the Project site?
- Does the proposed Project include lighting that would routinely spill over onto a light-sensitive land use?

3.2.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-1, Aesthetics and Visual Resources Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impacts on Aesthetics and Visual Resources from the proposed Project and therefore further study in this EIR is not required.

Table 3-1: Aesthetics and Visual Resources Screening Analysis

Screening Criteria	Response
Aesthetics	
Does the proposed Project include a proposed zone change or variance that would increase density, height, and bulk in areas where there is a consistent theme, style, or building height and setbacks?	No. The proposed Project would not include zone changes or variances in land use requirements or policies that would increase density, height, and bulk. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats; amendments to the City of Los Angeles Administrative Code (LAAC) to broaden the permitted use of Animal Sterilization Funds and to the City of Los Angeles Municipal Code (LAMC) regarding the definition of a cat kennel; implementation of a modified trap, neuter, and return (TNR) program that includes TNR-related community education and outreach and collaboration with TNR organizations; publishing and implementation of program guidelines and ecological conservation measures; and creation of a City of LA Working Cat Program (WCP). While the LAMC would be amended, the proposed change in language would have no potential to result in increases in density, height, or bulk of any existing or future land uses.

Screening Criteria	Response
Does the proposed Project include a proposal to develop or allow development in an existing natural open space area (not including previously developed or infill lots)?	No. The proposed Project does not include development of any structures or land in an existing natural open space area. As discussed, the proposed Project involves provisions of funds to support spay/neuter of free-roaming cats, revisions to municipal and administrative codes, encouragement to existing facilities to implement the modified TNR program, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. Changes to the municipal and administrative codes would have no bearing on future development and are largely revisions in definitions and policies related to animal control and the modified TNR program. Trapping activities associated with the modified TNR program may occur within natural open space areas, but these activities would be temporary, transitory, and would not include any permanent structures.
Would the proposed Project result in the removal of one or more features that contribute to the valued aesthetic character or image of the neighborhood, community, or localized area?	No. The proposed Project is not anticipated to result in any physical changes to the built environment, including features that contribute to the aesthetics of any neighborhood, community, or localized area.
Would the proposed Project introduce features that would detract from the existing valued aesthetic quality of a neighborhood, community, or localized area by conflicting with important aesthetic elements or the quality of the area (such as theme, style, setbacks, density, massing, etc.) or by being inconsistent with applicable design guidelines?	No. The proposed Project does not include any physical changes or design characteristics that have the potential to detract from or otherwise affect the existing aesthetic quality of a neighborhood, community, or localized area. While the modified TNR program would introduce trapping devices that may detract from the aesthetic quality of an area, such activities would be temporary and transitory, posing no long-term potential for aesthetic impacts.
Obstruction of Views	
Would the proposed Project occur within or adjacent to a valued focal or panoramic vista or within view of any designated scenic highway, corridor, or parkway?	No. The proposed Project would be implemented across the City through the City's six animal services centers. It does not involve any ground disturbance or construction activities. It is focused on the provision of funds through vouchers, amendments to the City administrative and municipal codes, implementation of a modified TNR program, implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. All facilities involved in the trapping, sterilization, and return of cats are existing facilities and services; the proposed Project would not involve development of any new structures or land, including in areas adjacent to a valued focal or panoramic vista or views along designated scenic highways, corridors, or parkways. Trapping activities (i.e., setting traps and transporting trapped animals) associated with the modified TNR program could be conducted anywhere in the City, including undisturbed areas or parklands that may have scenic value. Such activities would be transitory and would not involve

Screening Criteria	Response
	structures that may obstruct views or otherwise affect views in a permanent manner.
Would the proposed Project obstruct, interrupt, or diminish a valued focal and/or panoramic view?	No. As discussed, the proposed Project would not involve development of any structures or land, or otherwise result in components that may obstruct, interrupt, or diminish existing views. Trapping activities (i.e., setting traps and transporting trapped animals) associated with the modified TNR program could be conducted anywhere in the City, including undisturbed areas or parklands that may have scenic value. Such activities would be transitory and would not involve structures that may obstruct views.
Does the proposed Project propose standards for height and bulk of structures and other elements that inadequately protect existing visual resources and/or views?	No. The proposed Project proposes administrative and municipal code amendments that govern use of Animal Sterilization Funds and cat kennel definitions. No standards or requirements related to height, bulk, or other development standards are proposed as part of these actions.
Shading	
Would the proposed Project include light-blocking structures in excess of 60 feet in height above the ground elevation that would be located within a distance of three times the height of the proposed structure to a shadow-sensitive use on the north, northwest, or northeast?	No. As discussed, the proposed Project would not involve development of any structures or land, or other components that may block light or cast shade or shadow.
Nighttime Illumination	
Would the proposed Project introduce light likely to increase ambient nighttime illumination levels beyond the property line of the Project site?	No. The proposed Project would not involve new structures or land uses, new sources of light, or other facilities that could increase ambient nighttime illumination levels. Transitory trapping activities may take place at night and would require minor lighting such as handheld flashlights to set and retrieve traps. Such lighting would be temporary and would have no potential to increase ambient nighttime illumination.
Does the proposed Project include lighting that would routinely spill over onto a light-sensitive land use?	No. The proposed Project would not involve new sources of light or other facilities that could generate light that could affect a light-sensitive land use. As discussed, nighttime trapping activities may require lighting, but it would not be routine as lighting would only be required to set and retrieve traps.

3.2.3 Conclusion

As discussed in Table 3-1, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Aesthetics and Visual Resources as a result of implementation of the proposed Project. The proposed Project would not introduce new structures or visual elements that could result in impacts on aesthetics, obstruction of views, or shading and lighting impacts. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to aesthetics and visual resources. No further study of this environmental resource topic is required in this EIR.

3.3 Air Quality

Air quality impacts may occur during the construction or operation phase of a project and may come from stationary, mobile, or area sources. The *L.A. CEQA Thresholds Guide* divides air quality into the following:

- Construction emissions
- Operational emissions
- Toxic air contaminants

Construction emissions refer to air emissions that occur as a result of construction activities associated with a project, while *operational emissions* refer to air emissions that occur as a result of the operation or activities associated with the operation of the project. *Toxic air contaminants* refer to air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

On December 24, 2018, the California Supreme Court addressed the standard of review for claims challenging the legal sufficiency of an EIR's discussion of environmental impacts in *Sierra Club v. County of Fresno* (Friant Ranch, L.P.) (2018). In affirming the Court of Appeal's judgment, the California Supreme Court held that the EIR for the Friant Ranch Project—a 942-acre master-planned, mixed-use development with over 2,500 senior residential units, 250,000 square feet of commercial space, and extensive open space/recreational amenities on former agricultural land in north central Fresno County—was deficient in its discussion of the project's significant and unavoidable human health impacts related to air quality in particular. As shown below in the screening analysis, the proposed Project would not result in significant air quality impacts. Therefore, the analysis performed by the South Coast Air Quality Management District (SCAQMD) in setting the health-based standards upon which the CEQA air quality significance thresholds are based sufficiently addresses human health impacts. There is no nexus for an expanded discussion of the potential health implications of significant air quality impacts.

3.3.1 Screening Criteria

3.3.1.1 Construction Emissions

- Would site preparation or construction activities for the proposed Project result in substantial emissions that would not be controlled on site by existing regulations?

3.3.1.2 Operational Emissions

- Would the proposed Project result in a development and/or activity level equal to or greater than thresholds provided in SCAQMD's *CEQA Air Quality Handbook*'s Screening Table for Operation - Daily Thresholds of Potential Significance for Air Quality (based on potential mobile source emissions for specified land uses) (see Exhibit B.2-1 in *L.A. CEQA Thresholds Guide*)?
- Would the proposed Project conflict with the regional population forecast and distribution in the most recent Air Quality Management Plan (AQMP)?
- Would the proposed Project have the potential to create or be subjected to an objectionable odor or localized carbon monoxide (CO) hot spot that could affect sensitive receptors?

3.3.1.3 Toxic Air Contaminants

- Would the proposed Project use, store, or process carcinogenic or non-carcinogenic toxic air contaminants that could result in airborne emissions?

3.3.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-2, Air Quality Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact on Air Quality from the proposed Project and therefore further study in this EIR is not required.

Table 3-2: Air Quality Screening Analysis

Screening Criteria	Response
Construction Emissions	
Would site preparation or construction activities for the proposed Project result in substantial emissions that would not be controlled on site by existing regulations?	No. The proposed Project does not include any site preparation or construction activities, and therefore would not result in substantial emissions related to construction work.
Operational Emissions	
Would the proposed Project result in a development and/or activity level equal to or greater than thresholds provided in the *CEQA Air Quality Handbook*'s Screening Table for Operation - Daily Thresholds of Potential Significance for Air Quality (see Exhibit B.2-1)? *Note: As noted in the* L.A. CEQA Thresholds Guide*, Exhibit B.2-1 is based on potential mobile source emissions for specified land uses and is not intended to screen for stationary sources. Stationary sources are screened on an individual basis by SCAQMD permit staff.*	No. It is anticipated that the provision of 20,000 spay/neuter vouchers under the proposed Project would generate additional vehicular trips throughout the City by City residents driving to the participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers, for spay/neuter of free-roaming cats. It is also anticipated that indirect vehicle trips will be generated associated with trapping activities. For this analysis it has been assumed that each spay/neuter voucher would generate seven one-way vehicle trips for each trapping activity: 1) one trip to retrieve a trap and voucher from a Los Angeles Department of Animal Services (LAAS) animal services center, 2) one trip to set the trap, 3) one trip to take the intact trapped cat to a participating spay and neuter clinic/veterinary hospital to drop it off for the spay/neuter procedure, 4) one return trip home, 5) one trip back to pick up the fixed cat, 6) one trip to return the animal to the environment and the trap to the LAAS animal services center, and 7)_one return trip home. If each voucher would result in seven trips, then 20,000 vouchers would result in a total of 140,000 trips annually. Averaged over the year, assuming that spay/neuter facilities operate 6 days a week (Los Angeles animal services centers are closed on Mondays, and most veterinary clinics in the City are open 6 or fewer days a week) and factoring in holidays, the proposed Project would result in approximately 467 daily trips (140,000 one-way trips divided by 300 business days). These additional trips were analyzed using the California Air Resources Board's (CARB's) EMFAC2017 (v1.0.2) BURDEN model to determine if the

Screening Criteria	Response
	additional trips would result in emissions that exceed SCAQMD's Air Quality Significance Thresholds contained in the *Air Quality Analysis Guidance Handbook.* As shown in Table 3-3, Daily Regional Operation Emissions, these additional trips would not exceed any SCAQMD emissions thresholds. Furthermore, 2018 emissions factors were used to calculate potential emissions that over time will improve as technology and other vehicle emissions standards regulating vehicle emissions are implemented consistent with the Clean Air Act and the California State Motor Vehicle Pollution Control Standards. Therefore, by the 30-year horizon year period for the Project, vehicle emissions resulting from the potential new trips associated with the proposed 20,000 annual spay/neuter vouchers would be substantially less than those shown in Table 3-3. While it is anticipated that TNR activities would increase as an indirect result of additional vouchers, education, and engagement with organizations that conduct TNR activities, potential emissions associated with the indirect trips resulting from trapping activities have been accounted for in the EMFAC2017 BURDEN model calculations. Therefore, there is no potential for the proposed Project to result in significant impacts related to operational emissions of criteria pollutants regulated by SCAQMD.
Would the proposed Project conflict with the regional population forecast and distribution in the most recent AQMP?	No. The proposed Project does not include new housing or employment centers that could affect regional population and distribution, including those forecasted in the 2016 Final AQMP prepared by the SCAQMD.
Would the proposed Project have the potential to create or be subjected to an objectionable odor or localized CO hot spot that could affect sensitive receptors?	No. Sensitive land uses include residences, board and care facilities, schools, playgrounds, hospitals, parks, childcare centers, and outdoor athletic facilities; such land uses are located throughout the City. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment facilities, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. The proposed Project would not include any of the land uses typically associated with odor complaints. Under baseline conditions in the City, feces and urine associated with free-roaming cats have the potential to create objectionable odors in localized settings citywide; however, such odors naturally resolve over time and are temporary. Implementation of the proposed Project would not create new sources of objectionable odors at any particular location in a manner that could be substantial and could affect sensitive resources. SCAQMD maintains both a toll-free phone line (1-800-CUT-SMOG) and a web-based platform (http://www.aqmd.gov/contact/complaints) for reporting complaints related to air quality, including

Screening Criteria	Response
	odors. Considering that no construction activities would occur under the proposed Project, and the public has the ability to report complaints to SCAQMD, the proposed Project would not create objectionable odors that could affect sensitive receptors throughout the City.
Toxic Air Contaminants	
Would the proposed Project use, store, or process carcinogenic or non-carcinogenic toxic air contaminants that could result in airborne emissions?	No. No carcinogenic or non-carcinogenic toxic air contaminants are used in spay/neuter procedures at any of the veterinary hospitals or spay/neuter facilities throughout the City. The proposed Project would not involve storage or processing of these substances such that they could result in airborne emissions.

Table 3-3, Daily Regional Operation Emissions, presents calculations of regional criteria pollutant emissions by applying the emissions factors from CARB's EMFAC2017 (v1.0.2) BURDEN model to the assumed daily trips that would result from the provision of 20,000 spay/neuter vouchers throughout the City. These calculations capture potential emissions from the CEQA baseline year (2018) through the first two years of implementation (2020) of the proposed Project. As shown in Table 3-3, daily regional emissions would not exceed significance thresholds for any of the criteria pollutants, and emissions would decrease each year as emissions factors improve with the advent of new technologies and vehicle emissions standards. Appendix E provides the EMFAC emissions factors and associated calculations shown in Table 3-3.

Table 3-3: Daily Regional Operation Emissions

	Daily Emissions (Pounds Per Day)[a]					
Source Category	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Regional Total (2018)	0.38	1.17	14.54	0.03	0.49	0.2
Regional Total (2019)	0.33	1.01	13.14	0.03	0.49	0.2
Regional Total (2020)	0.30	0.87	12.02	0.03	0.49	0.2
Regional Significance Threshold[b]	55	55	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: SCAQMD 2019, EMFAC2017 (v1.0.2) model. Compiled by TAHA 2019.

Notes:

[a] Assumptions include 467 daily one-way trips with a one-way trip distance of 10 miles. Emissions factors are standard for non-truck vehicles, assuming 35-mile-per-hour speeds

[b] Regional Significance Threshold taken from SCAQMD's Air Quality Analysis Handbook, *SCAQMD Air Quality Significance Thresholds,* updated April 2019.

3.3.3 Conclusion

As discussed in Table 3-2, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Air Quality as a result of implementation of the proposed Project. The proposed Project would not result in construction emissions because no construction activities are proposed. Operation of the proposed Project would not result in a potentially significant impact because, as discussed in the screening analysis, the potential addition of trips from the availability of spay/neuter vouchers would not result in regional or localized

emissions that would exceed SCAQMD thresholds. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to air quality. No further study of this environmental resource topic is required in this EIR.

3.4 Biological Resources

A wide variety of sensitive biological resources, including both plant and animal species, reside in or use resources within the City. The City encompasses a variety of open space and natural areas that serve as habitat for sensitive species. The evaluation of impacts on biological resources accounts for potential impacts on sensitive species or their habitats. As detailed in the *L.A. CEQA Thresholds Guide*, Exhibit C-1 divides the City into five geographic zones for the purpose of identifying potential sensitive biological resources; Exhibits C-2 through C-5 show natural open space areas within the City's 11 Planning Subregions that may contain habitat for sensitive species. The screening analysis for Biological Resources applies the screening criteria listed below, depending on a project's location relative to these exhibits. Because the proposed Project would be implemented throughout the City, screening criteria associated with Exhibits C-1 through C-5 are presented below.

3.4.1 Screening Criteria

3.4.1.1 Projects in Area 5 of Exhibit C-1, or in the Unshaded Portion of Exhibits C-2 through C-5

- Do known individuals or populations of a sensitive species use or inhabit the site during one or more seasons of the year, according to readily available published accounts, the Project proponent, and/or property owner?
- Is the Project site immediately adjacent to undeveloped natural open space containing native vegetation (such as the shaded areas on Exhibits C-2 through C-5) or does the site appear to serve as a buffer between existing development and more natural habitat areas? Could it be part of a movement corridor or habitat linkage system?
- Is a natural water source, such as a lake, river, vernal pool, ephemeral stream, marsh, or the ocean, present on or adjacent to the site?

3.4.1.2 Projects in a Shaded Open Space Area as Identified in Exhibits C-2 through C-5

- Do known individuals or populations of a sensitive species use or inhabit the site during one or more seasons of the year, according to readily available published accounts, the Project proponent, and/or property owner?
- Does the Project site contain natural open space and/or known native vegetation?
- Does the Project site serve as a buffer between existing development and more natural habitat areas?
- Does the Project site serve as a known wildlife movement corridor between habitat areas?

- Is a natural water source, such as a lake, river, vernal pool, ephemeral stream, marsh, or the ocean, present on or adjacent to the site?
- Is the Project site relatively undisturbed or undeveloped, that is, free of structures, agricultural fields, pavement, etc.? Is it free of regular maintenance activities such as disking or clearing, maintenance and repair of linear utilities, maintenance or repair of roads, or maintenance and repair of municipal reservoirs and associated infrastructure?

3.4.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-4, Biological Resources Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact on Biological Resources from the proposed Project and therefore further study in this EIR is not required.

Table 3-4: Biological Resources Screening Analysis

Screening Criteria	Response
Projects in Area 5 of Exhibit C-1, or in the Unshaded Portion of Exhibits C-2 through C-5	
Do known individuals or populations of a sensitive species use or inhabit the site during one or more seasons of the year, according to readily available published accounts, the Project proponent, and/or property owner?	Yes. Sensitive species are known to inhabit areas throughout the City including a variety of open space and natural areas that serve as habitat for sensitive species. Much of this natural open space is found in or adjacent to the foothill regions of the San Gabriel, Santa Susana, Santa Monica, and Verdugo Mountains; the Simi Hills; and along the coastline between Malibu and the Palos Verdes Peninsula. Many of the outlying areas are contiguous with larger natural areas and may be part of significant wildlife habitats or movement corridors. In contrast, the central and valley portions of the City contain fewer natural areas. Given that the proposed Project encompasses the entire City, and the habitat and species therein, there are known sensitive populations that would be involved in the proposed Project.
Is the Project site immediately adjacent to undeveloped natural open space containing native vegetation (such as the shaded areas on Exhibits C-2 through C-5) or does the site appear to serve as a buffer between existing development and more natural habitat areas? Could it be part of a movement corridor or habitat linkage system?	Yes. As discussed above, the proposed Project encompasses all of the City, including undeveloped natural open space areas depicted in Exhibits C-2 through C-5 of the *L.A. CEQA Thresholds Guide*.
Is a natural water source, such as a lake, river, vernal pool, ephemeral stream, marsh, or the ocean, present on or adjacent to the site?	Yes. There are numerous natural water sources throughout the City and adjacent areas.
Projects in a Shaded Open Space Area as Identified in Exhibits C-2 Through C-5	
Do known individuals or populations of a sensitive species use or inhabit the site during one or more seasons of the year, according to readily available published accounts, the Project proponent, and/or property owner?	Yes. Sensitive species are known to inhabit areas throughout the City, including a variety of open space and natural areas that serve as habitat for sensitive species. Much of this natural open space is found in or adjacent to the foothill regions of the San Gabriel,

Screening Criteria	Response
	Santa Susana, Santa Monica, and Verdugo Mountains; the Simi Hills; and along the coastline between Malibu and the Palos Verdes Peninsula. Many of the outlying areas are contiguous with larger natural areas and may be part of significant wildlife habitats or movement corridors. In contrast, the central and valley portions of the City contain fewer natural areas. Given that the proposed Project encompasses the entire City, and the habitat and species therein, there are known sensitive populations that could be affected by the proposed Project.
Does the Project site contain natural open space and/or known native vegetation?	Yes. There are natural open space areas and native vegetation throughout the City, and the proposed Project is a citywide program. Therefore, the proposed Project would contain natural open space and known native vegetation.
Does the site serve as a buffer between existing development and more natural habitat areas?	Yes. As discussed, the proposed Project encompasses the entire City and therefore includes natural habitat areas as well as buffer areas between existing development and natural habitat areas.
Does the site serve as a known wildlife movement corridor between habitat areas?	Yes. There are wildlife movement corridors throughout the City, particularly natural open space in or adjacent to the foothill regions of the San Gabriel, Santa Susana, Santa Monica, and Verdugo Mountains; the Simi Hills; and along the coastline between Malibu and the Palos Verdes Peninsula. Because the proposed Project includes the entire City, there are known wildlife movement corridors within the proposed Project's service area.
Is a natural water source, such as a lake, river, vernal pool, ephemeral stream, marsh, or the ocean, present on or adjacent to the site?	Yes. There are numerous natural water sources throughout the City and adjacent areas.
Is the Project site relatively undisturbed or undeveloped, that is, free of structures, agricultural fields, pavement, etc.? Is it free of regular maintenance activities such as disking or clearing, maintenance and repair of linear utilities, maintenance or repair of roads, or maintenance and repair of municipal reservoirs and associated infrastructure?	Yes. Large portions of the City are heavily developed; however, substantial portions of the City are undeveloped with natural areas situated along the foothill regions to the north and west of the City.

3.4.3 Conclusion

As discussed in Table 3-4, all screening criteria received "yes" responses, indicating that there is a potential for significant impacts on Biological Resources as a result of implementation of the proposed Project. Because the proposed Project is a citywide program, all portions of the City are subject to potential effects under the modified TNR policy, which would result in the release of free-roaming cats. Because the City contains large areas that are undeveloped and that contain sensitive species, habitat, and migration corridors, the release of cats throughout the City has the potential to affect sensitive species, as cats are predators of a variety of wildlife species and may have other

indirect effects on sensitive species. Given the potential for the proposed Project to affect sensitive wildlife species, further study of this environmental resource topic is required and is discussed in Chapter 4 of this EIR.

3.5 Cultural Resources

The *L.A. CEQA Thresholds Guide* divides the Cultural Resources topic into the following subcategories: paleontological resources, archaeological resources, and historical resources. *Paleontological resources* refer to fossilized remains of organisms that have lived in the region in the geologic past and the accompanying geologic strata. *Archaeological resources* involve the physical, structural, and documentary evidence of past human endeavors. *Historical resources* include those buildings, structures, street lighting systems, spaces, sites, or components thereof that are designated or eligible for designation in the National Register of Historic Places, the California Register of Historical Resources, or other state program; as a City of Los Angeles Historic Cultural Monument; or in a City of Los Angeles Historic Preservation Overlay Zone.

3.5.1 Screening Criteria

3.5.1.1 Paleontological Resources

- Could implementation of the proposed Project result in the disturbance of surface or subsurface fossils, either through site preparation, construction, or operational activities, or through an increase in human activities at or near the fossil site?

3.5.1.2 Archaeological Resources

- Would the proposed Project occur in an area with archaeological resources, human remains having archaeological associations, an archaeological study area, or a Native American sacred place, and involve grading, excavation, accelerated erosion, or other activities or changes to the site that could affect archaeological resources?

3.5.1.3 Historical Resources

- Are there historical resources on the Project site or in the vicinity that would be adversely affected by the proposed Project through, for example, demolition, construction, conversion, rehabilitation, relocation, or alteration?

3.5.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-5, Cultural Resources Screening Analysis. As discussed, a “yes” response warrants further study and more detailed analysis, while a “no” response indicates that there would normally be no significant impact on Cultural Resources from the proposed Project and therefore further study in this EIR is not required.

Table 3-5: Cultural Resources Screening Analysis

Screening Criteria	Response
Paleontological Resources	
Could implementation of the proposed Project result in the disturbance of surface or subsurface fossils, either through site preparation, construction or operational activities, or through an increase in human activities at or near the fossil site?	No. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. The proposed Project does not include construction of new facilities that could require ground disturbance of any kind. Similarly, there are no operational characteristics associated with the proposed Project that would require ground disturbance or subsurface activities that could result in fossil disturbance.
Archaeological Resources	
Would the proposed Project occur in an area with archaeological resources, human remains having archaeological associations, an archaeological study area, or a Native American sacred place, and involve grading, excavation, accelerated erosion, or other activities or changes to the site that could affect archaeological resources?	No. The proposed Project does not include construction of new facilities that could require ground disturbance of any kind. Similarly, there are no operational characteristics associated with the proposed Project that would require ground disturbance or subsurface activities that could result in disturbance of archaeological resources.
Historical Resources	
Are there historical resources on the Project site or in the vicinity that would be adversely affected by the proposed Project through, for example, demolition, construction, conversion, rehabilitation, relocation, or alteration?	No. There are historical resources located throughout the City; however, the proposed Project would have no potential to affect any such resource because the proposed Project would not demolish, alter, or change the use of any existing structures or land.

3.5.3 Conclusion

As discussed in Table 3-5, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Cultural Resources as a result of implementation of the proposed Project. The proposed Project would not introduce new structures or require construction activities that could disturb buried cultural archaeological or paleontological resources. No structures would be demolished or altered, and there is no potential for impacts on historic built resources, as no potentially historic resources would be altered directly or indirectly through changes in setting. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to cultural resources. No further study of this environmental resource topic is required in this EIR.

3.6 Geology and Soils

The *L.A. CEQA Thresholds Guide* organizes the geology and soils analysis into geologic hazards, sedimentation and erosion, landform alteration, and mineral resources. *Geologic hazards* refer to surface rupture, ground shaking, ground failure, tsunamis, seiches, landslides, mudflows, and subsidence of the land. Because the region is generally considered to be geologically active, most projects will be exposed to some risk from geologic hazards, such as earthquakes. *Sedimentation and erosion* impacts are related to the amount of land exposed to wind and water forces that cause erosion. *Landform alteration* refers to potential impacts on distinct and prominent geologic or physical features, such as hilltops, ridges, hillslopes, canyons, ravines, rock outcrops, water bodies, streambeds, and wetlands. *Mineral resources* in the City include deposits of non-renewable mineral resources, including petroleum and natural gas, limestone, and aggregate (e.g., rock, sand, and gravel).

3.6.1 Screening Criteria

3.6.1.1 Geologic Hazards

- Is the proposed Project located in an area susceptible to unusual geologic hazards considering the following: (1) designation on official maps and databases; (2) past episodes on site or in the surrounding area; and (3) physical properties of the site, including the topography, or soil underlying bedrock (including thickness of bedrock and soil compressibility, strength, moisture content, and distribution)?
- Would the proposed Project include any of the following: (1) placement of structures designed for regular occupancy or infrastructure on fill; or (2) active or planned extraction (removal) of mineral resources, groundwater, oil, or natural gas on site or in the surrounding area?

3.6.1.2 Sedimentation and Erosion

- Would the proposed Project result in grading, clearing, or excavation of more than 20,000 cubic yards on a slope of 10 percent or more?
- Does the proposed Project include grading, clearing, or excavation activities in an area of known or suspected erosion hazard (based upon designation on official maps and databases)?

3.6.1.3 Landform Alteration

- Does the Project site contain any distinct and prominent geologic or physical features that may be physically altered by proposed Project implementation?

3.6.1.4 Mineral Resources

- Is the proposed Project located within, or would it block access to, a Mineral Resource Zone (MRZ) 2, or other known or potential mineral resource area (based on designation on official maps and databases such as those identified in the *L.A. CEQA Thresholds Guide*)?

3.6.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-6, Geology and Soils Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact related to geology and soils from the proposed Project and therefore further study in this EIR is not required.

Table 3-6: Geology and Soils Screening Analysis

Screening Criteria	Response
Geologic Hazards	
Is the proposed Project located in an area susceptible to unusual geologic hazards considering the following: (1) designation on official maps and databases; (2) past episodes on site or in the surrounding area; and (3) physical properties of the site, including the topography, or soil underlying bedrock (including thickness of bedrock and soil compressibility, strength, moisture content, and distribution)?	No. The proposed Project is a citywide program that does not include development of any habitable structures. There are areas within the City that are subject to geologic hazards, particularly the Alquist-Priolo fault study areas in the foothill areas of the San Fernando Valley and the areas surrounding Inglewood, as depicted in the Exhibit A of the City's General Plan Safety Element. However, because the proposed Project would not develop new habitable structures, it would not subject people or structures to such hazards. The proposed Project would be implemented through the six animal services centers across the City; none of the existing animal services centers are located in areas that are subject to unusual geologic hazards.
Would the proposed Project include any of the following: (1) placement of structures designed for regular occupancy or infrastructure on fill; or (2) active or planned extraction (removal) of mineral resources, groundwater, oil, or natural gas on site or in the surrounding area?	No. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. No habitable structures or mineral, groundwater, oil, or natural gas extraction activities are proposed as part of the proposed Project.
Sedimentation and Erosion	
Would the proposed Project result in grading, clearing, or excavation of more than 20,000 cubic yards on a slope of 10 percent or more?	No. There are no construction or ground disturbance activities proposed as part of the proposed Project. There would be no potential for grading, clearing, or excavation of more than 20,000 cubic yards on a slope of 10 percent or more.
Does the proposed Project include grading, clearing, or excavation activities in an area of known or suspected erosion hazard (based upon designation on official maps and databases)?	No. As discussed, no grading, clearing, or excavation activities are proposed as part of the proposed Project.

Screening Criteria	Response
Landform Alteration	
Does the Project site contain any distinct and prominent geologic or physical features that may be physically altered by proposed Project implementation?	No. The proposed Project is a citywide program; therefore, there are no site-specific characteristics that may include distinct geologic or physical features. As discussed, the proposed Project does not include any construction activities or ground disturbance; therefore, no physical alterations to landforms would result from the proposed Project.
Mineral Resources	
Is the proposed Project located within, or would it block access to, an MRZ-2, or other known or potential mineral resource area (based on designation on official maps and databases such as those identified in the *L.A. CEQA Thresholds Guide*)?	No. As discussed, the proposed Project does not include any new structures or land uses that could impede access to a known or potential mineral resource area. The proposed Project would be implemented through the six animal services centers across the City; a review of the City's Conservation Element Exhibit A has determined that none of the existing animal services centers are located within a designated MRZ or oil field.

3.6.3 Conclusion

As discussed in Table 3-6, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Geology and Soils as a result of implementation of the proposed Project. The proposed Project would not introduce new structures or require construction activities that could expose soils to erosion or people to geologic hazards. The proposed Project would be implemented through the existing animal services centers, which are subject to typical geologic hazards experienced throughout the City. None of these centers are in areas with unusual geologic hazards. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to geology and soils. No further study of this environmental resource topic is required in this EIR.

3.7 Hazards

The *L.A. CEQA Thresholds Guide* discusses hazards in terms of potential hazards to humans. This resource topic is divided into an evaluation of risks of upset related to hazardous or explosive substances, emergency preparedness, and human health hazards. *Hazardous materials* generally are chemicals that have the capability of causing harm during an accidental release or mishap, and are characterized as being toxic, corrosive, flammable, reactive, an irritant, or strong sensitizer. A variety of activities, operations, and projects can create human health hazards or expose people to existing sources of potential health hazards.

3.7.1 Screening Criteria

3.7.1.1 Risk of Upset/Emergency Preparedness

- Would the proposed Project use or manage hazardous or potentially hazardous or explosive substances (including, but not limited to, oil, pesticides, chemicals, or radiation)?

- Would the proposed Project require a new or revised risk management plan, emergency response, or emergency evacuation plan?

3.7.1.2 Human Health Hazards

- Would the proposed Project create a health hazard, such as by introducing or directly modifying any of the following (or similar) facilities/activities: (1) pipeline for hazardous or potentially hazardous or explosive substance that is (a) more than 8 miles in length, or (b) less than 8 miles in length with more than 0.5 mile subject to activity at any time; (2) subterranean storage field or above-ground tanks; (3) solid waste facility; (4) waste water treatment plant; (5) major utility transmission or distribution facility; (6) land use or activity with recognized vector (e.g., rodents, insects) management problems; or (7) facility that uses or manages hazardous substances in sufficient quantities to cause a potential hazard?
- Would the proposed Project locate people adjacent to a health hazard, such as any of the above uses?
- Would the proposed Project create a health hazard through activities that involve the disturbance, removal, storage, or disposal of asbestos-containing materials (ACM) or lead paints?

3.7.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-7, Hazards Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact related to Hazards from the proposed Project and therefore further study in this EIR is not required.

Table 3-7: Hazards Screening Analysis

Screening Criteria	Response
Risk of Upset/Emergency Preparedness	
Would the proposed Project use or manage hazardous or potentially hazardous or explosive substances (including, but not limited to, oil, pesticides, chemicals, or radiation)?	No. Hazardous materials associated with veterinary procedures such as sterilizers, anesthetics, and cleaning supplies are used routinely for spaying and neutering cats. However, the proposed Project does not propose new facilities that would use or manage these materials but rather could result in the increased use of such materials at existing facilities (such as participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers) as a result of the proposed vouchers to support the spay/neuter of free-roaming cats and expanded use of Animal Sterilization Funds. All use and handling of hazardous materials at the aforementioned facilities would be in accordance with applicable federal, state, and local regulations as well as Department of Toxic Substances Control and California Health Code requirements.

Screening Criteria	Response
Would the proposed Project require a new or revised risk management plan, emergency response, or emergency evacuation plan?	No. The proposed Project does not pose new risks or hazards that would require a new or revised risk management plan or other emergency response/ management plan. Spay/neuter operations currently occur throughout the City. They are routine procedures with no potential to result in emergencies or other hazards to humans, and they would continue to occur with implementation of the proposed Project.
Human Health Hazards	
Would the proposed Project create a health hazard, such as by introducing or directly modifying any of the following (or similar) facilities/activities: (1) pipeline for hazardous or potentially hazardous or explosive substance that is (a) more than 8 miles in length, or (b) less than 8 miles in length with more than 0.5 mile subject to activity at any time; (2) subterranean storage field or above-ground tanks; (3) solid waste facility; (4) waste water treatment plant; (5) major utility transmission or distribution facility; (6) land use or activity with recognized vector (e.g., rodents, insects) management problems; or (7) facility that uses or manages hazardous substances in sufficient quantities to cause a potential hazard?	Yes. The proposed Project involves changes to the City's administrative code and policy related to domestic cats, which would result in the release of some free-roaming cats into the City. Domestic cats can be vectors for human diseases, including toxoplasmosis, typhus, and giardia. Because the proposed Project involves the release of domestic cats into the city, the potential for creation of a health hazard as a result of the proposed Project is further analyzed in Chapter 4.
Would the proposed Project locate people adjacent to a health hazard, such as any of the above uses?	No. The proposed Project does not include new housing or other habitable structures that could expose people to health hazards; it does not involve locating people adjacent to a health hazard, such as those discussed above. TNR activities would occur throughout the City, including near sensitive receptors such as schools; however, no hazardous materials are used in the trapping process. While animal traps could pose a hazard to unattended children, such circumstances would be rare, and traps would be monitored by trained TNR staff to avoid hazards to the public.
Would the proposed Project create a health hazard through activities that involve the disturbance, removal, storage, or disposal of ACM or lead paints?	No. The proposed Project does not include construction activities or other activities that could involve the disturbance, removal, storage, or disposal of ACM or lead paints. No new facilities or alterations to existing animal care facilities are proposed as part of the proposed Project.

3.7.3 Conclusion

As discussed in Table 3-7, all screening criteria related to risk of upset and emergency preparedness received "no" responses, indicating that there would normally be no significant impacts associated with Hazards as a result of implementation of the proposed Project. However, the screening analysis resulted in a "yes" response to the question of whether the proposed Project has the potential to create a health hazard because of the human disease-carrying potential of domestic cats and the

release of free-roaming cats to the environment under the proposed Project after being sterilized using one of the City's spay/neuter vouchers. Accordingly, further study of human health hazards related to an activity with a recognized human disease vector (i.e., domestic cats) is required and discussed in Chapter 4 of this EIR.

3.8 Water Resources

Water Resources include both surface water and subsurface groundwater, and the evaluation of potential impacts assesses the proposed Project's potential to affect water supply and water quality. The impacts evaluation also assesses hydrology, such as how the proposed Project affects stormwater flow or disposal, as well as potential risks of flooding and treatment capacities. The *L.A. CEQA Thresholds Guide* organizes water resources into surface water hydrology, surface water quality, groundwater level, and groundwater quality.

3.8.1 Screening Criteria

3.8.1.1 Surface Water Hydrology

- Is the proposed Project located within a 100-year floodplain, an area designated as hillside (as identified in LAMC Section 91.7001), or other known floodplain area?
- Would runoff from the Project site drain onto an unimproved street or onto adjacent properties other than public right-of-way?
- Would proposed Project implementation affect a surface water body such that the amount of surface water, current, course, or direction of flow would change?
- Would the runoff factor for the developed Project site exceed the percentage of imperviousness for the existing land use category, as contained in the Bureau off Engineering Manual, Part G, Storm Drain Design?

3.8.1.2 Surface Water Quality

- Would the proposed Project involve or allow an activity or process that would result in a point-source discharge to a receiving water body?
- Would the proposed Project create conditions that may result in soil erosion, sediment runoff, or nonpoint sources of contamination?

3.8.1.3 Groundwater Level

- Does the proposed Project include the installation of production water wells or a permanent groundwater extraction or dewatering system in a groundwater basin used for potable water supply purposes?
- Does the proposed Project include planned groundwater recharge through surface spreading or injection?
- Would the proposed Project involve cuts or excavation that would intercept an aquifer?
- Would the proposed Project reduce permeable areas overlying a spreading ground used for groundwater recharge?

- Would the runoff factor for the developed Project site exceed the percentage of imperviousness for the existing land use category, as contained in Part G of the Bureau of Engineering Manual, Storm Drain Design?

3.8.1.4 Groundwater Quality

- Would the proposed Project include the installation of water wells, or any groundwater extraction or recharge system, that is in the vicinity (usually within 1 mile) of the coast, an area of known groundwater contamination or seawater intrusion, a municipal supply well, or spreading ground facility?
- Would the proposed Project include surface or subsurface application or introduction of potential contaminants or waste materials during construction or operation? Examples of such projects include: on-site disposal systems (septic systems), holding/equalization tanks, evaporation ponds, underground or above-ground storage tanks, percolation ponds and leachfields, landfills and other land surface waste disposal facilities, land treatment units (bioremediation), oil field brine disposal, and agricultural activities.
- Could the proposed Project result in releases or spills of contaminants that could reach a groundwater recharge area or spreading ground or otherwise reach groundwater through percolation?
- Would the proposed Project involve drilling to or through a clean or contaminated aquifer?

3.8.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-8, Water Resources Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact on Water Resources from the proposed Project and therefore further study in this EIR is not required.

Table 3-8: Water Resources Screening Analysis

Screening Criteria	Response
Surface Water Hydrology	
Is the proposed Project located within a 100-year floodplain, an area designated as hillside (as identified in LAMC Section 91.7001), or other known floodplain area?	No. There are 100-year floodplains, hillside areas, and other floodplains located throughout the City; however, other than TNR activities, the proposed Project would not place any new facilities or Project activities within such areas subject to flood risk, as no new buildings, land uses, or other developments are proposed as part of the proposed Project. TNR activities would include temporary setting and retrieval of traps and would not include permanent structures of any kind. While not prohibited, TNR activities are unlikely to occur during rain events or other conditions where flooding is present due to risks posed to TNR staff and cats.

Screening Criteria	Response
Would runoff from the Project site drain onto an unimproved street or onto adjacent properties other than public right-of-way?	No. Runoff associated with existing veterinary and animal care facilities would remain unaffected by the proposed Project. The proposed Project would not include any new facilities or alterations to existing drainage patterns such that runoff would drain onto unimproved streets or adjacent properties.
Would proposed Project implementation affect a surface water body such that the amount of surface water, current, course, or direction of flow would change?	No. The proposed Project does not include any alterations or other use of surface bodies of water such that there would be a change in the amount of surface water, current, course, or direction of flow.
Would the runoff factor for the developed Project site exceed the percentage of imperviousness for the existing land use category, as contained in the Bureau off Engineering Manual, Part G, Storm Drain Design?	No. The proposed Project does not include any development or alterations to existing facilities that would change the amount of impervious surfaces anywhere in the City or otherwise increase the percentage of imperviousness for existing land uses.
Surface Water Quality	
Would the proposed Project involve or allow an activity or process that would result in a point-source discharge to a receiving water body?	No. The proposed Project would not create a new point-source discharge to any water bodies. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. No new facilities or operations are proposed that would generate pollutants or result in point-source discharges that could be received by any water bodies.
Would the proposed Project create conditions that may result in soil erosion, sediment runoff, or nonpoint sources of contamination?	Yes. Although the proposed Project would not directly contribute new nonpoint source discharge to a water body, implementation of the modified TNR program would lead to the release of free-roaming cats in the City after they have been sterilized using the new spay/neuter vouchers that would become available under the proposed Project. These free-roaming cats could contribute feces and urine that can be a source of pathogens such as giardia, which could be discharged into surface waters throughout the City. This topic is further analyzed in Chapter 4.
Groundwater Level	
Does the proposed Project include the installation of production water wells or a permanent groundwater extraction or dewatering system in a groundwater basin used for potable water supply purposes?	No. The proposed Project does not include installation of wells or other groundwater extraction systems. No substantial increase in the use of potable water is anticipated, as the 20,000 annual surgeries associated with the proposed Project would all be carried out at existing facilities throughout the City.

Screening Criteria	Response
Does the proposed Project include planned groundwater recharge through surface spreading or injection?	No. The proposed Project does not include any groundwater recharge activities.
Would the proposed Project involve cuts or excavation that would intercept an aquifer?	No. No construction activities or other activities requiring excavation or trenching would result from the proposed Project. Accordingly, there is no potential for the proposed Project to affect an aquifer.
Would the proposed Project reduce permeable areas overlying a spreading ground used for groundwater recharge?	No. The proposed Project does not include any new facilities that would increase impermeable surfaces or otherwise increase groundwater recharge.
Would the runoff factor for the developed Project site exceed the percentage of imperviousness for the existing land use category, as contained in Part G of the Bureau of Engineering Manual, Storm Drain Design?	No. The proposed Project does not include any new facilities that would increase impermeable surfaces within the City. Proposed amendments to the LAMC would have no effect on current development standards associated with impervious surfaces or other design requirements.
Groundwater Quality	
Would the proposed Project include the installation of water wells, or any groundwater extraction or recharge system, that is in the vicinity (usually within 1 mile) of the coast, an area of known groundwater contamination or seawater intrusion, a municipal supply well, or spreading ground facility?	No. As discussed, no wells or groundwater extraction/infiltration facilities are proposed as part of the proposed Project.
Would the proposed Project include surface or subsurface application or introduction of potential contaminants or waste materials during construction or operation? Examples of such projects include: on-site disposal systems (septic systems), holding/equalization tanks, evaporation ponds, underground or above-ground storage tanks, percolation ponds and leachfields, landfills and other land surface waste disposal facilities, land treatment units (bioremediation), oil field brine disposal, and agricultural activities?	No. While contaminants associated with feces and urine from free-roaming cats are distributed throughout the City under existing conditions, none of these contaminants would be introduced or stored underground. No facilities such as septic systems, holding tanks, storage tanks, percolation ponds, or waste disposal facilities are proposed as part of the proposed Project.
Could the proposed Project result in releases or spills of contaminants that could reach a groundwater recharge area or spreading ground or otherwise reach groundwater through percolation?	No. The proposed Project would result in 20,000 annual surgeries carried out at existing facilities throughout the City. However, this increase in surgeries at existing facilities would not result in releases or spills or contaminants that would affect groundwater. Feces and urine associated with free-roaming cats are deposited throughout the City under existing environmental conditions. Groundwater contamination from feces and urine is typically associated with larger volumes of liquids infiltrating into the ground. Examples include on-site sanitation systems such as septic tanks and concentrated animal feeding operations. Concentrated animal feeding operation sources of groundwater pollution include

Screening Criteria	Response
	animal holding areas and manure storage lagoons, which can result in leaching from a continuous source of pollutants (Harter 2014). While some free-roaming cats would be released back to the environment, that would occur across the City and the number of released cats would be small compared to the existing number of cats in the environment. Therefore, deposits of feces and urine from free-roaming cats would not likely result in a significant concentration of pollutants that would contaminate a groundwater recharge area or spreading ground.
Would the proposed Project involve drilling to or through a clean or contaminated aquifer?	No. The proposed Project would not drill or include subsurface disturbance that could encounter a clean or contaminated aquifer.

3.8.3 Conclusion

As discussed in Table 3-8, all screening criteria related to hydrology and groundwater received "no" answers, as no changes to drainage or use of groundwater are proposed by the proposed Project. However, a screening criterion question related to surface water contamination received a "yes" answer due to the potential indirect effect on surface water quality associated with feces and urine from the sterilized free-roaming cats released under the proposed Project. Accordingly, further study of surface water quality is required and discussed in Chapter 4 of this EIR.

3.9 Land Use

Review of potential land use and planning impacts deal with a project's potential for inconsistency with established land use plans, policies, or regulations and potential incompatibility of a project with surrounding land uses. Potential areas of inconsistency include, but are not limited to: land use type; height, bulk, design, or density; waste or wastewater generation; resource consumption or degradation; and other plan policies that relate to the physical environment. Land use compatibility issues include land uses that create noise, odor, safety hazards, visual, or other environmental impacts that conflict with surrounding land uses and the activities and conditions typically associated with those land uses. The *L.A. CEQA Thresholds Guide* organizes this topic into land use consistency and land use compatibility.

3.9.1 Screening Criteria

3.9.1.1 Land Use Consistency

- Is the proposed Project inconsistent with the General Plan or its elements, or an applicable specific plan, local coastal plan, redevelopment plan, interim control ordinance, or adopted environmental goals or policies?
- Would the proposed Project require a General Plan amendment or zone change?

3.9.1.2 Land Use Compatibility

- Would the proposed Project include a land use type that is incompatible with existing or proposed adjacent land uses (due to size, intensity, density, or type of use)?
- Would the proposed Project include features such as a highway, above-ground infrastructure, or an easement through an established neighborhood community that could cause a permanent disruption in the physical arrangement of that established community or otherwise isolate an existing land use?
- Would the proposed Project result in a "spot" zone?

3.9.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-9, Land Use Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact on Land Use from the proposed Project and therefore further study in this EIR is not required.

Table 3-9: Land Use Screening Analysis

Screening Criteria	Response
Land Use Consistency	
Is the proposed Project inconsistent with the General Plan or its elements, or an applicable specific plan, local coastal plan, redevelopment plan, interim control ordinance, or adopted environmental goals or policies?	No. The City's General Plan conservation element includes objectives aimed at protecting sensitive species and their habitat. The proposed modified TNR policy would allow for the return of free-roaming cats that have been spayed or neutered back into the environment where they resided prior to being trapped and spayed or neutered. Cats are hunters, and wild birds, mammals, and reptiles are typical prey for many cats. While return of free-roaming cats within the City has the potential to result in impacts on sensitive species residing or migrating within the City, the proposed Project is consistent with the General Plan Conservation Element goals and policies pertaining to sensitive species and habitat protection because 1) a key objective of the Project is to reduce the relative number of free-roaming cats in the City over time, 2) several measures are included in the CCP program implementation guidelines and ecological conservation measures to protect environmentally sensitive areas (ESAs) from the release of spayed/neutered cats (see Chapter 2), and 3) the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs. Table 3-10 below provides an analysis of the proposed Project's consistency with applicable goals and policies contained in the General Plan Conservation Element and associated Community Plans.

Screening Criteria	Response
Would the proposed Project require a General Plan amendment or zone change?	No. The proposed Project would involve changes to the LAAC and an amendment to the LAMC but would not require amendments to the General Plan or zone changes.
Land Use Compatibility	
Would the proposed Project include a land use type that is incompatible with existing or proposed adjacent land uses (due to size, intensity, density, or type of use)?	No. The proposed Project is primarily an administrative action that would be implemented citywide through existing facilities. No new facilities or land uses are proposed as part of the proposed Project.
Would the proposed Project include features such as a highway, above-ground infrastructure, or an easement through an established neighborhood community that could cause a permanent disruption in the physical arrangement of that established community or otherwise isolate an existing land use?	No. As discussed, the proposed Project does not include construction of new facilities or infrastructure. The proposed Project would be implemented citywide through existing facilities located along existing roads, and no new infrastructure would be required for the proposed Project. Similarly, no easements of any kind would be required. Accordingly, there is no potential for a permanent disruption in the physical arrangement of an established community or other isolation of existing land uses.
Would the proposed Project result in a "spot" zone?	No. The proposed Project would have no effect on existing or future zoning anywhere within the City. Existing facilities through which the proposed Project would be implemented citywide are consistent with the existing zoning and land use designations of their respective land.

The City of Los Angeles General Plan and associated Community Plans provide several policies applicable to the conservation of sensitive species and their habitat within the City. Table 3-10, Consistency with City of Los Angeles General Plan, provides an analysis of the proposed Project's consistency with these policies.

Table 3-10: Consistency with City of Los Angeles General Plan

Policy	Project Consistency
General Plan Conservation Element	
Section 6 – Endangered Species Policy 1: Continue to require evaluation, avoidance, and minimization of potential significant impacts, as well as mitigation of unavoidable significant impacts on sensitive animal and plant species and their habitats and habitat corridors relative to land development activities.	Consistent. The proposed Project involves implementing the modified TNR program and facilitating the spay/neuter of free-roaming cats throughout the City. Existing free-roaming domestic cats in the City may directly and indirectly affect the survival, reproductive success, and habitat use of a variety of special-status species. The proposed Project would result in fewer free-roaming cats throughout the City; therefore, by the proposed Project horizon year of 2049, fewer free-roaming cats would be present in the City. Additionally, several measures are included in the CCP program implementation guidelines and ecological conservation measures to protect ESAs from the release of spayed/neutered cats (see Chapter 2), and the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs. For an evaluation of potential impacts on endangered species and associated mitigation, minimization, and avoidance measures, please see Section 4.2, Biological Resources.
Section 12: Habitats/ecological areas Policy 1: Continue to identify significant habitat areas, corridors and buffers to take measures to protect, enhance and or restore them.	Consistent. The proposed Project does not restrict the City's ability to identify, designate, or protect significant habitat areas, corridors, or buffers. While the modified TNR program will result in the release of free-roaming cats throughout the City, including potential sensitive habitat, these cats are existing cats that pose an existing threat of predation to sensitive species. The proposed Project and analysis throughout this EIR identify and consider the significant habitat areas throughout the City, and the program implementation guidelines and ecological conservation measures include protective measures such as recommendations to relocate cats found in or near ESAs and avoid release of cats within 1 mile of an ESA, and the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.

Policy	Project Consistency
Section 12: Habitats/ecological areas Policy 2: Continue to protect, restore and/or enhance habitat areas, linkages and corridor segments, to the greatest extent practical, within city owned or managed sites.	Consistent. The proposed Project does not restrict the City's ability to protect or enhance habitat areas, linkages, or corridor segments within City-owned or managed areas. While the modified TNR program would result in the release of free-roaming cats throughout the City, including potential city owned or managed sites with sensitive habitat, these cats that would be returned are existing cats that pose an existing threat of predation to sensitive species. The proposed Project would not exacerbate or otherwise increase any impacts on habitat areas. The draft program guidelines and ecological conservation measures also include protective measures such as recommendations to relocate cats found in or near ESAs and avoid releasing cats within 1 mile of an ESA. In addition, the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
Section 12: Habitats/ecological areas policy 3: Continue to work cooperatively with other agencies and entities in protecting local habitats and endangered, threatened, sensitive and rare species.	Consistent. The proposed Project includes measures for coordination and cooperation with third-party entities to implement the modified TNR program and to provide training for trappers or to protect ESAs.
Community Plans	
Granada Hills – Knollwood Community Plan Policy CF6.2: Protect significant open space resources and environmentally sensitive areas from environmental hazards and incompatible land uses.	Consistent. The proposed Project would not construct or otherwise alter existing open space resources or ESAs. While the modified TNR program would result in the release of cats throughout the City, the Project also includes program implementation guidelines and ecological conservation measures such as recommendations to relocate cats found in or near ESAs and avoid releasing cats within 1 mile of an ESA, and the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
Los Angeles International Airport LAX Plan Policy P1: Protect the existing state-designated sensitive habitat areas.	Consistent. The proposed Project would not construct or otherwise alter existing state-designated sensitive habitat areas. While the modified TNR program would result in the release of cats throughout the City, the program includes program implementation guidelines and ecological conservation measures to protect ESAs by recommending no release of free-roaming cats within 1 mile of ESAs as well relocating cats found in or near ESAs, including the existing state-designated sensitive habitat areas described in the

Policy	Project Consistency
	LAX Plan, and the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
San Pedro Community Plan Policy CF6.1: Protect wildlife habitat: Preserve passive and visual open space that provides wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas, and a balance to the urban development of the community.	Consistent. The proposed Project would not construct or otherwise alter existing passive and visual open space. The proposed Project would not exacerbate or otherwise increase any impacts on passive and visual open space areas. While the modified TNR program would result in the release of cats throughout the City, the program includes program implementation guidelines and ecological conservation measures to protect ESAs by recommending no release of free-roaming cats within 1 mile of ESAs as well relocating cats found in or near ESAs, and the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
Venice Community Plan Policy 18-1.2: The protection of estuaries and wetlands and the restoration and protection of the Venice Canals.	Consistent. The proposed Project does not restrict the City's ability to protect or restore the Venice Canals and includes program implementation guidelines and ecological conservation measures to protect ESAs by prohibiting release of free-roaming cats within 1 mile of ESAs as well relocating cats found in or near ESAs, and the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
Westchester - Playa Del Rey Community Plan Policy 5-1.5: Preserve and restore the Ballona Wetlands for enjoyment of the public.	Consistent. The proposed Project includes program implementation guidelines and ecological conservation measures to protect ESAs by recommending no release of free-roaming cats within 1 mile of ESAs as well relocating cats found in or near ESAs. This would include restricting the release of free-roaming cats in or near the Ballona Wetlands. The proposed Project would not limit the preservation and restoration of the Ballona Wetlands, nor would it exacerbate or otherwise increase any impacts on this area. In addition, the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
Westchester - Playa Del Rey Community Plan Policy 18-2.2: Preserve and enhance Ballona Wetlands by consolidating and restoring all wetlands and environmentally sensitive habitats within the Ballona area.	Consistent. The proposed Project includes program implementation guidelines and ecological conservation measures to protect ESAs by recommending no release of free-roaming cats within 1 mile of ESAs as well relocating cats found in or near ESAs. This would include restricting the

Policy	Project Consistency
	release of free-roaming cats in or near the Ballona Wetlands. The proposed Project would not limit the preservation, enhancement, consolidation, or restoration of the Ballona Wetlands, nor would it exacerbate or otherwise increase any impacts on this area. In addition, the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
Westchester - Playa Del Rey Community Plan Policy 18-2.3: Preserve and enhance Del Rey Lagoon as a community and visitor serving park with significant ecological functions.	Consistent. The proposed Project includes program implementation guidelines and ecological conservation measures to protect ESAs by recommending no release of free-roaming cats within 1 mile of ESAs as well relocating cats found in or near ESAs. This would include restricting the release of free-roaming cats in or near the significant ecological portions of the Del Rey Lagoon. The proposed Project would not limit the preservation or enhancement of the Del Rey Lagoon, nor would it exacerbate or otherwise increase any impacts on this area. In addition, the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs.
Mission Hills - Panorama City - North Hills Community Plan Policy 5.1-2, Northridge Community Plan Policy 5.1-2, Reseda - West Van Nuys Community Plan Policy 6.1-2, Sunland - Tujunga - Shadow Hills - Lake View Terrace - East La Tuna Canyon Community Plan Policy 5.1-2, Sun Valley - La Tuna Canyon Community Plan Policy 5.1-2, Van Nuys - North Sherman Oaks Community Plan Policy 5-1.2, Venice Community Plan Policy 5-1.3: Protect significant environmental resources from environmental hazards.	Consistent. While the modified TNR program would result in the release of cats throughout the City, the program includes program implementation guidelines and ecological conservation measures to protect ESAs by recommending no release of free-roaming cats within 1 mile of ESAs as well relocating cats found in or near ESAs. In addition, the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs. The proposed Project would not limit the protection of resources in these areas, nor would it exacerbate or otherwise increase any impacts on these areas.

Source: City of Los Angeles 2019a.

3.9.3 Conclusion

The screening analysis identified "no" answers for all screening criteria related to land use compatibility, as no development or changes to existing land uses would result from the proposed Project that may result in incompatible adjacent land uses. The proposed Project would not result in inconsistencies with established plans and policies, including adopted environmental goals or policies. Under the proposed Project, sterilized free-roaming cats would be released back to the

environment where they currently reside. While return of free-roaming cats within the City has the potential to result in impacts on sensitive species residing or migrating within the City, the proposed Project is consistent with the General Plan Conservation Element goals and policies pertaining to sensitive species and habitat protection because 1) a key objective of the Project is to reduce the relative number of free-roaming cats in the City over time and 2) several measures are included in the CCP program implementation guidelines and ecological conservation measures to protect ESAs from existing impacts of free-roaming cats. In addition, the Project includes the creation of a City of LA WCP that would prioritize admission of cats found in or near ESAs. No further study of this environmental resource topic is required in this EIR.

3.10 Noise

Noise impacts generally refer to noise generated during construction or resulting from noisy operations associated with the proposed Project. Construction of facilities and structures requires the use of equipment, which may generate high noise levels and adversely affect noise-sensitive uses. Operational noise refers to stationary and mobile vehicular noise sources associated with the operation of a project that may increase existing noise levels and/or adversely expose people to severe noise levels. The *L.A. CEQA Thresholds Guide* requires evaluation of construction and operational noise, as well as a project's potential to expose sensitive receptors to railroad and airport noise, as presented below.

3.10.1 Screening Criteria

3.10.1.1 Construction Noise

- Would construction activities occur within 500 feet of a noise-sensitive use?
- For projects located within the City of Los Angeles, would construction occur between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or anytime on Sunday?

3.10.1.2 Operational Noise

- Would the proposed Project introduce a stationary noise source likely to be audible beyond the property line of the Project site?
- Would the proposed Project include 75 or more dwelling units, include 100,000 square feet or greater of non-residential development, or have the potential to generate 1,000 or more average daily vehicle trips?

3.10.1.3 Railroad Noise

- Would proposed Project development result in a noise-sensitive land use being located within 3,000 feet of a railroad line?
- Would the proposed Project result in an increase in the number or length of non-commuter trains operating on existing tracks within 3,000 feet of a noise-sensitive land use?

3.10.1.4 Airport Noise

- If the proposed Project includes the construction or expansion of an airport or heliport and has the potential to expose noise-sensitive land uses to high noise levels (through proximity of such land uses to the flight path, etc.) would the proposed Project result in an incompatible land use existing within the 65-decibel (dB) Community Noise Equivalent Level (CNEL) contour of an airport or heliport?

3.10.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-11, Noise Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact related to Noise from the proposed Project and therefore further study in this EIR is not required.

Table 3-11: Noise Screening Analysis

Screening Criteria	Response
Construction Noise	
Would construction activities occur within 500 feet of a noise-sensitive use?	No. The proposed Project does not include any new facilities or construction activities, as the proposed Project primarily involves implementing the modified TNR policy and other administrative actions. The animal services centers in the City through which the proposed Project would be implemented are existing facilities, and no new facilities or land uses are proposed as part of the proposed Project.
For projects located within the City of Los Angeles, would construction occur between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or anytime on Sunday?	No. The proposed Project does not include any new facilities or construction activities, as the proposed Project primarily involves implementing the modified TNR policy and other administrative actions. The animal services centers in the City through which the proposed Project would be implemented are existing facilities, and no new facilities or land uses are proposed as part of the proposed Project. Indirectly, the proposed Project also relies on third parties to implement the program by performing the trapping and releasing activities.
Operational Noise	
Would the proposed Project introduce a stationary noise source likely to be audible beyond the property line of the Project site?	No. The animal services centers in the City through which the proposed Project would be implemented citywide are existing facilities, and no new facilities or land uses are proposed as part of the proposed Project. TNR activities are anticipated to increase throughout the city, but the noise sources would be transitory, temporary, and not stationary. While free-roaming cats can be a source of noise, either as a result of territorial dispute or when female cats are in heat, the Project would reduce the overall cat population

Screening Criteria	Response
	over time and would reduce the frequency and occurrence of cats in heat through the systematic spaying/neutering of the free-roaming cat population. Further, the occurrence of cat-generated noise, either from a free-roaming cat colony or individuals, is an existing condition. The Project would not result in an increase in the cat population or otherwise introduce new sources of noise in the City.
Would the proposed Project include 75 or more dwelling units, include 100,000 square feet or greater of non-residential development, or have the potential to generate 1,000 or more average daily vehicle trips?	No. As discussed, the proposed Project does not include any new housing or non-residential development. The proposed Project does include the provision of up to 20,000 vouchers for spay/neuter services, which has the potential to generate up to 467 daily trips.
Railroad Noise	
Would Project development result in a noise-sensitive land use being located within 3,000 feet of a railroad line?	No. The proposed Project does not include construction of new facilities or infrastructure, including in areas within 3,000 feet of a railroad line. The proposed Project would be implemented through existing facilities across the City.
Would the proposed Project result in an increase in the number or length of non-commuter trains operating on existing tracks within 3,000 feet of a noise-sensitive land use?	No. The proposed Project involves provision of funds to support spay/neuter of free-roaming cats and amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds, none of which is reliant on non-commuter train operations. Therefore, the proposed Project would not lead to any increase in the number or length of non-commuter trains operating on existing tracks.
Airport Noise	
If the proposed Project includes the construction or expansion of an airport or heliport and has the potential to expose noise-sensitive land uses to high noise levels (through proximity of such land uses to the flight path, etc.) would the proposed Project result in an incompatible land use existing within the 65 dB CNEL contour of an airport or heliport?	No. The proposed Project does not include construction or expansion of an airport or heliport.

3.10.3 Conclusion

As discussed in Table 3-11, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Noise as a result of implementation of the proposed Project. The proposed Project would not result in any construction activities that could generate noise. Similarly, no new land uses are proposed, and the proposed Project would be implemented through existing facilities citywide; therefore, the proposed Project would not create a new source of operational noise. Because the proposed Project would not construct any housing or other infrastructure, there would be no potential for the proposed Project to expose sensitive uses to rail- or airport-related noise. Given the lack of physical improvements associated with the

proposed Project and outcome of the screening analysis, there is no potential for impacts related to Noise. No further study of this environmental resource topic is required in this EIR.

3.11 Population and Housing

The quantity and distribution of population and households in the City affects the environment, use of infrastructure, and demand for public services. As such, an evaluation of potential growth that could result from the proposed Project is necessary. According to the State CEQA Guidelines Section 15064(e): "Economic and social changes resulting from a project shall not be treated as significant effects on the environment. Economic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment." In addition to growth considerations, the population and housing section also considers potential displacement or loss of housing stock that may result in development of housing in another location, which may cause environmental impacts. The *L.A. CEQA Thresholds Guide* organizes this topic into population and housing growth, and population and housing displacement, as discussed below.

3.11.1 Screening Criteria

3.11.1.1 Population and Housing Growth

- Would the proposed Project include a General Plan amendment, which could result in an increase in population over that projected in the adopted Community Plan or General Plan?
- Would the proposed Project induce substantial growth on the Project site or in the surrounding area?

3.11.1.2 Population and Housing Displacement

- Would the proposed Project result in a net loss of housing equal to or greater than one-half block equivalent of habitable housing units through demolition, conversion, or other means? (One-half block is generally equivalent to 15 single-family or 25 multi-family dwelling units.)
- Would the proposed Project result in the net loss of any existing housing units affordable to very low- or low-income households (as defined by federal and/or City standards), through demolition, conversion, or other means?

3.11.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-12, Population and Housing Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact related to population and housing from the proposed Project and therefore further study in this EIR is not required.

Table 3-12: Population and Housing Screening Analysis

Screening Criteria	Response
Population and Housing Growth	
Would the proposed Project include a General Plan amendment, which could result in an increase in population over that projected in the adopted Community Plan or General Plan?	No. The proposed Project would involve changes to the LAAC and an amendment to the LAMC but would not require amendments to the General Plan or zone changes. Proposed amendments to the LAMC would not change housing density or increase the number of housing units within the City.
Would the proposed Project induce substantial growth on the Project site or in the surrounding area?	No. The proposed Project involves provision of funds to support spay/neuter of free-roaming cats and amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds. The proposed Project is a citywide program that affects the City's cat population and does not include a housing component. It would provide little increase in employment opportunity such that there would be any potential for substantial growth within the City.
Population and Housing Displacement	
Would the proposed Project result in a net loss of housing equal to or greater than one-half block equivalent of habitable housing units through demolition, conversion, or other means? (One-half block is generally equivalent to 15 single-family or 25 multi-family dwelling units.)	No. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. The proposed Project would not require the removal or demolition of any residential dwelling units.
Would the proposed Project result in the net loss of any existing housing units affordable to very low- or low-income households (as defined by federal and/or City standards), through demolition, conversion, or other means?	No. As previously discussed, the proposed Project would not result in the loss of any housing, affordable or otherwise.

3.11.3 Conclusion

As discussed in Table 3-12, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with population and housing growth as a result of implementation of the proposed Project. The proposed Project would not involve any new residential, commercial, or industrial land uses, and no changes to development density are proposed by the proposed Project. Additionally, the proposed Project would not result in the displacement or loss of any housing such that changes in population may occur. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis,

there is no potential for impacts related to Population and Housing. No further study of this environmental resource topic is required in this EIR.

3.12 Public Services

Public services include police, fire, and emergency medical services, and public facilities such as parks, schools, and libraries. The evaluation of this topic involves an assessment of whether the proposed Project would place populations or hazards in areas beyond the service areas of emergency service providers or would affect response times and service ratios. For public facilities, the assessment of the Public Services topic pertains to the proposed Project's potential to result in an increase in the use of facilities that may require repairs or new facilities to meet service requirements or ratios. The *L.A. CEQA Thresholds Guide* organizes the Public Services topic into police protection, fire protection and emergency medical services, public schools, recreation and parks, and libraries.

3.12.1 Screening Criteria

3.12.1.1 Police Protection

- Would the proposed Project result in a net increase of 75 residential units, 100,000 square feet of commercial floor area, or 200,000 square feet of industrial floor area?

3.12.1.2 Fire Protection and Emergency Medical Services

- Would the proposed Project be located farther from an engine or truck company than the maximum response distances, based on the proposed Project's proposed land use(s), as indicated in the following chart?

	Maximum Response Distance (miles)	
Land Use	**Engine Company**	**Truck Company**
Neighborhood Land Uses		
Los Density Residential/High Density Residential/ Neighborhood	1.50	1.50
Regional Land Uses		
Commercial Industrial/Commercial	1.00	1.50
Commercial and Industrial Centers		
High Density Commercial/High Density Industrial	0.75	1.00

- Is the proposed Project located in a brush fire hazard area, hillside, or area with inadequate fire hydrant service or street access?
- Does the proposed Project involve the use, manufacture, or storage of toxic, readily combustible, or otherwise hazardous materials?
- Would the proposed Project's location provide for adequate Los Angeles Fire Department (LAFD) access (e.g., adequate street/fire lane width—minimum 20 feet clear and unobstructed with an approved turn-around, grade not exceeding 15 percent, dead-ends not exceeding 700 feet)?

- Are there any street intersections with a level of service (LOS) of E or F near the Project site that would adversely affect response time?

3.12.1.3 Public Schools

- Would the proposed Project result in a net increase of at least 75 residential units, 100,000 square feet of commercial floor area, or 200,000 square feet of industrial floor area?

3.12.1.4 Recreation and Parks

- Would the proposed Project result in a net increase of 50 or more residential units that would adversely affect recreation and park services and/or facilities due to the proposed Project 's proximity to, or expected usage of, those facilities or services?

3.12.1.5 Libraries

- Would the proposed Project result in a net increase of 75 residential units or more?

3.12.2 Screening Analysis

The screening analysis for this topic is provided in Table 3-13, Public Services Screening Analysis, below. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact related to Public Services from the proposed Project and therefore further study in this EIR is not required.

Table 3-13: Public Services Screening Analysis

Screening Criteria	Response
Police Protection	
Would the proposed Project result in a net increase of 75 residential units, 100,000 square feet of commercial floor area, or 200,000 square feet of industrial floor area?	No. As discussed, the proposed Project does not include new residential units, commercial space, or industrial space or any development of new land uses. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. There is no potential for increases in residential, commercial, or industrial uses.

Screening Criteria	Response
Fire Protection and Emergency Medical Services	
Would the proposed Project be located farther from an engine or truck company than the maximum response distances, based on the proposed Project's proposed land use(s), as indicated in the following chart?	No. The proposed Project does not involve the construction of infrastructure. It would be implemented citywide through existing state-licensed facilities such as the City's animal services centers, participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers, which are already sited within the required response distances for such land uses; it would not be located in a specific area beyond maximum response distances.
Is the proposed Project located in a brush fire hazard area, hillside, or area with inadequate fire hydrant service or street access?	No. The proposed Project does not include the construction of any infrastructure that could trigger brush fires or lead to inadequate amounts of fire hydrants. Existing facilities through which the proposed Project would be implemented are required to have adequate fire hydrant service and access. No development or other proposed Project–related uses are proposed; therefore, brush fire hazards and fire hydrant access are not issues of concern. While TNR activities would take place throughout the City, including potentially in brush fire hazard areas, hillsides, or other areas with inadequate fire hydrant service, these activities would involve setting and retrieval of traps. Such activities would not pose a fire hazard as no flammable chemicals would be used.
Does the proposed Project involve the use, manufacture, or storage of toxic, readily combustible, or otherwise hazardous materials?	No. As discussed under Section 3.7, while some hazardous materials (such as disinfectants, cleaning chemicals, and laboratory chemicals) are routinely used at the animal services centers and veterinary facilities that serve the City, these substances are routine chemicals used for veterinary procedures and none are considered readily combustible. Furthermore, the proposed Project would not introduce a new use that would require such substances and relies on existing facilities to provide spay/neuter services.
Would the proposed Project's location provide for adequate LAFD access (e.g., adequate street/fire lane width—minimum 20 feet clear and unobstructed with an approved turn-around, grade not exceeding 15 percent, dead-ends not exceeding 700 feet)?	Yes. The proposed Project does not involve any new uses or facilities that would require new LAFD service; it is primarily administrative in nature and would be implemented citywide through existing facilities that are required to have adequate LAFD access. The proposed Project would not affect such access in any way.
Are there any street intersections with an LOS of E or F near the Project site that would adversely affect response time?	No. The proposed Project is a citywide program that involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a

Screening Criteria	Response
	modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. While there are many intersections throughout the City that operate at LOS E or F, the proposed Project poses no potential to exacerbate these conditions such that response time would be adversely affected. See discussion in Section 3.13.
Public Schools	
Would the proposed Project result in a net increase of at least 75 residential units, 100,000 square feet of commercial floor area, or 200,000 square feet of industrial floor area?	No. The proposed Project does not include development of any residential units, commercial space, or industrial space.
Recreation and Parks	
Would the proposed Project result in a net increase of 50 or more residential units that would adversely affect recreation and park services and/or facilities due to the proposed Project's proximity to, or expected usage of, those facilities or services?	No. As previously discussed, the proposed Project does not include development of residential units and therefore would not adversely affect recreation and park services or facilities.
Libraries	
Would the proposed Project result in a net increase of 75 residential units or more?	No. The proposed Project does not include development of any residential units.

3.12.3 Conclusion

As discussed in Table 3-13, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Public Services as a result of implementation of the proposed Project. The proposed Project does not include development of new housing or other uses that could increase demand for public services or facilities; it would be implemented citywide through existing facilities. Because no new facilities or infrastructure are proposed, there is no potential for the proposed Project to affect emergency response times. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to Public Services. No further study of this environmental resource topic is required in this EIR.

3.13 Transportation

The Transportation topic refers mostly to the proposed Project's potential to generate traffic. For the assessment of potential traffic impacts, the proposed Project's potential to add vehicle trips to particular intersections, street segments, freeways, and along residential streets is analyzed. In addition, Project access, transit impacts, parking impacts, and construction period impacts are assessed.

3.13.1 Screening Criteria

3.13.1.1 Intersection Capacity

- Would the proposed Project generate and/or cause a diversion or shift of 500 or more daily trips or 43 or more p.m. peak hour vehicle trips on the street system?

3.13.1.2 Street Segment Capacity

- Would the proposed Project generate and/or cause a diversion or shift of 500 or more daily vehicle trips or 43 or more a.m. or p.m. peak hour trips?

3.13.1.3 Freeway Capacity

- Would the proposed Project add 150 or more one-way vehicle trips to a Congestion Management Program (CMP) mainline freeway monitoring segment during either the a.m. or p.m. peak hours?
- Would the proposed Project add 50 or more a.m. or p.m. peak hour trips to a freeway on- or off-ramp?

3.13.1.4 Neighborhood Intrusion Impacts

- Would the proposed Project generate more than 120 daily vehicle trips to a local residential street?

3.13.1.5 Project Access

- Would the proposed Project generate 500 or more daily trips or 43 or more vehicle trips during either the a.m. or p.m. peak hours?
- Is a Project driveway proposed on a major or secondary highway within 150 feet of an intersection with another major or secondary highway?
- Would a Project driveway intersect an on-street bicycle lane or cross a sidewalk in an area of high pedestrian activity?
- Can it be readily perceived that there are access risks or deficiencies associated with the adjoining street system due to curves, slopes, walls, or other barriers to adequate lines of sight?

3.13.1.6 Transit System Capacity

- Will an EIR be prepared for the proposed Project to evaluate potential transportation impacts?

3.13.1.7 Parking

- Would the proposed Project's proposed parking supply be less than that required by City code, including the LAMC, Transportation Specific Plan, or Interim Control Ordinance requirements, prior to applying for a variance, exemption, or amendment, if any apply to the proposed Project?
- If the proposed Project is located within the coastal zone (generally, 1,000 yards inland of the mean high tide line), would the proposed Project's proposed parking supply be less than that required by California Coastal Commission requirements?

3.13.1.8 In-Street Construction Impacts

- Would a project not exempted in Article VII of the City CEQA Guidelines require construction activities to take place within a major or secondary highway right-of-way, which would necessitate temporary lane, alley, or street closures for more than 1 day (including day and evening hours, and including overnight closures if on a residential street)?
- Would a non-exempt project require construction activities to take place within a collector or local street right-of-way, which would necessitate temporary lane, alley, or street closures for more than 7 days (including day and evening hours, and including overnight closures if on a residential street)?
- Would in-street construction activities result in the loss of regular vehicular or pedestrian access to an existing land use for more than 1 day, including day and evening hours and overnight closures if access is lost to residential units?
- Would in-street construction activities result in the temporary loss for more than 1 day of an existing bus stop or rerouting of a bus route that serves the Project site?

3.13.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-14, Transportation Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact related to Transportation from the proposed Project and therefore further study in this EIR is not required.

Table 3-14: Transportation Screening Analysis

Screening Criteria	Response
Intersection Capacity	
Would the proposed Project generate and/or cause a diversion or shift of 500 or more daily trips or 43 or more p.m. peak hour vehicle trips on the street system?	No. The proposed Project would provide funds to support spay/neuter of free-roaming cats and amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds. As a result, up to 20,000 vouchers would be available to support spay/neuter activities annually. For this analysis, it has been assumed that each spay/neuter voucher would generate seven one-way vehicle trips: 1) one trip to retrieve a trap and voucher from an LAAS animal services center, 2) one trip to set the trap, 3) one trip to take the intact trapped cat a participating spay and neuter clinic/veterinary hospital to drop it off for the spay/neuter procedure, 4) one return trip home, 5) one trip back to pick up the fixed cat, 6) one trip to return the animal to the environment and the trap to the LAAS animal services center, and 7) one return trip home. If each voucher would result in seven trips, then 20,000 vouchers would result in a total of 140,000 trips annually. These trips would occur throughout the City with destinations that would consist of participating veterinary hospitals, spay/neuter clinics, and mobile

Screening Criteria	Response
	spay/neuter clinics accepting these new spay/neuter vouchers. Assuming that spay/neuter facilities operate 6 days a week (Los Angeles animal services centers are closed on Mondays and most veterinary clinics in the City are open 6 or fewer days a week) and factoring in holidays, spay/neuter vouchers would generate trips during a 300-day year. As a result, the 20,000 spay/neuter vouchers would generate approximately 467 daily trips (140,000 one-way trips divided by 300 animal services center business days). The 467 daily trips can be conservatively anticipated to result from the provision of spay/neuter vouchers. Accordingly, the proposed Project would not generate or cause a diversion or shift of 500 or more daily trips on the street system. Trapping activities are anticipated to increase as an indirect result of the additional vouchers, education, and engagement with organizations that conduct TNR activities. As such, additional indirect vehicle trips associated with as many as 20,000 trapping events are anticipated and have been factored into the trip calculation discussed above.
Street Segment Capacity	
Would the proposed Project generate and/or cause a diversion or shift of 500 or more daily vehicle trips or 43 or more a.m. or p.m. peak hour trips?	No. As discussed, at most, the proposed Project would generate 467 daily trips distributed throughout the City to and from existing facilities that provide spay/neuter procedures as well as locations throughout the City where free-roaming cats are present. Accordingly, the proposed Project would not generate or cause a diversion or shift of 500 or more daily trips on a single street segment. Because these trips would be distributed throughout the City and users of the proposed vouchers would be able to redeem the vouchers at various veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics throughout the City, the trips would similarly be dispersed throughout the City rather than concentrated upon a particular street segment, roadway, or geography. While the availability of spay/neuter vouchers may result in the diversion of some trips to facilities that accept the vouchers, such a change would be minor and still below the 500 daily trip threshold identified in the screening criterion.

Screening Criteria	Response
Freeway Capacity	
Would the proposed Project add 150 or more one-way vehicle trips to a CMP mainline freeway monitoring segment during either the a.m. or p.m. peak hours?	No. As discussed, the proposed Project would add up to 467 daily trips throughout the City. While it is likely some proportion of these trips would use the City's freeways to travel to one of the destinations associated with the TNR program, including participating veterinary hospitals, spay/neuter clinics, or mobile spay/neuter clinics accepting these new spay/neuter vouchers, such trips would originate from disparate locations at disparate times such that there is no potential for a sustained increase in trips on a single CMP mainline freeway monitoring segment.
Would the proposed Project add 50 or more a.m. or p.m. peak hour trips to a freeway on- or off-ramp?	No. All trips associated with the proposed Project would be dispersed throughout the City and would utilize numerous on- and off-ramps throughout the City. Given the limited number of daily trips that could be generated by the proposed Project and the extensive area over which these trips would be distributed, there is no potential for the proposed Project to result in 50 additional peak hour trips on any single freeway on- or off-ramp.
Neighborhood Intrusion Impacts	
Would the proposed Project generate more than 120 daily vehicle trips to a local residential street?	No. The proposed Project would generate vehicle trips from areas throughout the City but would not result in a concentration of vehicle trips along any single residential street. Facilities that provide spay/neuter services are typically located in commercial or industrial areas that are well served by existing arterial streets rather than residential collectors. Furthermore, as discussed, the proposed Project would generate up to 467 daily trips throughout the City, which would be distributed among the participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics throughout the City. Therefore, there is no potential for the proposed Project to result in more than 120 daily vehicle trips to a single local residential street.
Project Access	
Would the proposed Project generate 500 or more daily trips or 43 or more vehicle trips during either the a.m. or p.m. peak hours?	No. As discussed, the proposed Project would generate up to 467 daily trips distributed throughout the City to and from participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers, which is well below the screening criterion of 500 daily trips. Accordingly, there is no potential for impacts on access related to increased traffic.

Screening Criteria	Response
Is a Project driveway proposed on a major or secondary highway within 150 feet of an intersection with another major or secondary highway?	No. The proposed Project would not construct any new facilities or associated infrastructure, including driveways. Therefore, there is no potential for a driveway associated with the proposed Project to be on a major or secondary highway within 150 feet of an intersection.
Would a Project driveway intersect an on-street bicycle lane or cross a sidewalk in an area of high pedestrian activity?	No. No driveways are proposed as part of the proposed Project. Therefore, there is no potential for a driveway to intersect an on-street bicycle lane or a sidewalk.
Can it be readily perceived that there are access risks or deficiencies associated with the adjoining street system due to curves, slopes, walls, or other barriers to adequate lines of sight?	No. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. Because all participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers are existing facilities, there are no potential new access risks or deficiencies that could result from the proposed Project.
Transit System Capacity	
Will an EIR be prepared for the proposed Project to evaluate potential transportation impacts?	No. This EIR provides detailed analysis for environmental topics that are most germane to the proposed Project. As described throughout Section 3.13, none of the screening criteria that address traffic or transportation impacts are answered with an affirmative; therefore, no additional analysis beyond this screening analysis is required because it is reasonably assumed that there is no potential for significant impacts related to transportation. Regarding transit, the proposed Project would not affect transit capacity because trips associated with the spay/neuter voucher program are unlikely to use transit due to the inconvenience of transporting cats on public transit.
Parking	
Would the proposed Project's proposed parking supply be less than that required by City code, including the LAMC, Transportation Specific Plan, or Interim Control Ordinance requirements, prior to applying for a variance, exemption, or amendment, if any apply to the proposed Project?	No. The proposed Project does not propose new facilities or associated parking, and there is no potential for a parking shortage. All facilities providing spay/neuter procedures are existing facilities, and no changes to existing parking supplies are proposed.

Screening Criteria	Response
If the proposed Project is located within the coastal zone (generally, 1,000 yards inland of the mean high tide line), would the proposed Project's proposed parking supply be less than that required by California Coastal Commission requirements?	No. The proposed Project is a citywide program, and portions of the City are within the Coastal Zone. The City would be served by existing participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers, and these facilities have existing parking. No new facilities or associated parking supplies are proposed as part of the proposed Project; therefore, there is no potential for the proposed Project to conflict with California Coastal Commission parking requirements.
In-Street Construction Impacts	
Would a project not exempted in Article VII of the City CEQA Guidelines require construction activities to take place within a major or secondary highway right-of-way, which would necessitate temporary lane, alley, or street closures for more than 1 day (including day and evening hours, and including overnight closures if on a residential street)?	No. The proposed Project would not result in any construction activities; therefore, no construction within a major or secondary highway right-of-way necessitating temporary lane, alley, or street closures would be required.
Would a non-exempt project require construction activities to take place within a collector or local street right-of-way, which would necessitate temporary lane, alley, or street closures for more than 7 days (including day and evening hours, and including overnight closures if on a residential street)?	No. As discussed, no construction activities would occur as a result of the proposed Project; therefore, no temporary lane, alley, or street closures would be required.
Would in-street construction activities result in the loss of regular vehicular or pedestrian access to an existing land use for more than 1 day, including day and evening hours and overnight closures if access is lost to residential units?	No. There would be no in-street construction activities associated with the proposed Project; therefore, no changes in access to existing land uses would occur.
Would in-street construction activities result in the temporary loss for more than 1 day of an existing bus stop or rerouting of a bus route that serves the Project site?	No. Because no construction activities are proposed as part of the proposed Project, there is no potential for the proposed Project to result in the temporary loss of an existing bus stop or rerouting of a bus route.

3.13.2.1 Vehicle Miles Traveled

In addition to the City's Thresholds Guide screening criteria, the City recently approved a CEQA Transportation Section Update on July 30, 2019, which addresses Senate Bill (SB) 743 (City of Los Angeles 2019b). SB 743 establishes vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts. The updated guidelines were not available during preparation of the transportation analysis; therefore, CEQA Guidelines Section 15064.3, which implements SB 743, served as the basis for the VMT discussion that follows. However, the VMT discussion below is consistent with the recently updated guidelines. Since the *L.A. CEQA Thresholds Guide* does not include screening criteria or significance criteria that account for VMT impacts, Section 15064.3 (b) provides the following factors for analyzing transportation impacts.

- **Land Use Projects.** VMT exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- **Transportation Projects.** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- **Qualitative Analysis.** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's VMT qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's VMT, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate VMT and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

No project-specific methodology has been established for the Proposed Citywide Cat Program. Additionally, the Citywide Cat Program is neither a land use project (Section 15064.3 [b][1]) nor a transportation project (Section 15064.3 [b][2]), and the considerations identified in the CEQA guidelines for qualitative analysis (Section 15064.3 [b][3])—including availability of transit, proximity to other destinations, and construction traffic—are not clearly applicable to the Program. The California Office of Planning and Research *2018 Technical Advisory on Evaluating Transportation Impacts in CEQA* provides the following general principle for the consideration of VMT:

> The VMT metric can support the three statutory goals: "the reduction of greenhouse gas emissions, the development of multimodal transportation networks, ***and*** a diversity of land uses." (Pub. Resources Code, § 21099, subd. (b)(1), emphasis added.) However, in order for it to promote and support all three, lead agencies should select a significance threshold that aligns with state law on all three. State law concerning the development of multimodal transportation networks and diversity of land uses requires planning for and prioritizing increases in complete streets and infill development, but does not mandate a particular depth of implementation that could translate into a particular threshold of significance. Meanwhile, the State has clear quantitative targets for GHG emissions reduction set forth in law and based on scientific consensus, and the depth of VMT reduction needed to achieve those targets has been quantified. Tying VMT thresholds to GHG reduction also supports the two other statutory goals. Therefore, to ensure adequate analysis of transportation impacts, OPR recommends using quantitative VMT thresholds linked to GHG reduction targets when methods exist to do so.

As no quantitative methodology exists for a program such as the Citywide Cat Program, the following discussion provides a qualitative discussion of the proposed Project's potential effects or support of the City's State-mandated GHG emissions reduction objectives, multimodal transportation development objectives, and land use diversity objectives.

The Citywide Cat Program involves implementation of a modified TNR program to address the free-roaming cat population, incentives to encourage individuals to spay/neuter their cats, and revisions to the City's administrative and municipal codes. No effect on transit availability or accessibility would result from the proposed Project, and all spay/neuter activities associated with the Project would be conducted at existing facilities. The proposed spay/neuter vouchers would be accepted at participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics distributed throughout the City. Since the spay/neuter procedure is a singular event, no repeat trips would result from the Program for any individual and trips would function as destination-style trips from home to the spay/neuter facility and back. Given the wide distribution of facilities throughout the City, it is assumed that a spay/neuter trip would be no longer than 10 miles in distance and the Program would not induce such trips but rather would facilitate the ease of procuring spay/neuter procedures by making it widely available and affordable. The mobile spray/neuter clinics and trapping activities are ephemeral in nature, and no long-term investments in housing or transportation infrastructure are proposed that would prevent the City from achieving State-mandated VMT or GHG reductions. As discussed in Section 3.15, Greenhouse Gas Emissions, the Proposed Project would not exceed any SCAQMD GHG thresholds or conflict with any plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The intent of the Project is the reduction of the City's free-roaming cat population, and the spaying/neutering cats could have long-term beneficial effects on VMT and GHG emissions because a smaller cat population would require fewer veterinary trips, less consumption of resources needed to support cats, and reduced demand on the City's animal service providers. Accordingly, the Proposed Project would have a less-than-significant impact related to VMT. No further study of this environmental resource topic is required in this EIR.

3.13.3 Conclusion

As discussed in Table 3-14, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Transportation as a result of implementation of the proposed Project. Existing animal services centers would serve the City with spay/neuter services, and the proposed Project does not include development of new trip-generating uses. While the proposed Project could generate up to 467 daily trips throughout the City due to the provision of up to 20,000 spay/neuter vouchers, such an increase would be minor relative to the entire City and therefore would not result in a significant impact on traffic conditions. Given the outcome of the screening analysis, there is no potential for impacts related to Transportation. No further study of this environmental resource topic is required in this EIR.

3.14 Public Utilities

The Public Utilities analysis reviews potential impacts on water, wastewater, solid waste, and energy utilities, per the discussion presented in the *L.A. CEQA Thresholds Guide*. In general, impacts on Public Utilities stem from growth that exceeds existing service capacities, which may require the construction of new or expanded infrastructure to continue service.

3.14.1 Screening Criteria

3.14.1.1 Water

- Would implementation of the proposed Project cause the Community Plan area to exceed the projected growth in population, housing, or employment for the year of Project occupancy/buildout?
- Would the proposed Project's water consumption require the construction of additional off-site water infrastructure?

3.14.1.2 Wastewater

1. Would the proposed Project produce wastewater flows greater than existing flows in an area shaded on Exhibits M.2-2 through M.2-11 presented in the *L.A. CEQA Thresholds Guide*?
- Would the proposed Project produce a new or increased average daily wastewater flow of 4,000 gallons per day or more, regardless of location?
- Does the proposed Project include a change in land use limitations (such as a zone change, variance, or General Plan amendment), which could allow greater average daily flows than could be produced following the current land use limitations?

3.14.1.3 Solid Waste

- Would implementation of the proposed Project result in solid waste generation of 5 tons or more per week?

3.14.1.4 Energy

- Would the proposed Project design or operation conflict with adopted energy conservation plans or policies of the City, or exceed the growth anticipated in the applicable Community Plan?
- Would the proposed Project result in the need for new (off-site) energy supply facilities, or major capacity-enhancing alterations to existing facilities?

3.14.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-15, Public Utilities Systems Screening Analysis. As discussed, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would normally be no significant impact related to Public Utilities from the proposed Project and therefore further study in this EIR is not required.

Table 3-15: Public Utilities Systems Screening Analysis

Screening Criteria	Response
Water	
Would implementation of the proposed Project cause the Community Plan area to exceed the projected growth in population, housing, or employment for the year of Project occupancy/buildout?	No. No housing or changes in land use are proposed as part of the proposed Project such that additional population would be added to a Community Plan area or the City at large. There is no potential for the proposed Project to result in population growth that

Screening Criteria	Response
	would exceed projected growth in population, housing, or employment.
Would the proposed Project's water consumption require the construction of additional off-site water infrastructure?	No. The proposed Project would be implemented through existing animal services centers, animal welfare organizations, and veterinary clinics that already have water supplies. While the likely increase in surgeries citywide may result in some increase in water consumption, the increase is anticipated to be minor relative to existing water usage at these facilities. There would be no need for additional off-site water infrastructure.
Wastewater	
Would the proposed Project produce wastewater flows greater than existing flows in an area shaded on Exhibits M.2-2 through M.2-11 presented in the *L.A. CEQA Thresholds Guide*?	No. The proposed Project would not construct new facilities or alter the use of existing facilities such that wastewater flows could increase beyond existing flows in the shaded areas of exhibits M.2-2 through M.2-11 of the *L.A. CEQA Thresholds Guide*.
Would the proposed Project produce a new or increased average daily wastewater flow of 4,000 gallons per day or more, regardless of location?	No. While the proposed Project would lead to an increase in spay/neuter surgeries throughout the City, daily wastewater flow resulting from this increase in surgeries would be well below 4,000 gallons per day. The proposed Project would be served by existing animal services centers, participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers. The proposed Project would have little or no effect on existing wastewater flows from these facilities.
Does the proposed Project include a change in land use limitations (such as a zone change, variance, or General Plan amendment), which could allow greater average daily flows than could be produced following the current land use limitations?	No. While the proposed Project would amend the LAMC to redefine "cat kennel," no changes to allowable daily wastewater flows are proposed and there is no potential for this amendment to result in increased wastewater flows.
Solid Waste	
Would implementation of the proposed Project result in solid waste generation of five tons or more per week?	No. As discussed, the proposed Project would be served by existing facilities that already produce solid waste. While there is potential for some increase in solid waste generation to result from the increase in surgeries performed annually, this increase would be minor given the relatively small amount of solid waste produced from spay/neuter procedures. It would not result in generation of five tons or more of solid waste per week under the proposed Project.
Energy	
Would the proposed Project design or operation conflict with adopted energy conservation plans or policies of the City, or exceed the growth anticipated in the applicable Community Plan?	No. The proposed Project does not include any design elements or new operations that could conflict with energy conservation plans or policies. It also would not exceed population growth anticipated in the Community Plans across the City.

Screening Criteria	Response
Would the proposed Project result in the need for new (off-site) energy supply facilities, or major capacity-enhancing alterations to existing facilities?	No. The proposed Project does not include any new facilities or uses that would consume additional energy beyond existing conditions. There would be no need for new off-site energy supply facilities or other capacity enhancements.

3.14.3 Conclusion

As discussed in Table 3-15, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Public Utilities as a result of implementation of the proposed Project. The proposed Project would not introduce new structures or have any potential for growth such that utility service capacity would be affected. Existing facilities through which the proposed Project would be implemented would use water and energy and generate wastewater and solid waste, but the amounts would be nominal. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to Public Utilities. No further study of this environmental resource topic is required in this EIR.

3.15 Greenhouse Gas Emissions

CEQA requires that lead agencies consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. GHG emissions adversely affect the environment through contributing, on a cumulative basis, to global climate change. In turn, global climate change will increase sea levels, which can inundate low-lying areas; affect rain and snow fall patterns, leading to changes in water supply; exacerbate the intensity of storms and other extreme weather, endangering human life and infrastructure; and increase temperatures, leading to adverse effects on public health, agriculture, habitats, and biological and other resources. Therefore, GHG emissions require consideration in CEQA documents.

3.15.1 Screening Criteria

The *L.A. CEQA Thresholds Guide* does not provide guidance for the review of GHG emissions; consequently, there are no screening criteria available. Therefore, the State CEQA Guidelines Appendix G checklist questions serve as the criteria used in this screening analysis. In accordance with Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to GHG emissions are below.

- Would the proposed Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the proposed Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

3.15.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-16, Greenhouse Gas Emissions Screening Analysis. While there are no screening criteria for this topic, similar to previous topics, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would be no significant impact related to GHG emissions from the proposed Project and therefore further study in this EIR is not required.

Table 3-16: Greenhouse Gas Emissions Screening Analysis

Screening Criteria	Response
Would the proposed Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	No. As discussed in Section 3.3, Air Quality, the proposed Project has the potential to generate up to 467 daily trips throughout the City. These vehicle trips would involve travel to and from participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics for spay/neuter of free-roaming cats. Emissions of GHGs that would be generated by the proposed Project were quantified by applying the emissions factors from CARB's EMFAC2017 (v1.0.2) model to the assumed annual trips that would result from the provision of 20,000 new spay/neuter vouchers. Assuming the annual number of trips generated by the provision of these vouchers would be 140,000 trips, the total GHG emissions as a result of implementation of the proposed Project were estimated to be 421.8 metric tons of carbon dioxide per year ($MTCO_2e$), which is well below the SCAQMD Draft Interim Significance Threshold of 3,000 $MTCO_2e$ (SCAQMD 2008). The potential trips generated by the proposed Project would not produce GHG emissions that would exceed established thresholds. The proposed Project does not include any site preparation or construction activities and therefore would not result in substantial emissions related to construction work.

Screening Criteria	Response
Would the proposed Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	No. Regional and local GHG reduction plans include, but are not limited to, the Southern California Association of Governments 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy, the City's Mobility Plan, and the City's General Plan Framework Element. GHG reductions were reviewed for consistency with the proposed Project, and no specific strategies were determined to be applicable to the Citywide Cat Program. GHG reduction plans typically focus on energy efficiency and mobile source emission. As discussed below in Section 3.19, Energy, operation of the proposed Project would consist of implementation of the Modified TNR program, which would result in some increase in the use of gasoline from traveling to obtain spay and neuter services. Spay and neuter facilities that would serve the City are all existing facilities that already conduct spay and neuter procedures on a regular basis. The increase in gasoline use would be modest relative to the City's overall animal services centers' and other existing facilities' operations energy consumption. In addition, as discussed above, GHG emissions would not exceed the SCAQMD Draft Interim Significance Threshold of 3,000 $MTCO_2e$. There is no potential for the proposed Project to interfere with implementation of GHG emission reduction plans. The proposed Project does not include any standards or development that could conflict with applicable plans, policies, or regulations related to reducing emissions of GHGs. Appendix F provides further detail regarding the Project's consistency with applicable plans, policies, or regulations for the purpose of reducing the emission of GHGs.

3.15.3 Conclusion

As discussed in Table 3-16, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with GHG emissions as a result of implementation of the proposed Project. The proposed Project would not result in construction emissions because no construction activities are proposed. Operation of the proposed Project would not result in a potentially significant impact because, as discussed in the screening analysis, the potential addition of trips from the availability of spay/neuter vouchers would not result in substantial GHG emissions that would exceed SCAQMD thresholds. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to GHG emissions. No further study of this environmental resource topic is required in this EIR.

3.16 Tribal Cultural Resources

This section provides an assessment of potential impacts on Tribal Cultural Resources that could result from the proposed Project. The analysis in this section is based on the results of consultation with California Native American Tribes conducted by the City for the proposed Project, as required by CEQA as amended by Assembly Bill (AB) 52. Native American consultation materials are provided in Appendix G of this Draft EIR.

AB 52 was signed into law on September 25, 2014. It requires lead agencies to evaluate a project's potential to affect Tribal Cultural Resources and establishes a consultation process for California Native American Tribes as part of CEQA. Tribal Cultural Resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources. AB 52 also gives lead agencies the discretion to determine whether a resource qualifies as a Tribal Cultural Resource on the basis of criteria for listing in the California Register of Historical Resources. The lead agency must support such a determination with substantial evidence. Written notice of a proposed Project and a 30-day window to request consultation is to be provided to a California Native American Tribe that has previously requested it and that is traditionally and culturally affiliated with the geographic area of a proposed project.

As presented in Appendix G, prior to circulation of the Notice of Preparation (NOP) on August 31, 2017, the City submitted a request to the Native American Heritage Commission (NAHC) for a CEQA Tribal Consultation List pursuant to AB 52 for the proposed Project. On May 26, 2017, the City sent a formal notice to the California Native American Tribes identified by NAHC, as well as others with a potential interest in the Project, informing them of the City's decision to undertake the proposed Project and requesting a response from the Tribes within 30 days if they wanted to consult on the Project (see Appendix G). One response was received and is maintained in a confidential appendix to this EIR pursuant to AB 52 requirements and PRC 21082.3.

3.16.1 Screening Criteria

The *L.A. CEQA Thresholds Guide* does not provide guidance for the review of Tribal Cultural Resources; consequently, there are no screening criteria available. Therefore, the State CEQA Guidelines Appendix G checklist questions serve as the criteria used in this screening analysis. In accordance with Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to Tribal Cultural Resources are below.

The proposed Project could have a significant impact if it would:

- Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
    - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
    - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the

Public Resources Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

3.16.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-17, Tribal Cultural Resources Screening Analysis. While there are no screening criteria for this topic, similar to previous topics, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would be no significant impact on Tribal Cultural Resources from the proposed Project and therefore further study in this EIR is not required.

Table 3-17: Tribal Cultural Resources Screening Analysis

Screening Criteria	Response
Would the proposed Project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	
Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	No. As discussed, the proposed Project is a citywide program that would not result in any development, construction, or alterations to existing uses such that a Tribal Cultural Resource eligible for listing in the California Register of Historical Resources could be affected. Based on consultation activities conducted for the proposed Project in accordance with AB 52, the Tongva Ancestral Territorial Tribal Nation (TATTN) identified certain biological resources to be part of the tribe's cultural resources. The conclusion from the tribal cultural resources analysis herein that the proposed Project does not result in significant impacts or require mitigation is consistent with the tribal consultation conducted. Appendix G documents AB 52 consultation and provides the correspondence with tribal representatives in accordance with AB 52 requirements. In addition, pursuant to AB 52 requirements and PRC 21082.3, one response received from a tribe is being maintained in a confidential appendix.
A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	No. The City has not identified any new Tribal Cultural Resources that could be affected by the proposed Project. Consultation with tribal representatives carried out in accordance with Public Resources Code Section 5024.1 has also not identified any Tribal Cultural Resources that may be adversely affected by the proposed Project, and such analysis is consistent with the tribal consultation conducted.

3.16.3 Conclusion

As discussed in Table 3-17, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Tribal Cultural Resources as a result of implementation of the proposed Project. The proposed Project would not result in any construction activities that could affect unknown or buried Tribal Cultural Resources. As discussed in the screening analysis, consistent with the tribal consultation with the TATTN, the proposed Project would not result in any significant impacts on tribal cultural resources. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for significant impacts related to Tribal Cultural Resources. No further study of this environmental resource topic is required in this EIR.

3.17 Energy

The Energy analysis reviews potential impacts related to energy conservation per Appendix G of the CEQA Guidelines. Impacts related to Energy consist of impacts on the environment resulting from wasteful consumption of energy and conflicts with state or local plans for renewable energy or energy efficiency.

3.17.1 Screening Criteria

The *L.A. CEQA Thresholds Guide* does not provide guidance for the review of Energy; consequently, there are no screening criteria available. Therefore, the State CEQA Guidelines Appendix G checklist questions serve as the criteria used in this screening analysis. In accordance with Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to Energy are below.

- Would the proposed Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- Would the proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

3.17.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-18, Energy Screening Analysis. While there are no screening criteria for this topic, similar to previous topics, a "yes" response warrants further study and more detailed analysis, while a "no" response indicates that there would be no significant impact related to Energy from the proposed Project and therefore further study in this EIR is not required.

Table 3-18: Energy Screening Analysis

Screening Criteria	Response
Would the proposed Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No. As discussed, the proposed Project is a citywide program that would not result in any development, construction, or alterations to existing uses such that energy consumption would increase substantially. As no construction activities would take place, there is no potential for inefficient or wasteful use of energy from construction activities. Operation of the proposed Project would consist of implementation of the Modified TNR program, which would result in some increase in the use of gasoline from traveling to obtain spay and neuter services. Spay and neuter facilities that would serve the City are all existing facilities that already conduct spay and neuter procedures on a regular basis. The increase in gasoline use would be modest relative to the City's overall animal services centers' operation's energy consumption. The proposed Project does not involve any characteristics or processes that would require the use of equipment that would be more energy intensive than is used for comparable activities. Additionally, the project would not involve the use of equipment that would not conform to current emissions standards and related fuel efficiency standards. Accordingly, there is no potential for significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. Appendix H provides more detailed discussion of potential energy consumption posed by the project, consistent with Appendix F of the State CEQA Guidelines.
Would the proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No. The City recently adopted the 2019 Green New Deal pLAn, which is an update to the City's 2015 Sustainability pLAn. The plan seeks to achieve carbon neutrality by 2050 through a variety of strategies, including expanding energy efficient building programs and increasing the City's renewable energy portfolio. Since the proposed Project consists of implementation of a Modified TNR program and does not propose new development of infrastructure or other facilities, the proposed Project does not include any features (i.e., substantial energy demands) that will interfere with implementation of the 2019 Green New Deal pLAn.

3.17.3 Conclusion

As discussed in Table 3-18, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Energy as a result of implementation of the proposed Project. The proposed Project would not result in any construction activities that would consume energy. As discussed in the screening analysis, while some increase in the use of gasoline is anticipated, the increase would be consistent with existing City services and would be minimal. No aspects of the proposed Project would conflict with the City's 2019 Green New Deal pLAn. Given the lack of physical improvements associated with the proposed Project and outcome of

the screening analysis, there is no potential for significant impacts related to Energy. No further study of this environmental resource topic is required in this EIR.

3.18 Wildfire Hazards

According to the State CEQA Guidelines, the evaluation of this topic involves analysis of the ability of fire personnel to adequately serve the existing and future population of the project site, as well as federal, state, and local regulations regarding wildfire. Wildfire Hazards represents a hazard where development is adjacent to open space or close to wildland fuels or designated fire severity zones. A variety of activities, operations, and projects could exacerbate wildfire response times as well as expose people to wildfire hazard risk.

3.18.1 Screening Criteria

The *L.A. CEQA Thresholds Guide* does not provide guidance for the review of Wildfire Hazards; consequently, there are no screening criteria available. Therefore, the State CEQA Guidelines Appendix G checklist questions serve as the criteria used in this screening analysis. In accordance with Appendix G of the State CEQA Guidelines, the applicable thresholds of significance with regard to Wildfire Hazards are below.

- Would the proposed project substantially impair an adopted emergency response plan or emergency evacuation plan?
- Would the proposed project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?
- Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

3.18.2 Screening Analysis

The screening analysis for this topic is provided below in Table 3-19, Wildfire Hazards Screening Analysis. As discussed, a “yes” response warrants further study and more detailed analysis, while a “no” response indicates that there would normally be no significant impact on Wildfire Hazards from the proposed Project and therefore further study in this EIR is not required.

Table 3-19: Wildfire Hazards Screening Analysis

Screening Criteria	Response
Emergency Response Plan or Emergency Evacuation Plan	
Would the proposed project substantially impair an adopted emergency response plan or emergency evacuation plan?	No. The proposed Project does not pose new risks or hazards that would require a new or revised emergency response plan or emergency evacuation plan. Spay/neuter operations currently occur throughout the City. They are routine procedures with no potential to result in emergencies or fire hazards to humans, and they would continue to occur with implementation of the proposed Project. Furthermore, the proposed Project does not include construction of new facilities that could impair an adopted emergency response plan or emergency evacuation plan.
Exacerbate Wildfire Risks	
Would the proposed project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats, amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel, implementation of a modified TNR program that includes TNR-related community education and outreach and collaboration with TNR organizations, publishing and implementation of program guidelines and ecological conservation measures, and creation of a City of LA WCP. The proposed Project does not include construction of new facilities or infrastructure and would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
Infrastructure	
Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?	No. As discussed, the proposed Project does not involve the construction of infrastructure. It would be implemented citywide through existing state-licensed facilities such as the City's animal services centers, participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics accepting these new spay/neuter vouchers, and this would not exacerbate fire risk.
Exposure Post-Fire	
Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No. The proposed Project does not include new facilities or operations that expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Spay/neuter operations currently occur throughout the City. They are routine procedures with no potential to expose people or structures to significant wildfire hazard risks.

3.18.3 Conclusion

As discussed in Table 3-19, all screening criteria received "no" responses, indicating that there would normally be no significant impacts associated with Wildfire Hazards as a result of implementation of the proposed Project. The proposed Project would not introduce new structures or require construction activities that could exacerbate wildfire hazards and risks. The proposed Project would be implemented through the existing animal services centers, which are subject to typical wildfire hazards experienced throughout the City. None of these centers are in areas where unusual wildfire hazards exist. Given the lack of physical improvements associated with the proposed Project and outcome of the screening analysis, there is no potential for impacts related to Wildfire Hazards. No further study of this environmental resource topic is required in this EIR.

Chapter 4
Environmental Impact Analysis

4.1 Introduction to the Analysis

This chapter presents detailed environmental setting and impacts analyses for the environmental resources that were identified in Chapter 3, *Screening Analysis,* as requiring further study in the EIR:

- Biological resources
- Hazards (public health)
- Water resources (surface water quality)

For each of these resources, the screening analysis identifies specific subtopics with the potential for significant impacts from the proposed Project. Accordingly, the detailed impacts analysis uses only those significance thresholds from the City of Los Angeles' (City's) 2006 *L.A. CEQA Thresholds Guide: Your Resource for Preparing CEQA Analyses in Los Angeles* (*L.A. CEQA Thresholds Guide*) that are relevant to the specific subtopic areas (listed in parenthesis for each environmental resource above) that were identified as having the potential to have significant impacts as a result of the proposed Project. The biological resources analyses use all of the significance thresholds from the *L.A. CEQA Thresholds Guide* to determine the significance of environmental impacts from the proposed Project.

The following sections in this chapter provide an overview of the format and approach to the environmental impacts analysis to provide the reader with context.

4.1.1 Format of the Environmental Analysis

Each of the environmental resource sections presented in this chapter contain the following subsections:

- **Regulatory Framework.** This subsection describes the relevant laws and regulations that apply to the environmental resource in the proposed Project area and the governmental agencies responsible for enforcing those laws and regulations.
- **Environmental Setting.** This subsection presents a description of the baseline physical environmental conditions in the vicinity of the proposed Project with respect to the environmental resource topics. The proposed Project does not include any direct physical changes to the environment. It involves provision of funds to support the spay/neuter of free-roaming cats with 20,000 spay/neuter vouchers and accompanying sterilization surgeries; amendments to the *City of Los Angeles Administrative Code* (LAAC) to broaden the permitted use of Animal Sterilization Funds and to the *City of Los Angeles Municipal Code* (LAMC) regarding the definition of a cat kennel; implementation of a modified trap, neuter, and return (TNR) program that includes TNR-related community education and outreach and collaboration with TNR organizations; publishing and implementation of program implementation guidelines and ecological conservation measures; and creation of a City of LA Working Cat Program. To provide full environmental context to the reader and provide a clear understanding of how the proposed Project would affect the environment, a description of baseline effects of domestic cats on the environment with a focus on the environmental resources is analyzed in detail in this chapter.

These existing effects are presented at an appropriate level of detail to provide environmental context and to allow the reader to understand the impact analysis. Baseline environmental conditions are the physical conditions that existed at the time of publication of the proposed Project's Notice of Preparation (NOP), which was published on August 31, 2017.

- **Environmental Impact Analysis.** This subsection evaluates the potential for the proposed Project to adversely affect the physical environment described in the environmental setting or adversely change the baseline effects of domestic cats on the environment. Significance criteria for evaluating environmental impacts are defined for each impact analysis and taken from the *L.A. CEQA Thresholds Guide*. As noted above, only the significance thresholds that are relevant to the specific subtopics identified for each environmental resource as needing further study in the EIR are used in the impact analysis. The impact analysis concludes by determining the significance of the respective impacts from the proposed Project.

4.1.2 Approach to the Environmental Setting and Environmental Impact Analysis

The proposed Project would be implemented by the Department of Animal Services (Department; LAAS), principally through the City's six animal services centers.

To specifically understand how the proposed Project would affect the environmental resources in the study area, it is important to first present a comprehensive discussion of the existing effects of domestic cats on the environment, which are documented extensively in published scientific literature and other studies. Where feasible and as supported by substantial evidence,[1] a discussion of these existing effects specific to the study area is presented in the EIR. A comprehensive literature review was undertaken to identify, screen, review, and summarize the effects of free-roaming cats on the environment as relevant to the CEQA environmental resources that require further study in this EIR, namely, biological resources, water resources (surface water quality), and hazards (public health considerations). Section 4.1.2.1 below summarizes the literature review approach, and Appendix I presents the detailed literature review approach and findings that support the biological resources environmental setting and environmental impacts analysis presented in this EIR.

It is reasonable to assume that most of the environmental effects of free-roaming cats are directly tied to their population size (i.e., they are density-dependent). Therefore, any change in the population dynamics of free-roaming cats as a result of the proposed Project in the study area could accordingly change the existing effects of domestic cats on environmental resources.

To provide additional context on the effects of free-roaming cats on the environment and how the proposed Project and its elements could affect the environment, domestic cat population dynamics modeling was conducted to show how the population of free-roaming cats would likely change under the proposed Project conditions over the 30-year horizon period chosen for impacts analysis in this EIR. A future baseline without project was also modeled to show the likely population dynamics without implementation of the proposed Project. This allows for a comparison of the free-roaming cat population under the proposed Project at the end of 30 years—and at various points in between—to the baseline conditions (free-roaming cat population in 2017) as required under CEQA. (See Appendix J for details on the population dynamics modeling.)

[1] State CEQA Guidelines 15384 (b). SUBSTANTIAL EVIDENCE. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

The literature review and the population dynamics modeling would provide full environmental context and disclosure to allow decision makers to clearly see and understand the existing effects of domestic cats on the environment and how they would change under the proposed Project.

4.1.2.1 Literature Review

Extensive systematic literature search, screening, and review were conducted to identify primary literature informative to the CEQA analysis presented in this EIR, with a focus on the natural biological environment. Because of the large amount of scientific literature related to the potential impacts of domestic cats on the natural environment, a systematic literature search, screening, and review were warranted to ensure comprehensive identification and compilation of information pertaining to this broad topic and ensure an unbiased, inclusive, and scientifically robust compilation of information on the topic.

Appendix I provides a detailed discussion of the approach, methods, and results of this literature review; a brief summary is presented here for the reader.

Published peer-reviewed literature related to 1) domestic cats and 2) ecology, wildlife, plants, habitats, imperiled species, migration and corridors, TNR, feline diseases and parasites, predation, competition, population dynamics, spatial distribution, and owned status of cats was obtained using a variety of academic science literature databases. A high-level overview of the steps is presented below. For the literature review process, analysts:

1. Gathered and compiled references in EndNote.
2. Filtered reference data using the ICF proprietary Document Classification and Topic Extraction Resource (DoCTER®) keyword-based filter, using a list of keyword filters compiled by a group of experts in CEQA, domestic cats, and wildlife ecology.
3. Analyzed the filtered reference data and prioritized using DoCTER® machine learning and natural language processing tool.
4. Analyzed and prioritized reference data, which were then screened (with a focus on titles and abstracts) using ICF's proprietary online litstream™ tool. Potentially relevant references were identified during screening and then fully reviewed.

Pertinent information and findings from full-text reviews fundamentally inform the environmental setting and environmental impacts approach used in this EIR, including specifically domestic cat ecology, environmental setting and impacts analysis approach for the environmental resources analyzed in detail in this chapter, the population dynamics model parameters and design assumptions, and the discussion of spatial distribution characteristics of free-roaming cats in the study area. Please see Appendix I for a detailed account of the methods described.

Focused literature searches were conducted to assess potential environmental impacts of domestic cats related to water quality and public health, especially focused on zoonotic diseases to inform the environmental setting for water resources and impacts analysis for hazards (public health). In addition, literature gathered from secondary citations, focused supplemental searches, and public scoping comment letters was also reviewed and incorporated into this chapter.

4.1.2.2 Estimated Spatial Distribution of Free-Roaming Cats in the Study Area

While there are no published population estimates for the number and distribution of free-roaming cats in the City, available data and information allow the potential distribution of free-roaming cats in the study area to be estimated. An estimate of the baseline distribution of free-roaming cats in the study area allows greater understanding of the potential effects of free-roaming cats on environmental resources in regional and localized settings. This also provides greater environmental context and allows evaluation of how the population and environmental effects would change under the proposed Project, using cat population dynamics modeling described in Section 4.1.2.4 below and Appendix J. Note that other methods exist for estimating the free-roaming cat population and distribution in the study area; however, the City has determined that the approach included in this EIR is backed by substantial evidence.

In order to establish a CEQA baseline for the existing free-roaming cat population in the study area, data on free-roaming cat density were compiled as part of the literature review. This data found that densities of free-roaming cats vary as a function of land cover type because of the varying availability in food, prey, water, cover, and shelter (see Appendix K for tabulated data and associated references). Land cover types with reported free-roaming cat densities generally included agriculture, open/open vegetated land, scrublands, trees/woodlands, and urban/suburban areas. Based on the literature review, the estimated mean free-roaming cat density in the City ranges from a high density of approximately 0.98 cat per acre in developed areas to a low density of approximately 0.05 cat per acre in agricultural areas. Table 4.1-1 summarizes the estimated mean free-roaming cat density as a function of land cover type. These density values were multiplied by land cover type acreages in the city (see the first column in Table 4.1-1) to produce Figure 4.1-1 and values reported in Table 4.1-1. Figure 4.1-1 depicts the estimated spatial distribution of estimated free-roaming cat densities across the study area. Using these estimated free-roaming cat density values and citywide land cover data, the total free-roaming cat population in the study area has been estimated to be approximately **226,970** cats.

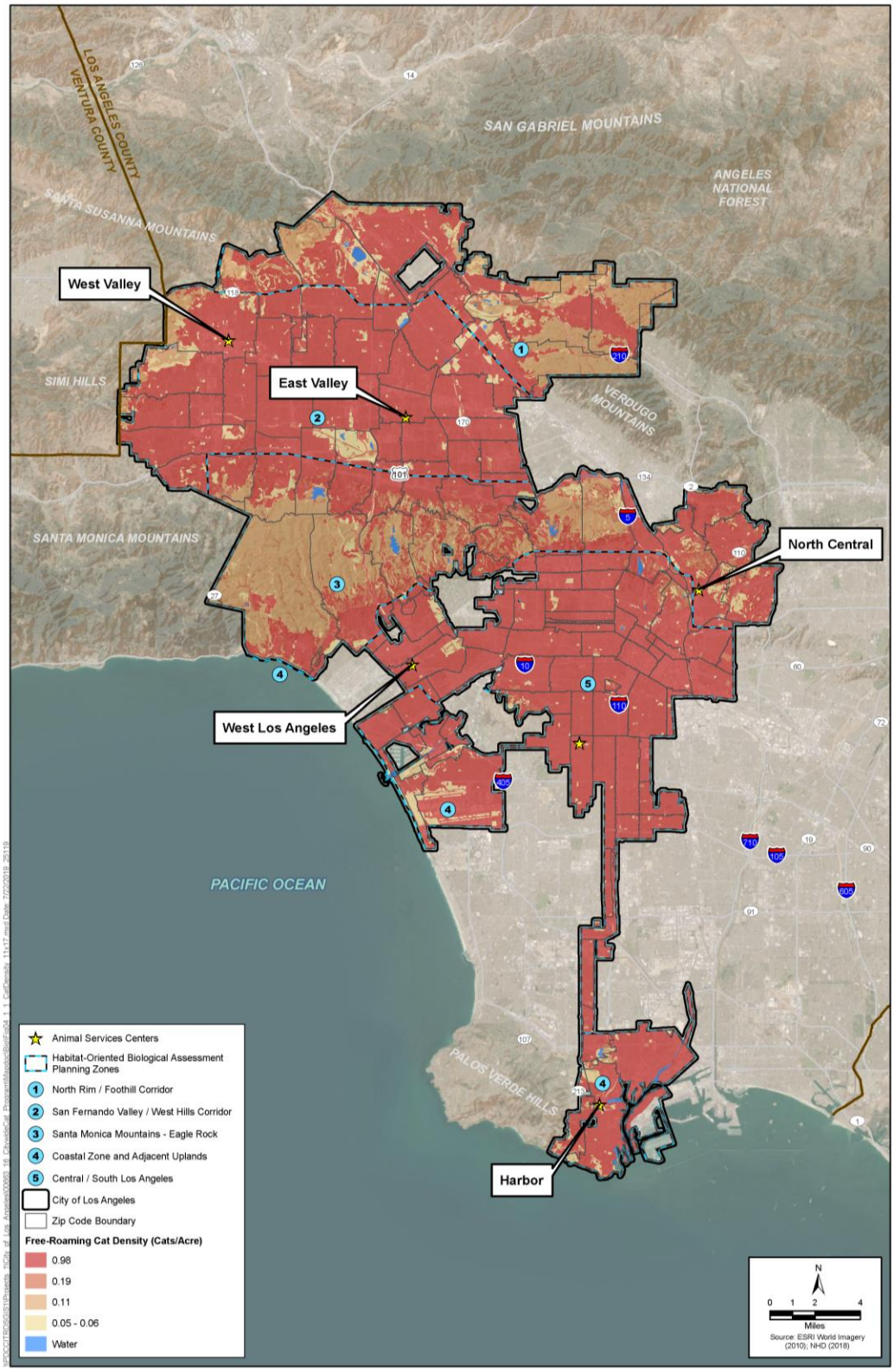


Figure 4.1-1
City of Los Angeles Estimated Free-Roaming Cat Density
Citywide Cat Program

Table 4.1-1: Estimated Density of Free-Roaming Cats

Land Cover Type in Study Area	Summary of Land Cover Type Acres in Study Area[a]	Estimated Free-Roaming Cat Density by Land Cover Type (free-roaming cats/acre)[b]	Estimated Free-Roaming Cat Density in Study Area (cats/total land cover type)
Agriculture	863.50	0.05	39.38
Open/open vegetated	18,571.50	0.06	1,050.45
Scrublands	43,288.42	0.11	4,957.65
Trees/woodlands	15,480.35	0.19	2,928.37
Urban/suburban	221,872.13	0.98	217,994.63
Estimated total free-roaming cat population in study area based on land cover type and cat density	226,970		

Notes: Input values are rounded to the nearest hundredth for presentation purposes. As a result, the presented density estimate values are not exact.

[a] U.S. Forest Service 2018.

[b] Methods, data sources, and calculations support these values are presented in Appendix K, Table K-1 and K-2.

4.1.2.3 Cat Trapping Permit Applications and Free-Roaming Cat Complaints Data

Input received during the scoping comment period suggested using cat trapping permit data and free-roaming cat complaints data from LAAS as methods to develop an estimate of the distribution of free-roaming cats in the City. Taking this into consideration and to assess if this approach would serve as a feasible method to accurately understand the spatial distribution of free-roaming cats in the City, cat trapping permit data tied to cat trapping permit applications that were received by the City from April 2015 to April 2017 were reviewed and analyzed for completion, summarized as number of permits issued by zip code over the 2-year period, and then depicted on a map of the City with cat trap permit density data ranging from none or low (1 to 5 cat trapping applications) to high (22 cat trapping applications) by zip code (Figure 4.1-2). Similarly, free-roaming cats complaints data as documented in the LAAS Chameleon system for the similar time period were reviewed, analyzed, and summarized as number of calls received by zip code over the 2-year period. They were then depicted on a map of the City with cat complaints density data ranging from none or low (1-10 calls), to high (100+ calls) by zip code (Figure 4.1-3).

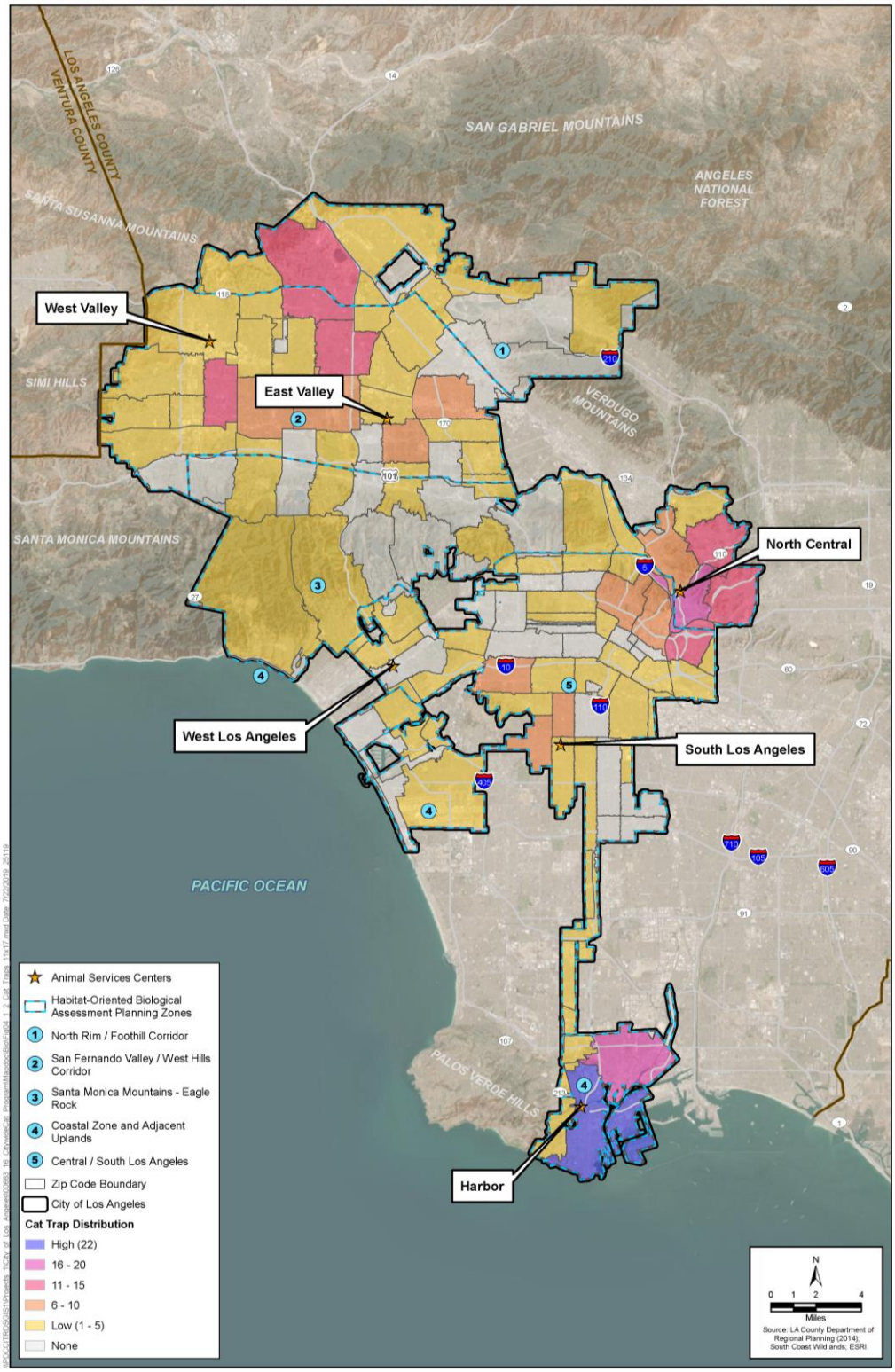


Figure 4.1-2
City of Los Angeles Animal Services Cat Trap Permit Applications (April 2015-April 2017)
Citywide Cat Program

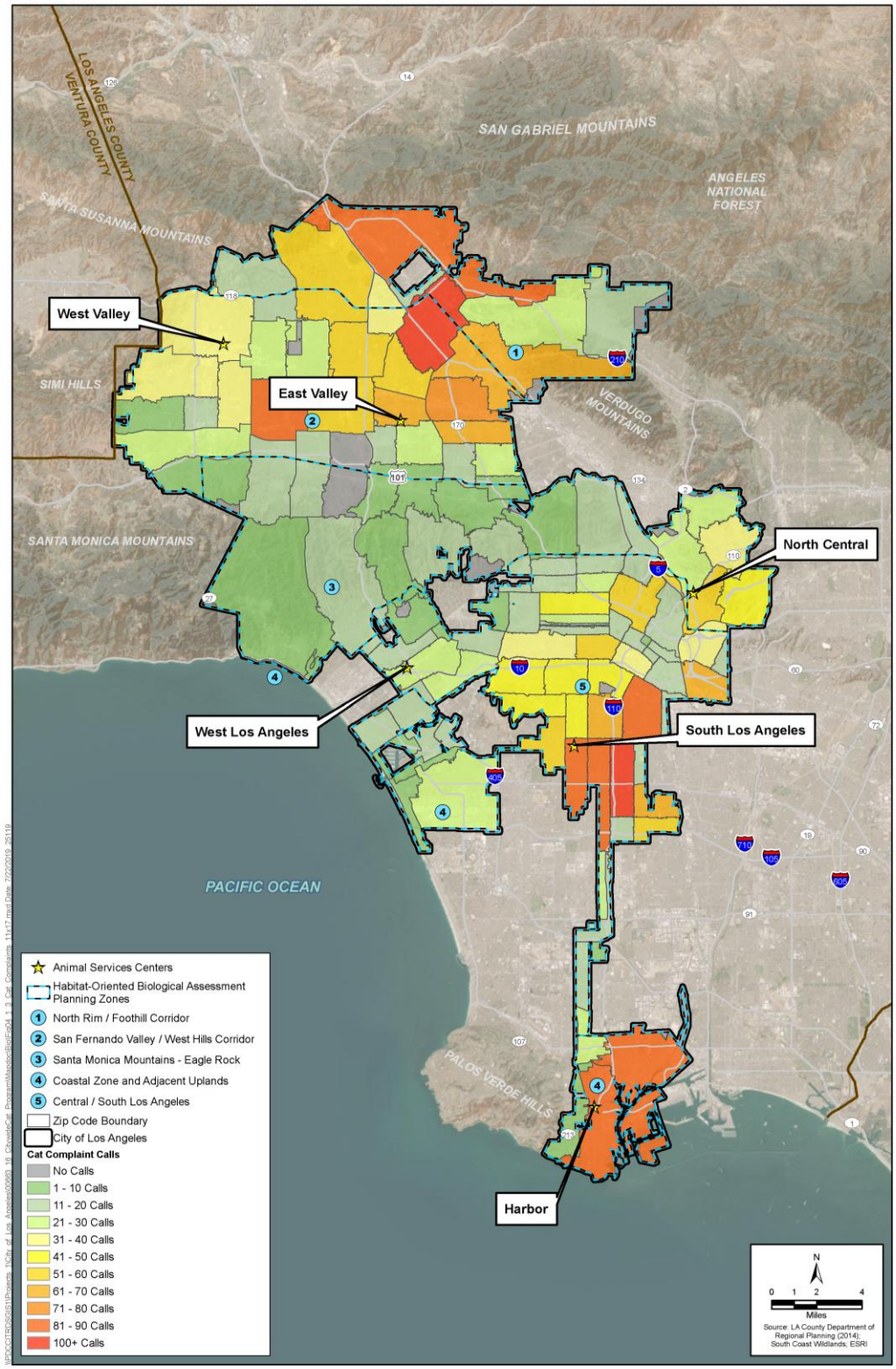


Figure 4.1-3
City of Los Angeles Animal Services Department Cat Complaint Calls (April 2015-April 2017)
Citywide Cat Program

These data and figures provide an insight into localized settings with respect to lower or higher density of cat trapping permit applications and free-roaming cat complaints. However, this does not definitively mean that these zip codes have a higher density of free-roaming cats, as there are numerous variables that influence the population dynamics of free-roaming cats in an area. These variables include land use (e.g., residential, industrial, open space); availability of resources such as food (including human-subsidized food), prey, water, and shelter; and demographic differences. In addition, it is to be expected that areas with a higher human population (such as residential and developed areas) will provide greater opportunities for cat trapping and a higher number of complaints calls to the City.

The proposed Project is a citywide project that will be implemented across the City primarily through its six animal services centers. Therefore, the availability of critical resources for free-roaming cats across the City needs to be taken into consideration to provide a comprehensive and informed estimate of the population size and distribution of free-roaming cats in the study area. Accordingly, the City has chosen the use of land cover type and published data on cat density by land cover to estimate the population and spatial distribution of free-roaming cats in the study area.

4.1.2.4 Population Dynamics Model: Leslie Matrix

The City also undertook a population dynamics modeling effort using a Leslie Matrix Model to assess and disclose the free-roaming cat population trends in the study area under the proposed Project and future baseline without project. The Leslie Matrix model is a commonly used scientific modeling approach used to describe changes in an organism's population size over time. Information gathered as part of the literature review process described in Section 4.1.2.1 above and the free-roaming cat population estimated above and reported in Table 4.1-1 were integrated into the population dynamics modeling assumptions and parameters, which were used to estimate trends in the population of free-roaming cats in the study area. Please see Appendix J for a detailed discussion of the Leslie Matrix model, assumptions, and parameters; their values for the proposed Project and future baseline without project; and results for the free-roaming cat population modeled over the 30-year horizon year chosen for detailed analysis in this EIR.

As discussed in Section 4.1.2 above, the effects of free-roaming cats on environmental resources are assumed to be proportional to their population size; therefore, the results of the population dynamics modeling—and projected population trends under proposed Project and future baseline without project—provide important context on understanding how existing effects of free-roaming cats on environmental resources would change under the proposed Project. The results of this population dynamics modeling are provided and discussed below.

Population Dynamics Model Results

The free-roaming cat population dynamics modeling provided estimates that the proposed Project would result in fewer free-roaming cats throughout the City and a lower rate of population growth due to reduced reproductive output as compared to future baseline without project conditions (Table 4.1-2, Figures 4.1-4 and 4.1-5). The total number of free-roaming cats would be expected to decrease under the proposed Project over the 30-year period leading up to the project horizon year of 2049, as compared to future baseline without project conditions. When compared to existing conditions (at the time of the preparation of the NOP, issued August 2017), the projected free-roaming cat population would include approximately 29,607 fewer cats at the end of the 30-year horizon period for the proposed Project (see Table 4.1-2, Figures 4.1-4 and 4.1-5), an approximate

13% decrease in total free-roaming cat population abundance in the entire study area, under the proposed Project at the end of the 30-year horizon period. These totals include the maximum number of free-roaming cats that could be released under the proposed Project. The releases constitute between 0.18% and 1.05% of the total free-roaming cat population under the proposed Project. Under the future baseline without project, these released free-roaming cats would be mostly euthanized or in some cases adopted and would not be released back to the environment.

Table 4.1-2. Free-Roaming Cat Modeling Results

Factor		Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10	Year 20	Year 30
Free-roaming Cat Population*	Future baseline without project	226,970	227,430	227,519	227,505	227,470	227,440	227,432	227,674	228,077
	Proposed Project	226,970	227,430	226,598	226,690	225,595	223,828	214,173	203,129	197,363
Cumulative Free Roaming Cat Population	Future baseline without Project	N/A	460	549	534	500	470	461	704	1,106
	Proposed Project	N/A	460	-373	-280	-1,376	-3,142	-12,797	-23,842	-29,608
Annual Free-roaming Cat Sterilizations	Future baseline without Project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Cumulative Free-roaming Cat sterilizations	Future baseline without project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0	20,000	40,000	60,000	80,000	100,000	200,000	400,000	600,000
Number of Free-roaming Kittens Born	Future baseline without project	178,871	179,039	178,990	178,896	178,801	178,715	178,390	177,744	176,805
	Proposed Project	178,871	179,039	172,451	170,146	167,764	165,558	156,389	146,051	139,755
Number of Free-roaming Kitten Births Prevented***	Future baseline without project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0	N/A	6,539	8,750	11,037	13,158	22,001	31,693	37,050
Cumulative Number of Free-roaming Kitten Births Prevented	Future baseline without project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0	N/A	6,539	15,289	26,326	39,484	133,304	412,537	760,771
LAAS Centers Free-roaming Cats Euthanasia + Deaths	Future baseline without project	4,065	4,065	4,065	4,065	4,065	4,065	4,065	4,065	4,065
	Proposed Project	4,065	3,650	3,234	2,819	2,403	1,988	1,988	1,988	1,988
Maximum Free-roaming Cat Releases from LAAS Centers**	Future baseline without project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0	416	831	1,247	1,662	2,078	2,078	2,078	2,078

Factor		Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10	Year 20	Year 30
Cumulative Maximum Free-roaming Cat Releases from LAAS Centers	Future baseline without project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0	416	1,247	2,494	4,156	6,234	16,620	37,395	58,170
Percent of Free-roaming Cat Population Returned	Future baseline without project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0.00%	0.18%	0.37%	0.55%	0.74%	0.93%	0.97%	1.02%	1.05%
Percent of Free-roaming Cats Sterilized	Future baseline without project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Proposed Project	0.00%	8.79%	8.83%	8.82%	8.87%	8.94%	9.34%	9.85%	10.13%

Notes: * = Population and reproductive values (i.e., number of kittens born, sterilizations) are based on domestic cat population dynamics modeling. ** = The number of returned cats is based on maximum proposed cat releases under the proposed Project. ***= Number of kitten births prevented is equal to the difference between number of juveniles modeled per year in the proposed Project vs. Future baseline without project.
Cumulative and percentage values are provided to illustrate the magnitude and relative proportion of proposed Project elements.

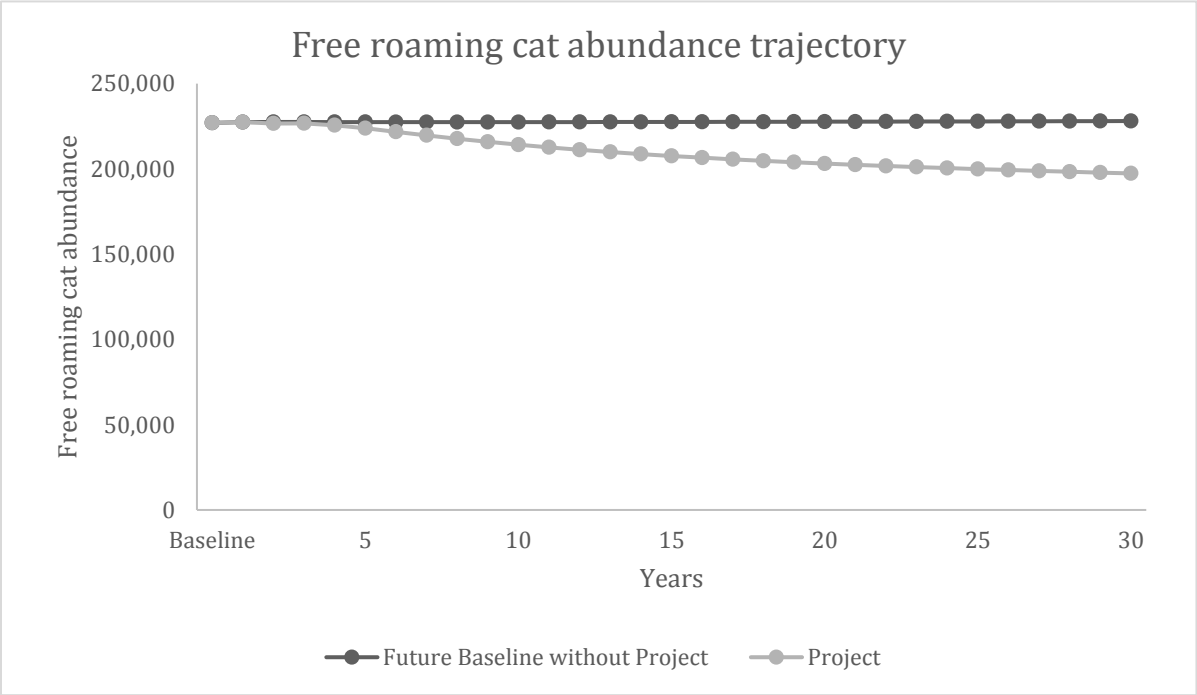


Figure 4.1-4. Modeled free-roaming cat population over the 30-year project horizon for both the future baseline without project and proposed Project. *Note the Y*-axis *scale starts at zero*.

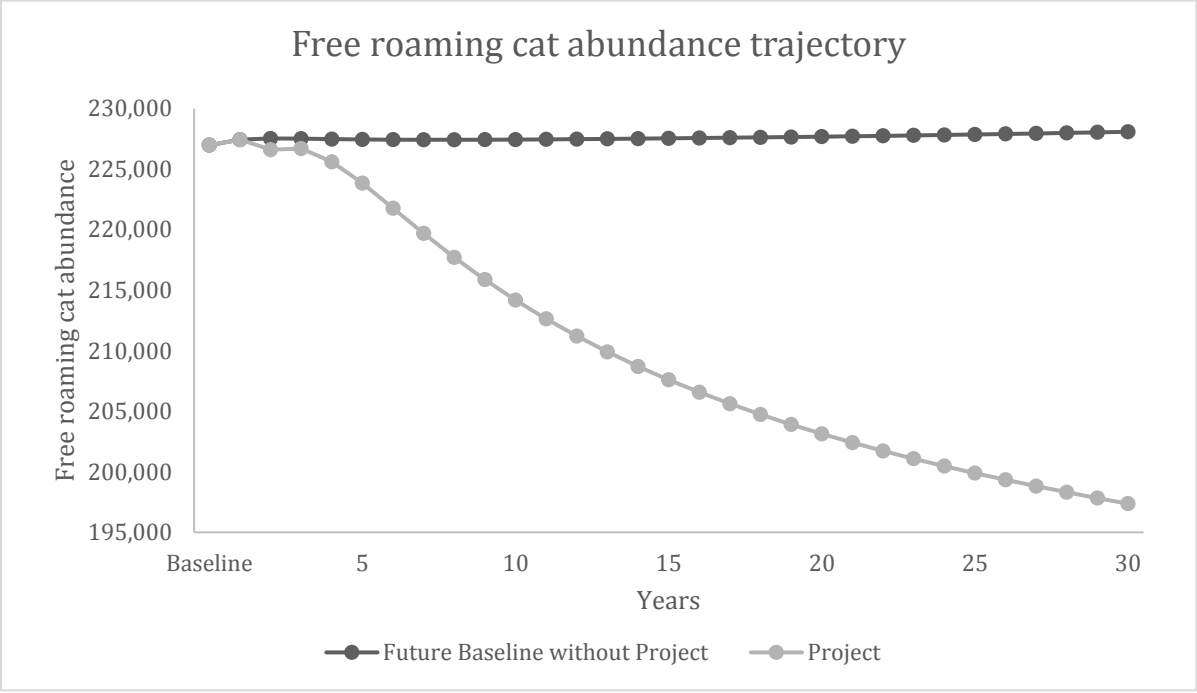


Figure 4.1-5. Modeled free-roaming cat population over the 30-year project horizon for both the future baseline without project and proposed Project. *Note the Y-axis scale starts at 195,000*.

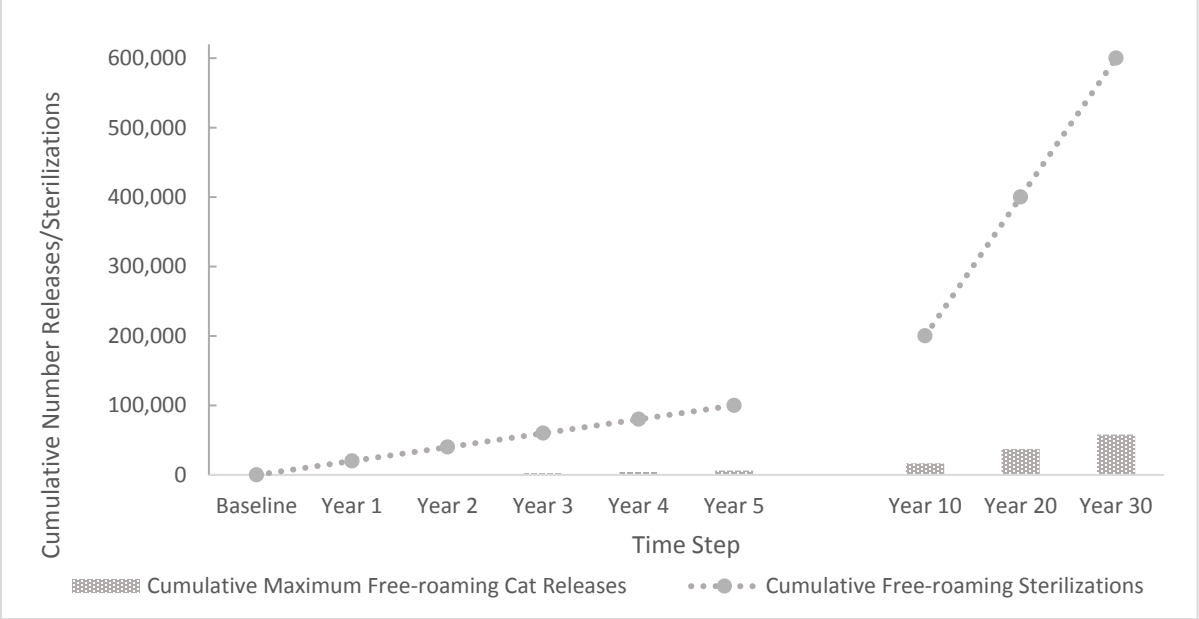


Figure 4.1-6. Cumulative proposed maximum free-roaming cat releases and cumulative sterilizations provided under the proposed Project over the 5-year project implementation phase and at the 10, 20, and 30-year proposed Project time periods. *Note the x-axis break indicating a discontinuous time scale*.

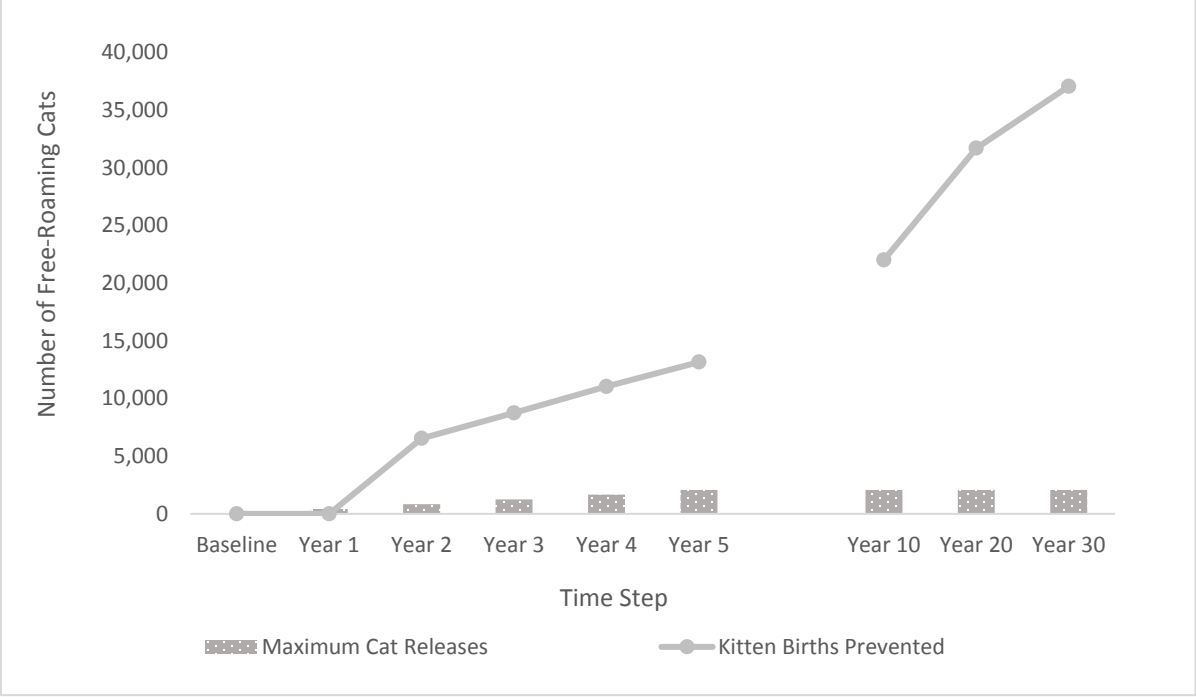


Figure 4.1-7. Proposed maximum yearly free-roaming cat releases and yearly number of kitten births prevented under the proposed Project over the 5-year project implementation phase and at the 10, 20, and 30-year proposed Project time periods. *Note the x-axis break indicating a discontinuous time scale*.

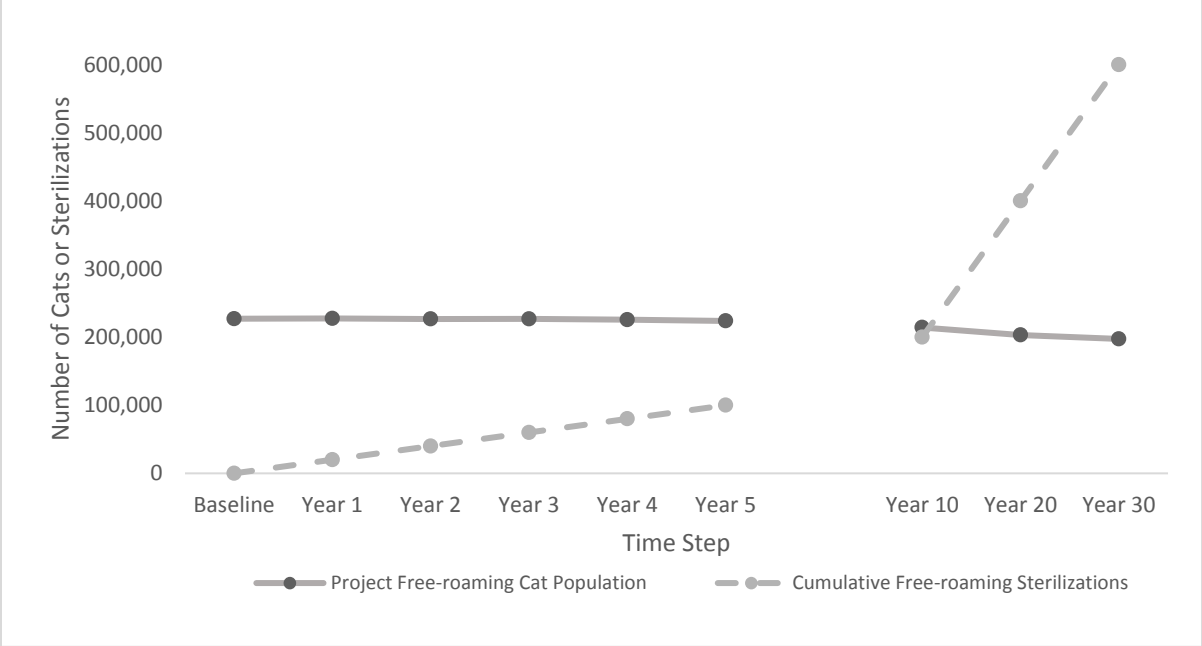


Figure 4.1-8. Modeled project free-roaming cat population and cumulative number of proposed Project free-roaming cat sterilizations over the 5-year project implementation phase and at the 10, 20, and 30-year proposed Project time periods. *Note the x-axis break indicating a discontinuous time scale*.

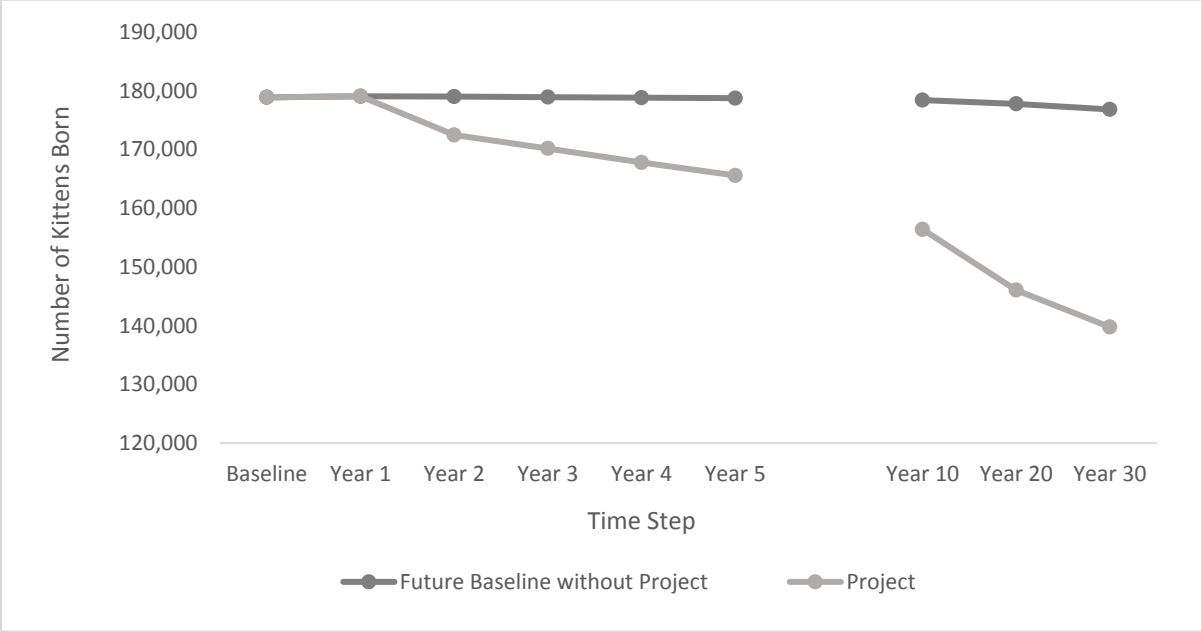


Figure 4.1-9. Modeled free-roaming cat yearly kitten births under the future baseline without project and proposed Project over the 5-year project implementation phase and at the 10, 20, and 30-year proposed Project time periods. *Note the x-axis break indicating a discontinuous time scale*.

Discussion of Population Dynamics Model Results

It should be noted that there is some inherent fluctuation in the modeled populations under both the future baseline without project and proposed Project (e.g., years 1–3 fluctuations in the proposed Project). For year 1 and year 2 under the future baseline without project, after a sufficient number of iterations, the matrix model converges on a stable stage distribution where the ratio between all demographic states in the model remains constant after each iteration. For simple population models that do not consider immigration or equilibrium abundance, there are simple algebraic techniques to calculate the stable stage distribution. The relative complexity of the model used in this EIR necessitates the use of numerical methods to calculate the initial stable stage distribution. Specifically, the model is allowed to run for several iterations to allow its various subpopulations and life stages to converge on a stable stage distribution. Because this numerical method is an approximation of the stable stage distribution, the model exhibits a 0.05% drop in the free roaming cat population in the first 2 years of the future baseline without project. This minute drop in the population is a consequence of the limitations of the numerical method and not a prediction that the free roaming cat population will drop by 0.05% in the first year. By year 3 of the proposed project, a cumulative 60,000 spay/neuter surgeries would have been performed and a total of 15,289 kitten births would have been prevented. As a consequence, there would be fewer juvenile feral and stray cats in year 3 under the proposed Project than under future baseline without project. However, because the rate of reproduction is lower there would also be less competition among feral and stray cats for resources such as food and shelter. Consequently, the survival rate of these cats would be higher, representing the lower rate of competition. (See section on equilibrium abundance under the proposed Project in Appendix J.) In year 3, the increase in the number of adult cats outweighs the decrease in the number of juvenile cats, leading to a slight net increase of 0.08% in year 3 relative to year 2. After this period, the number of free-roaming cats under the proposed Project would decline steadily over time due to accumulating reduction in fecundity.

The proposed Project would be initiated over a 5-year program implementation phase when the free-roaming cats that would have been euthanized under the future baseline without project are released (transition from the LAAS center sub-population), gradually increasing over 5 years (See Table 4.1-2 and Figures 4.1-4 and 4.1-5). Over this 5-year program implementation phase, the release of free-roaming cats would ramp up to 416 cats, 831 cats, 1,247 cats, 1,662 cats, and 2,078 cats in years 1–5, respectively (See Table 4.1-2 and Figures 4.1-5 and 4.1-6). Over this period the program would provide 20,000 spay and neuter surgeries in each of those 5 years and through the 30-year project horizon, which constitutes between 8.79% and 10.13% of the total free-roaming cat project population under the project (Table 4.1-2 and Figure 4.1-6). The 5-year program implementation phase, combined with the immediate provision of 20,000 yearly free-roaming cat sterilization surgeries and increase in number of cats per household, results in a modeled net free-roaming cat population decrease and decreased reproductive output (number of kittens born) starting in year 2 because of decreased reproductive potential and subsequent reduction in the number of kittens born as well as increased numbers of adoptions (See Table 4.1-2 and Figure 4.1-9). The subsequent years of the proposed Project occur during the full program implementation phase and continue to experience decreasing free-roaming cat population declines and decreasing reproductive outputs.

Additionally, through providing 20,000 free-roaming cat spay and neuter surgeries per year for 30 years, the proposed Project would result in the cumulative provision of additional 600,000 spay and neuter surgeries, resulting in the prevention of 760,771 free-roaming kitten births over the life of the 30-year horizon period. The cumulative magnitude is important to note because of the

continual effect sterilizations can have on a population over time, resulting in more than an annual effect but a progressive population effect over time. The sterilization surgeries and subsequent population decreases starting in year 2 would result in a per year population decrease that is greater than the proposed release of up to 2,078 free-roaming cats per year. Therefore, the modeled population declines would more than offset the contribution of released free-roaming cats to the overall free-roaming cat population. This is illustrated in Figure 4.1-6, which depicts the cumulative number of free-roaming cat releases (58,170).

4.2 Biological Resources

This section describes the regulatory setting, environmental setting, and potential impacts for biological resources in the City of Los Angeles (City). As presented in Table 3-4, Biological Resources Screening Analysis, and noted in Section 3.1.3.3, *Conclusion*, further study of the proposed Project's potential impacts on biological resources is required, and accordingly presented in this section. As analyzed below, potential impacts associated with biological resources would be less than significant and no mitigation measures are required.

4.2.1 Regulatory Setting

4.2.1.1 Federal

Federal Endangered Species Act

The *federal Endangered Species Act* (FESA) provides guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. Sections 7 and 10 of the FESA require federal agencies and non-federal entities to ensure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of species listed as threatened or endangered or result in the destruction or adverse modification of critical habitat for these listed species. The National Marine Fisheries Service (NMFS) is responsible for managing marine and anadromous species and the U.S. Fish and Wildlife Service (USFWS) is responsible for managing freshwater and terrestrial species. The FESA regulates actions that may harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed species or their critical habitats. Listed species and their habitats may be impacted by domestic cats.

Marine Mammal Protection Act

The *Marine Mammal Protection Act* (MMPA) protects all marine mammals within the United States and prohibits harassment, feeding, capture, collection, or killing of any marine mammals without a permit. The MMPA is managed by the federal government. NMFS is responsible for managing cetaceans, otariids, and phocids. USFWS is responsible for managing odobenids, sirenians, otters, and polar bears.

The MMPA regulates harassment, feeding, capture, collection, or killing of marine mammals. Marine mammal species and their habitats may be impacted by domestic cats.

Migratory Bird Treaty Act

The *Migratory Bird Treaty Act* (MBTA) was enacted in 1918 to prohibit the killing or transport of native migratory birds or any part, nest, or egg of any such bird, unless allowed by another regulation adopted in accordance with the MBTA. A list of migratory bird species that are protected by the MBTA is maintained by USFWS, which regulates most aspects of the taking, possession, transportation, sale, purchase, barter, exportation, and importation of migratory birds. Under the MBTA, *take* is defined as to kill, directly harm, or destroy individuals, eggs, or nests or to otherwise cause failure of an ongoing nesting effort. Permits are available under the MBTA through USFWS, and authorization for potential take under the MBTA is addressed as part of the FESA Section 7

consultation process. The proposed Project must be analyzed to ensure consistency with the MBTA, including avoidance of take of nesting birds, their eggs, or activities that may cause nest failure. This applies for both terrestrial and marine migratory species protected under the MBTA that may be directly or indirectly impacted by the proposed Project. Any potential take must be either permitted through consultation with USFWS or avoided and minimized through mitigation measures.

The MBTA regulates take of migratory birds. Migratory bird species may be impacted by domestic cats.

Magnuson-Stevens Fisheries Conservation and Management Act

The *Magnuson-Stevens Fisheries Conservation and Management Act* (MSA) is the primary law governing marine fisheries management in U.S. federal waters. First passed in 1976, the MSA fosters long-term biological and economic sustainability of our nation's marine fisheries. Key objectives of the MSA are to establish and protect Essential Fish Habitat (EFH), prevent overfishing, rebuild overfished stocks, increase long-term economic and social benefits, and ensure a safe and sustainable supply of seafood. Private landowners and state agencies are not required to consult with NMFS. However, NMFS must provide conservation recommendations on any federal or state action that would adversely affect EFH.

The MSA regulates marine fisheries and EFH. Marine fish species and EFH may be impacted by domestic cats.

Clean Water Act

The federal *Water Pollution Control Act Amendments of 1972*, commonly known as the *Clean Water Act* (CWA) (33 United States Code [USC] 1251 et seq.), as amended by the *Water Quality Act of 1987*, is the major federal legislation governing water quality. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

The CWA regulates impacts on waters that result in the alteration of chemical, physical, and biological integrity of the nation's waters. Chemical, physical, and biological integrity of the nation's waters may be impacted by domestic cats.

4.2.1.2 State

California Endangered Species Act

The *California Endangered Species Act* (CESA), *Fish and Game Code* Sections 2050 et seq., establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered plant and animal species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of species listed as threatened or endangered or candidates for listing if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that affect both a state- and federally listed species, compliance with both the FESA and CESA are required, although the California Department of Fish and Wildlife (CDFW) may determine that the federal incidental take authorization is consistent with the CESA under *California Fish and Game Code* Section 2080.1.

The CESA regulates actions that may (or attempt to) hunt, pursue, catch, or kill state-listed species (including candidates for listing). CESA-listed species may be impacted by domestic cats.

California Fish and Game Code

CDFW is the lead state agency that enforces the *California Fish and Game Code* and is the lead agency that manages native fish, wildlife, plant species, and natural communities for their ecological value and their benefits to people. CDFW oversees the management of marine species through several programs, some in coordination with NMFS and other agencies.

Sections 3503, 3503.5, 3505, 3513, 3800, and 3801.6 of the *Fish and Game Code* protect all native birds, birds of prey, and all nongame birds, including their eggs and nests, that are not already listed as fully protected and that occur naturally within the state. Section 3503 specifically states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, and Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, falcons), including their nests or eggs. The *Fish and Game Code* regulates protection of all native bird species including their nests and eggs.

Sections 3511, 4700, 5050, and 5515 of the *Fish and Game Code* specify species that are classified as Fully Protected. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except for specific permitted activities such as scientific research.

Native bird species and their nests and eggs as well as Fully Protected species may be impacted by domestic cats.

Special-Status Species

Special-status species in a term used to generally reference species of plants and animals that are legally protected, rare, of high conservation priority, or at risk of extinction. In California, special-status species include species listed as Special Animals (SAs) and Species of Special Concern (SSC). SA is a broad category used by CDFW to refer to species tracked by CDFW's California Natural Diversity Database (CNDDB). SAs include species native to California that satisfy a number of criteria related to species imperilment, such as species that are federally or state listed, state SSC, or are generally considered at risk of extinction. State SSC are a subset of SAs with elevated conservation, research, and recovery priorities (California Department of Fish and Wildlife 2019a). The SA and SSC designations are not regulatory; rather, they are administrative designations intended to facilitate species tracking, prioritization of conservation resources, research, and recovery efforts. Additionally, the *California Environmental Quality Act* (CEQA) Section 15380 specifies that species meeting these criteria be included in CEQA analyses.

SAs and SSC may be impacted by domestic cats.

California Native Plant Protection Act

Fish and Game Code Sections 1900 et seq. prohibit take of endangered or rare native plants. Some exceptions are allowed for specific agricultural and nursery operations; emergencies; and after proper notification of CDFW for vegetation removal activities within canals, roads, and other sites, and changes in land use.

The *Fish and Game Code* regulates protection of all endangered and rare plants. Native endangered and rare plant species may be impacted by domestic cats.

California Code of Regulations

Title 14, Division 1, Section 251.1 of the *California Code of Regulations* (CCR) pertains to harassment of animals and states that "Except as otherwise authorized in these regulations or in the *Fish and Game Code*, no person shall harass, herd or drive any game or nongame bird or mammal or furbearing mammal. For the purposes of this section, harass is defined as an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering. This section does not apply to a landowner or tenant who drives or herds birds or mammals for the purpose of preventing damage to private or public property, including aquaculture and agriculture crops."

The CCR regulates harassment of birds and mammal species. Native bird and mammal species may be impacted by domestic cats.

The California Coastal Act

The *California Coastal Act* (California Public Resources Code, Section 30000 et seq.) regulates development such as building, extraction, or discharge in the coastal zone and protects sensitive coastal resource areas, such as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and could be easily disturbed or degraded by human activities and developments," from significant disruption of habitat values.

The *California Coastal Act* regulates discharge the coastal zone. Domestic cats have potential to cause discharges into the coastal zone though these would not be regulated under the *California Coastal Act*.

4.2.1.3 Local

City of Los Angeles General Plan

The City of Los Angeles General Plan, approved by the City Council, is a comprehensive, long-range declaration of purposes, policies, and programs for the development of the City of Los Angeles.

The Conservation Element of the City of Los Angeles General Plan was designed to address the need to conserve and protect natural resources and open space in the City of Los Angeles. The document outlines an alphabetical organization of conservation elements that pertain to the General Plan. Primary elements that pertain to biological resources include, but are not limited to, conservation, endangered species, fisheries, and habitats.

The Conservation Element of the General Plan provides an official guide for the City Planning Commission, the City Council, the Mayor, and other governmental agencies and interested citizens concerning the conservation, protection, development, utilization, and reclamation of natural resources. Natural resources addressed in this element include water and hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. As a part of the Conservation Element, the General Plan Infrastructure Element addresses water supply and demand, measures related to energy conservation and reducing the City's reliance on oil, landfill capacity assessment, wastewater discharge into the ocean and other water bodies, protection of groundwater and watershed resources, solid waste management, and electrical and other City-managed resource areas.

The habitat section further breaks down habitat types within the City of Los Angeles (as identified by the Los Angeles County General Plan, 2015), including Significant Ecological Areas (SEAs).

The Wildlife Corridors section identifies wildlife corridors as land segments that connect two or more large habitat areas and provide a habitat for movement of animals between those areas. Important local wildlife corridors are identified in the City's General Plan and are discussed in detail in the *City of Los Angeles Wildlife Corridors* section below.

Similarly, the Open Space Element of the General Plan provides guidance for the preservation, conservation, and acquisition of open space in the City. This includes lands needed for life support systems such as the water supply, water recharge, water quality protection, wastewater disposal, solid waste disposal, air quality protection, energy production, and noise prevention. Natural drainage channels, flood plains, fire hazard areas, airport clear zones, and geological hazard areas are also addressed (City of Los Angeles 1973).

There is potential for domestic cats to impact resources identified in the Conservation Element including species, habitats, and wildlife corridors.

City of Los Angeles Regional Wildlife Habitat Linkage Zone

On April 22, 2016, the Los Angeles City Council approved a motion to instruct staff to prepare an ordinance to create a wildlife corridor in the eastern area of the Santa Monica Mountains and to report on the feasibility of identifying and establishing a potential regional habitat linkage zone in the Rim of the Valley Corridor Special Resources Study Area (Council File 14-0518). This ordinance and report are still under development, and current wildlife corridor areas proposed by the Santa Monica Mountains Conservancy are informational only at this time.

There is potential for domestic cats to affect wildlife corridors within the study area.

4.2.1.4 Conservation Plans

Federal, State, and Regional

There are no Habitat Conservation Plans, Natural Community Conservation Plans, or Regional Conservation Investment Strategy programs currently implemented within the City of Los Angeles.

Local

Los Angeles Protection Areas for Wildlife

The Potential Protection Areas for Wildlife (PAWs) program is currently in development as a pilot study. The PAWs pilot study will aim to "conserve and protect existing natural areas and wildlife habitats within the City of Los Angeles and support other related City, County, State, and Federal government ecological efforts." The goals of the pilot study are to evaluate existing biotic conditions within the City, identify areas important for supporting habitat and movement for wildlife, and provide development standards for managing and conserving biological resources by potentially regulating development and wildlife habitat within these areas. The pilot study area will be located within the Santa Monica Mountains between the Interstate (I-) 405 and U.S. 101 freeways and will serve to test potential regulations that could be adapted for future PAWs program development such as measures to reduce interference with wildlife movement (permeable fencing, bird-friendly

windows), reduce wildlife-human conflict (secured trash), reduce lighting, and implement habitat buffers (City of Los Angeles 2018a).

4.2.2 Environmental Setting

The City of Los Angeles is situated on the Pacific Coast of Southern California within a region known as the "California Floristic Province." This region is one of 25 identified global biodiversity hotspots containing high species richness and endemism characteristic of regions in Mediterranean-type climates. *Biodiversity hotspots* are generally defined as areas with rich concentrations of endemic species that have experienced exceptional habitat losses, making them a global conservation priority (Myers et al. 2000). The City of Los Angeles exists in a geographically, topographically, and biologically unique and diverse landscape. The northern portion of the City is bounded by the Santa Susana and San Gabriel Mountains. Both are part of the transverse ranges geomorphic province. Another transverse range, the Santa Monica Mountains, bisects the City, extending easterly from the sea to Griffith Park. This coastal mountain range separates the San Fernando Valley to the north and the Los Angeles Basin to the south. The City encompasses mountains, rivers, foothills, canyons, valleys, diversified wilderness areas, native scrublands, and sandy beaches and rocky intertidal areas of the Pacific Ocean coastline. This distinct natural landscape supports the region's rich biodiversity. The City is also home to approximately 4 million residents and a thriving metropolis of over 14 million (2010), which make Los Angeles the second-largest city and metropolitan area in the United States.

The City of Los Angeles supports a wide variety ecosystems, habitats, and native wildlife (i.e., native animal and plant species). Wildlife may vary in their tolerance for humans and human developments. Some native species are well adapted to developed areas (i.e., urban-adapted species) and may utilize both urban and undeveloped natural areas (open space). Common urban-adapted species include hummingbirds, swallows, sparrows, owls, hawks, lizards, skunks, raccoons, opossums, bats, coyotes, and monarch butterflies. Other species are more sensitive to developed areas or have specific habitat requirements. These species are more likely to utilize more insular, intact, or discrete ecosystem types. Such species include California coastal gnatcatcher, least Bell's vireo, cactus wren, Swainson's thrush, bobcat, El Segundo blue butterfly, and various freshwater fish species such as the southern steelhead trout. Additionally, a diverse assemblage of marine species are found in the estuaries, intertidal zones, and pelagic zones along the coast.

In addition to native wildlife species, nonnative species, including domestic cats, are present throughout the study area. As discussed in Chapter 1 and Section 4.1, domestic cats are known to occur throughout the study area and to cause a variety of adverse effects on sensitive biological resources in the study area, which is the subject of this Biological Resources section.

The limits of the City serve as the study area for this analysis and the terms "City" and "study area" may be used interchangeably in this analysis. All figures in this section depict the City boundary and the prominent geographic features of the region.

4.2.2.1 Sensitive Biological Resource Evaluation

Data obtained from plant and wildlife inventory databases were reviewed to identify sensitive biological resources with potential to occur in the study area. Such resources include protected, sensitive, special-status, and locally important species and habitats. Queries were conducted in CDFW's CNDDB (California Department of Fish and Wildlife 2019b), the California Native Plant

Society's (CNPS) Inventory of Rare and Endangered Plants of California (California Native Plant Society 2019), the USFWS Information for Planning and Consulting (IPAC) System (U.S. Fish & Wildlife Service 2019), and the NMFS California Species List Tool (Google Earth KMZ tool) (National Oceanic and Atmospheric Administration 2019) on July 3, 2019. The CNDDB, CNPS, and NMFS California Species List Tool queries were conducted using the following U.S. Geological Survey 7.5-minute map quadrangles, which overlap with the study area: Condor Peak, Sunland, San Fernando, Oat Mountain, Simi Valley East (Santa Susana), Pasadena, Burbank, Van Nuys, Canoga Park, Calabasas, Los Angeles, Hollywood, Beverly Hills, Topanga, South Gate, Inglewood, Venice, Long Beach, Torrance, and San Pedro. The Project area was defined in the USFWS IPAC System using a polygon encompassing the entire study area.

In addition to database queries, other resources were reviewed to identify existing biological resources and conditions including the CDFW Biogeographic Information and Observation System (California Department of Fish and Wildlife 2019c), City of Los Angeles CEQA Thresholds Guide (*L.A. CEQA Thresholds Guide*) (City of Los Angeles 2006), the City of Los Angeles' website (City of Los Angeles 2018b), the Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan (Los Angeles Regional Water Quality Control Board 2019), the Los Angeles Biodiversity Report (City of Los Angeles 2018c), and Google Earth (Google 2018). Results of these reviews were compiled to produce a comprehensive list of sensitive biological resources with potential to occur in the study area for inclusion in this CEQA analysis. A full list of these resources, their conservation status, and their habitat requirements is provided in Appendix L.

City of Los Angeles Sensitive Biological Resources

Exhibit C-1 of the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) divides the City into five geographic zones called Habitat-Oriented Biological Assessment Planning Zones (hereafter biological planning zones) used to identify the City's distinct geographic regions and locations of sensitive biological resources. These biological planning zones are used throughout this section, in both discussion and figures, to provide general location, context, and points of reference.

The five biological planning zones are listed below and depicted on Figure 4.2-1:

- Zone 1 - North Rim/Foothill Corridor Zone
- Zone 2 - San Fernando Valley/West Hills Corridor Zone
- Zone 3 - Santa Monica Mountains – Eagle Rock Zone
- Zone 4 - Coastal Zone and Adjacent Uplands Zone
- Zone 5 - Central/South Los Angeles Zone

Exhibits C-2 through C-8 of the *L.A. CEQA Thresholds Guide* reference sensitive biological resources including sensitive species and habitats with potential to occur in the City and define a **sensitive biological resource** as:

- A plant or animal that is currently listed by a state or federal agency(ies) as endangered, threatened, rare, protected, sensitive, or a Species of Special Concern or federally listed critical habitat;
- A plant or animal that is currently listed by a state or federal agency(ies) as a candidate species or proposed for state or federal listing;
- A locally designated or recognized species; or

- A locally designated or recognized habitat (e.g., Environmentally Sensitive Area).

In addition, the City's *Municipal Code* (Section 64.70.01), for purposes of the Stormwater and Urban Runoff Pollution Control Ordinance, defines **Environmentally Sensitive Areas** (ESAs) as:

> "…any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments. ESAs include, but are not limited to, areas designated as Significant Ecological Areas by the County of Los Angeles (Los Angeles County Significant Areas Study, Los Angeles County Department of Regional Planning (1976) and amendments), areas designated as Significant Natural Areas by the California Department of Fish and Game's Significant Natural Areas Program[1] and field verified by the Department of Fish and Game, and areas listed in the Basin Plan as supporting the 'Rare, Threatened, or Endangered Species (RARE)' beneficial use."

For the purposes of this EIR, sensitive biological resources include the following:

- Species and resources listed in Exhibits C-6 and C-7 of the *L.A. CEQA Thresholds Guide*
- Species and resources identified in CNDDB query
- Species and resources identified in the CNPS inventory query
- Species and resources identified with the NMFS Species List Tool
- Listed species and critical habitat identified in the USFWS IPAC System
- Species and habitats known to be locally designated or important

Sensitive biological resources may be specific species or a habitat area. In this EIR, sensitive plant and animal species are referred to as **special-status species** and sensitive habitat areas are referred to as **ESAs**. Furthermore, the City defines ESAs to include those vegetation communities, habitats, and open space resources listed in Exhibits C-6 and C-7 of the *L.A. CEQA Thresholds Guide*, or other habitats supporting one or more special-status species such as locally designated habitat areas, critical habitat, habitat and wildlife connectivity areas, natural vegetation communities, wetlands and waters, areas of scientific (biological or conservation) interest, and important game and fisheries resources.

For the purposes of this EIR, ESAs include the following and are mapped on Figure 4.2-2a and 4.2-2b (note that a 1-mile buffer has been added to depict the estimated average free-roaming cat home range for cats dwelling within any ESA areas; see Appendix M for input data for this estimate).

- Los Angeles County Significant Ecological Areas
- CDFW Sensitive Natural Vegetation Communities
- USFWS/NMFS Critical Habitat
- Rim of the Valley Corridor
- State Park Lands
- U.S. Forest Service Lands
- Certified Environmentally Sensitive Habitat Areas

[1] The California Department of Fish and Game's Significant Natural Areas Program is no longer in operation. The Areas of Conservation Emphasis is now used by the Department. The ACE program identifies relative biodiversity values across the state.

4.2.2.2 Vegetation Communities and Land Cover

Natural Vegetation Communities

The study area encompasses approximately 471 square miles of diverse geography, topography, and biology stretching from the coastal beaches and coastal plains to the coastal mountains and foothills. As a result, natural vegetation (plant) communities and land cover types within the study area are also diverse and comprise over 45 distinct natural vegetation communities that provide important ecological structure and function for species within the study area. Urban areas are also diverse and include highly developed portions of the City center, residential and industrial areas, and developments bordering open space. CalVeg (United States Forest Service 2018) vegetation and land cover data for the South Coast Ecoregion were used in this analysis.

For the purpose of this CEQA analysis, natural vegetation communities and land cover types were combined to produce groups of similar/related land cover and vegetation communities (land cover groups). The **land cover groups** use an upper/mid-level vegetation classification hierarchy rather than lower-level classification units. This approach was taken to illustrate the landscape-scale spatial distribution of natural vegetation communities and land cover types over the entire study area, rather than fine-scale distribution of distinct vegetation communities and land cover types, thereby providing a more relevant scale for discussion of potential impacts. Land cover groups used in this analysis include grasslands, riparian and other wetlands, shrublands, beaches and dunes, woodlands, and disturbed/developed. These land cover groups and their distribution throughout the study area are described below and depicted on Figure 4.2-3. Fine-scale vegetation community and land use mapping can be found in the City's 2018 Biodiversity Report (City of Los Angeles 2018c).

Grasslands are composed of areas where grasses are the dominant vegetation in the community. For the purposes of this analysis, grasslands include areas dominated by native and nonnative, annual and perennial grass species. Grasslands occur within both developed and open space areas as well as in flood control basins and near reservoirs. Within the study area, grasslands are most prevalent near the western boundary of the North Rim/Foothill Corridor Zone, centered along the southern border of the San Fernando Valley/West Hills Corridor Zone, and near the eastern end of the Santa Monica Mountains – Eagle Rock Zone. Grasslands are patchily abundant across the rest of the biological planning zones, except for several larger blocks near the coast within the centermost section of the Coastal Zone and Adjacent Uplands Zone.

Riparian and Other Wetlands are composed of vegetated areas, with hydric soils, adjacent to lakes, streams, or rivers and areas where surface water is perennially or intermittently present. Riparian and wetland plant species can include hydrophytic large woody trees, shrubs, and other emergent vegetation. These communities exist throughout the study area and are found in all of the biological planning zones. This land cover group is most prevalent in the North Rim/Foothill Corridor Zone and along higher elevation drainages in the Santa Monica Mountains – Eagle Rock Zone. Both the San Fernando Valley/West Hills Corridor Zone and the two southern sections of the Coastal Zone and Adjacent Uplands Zone have a few large patches, but are fairly bare (i.e., lacking vegetation) otherwise. Apart from one area in the northeastern corner, the Central/South Los Angeles Zone contains few occurrences of this land cover group.

Shrublands consists of drought-deciduous coastal scrub and evergreen Chaparral composed of small to medium shrubs with sclerophilic leaves and relatively low water requirements. These are

usually found in xeric (dry) uplands and include species such as chemise (*Adenostoma fasciculatum*), California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), Laurel sumac (*Malosma laurina*), cactus (*Opuntia* spp.), and other coastal shrubland species. Shrublands are most prevalent throughout the North Rim/Foothill Corridor Zone and Santa Monica Mountains – Eagle Rock Zone and within the Santa Monica, Santa Susana, San Gabriel, and Verdugo Mountains and foothills. The Coastal Zone and Adjacent Uplands Zone and Central/South Los Angeles Zone Coastal scrub is more prevalent along mesic, lower-elevation foothills, while chaparral is found on steeper, drier slopes. Both communities have limited distribution and have a low overall abundance of this land cover type within the study area.

Woodlands consist of large woody vegetation dominated by trees and arborescent shrubs. Common species in this land cover group include oak (*Quercus sp*p.), California bay (*Umbellularia californica*), California black walnut (*Juglans californica*), cottonwood (*Populus fremontii*), and sycamore (*Platanus racemosa*). Nonnative ornamental species are also present. Woodlands occur throughout the study area and are most commonly found throughout the Santa Monica Mountains – Eagle Rock Zone, where they are second only to coastal scrub and chaparral in relative abundance. In the remainder of the study area, woodlands exist in small, isolated patches.

Beaches and Dunes are sandy, sparsely vegetated areas along and near coastal beaches. Beaches and dunes are present along thin strands of the Coastal Zone and Adjacent Uplands Zone along the westernmost coastal boundaries and occur in low overall abundance in the study area.

Disturbed and Developed lands do not support natural vegetation communities and include areas dominated by human development, urbanization, and disturbance. Disturbed and developed lands cover a majority of the study area, particularly in the San Fernando Valley/West Hills Corridor Zone, Coastal Zone and Adjacent Uplands Zone, and Central/South Los Angeles Zone. Disturbed and developed lands in the study area often surround, adjoin, or fragment existing natural vegetation communities. These areas are dominated by nonnative, ornamental and invasive, ruderal plant species.

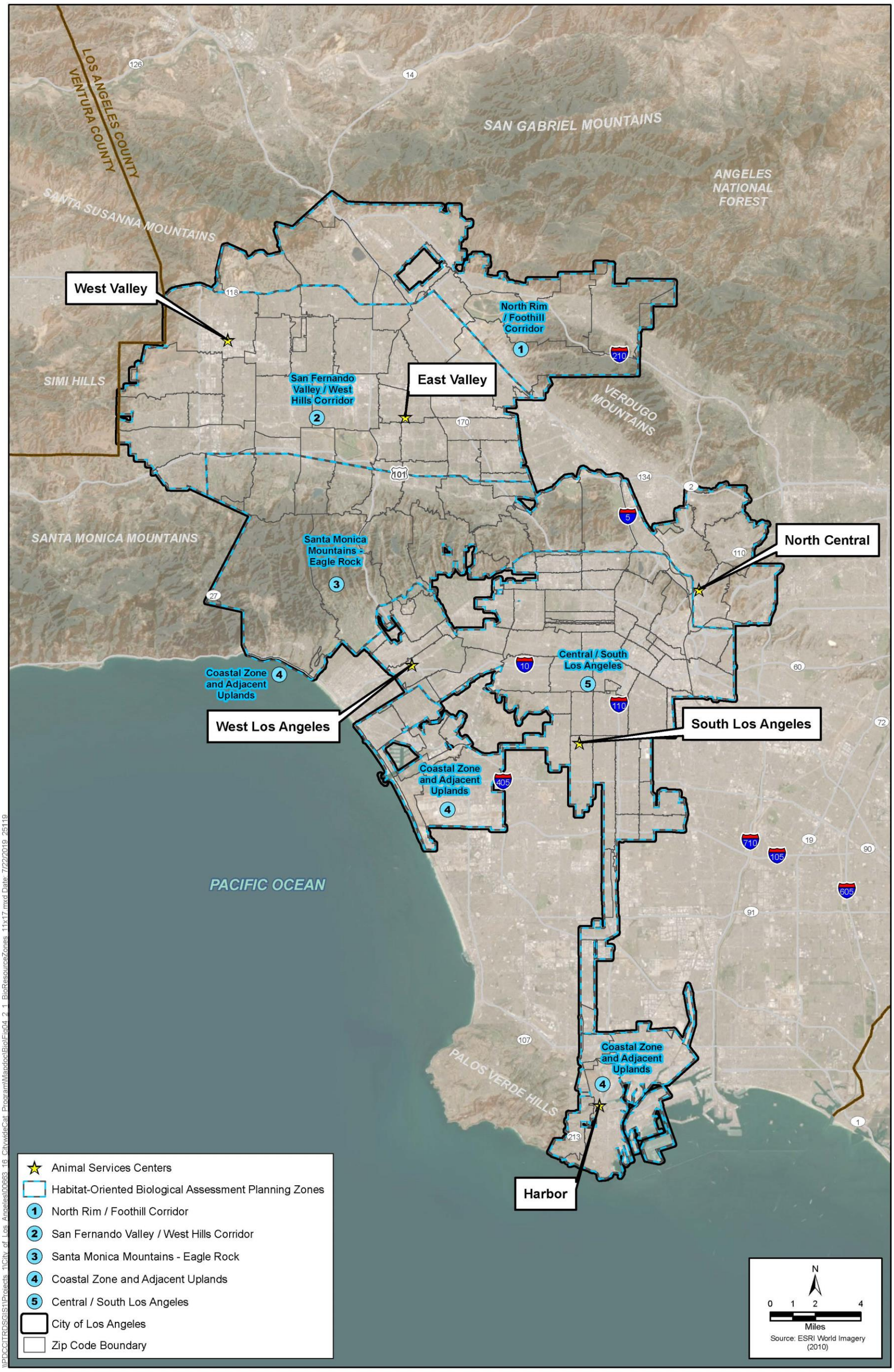


Figure 4.2-1. Biological Resources Planning Zones

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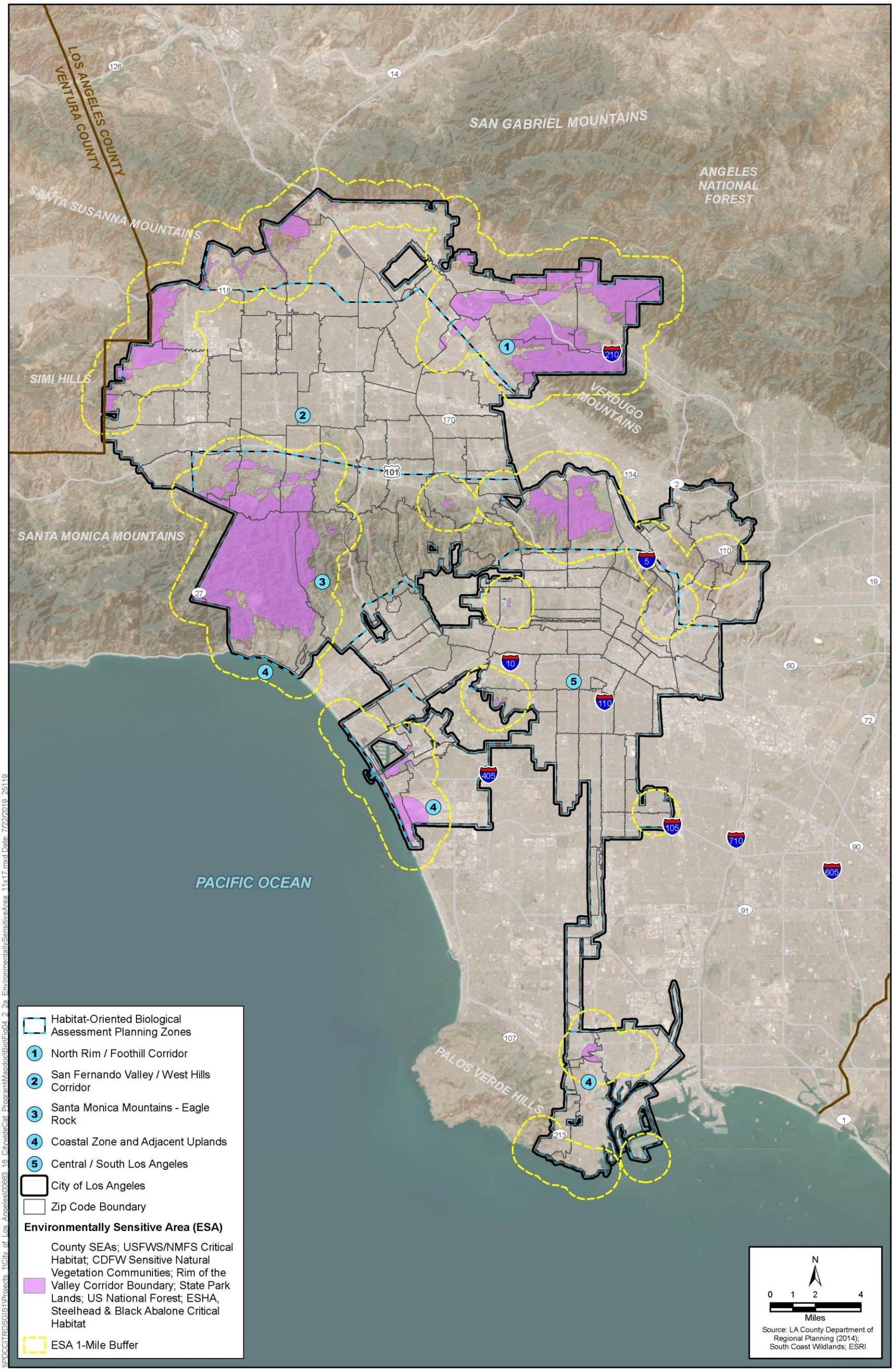

Figure 4.2-2a. City of Los Angeles Environmentally Sensitive Areas

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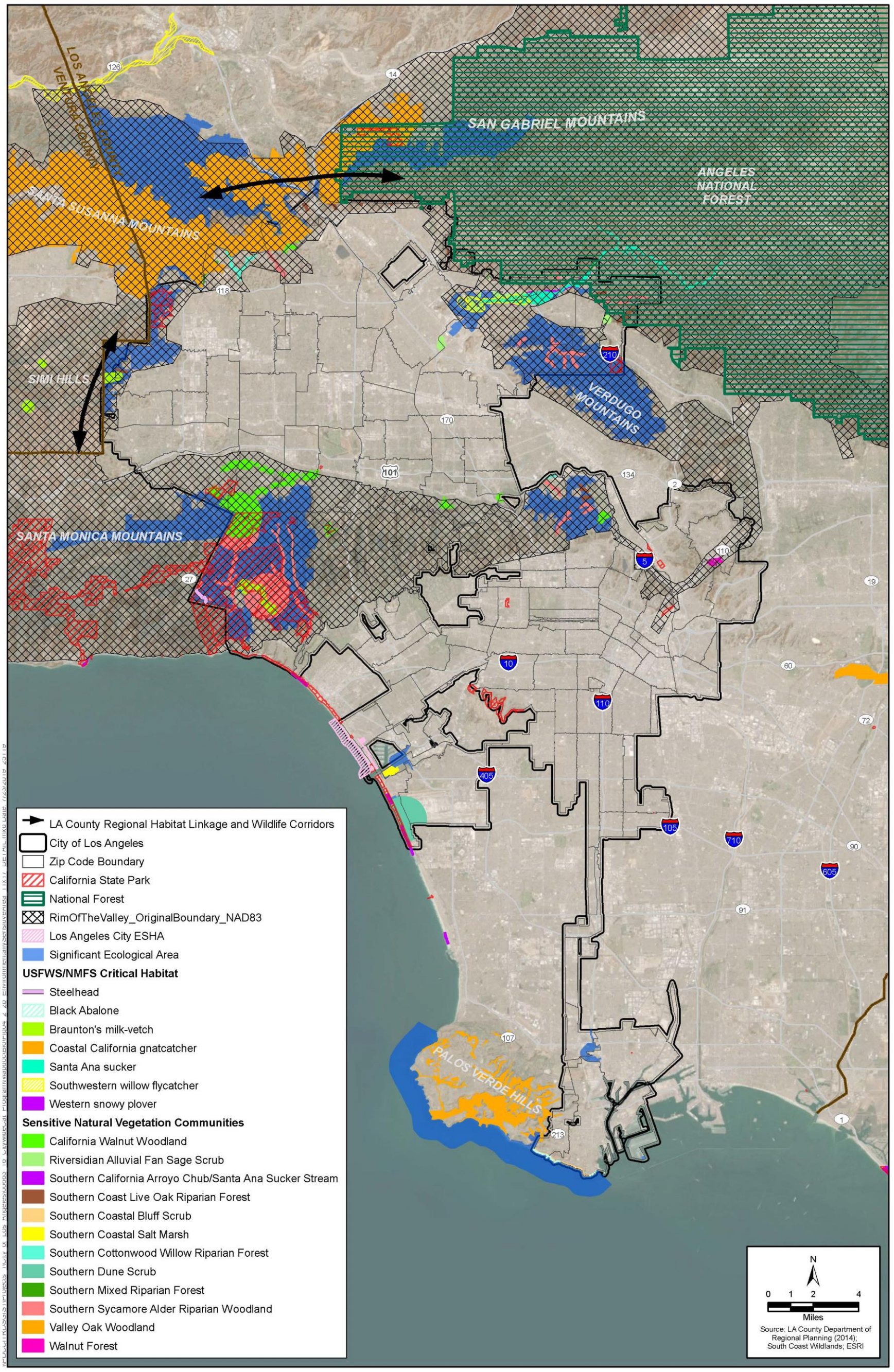

Figure 4.2-2b. City of Los Angeles Environmentally Sensitive Areas Detailed

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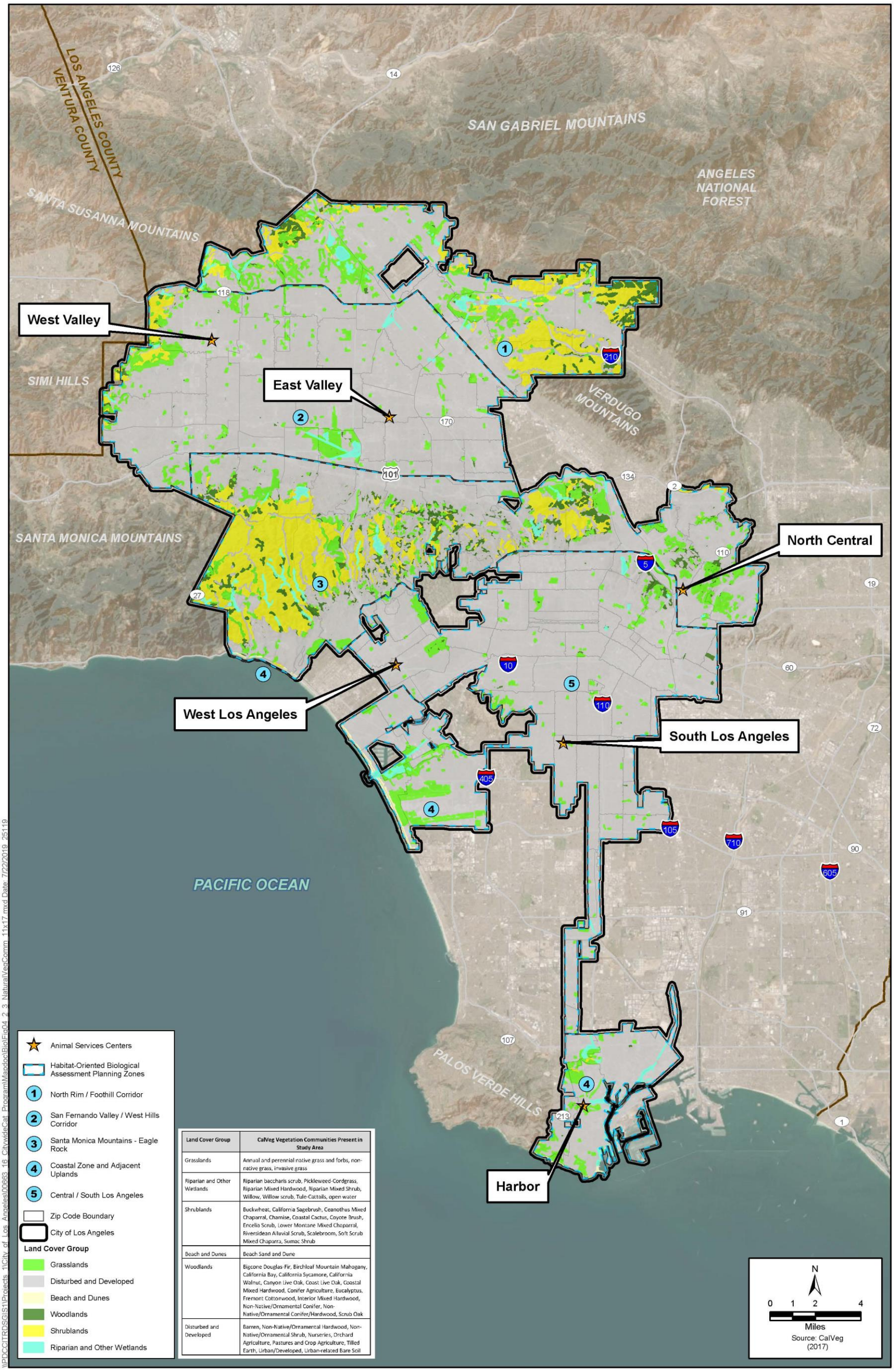

Land Cover Group	CalVeg Vegetation Communities Present in Study Area
Grasslands	Annual and perennial native grass and forbs, non-native grass, invasive grass
Riparian and Other Wetlands	Riparian baccharis scrub, Pickleweed-Cordgrass, Riparian Mixed Hardwood, Riparian Mixed Shrub, Willow, Willow scrub, Tule-Cattails, open water
Shrublands	Buckwheat, California Sagebrush, Ceanothus Mixed Chaparral, Chamise, Coastal Cactus, Coyote Brush, Encelia Scrub, Lower Montane Mixed Chaparral, Riversidean Alluvial Scrub, Scalebroom, Soft Scrub Mixed Chaparra, Sumac Shrub
Beach and Dunes	Beach Sand and Dune
Woodlands	Bigcone Douglas-Fir, Birchleaf Mountain Mahogany, California Bay, California Sycamore, California Walnut, Canyon Live Oak, Coast Live Oak, Coastal Mixed Hardwood, Conifer Agriculture, Eucalyptus, Fremont Cottonwood, Interior Mixed Hardwood, Non-Native/Ornamental Conifer, Non-Native/Ornamental Conifer/Hardwood, Scrub Oak
Disturbed and Developed	Barren, Non-Native/Ornamental Hardwood, Non-Native/Ornamental Shrub, Nurseries, Orchard Agriculture, Pastures and Crop Agriculture, Tilled Earth, Urban/Developed, Urban-related Bare Soil

Figure 4.2-3. Natural Vegetation Communities

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Land cover groups that occur in the study area are listed in Table 4.2-1 (along with their constituent vegetation communities and land cover types) and depicted on Figure 4.2-3.

Table 4.2-1. Land Cover Groups, Constituent Vegetation Communities, and Land Cover Types Present in the Study Area, and Biological Planning Zones within which They Occur

Land Cover Group	Constituent Vegetation Communities and Land Cover Types	Biological Planning Zone
Grasslands	Annual and perennial native grass and forbs, nonnative grass, invasive grass	1, 2, 3, 4, 5
Riparian and Other Wetlands	Riparian baccharis scrub, Pickleweed-Cordgrass, Riparian Mixed Hardwood, Riparian Mixed Shrub, Willow, Willow scrub, Tule-Cattails	1, 2, 3, 4, 5
Shrublands	Buckwheat, California Sagebrush, Ceanothus Mixed Chaparral, Chamise, Coastal Cactus, Coyote Brush, California sunflower (*Encelia*), Coastal Sage Scrub, Lower Montane Mixed Chaparral, Riversidean Alluvial Scrub, Scalebroom, Soft Scrub Mixed Chaparral, Sumac Shrub	1, 2, 3, 4, 5
Beaches and Dunes	Sandy beaches and coastal dunes	3, 4
Woodlands	Bigcone Douglas-Fir, Birchleaf Mountain Mahogany, California Bay, California Sycamore, California Walnut, Canyon Live Oak, Coast Live Oak, Coastal Mixed Hardwood, Conifer Agriculture, Eucalyptus, Fremont Cottonwood, Interior Mixed Hardwood, Non-Native/Ornamental Conifer, Non-Native/Ornamental Conifer/Hardwood, Scrub Oak	1, 2, 3, 4, 5
Disturbed and Developed	Barren, Non-Native/Ornamental Hardwood, Non-Native/Ornamental Shrub, Nurseries, Orchard Agriculture, Pastures and Crop Agriculture, Tilled Earth, Urban/Developed, Urban-related Bare Soil	1, 2, 3, 4, 5

Sensitive Natural Communities

State-designated Sensitive Natural Communities exist throughout the study area. These vegetation communities are determined by the state by ranking their level of rarity and imperilment. The distribution, range, area of occupancy, vulnerability, and population trends of specific vegetation communities determine their ranking. Potential threats, such as urbanization, are taken into account to further refine the current and potential long-term rarity of the vegetation community. State rankings range between 1 and 5 (1 = very rare and 5 = common). If a natural community falls between 1 and 3, it is considered a Sensitive Natural Community and must be addressed in the CEQA environmental review processes (California Department of Fish and Wildlife 2018). Sensitive Natural Communities present within the study area and their general locations within Biological Planning Zones are listed in Table 4.2-2 and depicted on Figure 4.2-4.

Table 4.2-2. State-Designated Sensitive Natural Communities and General Locations within the Study Area

CDFW Sensitive Natural Community	Biological Planning Zones
California Walnut Woodland	1, 3
Southern Coast Live Oak Riparian Forest	1, 2, 3
Southern Coastal Bluff Scrub	4
Southern Coastal Salt Marsh	4
Southern Cottonwood Willow Riparian Forest	1, 3
Southern Coastal Dune Scrub	4
Southern Mixed Riparian Forest	1
Southern Sycamore Alder Riparian Woodland	1, 3
Southern California Arroyo Chub/Santa Ana Sucker Stream	1
Riversidian Alluvial Fan Sage Scrub	1, 2
Valley Oak Woodland	1
Walnut Forest	3

4.2.2.3 Los Angeles County Significant Ecological Areas

The County of Los Angeles has established, through its General Plan, conservation of SEAs. SEAs are locations that contain irreplaceable biological resources and important regional habitat linkages where development is limited (Los Angeles County 2015). Twenty-eight SEAs occur within Los Angeles County, 11 of which are located within the study area and are depicted on Figure 4.2-5. A detailed description of SEAs is provided in the Los Angeles County General Plan 2035 (Los Angeles County 2015). SEAs occurring within the study area are listed and described below.

Ballona Wetlands SEA

The Ballona Wetlands SEA is located just north of the El Segundo Dunes in the Coastal Zone and Adjacent Uplands Zone. Vegetation communities present include tidally influenced coastal saltmarsh, freshwater marsh, coastal dunes, and coastal scrub. Ballona Creek is one of two remnant saltmarshes in Los Angeles County, and supports breeding habitat for special-status wildlife species such as Belding's savanna sparrow (*Passerculus sandwichensis beldingi*), California least tern (*Sterna antillarum browni*), wandering skipper (*Panoquina errans*), and Southern California saltmarsh shrew (*Sorex ornatus salicornicus*) as well as habitat for Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*).

El Segundo Dunes SEA

The El Segundo Dunes SEA is located in the Coastal Zone and Adjacent Uplands Zone just west of the Los Angeles International Airport runways. The El Segundo dunes are the last remnant of a larger coastal dune system that once stretched several miles in each direction. Southern coastal prairie and dune scrub make up the majority of vegetation and occur nowhere else in the county; the dunes host the entire world population of the El Segundo Blue butterfly (*Euphilotes battoides allyni*), a federally listed endangered species.

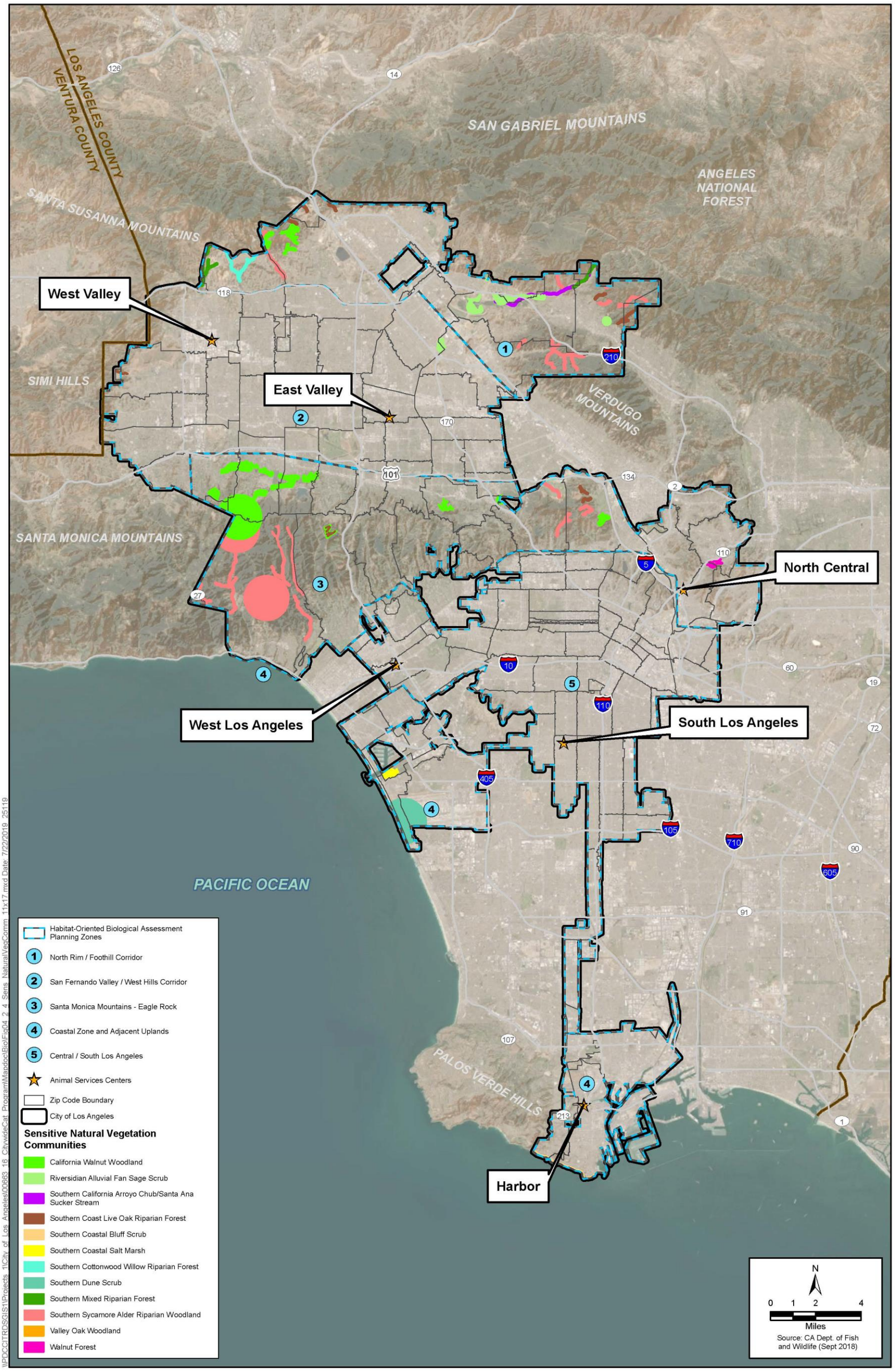

Figure 4.2-4. Sensitive Natural Vegetation Communities

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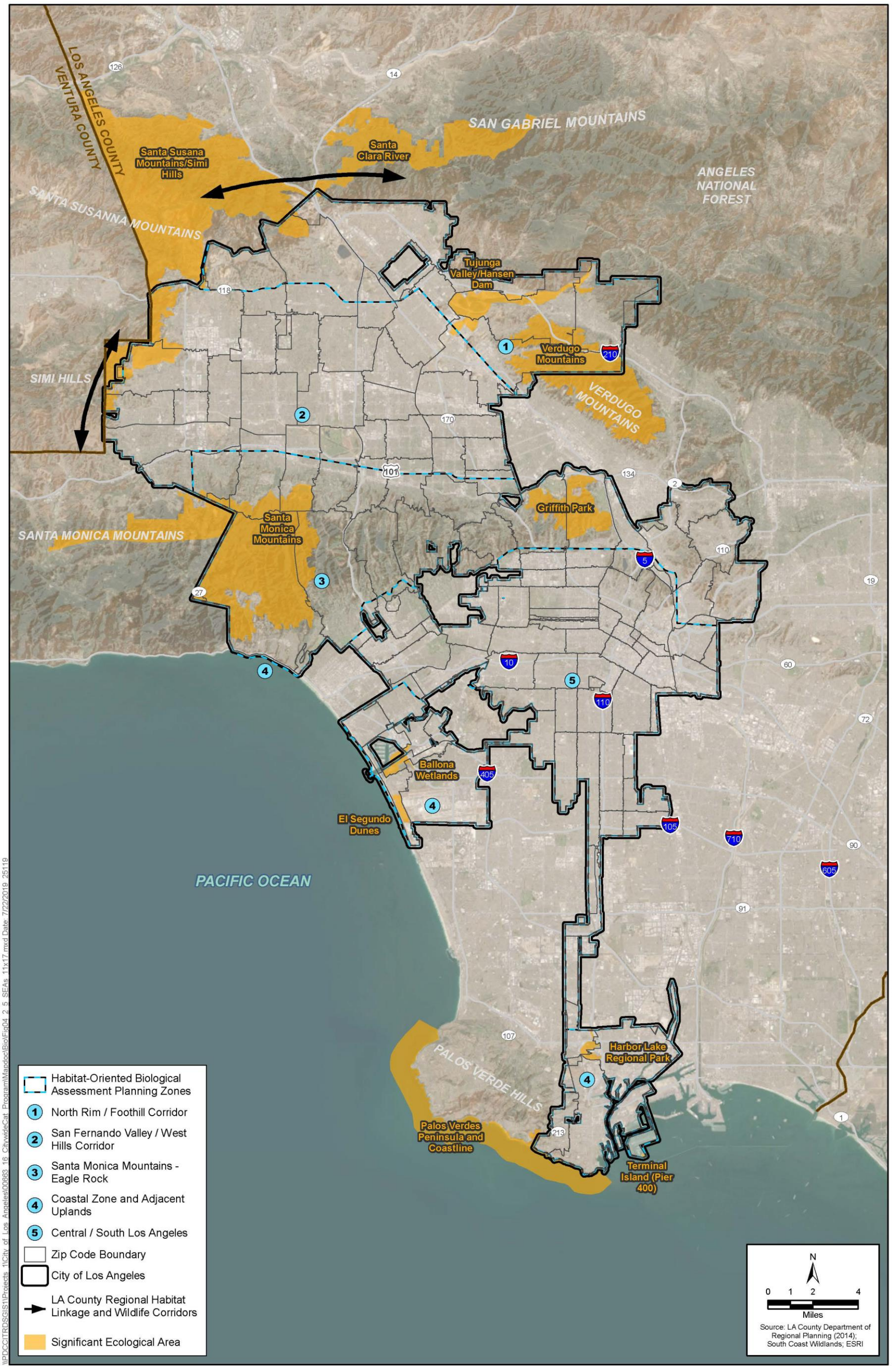

Figure 4.2-5. Los Angeles County Significant Ecological Areas

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Griffith Park SEA

Griffith Park lies at the easternmost end of the Santa Monica Mountains and is within the Santa Monica Mountains – Eagle Rock Zone. Griffith Park supports native vegetation communities such as coastal scrub, chaparral, riparian, and oak and walnut woodlands and is surrounded by major freeways (U.S. Route 101 and U.S. Route 5) and extensive urbanization. The park supports a diverse assemblage of native plant and animal species and also provides important stop-over habitat for migratory birds. Griffith Park lies within the Rim of the Valley Corridor and is home to "P-22," the mountain lion who resides in the park.

Harbor Lake Regional Park SEA

The Harbor Lake Regional Park is north of San Pedro, within the Coastal Zone and Adjacent Uplands Zone. This SEA supports one of two remaining wetlands that once covered the South Bay area and Lake Machado. Natural communities include willow forest, freshwater marsh, and Lake Machado, which support a diversity of wildlife species including migratory birds, such as waterfowl, shorebirds, and marsh birds.

Palos Verdes Peninsula and Coastline SEA

The Palos Verdes Peninsula and Coastline SEA consists of a 10-mile stretch of coastline along the Palos Verdes Peninsula encompassing coastal bluffs and cliffs, headlands, coastal strand, coastal scrub, rocky intertidal, and kelp beds. The coastal cliffs and offshore rocks support shorebirds, gulls, and other seabirds. The American peregrine falcon (*Falco peregrinus anatum*) and prairie falcon (*Falco mexicanus*) historically winter along bluff tops in this area. This SEA also includes Fort MacArthur Military Reservation within its buffer.

Santa Clara River SEA

The Santa Clara River SEA is composed of a large, mostly intact riparian corridor that serves as the primary east-west linkage between the California coast, coastal and interior mountain ranges, and the high desert, and is essential for wildlife and ecosystem connectivity in the region. Only a very small fragment of this SEA occurs within the study area in the northernmost portion of the North Rim/Foothill Corridor Zone.

Santa Monica Mountains SEA

The Santa Monica Mountains SEA is composed of coastal mountainous regions of the Santa Monica Mountains along the westernmost portion of the Santa Monica Mountains – Eagle Rock Zone. Vegetation communities in this SEA include chaparral, coastal scrub, oak and riparian woodlands, grassland situated in coastal mountains, and foothills that support a rich diversity of native plant and animal species. The Santa Monica Mountains provide large areas of open space and important connectivity to the Simi Hills, Santa Susana Mountains, and the remainder of the transverse ranges including the San Gabriel Mountains.

Santa Susana Mountains/Simi Hills SEA

The Simi Hills and Santa Susana Mountains SEA is located along the northwestern boundary of the North Rim/Foothill Corridor Zone supporting grassland, chaparral, oak woodland and savanna,

riparian woodland, and bigcone Douglas-fir forest. The Santa Susana Mountains/Simi Hills SEA includes several important linkages for wildlife movement between the Santa Monica Mountains to the south, San Gabriel Mountains to the east, and mountains of the Los Padres National Forest to the north.

Terminal Island (Pier 400) SEA

The Terminal Island Pier 400 SEA is protected from development and was specifically designed for the California least tern (*Sterna albifrons browni*). It is buffered from the surrounding urban development, close to least tern foraging areas, and maintained as a nesting ground. The site is flat, sandy, and sparsely vegetated.

Tujunga Valley/Hansen Dam SEA

This SEA is located in the eastern portion of the North Rim/Foothill Corridor Zone and is composed of the Tujunga Valley, which occupies the Big Tujunga Canyon floodplain, and Hansen Dam, which is a flood control basin receiving stream discharge from Lopez, Kagel, Little Tujunga, and Big Tujunga Canyon Watersheds. The area supports open coastal scrub, chaparral, Riversidean alluvial scrub, riparian willow woodland, and small pockets of freshwater marsh. The area and surrounding hillsides are dry and support federally listed endangered species such as Nevin's barberry (*Berberis nevinii*) and slender-horned spineflower (*Dodecahema leptoceras*), which have been found in the wash. The vegetation in the Tujunga Valley runs nearly uninterrupted from the foot of the Verdugo Mountains well up into the San Gabriel Mountain foothills, providing valuable wildlife connectivity and habitat for riparian bird species such as southwestern willow flycatcher. The region historically supports populations of arroyo chub (*Gila orcutti*) and Santa Ana sucker (*Catostomus santaanae*) and, as of 1993, chub was reported as common in Big Tujunga, although Santa Ana speckled dace (*Rhinichthys osculus*) and Santa Ana sucker have become rare or extirpated (Swift et al. 1993).

Verdugo Mountains SEA

The Verdugo Mountains SEA includes the northwestern portion of the Verdugo Mountains in the easternmost portion of the North Rim/Foothill Corridor Zone. This region is an important linkage between the San Gabriel and the Santa Monica Mountains and lies within the Rim of the Valley Corridor. The range has a diverse topography and water resources that support coastal scrub, chaparral, and mature oak woodlands, along with many species of plants and wildlife.

4.2.2.4 Wetlands and Water Resources

Several types of aquatic resources exist in the study area including both freshwater and marine resources and protected areas that support a diverse assemblage of marine, aquatic, riparian, and upland plant and animal species. Existing stressors on wetlands and water resources within the study area include maritime shipping activities at the port and off the coast; contaminated stormwater runoff and transport from various flood control channels, streams, and rivers to the ocean; recreation; human use; and disturbance along major rivers, wetlands, and beaches, which in some areas substantially limit or eliminate the habitat value for a variety of aquatic, terrestrial, and marine wildlife species.

These water resources and their general distribution and conditions within the study area are discussed below and depicted on Figure 4.2-6.

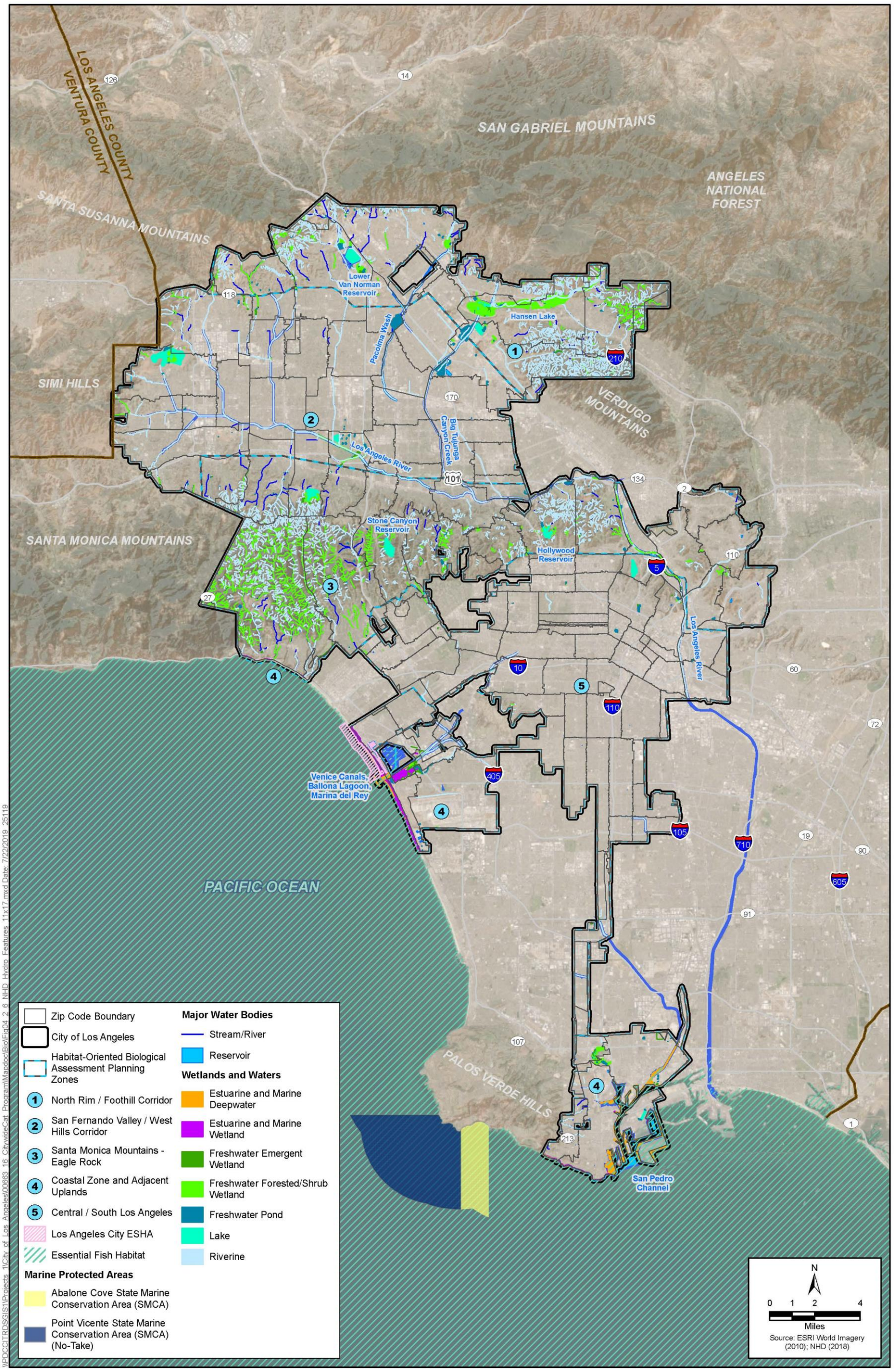

Figure 4.2-6. City of Los Angeles Marine, Freshwater, and Wetland Resources

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Freshwater

The study area encompasses portions of four watersheds including the Los Angeles River, Ballona Creek, Santa Monica Bay, and Dominguez Channel Watersheds, which support a variety of water resources including wetlands, rivers, creeks, channels, reservoirs, and marine (City of Los Angeles 2018d; City of Los Angeles Stormwater Program 2018). These water features provide resources and habitat for wildlife such as feeding, breeding, shelter, and stop-over habitats for a variety of mammals, avian, fish, reptiles, amphibians, and invertebrates. Waters provide patches of habitat within developed areas with habitat types such as open water, coastal estuary, riparian forest, riparian scrub, and wetland. These vegetation communities hold not only rare plant species but also provide habitat for least Bell's vireo, southwestern willow flycatcher, Santa Ana sucker, and various other special-status species.

An overview of these water resources is presented below and depicted on Figure 4.2-6. Basin Plan RARE features that support habitats necessary, at least in part, for the survival and development of animal or plant species that have been established as rare, threatened, or endangered under state or federal law are also discussed.

Detailed information on hydrology and water quality is discussed in Section 4.3 of this EIR.

Lacustrine (Standing) Waters

Seasonal or perennial lentic water bodies in the study area include reservoirs, lagoons, pools, flood control basins, and lakes. Major water bodies include, but are not limited to, Stone Canyon Reservoir, Encino Reservoir, Hollywood Reservoir, Redwing Lake, Silverlake Reservoir, Sepulveda Basin, Machado (Harbor) Lake, Chatsworth Reservoir, Ascot Reservoir, Del Rey Lagoon, and the Hansen Flood Control Basin (United States Geological Survey 2018).

Many of these water bodies are found within Los Angeles County–designated SEAs. Harbor Lake Regional Park SEA natural communities include willow forest, freshwater marsh, and Lake Machado, which support a diversity of wildlife species including migratory birds, such as waterfowl, shorebirds, and marsh birds. The Chatsworth Reservoir contains native oak woodland, savannas, grassland, seasonal wetlands, marsh, and riparian communities as well as open water within the reservoir. The area supports a variety of rare plants as well as amphibians, reptiles, mountain lions, bobcats, and birds. Tujunga Valley/Hansen Dam SEA includes Hansen Flood Control Basin, which receives stream discharge. The area supports open coastal sage scrub and small pockets of freshwater marsh that support federally listed endangered species. The vegetation in the area provides valuable habitat for riparian bird species such as southwestern willow flycatcher. Historically, the waters that flow into the basin have had populations of arroyo chub (*Gila orcutti*) and Santa Ana sucker (*Catostomus santaanae*). Sepulveda Basin is located upstream from the Sepulveda Dam and contains a recreation area and a 225-acre wildlife reserve. The wildlife reserve contains crucial habitat for various birds, mammals, reptiles, plants, and insects.

Riverine (Moving) Waters

The Los Angeles River is the longest river within the study area and originates in the western San Fernando Valley, extending 55 miles to flow east and south, emptying into San Pedro Bay. Major tributaries to the Los Angeles River include Compton Creek, Rio Hondo, Arroyo Seco, and Tujunga Creek. The vast majority of the Los Angeles River is hardened with concrete and rip rap; however,

the aquatic and riparian habitat that exist along the soft-bottom portions provide habitat for wildlife and improve water quality. The river, like most waterways in the region, typically flows year-round, from both wet-weather (storm events) and dry-weather flows (urban water waste and treatment plant discharges). Wet-weather flows are typical for the region and extremely flashy (i.e., high flow variability due to rapid increases in flow after precipitation events) in the wet season. The average dry-weather flow is 153 cubic feet of water per second. The average wet-weather flow is two to three times higher, and even more during large storms. The river supports over 300 species of fish and wildlife and also provides important connectivity opportunities in an otherwise developed and fragmented landscape.

Ballona Creek is another major waterway in the study area. The highly developed and hardened creek drains mostly urban runoff from an approximately 130-square-mile area stretching from the eastern Santa Monica Mountains to Marina Del Rey and the Pacific Ocean. Ballona Wetlands, located adjacent to the mouth (end) of Ballona Creek, is a 600-acre area of wetland habitat. Ballona Wetlands is the largest protected continuous coastal wetland within the study area and contains rare estuarine wetland, brackish wetland, freshwater marsh, and riparian habitats. Over 300 bird species have been documented in this area as well as rare and endangered plant and animal species (Los Angeles Sanitation 2018).

Big Tujunga Creek and Little Tujunga Creek are two major tributaries to the Los Angeles River. Both are also in the Pacoima/Tujunga subwatershed that flow into Hansen Flood Control Basin (also known as Hansen Dam). The two creeks converge into Tujunga Wash. Together these waters provide critical habitat for many species. Historically, Santa Ana sucker, arroyo chub, red-legged frog, raptors, and western yellow-billed cuckoo have been found in these areas. The Riversidean alluvial fan scrub vegetation community in Big Tujunga Wash is endangered and unique to that area. Other vegetation types include coastal sage scrub, riparian willow woodland, and riparian scrub (The River Project 2008). The Big Tujunga Canyon floodplain and Hansen Dam make up the Tujunga Valley/Hansen Dam SEA.

Topanga Creek is a mostly natural, uninterrupted, ephemeral creek that includes surface flow from several springs in the southwestern Santa Monica Mountains, before flowing into Topanga Lagoon and the Pacific Ocean. The creek supports a diverse community of plants and wildlife, many of which have special status, including populations of southern steelhead trout and tidewater goby (The Topanga Creek Watershed Committee 2002).

Other water features that provide resources for special-status species and are included in the Basin Plan are discussed and listed in the following section.

Basin Plan RARE Features

As described in Section 4.2.2.1, the LARWQCB Basin Plan (Los Angeles Regional Water Quality Control Board 2019) has established RARE features, which are designated ESAs per the City's *Municipal Code*. The beneficial uses portion of the Basin Plan lists major regional water bodies, or portions thereof, called RARE features, which support habitats necessary, at least in part, for the survival and development of animal or plant species that have been established as rare, threatened, or endangered under state or federal law. The Basin Plan RARE features that occur within the study area are listed below.

- Arroyo Seco Reach 1
- Ballona Creek Estuary

- Ballona Lagoon/Venice Canals
- Ballona Wetlands
- Big Tujunga Canyon Creek
- Del Rey Lagoon
- Dominguez Channel
- Dominguez Channel Estuary
- Haines Canyon Creek
- Hansen Dam Flood Control Basin &and Lakes
- Harbor Lake/Lake Machado
- Harbors, Estuaries, and Beaches
- Little Tujunga Canyon Creek
- Los Angeles Harbor
- Los Angeles Reservoir (Bull Creek)
- Lower Van Norman Reservoir
- Marina del Rey (public beach areas, entrance channel, all other areas except the harbor)
- Pacoima Wash

Marine Waters

The study area is immediately adjacent to and includes portions of the Pacific Ocean coastline. All streams, rivers, and storm drains within the study area eventually drain into the Pacific Ocean. This portion of the Pacific Ocean and coastline in the study area support important coastal habitats and a wide variety of marine species, including special-status species and resources, which may inhabit or migrate through the intertidal and pelagic zones. Locally important coastal and marine resources include established SEAs such as Ballona Wetlands, Palos Verde Peninsula Coastline, and Terminal Island; EFH; and Marine Protected Areas (MPAs). EFH and MPAs are discussed below and SEAs are discussed in Section 4.2.2.3.

EFH is habitat identified by NMFS as being required for fish to spawn, breed, feed, and grow to maturity. Off the coast of the study area, EFH is designated for groundfish, coastal pelagics, and highly migratory species. Additionally, Ballona Lagoon and Venice Canals have recently been determined to be EFH For Pacific Coast groundfish and coastal pelagic species (National Oceanic and Atmospheric Administration 2004; Pacific Fishery Management Council 2016, 2018). MPAs are protected oceanic areas where activities such as fishing or collecting are restricted or prohibited. Three designated MPAs exist in the study area vicinity: Point Dume State Marine Reserve, Point Vicente State Marine Conservation Area, and Abalone Cove State Marine Conservation Area (California Department of Fish and Wildlife 2014). MPA regulations are per CCR Title 14, Section 632. EFH and MPAs are depicted on Figure 4.2-6.

4.2.2.5 Special-Status Plant and Wildlife Species

The study area supports a wide diversity of special-status plant and animal species that have the potential to be impacted by domestic cats. Appendix L contains a comprehensive list of special-status plant and animal species with potential to occur in the study area. A general overview of these species is provided in the following sections.

Non-Listed Special-Status Plants

The study area supports an abundance of native plant species. Habitat loss and fragmentation have reduced the number and distribution of native plant species and resulted in the extirpation of others; however, many native plants and plant communities exist within the City in both developed and open space areas (City of Los Angeles 2006). Plant species are adapted to and require specific environmental conditions for survival. While some plant species thrive under a wide range of environmental conditions, other species require specific environmental conditions—temperature, moisture, soil type, or disturbance for germination and survival. The City's recently published *Biodiversity Report* (City of Los Angeles 2018c) identifies at least 449 native plant species that occur within the City, 67 of which are considered special-status species. The City's *Biodiversity Report* also states that the highest concentration of plant biodiversity occurs within the foothills of the Santa Monica and San Gabriel Mountains (City of Los Angeles 2018c). Special-status plant species are primarily distributed throughout the open space of the mountains and foothills, coastal dunes, wetlands, and riverine habitat in the study area. As part of the sensitive biological resources evaluation, 88 non-listed special-status plant species were identified as having the potential to occur in the study area and surrounding region (see Appendix L for the full list of special-status species with potential to occur in the study area). Special-status species federally or state-listed as endangered or threatened are discussed below.

Non-Listed Special-Status Wildlife

Non-listed special-status wildlife species include fish and wildlife species that do not have state or federal status under the FESA or CESA, but are at risk of imperilment due to population declines, rarity, sensitivity, or narrow distribution. According to the review, 82 non-listed special-status animal species were identified as having the potential to occur in the study area and include 17 invertebrates, 2 fishes, 11 reptiles, 2 amphibians, 29 birds, and 21 mammals. Species listed under the FESA or CESA are discussed below. Appendix L includes a full list of special-status species with potential to occur in the study area along with their regulatory status and habitat requirements.

Special-status wildlife within and around the study area include mountain lion (*Puma concolor*); ring-tailed cat (*Bassariscus astutus*); American badger (*Taxidea taxus*); a wide variety of insectivorous bat species; small terrestrial mammals, reptiles, and amphibians; birds such as burrowing owl (*Athene cunicularia*), American peregrine falcon (*Falco peregrinus anatum*), and yellow warbler (*Setophaga petechia*); and invertebrates such as the iconic monarch butterfly (*Danaus plexippus*), El Segundo blue butterfly (*Euphilotes battoides allyni*), and several species of beetle (*Cicindela* and *Coelus* spp.). Channelization and extensive alteration of the region's rivers and streams have dramatically impacted native fish populations, with four of seven native freshwater fish species currently extirpated from the region (City of Los Angeles 2018e). Despite the highly altered and degraded condition of the region's waters, some remnant populations of special-status fish species occur in the upper reaches of the watersheds including arroyo chub (*Gila orcutti*), Santa

Ana speckled dace (*Rhinichthys osculus*) (Swift et al. 1993), and the Santa Ana Sucker (*Catostomus santaanae*) (Ecorp Consulting Inc. 2010).

Non-listed special-status wildlife species occur across the entire study area, particularly within remaining habitat and open space areas. Interspersed within the most developed portions of the study area are mountains, hillsides, canyons, riparian and wetland communities, rivers, lakes, reservoirs, parks, and larger blocks of habitat such as the Santa Monica and Verdugo Mountains, and SEAs such as Griffith Park, which support a rich diversity of wildlife species. The City's mountains and foothills support larger areas of intact open space, which have higher habitat value than more developed areas in the study area. Many special-status species in the study area are well adapted to living within the urban-wildland interface or are well adapted to the City's urban areas. Other species require specific habitat conditions not available in developed areas or are sensitive to human disturbances, urbanization, and fragmentation, resulting in low urban tolerance and abundance.

Threatened and Endangered Species

Seventy-six plant and animal species listed as endangered, threatened, proposed, or candidate under the FESA and/or CESA have potential to occur within the study area and along its coastal region. These species include 11 federally listed endangered plants, 9 state-listed endangered plants, 3 federally listed threatened plants (one under petition), 2 state-listed threatened plants, 28 federally listed endangered animals, 9 state-listed endangered animals, 10 federally listed threatened animals, and 4 state-listed threatened animals. See Table 4.2-3 below and Appendix L for a list of threatened and endangered species with potential to occur in the study area.

Habitats supporting these FESA- and CESA-listed species occur throughout the study area and consist of coastal marine waters, beaches and dunes, grasslands, riparian vegetation, wetlands, coastal scrub and chaparral, woodlands, and freshwater riverine habitat including Big Tujunga Canyon Creek. Federally designated critical habitat also exists within the study area for Braunton's milk-vetch, coastal California gnatcatcher, Santa Ana sucker, western snowy plover, southwestern willow flycatcher, black abalone, and Southern California steelhead and is depicted on Figure 4.2-7. FESA defines *critical habitat* as specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. Critical habitat may include areas that are not currently occupied by the species but will be needed for its recovery. Critical habitat is distributed in the coastal scrub of the Santa Susana foothills and Palos Verdes peninsula; Santa Monica Mountains; coastal zones including beach, dune, and subtidal habitats; and remnant wetland, riverine, riparian scrub, and forest in Big Tujunga Canyon Creek, Topanga Creek, Hansen Lake, and around the San Pedro/Harbor City region.

Table 4.2-3. Federally and State-Listed Species with Potential to Occur in Study Area

Common Name (Scientific Name)	Species Status	Biological Planning Zone with Critical Habitat
Plants		
Marsh Sandwort (*Arenaria paludicola*)	Federal: Endangered State: Endangered CRPR: 1B.1	None
Braunton's Milk-vetch (*Astragalus brauntonii*)	Federal: Endangered State: None CRPR: 1B.1	2, 3
Ventura Marsh Milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*)	Federal: Endangered State: Endangered CRPR: 1B.1	None
Coastal Dunes Milk-vetch (*Astragalus tener* var. *titi*)	Federal: Endangered State: CSC CRPR: 1B.1	
Nevin's Barberry (*Berberis nevinii*)	Federal: Endangered State: Endangered CRPR: 1B.1	None
Salt Marsh Bird's-beak (*Chloropyron maritimum* ssp. *Maritimum*)	Federal: Endangered State: Endangered CRPR: 1B.1	None
San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*)	Federal: Proposed Threatened State: Endangered CRPR: 1B.1	1, 2
Beach spectaclepod (*Dithyrea maritima*)	Federal: None State: Threatened CRPR: 1B.1	4
Slender-horned Spineflower (*Dodecahema leptoceras*)	Federal: Endangered State: Endangered CRPR: 1B.1	1, 2
Santa Monica Dudleya (*Dudleya cymosa* ssp. *ovatifolia*)	Federal: Threatened State: None CRPR: 1B.1	3
San Diego Button-celery (*Eryngium aristulatum* var. *parishii*)	Federal: Endangered State: Endangered CRPR: 1B.1	None
Gambel's Water Cress (*Nasturtium gambelii*)	Federal: Endangered State: Threatened CRPR: 1B.1	2
Spreading Navarretia (*Navarretia fossalis*)	Federal: Threatened State: None CRPR: 1B.1	None
California Orcutt grass (*Orcuttia californica*)	Federal: Endangered State: Endangered CRPR: 1B.1	2, 4
Lyon's Pentachaeta (*Pentachaeta lyonii*)	Federal: Endangered State: Endangered CRPR: 1B.1	4

Common Name (Scientific Name)	**Species Status**	**Biological Planning Zone with Critical Habitat**
Invertebrates		
Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	Federal: Endangered State: None	None
Crotch Bumble Bee (*Bombus crotchii*)	Federal: None State: Candidate	None
El Segundo Blue Butterfly (*Euphilotes battoides allyni*)	Federal: Endangered State: Special Animal	None
Palos Verdes Blue Butterfly (*Glaucopsyche lygdamus palosverdesensis*)	Federal: Endangered State: Special Animal	4
White Abalone (*Haliotis sorenseni*)	Federal: Endangered State: None	4
Black Abalone (*Haliotis cracherodii*)	Federal: Endangered State: None	4
Riverside Fairy Shrimp (*Streptocephalus woottoni*)	Federal: Endangered State: Special Animal	None
Fish		
Green Sturgeon (*Acipenser medirostris*)	Federal: Threatened State: None	None
Santa Ana Sucker (*Catostomus santaanae*)	Federal: Endangered State: None	1
Tidewater Goby (*Eucyclogobius newberryi*)	Federal: Endangered State: None	4
Southern California Steelhead (*Oncorhynchus mykiss irideus*)	Federal: Endangered State: Species of Special Concern	3
Reptiles and Amphibians		
Arroyo Toad (*Anaxyrus californicus*)	Federal: Endangered State: Special of Special Concern	1, 2
Loggerhead Sea Turtle (*Caretta caretta*)	Federal: Endangered State: None	None
Green Sea Turtle (*Chelonia mydas*)	Federal: Endangered State: None	None
Leatherback Sea Turtle (*Dermochelys coriacea*)	Federal: Endangered State: None	None
Olive Ridley Sea Turtle (*Lepidochelys olivacea*)	Federal: Threatened State: None	None
California Red-legged Frog (*Rana draytonii*)	Federal: Threatened State: Special of Special Concern	1, 2
Southern Mountain Yellow-legged Frog (*Rana muscosa*)	Federal: Endangered State: Endangered	1
Birds		
Tricolored Blackbird (*Agelaius tricolor*)	Federal: None State: Threatened	None
Swainson's Hawk (*Buteo swainsoni*)	Federal: None State: Threatened	None

Common Name (Scientific Name)	**Species Status**	**Biological Planning Zone with Critical Habitat**
Western Snowy Plover (*Charadrius alexandrines nivosus*)	Federal: Threatened State: Special of Special Concern	4
Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)	Federal: Threatened State: Endangered	None
Willow Flycatcher (all subspecies) (*Empidonax traillii*)	Federal: None State: Endangered	2
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)	Federal: Endangered State: Endangered	1
California Condor (*Gymnogyps californianus*)	Federal: Endangered State: None	3
California Black Rail (*Laterallus jamaicensis coturniculus*)	Federal: None State: Threatened, CA Fully Protected	None
Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*)	Federal: None State: Endangered	4
Coastal California Gnatcatcher (*Polioptila californica californica*)	Federal: Threatened State: Species of Special Concern	4, 1
Light-footed Clapper Rail (*Rallus longirostris levipes*)	Federal: Endangered State: None	None
Bank Swallow (*Riparia riparia*)	Federal: Endangered State: Threatened	None
California Least Tern (*Sterna antillarum browni*)	Federal: Endangered State: Endangered, CA Fully Protected	4
Least Bell's Vireo (V*ireo bellii pusillus*)	Federal: Endangered State: Endangered	1, 2
Mammals		
Guadalupe Fur Seal (*Arctocephalus townsendii*)	Federal: Threatened State: None MMPA: Depleted, Protected	None
Sei Whale (*Balaenoptera borealis*)	Federal: Endangered State: None MMPA: Depleted, Protected	None
Blue Whale (*Balaenoptera musculus*)	Federal: Endangered State: None MMPA: Depleted, Protected	None
Fin Whale (*Balaenoptera physalus*)	Federal: Endangered State: None MMPA: Depleted, Protected	None
Southern Sea Otter (*Enhydra lutris nereis*)	Federal: Threatened State: None	None
North Pacific Right Whale (*Eubalaena japonica*)	Federal: Endangered State: None MMPA: Depleted, Protected	None

Common Name (Scientific Name)	Species Status	Biological Planning Zone with Critical Habitat
Stellar Sea Lion (*Eumetopias jubatus*)	Federal: Endangered State: None MMPA: Depleted, Protected	None
Humpback Whale (*Megaptera novaeangliae*)	Federal: Endangered State: None MMPA: Depleted, Protected	None
Southern Resident Killer Whale (*Orcinus orca*)	Federal: Endangered State: None MMPA: Depleted, Protected	None
Sperm Whale (*Physeter microcephalus*)	Federal: Endangered State: None MMPA: Depleted, Protected	None

*CRPR= California Rare Plant Rank

4.2.2.6 Ecological Connectivity Areas

Connectivity, in the context of ecology, generally refers to the ability of plant and animal species to move between different habitat areas. Terms such as *corridor* and *linkage* are often used to describe landscape features that facilitate the movement of plants and animals between two or more habitat areas or regions (Soule and Gilpin 1991; Beier and Loe 1992; City of Los Angeles 2001). Connectivity facilitates important ecological processes such as species movement, species dispersal, seasonal migration, and gene flow and interchange. Connectivity also facilitates species access to food, shelter, mates, and other life-sustaining resources and the ability of species to move and recolonize in response to environmental perturbations and disturbance such as fire, habitat loss, and climate change (Beier and Loe 1992; Noss 2001; Seavy et al. 2009). Connectivity is an essential component of ecosystem function and is necessary for the continued existence of both plant and animal species (Fischer and Lindenmayer 2007). When habitats and landscapes are fragmented by roads and highways, human developments, and habitat loss, connectivity may be constrained or obstructed.

Important connectivity areas within and adjacent to the study area include areas referred to as *linkages*, *corridors*, and *connectivity areas*. These resources are discussed below and are generally referred to as connectivity areas, although specific terminology is used by resource when appropriate. In addition to the recognized or designated connectivity areas listed below, other features within the study area provide connectivity or stop-over opportunities for both resident and migratory species. These features include open waters, rivers, streams, and associated vegetation; open space; remnant habitat patches; and man-made elements such as parks, trees, as well as crevices and bays within culverts and bridges.

Recognized connectivity areas in the study area and vicinity are primarily located along the Santa Monica Mountains, Santa Susana Mountains, San Gabriel Mountains, and Verdugo Mountains and their associated foothill regions, as well as within the Arroyo Seco and Los Angeles River Watersheds, along with adjacent open space and park lands such as Griffith Park, Elysian Park, and Ernest E. Debs Regional Park. Each of the recognized connectivity areas that overlap with the study area are discussed in detail below.

California Essential Habitat Connectivity Project

The California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (Spencer et al. 2010) was designed to support land use planning and transportation. The report was produced by a multidisciplinary team of representatives from 62 agencies, a smaller Technical Advisory Team, and a Steering Committee. The report includes a statewide Essential Habitat Connectivity Map that depicts large blocks of habitat called Natural Landscape Blocks and areas deemed essential for ecological connectivity for a broad range of species called Essential Connectivity Areas that can be used to help prioritize conservation, mitigation, and other land-based decisions. Essential Connectivity Areas and Natural Landscape Blocks in the study area vicinity are listed below and depicted on Figure 4.2-8.

Essential Connectivity Areas:

- Castro Peak/Santa Monica Mountains - Pine Mountain/Sespe Condor
- Contract Point / Santa Susana Mountains
- Los Angeles River (Riparian Connection)

Natural Landscape Blocks:

- Las Flores/Santa Monica Mountains
- Mount Hollywood
- Calabasas Peak/Santa Monica Mountains
- Topanga Canyon/Santa Monica Mountains
- Las Virgenes Creek/Santa Monica Mountains
- Verdugo Mountains
- Big Tujunga Canyon
- Simi Hills
- Contract Point
- San Gabriel Mountains West
- Santa Susana Mountains

Missing Linkages

The South Coast Missing Linkages (Penrod et al. 2006) and Missing Linkages in California's Landscape (Penrod et al. 2000) include a collection of wildlife linkages identified in the south coast California ecoregion, which were assembled during a series of dedicated statewide connectivity conferences and workshops. Linkages identified as having high value and being vulnerable to degradation were identified by a collection of experts including resource agency staff, land managers, land and transportation planners, conservation biologists, university scientists, and other experts. Linkages in the study area vicinity are listed below and depicted on Figure 4.2-9.

Linkages within or overlapping with study area:

- Santa Susana Pass Linkage

- Angeles - Verdugo Mountains Linkage
- Griffith Park - Verdugo Hills Linkage
- Santa Monica- Sierra Madre Linkage

Linkages immediately adjacent to study area boundaries:

- Highway 5 – Newhall Pass Linkage

Los Angeles County Regional Habitat Linkages and Wildlife Corridors

Regional Habitat Linkages and Wildlife Corridors identified in the 2015 County General Plan (Los Angeles County 2015) and are recognized as important for ensuring greater regional biodiversity, species and habitat connectivity, and connectivity of biological resource areas in Los Angeles County with resource areas in adjacent local jurisdictions. These linkages are based on National Forest boundaries, the County SEAs, and a series of missing linkage design studies conducted by the South Coast Wildlands Project. For a detailed description of these linkages, please refer to Appendix E of the Los Angeles County General Plan (Los Angeles County 2015). Los Angeles County Regional Habitat Linkages and Wildlife Corridors in the study area vicinity are listed below and depicted on Figure 4.2-10.

- Two Los Angeles County Regional Habitat Linkages and Wildlife Corridors exist to the northwest and north of Biological Planning Zone 1 and connect the Santa Monica Mountains, Santa Susana Mountains, Simi Hills, and Santa Clara River.

City of Los Angeles Wildlife Corridors

General Plan Corridors

The City of Los Angeles General Plan (2001) identifies several important local wildlife corridors including the Rim of the Valley Trail Corridor, which was adopted into state law in 1990 (Public Resources Code Section 33204.3). This law authorizes the Santa Monica Mountains Conservancy, a state agency, to work with counties and cities within the greater Los Angeles region to develop a plan to acquire lands linking the mountain ranges surrounding the San Fernando and La Crescenta Valleys. One of the primary features of the plan is creation of permanent habitat corridors to protect endangered and threatened native plant and animal species. Other important corridors identified in the City's General Plan include corridors between the Santa Susana Mountains and the Simi Hills and between the Simi Hills and the Santa Monica Mountains, and connections between the Santa Monica Mountains and the Verdugo Mountains and San Gabriel Mountains. The Rim of the Valley Corridor is depicted on Figure 4.2-10.

Regional Connectivity

Pacific Flyway

The study area is situated within the Pacific Flyway, which encompasses the entire City. The Pacific Flyway is an important north-south migration corridor for more than 350 migratory bird species totaling at least 1 billion birds that inhabit the area during the spring or fall migration periods (City of Los Angeles 2018c; Pacific Flyway Center 2018). Because the City is situated along the Pacific Flyway, the more than 400 resident bird species share the City with migratory species such as

Costa's hummingbirds, cliff swallows, Swainson's thrush, yellow-rumped warblers, and Canada geese that have traveled great distances to inhabit the region during their breeding season or to stop over and pass through on their spring and fall migrations (City of Los Angeles 2018c). Migratory bird species may use portions of the study area as winter range, summer range, or breeding habitat, or may stop over to rest and gather resources necessary to continue their migrations.

4.2.2.7 Local Conservation Efforts

Various efforts related to conservation of sensitive biological resources are underway in the study area. Some of these efforts are introduced below to provide context to the environmental setting of this EIR.

Los Angeles City Biodiversity Motion

The Los Angeles City Biodiversity Motion was adopted on May 10, 2017, and is designed to guard and improve the City of Los Angeles' biodiversity (Council File 15-0499). The motion is composed of three main goals: (1) form an index system to assess overall biodiversity, (2) create policies and programs to enrich biodiversity, and (3) provide ways to engage and inform the public on biodiversity protection and enhancement. The first step of developing an index score has started in the form of the Singapore Index for the City of Los Angeles. Eventually, findings from this study will assist the development of a biodiversity management strategy as required by the motion (City of Los Angeles 2018c).

Los Angeles Protection Areas for Wildlife

The PAWs program is currently in development as a pilot study. The PAWs pilot study will aim to "conserve and protect existing natural areas and wildlife habitats within the City of Los Angeles and support other related City, County, State, and Federal government ecological efforts." The goals of the pilot study are to evaluate existing biotic conditions within the City, identify areas important for supporting habitat and movement for wildlife, and provide development standards for managing and conserving biological resources by potentially regulating development and wildlife habitat within these areas. The pilot study area will be located within the Santa Monica Mountains between the I-405 and U.S. 101 freeways and will serve to test potential regulations that could be adapted for future PAWs program development such as measures to reduce interference with wildlife movement (permeable fencing, bird-friendly windows), reduce wildlife-human conflict (secured trash), reduce lighting, and implement habitat buffers (City of Los Angeles 2018a).

Los Angeles River Revitalization and Enhancements

Los Angeles County – Los Angeles River Master Plan

The 1996 Los Angeles River Master Plan's mission is to provide for the "optimization and enhancement of aesthetic, recreational, flood control and environmental values by creating a community resource, enriching the quality of life for residents and recognizing the river's primary purpose for flood control." The Los Angeles River Master Plan is currently being updated with an updated plan due in 2020.

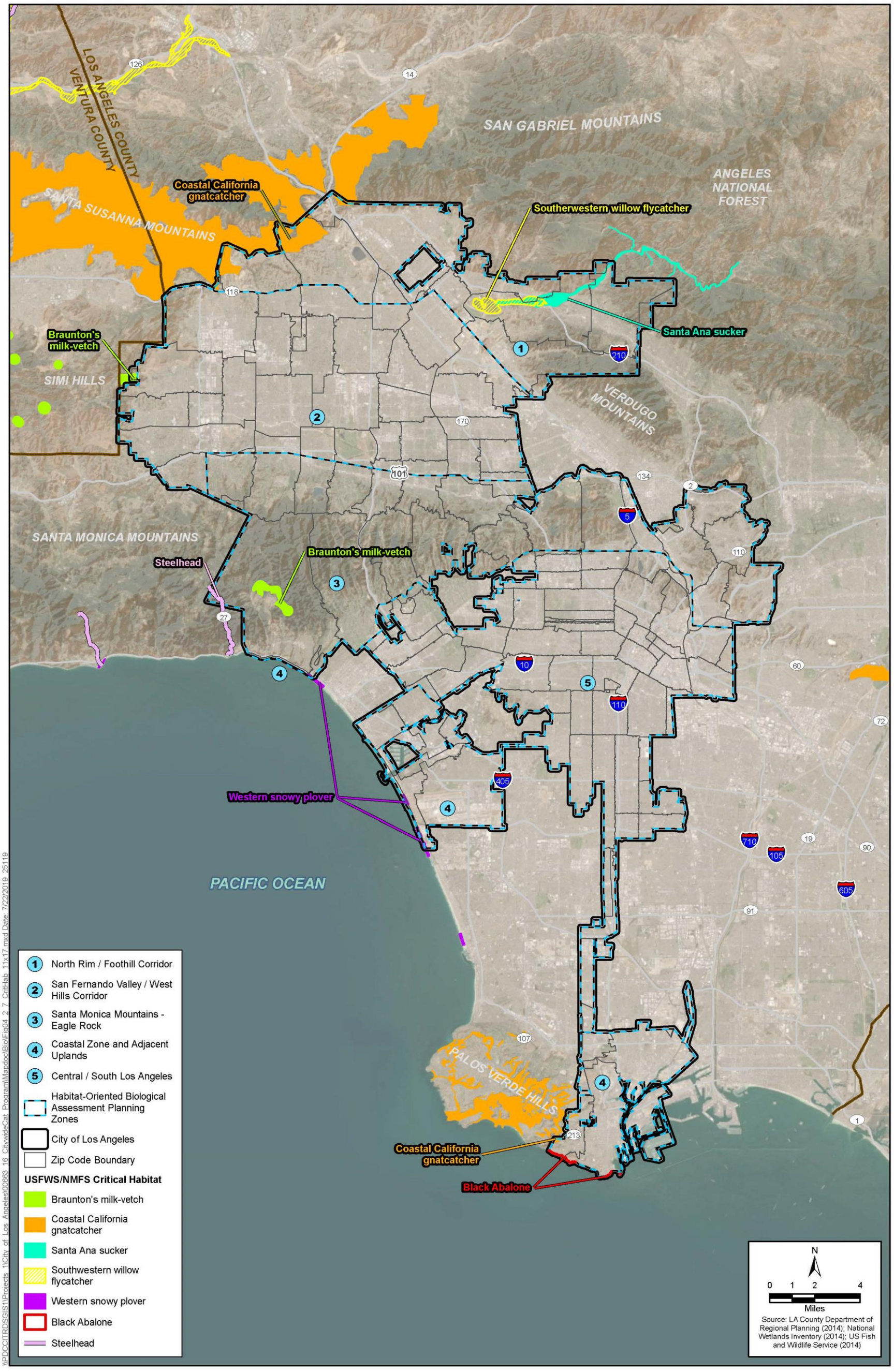

Figure 4.2-7. City of Los Angeles Federally Designated Critical Habitat

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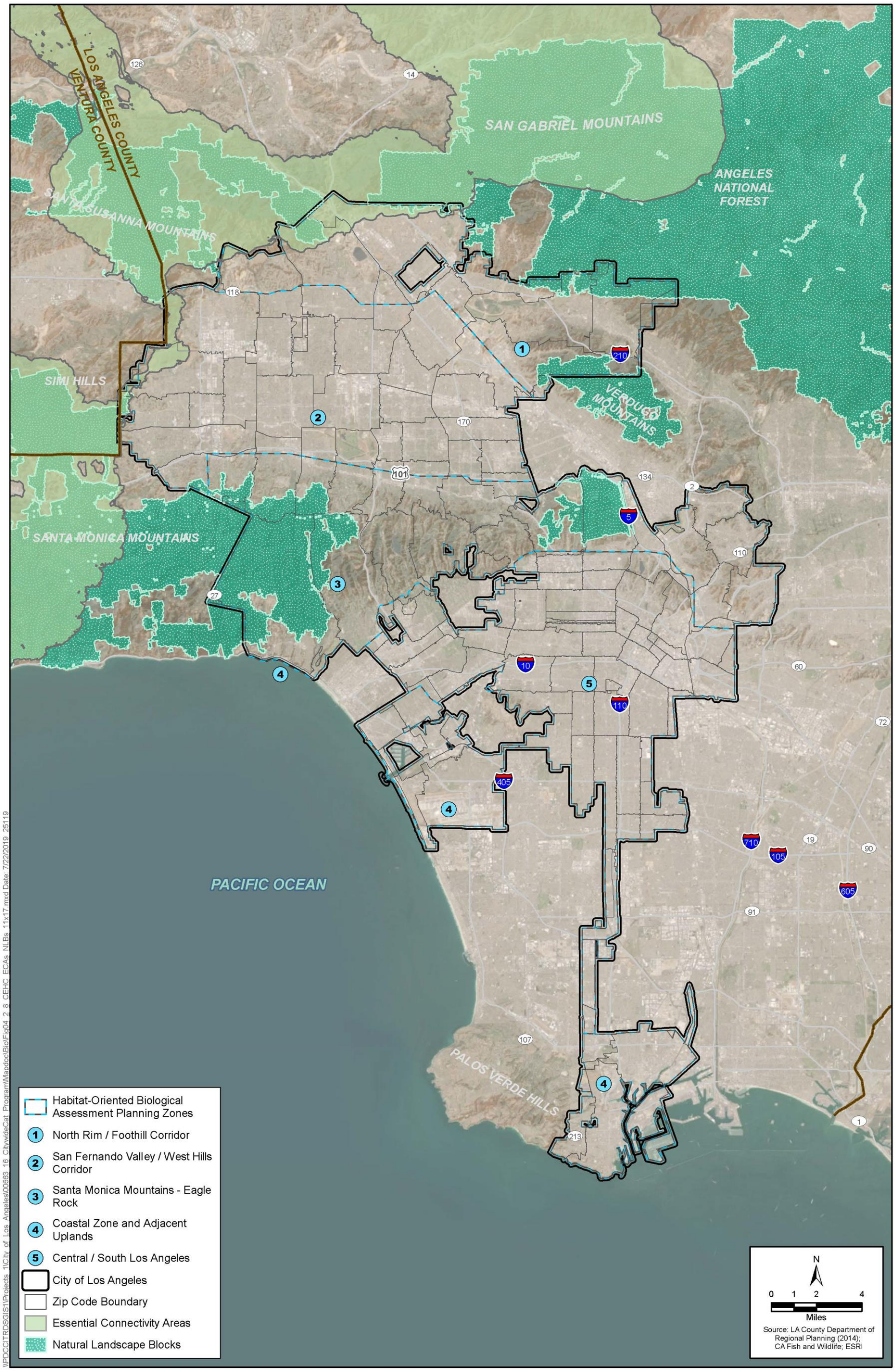

Figure 4.2-8. Essential Connectivity Areas and Natural Landscape Blocks

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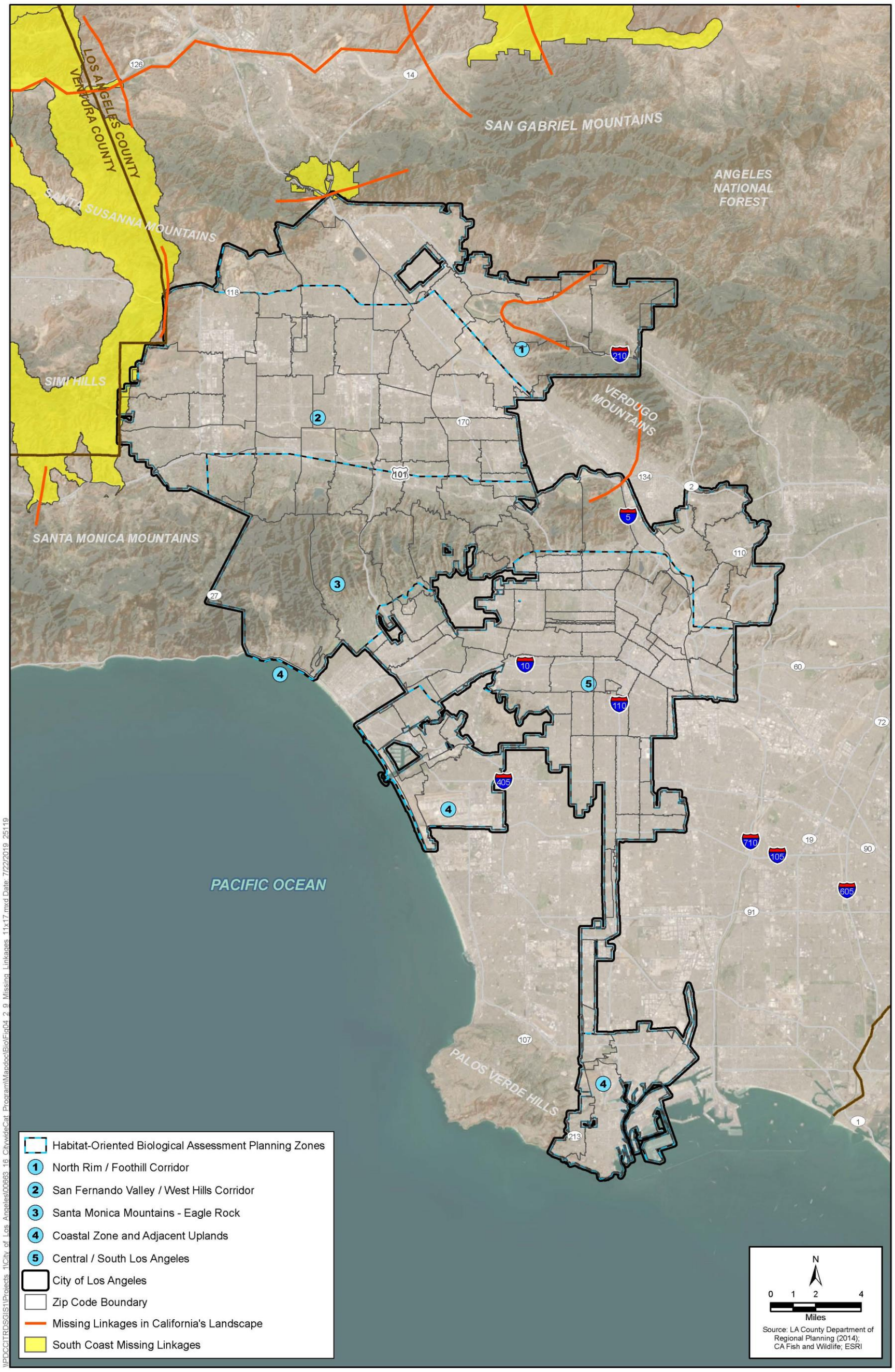

Figure 4.2-9. South Coast Missing Linkages

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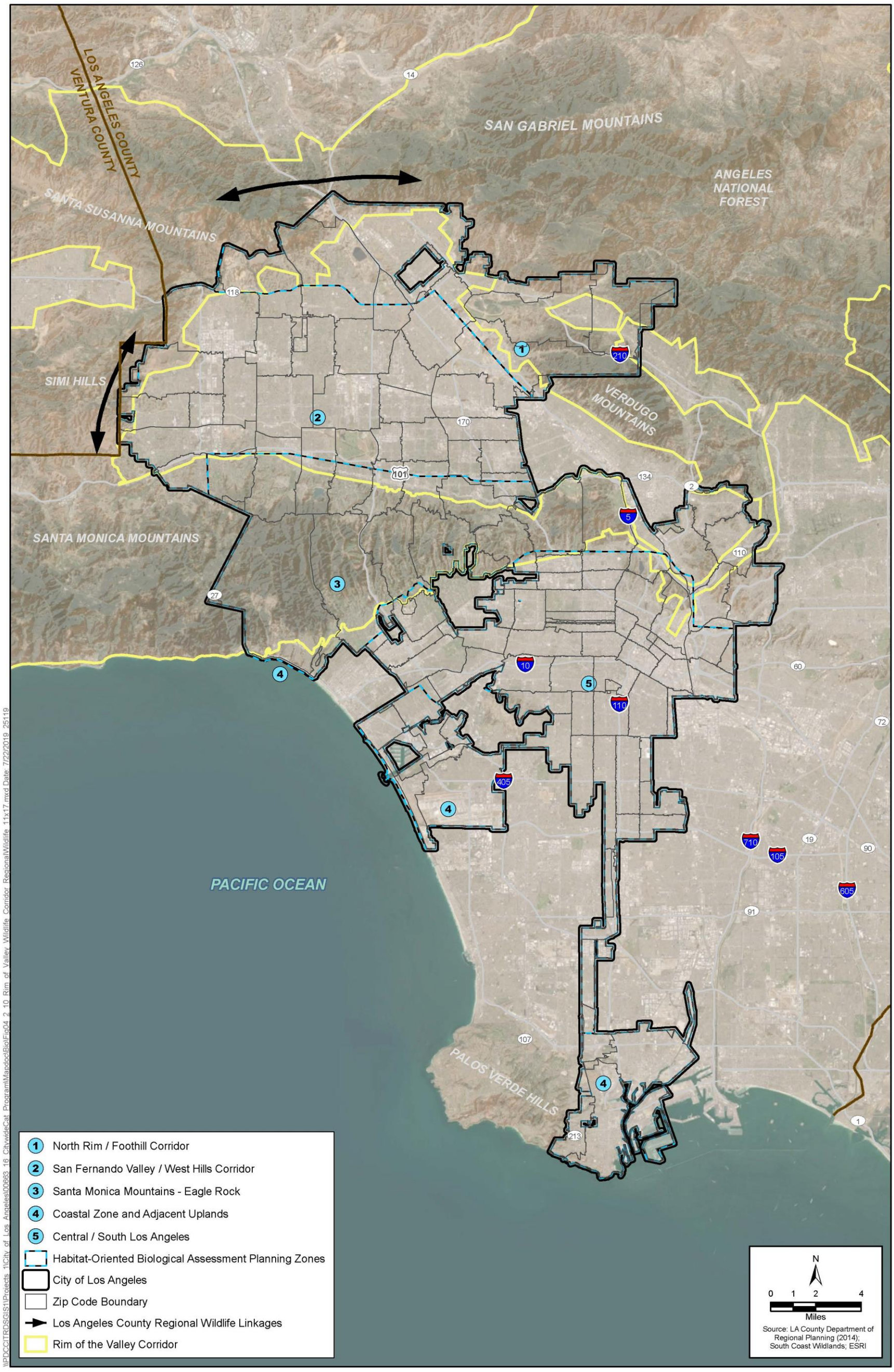

Figure 4.2-10. Los Angeles County Regional Habitat Linkages and Wildlife Corridors

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City of Los Angeles – Los Angeles River Revitalization

The Los Angeles River Revitalization Master Plan aims to enhance the Los Angeles River's environmental qualities over a 32-mile-long river corridor. Long-term goals include restoring the river's ecological and hydrological function through riparian habitat restoration. In addition to ecological restoration, the plan includes efforts to reduce flow velocities in the channel to facilitate ecological restoration and access. The plan also aims to facilitate development of multi-benefit green spaces within the river channel that provide continuous vegetation, open space, and water quality benefits. The envisioned continuous River Greenway would to link a network of "green connections," bikeways, and pedestrian paths to the river and to public open space.

Upper Los Angeles River Revitalization Plan

As established by Assembly Bill 466 in September 2017, within the Santa Monica Mountains Conservancy, the Upper Los Angeles River and Tributaries Working Group was charged with developing a revitalization plan for the Upper Los Angeles River, the tributaries of the Pacoima Wash, Tujunga Wash, and Verdugo Wash, and any additional tributary waterway that the working group determines to be necessary. This plan is currently under development.

Other City of Los Angeles Habitat Restoration Efforts

Below is a list of current and scheduled City of Los Angeles habitat restoration and improvement projects in the City of Los Angeles.

Project Title	Description	Completion
Aliso Canyon Park	Riparian wetland restoration, bridge, recreational facilities	2017
Atwater Creek Restoration	Riparian wetland restoration, recreational facilities	2013
Ballona Lagoon Phase IIIa Habitat Restoration	Coastal Dune and coastal sage scrub habitat restoration, recreational facilities	2017
Ballona Lagoon Water Quality Enhancement	Coastal Dune and coastal sage scrub habitat restoration, recreational facilities	2003
Emergency Sewer Repair- Venice PP MH Repair	Intertidal and bank habitat restoration	2012
Grand Canal West Bank	Intertidal and bank habitat restoration, erosion control, storm drain, stormwater treatment	2017
Hansen Dam Bikeway	coastal sage scrub habitat restoration, recreational facilities	2006
Hansen Dam Wetlands Restoration	riparian wetland and coastal sage scrub habitat restoration, stormwater treatment recreational facilities	2011
Harding Street Bridge*	Abutment Repair, alluvial scrub and riparian wetland restoration	2020
Humboldt Stormwater Greenway	Street removal, creation of riparian habitat.	2012
Machado Lake*	Lacustrine rehabilitation, wetland restoration	2019
North Atwater Creek Restoration	Riparian wetland restoration, recreational facilities	2013
Osbourne Street Bridge Repair	Bridge repair, alluvial scrub and riparian wetland restoration	2011

Project Title	Description	Completion
Paseo Del Mar Permanent Roadway Restoration*	Landslide repair, road replacement, coastal bluff habitat restoration.,	2022
Peck Park	Riparian wetland restoration, stormwater treatment, recreational facilities	2013
Potrero Canyon Park*	Riparian wetland creation, recreational facilities	2020
So. LA Wetlands Restoration	Riparian wetland restoration, stormwater treatment, recreational facilities	2012
Taylor Yard Bikeway and Pedestrian Bridge over L.A. River*	Riparian wetland restoration, stormwater treatment, recreational facilities	2019
Venice Auxiliary Pumping Plant*	wastewater facilities, Intertidal and bank habitat restoration	2024
Venice Dual Force Main*	wastewater facilities, Coastal Dune and coastal sage scrub habitat restoration	2022
Vista Del Mar Bulkhead Projects (various)*	Road Bulkheads, Coastal Dune and coastal sage scrub habitat restoration	2012-19
Washington Blvd At Venice Canals Culvert Rehabilitation Project	Intertidal and bank habitat restoration, erosion control, storm drain.	2015
Whites Point Landslide Interim Measures	Landslide repair, road replacement, coastal sage scrub, coastal prairie, and coastal bluff habitat restoration.	2016
Wilmington Drain*	Lacustrine rehabilitation, wetland restoration	2019

*Current/future projects

4.2.2.8 State Conservancies

Four of the State of California's ten non-regulatory conservancies overlap with the City of Los Angeles and include the California Coastal Conservancy, San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, Baldwin Hills Conservancy, and Santa Monica Mountains Conservancy. State conservancies were created by the state legislature and are managed by the California Natural Resources Agency, whose mission is "To restore, protect and manage the state's natural, historical and cultural resources for current and future generations using creative approaches and solutions based on science, collaboration and respect for all the communities and interests involved."

California Coastal Conservancy

The Coastal Conservancy is a state agency established in 1976 with a mission to protect and restore, and increase public access to, California's coast, ocean, coastal watersheds, and the San Francisco Bay Area.

San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy

The San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy was established by the California Legislature in 1999 with a mission to preserve open space and habitat in order to provide for low-impact recreation and educational uses, wildlife habitat restoration and protection, and watershed improvements within its jurisdiction.

Baldwin Hills Conservancy

The Baldwin Hills Conservancy's mission is to acquire open space and manage public lands within the Baldwin Hills area and to provide recreation, restoration and protection of wildlife habitat, habitat connectivity, and improved water quality within the last undeveloped open space area of urban Los Angeles for the public's enjoyment and educational experience.

Santa Monica Mountains Conservancy

The Santa Monica Conservancy was established by the California State Legislature in 1980 with the mission "through direct action, alliances, partnerships, and joint powers authorities, to strategically buy back, preserve, protect, restore, and enhance treasured pieces of Southern California to form an interlinking system of urban, rural and river parks, open space, trails, and wildlife habitats that are easily accessible to the general public."

4.2.2.9 Existing Effects of Domestic Cats on Biological Resources

The environmental setting section normally includes the *baseline* physical conditions by which a lead agency determines whether an impact is significant. Accordingly, Sections 4.2.2.1 through 4.2.2.7 above present a discussion of the relevant environmental setting in the City to provide the environmental context for the understanding of potential impacts from the proposed Project. Furthermore, because a determination of significance of impacts on the environment focuses on changes in the environment, the environmental setting description is required so that changes as a result of the proposed Project can be identified and understood in context. The following description of the pre-existing environment (baseline conditions) helps reviewers understand the CEQA lead agency's identification of significant effects.[2]

The proposed Project does not include any direct physical changes in the environment undertaken by the City; however, to clearly understand the potential impacts from the proposed Project as they relate to potential changes in the free-roaming cat population under the Project and the resulting changes in associated impacts on the environment, it is key that a description of effects of cats on biological resources is presented. This discussion includes environmental effects that are pre-existing in the environment in the City due to the established free-roaming cat population to allow reviewers of this Draft EIR to consider the effects of the proposed Project within the context of pre-existing environmental conditions and any changes in the environment due to the proposed Project.

Per State CEQA Guidelines Section 15125(a), the description of the environmental setting shall be no longer than necessary to provide an understanding of the significance of impacts of the proposed Project and its alternatives. Therefore, while taking this into consideration, the discussion of existing effects of cats on the environment is presented in detail below as informed by the extensive literature review conducted for this EIR (see Appendix I) to provide the reviewer full environmental context to understand potential impacts from the proposed Project as they relate to free-roaming cats and free-roaming cat population dynamics under the proposed Project compared to existing environmental setting conditions and the existing free-roaming cat population impacts in the study area.

Specifically, based on the results of the extensive literature review completed for this EIR (see Appendix I), Section 4.2.2.8 describes the overall effects of domestic cats on biological resources.

[2] State CEQA Guidelines Section 15125. ENVIRONMENTAL SETTING.

Section 4.2.2.9 uses the results of the literature review to assess the potential effects of free-roaming cats on sensitive biological resources within the study area.

Effects on Biological Resources

The discussions provided below are based on the literature review conducted as part of this EIR (see Section 4.1 and Appendix I for details) and are based on findings in published scientific literature, books, and other relevant publications.

Domestic cats with outdoor access may interact with the natural environment and biological resources in a number of ways. They may come in contact with other animals such as other domestic cats, domestic dogs, wildlife, and humans. They may be hunted and consumed by natural predators such as coyote, mountain lion, bobcat, fox, and large raptors (such as great horned owls and bald eagles) (Crooks and Soulé 1999; McPherson et al. 2016). Wildlife may be attracted to areas inhabited by cats due to access to concentrated food sources such as garbage, pet food, other wildlife, and cats themselves (Harrison et al. 2011). Domestic cats are opportunistic predators that hunt and consume small mammals, birds, reptiles, and insects and are known to capture prey they do not eat (Adamec 1976). Free-roaming cats may also carry a number of diseases, parasites, and infections, some of which are transmissible to wildlife and humans.

The versatility and variability of domestic cat habitat use and diet, innate hunting instincts, high reproductive rate, subsidization by humans, and in some cases limited exposure to predators and competition (such as in protected developed or residential areas lacking natural densities of native predators) allow domestic cats to be highly successful across a wide variety of areas around the world. These behaviors and population dynamics facilitate potential for cats to cause adverse impacts on biological resources including directly by predation and injury of wildlife species, and indirectly by altering wildlife behavior (such as induced stress and habitat avoidance), increasing competition, and transmitting diseases to wildlife (Loss and Marra 2017). These effects have the potential to contribute to the decline and loss of species and the loss of habitat availability and value. The nature of these impacts, their mechanisms, and distribution are discussed in the sections below and their effects on sensitive biological resources in the study area are discussed in Section 4.2.2.9.

Direct Impacts

Direct effects of domestic cats, for the purposes on this EIR, are considered predation-related effects, which directly harass, harm, or kill special-status species. Predation is defined biologically as behavior involving the pursuit, capture, and killing of an organism, usually for the purpose of acquiring food, which can lead to death of an individual either directly via killing and consuming or indirectly via injuries inflicted on animals that have escaped or were not consumed resulting in death. Domestic cat predation and associated effects are discussed below.

Predation

In summary, domestic cats are obligate carnivores and opportunistic predators on a range of species including native and nonnative mammals, birds, reptiles, amphibians, and invertebrates (Hess et al. 2007; Doherty et al. 2017). Domestic cats are known to readily switch food and prey types—although relative predation rates on taxonomic groups are variable, mammals and birds are among the most common prey reported with mammals consistently representing a higher proportion, although it is unclear if the differences in prey rate between taxonomic groups is due to differential prey availability, prey abundance, opportunity, prey selection/preference, or ease of capture such as

ground-nesting/-foraging species (Eberhard 1954; George 1974; Fitzgerald and Karl 1979; Churcher and Lawton 1987; Alterio and Moller 1997a; Barratt 1997a; Crooks 1998; Pearre and Maass 1998; Pontier et al. 2002; Winter 2004; Brickner-Braun et al. 2007; Hess et al. 2007; Meckstroth et al. 2007; Medina et al. 2008; Medina and Nogales 2009; Bonnaud et al. 2011; Tschanz et al. 2011; Cooper et al. 2012; Loyd and Hernandez 2012; McGregor et al. 2015; Doherty et al. 2016; Loyd et al. 2017). While mammals are reported as the most commonly preyed on taxonomic group by domestic cats, when they are present in low densities or unavailable, cats may shift to hunting other species such as birds, reptiles, amphibians, and invertebrates, although research has documented that even when preferred prey types are in low abundance, some cats may continue to target preferred species (Bonnaud et al. 2011; Dickman and Newsome 2015; Doherty et al. 2016). Reported domestic cat predation data indicate that domestic cats typically prey upon smaller animals (such as small or juvenile mice, rats, bats, birds, reptiles, amphibians, and invertebrates). However, some have been documented hunting prey as large as themselves, including large rats (Paltridge et al. 1997; Pearre and Maass 1998; Loss et al. 2013; McRuer et al. 2017; Welch and Leppanen 2017; Parsons et al. 2018).

Domestic cat predation is not completely regulated by hunger or food availability; research has documented opportunistic hunting behavior and surplus predation (predation without consumption) even when cats have access to food sources (Adamec 1976; Robertson 1998; Winter 2004; Peck et al. 2008; Loyd et al. 2013). Prey choice of free-roaming cats has been found to be similar to that of pet cats, although there is potential for free-roaming cats to hunt more than pet cats, and free-roaming cats that are not subsidized with food have been documented hunting and consuming as much as four times that of pet cats (Adamec 1976; Liberg 1984; Pearre and Maass 1998; Murphy et al. 2004; Doherty et al. 2017). Unlike with natural predators, cat density is decoupled from prey abundance because domestic cat density is supported by humans, which can lead to unnatural and unsustainable levels of effects on species and the environment (Sims et al. 2008). Domestic cat hunting behavior, prey drive, prey selection, and prey preference can vary among individual cats and by age, with younger cats being more active hunters and exerting more intense predation drives than older cats (Churcher and Lawton 1987; Morgan et al. 2009).

Domestic cats have been documented hunting year-round. However, research has reported seasonal influence on predation by domestic cats, including seasonal differences in predation between taxonomic groups (e.g., higher reptile predation risk in the summer and higher bird predation risk in winter) and markedly higher predation intensity in the spring and summer (George 1974; Churcher and Lawton 1987; Paltridge et al. 1997; McRuer et al. 2017). In addition, time of day and weather may influence cat predation activity and research indicates that domestic cats may hunt more around dawn and dusk (Goszczynski et al. 2009), that taxonomic group predation risk changes throughout the day (e.g., mammals often caught at night and birds often caught in the morning [Barratt, 1997a]), and that domestic cat predation is reduced during inclement weather (Churcher and Lawton 1987).

Domestic cat predation intensity, prey types, and diet are also influenced by environmental setting, location of their home range, and cat density (Fitzgerald and Karl 1979; Churcher and Lawton 1987; Thomas et al. 2012). Cats in more developed and urban settings have been found to consume more nonnative species, garbage, and manufactured food; have less food in their stomachs; and consume less wild prey (per cat) compared to cats sampled in and adjacent to less-developed or more natural areas (Fitzgerald and Karl 1979; Churcher and Lawton 1987; Barratt 1997b; Brickner-Braun et al. 2007). Although data suggest that individual cat predation in urban areas may occur at lower levels than in less-developed settings, it is important to note that cat density tends to be much higher in

urban settings and the net predation rate may not necessarily be smaller. Domestic cats may also exploit concentrations of prey around items such as wildlife nest boxes, feeders, and foliage, resulting in increased predation (Cooper et al. 2012).

Domestic cats living within or near less-developed and more natural habitats consume less manufactured food and garbage and consume a greater quantity of natural prey (Fitzgerald and Karl 1979; Meckstroth et al. 2007; Morgan et al. 2009). Domestic cats have been reported to successfully hunt in a variety of habitat types including urban-wildlands interface (edge areas), dense vegetation, rugged and rocky terrain, open areas, grasslands, wetlands, woodlands, and canyons (Morgan et al. 2009; McGregor et al. 2015; McDonald et al. 2017). Some studies indicate that predation risk may be higher for some taxa in some habitats more than others. For example, domestic cats are more successful when hunting prey in open areas (Nogales and Medina 1996; McGregor et al. 2015), while higher levels of reptile predation in scrub and open areas have been documented and birds were more frequently taken in the forest than in open areas (Nogales and Medina 1996).

Domestic cat predation is reported to have the potential to reduce wildlife populations and is considered to be a contributor to or cause of the decline and extinction of a variety of species on both small islands and continents throughout the world (Hubbs 1951; Dickman et al. 1993; Nogales and Medina 1996; Pontier et al. 2002; Alvarez-Castaneda and Ortega-Rubio 2003; Murphy et al. 2004; Balogh et al. 2011; Bonnaud et al. 2011; Medina et al. 2011; Loss et al. 2013; Doherty et al. 2017; Loss and Marra 2017). Historical data and field observations indicate many cases where mammals (e.g., Burbidge and McKenzie 1989; Smith and Quin 1996) and birds (Whitlock 1923; Beckerman et al. 2007; Hilton and Cuthbert 2010) have declined rapidly following feral cat arrival or following increases in local cat abundance. Dickman et al. (1993) concluded that feral cats were the sole or primary cause of extinction of 10 species of small mammals in western New South Wales in the first half of the 19th century and Loss et al. (2013) documented at least 63 cases of vertebrate extinctions in which cats have been implicated. Research also indicates that domestic cat predation can intensify and exacerbate the decline of already imperiled wildlife populations and has potential to have substantial and unsustainable effects on such wildlife species, even at low cat densities (Medina and Nogales 2009; Kitts-Morgan et al. 2015; Moseby et al. 2015; Doherty et al. 2016). In addition, unsuccessful predation attempts by cats can substantially reduce the health and welfare of animals they pursue because cats do not always kill their prey and may play with injured prey for minutes or hours after capture (Ruxton et al. 2002). Data collected at wildlife rehabilitation facilities indicate that cat-related injury is a common cause of wildlife admissions; such animals have low survival rates (Loyd et al. 2017; McRuer et al. 2017).

In summary, domestic cats are instinctual and opportunistic predators of a wide variety of small animals, inhabit a wide variety of habitat and land use types, and exhibit differential levels of predation, which are influenced by age of the cat, food availability, prey availability, and individual prey preferences and prey drive intensity.

Table 4.2-4 provides a summary of compiled reported predation rates by free-roaming cats from the literature review. These data have been standardized as number of prey captured, per free-roaming cat, per year for ease in comparison across studies. These data indicate that the free-roaming cat predation rate varies substantially, primarily representing mammals and birds. It should be noted that all studies used differing methods, sample sizes, approaches to data collection, and collected data in various geographies and land use types. Additionally, some studies used empirical data while others conducted literature reviews and modeling to estimate predation rates. These reported data have been compiled and standardized to provide context and comparison to the reported data in the

literature. This list is not intended to be exhaustive; rather, it is intended to provide a general overview of predation levels reported in the primary literature.

Table 4.2-4. Reported Free-Roaming Cat Predation Rates, Standardized as Number of Prey Captured, per Free-Roaming Cat, per Year, as a Function of Prey Type

Mammals	Birds	Reptiles	Invertebrates	Total Prey	Source
	154				Jones 1977
559	143				Berruti 1986
394					Harper 2005
304	104		695		Hess et al. 2007
136–4,363	21–55				Loss et al. 2013
				2,628	McGregor et al. 2015
	62–129				Woinarski et al. 2017
436	120	305	550		Ortiz-Alcaraz et al. 2017

Indirect Impacts

Indirect effects of domestic cats, for the purposes of this EIR, are considered non-predation effects (also known as non-consumptive effects) that indirectly harm or kill special-status species. Indirect effects may include psychological and biological stress; the transmission of diseases such as viruses, bacteria, and parasites; and water quality impacts, which may adversely affect species and habitats. Domestic cat–associated indirect effects are discussed below.

Non-Consumptive Effects

Domestic cats may cause effects on wildlife that are not directly caused by predation (non-consumptive effects), such as physiologic and biologic stress (Cocke and Thiessen 1986; Beckerman et al. 2007; Hervias et al. 2013; Medina et al. 2014; West et al. 2018), altered habitat use (space and temporal shifts) (Hughes and Banks 2010; Bogdan et al. 2016; Cove et al. 2018), and competition for food and other resources (Alterio and Moller 1997b; Pontier et al. 2002; Phillips et al. 2007; Pavey et al. 2008; Dauphiné and Cooper 2009; Doherty et al. 2014). These stressors can affect species distribution, reproduction, and survival. Stress may be induced in response to the presence or perception (e.g., odor) of a predator, which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration behavior, habitat avoidance, altered foraging behavior, and altered parental care. These in turn can result in increased competition for resources (such as food and space), decreased body condition, immunosuppression, reduced fitness, brood failure, death of offspring, increased susceptibility to predation (of both individuals and broods), and reduced survival (Beckerman et al. 2007; Hughes and Banks 2010; Baker et al. 2013; Bonnington et al. 2013; Medina et al. 2014; Blanchard et al. 2016; Bogdan et al. 2016; Davies et al. 2017). When stressed, wildlife may also secrete odors detectable and preferred by cats and other predators, increasing the susceptibility of stressed animals to predation and indirect effects (Cocke and Thiessen 1986). Competition may also be altered by cat predation when cats decrease or deplete wildlife prey availability (George 1974; Lepczyk et al. 2004; Phillips et al. 2007; Pavey et al. 2008; Dickman and Newsome 2015; Doherty et al. 2017). In addition, cats may displace wildlife from habitat features important for breeding and shelter such as rocky outcrops (Fitzsimons and Michael

2017). These non-consumptive effects, even in the absence of predation, have the potential to reduce wildlife abundance and cause population declines, although it should be noted that uncertainty remains on the exact magnitude of these effects on specific species and some species will be less impacted than others (Hawkins et al. 2004; Beckerman et al. 2007; Phillips et al. 2007; Sims et al. 2008; Bonnington et al. 2013; Loss and Marra 2017).

Diseases

Domestic cats are known to carry (host) a wide range of diseases and parasites that are transmissible to other domestic and wildlife species and potentially act as unrecognized sources (reservoirs) for other diseases (Lepczyk et al. 2015). General modes of disease transmission (spread) include direct or indirect exposure to infectious agents through vectors such as parasites (e.g., fleas, ticks); contaminated soil, water, or food; bites and scratches; and direct contact including consuming infected individuals (Lepczyk et al. 2015).

This section provides information regarding common feline diseases with potential to occur in the study area that are transmissible to wildlife. Diseases included in this section are based on findings from the literature review and identified distributions of animals, diseases, and disease vectors. Diseases transmissible from animals to humans (referred to as zoonotic diseases) are specifically discussed in Section 4.4 though may be coincidentally discussed below if they are also transmissible to wildlife.

Table 4.2-5. Domestic Cat Diseases Transmissible to Wildlife

Disease/Infection	Mode of Transmission	Susceptible Wildlife Species
Anaplasmosis	Ticks, bites of infected individuals, mother to offspring	Bobcat, mountain lion, rodents, birds, lizards
Bartonellosis	Sand fly, human body louse, vole ear mite, cat flea, and tick; exposure via wound or mucous membranes; mother to offspring	Bobcat, mountain lion, rodents
Cytauxuzoonosis	Ticks	Bobcat, mountain lion
Ehrlichiosis	Ticks	Mammals: carnivores and rodents
Feline calicivirus	Direct and indirect contact and airborne droplets	Bobcat, mountain lion
Feline Hemotropic Mycoplasmosis	Ticks, fleas, lice, flies infected with Mycoplasma bacteria	Bobcat, mountain lion
Feline herpesvirus	Direct and indirect contact and airborne droplets	Bobcat, mountain lion
Feline Immunodeficiency Virus (FIV)	Exposure via bites and predation of infected cats	Bobcat, mountain lion (low risk potential)
Feline Infectious Peritonitis (FIP)	Unknown; potential parent to offspring, fecal-oral, genetic pre-disposition	All members of the Felidae family (includes mountain lions and bobcats)
Feline Leukemia (FeLV)	Exposure to infected saliva, blood, urine, feces, shared resources (food and water); grooming; fighting; predation of infected cats	Bobcat, mountain lion

Disease/Infection	Mode of Transmission	Susceptible Wildlife Species
Feline Panleukopenia	Exposure to infected saliva, urine, feces, vomit	Mountain lion, bobcat, skunk, and raccoon
Feline viral rhinotracheitis	Direct and indirect contact and airborne droplets	Bobcat, mountain lion
Influenza	Direct and indirect contact and airborne droplets	Mammals and birds
Internal Helminth Parasitic Worms (e.g., tapeworm, roundworm, heartworm, lungworm)	Various vectors: fleas, mosquitos, snails, slugs, prey; contaminated food/water	Canids, felids, birds, rodents, snakes, bats, fish
Leptospirosis	Water or soil contaminated by infected urine of infected animals; also through the semen of infected animals	Most mammals, reptiles, and birds
Notoedric mange	Infection by notoedric mites, which can be transmitted between individuals	Insectivores, rodents, lagomorphs, rabbits, felids (bobcat, mountain lion), procyonids, raccoons
Onchocerca lupi protozoan	Transmitted by the bite of an infected blackfly; other potential arthropod vectors suspected. Poorly understood; however, a transmission cycle in the southwest United States appears to involve blackflies, dogs, cats, and humans.	Canids
Piroplasmida protozoan (*Babesia*/*Theileria*)	Primary manner of transmission appears to be through tick bites although other forms of transmission have been described.	Canids (fox, coyote), felids (bobcat, mountain lion), and mustelids, weasels, badgers, otters, raccoons, procyonids
Plague	Transmitted by the bite of an infected flea or if an animal eats an infected rodent	Most mammals. Felids are at particular risk for developing severe disease.
Rabies	The virus is spread through the infected saliva of a host, most commonly through a bite.	All warm-blooded mammals
Rickettsia (spotted fever, typhus)	Transmitted by the bite of infected fleas, ticks, mites, lice, mosquitos, and potentially other arthropod vectors	Rodents, birds, snakes, bats, fish
Toxoplasma	Transmitted by ingesting soil, water, or plant material contaminated with oocysts excreted by cats, or by ingestion of infected ticks, rodents, birds, or other small animals	All mammals, including marine mammals such as sea otters, and birds
Tularemia	Transmitted by the bite of an infected tick and deer fly bites	Rodents

Parasites

Domestic cats may harbor external parasites (ectoparasites) such as ticks, fleas, mites, and lice, which may transmit a variety of pathogens. The following paragraphs discuss several ectoparasites of concern that may be transmitted by domestic cats.

Notoedric mange is a potentially fatal contagious syndrome that can be carried by cats and is caused by the parasite burrowing Notoedres mite (Foley et al. 2016). Mange is often recognized by a potentially fatal dermatitis and may cause intense infection, disease, and considerable suffering in some individuals, which may result in self-mutilation and changes in normal behaviors such as hunting and foraging. Mange predisposes the animal to secondary bacterial infection, can lead to death, and is sometimes associated with population-level impacts (Cornish et al. 2001; Foley et al. 2016). The best-studied member of the genus and the only known zoonotic species is *Notoedres cati*, which is known to infect at least 18 host species including cats. Among case reports of *N. cati* infestation reviewed by Foley et al (Foley et al. 2016), species impacted included rodents, rabbits, felines (domestic cats, bobcats, and mountain lions), canids, and raccoons. While knowledge of the geographical distribution of the mites is poorly understood, North American infestations are mostly reported from the southern half of the United States, particularly Southern California, Texas, and Florida. There are a few reported hot-spots of *N. cati*, such as central coastal areas of California to San Diego County, and parts of the Florida Keys (Foley 1991). Outbreaks in the form of epidemics may occur; an epidemic on a Florida key began in a feral cat colony and spread to most neighborhoods and entire cat households, eventually comprising more than 500 cases (Foley 1991). Most cases in wildlife remain unreported or undiagnosed. It is thought that domestic cats could transmit *N. cati* to and from wild cats (e.g., bobcats) (Foley et al. 2016).

Urbanization and habitat fragmentation are increasing wildlife exposure to domestic animals and anticoagulant rodenticides, which are altering and exacerbating wildlife vulnerability, exposure, and transmission of mange in the study area and beyond. Although this has been documented in a variety of wildlife species in the Los Angeles region, one well-known and local example of notoedric mange infection in wildlife is the case of famous Los Angeles mountain lion P-22, who inhabits Griffith Park, a large urban park on the eastern end of the Santa Monica Mountains in the neighborhood of Los Feliz in Los Angeles. P-22 was discovered on remote camera forage to be severely diseased, emaciated, and suffering from mange in 2014 and was subsequently trapped and treated successfully, although he tested positive for rodenticide (Foley et al. 2016).

Fleas are one of the most common external parasites of domestic cats with reported flea infestation rates of 24% in owned domestic cats (Magnarelli et al. 2005; Thomas et al. 2016). Fleas feed on blood and may carry and transmit several infections and diseases including tapeworm, plague, *Bartonella*, tularemia, rickettsia, mycoplasma, and toxoplasma (Zhou et al. 2016; Lappin 2018). Transmission occurs via exposure to flea saliva or feces, regurgitation of infected blood (e.g., plague), or ingestion of infected fleas (e.g., tapeworm) (Bitam et al. 2010). Although there are many species of flea, the cat flea *Ctenocephalides felis* is most commonly associated with cats. Cat fleas are among the most host generalist of all ectoparasites, a trait that likely contributes to their spread at the human-wildlife interface, and are more widespread, both in terms of geography and host breadth, than dog fleas (Clark et al. 2018).

In a study conducted by Clark and others (Clark et al. 2018), a global dataset of wild mammal host associations for cat and dog fleas was produced to identify traits that would predict wildlife infestation probability. Over 130 wildlife species were found to harbor cat fleas (*C. felis*), which represented nearly 20% of all mammal species sampled for fleas. Phylogenetic models indicate cat fleas are capable of infesting a broad diversity of wild mammal species, and cats that use human habitats are at the highest risk of transmitting cat fleas to wildlife. Among locally native species, cat flea was commonly reported in Virginia opossum (*Didelphis virginiana*) and gray fox (*Urocyon cinereoargenteus*). The bobcat is thought to be a natural reservoir of *C. felis* in North America, and mountain lions may be an additional natural reservoir for *C. felis* in the United States. Both cat and

dog flea species are commonly reported to infest free-roaming pets and wildlife, indicating risk of spillover (spread of disease from one species/population to another) in areas where domestic and wild species overlap, such as the urban-wildland interface. Spillover occurs when a species or population with high disease prevalence (a reservoir) has direct or indirect contact with a species or population with low disease prevalence, resulting in disease transmittal.

Ticks are another common ectoparasite that feeds on blood at every stage of its life cycle. A recent study reports that, in contrast to fleas, primary literature addressing ticks infesting cats in the United States is scarce, although domestic cats are known to be infested by ticks and recent studies have documented free-roaming cats infested with up to four tick species and up to 40 ticks per cat. Feline tick-borne diseases reported in North America include anaplasmosis, cytauxzoonosis, ehrlichiosis, tularemia, and rickettsiosis, and some of these may be under-reported and under-recognized (Nagamori and Reichard 2015). There are many species of ticks, which feed on a wide range of vertebrate hosts including domestic cats and wildlife (Little et al. 2018). Free-roaming cats may become infested with different species of ticks, which may harbor various pathogens. The feline and zoonotic disease risks presented by ticks make surveys of ticks and tick-borne disease agents associated with cats an important focal topic (Davies et al. 2017).

Internal Parasites

Internal parasite infection is common in domestic cats, with prevalence rates as high as 45%. These parasites range from single-celled protozoa (e.g., Toxoplasma) to parasitic worms (e.g., roundworms, hookworms, tapeworms, heartworms) (Dobson 1988). In small geographical areas there is an increased likelihood of transmission of internal parasites from host to host (Dobson 1988). Internal parasites may be host-specific or infect multiple hosts and may have simple or complex life cycles requiring intermediate hosts. For example, in areas that host a large diversity of migratory birds, there is potential for these birds to continually introduce parasites, whether they are acting as intermediate hosts or as biological or mechanical vectors. The following paragraphs discuss several internal parasites that may be transmitted by domestic cats.

Onchocerca lupi is a parasitic nematode (roundworm) capable of infecting canids (e.g., fox, coyote), felids (e.g., bobcat, puma), and humans. The life cycle of *O. lupi*, including the vector and its primary reservoir host, is unknown; it is an emerging parasitic pathogen that is poorly understood, but it may involve black flies (County of Los Angeles Public Health 2013). Black flies (*Simulium* spp.) and biting midges (*Culicoides* spp.) are vectors for other species of Onchocerca and may be vectors for *O. lupi* (Hassan et al. 2015). Black flies are routinely detected in some areas of Los Angeles County, including the Los Angeles River, and a control program has been in effect in the County since 1994 (Greater Los Angeles Vector Control, 2016; Los Angeles County Public Health 2013). Infected black flies have been identified in California, and *O. lupi* infection has been reported in dogs in Los Angeles and San Diego counties and in cats and dogs in the southwestern United States (Hassan et al. 2015; Los Angeles County 2016).

Piroplasmids are tick-borne protozoan parasites that infect blood cells or endothelial cells of various wild and domestic vertebrates worldwide; they cause severe disease in mammals and occasionally in humans (Alvarado-Rybak et al. 2016). The primary mode of transmission is via tick bites, although a range of other potential vectors exist (Alvarado-Rybak et al. 2016). Piroplasmids are among the most prevalent arthropod-caused diseases of animals. They are caused by parasites belonging to four related genera of *Babesia*, *Theileria*, *Cytauxzoon,* and *Rangelia* that infect a wide

variety of domestic animals and wildlife including red fox, raccoon, and coyote, which may serve as disease reservoirs, particularly in suburban and urban environments (Alvarado-Rybak et al. 2016).

Toxoplasma gondii is a protozoan parasite that causes Toxoplasmosis, a parasitic disease capable of infecting virtually all warm-blooded animals including most bird and mammal species (Dubey et al. 2008; Love et al. 2016; Zhou et al. 2016). *T. gondii* relies on a definitive host to complete the sexual reproductive phase of its life cycle, which only takes place in wild and domestic cat species. Sexual reproduction of *T. gondii* only occurs in the intestines of felids, resulting in the production of reproductive cells called oocysts, which are excreted in feces. Infected feces may contaminate soils and water and can remain viable for up to 10 years (Zhou et al. 2016; Verma et al. 2017). Non-feline hosts, called intermediate hosts, may also become infected, although only asexual reproduction occurs in these hosts and takes place when reproductive cysts called bradyzoites form in muscle and central nervous system tissues (Fredebaugh et al. 2011).

T. gondii has a complex lifecycle composed of both sexual and asexual reproduction. Generally, *T. gondii* larvae hatch within the intestines shortly after ingestion of either oocysts (released from feline intestines) or tissues of animals infected with bradyzoite cysts. Next, the larvae differentiate into trachyzoites that migrate and invade living cells until infected cells die and subsequently release more trachyzoites. As the trachyzoites accumulate and spread throughout the infected individual, they differentiate back into bradyzoites, which form cysts in brain, liver, and muscle tissues and the cycle repeats. In the definitive feline host, bradyzoites differentiate into gametocytes (as well as bradyzoites), which undergo fertilization to form a zygote that matures and becomes an oocyst.

The primary cause of infection with *T. gondii* is ingestion of water or food contaminated with oocysts, or ingestion of raw tissues containing bradyzoite cysts. Oral transmission has been thought to be the main route of infection, although tick species may harbor *T. gondii* and ingestion of ticks may be a mode of transmission (Zhou et al. 2016). Infection with *T. gondii* may be asymptomatic or may result in disease ranging from mild to severe. Severity of infection is dependent on the virulence of specific *T. gondii* strains and is species specific. Symptoms of acute (initial) infection ranges from asymptomatic (no symptoms) to moderate to severe including fever, muscle weakness, diarrhea, abnormal breathing, weight loss, and lethargy. Toxoplasmosis may also cause behavioral changes when trachyzoite migration occurs in the central nervous system.

T. gondii is one of several parasites that have been shown to alter the behavior of their host in a manner that increases transmission of the parasite. Several studies have shown that rats infected with *T. gondii* experience altered brain function and exhibit reduced aversion to cat odors, which uninfected individuals avoid (Kannan et al. 2010; House et al. 2011; Dass and Ajai 2014; Poulsen et al. 2017). *T. gondii* is better studied in terrestrial landscapes but has emerged as a significant aquatic pathogen linked to marine mammal infection and water-borne outbreaks of disease in humans worldwide (Barros et al. 2018).

There is potential for interaction between wild and domestic cycles of *T. gondii* and *T. gondii* strains (Bevins et al. 2012; Carver et al. 2016), which could increase novel genotypes in domestic cats and facilitate transmission of potentially more pathogenic genotypes to humans, domestic animals, and wildlife (VanWormer et al. 2014; Dubey et al. 2015). Researchers have started to genetically characterize *T. gondii* strains from wildlife and domestic animals from the United States to understand the transmission patterns (Dubey et al. 2015). Several studies have demonstrated a pattern of *T. gondii* contamination in human-inhabited areas in which concentrated cat populations

may contribute to oocyst-induced infections. Soil contamination is not always restricted to areas of high cat density, suggesting a large spatial scale of environmental contamination, which could result from *T. gondii* oocyst dissemination through rain washing or other mechanisms (Afonso et al. 2008; Gotteland et al. 2014).

The parasite has been identified as a cause of death in sea otters (*Enhydra lutris*), bobcats, and American red squirrels (*Tamiasciurus hudsonicus*) (Fredebaugh et al. 2011). Deer that contract *T. gondii* are more likely to have been exposed to areas with higher cat density (Ballash et al. 2015), and mammals with small home ranges inhabiting sites with a high frequency of cat occurrence are at a significantly higher risk of infection with *T. gondii* compared to those inhabiting sites with low cat occurrence (Fredebaugh et al. 2011). In an extensive survey of *T. gondii* infections in free-roaming and wild felids in California, *T. gondii* DNA was found in 49 of 166 feral cats, 10 of 73 mountain lions, and 11 of 27 bobcats (VanWormer et al. 2014). Another study found that 53% of dolphins tested positive for *T. gondii* antibodies, and numerous studies reported the existence of *T. gondii* infections in marine mammals, including sea otters, dolphins, seals, and whales (Dubey et al. 2008). Infection has also occurred in captive wildlife; two cases of fatal disseminated toxoplasmosis (a severe and fatal form of infection) occurred in an urban zoological collection of meerkats (*Suricata suricatta*). Both cases are suspected to be the result of feral cats that were found sleeping and feeding in the outdoor component of the enclosure (Burger et al. 2017). Wildlife species potentially at increased risk of interspecies disease transmission are those inhabiting areas within or near the urban-wildlands interface or within the coastal zones adjacent to developed landscapes; that are urban-adapted species such as coyote, raccoons, and opossums; and that have ranges in proximity to or overlapping with both wild and domestic felids (free-roaming cats) (Fredebaugh et al. 2011; Verma et al. 2016).

Viruses

Domestic cats are natural hosts to a variety of viruses that may infect wildlife. Viruses transmissible to felines with potential to occur in the study area region along with their modes of transmission and transmissibility to wildlife are discussed below.

Feline Panleukopenia Virus (FPV) includes feline parvovirus, canine parvovirus, mink enteritis virus, and raccoon parvovirus. The virus afflicts a wide range of hosts within the Carnivora order. FPV is disease causing and has the ability to infect many types of tissues within the host. Cats in the fetal and neonatal stages are particularly susceptible and death is possible once infected. Transmission occurs from contact with the excretion (urine, saliva, feces, vomitus) of a carrying host (Reif 1976). In addition to domestic cats, animals that have been documented as contracting the disease include mountain lions, bobcats, skunks, and raccoons (Allison et al. 2012). Effective vaccinations are available and provide a long-term defense against the disease (Truyen and Parrish 2013).

Feline Infectious Peritonitis Virus (FIP) is closely related to and is a mutation of the more aggressive strains of feline enteric coronavirus. FIP varies in severity and can cause fever, decreased appetite, lesions, general malaise, abdominal distension, and death (Pedersen 2009, 2014). Once the disease has developed, death from FIP is largely unavoidable and commonly takes place in cats 1 to 2 years old. The likelihood of death decreases as the cats age and is rare after reaching 5 years. Although it may be possible in rare cases, there is little evidence of horizontal FIP transmission between cats and it is believed that a genetic component within the cats' genome may be involved, predisposing some individuals to the disease. While FIP is mainly associated with domestic cats, the

virus is worldwide and found in nearly all members of the Felidae family, including mountain lions, although the virus strains appear to be species specific. Currently there is no effective cure, yet a small number of cats spontaneously enter remission (Pedersen 2009, 2014).

Feline Upper Respiratory Viruses include Feline calicivirus (FVC), Feline herpesvirus (FHV), and Feline viral rhinotracheitis (FVR). Feline upper respiratory virus symptoms range from mild to severe and can cause death; infections may be chronic and are particularly common in multi-cat environments. Vaccinations are available for FVC and FVR, although the FVC vaccine does not protect against other strains of calicivirus (such as highly virulent or novel strains) and vaccinations do not prevent animals from carrying and spreading the viruses (Dawson and Willoughby 1999).

Influenza is an infectious disease caused by various viral strains in the influenza virus family that can cause moderate to severe illness and death. Influenza strains infect a wide variety of vertebrate species, although some strains have a limited range of hosts while others such as Influenza A infect a variety of species (Neumann and Kawaoka 2006). Influenza may be spread by direct and indirect contact with the virus and by airborne droplets (Weinstein et al. 2003). Influenza has been confirmed in domestic cats and includes viral strains such as H5N1 (the avian influenza virus) and H5N6 (a highly pathogenic and deadly strain of avian influenza). These reports confirmed that the cats contracted the disease from wild birds (pigeon and geese) and died as a result. Both of these influenza strains are transmissible to humans, birds, and other mammals (Klopfleisch et al. 2007; Pontier et al. 2009; Harder and Vahlenkamp 2010; Yu et al. 2015).

Rabies Virus is a Lyssavirus that causes rabies in mammals and has the highest mortality rate (99.9%) of any known virus. Rabies invades the central nervous system, causing inflammation of the brain and death. The primary route of transmission is through bites by infected animals, although it may be transmitted if infected saliva comes in contact with wounds or mucous membranes. Despite its high mortality rate, rabies can be prevented by vaccination or by administering antibodies and vaccinations after suspected exposure (Ma et al. 2018).

In the United States, the number of rabies cases reported to the Centers for Disease Control and Prevention in 2016 comprised approximately 5,000 cases and included confirmed infections in both wild and domestic animals, although over 90% were reported in wildlife (Birhane et al. 2017). Domestic species reported included cats, dogs, and cattle, and wildlife species reported included raccoons, skunks, bats, and foxes (Ma et al. 2018). Various strains (variants) of the virus are associated with specific wildlife species and in California the skunk variant is the most common, indicating this species is a major rabies reservoir (Birhane et al. 2017). In California, bats and skunks are the most commonly reported species infected with rabies, although bats have been the only species reported as testing positive in Los Angeles County over the last 35 years (Los Angeles County 2013; California Department of Public Health 2018). In California, all dogs 4 months or older are required to be vaccinated for rabies, and it is recommended that cats be vaccinated for rabies.

Any rabies variant can spread through interspecies contact (Ortiz et al. 2018) and cases of rabies in cats and dogs have been attributed to spillover from local mammal reservoirs (McQuiston et al. 2001). Cats are the domestic animal most often reported as rabid in the United States as of 2008 (Lackay et al. 2008) and studies have indicated that cats are a leading domestic animal source of possible human exposure to rabies. Increased incidence of rabies transmission has been associated with unvaccinated animals, exposure to infected wildlife, and feral cat feeding stations, which attract wild and domestic animals, increasing species densities and interspecies interactions (Ortiz et al. 2018).

Feline leukemia virus (FeLV) is a retrovirus that commonly infects domestic cats and more rarely infects wild cats. FeLV is chronic and can lead to cancer (mainly lymphoma), immunosuppression, anemia, secondary infection, and reduced lifespan (Brown et al. 2008; Hartmann 2012). FeLV can be transmitted through body fluids and feces exchanged through birth and nursing, social contact, and bite wounds (Winkler et al. ; Brown et al. 2008). Risk factors for domestic cat infection include male gender, adult age, and access to the outdoors (Lee et al. 2002; Little et al. 2009). FeLV infection prevalence has been found to be similar in unowned free-roaming cats and owned cats in the United States (Lee et al. 2002). FeLV can be transmitted from domestic cats to wild cat species (Sleeman et al. 2001; Bevins et al. 2012; Carver et al. 2016); outbreaks have been confirmed in Florida panthers (*Puma concolor coryi*) (Brown et al. 2008) and exposure confirmed in California mountain lions and California bobcats (Foley et al. 2013). Genetic analysis of the panther FeLV determined that the outbreak likely came from a single cross-species transmission from a domestic cat, and other wild cat infections are suspected to have been transmitted by FeLV-positive domestic cats (Brown et al. 2008).

Feline Immunodeficiency Virus (FIV) is a retrovirus that attacks the immune system, leading to chronic disease and increased risk of infections, neurological diseases, tumors, and feline acquired immunodeficiency syndrome (Hartmann 2012). Risk factors for FIV include male gender, aggressive behavior, adult age, and access to the outdoors (Lee et al. 2002). FIV is primarily transmitted by bite wounds, which may occur during cat fights and mating behavior such as neck biting by males. In the United States, species-specific strains of FIV have been identified in domestic cats and mountain lions and transmission between species susceptible to different strains is considered extremely rare, meaning that transmission does not occur between wild and domestic cats in the United States (Franklin et al. 2007; Troyer et al. 2008; Lee et al. 2017). Mountain lions and bobcats in Southern California share an FIV strain and transmission has occurred between the species (Franklin et al. 2007; Lee et al. 2017).

Bacteria

Leptospira are bacteria that cause leptospirosis, a mild to severe infection affecting domestic and wild mammals, including marine mammals. The infection in felines is not well understood but is thought to be similar to that in dogs and humans, which may cause fever, vomiting, diarrhea, weakness, organ failure, and death, although it is highly responsive to antibiotics (Azocar-Aedo et al. 2014). Mammals are the only animals capable of transmitting the bacteria, although the bacteria have also been identified in reptiles and birds (Guerra 2009). Infection occurs through direct contact with an infected host, infected host urine, or contaminated soil or water. Leptospirosis is difficult to diagnose and is likely underreported (Hartmann et al. 2013; Azocar-Aedo et al. 2014; Dybing et al. 2017). A wide variety of domestic and wild animal species may carry Leptospira, including small rodents, shrews, raccoons, opossums, foxes, skunks, weasels, and otters, and small mammals are the primary reservoirs (Azocar-Aedo et al. 2014). In arid regions or during drought conditions, infections are more common around water sources (Langston and Heuter 2003; Azocar-Aedo et al. 2014).

Bartonella are a family of bacteria transmitted by vectors such as fleas, ticks, lice, sand flies, and mosquitoes that cause a variety of diseases in animals including Cat Scratch Disease (Bartonellosis) and meningitis (Breitschwerdt and Kordick 2000; Pinto Jr et al. 2008). Specific species such as wild rabbits, dogs, coyotes, and humans are each associated with distinct species of *Bartonella*, indicating a potential vector preference for certain hosts, which may influence transmission (Breitschwerdt and Kordick 2000). Several insects have been implicated in *Bartonella* transmission, including sand

flies, the human body louse, the vole ear mite, the cat flea, and ticks. In Los Angeles, Oriental rat fleas (*Xenopsylla cheopis*) collected from rats in downtown Los Angeles commonly tested positive for *Bartonella* strains, including *B. elizabethae*, which is infectious to domestic dogs and cats (L. Beati 1999). In the western United States, *Bartonella* spp. have been documented in mountain lions, bobcats, coyotes, gray foxes, elk, and mule deer. Domestic cats are the primary reservoir of *Bartonella henselae*, which causes Cat Scratch Disease. Free-roaming cats are known as a substantial reservoir for infection and have higher of rates of infection than owned domestic cats, likely due to increased exposure (Breitschwerdt and Kordick 2000; Nutter et al. 2004). Cat Scratch Disease may be spread by cats through saliva, scratches, and bites, and by vectors.

Water Quality

Free-roaming cats may also have the potential to adversely affect water quality and aquatic species health and survival in impacted waters. Pollutants such as waste, bacteria, and nutrients from free-roaming cats' feces and urine (e.g., urea) accumulate in the environment and have potential to discharge via runoff into the City storm drainage system and natural waterways and wetlands (Dabritz et al. 2006; Glibert et al. 2006). Untreated free-roaming cat waste discharged into rivers, streams, lakes, and oceans can contribute nutrients (e.g., ammonia and phosphorous) and bacteria into aquatic systems. When such pollutants are in excess, they may cause or contribute to nutrient pollution, which adversely affects water quality. Urine contains ammonia, a source of nitrogen, which at high levels in water becomes toxic for aquatic organisms and alters water acidity (Environmental Protection Agency 2018).

Excess nitrogen and phosphorus can cause eutrophication and subsequent depletion of oxygen in aquatic environments through a series of reactions. Eutrophication occurs when excess nutrients cause large algal blooms in either fresh or marine waters. The excess algal blooms result in heightened levels of decomposition from algal turn-over and die-off. This process of decomposition is oxygen intensive and can deplete available dissolved oxygen in water bodies, making them anoxic (also known as dead zones). Large algal blooms can also inhibit light penetrating the water column, thus interfering with or preventing aquatic plant photosynthesis. Reduced photosynthesis may contribute to die-off of plants and photosynthetic algae, further increasing levels of decomposition and contributing to oxygen depletion (Smith et al. 1999).

Anoxic waters are uninhabitable to organisms requiring oxygen (aerobic organisms) and can result in species death and altered physical, biological, and chemical conditions, which may lead to habitat degradation or loss. In addition, areas with low oxygen can become dead zones if the dissolved oxygen remains too low for organisms to survive, resulting in a breakdown of the food web and subsequent species declines. Some algal species produce toxins that are not harmful until they reach levels only possible with excessive nutrient loading. The toxins produced can accumulate in species' tissues, resulting in increasing toxin concentration as it moves up the food chain and causing illness or death in species such as marine mammals, fish, birds, crabs, and turtles (Anderson et al. 2002; Baldera and Brooker 2018). Toxic cyanobacteria blooms have been linked to excess nutrient loading and are known to kill various wildlife that consumes the bacteria including birds, mammals, fish, and some invertebrates (Heisler et al. 2008; Chislock et al. 2013).

Free-roaming cat waste may also contain viruses, bacteria, and parasites, which could contaminate surface and ground waters and transmit diseases to wildlife (Adeela et al. 2013). Diseases and their modes of transmission are discussed in detail above and a detailed analysis and discussion of hydrology and water quality are provided in Section 4.3.

As discussed in the *Hydrology and Water Quality* section of this EIR (Section 4.3), although there is potential for cat-related discharge of nutrients and bacteria to adversely affect water bodies and water quality in the Project region, the exact contribution of such impacts from free-roaming cats and precise locations of such impacts within the study area and vicinity are currently unknown. Study area drainage basins in more urban areas and local coastal marine waters that receive regular flows from untreated inlets and storm drains in the City may be more at risk from free-roaming cat–related water quality impacts.

4.2.2.10 Existing Effects of Free-Roaming Cats on Biological Resources in the Study Area

This section assesses the existing effects of free-roaming cats on sensitive biological resources in the study area based on the following:

1. Information compiled during the literature review on the effects of free-roaming cats on natural resources,
2. General distribution of existing sensitive biological resources and ESAs (see Sections 4.2.2.1 through 4.2.2.7 above), and
3. Estimated spatial distribution of free-roaming cats in the study area (see Section 4.1.2.2).

Limitations that Influence Results

Although much information is available on the general direct and indirect impacts caused by domestic cats on biological resources, it is difficult to accurately estimate or determine details on the specific spatial distribution, intensity, or species-specific effects of such impacts from free-roaming cats in the study area. Variability in domestic cat and biological resource density, spatial distribution, and behavior makes it difficult to make specific estimates across populations and areas of interest relevant to CEQA for an assessment of potential impacts. Limitation in the availability of published data and resources to collect such data (such as ground surveys) further exacerbates limitations in species-specific and quantifiable data and related impact conclusions. This inherent and observed level of uncertainty related to data limits the ability to definitively quantify impacts without necessitating a moderate level of assumptions and speculation.[3] Accordingly, the baseline effects of free-roaming cats as assessed below in the study area are presented while taking into consideration the aforementioned limitations.

Discussion of Existing Effects of Free-roaming Cats on Sensitive Biological Resources in the Study Area

Estimated Spatial Distribution of Study Area Effects from Free-Roaming Cats

Although all biological resources in the study area are at least partially susceptible to impacts from free-roaming cats, biological resources that are most at risk or susceptible likely include species and resources that inhabit, roost, nest, forage, or frequent areas in or near (1) smaller blocks of habitat, (2) fragmented habitat, (3) open space adjacent to developed lands, (4) open space with high total edge habitat (habitat bordering developed lands or urban-wildlife interface), and (5) areas more

[3] State CEQA Guidelines Section 15145. SPECULATION. If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

likely to overlap with high cat density areas. Existing impacts of free-roaming cats on sensitive biological resources present in the study area are generally summarized below.

Due to the aforementioned limitations in identifying and quantifying particular effects of free-roaming cats on specific sensitive biological resources in general, and also in the study area in particular, the following sections detail the effects of free-roaming cats on specific resources and taxonomic groups where supported by substantial evidence through the literature review conducted for this EIR, and also provide general information about sensitive biological resources occurring in the study area that consequently may be impacted by free-roaming cat populations in the study area, either directly or through other potential impact mechanisms. Where feasible, effects from free-roaming cats on specific sensitive biological resources in the study area are discussed.

Environmentally Sensitive Areas

Natural and Sensitive Vegetation Communities

Although free-roaming cats may not have apparent direct impacts on natural vegetation communities and habitats, they may have indirect effects on community structure and function due to impacts on pollination, seed dispersal, and soil health caused by predation of important pollinator, frugivorous, herbivorous, and fossorial species; by altering wildlife behavior and habitat use; or by facilitating the spread of invasive plant species (Dickman 1996; Nogales and Medina 1996; Bourgeois et al. 2004; Medina et al. 2014). Removal of such native species has potential to disrupt normal ecological processes, which may have a negative effect on plant species and plant communities. Natural vegetation communities, including sensitive natural communities, are primarily distributed within natural open space areas and SEAs, which are partially or completely bordered by highly developed and urbanized portions of the study area.

Significant Ecological Areas

SEAs may experience similar impacts as described above for natural vegetation communities and impact intensities are likely to correspond with cat density and use of SEAs. Free-roaming cat density, as depicted on Figure 4.1-1, is highest within the most developed portions of the study area, which are most concentrated within the San Fernando Valley/West Hills Corridor Zone (Zone 2), Central/South Los Angeles Zone (Zone 5), coastal regions (Zone 4), and northeast Los Angeles in the easternmost portion of the Santa Monica Mountains – Eagle Rock Zone (Zone 3). These are the areas most likely to experience effects of free-roaming cats.

The North Rim/Foothill Corridor Zone (Zone 1) is largely developed but contains large blocks of open space to the west and east and also encompasses smaller areas of open space situated in the urban-wildlands interface along the foothills of the Santa Susana Mountains, San Gabriel Mountains, and Verdugo Mountains. Several SEAs exist in this region and include the Santa Susana Mountains/Simi Hills SEA, the Tujunga Valley/Hansen Dam SEA, and the Verdugo Mountains SEA. Cat density estimates are high across developed areas in this region and decrease across open space areas.

The San Fernando Valley/West Hills Corridor Zone (Zone 2) is dominated by highly developed lands but also encompasses open space such as parks, portions of the Simi Hills to the west, the Chatsworth Reservoir, and the Sepulveda Basin and Wildlife Area situated within the urban-wildlands interface.

The Santa Monica Mountains – Eagle Rock Zone (Zone 3) encompasses the largest and most connected areas of open space in the City, which include wilderness areas within the Santa Monica Mountains, Santa Monica Mountains SEA and Griffith Park SEA, and various parks, canyons, and reservoirs. Estimated cat density in the region is lower than in other regions of the study area due to the amount of open space, although it increases farther east and is highest in the Hollywood Hills, Studio City, and Eagle Rock regions.

The Coastal Zone and Adjacent Uplands Zone (Zone 4) includes three distinct areas where the City meets the coast and includes Pacific Palisades, Venice and Marina Del Rey, and San Pedro. These regions are largely developed, although they are adjacent to or encompass areas of open space, sandy beaches, and the rocky intertidal in areas such as Temescal Canyon, Laurel Canyon, Palisades Park, Ballona Wetlands Ecological Reserve, El Segundo Blue Butterfly Preserve, White Point Nature Preserve, and Point Fermin. SEAs in the region include the Ballona Wetlands, El Segundo Dunes, Palos Verdes Peninsula and Coastline, Terminal Island Pier 400, and Harbor Lake Regional Park SEAs. Free-roaming cat density in these regions is lowest along the sandy beaches and undeveloped areas although it is generally low throughout due to the highly developed nature of the coastline.

The Central/South Los Angeles Zone (Zone 5) is the most developed zone in the City and is predominantly surrounded by developed lands. However, the Baldwin Hills Conservancy lands in the northwest and the Los Angeles River Corridor and Elysian Park to the east encompass various small areas of open space such as parks and canyons. Estimated free-roaming cat density is high throughout this region.

Although free-roaming cat density is estimated to be lower in undeveloped and open space areas, much of the small and large blocks of undeveloped lands in the City are likely to be occupied or used by free-roaming cats. Large blocks of undeveloped lands are predominantly located within the Santa Monica Mountains, Santa Susana Mountains, Verdugo Hills, San Gabriel Mountains, and the foothills, which contain native shrublands and woodlands, as well as burned areas, which are known to be suitable habitats for free-roaming cats. These undeveloped regions are also bordered by highly developed lands with high free-roaming cat densities, which increases the likelihood of free-roaming cat use especially along the urban-wildlands interface. Locations within the City that likely contain the lowest relative densities of free-roaming cats are the remote, high-elevation areas of the surrounding foothills and mountains where human-subsidized food and shelter are scarce and risk of predation of wildlife by free-roaming cats is low. Smaller areas of undeveloped lands are dispersed throughout the study area and include the Sepulveda Basin, Hansen Flood Control Basin, various parks such as Griffith Park and Elysian Park, White Point Nature Preserve, Ballona Wetlands Ecological Reserve, Arroyo Seco Park, La Tuna Canyon Park, and Kenneth Hahn State Recreation Area. These smaller open space areas are either completely surrounded by or immediately adjacent to highly developed and urbanized areas, increasing the likelihood of free-roaming cat presence in these locations and possibly supporting higher free-roaming cat densities versus larger and more remote open space areas in the City.

Critical Habitat

Critical habitat may experience similar impacts as described above for natural vegetation communities and SEAs and impact intensities are likely to correspond with cat density and use of critical habitat areas. Critical habitat located in more developed areas with higher potential cat density include critical habitat for coastal California gnatcatcher and western snowy plover. Critical

habitat located in less developed areas include habitat for southwestern willow flycatcher, Santa Ana sucker, Southern California steelhead, and black abalone.

Ecological Connectivity Areas

Free-roaming cats may interfere with wildlife movement and migration, causing direct and indirect effects on species utilizing such areas. Such effects may reduce species' use of connectivity and stop-over areas, posing a barrier effect for some species. Altered wildlife behavior or shifts in habitat use to avoid free-roaming cats may subsequently prevent dispersal; genetic interchange; access to feeding, breeding, and shelter; and access to other resources that are essential to the survival of both resident and migratory species. In addition, the introduction or spread of disease in connectivity areas may interfere with the function of such areas. In already fragmented, disturbed, and degraded regions, the direct and indirect effects of free-roaming cats are intensified, which can exacerbate effects on the function of connectivity areas (Crooks 1998; Pichancourt et al. 2006; Graham et al. 2012; McGregor et al. 2014; McGregor et al. 2015; Recio et al. 2015; McGregor et al. 2017). Because the Rim of the Valley Corridor encompasses much of the recognized local and regional wildlife connectivity areas, effects of free-roaming cats on local connectivity may be concentrated in and around this region. In addition, the entire study area is situated within the Pacific Flyway, with potential impacts of free-roaming cats being distributed over the study area, although likely with increased intensity in and around high cat density areas.

Wetlands and Other Waters

As detailed in the *Water Quality* subsection of Section 4.2.2.8, pollutants such as waste, bacteria, and nutrients from free-roaming cats' feces and urine accumulate in the environment and have potential to discharge via runoff into the City storm drainage system and natural waterways and wetlands, which can create anoxic and toxic conditions for plants and animals. Free-roaming cat waste may also contain viruses, bacteria, and parasites, which could contaminate surface and ground waters and transmit diseases to wildlife (Adeela, 2013). Diseases and their modes of transmission are discussed in detail in the *Non-Consumptive Effects* subsection of Section 4.2.2.8 and a detailed analysis and discussion of hydrology and water quality are provided in Section 4.3.

As discussed in the *Hydrology and Water Quality* section of this EIR (Section 4.3), although there is potential for cat-related discharge of nutrients and bacteria to adversely affect water bodies and water quality in the Project region, the exact contribution of such impacts from free-roaming cats and precise locations of such impacts within the study area and vicinity are currently unknown. Study area drainage basins in more urban areas and local coastal marine waters that receive regular flows from untreated inlets and storm drains in the City may be more at risk from free-roaming cat–related water quality impacts.

Special-Status Plant and Animal Species

Plant Species

Although specific research informing potential direct impacts of free-roaming cats on plant species themselves was not identified, it is recognized in the scientific literature that free-roaming cats may have indirect effects on plant species and plant communities through direct removal of and reductions in species that are important contributors to pollination (e.g., birds and insects), seed dispersal, and soil health and soil microbe translocation (e.g., nutrient and mycorrhizal fungi

dispersal by fossorial mammals) (Dickman 1996; Nogales and Medina 1996; Bourgeois et al. 2004; Medina et al. 2014). Removal of these species could interfere with or disrupt normal ecological processes, which may have negative effects on plant species and plant communities.

Special-status plant species in the study area are primarily associated with natural vegetation communities such as beaches and dunes, grasslands, riparian and wetland areas, coastal scrub and chaparral, and woodlands, which are predominantly distributed within natural open space areas and SEAs in the study area. Such locations in the study area are either partially or completely bordered by highly developed and urbanized lands. Although all special-status plant species in the study area are at least partially susceptible to impacts from free-roaming cats, some may be more susceptible than others. These plant species include those that are biologically dependent on animals species potentially impacted or depleted by free-roaming cats and more likely to be impacted by free-roaming cats because of their location.

Wildlife Species

Invertebrates

Invertebrates and insects are most frequently preyed on by domestic cats. Most insect orders have been reported within the domestic cat prey base, with grasshoppers (Orthoptera), beetles (Coleoptera), and moths/butterflies (Lepidoptera) most commonly preyed upon (Fitzgerald and Karl 1979; Kirkpatrick and Rauzon 1986; Konecny 1987; Medina and Garcia 2007; Loyd et al. 2013). In one study, invertebrates were found to be eaten by 54% of cats studied and made up most of the diets when other prey sources were not available (Hess et al. 2007). Predation on insects is likely driven by insect size, abundance, and seasonal variations in insect activity and abundance (Nogales and Medina 1996; Medina and Garcia 2007; Loyd et al. 2013). Indirect effects such as those that influence species habitat availability and use, access to resources, reproductive success, and survival also have the potential to result from free-roaming cats on species that exhibit anti-predator or anti-threat behavior or are sensitive to water quality impacts.

As supported by the literature review conducted for this EIR, free-roaming cats' effects on special-status invertebrates in the study area may include predation and water quality-related effects. The literature reviewed does not specifically mention species-specific effects for invertebrates, but rather generally discusses effects of domestic cats on invertebrates. Accordingly, Table 4.2-6 below presents a compilation of special-status invertebrate species potentially occurring in the study area that have the potential to be impacted by free-roaming cats and lists the general types of potential effects they may experience as supported by the literature review.

Table 4.2-6. Special-Status Invertebrate Species with Potential to Occur in the Study Area and the Potential Effects of Free-Roaming Cats on Each Species

Species	Status Federal/ State*	Potential Effects	
		Predation	Water Quality
Crotch bumble bee (*Bombus crotchii*)	–/SC	X	
Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	T/–		X
Belkin's Dune Tabanid Fly (*Brennania belkini*)	–/SA	X	
Busck's Gallmoth (*Carolella busckana*)	–/SA	X	
Western Tidal-flat Tiger Beetle (*Cicindela gabbii*)	–/SA	X	X
Sandy Beach Tiger Beetle (*Cicindela hirticollis gravida*)	–/SA	X	X
Western Beach Tiger Beetle (*Cicindela latesignata latesignata*)	–/SA	X	X
Senile Tiger Beetle (*Cicindela senilis frosti*)	–/SA	X	X
Globose Dune Beetle (*Coelus globosus*)	–/SA	X	X
Monarch Butterfly (*Danaus plexippus*)	–/SA	X	
Henne's Eucosman Moth (*Eucosma hennei*)	–/SA	X	
El Segundo Blue Butterfly (*Euphilotes battoides allyni*)	E/SA	X	
Palos Verdes Blue Butterfly (*Glaucopsyche lygdamus palosverdesensis*)	E/SA	X	
White Abalone (*Haliotis sorenseni*)	E/–		X
Black Abalone (*Haliotis cracherodii*)	E/–		X
Lange's El Segundo Dune Weevil (*Onychobaris langei*)	–/SA	X	
Wandering Skipper (*Panoquina errans*)	–/SA	X	
El Segundo Flower-loving Fly (*Rhaphiomidas* t. *terminatus*)	–/SA (Extinct)	X	
Gertsch's Socalchemmis Spider (*Socalchemmis gertschi*)	–/SA	X	
Riverside Fairy Shrimp (*Streptocephalus woottoni*)	E/SA		X
Dorothy's El Segundo Dune Weevil (*Trigonoscuta dorothea dorothea*)	–/SA	X	
Mimic Tryonia (California brackishwater snail) (*Tryonia imitator*)	–/SA	X	X

* Status Codes

FESA
E = Federally listed; Endangered
T = Federally listed; Threatened

CESA
E = State listed; Endangered
T = State listed; Threatened
SC = State Candidate for listing
SA = California Special Animal

Fish

Free-roaming cats may affect fish directly through predation or indirectly through water quality impacts. Potential for indirect effects and disease transmission between cats and fish that result in fish disease is unknown and was not identified in literature reviews. Fish do not appear to be commonly preyed on by domestic cats and studies on free-roaming cat diets around the world have

found that fish species, including eel, were taken by cats; however, these predation events were very seldom and occurred in small numbers (Bonnaud et al. 2011; Ortiz-Alcaraz et al. 2017). In addition, effects on water quality have the potential to adversely affect fish health and habitat conditions. Adverse effects on the biological, chemical, or physical conditions of waters inhabited by fish could lead to effects on species' habitat availability and use, reproductive success, and survival.

As supported by the literature review conducted for this EIR, free-roaming cats' effects on special-status fish species in the study area may include predation and water quality–related effects. The literature reviewed does not specifically mention species-specific effects for fish, but rather generally discusses effects of domestic cats on fish. Accordingly, Table 4.2-7 below presents a compilation of special-status fish species potentially occurring in the study area that have the potential to be impacted by free-roaming cats and lists the general types of potential effects they may experience as supported by the literature review.

Table 4.2-7. Special-Status Fish Species with Potential to Occur and the Potential Effects of Free-Roaming Cats on Each Species

Species	Status Federal/ State*	Potential Effects	
		Predation	Water Quality
Green Sturgeon (*Acipenser medirostris*)	T/–		X
Santa Ana Sucker (*Catostomus santaanae*)	T/–	X	X
Tidewater Goby (*Eucyclogobius newberryi*)	E/–	X	X
Unarmored Threespine Stickleback (*Gasterosteus aculeatus williamsoni*)	E/E, CFP	X	X
Arroyo Chub (*Gila orcuttii*)	–/CSC	X	X
Southern California Steelhead (*Oncorhynchus mykiss irideus*)	E/CSC	X	X
Santa Ana Speckled Dace (*Rhinichthys osculus* ssp. 3)	–/CSC	X	X

* Status Codes

FESA
E = Federally listed; Endangered
T = Federally listed; Threatened

CESA
E = State listed; Endangered
CSC = California Species of Special Concern
CFP = California Fully Protected Species

Reptiles and Amphibians

Reptiles and amphibians are commonly preyed on by domestic cats and in some instances levels of predation on these taxa have been high (Mitchell and Beck 1992; Nogales and Medina 2009; Hilmer et al. 2010; Medina et al. 2010; Loss et al. 2013; Loyd et al. 2013). Domestic cat predation on reptiles and amphibians can have seasonal patterns and has been documented to occur more frequently during warmer seasons (Mitchell and Beck 1992; Loyd et al. 2013). Loss (2013) compiled domestic cat predation data from research conducted in Europe, Australia, and New Zealand and extrapolated and estimated from those data that between 258 and 822 million reptiles and 95 and 299 million amphibians are killed by domestic cats in the contiguous United States annually. Reptiles and amphibians may also experience indirect effects from free-roaming cats such as avoidance of areas where free-roaming cats are detected, which may interfere with their ability to thermoregulate and access or occupy suitable habitat, or may cause stress and altered access to necessary resources (Gerard et al. 2014). Potential for disease transmission between domestic cats and reptiles and amphibians is unknown and was not identified in literature reviews.

As supported by the literature review conducted for this EIR, free-roaming cats' effects on special-status reptile and amphibian species in the study area may include predation, indirect effects, and water quality–related effects. The literature reviewed does not specifically mention species-specific effects for reptiles and amphibians, but rather generally discusses effects of domestic cats on reptiles and amphibians. Accordingly, Table 4.2-8 below presents a compilation of special-status reptiles and amphibian species potentially occurring in the study area that have the potential to be impacted by free-roaming cats and lists the general types of potential effects they may experience as supported by the literature review.

Table 4.2-8. Special-Status Reptiles and Amphibians with Potential to Occur in the Study Area and Potential Effects of Free-Roaming Cats

Species	Status Federal/ State*	Potential Effects		
		Predation	Indirect Effects	Water Quality
Arroyo Toad (*Anaxyrus californicus*)	E/CSC	X	X	X
Silvery Legless Lizard (*Anniella pulchra pulchra*)	–/CSC	X	X	
Southern California Legless Lizard (*Anniella stebbinsi*)	–/CSC	X	X	
California glossy snake (*Arizona elegans occidentalis*)	–/CSC	X	X	
Orange-throated Whiptail (*Aspidoscelis hyperythra*)	–/CSC	X	X	
Coastal Whiptail (*Aspidoscelis tigris stejnegeri*)	–/CSC	X		
Loggerhead Sea Turtle (*Caretta caretta*)	E/–			X
Green Sea Turtle (*Chelonia mydas*)	E/–			X
San Bernardino Ringneck Snake (*Diadophis punctatus modestus*)	–/SA	X	X	
Leatherback Sea Turtle (*Dermochelys coriacea*)	E/–			X
Western Pond Turtle (*Emys marmorata*)	–/CSC	X	X	X
California Mountain Kingsnake (*Lampropeltis zonata pulchra*)	–/WL	X	X	
Olive Ridley Sea Turtle (*Lepidochelys olivacea*)	T/–			X
Coast Horned Lizard (*Phrynosoma blainvillii*)	–/CSC	X	X	
California Red-legged Frog (*Rana draytonii*)	T/CSC	X	X	X
Southern Mountain Yellow-legged Frog (*Rana muscosa*)	E/E	X	X	X
Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*)	–/CSC	X	X	
Western Spadefoot (*Spea hammondii*)	–/CSC	X	X	X
Coastal Range Newt (*Taricha torosa*)	–/CSC	X	X	X
Two-striped Garter Snake (*Thamnophis hammondii*)	–/CSC	X	X	
Island Night Lizard (*Xantusia riversiana*)	D/–	X	X	

* Status Codes

FESA
E = Federally listed; Endangered
T = Federally listed; Threatened
D = Delisted

CESA
E = State listed; Endangered
CSC = California Species of Special Concern
SA = California Special Animal
WL = Watch List

Birds

The impacts of free-roaming cats on birds are widely documented. Free-roaming cats are known to prey on many species of birds, with ground-foraging, ground-nesting, cavity-nesting, and smaller birds (including chicks and fledglings) at greater risk for predation (Berruti 1986; Dunn and Tessaglia 1994; McChesney and Tershy 1998; Hawkins et al. 2004; Lepczyk et al. 2004; Baker et al. 2008; Le Corre 2008; Cooper et al. 2012; Woinarski et al. 2017b). Free-roaming cats have been implicated in the extinction and decline of bird species and their impacts can have detrimental effects on bird populations (Whitlock 1923; Dauphiné and Cooper 2009; Medina et al. 2011). Studies aiming to quantify the magnitude of domestic cat predation effects on birds estimate that at least 1 billion birds are killed by domestic cats per year in the United States (Dauphiné and Cooper 2009; Loss et al. 2013).

In addition, indirect effects on birds such as stress and anti-predator behavior can lead to increased vulnerability to predation (Bonnington et al. 2013), habitat avoidance (Beckerman et al. 2007; Sims et al. 2008; Dickman 2009; Bogrand et al. 2017), competition for resources (George 1974; Doherty et al. 2017), reproductive failure (Anderson et al. 1989; Radunzel et al. 1997; Lima 1998; Baker et al. 2008; Cooper et al. 2012), and disease transmission such as *Toxoplasma gondii*, which has potential to be fatal to birds (Work et al. 2000). Altered bird behavior and habitat avoidance in response to domestic cat presence may disrupt bird foraging patterns and may also drive species away from preferred, available, or suitable habitats, increasing competition with other bird species in already occupied habitats and territories. These stress and behavioral responses to domestic cats have potential to reduce bird survival and reproductive success and have population-level effects on bird species (Lima 1987, 1998; Beckerman et al. 2007). Effects on water quality may also be detrimental for bird species if such effects result in reduced prey abundance, pollutants, or exposure to toxins from algal blooms.

Bird species are distributed throughout the entire study area. Some species are highly adapted to the urban environment while others require specific habitats and conditions. Species that are small, are within or in proximity to high cat density areas, or nest or forage on/near the ground are considered most susceptible to cat predation. All bird species in the study area are potentially subject to indirect effects caused by free-roaming cats, although some species may be more impacted than others.

As supported by the literature review conducted for this EIR, free-roaming cats' effects on special-status bird species in the study area may include predation, indirect effects, disease, and water quality–related effects. The literature reviewed does not specifically mention species-specific effects for all birds, but rather generally discusses effects of domestic cats on bird species. Accordingly, Table 4.2-9 below presents a compilation of special-status bird species potentially occurring in the study area that have the potential to be impacted by free-roaming cats and lists the general types of potential effects they may experience as supported by the literature review.

Table 4.2-9. Special-Status Bird Species with Potential to Occur in the Study Area and Potential Effects of Free-Roaming Cats

Species	Status Federal/ State	Potential Effects			
		Predation	Indirect Effects	Diseases	Water Quality
Cooper's Hawk (*Accipiter cooperii*)	–/WL		X	X	
Sharp-shinned Hawk (*Accipiter striatus*)	–/WL		X	X	
Tricolored Blackbird (*Agelaius tricolor*)	–/T	X	X	X	
Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)	–/WL	X	X	X	
Golden Eagle (*Aquila chrysaetos*)	–/CFP		X	X	
Bell's Sage Sparrow (*Artemisiospiza b. belli*)	–/WL	X	X	X	
Short-eared Owl (*Asio flammeus*)	–/CSC		X	X	
Long-eared Owl (*Asio otus*)	–/CSC		X	X	
Burrowing Owl (*Athene cunicularia*)	–/CSC	X	X	X	
Swainson's Hawk (*Buteo swainsoni*)	–/T		X	X	
Western Snowy Plover (*Charadrius alexandrines nivosus*)	T/CSC	X	X	X	X
Mountain Plover (*Charadrius montanus*)	–/CSC	X	X	X	
Black Tern (*Chlidonias niger*)	–/CSC	X	X	X	X
Northern Harrier (*Circus cyaneus*)	–/CSC		X	X	
Yellow Rail (*Coturnicops noveboracensis*)	–/CSC	X	X	X	X
Black Swift (*Cypseloides niger*)	–/CSC	X	X	X	
White-tailed Kite (*Elanus leucurus*)	–/CFP		X	X	
Willow Flycatcher (all subspecies) (*Empidonax traillii*)	–/E	X	X	X	X
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)	E/E	X	X	X	X
California Horned Lark (*Eremophila alpestris actia*)	–/WL	X	X	X	
Merlin (*Falco columbarius*)	–/WL	X	X	X	
Prairie Falcon (*Falco mexicanus*)	–/WL		X	X	
American Peregrine Falcon (*Falco peregrinus anatum*)	D/CFP		X	X	
California Condor (*Gymnogyps californianus*)	E/–		X	X	
Southern Bald Eagle (*Haliaeetus leucocephalus*)	D/CFP		X	X	X
Yellow-breasted Chat (*Icteria virens*)	–/CSC	X	X	X	
Least Bittern (*Ixobrychus exilis*)	–/CSC	X	X	X	X
Loggerhead Shrike (*Lanius ludovicianus*)	–/CSC	X	X	X	
California Black Rail (*Laterallus jamaicensis coturniculus*)	–/T, CFP	X	X	X	X
Long-billed Curlew (*Numenius americanus*)	–/WL	X	X	X	X
Virginia's Warbler (*Oreothlypis virginiae*)	–/WL	X	X	X	

Species	Status Federal/ State	Potential Effects			
		Predation	Indirect Effects	Diseases	Water Quality
Osprey (*Pandion haliaetus*)	–/WL		X	X	X
Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*)	–/E	X	X	X	X
California Brown Pelican (*Pelecanus occidentalis californicus*)	D/CFP	X	X	X	X
Double-crested Cormorant (*Phalacrocorax auritus*)	–/WL	X	X	X	X
Summer Tanager (*Piranga rubra*)	–/CSC	X	X	X	
Coastal California Gnatcatcher (*Polioptila californica californica*)	T/CSC	X	X	X	
Light-footed Clapper Rail (*Rallus longirostris levipes*)	E/–	X	X	X	X
Yellow Warbler (*Setophaga petechia*)	–/CSC	X	X	X	X
California Least Tern (*Sterna antillarum browni*)	E/E	X	X	X	X
Least Bell's Vireo (*Vireo bellii pusillus*)	E/E	X	X	X	X

[a] Status Codes

FESA
E = Federally listed; Endangered
T = Federally listed; Threatened
D = Delisted

CESA
E = State listed; Endangered
T = State listed; Threatened
SC = State Candidate for Listing
CSC = California Species of Special Concern
CFP = California Fully Protected Species
WL = Watch List

Terrestrial Mammals

As reported in Section 4.2.2.9, small mammals (e.g., mice, small rats, rabbits) were the most commonly reported animals preyed on by domestic cats and included both native and introduced species (Hubbs 1951; Parmalee 1953; Eberhard 1954; Nogales and Medina 1996; Barratt 1997b; Paltridge et al. 1997; Pearre and Maass 1998; Molsher et al. 1999; Pontier et al. 2002; Hess et al. 2007; Meckstroth et al. 2007; Baker et al. 2008; Medina et al. 2008; Dickman 2009; Medina and Nogales 2009; Medina et al. 2010; Bonnaud et al. 2011; Fancourt 2014, 2015; Hardman et al. 2016; Doherty et al. 2017; McRuer et al. 2017). In addition to preying on small, ground-based mammals, free-roaming cats are one of the most highly reported predators of bats and are well known within the bat ecology and wildlife rehabilitation communities to regularly capture and kill bats (Welch and Leppanen 2017).

As do native predators, domestic cats are known to shift prey items based on seasonal abundance and changes in prey availability (Paltridge et al. 1997; Bergstrom et al. 2009; Bonnaud et al. 2011; Mutze 2017) and dietary overlap between domestic cats and native predators has potential to result in competition and reduced prey availability for native species (Welch and Leppanen 2017). Domestic cats have been implicated in the decline and extinction of mammal species throughout the world and can have substantial impacts on mammal populations (Burbidge and McKenzie 1989; Dickman et al. 1993; Krebs et al. 1996; Molsher et al. 1999; Doherty et al. 2017). A recent study

conducted by Loss et al. (2013) estimates that cats kill a median of 12.3 billion mammals per year (with a range of 6.3–22.3 billion) in the United States.

Free-roaming cats may indirectly affect mammals including rats by causing altered behavior and stress, resulting in habitat avoidance, altered space use, and interference with feeding, breeding, and shelter (Hughes and Banks 2010; Bogdan et al. 2016; Parsons et al. 2018). Additionally, free-roaming cats may facilitate disease or parasite transmission to some mammal species, which may have adverse species impacts. As supported by the literature review conducted for this EIR, free-roaming cats' effects on special-status terrestrial mammal species in the study area may include predation, indirect effects, disease, and water quality-related effects. The literature reviewed does not specifically mention species-specific effects for all terrestrial mammals, but rather generally discusses effects of domestic cats on terrestrial mammals. Accordingly, Table 4.2-10 below presents a compilation of special-status terrestrial mammal species potentially occurring in the study area that have the potential to be impacted by free-roaming cats and lists the general types of potential effects they may experience as supported by the literature review.

Table 4.2-10. Special-Status Terrestrial Mammal Species with Potential to Occur in the Study Area and Potential Effects of Free-Roaming Cats on Each Species

Species	Status Federal/ State*	Potential Effects		
		Predation	Indirect Effects	Diseases
Pallid Bat (*Antrozous pallidus*)	–/CSC	X	X	
Ring-tailed Cat (*Bassariscus astutus*)	–/CFP		X	X
Coyote (*Canis latrans*)	–/–			X
Townsend's Big-eared Bat (*Corynorhinus townsendii*)	–/CSC	X	X	
Western Mastiff Bat (*Eumops perotis californicus*)	–/CSC	X	X	
Silver-haired Bat (*Lasionycteris noctivagans*)	–/SA	X	X	
Hoary Bat (*Lasiurus cinereus*)	–/SA	X	X	
Western Yellow Bat (*Lasiurus xanthinus*)	–/CSC	X	X	
San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*)	–/CSC	X	X	X
Bobcat (*Lynx rufus*)	–/–			X
California Leaf-nosed Bat (*Macrotus californicus*)	–/CSC	X	X	
South Coast Marsh Vole (*Microtus californicus stephensi*)	–/CSC	X	X	X
San Diego Desert Woodrat (*Neotoma lepida intermedia*)	–/CSC	X	X	X
Pocketed Free-tailed Bat (*Nyctinomops femorosaccus*)	–/CSC	X	X	
Big Free-tailed Bat (*Nyctinomops macrotis*)	–/CSC	X	X	
Southern Grasshopper Mouse (*Onychomys torridus ramona*)	–/CSC	X	X	X
Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*)	–/CSC	X	X	X
Mountain Lion (*Puma concolor*)	–/–			X

Species	Status Federal/ State*	Potential Effects		
		Predation	Indirect Effects	Diseases
Southern California Saltmarsh Shrew (*Sorex ornatus salicornicus*)	–/CSC	X	X	X
American Badger (*Taxidea taxus*)	–/CSC			X
Gray Fox (*Urocyon cinereoargenteus*)	–/–			X

* Status Codes
CESA
CSC = California Species of Special Concern
SA = California Special Animal
CFP = California Fully Protected Species

Marine Mammals

Potential effects of domestic cats on marine mammals include those related to impacts on water quality and spread and transmission of disease including *Toxoplasma gondii*. *T. gondii*, which is discussed in detail in the *Non-Consumptive Effects* subsection of Section 4.2.2.8, is a protozoan spread of the parasite that infects virtually all warm-blooded animals including birds, humans, and domestic and wild mammals, including marine mammals (Dubey et al. 2008) *T. gondii* oocysts are known to be transferred from cat feces in the terrestrial environment via natural drainage and runoff and sewage outfall into the marine environment, where it travels up and concentrates in the food chain and is consumed by marine invertebrates, marine fishes, marine birds, and marine mammals. T. gondii oocysts can remain infectious in sea water for up to 6 months (Lindsay and Dubey 2009) *T. gondii* infection has been found in numerous marine mammals including sea otters, dolphins, seals, and whales; in one study, 53% of dolphins tested were positive for the parasite (Dubey et al. 2008). High levels of mortality in some marine mammals, including the endangered southern sea otter (*Enhydra lutris nereis*), have been caused by infection with *T. gondii* (Kreuder et al. 2003; Jessup et al. 2004; Conrad et al. 2005). California sea lion deaths have also been documented as likely being caused by *T. gondii* infection (Migaki et al. 1977).

One study on different strains of *T. gondii* indicate that a strain commonly found in southern sea otters off the central coast of California matches strains sampled from wild mussel, native wild felines (cougar and bobcat), and native fox, but did not match the strain found in feral cats (Miller et al. 2008). Despite these findings, it is speculated that due to their relatively large populations, domestic cats likely contribute more *T. gondii* oocysts to lands bordering the coast than native wild felids, constituting a more pronounced source of oocysts introduced into the marine environment (VanWormer et al. 2013). Another study documented 62% of dead otters and 42% of live otters were infected with *T. gondii*. Factors that correlated with infection were male sex, older age, and location, with sea otters sampled near freshwater runoff sources being three times more likely to be infected with *T. gondii* (Miller et al. 2002). More developed coastal regions, such as the study area, experience greater *T. gondii* oocyst runoff into adjacent marine waters, which may influence transmission to wildlife (VanWormer et al. 2016). In addition, effects on water quality from free-roaming cat nutrient inputs may contribute to habitat degradation, oxygen depletion, potential alteration of food resources, and potential toxicity from red tides, which can lead to species decline.

A variety of marine mammal species may inhabit or migrate through the coastal marine waters adjacent to the study area and include special-status species such as the southern sea otter, which is

currently expanding its range southward through Southern California (U.S. Court of Appeals 9th Circuit 2018). As supported by the literature review conducted for this EIR, free-roaming cats' effects on special-status marine mammal species in the study area may include predation, indirect effects, disease, and water quality–related effects. The literature reviewed does not specifically mention species-specific effects for all marine mammals, but rather generally discusses effects of domestic cats on marine mammals. Accordingly, Table 4.2-11 below presents a compilation of special-status marine mammal species potentially occurring in the study area that have the potential to be impacted by free-roaming cats and lists the general types of potential effects they may experience as supported by the literature review.

Table 4.2-11. Special-Status Marine Mammals with Potential to Occur in the Project Region and Potential Effects of Free-Roaming Cats on Each Species

Species	Status Federal/ State/MMPA	Potential Effects	
		Diseases	Water Quality
Guadalupe Fur Seal (*Arctocephalus townsendii*)	T/CFP MMPA: D/P	X	X
Sei Whale (*Balaenoptera borealis*)	E/– MMPA: D/P	X	X
Blue Whale (*Balaenoptera musculus*)	E/– MMPA: D/P	X	X
Fin Whale (*Balaenoptera physalus*)	E/– MMPA: D/P	X	X
Southern Sea Otter (*Enhydra lutris nereis*)	T/–	X	X
North Pacific Right Whale (*Eubalaena japonica*)	E/– MMPA: D/P	X	X
Steller Sea Lion (*Eumetopias jubatus*)	D/–/ MMPA: D/P	X	X
Humpback Whale (*Megaptera novaeangliae*)	E/– MMPA: D/P	X	X
Southern Resident Killer Whale (*Orcinus orca*)	E/– MMPA: D/P	X	X
Sperm Whale (*Physeter microcephalus*)	E/– MMPA: D/P	X	X

[a] Status Codes

FESA
E = Federally listed; Endangered
T = Federally listed; Threatened
D = Delisted

CESA
CFP = California Fully Protected Species

Other
Marine Mammal Protection Act (MMPA)
D = Depleted
P = Protected

4.2.2.11 Trap-Neuter-Return

It has been estimated that approximately 50 million free-roaming cats exist in the United States (Levy and Crawford 2004). While only a small fraction of them enter the nation's animal shelter systems, many of the individuals that do are euthanized due to shelter crowding, disease, and feral

behavior (which makes them very difficult to adopt) (Levy et al. 2014). The high reproductive rate of domestic cats combined with the low sterilization rates of free-roaming cats (estimated as low as ~2% versus over 80–90% for owned cats) results in high reproductive rates contributing up to 147 million kittens born per year in the United States alone and resulting in a large nationwide free-roaming cat population (Levy and Crawford 2004; Wallace and Levy 2006). Such large free-roaming cat populations have led to the development of humane free-roaming cat population control efforts, the most common of which is Trap-Neuter-Return (TNR). TNR typically minimally entails the trapping, examination, sterilization (spay or neuter), ear tip removal (to aid in future reproductive status identification), and subsequent return of free-roaming cats to where they were trapped. Some TNR programs and efforts also implement vaccination at the time of sterilization (e.g., for rabies virus [RV] and FVR, FVC, and feline viral rhinotracheitis, calicivirus, and panleukopenia virus [FVRCP]). The purpose of TNR is to reduce the free-roaming cat population through sterilization, i.e., reduced reproduction.

Generally, TNR efforts across the country may occur in the form of an official program implemented by animal care agencies or non-profit organizations (TNR organizations) or may be conducted by unaffiliated volunteers. TNR efforts and programs are highly variable in terms of scale, volume, duration, frequency, training provided to practitioners/volunteers, specific locations targeted, and specific procedures followed, with some programs being quite comprehensive and others consisting of small, individual efforts aimed at controlling cats within an individual's property. For example, a TNR effort could entail the use of a single trap or multiple traps during a given trapping event. Trapping events may be conducted at one targeted location or several locations. Trapping events may be implemented by one to several volunteers consisting of volunteers from a specific TNR organization or unaffiliated TNR practitioner. TNR efforts may focus on a specific group of free-roaming cats in a specific location or multiple locations based on factors such as area of interest and/or resource availability. Levels of training of TNR practitioners ranges from highly trained and experienced staff and volunteers to novice TNR practitioners with little to no training.

In the City, there are several non-profit organizations that conduct or facilitate one or more aspects of TNR across the City. Traps may be purchased at local hardware stores or online, or provided by TNR organizations or the City. If a volunteer trapper is conducting cat trapping as part of a TNR organization TNR effort, they typically must undergo some minimal training on how to conduct TNR. For example, some organizations offer an online training, which consists of a 30-minute video that volunteers are required to watch before participating in or conducting TNR activities with that organization. Other TNR organizations offer in-person trainings and workshops to interested TNR volunteers.

On March 6, 2019, the City held an interview-style workshop with various TNR organizations to gain an understanding of the existing general TNR practices employed or supported by these organizations and their volunteers across the City (City of Los Angeles 2019a). Additionally, a follow-up meeting was conducted on March 12, 2019, with organizations that could not attend the March 6 meeting (City of Los Angeles 2019b). The information gathered from the workshop largely informs the following narrative of TNR practices across the City.

Organizations supporting TNR in the City include FixNation, Best Friends Animal Society, Alley Cat Allies, Luxe Paws, Heaven on Earth, Kitty Bungalow, and Stray Cat Alliance. These organizations range widely in volunteer and financial resources available to them, which in turn directly affects the specific services they provide (e.g., support the entire TNR process versus only support the sterilization element) and the volume of TNR or services they support, which can range from a few

hundred to several thousand per year. For instance, Kitty Bungalow completed 770 TNRs in 2018 (City of Los Angeles 2019a, 2019b) compared to FixNation's approximately 10,000 (City of Los Angeles 2019a, 2019b).

A typical TNR scenario in the City of Los Angeles entails conducting trapping during mild weather conditions at a location containing free-roaming cats in need of sterilization, such as a neighborhood, an individual's back yard, or an industrial area. First, the trapper sets a trap(s) such as a Havahart® Feral Cat Trap or Tomahawk® feral cat trap with food bait to lure cats into the cage. When free-roaming cats in a targeted TNR area are being fed regularly, the caretakers/feeders are asked to withhold food prior to TNR trapping to facilitate enticing cats to enter the traps to obtain food bait. Traps are typically set in the evening and baited with food items such as canned cat food, canned chicken, or canned tuna. Following trap set-up, the trapper observes the trap from a distance, monitoring it regularly, until a cat is trapped; this may take anywhere from a few minutes to several hours. The trapped cat is kept in a quiet location within the trap until the following morning, then transported to a veterinary facility where the cat undergoes, at a minimum, surgical sterilization (under anesthesia), vaccination (FVRCP and RV typical minimum), and left ear tip removal. Once the cat has recovered from anesthesia and is deemed fit to leave the facility, typically later that day or the following day (for example, it can eat on its own and has no major medical issues), it is returned to the location where it was trapped. Variations in this typical scenario include different vaccination regimes, length of time the cat is kept at the veterinary facility, and when it is returned to where it was trapped. Some programs may offer comprehensive veterinary care in addition to sterilization such as treatment for medical conditions, internal and external parasite treatment, all-inclusive vaccination including FVRCP, RV, FeLV, and other vaccinations, microchipping, and registration with a TNR monitoring program. Occasionally, free-roaming cats undergoing TNR are not returned to the location where they were trapped due to successful adoptions, admission to a working cat program(WCP) (see Section 2.5, *Project Description*) humane euthanasia due to injury or disease, or concerns with cat welfare and ongoing care at the trapping location; these cases are the exception, less than 1%, although approximately 80% are reportedly returned to the original trapping location (City of Los Angeles 2019a, 2019b). In most cases the locations where cats are returned have a resident or volunteer cat caregiver who provides cat care such as feeding and medical care on an ongoing basis. Because free-roaming cats congregate around food and other resources, such locations typically host several cats although some can host tens of cats. Like TNR, ongoing cat care practices are highly variable and may be comprehensive and involve regulated feeding, cleaning, flea control, provision of shelter, feces cleanup, and ongoing medical treatments or may simply involve residents within a neighborhood providing food haphazardly to local free-roaming cats in their neighborhood.

Per *Los Angeles Municipal Code* Section 53.69, the City is authorized to issue a cat trap permit for domestic cats that are trapped on private property. The City may also rent traps to a permittee for a daily fee. Permittees must surrender trapped nuisance cats to Los Angeles Animal Services (LAAS). The trapping permit requires that the trapping be conducted on the permittee's private property, that the permittee distribute a Declaration of Notice of Cat Trapping to all neighbors within 300 feet of the trapping location, and that the trapped cats are turned into LAAS. Additionally, the permit requires that the permittee release all non-target cats on site, the presence of a responsible adult, regular trap monitoring, provision of fresh water within the trap, that the trap be protected from the elements, and that any trapped cat is taken to LAAS within 1 hour of discovering the cat in the trap.

Data for the purposes of identifying the spatial distribution and magnitude of TNR and free-roaming cat care activities conducted by the various TNR organizations across the City are not systematically

collected or publicly available and anecdotal information was shared by local TNR practitioners at the City TNR workshop (City of Los Angeles 2019a, 2019b). The City does maintain records of cat trap permits issued by the City and cat complaint calls received by the City, which have been compiled for this analysis and are depicted in Section 4.1, Figures 4.1-2 and 4.1-3. Additionally, cat density estimates prepared for this EIR indicate the likely relative distribution of free-roaming cats throughout the City as depicted on Figure 4.1-1. These data and information indicate that free-roaming cat distribution and TNR activities occur primarily within urban, residential, light industrial, and other developed areas within the City, with TNR organizations stating that lower socioeconomic areas are most represented and with south Los Angeles having a very high free-roaming cat population and limited sterilization services (City of Los Angeles 2019a, 2019b). Local TNR organizations indicated some locations where targeted and ongoing TNR efforts have and do occur include areas such as Echo Park, Silver Lake, Los Feliz, San Fernando Valley, and Elysian Valley. In addition, information provided by TNR organizations working in the City indicated that free-roaming cats most commonly occur in groups of three to five cats but can include many more.

Existing Effects of TNR on Biological Resources

Free-roaming Cat Trapping

Once a trap is set and baited, non-target wildlife could become attracted to the bait and enter the trap. This inadvertent trapping of wild animals could result in stress, injury, or death to an individual. For example, wildlife inadvertently trapped within a cat trap could suffer bodily injuries if stressed and struggling to free itself from the cat trap. If the trapped animal was not freed in a timely manner and left unattended, such injuries could result in extreme harm or death from injuries, dehydration, or extreme conditions (if left unattended for a long period with no water or during excessive heat). Trapped wildlife may also be exposed to disease from contaminated food dishes and cages. For example, a food dish or trap used during a TNR operation may become contaminated by the saliva or body fluids of a cat infected with a communicable disease (such as FeLV, influenza, or other disease). If this food dish/trap was not cleaned and was reused during a trapping event and came in contact with a wildlife species that was inadvertently trapped, this could result in exposure to infected saliva and subsequent disease transmission to wildlife. Additionally, wildlife may be attracted to food provided in TNR traps; therefore, this may increase wildlife exposure to cat-occupied areas and cats themselves, thereby increasing potential for disease and parasite transmission between cats and wildlife. Furthermore, trapping activities conducted in ESAs have potential to trample and disturb vegetation and wildlife use areas, which may negatively affect wildlife and reproduction/nesting activities. This may occur if volunteers are accessing an ESA to set traps and disturbing vegetation, habitat, and wildlife use within that area.

Free-roaming Cat Care and Maintenance

Return of free-roaming cats and ongoing free-roaming cat care (e.g., feeding) associated with TNR may also adversely affect wildlife. Providing food to free-roaming cats may serve as an attractant for wildlife due to cat food being left unattended and/or regularly available, allowing wildlife to access and consume it. The inadvertent feeding of wildlife can increase wildlife-cat interactions (e.g., use of the same localized area, use of the same food and water dishes), which can lead to disease and parasite transmission and spread between species. Feeding wildlife may also increase wildlife use and reproduction within such areas, leading to increased wildlife populations such as nonnative rat infestations creating nuisance-related issues and exacerbating parasite and disease reservoirs (such

as fleas and flea-borne disease). Other wildlife species may become habituated to human-dominated spaces due to the regular food supply created by regular cat feedings, which can cause and increase incidence of human-wildlife conflict, which often leads to wildlife extermination or the use of poisons to control nuisance animals.

Anticoagulant rodenticides are commonly used to control rodents and, once ingested, inhibit vitamin K and cause the impacted animal to bleed to death, usually over several days while they are sick, lethargic, and easy prey for predators such as bobcats, hawks, and coyotes. Such poisons are known to affect native rodents in addition to target animals and may move through the food web, resulting in secondary poisoning (e.g., consuming an animal who has ingested the poison). Secondary poisoning may have detrimental effects on native wildlife and non-target species such as pumas, bobcats, coyotes, and birds (see Section 4.2.2.8, notoedric mange). At lower doses, as in secondary poisoning, wildlife may experience symptoms ranging from impaired immune system function to secondary disease (such as mange), which may lead to death (Foley et al. 2016).

In addition, wildlife such as coyotes and pumas may be attracted to the cats themselves as a food source, which may increase wildlife disease exposure and spread. Coyotes are well known to prey on domestic cats and are highly adapted to the developed areas of Southern California where they regularly kill and consume domestic cats. Additionally, TNR cats that have not received all-inclusive and ongoing vaccinations and parasite treatments may increase disease reservoirs (see the *Diseases* subsection of Section 4.2.2.8) and the spread of diseases and parasites to and from other cats and wildlife.

Although the existing level and distribution of TNR activities within the study area are not exactly known, information provided by local TNR organizations during the City's TNR Workshop (City of Los Angeles 2019a) indicated that the vast majority of TNR activities occur within highly developed and residential areas and not within habitat areas, although TNR activities do occur in areas adjacent to ESAs (e.g., Los Feliz, which is near Griffith Park). They also report that it is rare to trap wildlife during TNR operations, although if wildlife were trapped they would most likely include urban-adapted species such as opossum, raccoon, and skunk. Special-status species in the study area that could theoretically be attracted to, fit inside, and become trapped within a cat trap include ring-tailed cat, grey fox, bobcat (small and juveniles), and jackrabbit, although trapping of such individuals within residential and urbanized settings would be highly unlikely. Given this information, the existing effects of TNR activities on sensitive biological resources are likely infrequent and do not pose a conservation concern for sensitive biological resources within the study area.

It should also be noted that established cat colonies may in some cases attract abandonment of unwanted cats. Cats have been known to be intentionally abandoned in locations where established free-roaming cat colonies exist. This potential influx of cats into existing colonies may exacerbate potential effects and increase efforts required to effectively control the free-roaming cat population.

4.2.3 Environmental Impact Analysis

The following significance criteria are based the *L.A. CEQA Thresholds Guide* and provide the basis for determining potentially significant impacts associated with sensitive biological resources resulting from the implementation of the proposed Project. The determination of whether an impact on a sensitive biological resource would be significant is based on the judgment of the City of Los

Angeles as the CEQA Lead Agency and relies on the substantial evidence provided in the administrative record.

A project would normally have a significant impact on biological resources if it could result in any of the following:

BIO-1: Would the proposed Project result in the loss of individuals, or the reduction of existing habitat, of a state- or federally listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or federally listed critical habitat?

BIO-2: Would the proposed Project result in the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community?

BIO-3: Would the proposed Project result in interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species?

BIO-4: Would the proposed Project result in alteration of an existing wetland habitat?

BIO-5: Would the proposed Project result in interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species?

4.2.3.1 Impacts Analysis Method

As discussed in Sections 4.2.2.8 and 4.2.2.9, domestic cats are responsible for an existing level of impacts on biological resources throughout the study area. However, due to limitations in data availability and inherent levels of uncertainty (discussed in Sections 4.2.2.8 and 4.2.2.9), it is not feasible to *identify and quantify* species-specific and habitat-specific impacts including loss of individuals, reduction in habitat, or behavioral changes; impacts on wildlife movement and migration; or reduction and degradation of wetland habitats caused by free-roaming cats in the City. To facilitate informed decision-making and elucidate impact analyses from the proposed Project related to free-roaming cats, it is reasonable to assume that impacts from free-roaming cats are generally proportional and positively correlated to their population size, presuming all other influencing variables are held relatively constant. For example, 1,000 free-roaming cats have a higher potential for greater impacts on biological resources than 100 free-roaming cats distributed similarly over the same area. Accordingly, the discussion below describes the modeled free-roaming cat population trends over the proposed Project's 30-year horizon period, as well as sterilization, reproduction trends, and number of cats returned to the environment under the proposed Project. The discussion focuses on the Project implementation phase of Years 1 through 5, and in Years 10, 20, and 30. This facilitates a meaningful comparison of the proposed Project impacts to the baseline conditions and future baseline without Project to demonstrate potential impacts, which for the purposes of this analysis are directly proportional to relative changes in the modeled free-roaming cat population in the City.

Overall 30-Year Population Trend

As discussed in Section 4.1 and in Appendix J, free-roaming cat population dynamics modeling indicates that the proposed Project would result in fewer free-roaming cats throughout the City of Los Angeles and a lower rate of population growth as compared to the future baseline without

Project conditions.[4] As such, the total population of free-roaming cats would be expected to decrease under the proposed Project over the 30-year period leading up to the Project horizon year of 2049 as compared to the future baseline without Project conditions. Furthermore, when compared to the CEQA baseline conditions (at the time of the Notice of Preparation issued in August 2017), the projected free-roaming cat population would include approximately 29,607 fewer cats (see Table 4.1-2 in Section 4.1), an approximate 13% decrease, under the proposed Project in the study area at the end of the 30-year horizon period. This total includes the free-roaming cats that would be released under the proposed Project, making up between 0.18% and 1.05% of the total free-roaming cat population under the proposed Project, over the 30-year horizon period. Under the future baseline without Project, these released free-roaming cats would mostly be euthanized, or in some cases adopted, and would not be released back to the environment.

Progressive Free-roaming Cat Population and Reproduction Trends

The proposed Project would be implemented starting with a 5-year program implementation phase wherein the release of free-roaming cats from the shelter population would gradually increase over 5 years (see Section 4.1, Table 4.1-2). Over this 5-year program implementation phase, the maximum release of free-roaming cats would ramp up from 416 cats to 831 cats, 1,247 cats, 1,662 cats, and finally 2,078 cats in Years 1 through 5, respectively. Over this period, the program would provide 20,000 spay and neuter surgeries per year, which constitutes sterilizing between 8.79% and 10.13% of the estimated total free-roaming cat population in the City. Under the proposed Project, the 5-year free-roaming cat release ramp-up period, combined with the immediate provision of 20,000 annual spay and neuter surgeries in Year 1, and the increase in number of cats per household from three to five (with all five cats being kept indoors), as modeled, results in a net decrease in the free-roaming cat population and decreased reproductive output (number of kittens born) starting in Year 2 as a result of the decreased reproductive potential of the populations and subsequent reduction in the number of kittens born (see Table 4.1-2 in Section 4.1). The subsequent 10-, 20-, and 30-year proposed Project years occur during the full program implementation phase and continue to experience free-roaming cat population declines and decreasing reproductive output. Additionally, by providing 20,000 free-roaming cat spay and neuter surgeries per year, the proposed Project would result in the cumulative provision of an additional 600,000 spay and neuter surgeries, resulting in the prevention of 760,771 free-roaming kitten births over the life of the Project with its 30-year horizon period. The spay and neuter surgeries and subsequent population decreases starting in Year 2 would result in a per-year population decrease that is greater than the proposed release of up to 2,078 free-roaming cats per year; therefore, the population declines would more than offset the contribution of released free-roaming cats to the overall free-roaming cat population. This is illustrated in Figure 4.1-6, which depicts the cumulative number of free-roaming cat releases by year 30 (58,170).

Free-roaming Cat Spatial Distribution

Under the proposed Project, impacts from free-roaming cats are assumed to be distributed similarly to baseline and future baseline without Project because the spatial distribution of free-roaming cats is not expected to change directly as a result of the proposed Project. Additionally, impacts on

[4] Section J.11 in Appendix J provides a discussion of the population modeling approach and results and the considerations and limitations inherent to model estimates. It is recommended that the reader consider these related to the model's estimated population results presented in the *Impacts Analysis Method* above when reviewing the impacts discussions in this EIR. Please see Section J.11 for details.

biological resources (discussed below) would be lower in magnitude compared to the baseline and future baseline without Project due to the estimated modeled decrease in the free-roaming cat population under the proposed Project. For instance, during the Project implementation phase over Years 1 through 5, the proposed Project free-roaming cat population would decrease by 3,142 free-roaming cats from the CEQA baseline, which would also equal 3,612 fewer cats than under the future baseline without Project at Year 5. Accordingly, the associated potential for impacts would decrease relative to the future baseline without Project due to 3,612 fewer free-roaming cats within the study area at Year 5 under the proposed Project. Similarly, at Years 5 through 30, the modeled free-roaming cat population would continue to decrease citywide; therefore, potential for impacts throughout this period would continue to decrease relative to the baseline and future baseline without Project.

Furthermore, as discussed in the *Estimated Spatial Distribution of Study Area Effects from Free-Roaming Cats* subsection of Section 4.2.2.9, although all biological resources in the study area are at least partially susceptible to free-roaming cat impacts, biological resources that are most at risk or susceptible likely include species that inhabit, roost, nest, forage, or frequent areas in or near (1) smaller blocks of habitat, (2) fragmented habitat, (3) habitat, open space, and wildlife corridors adjacent to developed lands, (4) open space with high total edge habitat (habitat bordering developed lands or urban-wildlife interface), (5) areas more likely to overlap with high cat density areas, and (6) ESAs near high cat density areas (such as residential and developed areas). Under the proposed Project, free-roaming cat abundance and density (see Figure 4.1-1 in Section 4.1) are not expected to change or increase in such locations because the spatial distribution of free-roaming cats is not expected to change directly as a result of the proposed Project; therefore, free-roaming cat impacts within and near such areas are expected to decrease along with a decrease in the citywide free-roaming cat abundance.

The City will also provide program implementation guidelines and ecological conservation measures for the proposed Project to include recommendations not to release trapped cats within a 1.0-mile buffer surrounding ESAs in the City. The program implementation guidelines and ecological conservation measures also provide guidance on responsible TNR including feeding and medical treatments for free-roaming cats. All recipients of free vouchers will be required to commit to adhering to these guidelines through a signed affidavit. Over time, this would help reduce the presence of free-roaming cats in and near such areas. In addition, the Project includes the creation of a City of Los Angeles WCP that would prioritize admission of cats found in or near ESAs.

Additionally, the spatial distribution of TNR and associated cat care activities throughout the City is not expected to differ relative to baseline conditions and the future baseline without Project because the proposed Project is not proposing any direct elements that are expected to change the distribution of such activities. However, the City's proposed program implementation guidelines and ecological conservation measures for the Project include recommendations on how to conduct TNR activities in the City, which would be intended, over time, to help reduce potential impacts from free-roaming cats in and near ESAs. In addition, the magnitude of cat feeding and care activities in the study area is expected to decrease over time as the free-roaming cat population declines citywide. The Project also includes the creation of a City of Los Angeles WCP that would prioritize admission of cats found in or near ESAs.

Taken together, these data and information indicate that under the proposed Project the free-roaming cat population would experience a net decline over time and would be distributed similarly to baseline conditions, resulting in a net citywide decrease in the free-roaming cat population and

free-roaming cat reproductive output. This is foundational to the discussion of potential impacts from the proposed Project as analyzed using the thresholds of significance below and should be considered during their review and interpretation.

4.2.3.2 Impacts Analysis

BIO-1 and BIO-2: Would the proposed Project result in the loss of individuals, or the reduction of existing habitat, of a state- or federally listed endangered, threatened, rare, protected, or candidate species; a Species of Special Concern; a locally designated species; or federally listed critical habitat, or reduction in a locally designated natural habitat or plant community?

The analysis below is organized to discuss potential impacts from elements of the proposed Project that have the potential to have a direct or indirect impact related to loss of individuals or reduction in habitat described in the BIO-1 and BIO-2 thresholds above. Direct impacts specifically analyze the potential impacts of the free-roaming cat population as it changes under the proposed Project due to the estimated annual 20,000 sterilization surgeries that would be implemented using the free vouchers issued by the City under the Project; the indirect impacts focus on general impacts of TNR, which under the proposed Project would be facilitated by LAAS but not directly implemented by the City.

Loss of Individuals and Reduction of Existing Habitat

For the purposes of this analysis, loss of individuals addresses (1) death of individuals, (2) reduced individual reproductive success (net population decline), or (3) the suppression or extirpation of individuals in a given area caused by free-roaming cats. As stated in Section 4.2.2, special-status species are defined as any state- or federally listed endangered, threatened, rare, protected, or candidate species, species of special concern, or locally designated species.

For the purposes of this thresholds analysis, reduction of existing habitat may be caused by physical or biological habitat degradation, or indirect habitat loss caused by species habitat avoidance or displacement of species from habitat caused by free-roaming cats.

Impacts from Free-roaming Cats on Individuals and Habitat

As detailed in Sections 4.2.2.8 and 4.2.2.9, existing free-roaming domestic cats in the City may directly and indirectly affect the survival, reproductive success, and habitat use of a variety of special-status species that have potential to occur in the study area. Section 4.2.2.9 includes a detailed account of the existing potential effects of free-roaming cats on sensitive biological resources in the study area. These effects are summarized below and used as the basis for this impacts analysis.

Free-roaming cats may directly affect sensitive biological resources via predation effects that result in direct harm, adversely affecting species survival and reproduction or cause death of special-status species. Such effects may affect invertebrates, fish, reptiles, amphibians, birds (including migratory birds), and mammals. Generally, smaller, terrestrial species are most at risk from such direct effects. In addition, as described in Sections 4.2.2.8 and 4.2.2.9, free-roaming cats may also cause indirect impacts including non-consumptive effects, effects from degraded water quality, and via disease

transmission from free-roaming cats, which have the potential to affect the survival of wildlife species.

Non-consumptive effects include effects on wildlife that are not directly caused by predation, such as physiologic and biologic stress, altered habitat use (space and temporal shifts), and competition. These stressors can affect species distribution, reproduction, and survival. Stress may be induced in response to the presence or perception (e.g., odor) of a predator, which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration behavior, habitat avoidance, altered foraging behavior, and altered parental care. These can reduce the amount of habitat available for a species to use, thereby resulting in habitat loss. It can also result in increased competition for resources (food, shelter, water), decreased body condition, immunosuppression, reduced fitness, brood failure, death of offspring, and increased susceptibility to predation (of both individuals and broods), leading to death. As detailed in Section 4.2.2.8, domestic cats can affect habitats and use of habitats such as vegetation communities and aquatic habitats (through non-consumptive effects such as physiologic and biologic stress, altered habitat use, and nutrient and bacterial loading). Habitat use may be impacted for a variety of special-status species with the potential to occur in the study area including various invertebrates such as the monarch butterfly, fish such as Southern California steelhead, birds such as coastal California gnatcatcher and least Bell's vireo (including many migratory birds), reptiles such as coastal whiptail, amphibians such as coastal range newt and Arroyo toad, and mammal species such as various bats (e.g., pallid bat) and small rodents (e.g., Los Angeles pocket mouse).

Indirect effects on water quality, as discussed in the *Wetlands and Other Waters* subsection of Section 4.2.2.9, may also affect aquatic habitats if water quality is impacted by excessive nutrient levels (from cat feces washing into waterways), resulting in subsequent algae blooms and depletion of oxygen, which can make habitat less suitable or unsuitable for aquatic species. Such impacts may reduce the quality and availability of habitat for aquatic plant species and aquatic animals such as invertebrates (e.g., fairy shrimp), amphibians, and fishes, and in severe cases can kill organisms and effectively remove suitable habitat. Indirect impacts from free-roaming cats may also result through disease and parasite transmission to wildlife, resulting in illness and death. Such diseases include toxoplasmosis, rabies virus, influenza, and FeLV, which may affect a wide variety of species including wild felids and canids (wild cats and dogs), birds, and marine mammals such as sea otters and whales, which can lead to death of individuals. Diseases and parasite infections may also result in adverse effects on species health and reproduction.

As discussed in Section 4.2.3.1, under the proposed Project, impacts from free-roaming cats are assumed to be distributed similarly to baseline and future baseline without Project because the spatial distribution of free-roaming cats is not expected to change directly as a result of the proposed Project. Additionally, such impacts would be lower in magnitude compared to the baseline and future baseline without Project due to the estimated modeled decrease in the free-roaming cat population under the proposed Project. Therefore, the potential for impacts on habitat and species throughout this time period would decrease relative to the baseline and future baseline without Project.

Additionally, under the proposed Project, a WCP will be implemented to provide some non-lethal options (based on capacity) for removal of unadoptable free-roaming cats from the environment (see Section 2.5.3 for proposed WCP details). Free-roaming cats trapped during TNR efforts would be eligible for the WCP. Free-roaming cats trapped within ESAs or within 1 mile of ESAs (see figures

4.2-2a and 4.2-2b) would be prioritized for participation into the WCP. Cats participating in the WCP would be processed and treated similar to adoptions under LAAS protocols. Exceptions include that the WCP cats would be placed in pairs and would be required to remain in an enclosed space without access to the outdoors. Prior to placement, all cats will be sterilized, vaccinated for rabies virus and FVRCP, ear tipped, microchipped, dewormed, and treated for fleas. Similar to current LAAS adoption protocols, adopters would be required to provide ongoing care, such as daily feeding, watering, and litter box maintenance, and regular vaccinations, flea treatment, and as-needed medical treatments. WCP opportunity sites will not be located within ESAs.

Because cats participating in the WCP will not be located in ESAs, will not have access to the outdoors, will have their urine and feces disposed of properly, and would be regularly treated for fleas and parasites, opportunities for WCP cats to cause direct or indirect impacts on sensitive biological resource (such as those impacts discussed in Sections 4.2.2.9 and 4.2.2.10) would be negligible and limited to rare occasions when a sensitive species could potentially enter a WCP structure and be subject to impacts caused by working cats. Furthermore, because the WCP is removing cats from the environment, it would contribute to the reduction of free-roaming cat impacts on sensitive biological resources citywide.

Indirect Impacts from TNR on Individuals and Habitat

Under the proposed Project, it is reasonable to assume that TNR activities would increase citywide due to the availability of 20,000 new (and additive) free vouchers for free-roaming cat sterilization in the City, the adoption of TNR as the City's preferred method of addressing the City's free-roaming cat population, and increased community outreach and education on TNR. These proposed Project elements could increase free-roaming cat trapping activities in the study area by as many as 20,000 additional annual trapping events. However, because the City is not directly partaking in TNR activities, any potential TNR impacts related to the proposed Project would be considered indirect in nature.

As discussed in Section 4.2.2.10, TNR may affect wildlife and habitats through TNR trapping activities and free-roaming cat care and maintenance. Such impacts may include inadvertent trapping of wildlife and habitat and wildlife disturbance during TNR activities, causing wildlife-cat interactions resulting in adverse effects on wildlife such as predation and non-consumptive effects, leading to habitat avoidance and altered habitat use. These impacts have the potential to affect wildlife movement, migration, and connectivity and are discussed below.

Trapping

The additional trapping activities that would result under the proposed Project could increase the potential to inadvertently trap wildlife. The inadvertent trapping of wildlife during TNR activities could result in stress, injury, or death to an individual animal. For example, wildlife inadvertently trapped within a cat trap could suffer bodily injuries if stressed and struggling to free itself from the cat trap. If the trapped animal was not freed in a timely manner and left unattended, such injuries could result in extreme harm or death, including from injuries, dehydration, or exposure to extreme conditions (e.g., if the caged animal was left unattended for a long period with no water or during extreme heat/cold). Trapped wildlife could also be exposed to disease from contaminated food dishes and cages. For example, if a food dish or other item used during a TNR operation that had previously been in contact with saliva or bodily fluids from a cat infected with a communicable disease (such as viruses transmitted via saliva and bodily fluids) was reused between trapping and

came into contact with a wildlife species that was inadvertently trapped, it could result in exposure to infected saliva and subsequent disease transmission to wildlife. Additionally, wildlife may be attracted to food provided in TNR traps; this may increase wildlife exposure to cats and cat trapping or feeding/care areas, thereby increasing the potential for disease and parasite transmission between cats and wildlife. A few examples of special-status species in the study area that could theoretically become trapped inside a cat trap (owing to their size) include the ring-tailed cat, grey fox, bobcats (small, juveniles), and San Diego black-tailed jackrabbit; however, these species are most commonly associated with ESAs and are not common in developed and urban settings, which tend to favor urban-adapted species such as opossums, raccoons, and skunks. Trapping of individuals from special-status species would be unlikely within residential and urbanized settings, where most TNR activities across the City occur (City of Los Angeles 2019a, 2019b), due to these species being generally rare and not present within a developed setting, particularly species that have specific or narrow habitat requirements (such as ring-tailed cats). Considering citywide TNR activities are primarily occurring within existing developed and residential areas, impacts caused by inadvertent trapping of wildlife are expected to be limited to such locations and be infrequent, and special-status species impacts would be limited.

Although the existing level and distribution of TNR activities within the study area are not exactly known, information provided by local TNR organizations during the City's TNR Workshop (City of Los Angeles 2019a, 2019b) indicated that the vast majority of TNR activities occur within highly developed and residential areas and not within habitat areas, although TNR activities do occur in areas adjacent to ESAs (e.g., Los Feliz, which is near Griffith Park). They also report that it is rare to trap wildlife during TNR operations, as traps are typically monitored and not left unattended, although if wildlife is inadvertently trapped it would most likely be an urban-adapted species such as opossum, raccoon, and skunk. As mentioned previously, there are some special-status species in the study area that could theoretically be attracted to, fit inside, and become trapped within a cat trap, but trapping of individuals of special status species within residential and urbanized settings would be unlikely. Given this information, the existing effects of TNR activities on sensitive biological resources related to loss of individuals of special-status species are likely infrequent and do not pose a conservation concern for sensitive biological resources within the study area. Furthermore, with the increase in trapping activity under the proposed Project by as many as 20,000 annual trapping events, the potential for such effects may increase but is expected to remain very low due to most trapping occurring outside of ESAs.

Furthermore, trapping activities conducted in ESAs in the City have the potential to trample and disturb vegetation and wildlife use areas, which may negatively affect wildlife and the foraging, reproduction, or nesting activities of special-status species. This may occur if volunteers access an ESA to set traps and disturb vegetation, habitat, and wildlife use within that area. Based on the information shared in the City's TNR Workshop and follow-up interview (City of Los Angeles 2019a, 2019b), citywide TNR activities are primarily occurring in existing developed, residential areas and not within ESAs. Therefore, TNR impacts would most likely be experienced by urban-adapted species such as opossums, raccoons, and skunks in the study area, which could theoretically be attracted to, fit inside, and become trapped within a cat trap.

Potential trapping-related impacts would continue to occur citywide under the proposed Project due to an increase of up to 20,000 trapping events, although the potential for impacts on ESAs and sensitive biological resource would remain low because most of these activities are not expected to be conducted within ESAs. Additionally, although it is not feasible to defensibly estimate and quantify the impacts of TNR on special-status species or specific habitats in the study area due to

this increase in TNR activity, it is important to consider that while a maximum of 20,000 additional TNR trapping events may occur under the proposed Project, they will result in an overall free-roaming cat population decline throughout the 30-year proposed Project horizon period. Because citywide TNR activities are primarily occurring in existing developed and residential areas (City of Los Angeles 2019a, 2019b), the proposed Project's indirect TNR activities are not expected to substantively increase impacts relative to the baseline condition and the future baseline without Project.

Return

Return of free-roaming cats and ongoing free-roaming cat care (e.g., feeding) associated with TNR may also adversely affect wildlife. Providing food to free-roaming cats may also attract wildlife due to cat food being left unattended and/or being regularly available, allowing wildlife to access and consume it. The inadvertent feeding of wildlife can increase wildlife-cat interactions (e.g., use of the same localized area, use of the same food and water dishes), which can lead to disease and parasite transmission and spread between species. Feeding wildlife may also increase wildlife use and reproduction within such areas, leading to increased wildlife populations such as nonnative rat infestations creating nuisance-related issues and exacerbating parasite and disease reservoirs (such as fleas and flea-borne disease). Other wildlife species may become habituated to human-dominated spaces due to the regular food supply created by regular cat feedings, which can cause and increase incidence of human-wildlife conflict, which often leads to wildlife extermination or the use of poisons to control the nuisance animals. Poisoned animals become sick and lethargic, with symptoms lingering and intensifying over several days while they are dying. During this time poisoned animals may become exposed and easy prey for predators such as bobcats, hawks, and coyotes. Such poisons are known to not only affect target animals but move through the food web as the poisoned animals are consumed, resulting in secondary poisoning (e.g., consuming an animal who has ingested the poison). Secondary poisoning can have detrimental effects on native wildlife and non-target species such as native rodents, puma, bobcat, coyote, and birds (see Section 4.2.2.8, notoedric mange). Some poisons at lower doses, as in secondary poisoning, may cause wildlife to experience symptoms ranging from impaired immune system function to secondary disease (such as mange) to death.

In addition, wildlife such as coyotes and pumas may be attracted to the cats themselves as a food source, which may increase wildlife disease exposure and spread. Coyotes are well known to prey on domestic cats and are highly adapted to the developed areas of Southern California where they regularly kill and consume domestic cats. Additionally, TNR cats that have not received all-inclusive and regular vaccinations and parasite treatments may increase disease reservoirs (see the *Diseases* subsection of Section 4.2.2.8) and the spread of diseases and parasites to and from other cats and wildlife.

As described in Sections 4.2.2.8 and 4.2.2.9, free-roaming cats may also cause indirect impacts including non-consumptive effects and effects from impacted water quality, which have the potential to affect the availability and use of habitat and species. These stressors can affect species distribution, habitat use, and habitat availability. Stress may be induced in response to the presence or perception (e.g., odor) of a predator (such as a free-roaming cat), which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration behavior, and habitat avoidance. These in turn can result in increased competition for resources (habitat, food, shelter, water), leading to decreased habitat availability. Indirect effects on water quality, as discussed in the

Wetlands and Other Waters subsection of Section 4.2.2.9, may also affect habitat availability if water quality is impacted by excessive nutrient levels (from cat feces washing into waterways), resulting in subsequent algae blooms and depletion of oxygen, which may reduce habitat for aquatic species such as aquatic invertebrates (e.g., fairy shrimp), amphibians, and fishes.

The projected reduction in the number of free-roaming cats under the proposed Project would result in reduced free-roaming cat care and maintenance activities and associated impacts (e.g., predation, non-consumptive effects, disease transmission, water quality effects) that may impact habitat or species. The proposed Project's indirect TNR activities are not expected to increase impacts relative to the baseline condition and the future baseline without Project.

BIO-1 and BIO-2 CEQA Significance Determination

Considering (1) the projected net decrease in the free-roaming cat population, (2) decreased free-roaming cat reproduction, (3) anticipated net reduction in cat feeding and care activities (as a result of the declining citywide free-roaming cat population over time), and (4) relatively lower magnitude of indirect effects related to TNR impacts on wildlife and habitats due to the progressively decreasing free-roaming cat population in the City, the proposed Project would not result in additional direct and indirect impacts that may cause losses of individuals of special-status species within the study area, or reductions in existing habitat or habitat use, relative to baseline conditions and the future baseline without Project scenario; therefore, impacts would be less than significant under CEQA.

BIO-3: Would the proposed Project result in interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species?

The analysis below is organized to discuss potential impacts from elements of the proposed Project that have the potential to have a direct or indirect impact related to interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species described in the BIO-3 threshold above. Direct impacts specifically analyze the potential impacts of the free-roaming cat population as it changes under the proposed Project due to the estimated annual 20,000 sterilization surgeries that would be implemented using the free vouchers issued by the City under the Project; the indirect impacts focus on general impacts of TNR, which under the proposed Project would be facilitated by the City but not directly implemented by LAAS.

Interference with Wildlife Movement/Migration Corridors

This threshold addresses free-roaming cat interference with wildlife movement/migration areas and corridors that may diminish the chances for long-term survival of species-status species. These impacts include direct and indirect effects such as predation, habitat avoidance, and habitat destruction of existing resources used by special-status species, which may interfere with daily or seasonal movements, migration, and connectivity.

Impacts from Free-roaming Cats on Wildlife Movement, Migration, and Connectivity

Sections 4.2.2.8 and 4.2.2.9 of this report include a detailed account of the existing baseline effects of free-roaming cats on sensitive biological resources in the study area including wildlife corridors and connectivity areas. Existing free-roaming cats in the City can directly and indirectly affect the

survival, habitat use and availability, and reproductive success of a variety of special-status species that have potential to occur in the study area. Free-roaming cats may also affect habitats such as vegetation communities and aquatic habitats. Such effects may affect invertebrates such as the monarch butterfly and fairy shrimp, fish such as Southern California steelhead and Santa Ana sucker, reptiles such as coastal whiptail, amphibians such as Arroyo toad, birds such as least Bell's vireo, coastal California gnatcatcher, and other migratory and resident birds, and mammals such as bats, rodents, ring-tailed cats, or San Diego black-tailed jackrabbits.

As discussed above in Sections 4.2.2.8 and 4.2.2.9, free-roaming cats may cause direct impacts through predation of wildlife and indirect impacts including non-consumptive effects, disease transmission, and effects from impacted water quality, habitat quality, and availability to wildlife species. These stressors can affect species distribution, and may also affect species' abilities to disperse and pollinate plants. Stress may be induced in response to the presence or perception (e.g., odor) of a predator (such as a free-roaming cat), which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration ability, and habitat avoidance. These effects can reduce the amount of habitat available for a species to use, resulting in habitat loss and increased competition for resources. Indirect effects on water quality, as discussed in the *Wetlands and Other Waters* subsection of Section 4.2.2.9, may also affect aquatic habitats if water quality is impacted by excessive nutrient levels (from cat feces washing into waterways), resulting in subsequent algae blooms and depletion of oxygen. Such impacts may reduce habitat quality and availability for aquatic species such as plants and aquatic animals such as invertebrates (e.g., fairy shrimp, abalone), amphibians, and fishes. Indirect impacts from free-roaming cats may also be caused by disease and parasite transmission to wildlife, resulting in illness and death. Such diseases include toxoplasmosis, rabies virus, influenza, and FeLV and may affect a wide variety of species including wild felids and canids (wild cats and dogs) such as puma, bobcat, and gray fox; birds; and marine mammals such as sea otters, sea lions, and whales. Diseases and parasite infections may also result in adverse effects on species health and reproduction.

All the above potential direct and indirect effects have potential to affect wildlife movement, migration, and wildlife connectivity. Direct or indirect harming or killing of wildlife in wildlife movement areas would directly preclude wildlife movement, migration, and connectivity. Indirect impacts on wildlife could interfere with wildlife habitat use, cause degradation of wildlife habitat, and result in wildlife habitat avoidance, which could interfere with wildlife movement, migration, and connectivity. Direct and indirect effects that interfere with wildlife reproduction could prevent the connectivity of populations, especially for species that rely on multiple generations to complete migrations (such as the monarch butterfly) or require movement and genetic exchange between metapopulations (such as western spadefoot toad and coastal range newt). Additionally, direct and indirect impacts on wildlife movement, migration, and connectivity could interfere with wildlife access to resources needed for survival such as food, shelter, water, and seasonal refugia. In addition, the introduction or spread of disease may interfere with the movement and connectivity function, as disease may directly kill individuals, reduce reproductive potential, and create uninhabitable areas. Such effects can reduce connectivity between species populations, preventing important genetic interchange and access to mates. In already fragmented, disturbed, and degraded regions, the direct and indirect effects of free-roaming cats are intensified (e.g., due to larger free-roaming cat densities), which can exacerbate existing effects on the function of connectivity areas.

Such effects could reduce species' use of connectivity and stop-over areas, imposing a barrier effect for some species. Altered wildlife behavior or shifts in habitat use to avoid free-roaming cats may

subsequently prevent dispersal; genetic interchange; access to feeding, breeding, and shelter; and access to other resources that are essential to the survival of both resident and migratory species. For example, free-roaming cats could interfere with daily or seasonal wildlife movement by actively preying on migratory birds such as least Bell's vireo or resident birds such as coastal California gnatcatcher. If aquatic habitat was degraded or destroyed due to free-roaming cat waste contamination (e.g., urine and feces), the access to important movement, reproduction, and refugia habitat for aquatic species such as fishes, fairy shrimp, or amphibians could be reduced, resulting in loss of individuals, potential fragmentation of habitats, and precluded or constrained movement potential.

In the study area, existing wildlife connectivity areas include areas identified by the California Essential Habitat Connectivity Project (Figure 4.2-8), the California Missing Linkages (Figure 4.2-9), the County of Los Angeles General Plan (Figure 4.2-10), and the Rim of the Valley Corridor (Figure 4.2-10) and effects from free-roaming cats on local wildlife connectivity may be concentrated in and around these regions. Additionally, developed areas used by urban-adapted species, such as many migratory birds that move through, forage in, and nest in developed settings (e.g., parks, backyards, city trees), may also experience impacts on wildlife movement and migration, and such species may be at greater risk due to their use of areas with higher cat densities (see Figure 4.1-1, Free-Roaming Cat Density). Furthermore, the entire study area is situated within the Pacific Flyway with potential impacts of free-roaming cats on migratory birds being distributed over the entire study area, although likely with increased intensity in and around high cat density areas.

This discussion demonstrates that free-roaming cats may directly and indirectly interfere with daily and seasonal wildlife movement, migration, and connectivity; however, due to limitations in data availability and inherent levels of uncertainty (discussed in Sections 4.2.2.8 and 4.2.2.9), it is not feasible to identify and quantify specific impacts from free-roaming cats on wildlife movement and migration.

As discussed in Section 4.2.3.1, under the proposed Project, impacts from free-roaming cats are assumed to be distributed similarly to the baseline and future baseline without Project because the spatial distribution of free-roaming cats is not expected to change directly as a result of the proposed Project. Additionally, such impacts would be lower in magnitude compared to the baseline and future baseline without Project due to the estimated modeled decrease in the free-roaming cat population under the proposed Project. Therefore, the potential for impacts that may interfere with wildlife movement, migration, and connectivity throughout this time period would continue to decrease relative to the baseline and future baseline without Project.

As discussed under BIO-1 and BIO-2, because cats participating in the WCP will not be located in ESAs, will not have access to the outdoors, will have their urine and feces disposed of properly, and would be regularly treated for fleas and parasites, opportunities for WCP cats to cause direct or indirect impacts on sensitive biological resource (such as those impacts discussed in Sections 4.2.2.9 and 4.2.2.10) would be negligible and limited to rare occasions when a sensitive species could potentially enter a WCP structure and be subject to impacts caused by working cats. Furthermore, because the WCP is removing cats from the environment, it would contribute to the reduction of free-roaming cat impacts on sensitive biological resources citywide.

Indirect Impacts from TNR on Wildlife Movement and Migration

Under the proposed Project, it is reasonable to assume that TNR activities would increase citywide due to the availability of 20,000 new (and additive) free vouchers for free-roaming cat sterilization in the City, the adoption of TNR as the City's preferred method of dealing with the City's free-roaming cat population, and increased community outreach and education on TNR. These proposed Project elements could increase free-roaming cat trapping activities in the study area by as many as 20,000 additional annual trapping events. However, because the City is not directly partaking in TNR activities, any potential TNR impacts related to the proposed Project would be considered indirect in nature.

As discussed in Section 4.2.2.10, TNR may affect wildlife and habitats through TNR trapping activities and free-roaming cat care and maintenance. Such impacts may include inadvertent trapping of wildlife and habitat and wildlife disturbance during TNR activities, causing wildlife-cat interactions resulting in adverse effects on wildlife such as predation and non-consumptive effects, leading to habitat avoidance and altered habitat use. These impacts have the potential to affect wildlife movement, migration, and connectivity and are discussed below.

Trapping

As discussed in Section 4.2.2.10 and above in BIO-1, TNR trapping activities may attract wildlife to food provided in TNR traps, thereby increasing wildlife exposure to cat-occupied areas and cats themselves, increasing the potential for free-roaming cat predation, altered wildlife behavior, and altered habitat use, which can affect wildlife movement, migration, and connectivity. Furthermore, trapping activities conducted in ESAs have the potential to trample and disturb vegetation and wildlife use areas, which may negatively affect wildlife habitat use due to habitat avoidance, causing impacts on movement, migration, and connectivity. This may occur if volunteers are accessing habitat areas to set traps, disturbing vegetation, habitat, and wildlife use within that area, although such effects would most likely be experienced by urban-adapted species in the study area because most trapping is conducted within residential and urbanized settings. Habitats that could be impacted include coastal wetlands, riparian wetlands, coastal scrub, woodlands, and other native vegetation communities that exist within the City, although residential, ornamental, disturbed, or other landscaped areas that migratory birds regularly use may also be impacted (see Figure 4.2-3, Natural Vegetation Communities).

Potential trapping-related impacts on wildlife would continue to occur citywide under the proposed Project due to an increase of up to 20,000 trapping events, although the potential for impacts on ESAs and sensitive biological resources is expected to remain low because most of these activities are not expected to be conducted within ESAs. Although it is not feasible to defensibly estimate and quantify the impacts of TNR on special-status species or specific habitats in the study area due to this increase in TNR activity, it is important to consider that while a maximum of 20,000 additional TNR trapping events may occur under the proposed Project, they would result in an overall free-roaming cat population decline throughout the 30-year proposed Project horizon period. Based on the information shared in the City's TNR Workshop (City of Los Angeles 2019a, 2019b), citywide TNR activities are primarily occurring in existing developed and residential areas. The proposed Project's indirect TNR activities are not expected to substantively increase impacts relative to the baseline condition and the future baseline without Project.

Return

Return of free-roaming cats and ongoing free-roaming cat care (e.g., feeding) associated with TNR may also adversely affect wildlife. As described in BIO-1 and in Sections 4.2.2.8 and 4.2.2.9, free-roaming cats may also cause indirect impacts including non-consumptive effects and effects from impacted water quality, which have the potential to affect the availability and use of habitat for wildlife species. These stressors can affect species distribution, habitat use, and habitat availability. Stress may be induced in response to the presence or perception (e.g., odor) of a predator (such as a free-roaming cat), which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration behavior, and habitat avoidance. These in turn can result in increased competition for resources (habitat, food, shelter, water), leading to decreased habitat availability. Indirect effects on water quality, as discussed in the *Wetlands and Other Waters* subsection of Section 4.2.2.9, may also affect habitat availability if water quality is impacted by excessive nutrient levels (from cat feces washing into waterways), resulting in subsequent algae blooms and depletion of oxygen, which may reduce habitat for aquatic species such as aquatic invertebrates (e.g., fairy shrimp), amphibians, and fishes.

In addition, wildlife such as coyotes and pumas may be attracted to the cats themselves as a food source, which may increase wildlife disease exposure and spread. Additionally, TNR cats that have not received all-inclusive and ongoing vaccinations and parasite treatments may increase disease reservoirs (see the *Diseases* subsection of Section 4.2.2.8) and the spread of diseases and parasites to and from other cats and wildlife. All of these effects may result in adverse impacts on the movement, migration, and connectivity of all wildlife species in the study area.

Although the existing level and distribution of TNR activities within the study area are not exactly known, the vast majority of TNR activities occur within highly developed and residential areas and not within habitat areas (City of Los Angeles 2019a, 2019b), although TNR activities do occur in areas adjacent to ESAs (e.g., Los Feliz, which is near Griffith Park). Considering existing TNR activities are primarily occurring within existing developed, residential areas, impacts caused by return activities in ESA habitat areas important for movement and connectivity are expected to be very infrequent. Impacts could occur on migratory birds, which are known to utilize residential and developed areas for movement, foraging, and nesting and may be at higher risk of being adversely impacted by free-roaming cats due to their closer proximity to higher cat density areas.

The projected reduction in the number of free-roaming cats under the proposed Project would result in reduced free-roaming cat care and maintenance activities and associated impacts (e.g., predation, non-consumptive effects, disease transmission, water quality effects) that may interfere with wildlife movement, migration, or connectivity. The proposed Project's indirect TNR activities are not expected to increase impacts relative to the baseline condition and the future baseline without Project.

BIO-3 CEQA Significance Determination

Considering (1) the projected net decrease in the free-roaming cat population, (2) decreased free-roaming cat reproduction, (3) anticipated net reduction in cat feeding and care activities (as a result of the declining citywide free-roaming cat population), and (4) relatively lower magnitude of indirect effects related to TNR impacts on wildlife and habitats due to the progressively decreasing

free-roaming cat population in the City, the proposed Project would not result in additional direct and indirect impacts that cause interference with wildlife movement, migration, or connectivity within the study area, relative to baseline conditions and the future baseline without Project scenario; therefore, impacts would be less than significant under CEQA.

BIO-4: Would the proposed Project result in alteration of an existing wetland habitat?

The analysis below is organized to discuss potential impacts from elements of the proposed Project that have the potential to have a direct or indirect impact related to alteration of existing wetland habitat described in the BIO-4 threshold above. Direct impacts specifically analyze the potential impacts of the free-roaming cat population as it changes under the proposed Project due to the estimated annual 20,000 sterilization surgeries that would be implemented through the free vouchers issued by the City under the Project; the indirect impacts focus on general impacts of TNR, which, under the proposed Project, would be facilitated by the City but not directly implemented by LAAS.

Alteration of an Existing Wetland Habitat

For the purposes of this thresholds analysis, alteration of existing wetland habitat is caused by Project-related impacts on water quality and wetland habitats with wetlands being broadly defined, for the purposes of this analysis, as freshwater and marine aquatic resources supporting sensitive biological resources.

Impacts from Free-roaming Cats on Existing Wetland Habitat

As detailed in Sections 4.2.2.8 and 4.2.2.9, existing free-roaming domestic cats in the City may directly and indirectly affect wetland habitats such as aquatic vegetation communities and aquatic (both freshwater and marine) habitats through nutrient and bacterial loading (from cat feces washing into waterways). Pollutants such as waste, bacteria, and nutrients from free-roaming cats' feces and urine accumulate in the environment and have potential to discharge via runoff into the city storm drainage system and natural waterways and wetlands. When such pollutants are in excess, they may cause or contribute to nutrient pollution, which adversely affects water quality. Urine contains ammonia, a source of nitrogen, which at high levels in water becomes toxic for aquatic organisms and alters water acidity. Excess nutrients can cause eutrophication and subsequent depletion of oxygen, called anoxia, in aquatic environments. Anoxic waters are uninhabitable to organisms requiring oxygen such as plants and animals and can result in species death and altered physical, biological, and chemical conditions, which may lead to habitat degradation or loss.

Potentially impacted habitats include emergent wetlands, streams, rivers, riparian habitats, ponds, lakes, marine intertidal, and marine offshore environments. Excess nutrient loading can cause algae blooms and depletion of oxygen, which can make habitat less suitable or unsuitable for aquatic plant and animal species. Such impacts may affect aquatic species such as plants and aquatic animals, including a variety of wetland-associated or wetland-obligate special-status species with potential to occur in the study area including various plants such as salt marsh bird's-beak, invertebrates such as vernal pool fairy shrimp and abalone, fish such as Southern California steelhead and Santa Ana sucker, amphibians such as coastal range newt and Arroyo toad, reptiles such as sea turtles and

western pond turtle, birds such as least Bell's vireo and light-footed clapper rail (including many migratory birds), and mammal species such as southern sea otter and other marine mammals.

This analysis demonstrates that domestic cats may be responsible for an existing level of reduction and degradation of wetland habitats throughout the study area. As presented in Section 4.2.3.1, under the proposed Project the free-roaming cat population would experience a net decline over time, resulting in a net citywide decrease in the free-roaming cat population and free-roaming cat reproductive output. Additionally, impacts from free-roaming cats on wetland habitat water quality, which can lead to reductions and alterations of habitat, are assumed to be distributed similarly to baseline and future baseline without Project because the spatial distribution of free-roaming cats is not expected to change as a result of the proposed Project. Therefore, such impacts would be lower in magnitude compared to the baseline and future baseline without Project due to the estimated modeled net decrease in the free-roaming cat population under the proposed Project. Consequently, the potential for the aforementioned impacts that may cause reductions in wetland habitat throughout this time period would continue to decrease relative to future baseline without Project and would not result in reductions of existing wetland habitat.

As discussed under BIO-1 and BIO-2, because cats participating in the WCP will not be located in ESAs, will not have access to the outdoors, will have their urine and feces disposed of properly, and would be regularly treated for fleas and parasites, opportunities for WCP cats to cause direct or indirect impacts on sensitive biological resource (such as those impacts discussed in Sections 4.2.2.9 and 4.2.2.10) would be negligible and limited to rare occasions when a sensitive species could potentially enter a WCP structure and be subject to impacts caused by working cats. Furthermore, because the WCP is removing cats from the environment, it would contribute to the reduction of free-roaming cat impacts on sensitive biological resources citywide.

Indirect Impacts From TNR on Wetland Habitat

Under the proposed Project, it is reasonable to assume that TNR activities would increase citywide due to the availability of 20,000 new (and additive) free vouchers for free-roaming cat sterilization in the City, the adoption of TNR as the City's preferred method of dealing with the City's free-roaming cat population, and increased community outreach and education on TNR. Because the City is not directly partaking in TNR activities, any potential TNR effects related to the proposed Project would be considered indirect in nature.

As discussed in Section 4.2.2.10, TNR may affect habitats through TNR trapping activities and free-roaming cat care and maintenance. Such impacts may include habitat and wildlife disturbance during TNR activities. These impacts have the potential to affect wetland habitats are discussed below.

Trapping

As discussed in Section 4.2.2.10, TNR activities such as trapping have the potential to cause reduction in wetland habitats via inadvertent disturbance of habitats from trapping activities conducted in habitat areas or ESAs and have the potential to trample and disturb wetland vegetation, although the potential for such impacts is considered to be rare and low. Habitats that could be impacted include emergent wetlands, streams, rivers, riparian wetlands, ponds, lakes, marine intertidal, and marine offshore environments that exist within the City (see Figure 4.2-3, Natural Vegetation Communities, and Figure 4.2-6, Water Resources). These proposed Project

elements could increase free-roaming cat trapping activities in the study area by as many as 20,000 additional trap events annually. The additional trapping activities that would result under the proposed Project could increase the potential to inadvertently disturb wetland habitats. Such increased trapping would occur primarily within upland developed areas where free-roaming cats exist in higher densities. Considering that existing TNR activities are primarily occurring within existing upland developed, residential areas, impacts caused by trapping in wetland habitats areas are expected to be rare. The proposed Project's indirect TNR activities are not expected to substantively increase impacts relative to the baseline condition and the future baseline without Project.

Return

Return of free-roaming cats and ongoing free-roaming cat care (e.g., feeding) associated with TNR may also adversely affect wetland habitats. As described in Sections 4.2.2.8 and 4.2.2.9, free-roaming cats may contribute to impacts on water quality that have potential to affect the quality and availability of wetland habitats if water quality is impacted by excessive nutrient levels (from cat feces washing into waterways), resulting in subsequent algae blooms and depletion of oxygen, which may reduce habitat for aquatic species such as aquatic invertebrates (e.g., fairy shrimp, abalone), amphibians, and fishes, and in severe cases can kill organisms and effectively remove suitable habitat. The projected reduction in the number of free-roaming cats under the proposed Project would in result in reduced free-roaming cat care and maintenance activities and associated impacts on wetland habitats. The proposed Project's indirect TNR activities are not expected to increase impacts relative to the baseline condition and the future baseline without Project.

BIO-4 CEQA Significance Determination

Considering (1) the projected net decrease in the free-roaming cat population, (2) decreased free-roaming cat reproduction, (3) anticipated net reduction in cat feeding and care activities (as a result of the declining citywide free-roaming cat population), and (4) relatively lower magnitude of indirect effects related to TNR impacts on wetland habitats due to the progressively decreasing free-roaming cat population in the City, the proposed Project would not result in alteration of existing wetland habitat within the study area, relative to baseline conditions and the future baseline without Project scenario; therefore, impacts would be less than significant under CEQA.

BIO-5: Would the proposed Project result in interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species?

The analysis below is organized to discuss potential impacts from elements of the proposed Project that have the potential to have a direct or indirect impact related to interference with habitat described in the BIO-5 threshold above. Direct impacts from the proposed Project specifically analyze the potential impacts of the free-roaming cat population as it changes under the proposed Project due to the estimated annual 20,000 sterilization surgeries that would be implemented through the free vouchers issued by the City under the Project; the indirect impacts from the proposed Project focus on general impacts of TNR, which, under the proposed Project, would be facilitated by the City but not directly implemented by LAAS.

Interference with Habitat and Species Behaviors

For the purposes of this thresholds analysis, interference with habitat is defined to include direct and indirect effects from free-roaming cats (such as predation, habitat avoidance and displacement, and altered habitat and space use), which can disturb habitat and adversely affect its quality and/or availability and use such that normal species behavior is impacted to a degree that may diminish long-term survival of a sensitive species.

Impacts from Free-roaming Cats on Habitat and Species Behaviors

As detailed in Section 4.2.2.8, domestic cats can affect habitats and use of habitats such as vegetation communities and aquatic habitats (through non-consumptive effects and nutrient and bacterial loading). Habitat use may be impacted for a variety of special-status species with potential to occur in the study area including various invertebrates such as the monarch butterfly, fish such as Southern California steelhead, birds such as coastal California gnatcatcher and least Bell's vireo (including many migratory birds), reptiles such as coastal whiptail, amphibians such as coastal range newt and Arroyo toad, and mammal species such as various bats, small rodents, and marine mammals. Section 4.2.2.9 includes a detailed account of the existing baseline effects of free-roaming cats on sensitive biological resources, including habitats and species behaviors in the study area. As discussed above in Sections 4.2.2.8 and 4.2.2.9, free-roaming cats may also cause indirect impacts including non-consumptive effects and effects from impacted water quality, which have the potential to affect habitat quality, habitat availability to wildlife species, and the survival of individuals. Non-consumptive effects include effects on wildlife that are not directly caused by predation such as physiologic and biologic stress, altered habitat use (space and temporal shifts) and competition. These stressors can affect species distribution and survival, and may also affect a species' ability to disperse and pollinate plant species that provide the inherent and essential structure and function of habitats. Stress may be induced in response to the presence or perception (e.g., odor) of a predator (such as a free-roaming cat), which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration ability, and habitat avoidance. These can reduce the amount of habitat available for a species to use, resulting in habitat loss.

Indirect effects on water quality, as discussed in the *Wetlands and Other Waters* subsection of Section 4.2.2.9, may also affect aquatic habitats if water quality is impacted by excessive nutrient levels (from cat feces washing into waterways), resulting in subsequent algae blooms and depletion of oxygen, which can make habitat less suitable or unsuitable for aquatic species. Such impacts may reduce habitat quality and availability for aquatic species such as plants and aquatic animals such as invertebrates (e.g., fairy shrimp), amphibians, and fishes and in severe cases can kill organisms and effectively remove suitable habitat.

Under the proposed Project, impacts from free-roaming cats on habitats and wildlife related to non-consumptive effects (such as induced biological and physiologic stress, altered space and habitat use, and reduced reproductive potential) and water quality that can lead to reductions in habitat, habitat use, and wildlife survival are assumed to be distributed similarly to baseline and future baseline without Project because the spatial distribution of free-roaming cats is not expected to change as a result of the proposed Project. Additionally, such impacts would be lower in magnitude compared to the baseline and future baseline without Project due to the estimated modeled decrease in the free-roaming cat population under the proposed Project. Therefore, the potential for impacts on habitats and wildlife species behavior throughout this period would continue to

decrease relative to the baseline and future baseline without Project and would not result in additional interference with habitat such that normal species behaviors are disturbed to a degree that may diminish the chances for long-term survival of a sensitive species.

As discussed under BIO-1 and BIO-2, because cats participating in the WCP will not be located in ESAs, will not have access to the outdoors, will have their urine and feces disposed of properly, and would be regularly treated for fleas and parasites, opportunities for WCP cats to cause direct or indirect impacts on sensitive biological resource (such as those impacts discussed in Sections 4.2.2.9 and 4.2.2.10) would be negligible and limited to rare occasions when a sensitive species could potentially enter a WCP structure and be subject to impacts caused by working cats. Furthermore, because the WCP is removing cats from the environment, it would contribute to the reduction of free-roaming cat impacts on sensitive biological resources citywide.

Indirect Impacts From TNR on Habitat and Species Behaviors

Under the proposed Project, it is reasonable to assume that TNR activities would increase citywide due to the availability of 20,000 new free vouchers for free-roaming cat sterilization in the City, the adoption of TNR as the City's preferred method of dealing with the City's free-roaming cat population, and increased community outreach and education on TNR. These proposed Project elements could increase free-roaming cat trapping activities in the study area by as many as 20,000 additional annual trapping events. However, because the City is not directly partaking in TNR activities, any potential TNR impacts related to the proposed Project would be considered indirect in nature.

As discussed in Section 4.2.2.10, TNR may affect wildlife and habitats through TNR trapping activities and free-roaming cat care and maintenance. Such impacts may include inadvertent trapping of wildlife and habitat and wildlife disturbance during TNR activities, causing wildlife-cat interactions resulting in adverse effects on wildlife such as predation and non-consumptive effects, leading to habitat avoidance and altered habitat use. These impacts with the potential to affect habitats and species behavior are discussed below.

Trapping

The inadvertent trapping of wildlife during TNR activities could result in stress, injury, or death to an individual animal. Trapped wildlife could also be exposed to disease from contaminated food dishes and cages. Additionally, wildlife may be attracted to food provided in TNR traps; this may increase wildlife exposure to cats and cat trapping or feeding/care areas, thereby increasing the potential for disease and parasite transmission between cats and wildlife.

Furthermore, trapping activities conducted in ESAs in the City have the potential to trample and disturb vegetation and wildlife use areas, which may negatively affect wildlife and reproduction/nesting activities of special-status species. This may occur if volunteers access an ESA to set traps and disturb vegetation, habitat, and wildlife use within that area. As mentioned previously, there are some special-status species in the study area that could theoretically be attracted to, fit inside, and become trapped within a cat trap, but trapping of individuals of special status species within residential and urbanized settings would be unlikely, particularly for species that have specific or narrow habitat requirements (such as ring-tailed cats). The aforementioned special-status species are most commonly associated with ESAs and are not common in developed and urban settings, which tend to favor urban-adapted species such as opossums, raccoons, and

skunks; these urban-adapted species are most likely to experience trap-related impacts. The proposed Project's indirect TNR activities are not expected to substantively increase impacts relative to the baseline condition and the future baseline without Project.

Return

Return of free-roaming cats and ongoing free-roaming cat care (e.g., feeding) associated with TNR may also adversely affect wildlife. Providing food to free-roaming cats may serve as an attractant for wildlife due to cat food being left unattended and/or regularly available, allowing wildlife to access and consume it. The inadvertent feeding of wildlife can increase wildlife-cat interactions (e.g., use of the same localized area, use of the same food and water dishes), which can lead to disease and parasite transmission and spread between species. Feeding wildlife may also increase wildlife use and reproduction within such areas, leading to increased wildlife populations such as nonnative rat infestations creating nuisance-related issues and exacerbating parasite and disease reservoirs (such as fleas and flea-borne disease). Other wildlife species may become habituated to human-dominated spaces due to the regular food supply created by regular cat feedings, which can cause and increase incidence of human-wildlife conflict, which often leads to wildlife extermination or the use of poisons to control the nuisance animals. Poisons are known to not only affect target animals but move through the food web, and the resulting secondary poisoning (e.g., consuming an animal who has ingested the poison) can have detrimental effects on native wildlife and non-target species such as native rodents, pumas, bobcats, coyotes, and birds (see Section 4.2.2.8, notoedric mange). At lower doses, as in secondary poisoning, wildlife may experience symptoms ranging from impaired immune system function to secondary disease (such as mange) to death.

In addition, wildlife such as coyotes and pumas may be attracted to the cats themselves as a food source, which may increase wildlife disease exposure and spread. Additionally, TNR cats that have not received all-inclusive and ongoing vaccinations and parasite treatments may increase disease reservoirs (see the *Diseases* subsection of Section 4.2.2.8) and the spread of diseases and parasites to and from other cats and wildlife.

As described in Sections 4.2.2.8 and 4.2.2.9, free-roaming cats may also cause indirect impacts including non-consumptive effects and effects from impacted water quality, which have the potential to affect the availability and use of habitat for wildlife species. These stressors can affect species distribution, habitat use, and habitat availability. Stress may be induced in response to the presence or perception (e.g., odor) of a predator (such as a free-roaming cat), which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration behavior, and habitat avoidance. These in turn can result in increased competition for resources (habitat, food, shelter, water), leading to decreased habitat availability. Indirect effects on water quality, as discussed in the *Wetlands and Other Waters* subsection of Section 4.2.2.9, may also affect habitat availability if water quality is impacted by excessive nutrient levels (from cat feces washing into waterways), resulting in subsequent algae blooms and depletion of oxygen, which may reduce habitat for aquatic species such as aquatic invertebrates (e.g., fairy shrimp), amphibians, and fishes.

The projected reduction in the number of free-roaming cats under the proposed Project would result in reduced free-roaming cat care and maintenance activities and associated impacts (e.g., predation, non-consumptive effects, disease transmission, water quality effects) that may impact habitat or species. Given this information, the existing effects of TNR activities related to

interference with habitat causing disturbance to normal behavior in special-status species are likely infrequent and would not diminish the chances for long-term survival of special-status species.

BIO-5 CEQA Significance Determination

Considering (1) the projected net decrease in the free-roaming cat population, (2) decreased free-roaming cat reproduction, (3) anticipated net reduction in cat feeding and care activities (as a result of the declining citywide free-roaming cat population), and (4) relatively lower magnitude of indirect effects related to TNR impacts on wildlife and habitats due to the progressively decreasing free-roaming cat population in the City, the proposed Project would not result in additional direct and indirect impacts that may cause interference with habitat such that normal species behavior is disturbed to a degree that may diminish the chances for long-term survival of a sensitive species within the study area relative to baseline conditions and the future baseline without Project scenario; therefore, impacts would be less than significant under CEQA.

4.2.4 Mitigation Measures

Biological resources impacts from the proposed Project would be less than significant. Therefore, no mitigation is required.

4.2.5 Significant Unavoidable Adverse Impacts

The proposed Project would not result in significant unavoidable adverse impacts related to biological resources.

4.3 Water Resources

This section describes the regulatory setting, environmental setting, and potential impacts on surface water resources that would result from implementation of the proposed Project. As presented in Table 3-8, Water Resources Screening Analysis, and noted in Section 3.1.7.3, *Conclusion*, further study of the proposed Project's potential impacts on surface water quality is required and accordingly presented in this section. As analyzed below, surface water quality impacts associated with water resources would be less than significant, and no mitigation measures are required.

4.3.1 Regulatory Setting

This section provides an overview of the pertinent federal, state, and local policies governing hydrology and water quality for the proposed Project.

4.3.1.1 Federal

Clean Water Act

The *federal Clean Water Act* (CWA) of 1977 (33 U.S. Code Section 1251 et seq.), which amended the federal Water Pollution Control Act of 1972, established the basic structure for regulating discharges of pollutants into the waters of the United States (not including groundwater). The CWA delegates authority to the U.S. Environmental Protection Agency (EPA) to implement pollution control programs. Under the CWA, it is unlawful for any person to discharge any pollutant from a point source into navigable waters. In addition, the CWA requires that states adopt EPA-approved water quality standards for water bodies. Water quality standards consist of two components: designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing) and the water quality criteria necessary to support those uses. In California, the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) are responsible for assessing water quality monitoring data for surface waters to determine if they contain pollutants that exceed the levels established in water quality standards. The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and enforcement activities.

The CWA regulates point and non-point sources of pollution. Deposition of feces and urine from free-roaming cats that discharge into surface ways would be regulated as non-point source discharges from urban areas, described further under the National Pollutant Discharge Elimination System (NPDES) Municipal General Permit.

Section 303: Impaired Water Bodies (303[d] List) and Total Maximum Daily Loads

Section 303(d) of the CWA requires each state to identify and list impaired surface waters that do not meet, or that the state expects will not meet, state water quality standards. This is a subset of the 305(b) list, which contains information on all water bodies. The water quality standards are promulgated under the *National Toxics Rule* (NTR) or the *California Toxics Rule* (CTR) after minimum technology-based effluent limitations have been implemented for point sources. For these waters, the RWQCBs are required to develop total maximum daily loads (TMDLs) of pollutants for

impaired water bodies and a program of implementation to meet the TMDLs. The TMDL must account for the pollution sources that caused the water bodies to be listed by the state. The TMDL is a calculation of the maximum amount of a pollutant that a water body can receive while still meeting water quality standards. TMDLs also define an allocation of that load among the various sources of that pollutant (i.e., municipalities, other permitted entities). Additionally, the TMDL can act as a plan to reduce pollutant loading, which improves water quality. After implementation of a TMDL, it is anticipated that the problems that led to placement of a given pollutant on the Section 303(d) list will be remediated.

The SWRCB has combined its 303(d) list and the 305(b) report into the 2014 and 2016 California Integrated Report. After approval of the 303(d) list portion of the California Integrated Report by the SWRCB, the complete California Integrated Report was submitted to EPA. EPA approved the 303(d) list portion of the California Integrated Report on April 6, 2018.

The SWRCB 303(d)-listed impaired waters that could be affected by the deposition of feces and urine from free-roaming cats that discharge into surface waters are discussed in Table 4.8-3, in Section 4.8.2.2, *Surface Waters and Local Hydrology.*

Section 402: National Pollutant Discharge Elimination System Permits

Section 402 of the CWA establishes the NPDES permit program to regulate all discharges to waters of the United States, including stormwater associated with construction activities, industrial operations, municipal drainage systems, and point sources, to protect surface water quality. The NPDES permit program controls, minimizes, or reduces surface water impacts. In California, the SWRCB administers the NPDES program; the RWQCBs have implementation and enforcement responsibilities. The NPDES program is applicable to all discharges to waters of the United States, including stormwater associated with construction activities, industrial operations, municipal drainage systems, and point sources, to protect surface water quality.

Only the Municipal NPDES program stormwater permits, which are discussed in the following section, would be relevant to the proposed Project.

4.3.1.2 State

Porter-Cologne Water Quality Control Act

The *Porter-Cologne Water Quality Control Act* authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and groundwater) and directs the RWQCBs to develop regional Basin Plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt Basin Plans on its own initiative. The RWQCBs are required, by law, to develop, adopt, and implement a Basin Plan for the entire region. Water quality standards are set forth in the regional Basin Plan.

National Pollutant Discharge Elimination System

The SWRCB and RWQCBs implement, monitor, and enforce the NPDES permitting requirements within their jurisdictions. In general, the regulations require all communities with populations of more than 50,000 to develop programs for reducing pollutants carried by stormwater runoff into waters of the United States. As with Waste Discharge Requirements, the SWRCB and RWQCBs can issue individual

NPDES permits to cover individual dischargers or general permits (state or regional) to cover a category of dischargers.

Municipal General Permit

CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4s). Phase I MS4 permit regulations cover medium-size municipalities (between 100,000 and 250,000 people) and large municipalities (more than 250,000 people). Phase II MS4 permit regulations require that stormwater management plans/programs be developed by municipalities with populations of less than 100,000, including non-traditional small MS4s, which are facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 permits require that cities and counties develop and implement programs and measures, including best management practices (BMPs), control techniques, system design and engineering methods, and other measures, as appropriate, to reduce the discharge of pollutants in stormwater to the maximum extent possible. As part of permit compliance, permit holders create stormwater management plans for their respective locations. These plans outline the requirements for municipal operations, industrial and commercial businesses, construction sites, and planning and land development. The requirements may include multiple measures to control pollutants in stormwater discharges.

The City of Los Angeles is a permittee under the current Phase 1 MS4 permit for Los Angeles County (Order No. R4-2012-175), as described further under Section 4.3.1.3, *Los Angeles County Municipal Stormwater NPDES Permit (MS4 Permit).* Certain elements of the MS4 Permit, such as the Public Information and Participation Program, would apply for the proposed Project, as described below.

4.3.1.3 Local and Regional

Los Angeles Basin Water Quality Control Plan (Basin Plan)

The preparation and adoption of water quality control plans (Basin Plans) is required by the *California Water Code* (Section 13240) and prescribed by the CWA. Section 303 of the CWA requires states to adopt water quality standards that "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." According to Section 13050 of the *California Water Code*, Basin Plans consist of designation or establishment of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives for the waters within a specified area. Because beneficial uses, together with their corresponding water quality objectives, can be defined per federal regulations as water quality standards, the Basin Plans are regulatory references for meeting the state and federal requirements for water quality control.

Beneficial uses of waters within the proposed Project study area and downstream receiving waters are shown in Table 4.3-3 in Section 4.3.2.2, *Surface Waters and Local Hydrology*. The Basin Plan specifies the water quality objectives for the all inland surface waters and enclosed bays and estuaries (including wetlands) in the region (LA RWQCB 2019).

Los Angeles County Municipal Stormwater NPDES Permit (MS4 Permit)

The current MS4 permit for Los Angeles County (Order No. R4-2012-175, as amended by Order WQ 2015-0075 and Order No R4-2012-0175-A01) was adopted on November 8, 2012; became effective December 28, 2012; and expired on December 28, 2017. In accordance with Section 2235.4 of Title 23 of the *California Code of Regulations*, the terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with. Accordingly, if a new order is not adopted by the expiration date above, then the Permittees must continue to implement the requirements of Order No. R4-2012-175 until a new one is adopted. Order No. R4-2012-175 is the fourth iteration of the stormwater permit for the MS4s in the Los Angeles region, which includes the Los Angeles County Flood Control District, Los Angeles County, and 84 incorporated cities (including the City of Los Angeles) within the county watersheds, excluding the City of Long Beach. The permit contains the requirements necessary to improve efforts to reduce the discharge of pollutants in stormwater runoff to the maximum extent practicable and achieve water quality standards. Stormwater effluent must meet water quality–based effluent limitations, or water quality standards for discharge, and must not cause or contribute to the exceedance of water quality standards for receiving waters, as identified in the Los Angeles Basin Plan.

The new development and redevelopment requirements of the Planning and Land Development Program would not apply to the proposed Project because no development is proposed. However, the MS4 permit also requires the City to implement a Public Information and Participation Program. The objectives are to increase the knowledge of the target audience about the MS4, the adverse impacts of stormwater pollution on receiving waters, and potential solutions to mitigated impacts. For example, the City of Los Angeles Stormwater Program promotes good pet practices. While largely focused on dog waste, many of the practices could also apply to some domestic cat owners as well (City of Los Angeles 2011).

4.3.2 Environmental Setting

This section describes the hydrology and water quality settings of the entire City of Los Angeles. The information in this section is used in preparing the evaluation and conclusions of the impact analysis as well as determining any required mitigation measures. This section identifies overall water resource existing conditions in the study area with a focus on the existing effects of free-roaming cats on these resources.

4.3.2.1 Watersheds

The City of Los Angeles covers approximately 471 square miles (301,738 acres). It encompasses portions of four watersheds: Los Angeles River (Hydrologic Unit Code [HUC] 18070105), Santa Monica Bay (HUC 18070104), Ballona Creek (HUC 18070104), and Dominguez Channel (HUC 18070104) (Table 4.3-1 and Figure 4.3-1) (City of Los Angeles 2018a). Each watershed presents unique settings, based on historic and current land use, various types of water resources (river, creek, or channel), and water quality and quantity parameters.

Table 4.3-1. Watersheds within the Project Study Area

Watershed (HUC-8)	Sub-watershed (HUC-10)	Sub-watershed Area within the City (acres)
Los Angeles River (18070105)	Big Tujunga Creek (1807010501)	11,000
	Upper Los Angeles River (1807010502)	134,883
	Lower Los Angeles River (1807010504)	37,905
Santa Monica Bay (18070104)	Dominguez Channel	3,329
	Frontal Santa Monica Bay-San Pedro Bay	3,096
	Garapito Creek-Frontal Santa Monica Bay	26,207
Ballona Creek – Santa Monica Bay (180070104)	Ballona Creek	68,169
Dominguez Channel – Santa Monica Bay (180070104)	Dominguez Channel	5,174
	Frontal Santa Monica Bay-San Pedro Bay	11,974
Total		301,738

Source: GIS dataset provided by Los Angeles Bureau of Engineering.

Los Angeles River Watershed

The City has jurisdiction over 41% of the Los Angeles River watershed, with other cities having jurisdiction in the watershed as well. The watershed is highly developed, with the predominant land uses being residential (36%); open space and agriculture (44%); and commercial, industrial, and transportation (20%). Approximately one-third of the watershed is impervious surface.

The 55-mile-long Los Angeles River originates in the San Fernando Valley and flows through the central portion of the City to San Pedro Bay, near Long Beach. Much of the Los Angeles River and its tributaries are completely channelized, including concrete-lined channels for flood protection. Much of the stormwater is managed through an extensive network of underground storm drains, along with a surface network of drainage ditches, most of which are concrete lined. Dams and reservoirs within the watershed were designed for flood control and groundwater recharge. The average dry-weather flow near the mouth of the river in Long Beach is 153 cubic feet per second, but the average wet-weather flow is double to triple that amount, with even larger flows possible during large storm events (City of Los Angeles 2018a, 2018b).

Santa Monica Bay Watershed

For purposes of this EIR, the Santa Monica Bay watershed is divided into three management areas, per the City's management of the watershed. The City has jurisdiction over 16% of the Santa Monica Bay watershed, with other cities having jurisdiction in the watershed as well. The Santa Monica Bay watershed management unit includes approximately 55 miles of coastline and beaches with approximately 200 separate storm drain outfalls that drain to the Pacific Ocean. The terrain ranges from mountainous to coastal, with rugged open space and open channel canyons, with little human alteration, to the north. The middle and southern portions are more urban and include the City and other urban communities. In the developed areas, water drains through a network of storm drains that carry runoff to the Pacific Ocean. Land use in the City's jurisdictional area is 32% residential; 48% open space, including parks and canyons; and 20% commercial, industrial, transportation, and educational (City of Los Angeles 2018c).

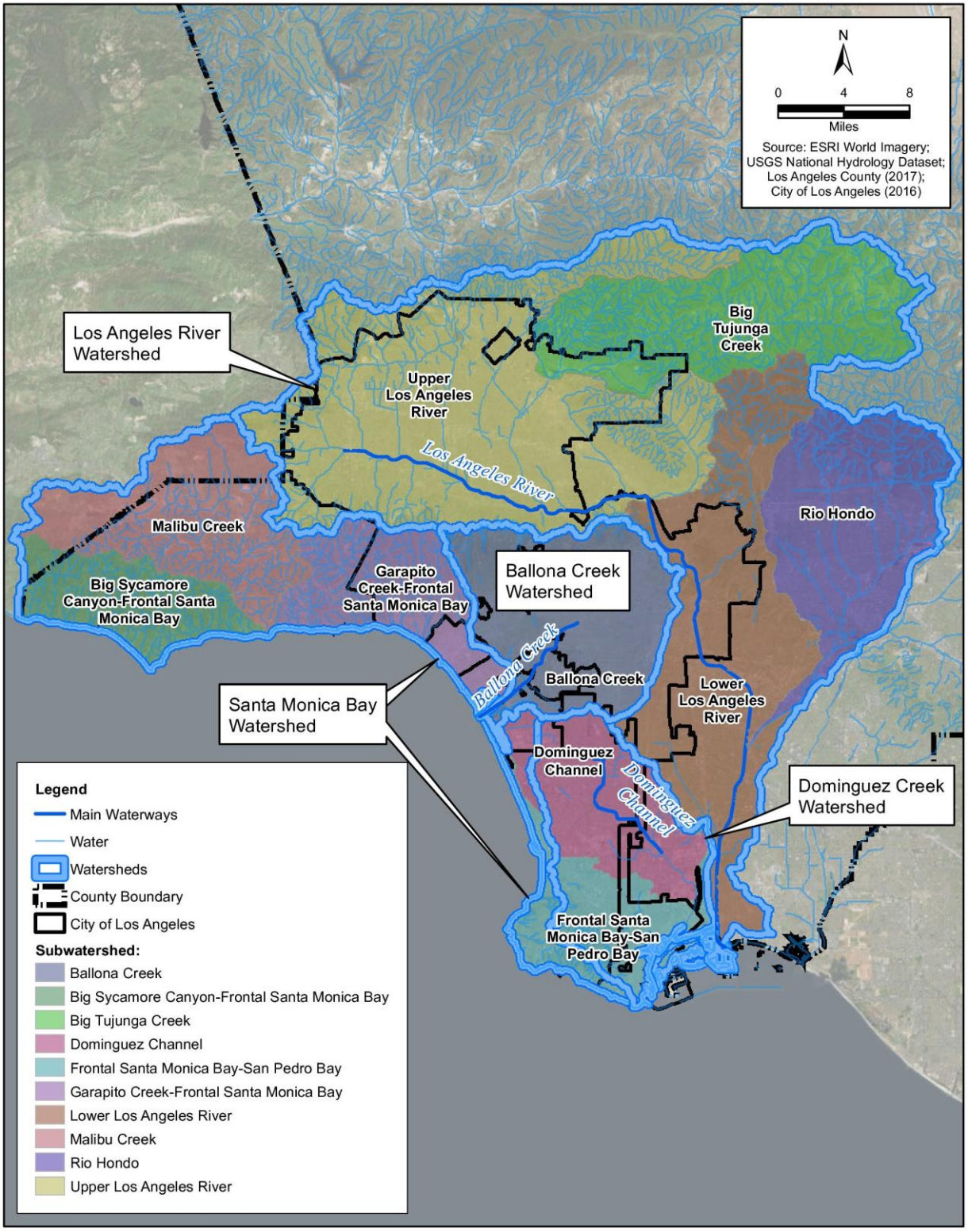


Figure 4.3-1. Watersheds in the City of Los Angeles

Ballona Creek Watershed

The City has jurisdiction over 83% of the Ballona Creek watershed. Ballona Creek is 10 miles long and mostly a concrete-lined channel that begins near the center of Los Angeles and flows southwesterly to the Pacific Ocean and into a large estuary. An extensive system of underground storm drains feeds to the creek and estuary. The watershed is highly developed and includes at least seven jurisdictions, two of which are the City of Los Angeles and the California Department of Transportation. Predominant land uses are residential (59%), vacant and open space (17%), and commercial (14%). Nearly half of the watershed is impervious surface (City of Los Angeles 2018d).

Dominguez Channel Watershed

The City has jurisdiction over 22% of the Dominguez Channel watershed. The nearly 16-mile-long Dominguez Channel originates in Hawthorne and drains approximately two-thirds of the watershed to the East Basin of the Los Angeles Harbor. The remaining area of the watershed, including the Wilmington Drain and Machado Lake, discharges independently to Los Angeles Harbor. More than 90% of the land area is developed, with approximately 61% being impervious surface. Predominant land uses are 41% residential, with industrial, commercial, and transportation uses totaling approximately 44% combined. The waterways are constructed of concrete, with a few small natural channels in the foothills. The watershed is managed by the City, Los Angeles County, and more than 15 cities and other jurisdictions (City of Los Angeles 2018e).

4.3.2.2 Rainfall

Annual average precipitation for the City, excluding mountain areas, is 15 inches but has ranged between 4 and 40 inches since record keeping began in 1880. In the last 10 years, annual rainfall has ranged between 4 and 28 inches. Mountain areas will experience higher rainfall levels than the valley bottoms during the same storm event. Drought spanned water years 2012 through 2016, which included the driest 4-year statewide precipitation on record (2012–2015) and the smallest Sierra-Cascades snowpack on record (2015, with 5 percent of average) (DWR 2017a). Drought years were extraordinarily hot; 2014, 2015, and 2016 were California's first, second, and third warmest year in terms of statewide average temperatures (DWR 2017a). Water year 2017 illustrated the variability in California's annual precipitation, ending the state's 5-year drought and coming in second for statewide runoff, behind the wettest year of 1983 (DWR 2017b).

4.3.2.3 Surface Waters and Water Quality

The City is surrounded by mountains on three sides and extends to the Pacific Ocean. Most surface waters are managed in concrete-lined channels and underground storm drain systems (City of Los Angeles 2018f). This is indicative of highly urbanized communities such as the City and surrounding communities. Surface water discharges into the Pacific Ocean from multiple outfalls, which can have significant discharge rates during large rainfall events because retention is not one of the major elements of the stormwater collection system. Lakes and groundwater recharge areas throughout the City are intended to address water quantity issues related to drought and dry seasons.

All watersheds in the proposed Project's study area have some degree of impairment. Table 4.3-2 provides a summary of water quality impairments, associated TMDLs, and potential sources of water quality impairments, as identified in the 303(d) and 305(b) integrated report list by sub-watershed. The summary includes listed impairments from the approved 2014/2016 303(d) list.

Los Angeles River Watershed impairments include pollutants such as trash, metals, bacteria, nutrients, pesticides, and polychlorinated biphenyls (PCBs). These pollutants are often associated with urbanized, densely populated areas and areas with a high percentage of impervious surface. The overall watershed is approximately one-third impervious surface, with higher rates within the City limits. Large areas of impervious surface result in more runoff because water cannot infiltrate to groundwater, and the lack of ponds and wetlands results in less retention time within the watershed (LA RWQCB 2016). This also results in reduced water quality due to little to no treatment of the water.

Similar to the Los Angeles River watershed, the Santa Monica Bay watershed management area has a large, dense population and a significant percentage of impervious surface that prevents infiltration of stormwater. This results in pollutants such as debris, bacteria, and toxics, including dichlorodiphenyltrichloroethane (DDT) and PCBs, reaching the drainage system and impairing water quality (City of Los Angeles 2018a, 2018b). Additionally, the significant percentage of impervious surface area results in little to no infiltration to groundwater.

The Ballona Creek watershed management area's large, dense population and high percentage of impervious surface results in impairment by pollutants such as trash, bacteria, metals, toxics, sediment, and exotic vegetation. Nearly half of the watershed is impervious surface, with the majority of stormwater managed in concrete-lined channels and underground storm drainage systems (City of Los Angeles 2018c).

The Dominguez Channel watershed management area's large, dense population and high percentage of impervious surface results in impairment by pollutants such as trash, metals, bacteria, toxics, and nutrients. More than 60% of the watershed is impervious surface, with few natural channels, resulting in little to no infiltration of stormwater to the soil and groundwater (City of Los Angeles 2018d).

The quality of surface water features is protected by the Los Angeles RWQCB, which has established the beneficial uses supported by each feature. Beneficial uses are a cornerstone of water quality protection, because—combined with water quality objectives—they form water quality standards. When beneficial uses are impaired by a pollutant that chronically exceeds its water quality objective, the RWQCB places the water body and pollutant on the CWA Section 303(d) list of water quality impairments. The RWQCBs must then begin developing a TMDL program that provides a programmatic response to the impairment in order for the water body to meet the water quality objectives. Beneficial uses of waters within the proposed Project's study area and downstream receiving waters are shown in Table 4.3-3.

A full list of impaired waters is given because the majority are located in developed areas, which are shown to have higher densities of domestic cat populations. Bacteria and nutrients are bolded because existing free-roaming cats are potential contributors to these pollutants through outdoor feeding and defecation. The majority of waterbodies within the City are impaired as a result of these pollutants; however, it is important to note that all these impairments are not solely the result of outdoor feeding and defecation related to free-roaming cats. Several other sources of urban runoff include other wildlife (birds, horses, pets), direct human inputs (leaks and overflows from wastewater, falling septic systems), and sediments. The impacts of free-roaming cats on water quality and the approved bacteria and nutrient TMDLs within the City are described further below in Section 4.3.2.5, Total Daily Maximum Loads.

Table 4.3-2. Study Area Water Quality Impairments

Watershed	Water Body	Pollutant Category	Potential Sources	EPA TMDL Date (2014/2016)
Los Angeles River (18070105)	Aliso Canyon Wash	Metals **Bacteria**	Unknown non-Point	2005/2008 2012
	Arroyo Seco Reach 1	**Bacteria** Trash	Unknown and urban runoff/ storm sewers	2012 2008
	Bell Creek	**Bacteria**	Unknown	2012
	Bull Creek	**Bacteria**	Unknown	2012
	Burbank Western Channel	**Bacteria** Metals Trash Other inorganics	Unknown and urban runoff/ storm sewers	2012 2005 2008 2019
	Dry Canyon Creek	**Bacteria** Metals	Unknown/ Non-point	2027 2005
	Los Angeles River Reach 2	**Nutrients** **Bacteria** Metals Trash Nuisance	Unknown and urban runoff/ storm sewers Natural	2004 2009 2005 2008 2019
	Los Angeles River Reach 3	**Nutrients** Metals Trash Toxicity **Bacteria**	Unknown and urban runoff/ storm sewers	2004 2005 2008 2027 2012
	Los Angeles River Reach 4	**Nutrients** **Bacteria** Toxicity Trash	Unknown and urban runoff/ storm sewers	2004 2019 2027 2004
	Los Angeles River Reach 5	**Nutrients** Metals Trash Nuisance Toxicity Miscellaneous	Unknown and urban runoff/ storm sewers	2004 2005 2008 2019 2027 2025
	Los Angeles River Reach 6	**Bacteria** Metals Toxicity	Unknown	2012 2005/2008 2027
	McCoy Canyon Creek	**Bacteria** **Nutrients** Metals	Unknown and urban runoff/ storm sewers	2027 2003 2005
	Tujunga Wash	**Nutrients** **Bacteria**	Unknown and urban runoff/ storm sewers	2004 2012

Watershed	Water Body	Pollutant Category	Potential Sources	EPA TMDL Date (2014/2016)
		Metals Trash		2005 2008
	Verdugo Wash Reach 1	**Bacteria** Metals Trash	Unknown and urban runoff/ storm sewers	2019 2021 2008
	Verdugo Wash Reach 2	**Bacteria** **Trash**	Unknown and urban runoff/ storm sewers	2012 2008
Santa Monica Bay (18070104)	Dockweiler Beach	**Bacteria**	Nonpoint	2003
	Royal Palms Beach	Pesticides Other organics	Unknown/ Nonpoint	2012 2012
	Santa Monica Beach	**Bacteria**	Non-point	2003
	Santa Monica Canyon	**Bacteria** Metals	Unknown/ Nonpoint	2003 2019
	Topanga Canyon Creek	Metals	Unknown	2019
	Venice Beach	**Bacteria**	Nonpoint	2003
	Whites Point Beach	Pesticides **Bacteria** Other organics	Unknown/ Nonpoint	2012 2003 2012
	Will Rogers Beach	**Bacteria**	Nonpoint	2003
Ballona Creek – Santa Monica Bay (180070104)	Ballona Creek	Metals **Bacteria** Toxicity Trash Other inorganics	Unknown point source or unknown nonpoint source	2005 2007 2005 2001 2019
	Ballona Creek Estuary	Metals Pesticides **Bacteria** Toxicity Other organics	Unknown point source or unknown nonpoint source	2005 2005 2007 2005 2005
Dominguez Channel – Santa Monica Bay (180070104)	Dominguez Channel	**Bacteria** Metals Toxicity	Unknown/ Nonpoint	2007 2012 2012
	Torrance Carson Channel	**Bacteria** Metals	Unknown	2007 2012
	Wilmington Drain	**Bacteria**	Unknown	2007

Source: LA RWQCB 2016.

Table 4.3-3. Study Area Beneficial Uses

Watershed (HUC-8)	Sub-Watershed (HUC-10)	Cold Freshwater Habitat	Commercial and Sport Fishing	Contact and Non-Contact Recreation	Estuarine Habitat	Groundwater Recharge	Industrial Service Supply and Industrial Process	Marine Habitat	Migration of Aquatic Organisms	Municipal and Domestic Supply	Navigation	Rare, Threatened, or Endangered Species	Shellfish Harvesting	Spawning, Reproduction, and/or Early Development	Warm Freshwater Habitat	Wetland Habitat	Wildlife Habitat
Los Angeles (18070105)	Big Tujunga Creek	X				X				X		X		X	X	X	X
	Upper Los Angeles River	X				X	X			X		X		X	X	X	X
	Lower Los Angeles River		X		X	X	X	X	X	X	X	X	X	X	X	X	X
Santa Monica Bay (18070104)	Dominguez Channel	X							X	X		X	X	X	X	X	X
	Frontal Santa Monica Bay	X							X	X		X	X	X	X	X	X
	Garapito Creek-Frontal Santa Monica Bay	X							X	X		X	X	X	X	X	X
Ballona Creek – Santa Monica Bay (18070104)	Ballona Creek		X		X			X	X	X	X	X		X	X	X	X
Dominguez Channel – Santa Monica Bay (18070104)	Dominguez Channel			X								X					
	Frontal Santa Monica Bay-San Pedro Bay		X	X	X		X	X	X		X	X		X			X

Source: LA RWQCB 2019.

4.3.2.4 Free-Roaming Cats' Existing Impact on Water Quality

Pet waste washes into lakes or streams with no treatment, decays, and may degrade water quality by increasing nutrient and bacteria loading. Nutrient loading of phosphorus, nitrogen, and ammonia degrades both fresh and marine water quality. Effects of excess nutrients include toxic algae blooms, anoxic conditions, and increased turbidity (Smith et al. 1999). These effects are harmful and potentially deadly to both wildlife and the public (EPA 2018).

Several studies have suggested that pet feces, including feline feces, contribute to bacterial loading of streams and coastal waters. Fecal coliform bacteria can enter surface waters through direct discharge of waste from mammals such as domestic cats, from agricultural and stormwater runoff, and from human sewage pathways (Marsalek and Rochfort 2004; Dabritz et al. 2006). The most basic test for bacterial contamination of a water supply is for total coliform bacteria. Total coliforms include bacteria that can be found in the soil, in water that has been influenced by surface water, and in human or animal waste. The presence of coliform bacteria is used to indicate that other pathogenic organisms of fecal origin may be present. Current bacterial testing carried out by agencies on a regular basis does not account for sources of bacteria. DNA testing for fecal bacterial sources is currently available to determine a source by species; however, this method is rarely used due to its extreme cost. Most source-based testing is conducted to determine the difference between human sources and animal sources, as human fecal bacteria pose more risks to public health (Beeler and May 2011).

Pet waste carries diseases, such as bacterial, parasitic, and viral infections, which could make water unsafe for contact. Refer to Section 4.3, *Biological Resources*, and 4.4, *Human Health Hazards*, for additional details on diseases that free-roaming cats may host. Water fecal pollution is also responsible for skin, eye, and ear irritations. Animal feces that are allowed to dry and/or disintegrate could contaminate soil with parasite propagules months or even years later. Domestic cats are capable of serving as hosts to parasites such as *T. gondii*. *T. gondii* is a parasite that causes the disease toxoplasmosis, and the parasite's oocysts are excreted in domestic cat feces. Domestic cat feces have the potential to contaminate surface waters with *T. gondii* oocysts, resulting in waterborne toxoplasmosis outbreaks. *T. gondii* oocysts can account for severe infections in humans and animals by ingestion of a single oocyst from contaminated water, soil, fruit, or vegetables. Domestic cats shed 3 to 349 million *T. gondii* oocysts 3 to 5 days after consuming infected animal tissues. However, a study found that the lowest contamination was observed in homes of urban areas, and the highest prevalence was reported from water around farms, followed by lakes and water reservoirs (Dabritz et al. 2006; Ajmal et al. 2013) More information about *T. gondii* and other potential waterborne diseases can be found in Section 4.3, *Biological Resources*, and 4.4, *Human Health Hazards. Hazards.*

The mean daily weight of feces from domestic cats was found to be 40.2 grams (1.42 ounces) for adults and 31.7 grams (1.12 ounces) for kittens. However, when the annual environmental accumulation of feces is considered, the result is considerable. For example, in the Cayucos, Morro Bay, and Los Osos, California areas, feral cats represent a considerable proportion (22%) of the free-roaming cats and could contribute 29.5 tons of feces to the environment per year (Dabritz et al. 2006). However, unowned free-roaming cats are not the principal source of fecal loading. Loss et al. (2013) found that 40% to 70% of owned cats have access to roam freely, which increases the likelihood of those owned cats defecating in the environment.

There are an estimated 226,970 free-roaming cats within the Project area for baseline conditions. Therefore, if each free-roaming cat produces 40.2 grams (1.42 ounces) of feces a day (Dabritz et al. 2006), the population of free-roaming cats could contribute as much as 3,335 tons (7,352,425 pounds) of feces to the environment per year within the Project area. In Year 30 under the future baseline without Project conditions, there will be an estimated 228,077 free-roaming cats within the Project area, which could contribute as much as 3,351 tons (7,388,265 pounds) of feces to the environment per year within the Project area. No studies on daily average urine volume of domestic cats could be located for reference. As such, no data were obtained regarding how much of free-roaming cat feces and urine deposited will be a source of pollution to surface water from rivers and storm drain systems. Current testing of fecal coliform does not determine type of source beyond warm blooded mammals. Common bacteria sources within the storm drain system include pet waste (dog and domestic cat), urban wildlife (particularly birds), human fecal pollution associated with storm drain cross-connections and homeless populations, rodent habitation in storm drains and sewers, and growth of bacteria in nutrient rich waters. For example, reservoir water has been contaminated with *Toxoplasma gondii*, causing human outbreaks of toxoplasmosis in 1995 (Aramini et al. 1998). However, there was doubt as to whether the cause was a domestic cat or a mountain lion, both of which are potential hosts and excrete the parasite. Open wells and unsecured reservoirs could potentially be affected by free-roaming cats, but there has not been a recorded instance in the past.

Trap-Neuter-Return

TNR typically minimally entails the trapping, examination, sterilization (spay or neuter), vaccination (for rabies virus [RV] and feline viral rhinotracheitis, calicivirus, and panleukopenia virus [FVRCP]), ear tip removal (to aid in future reproductive status identification), and subsequent return of free-roaming cats to where they were trapped. Existing TNR activities may indirectly affect water quality. The subsequent return of free-roaming cats to where they were initially trapped is not anticipated to have a new indirect impact that was not present prior to the free-roaming cat trapping, given the free-roaming cat was already indirectly having an impact on the water quality of that area, unless the free-roaming cat is returned to a different watershed than where it was trapped. If returned to a different watershed, this could potentially increase pollutant sources within the new returned watershed while slightly lowering the pollutant sources from the trapped watershed. The trapping itself could result in a very minor indirect water quality impact. The trap mechanism is not technically considered a source of pollutants, and the traps are not anticipated to be placed directly in streams, rivers, ponds, lakes, marine intertidal, and marine offshore environments. The trapping activities could inadvertently result in the discharge of nutrients from food from the trapped free-roaming cat. For example, a small amount of food is typically used within and around the trap to lure the cat into the trap. Should this food not be consumed by the free-roaming cat and not be removed by the trapper, there is a potential, albeit small, for this food to be discharged into waterways during storm events, potentially increasing nutrients and suspended solids within the waterway and contributing to a water quality impairment. However, most of the food is anticipated to be consumed by free-roaming cats or by other wildlife.

4.3.2.5 Total Daily Maximum Loads

TMDLs are established due to pervasive impairments of specific waterbodies by specific pollutants, as required by the CWA list of Section 303(d) impaired waters. TMDLs examine the problem, identify sources or potential sources, and lay out solutions to the problem. Development involves several stages of analysis and allocations of responsibility for pollutant reduction while accounting

for uncertainties, and creates an implementation plan and monitoring strategy. As potential water quality impacts related to the Project from free-roaming cats are nutrient- and bacteria-based from outdoor feeding and defecation by free-roaming cats, TMDLs within the City for these types of pollutants are summarized below.

The City of Los Angeles, as part of MS4 Permit and TMDL compliance, is implementing several bacteria TMDLs and BMP projects—such as the Ballona Creek Bacteria TMDL Project—that would help address bacteria loading (among other pollutants) in surface water quality. As more BMP projects become operational and TMDLs implemented, improvements in bacteria loading would occur in the associated watershed.

Marina del Rey Harbor Mother's Beach and Back Basins Bacteria TMDL

In addition to the Marina del Rey Toxic Pollutants TMDL, this bacteria TMDL was adopted in 2004, and the implementation plan was adopted in 2006. Elevated bacterial indicator densities are causing beach water to be impaired for swimming and other contact recreation activities. This TMDL sets limits for 30-day geometric means of total coliform density, fecal coliform density, and enterococcus density with single sample limits on maximum densities for total coliform, fecal coliform, and enterococcus. It also provides a specific ratio limit for fecal-to-total coliform. Dry-weather urban runoff and stormwater conveyed through the storm drain system are the primary sources of elevated bacterial indicator densities in the Marina del Rey watershed. Dischargers in the watershed were issued NPDES permits. Bacteria loads associated from these dischargers are unknown, but they are expected to be insignificant sources. Potential sources of nonpoint sources of bacteria were found to be related to marina activities such as boat waste disposal, boat deck and slip washing, swimmer "wash off," restaurant washouts, and natural sources from birds and other wildlife. The loads associated with these nonpoint sources are unknown (LA RWQCB 2003).

Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL

The Ballona Creek, Ballona Estuary, and Sepulveda Channel were listed as impaired beginning in 1998 due to total coliform or fecal coliform. The TMDL was adopted in 2006 and became effective in 2007. This TMDL created bacteria targets based on marine and freshwater objectives for multiple beneficial use designations. The main contributors of bacterial loading are wet- and dry-weather urban runoff from the storm drain system. Runoff to Ballona Creek is a regulated MS4 permit under the County of Los Angeles, California Department of Transportation (Caltrans) Storm Water Permit, and the General and Industrial Storm Water Permit as a point source. Due to linked tidal gates, Ballona Estuary receives input from Ballona Wetlands through connecting tide gates. Source analysis suggests that Ballona Wetlands act as a sink for bacteria from the creek, and the estuary may be considered a natural source of bacteria due to the presence of wildlife. As part of this TMDL, a source identification study for the lagoon will be implemented to determine if a natural source exclusion is applicable (LA RWQCB 2006).

Ballona Creek Bacteria TMDL Project

The Ballona Creek Bacteria TMDL project addresses the elevated bacteria levels and water quality impairments of Ballona Creek and associated estuary during dry weather. In June 2006, the Los Angeles RWQCB adopted an amendment to the Basin Plan that established the Ballona Creek Bacteria TMDL, which became effective in July 2014. The project is set to repurpose three existing treatment facilities owned by the City of Los Angeles Bureau of Sanitation (LA Sanitation). The

existing facilities would be repurposed to increase the amount of dry weather flow that is disinfected with ultraviolet or ozone treatments at the downstream end of Ballona Creek, Ballona Estuary, Sepulveda Channel, and Centinela Creek during dry weather in order to comply with the bacteria TMDL. The project will also divert some dry weather flows from Ballona Creek and Centinela Creek to Hyperion Water Reclamation Plant to increase the available recycled water (City of Los Angeles 2018g).

Machado Lake Eutrophic, Algae, Ammonia, and Odors (Nutrients) TMDL

The Machado Lake Eutrophic, Algae, Ammonia, and Odors (Nutrients) TMDL was adopted in 2008 and made effective in 2009. Machado Lake is listed as impaired due to excessive loadings of nutrients such as nitrogen, ammonia, and phosphorus. The excess nutrients caused eutrophic effects in the lake, including increased algae blooms, which through algal respiration causes depletion of dissolved oxygen and creates an adverse habitat for lake inhabitants. This TMDL's point sources of nutrient loading into the lake are stormwater discharges from the MS4, Caltrans, and general construction and industrial discharge. Nonpoint sources include atmospheric deposition, nutrient loading from wind resuspension, bioturbation, birds, and general surface runoff (LA RWQCB 2008).

Los Angeles Harbor Bacteria TMDL

The Los Angeles Harbor Bacteria TMDL includes inner Cabrillo Beach and the main ship channel. The TMDL was adopted in 2004 and made effective in 2005. Exceedances of bacterial indicator densities is causing impairments to both Cabrillo Beach for swimmers and potentially for the Main Ship Channel of the Los Angeles Harbor. The TMDL sets limits for geometric mean of *E. coli* density and fecal coliform density as well as single sample limits for *E. coli*, enterococcus, and fecal coliform densities. Source analysis suggests that dry-weather urban runoff and stormwater flowing through the storm drain system are the major sources of bacteria loading to the area. Smaller additional sources include waste disposal from boats, restaurant washouts, birds and wildlife, and swimmer "wash-off." Studies suggest that Cabrillo Beach sources are coming directly from sources entering at the beach; this is due to higher bacterial densities in the ankle depth portion of the water (LA RWQCB 2004).

Los Angeles River Watershed Bacteria TMDL

Historically, the Los Angeles River has been highly contaminated by fecal pollution, with many reaches and tributaries exceeding bacteria water quality standards over 80% of the time. This TMDL was adopted as an amendment to the Basin Plan in 2012. The TMDL sets limits for geometric mean of *E. coli* density and fecal coliform density as well as single sample limits for *E. coli* and fecal coliform densities (LA RWQCB 2010).

4.3.3 Environmental Impact Analysis

The discussion below considers the threshold of significance relevant to Surface Water Quality as included in Section G2.2.A of the *L.A. CEQA Thresholds Guide.* As presented in the Screening Analysis chapter's Table 3-8, Water Resources Screening Analysis, and noted in Section 3.8.3, *Conclusion*, further study of the proposed Project's potential impacts on surface water quality is required in this EIR. Accordingly, this significance threshold allows determination of significance related to surface water quality impacts that would occur from the proposed Project.

4.3.3.1 Impacts Analysis Method

As discussed in Section 4.3.2.4 above, free-roaming cats are responsible for contributing to an existing level of impacts on water resources in the study area. Similar to the impacts analysis method presented in Section 4.2.3.1, to facilitate informed decision-making and elucidate impact analyses from the proposed Project related to free-roaming cats, it is reasonable to assume that impacts from free-roaming cats are generally proportional and positively correlated to their population size, presuming all other influencing variables are held relatively constant. Accordingly, the discussion below describes the modeled free-roaming cat population trends—including cumulative free-roaming cat population changes—over the proposed Project's 30-year horizon period, as well as sterilization, reproduction trends, and number of cats returned to the environment under the proposed Project.

The discussion below recaps and focuses on the project implementation phase of Years 1 through 5, and Years 10, 20, and 30. This facilitates a meaningful comparison of the proposed Project impacts to the baseline conditions and future baseline without Project to demonstrate potential impacts, which for the purposes of this analysis are directly proportional to relative changes in the modeled free-roaming cat population in the City.

Overall 30-Year Population Trend

As discussed in Section 4.1.2.4, free-roaming cat population dynamics modeling indicates that the proposed Project would result in fewer free-roaming cats throughout the City of Los Angeles and a lower rate of population growth as compared to the future baseline without Project conditions. Therefore, the total number of free-roaming cats would be expected to decrease under the proposed Project over the 30-year period leading up to the project horizon year of 2049 as compared to the baseline and the future baseline without Project. Furthermore, when compared to the CEQA baseline conditions (at the time of the Notice of Preparation issued in August 2017), the projected free-roaming cat population would include approximately 29,607 fewer free-roaming cats (see Table 4.1-2 and Figures 4.1-4, 4.1-5, and 4.1-7 in Section 4.1.1), an approximate 13% decrease, under the proposed Project in the study area at the end of the 30-year horizon period. This total includes the free-roaming cats that would be released under the proposed Project and that make up between 0.18% and 1.05% of the total free-roaming cat population under the proposed Project for the 30-year horizon period. Under the future baseline without Project, these released free-roaming cats would mostly be euthanized, or in some cases adopted, and would not be released back to the environment.

Progressive Free-Roaming Cat Population and Reproduction Trends

The proposed Project would be implemented starting with a 5-year program implementation phase wherein the release of free-roaming cats from the shelter population would gradually increase over 5 years (see Section 4.1.1, Table 4.1-2). Over this 5-year program implementation phase, the maximum release of free-roaming cats would ramp up from 416 free-roaming cats to 831, 1,247, 1,662, and finally 2,078 free-roaming cats in Years 1 through 5, respectively. Over this period, the program would provide 20,000 spay and neuter surgeries each year, which would constitute between 8.79% and 10.13% of the estimated total free-roaming cat population in the City. Under the proposed Project, the 5-year free-roaming cat release ramp-up period—combined with the immediate provision of 20,000 annual spay and neuter surgeries in Year 1 and the increase in number of owned cats per household from three to five (with all five owned cats being kept

indoors)—as modeled would result in a net decrease in the free-roaming cat population and decreased reproductive output (number of kittens born) starting in Year 2 (see Table 4.1-2 in Section 4.1). The subsequent 10-, 20-, and 30-year proposed Project years would occur during the full program horizon period and would continue to experience free-roaming cat population declines and decreasing reproductive output. Additionally, by providing 20,000 free-roaming cat spay and neuter surgeries per year, the proposed Project would result in the cumulative provision of an additional 600,000 spay and neuter surgeries, resulting in the prevention of 760,771 free-roaming kitten births over the life of the Project with its 30-year horizon period (Table 4.1-2). The spay and neuter surgeries and subsequent population decreases starting in Year 2 would result in a per-year population decrease that is greater than the proposed release of up to 2,078 free-roaming cats per year; therefore, the population declines would more than offset the contribution of released free-roaming cats to the overall free-roaming cat population. This is illustrated in Figure 4.1-6, which depicts the cumulative number of free-roaming cat releases by Year 30 (58,170).

4.3.3.2 Impacts Analysis

HyWQ-1. Would the proposed Project result in discharges that could create pollution, contamination, or a nuisance, or cause regulatory standards to be violated for the receiving water body?

Impacts from Free-Roaming Cats on Receiving Water Bodies

Under the proposed Project, impacts from free-roaming cats on water quality, which can lead to an increase in bacteria and nutrient pollutants, would be distributed similar to baseline and future baseline without Project impacts because the spatial distribution of free-roaming cats is not expected to change as a result of the proposed Project. Additionally, such impacts would be lower in magnitude compared to the baseline and future baseline without Project because of the estimated modeled net decrease in the free-roaming cat population under the proposed Project. For instance, during the project implementation phase over Years 1 through 5, cumulatively over the 5 years, there would be 7,224 fewer free-roaming cats under the proposed Project than under the future baseline without Project (Table 4.1-2). Accordingly, potential pollutants associated with feces from free-roaming cats would decrease relative to the future baseline without Project. For general comparison purposes, the mean daily weight of feces from domestic cats was found to be 40.2 grams (1.42 ounces) for adults (Dabritz et al. 2006). A total of 7,224 fewer free-roaming cats under the proposed Project through the end of Year 5 could potentially reduce the amount of free-roaming cat feces deposited in the environment by as much as 117 tons (234,012 pounds). This number gives a rough indication of how many feces generated by the free-roaming cat population in the project area have the potential to make some contribution to surface water pollutants. Similarly, at Years 5 through 30, the modeled free-roaming cat population would continue to decrease citywide; therefore, the potential for the aforementioned feces deposit and associated pollutant impacts throughout this time period could continue to decrease relative to the future baseline without Project.

Taken together, these data indicate that under the proposed Project the free-roaming cat population would experience a net decline over time, resulting in a net citywide decrease in the free-roaming cat population and free-roaming cat reproductive output. These free-roaming cat population reductions would result in a potential decreased free-roaming cat impacts on water quality for surface waters within the study area. Surface water flows are not anticipated to change compared to

existing conditions as a result of the proposed Project, as the proposed Project does not include any ground disturbance elements that could affect surface water flows. Therefore, there would be no change in runoff volumes, which could mobilize pollutants and potentially create a nuisance or regulatory standards to be violated. Following Year 1 of the proposed Project, the free-roaming cat population would begin to decrease over time, thereby resulting in potentially lower pollutant loading contributions associated with these free-roaming cats to surface waters in the city. Under the proposed Project, pollutant loading related to feeding and defecation from free-roaming cats would continue to occur in surface water runoff because there would continue to be free-roaming cats contributing feces and urine to the environment. Runoff potentially contaminated with free-roaming cat urine and feces could mobilize into surface waters, as occurs in the existing condition. This would be a low-level risk during the dry season and a moderate risk during the rainy season. Free-roaming cat waste deposited in waterways or washed into storm drain systems is potentially harmful in the existing condition, although identifying where and how much is likely infeasible. However, as anticipated under the proposed Project, the free-roaming cat population would grow at a slower rate compared to future baseline without Project conditions, and the number of free-roaming cats in the city would decrease over time. As a result, long-term water quality conditions would be similar to existing conditions under the proposed Project, and contributions of bacteria and nutrients to surface waters related to free-roaming cats could decrease as their numbers decrease over time.

Because the Project would result in a smaller free-roaming cat population over time, the proposed Project could also result in an incremental reduction of impacts on water quality from these free-roaming cats. As mentioned in Section 4.3.2.3, *Surface Waters and Water Quality*, above, there are several sources of pollutant loading into surface waters across the City—including other wildlife (birds, horses, pets), direct human inputs (homeless populations, leaks and overflows from wastewater, failing septic systems), and sediments—and there is no established feasible and sound method currently available that would allow quantification of bacteria and nutrients specifically from free-roaming cats that are being loaded into surface waters across the City. Therefore, it would not be possible to quantify the exact reduction in surface water loads that could be associated with fewer free-roaming cats and kittens under the proposed Project. However, for general comparison purposes of free-roaming cat feces deposited in the environment, as identified previously, the mean daily weight of feces from free-roaming cats was found to be 40.2 grams (1.42 ounces) for adults (Dabritz et al. 2006). The projected free-roaming cat population would include approximately 30,714 fewer free-roaming cats at the end of the 30-year horizon period under the proposed Project compared to the future baseline without Project, which could potentially reduce the yearly amount of free-roaming cat feces deposited to the environment by as much as 451 tons (994,951 pounds) within the project area. Cumulatively over the 30-year horizon period, there would be fewer free-roaming cats (Attachment J-1 to Appendix J), which would have cumulatively deposited approximately 7,910 tons (17,438,118 pounds) of feces into the environment. This amount would be higher if the cumulative number of kitten births prevented (760,771 kittens) were factored in compared to the future baseline without Project. The amount of feces deposited into the environment by free-roaming cats does not directly correlate to potential pollutants discharged into surface waters; however, it gives a rough indication of how many feces generated by the free-roaming cat population in the project area have the potential to make some contribution to surface water pollutants. Most free-roaming cat feces deposited in the environment are not anticipated to have a direct discharge to surface waters because free-roaming cats typically bury their feces and urine to mask their scent for protection from predators and all feces would not necessarily discharge to surface waters. The intent is to show that fewer free-roaming cats would ultimately produce less feces in the environment that

could potentially result in a contribution to impaired surface water quality. Overall, the proposed Project would not create new or additional pollution, contamination, or nuisance or cause regulatory standards to be violated to a receiving water body. Impacts would be less than significant.

As part of this Project, an ordinance would be revised to increase indoor cats allowed per household from three to five. Free-roaming cats that would typically be removed to shelters and euthanized now would ideally be placed indoors and be mandated to a litter box. Some domestic cat owners are known to dispose of domestic cat waste in the toilet (rather than the trash), and some newly developed litter brands allow for used litter to be flushed down the toilet (Kapush 2018). Two additional owned cats per household could increase the amount of domestic cat waste being flushed down the toilet, which could increase the input to wastewater treatment plants; however, it is not possible to quantify the current amount of owned cat waste being flushed into the sewer system or potential increase in owned cat waste flushed as a result of the proposed Project from additional indoor owned cats. Currently, the wastewater treatment plants that receive waters from within the City are not at capacity. The Hyperion Water Reclamation Plant (WRP) is the City's largest wastewater treatment facility and has been treating an average of 275 million gallons a day (MGD). However, the plant has been upgraded over the years to be able to treat a maximum of 800 MGD (LA Sanitation 2018). While Hyperion treats the majority of wastewater from the City of Los Angeles, plants such as Terminal Island WRP (30 MGD capacity; treats average 15 MGD), Donald C. Tillman WRP (80 MGD capacity), and Los Angeles-Glendale WRP (treats average 20 MGD) treat water from various cities and share the cost of running the plants (LA Sanitation 2018). As such, the increase in wastewater to treat potentially extra domestic cat waste and flushable litter would not have an impact on the capacity of the treatment plants. Because the wastewater treatment plants already treat some domestic cat waste, a potential increase in volume of domestic cat waste discharged into the sewer system would not result in violation of the plants' NPDES permit.

Further, the proposed Project would lead to an increase in free-roaming cat spay and neuter surgeries throughout the City. Daily wastewater flow resulting from this increase in surgeries would be minimal compared to existing conditions and would be served by existing animal service centers, animal welfare organizations, and veterinary facilities. As such, the proposed Project would have little or no effect on existing wastewater treatment facilities. Therefore, surface water quality impacts from the proposed Project would be less than significant.

Additionally, under the proposed project, a Working Cat Program (WCP) would be implemented to provide non-lethal options for removal of unadoptable free-roaming cats from the environment (See Section 2.5.3 for proposed WCP details). Free-roaming cats trapped during TNR efforts would be eligible for the WCP. Free-roaming cats trapped within Environmentally Sensitive Areas (ESAs) or within 1 mile of ESAs (See Figures 4.2-2a and 4.2-2b) would be prioritized for participation into the WCP. Cats participating in the WCP would be processed and treated similarly to adoptions under LAAS protocols. Exceptions include that the WCP cats would be placed in pairs and would be required to remain in an enclosed space without access to the outdoors. Prior to placement, all cats would be sterilized, vaccinated for rabies virus and FVRCP, ear tipped, microchipped, dewormed, and treated for fleas. As with current LAAS adoption protocols, adopters would be required to provide ongoing care—such as daily feeding, watering, and litter box maintenance—and regular vaccinations, flea treatment, and as-needed medical treatments. WCP opportunity sites would include enclosed spaces where the cats would not have routine interactions with vulnerable populations, such as children, the elderly, or those with compromised immune systems.

Because cats participating in the WCP would not have access to the outdoors, would not be placed near susceptible human populations (e.g., schools, hospitals, playgrounds), would have their urine and feces disposed of properly, and would be regularly treated for fleas and parasites, opportunities for WCP cats to cause direct or indirect impacts on vulnerable human populations would be negligible. Further, because the WCP would remove cats from the environment, it would contribute to the reduction of impacts from free-roaming cats on vulnerable human populations citywide.

Indirect Impacts from TNR on Receiving Water Bodies

Under the proposed Project, it is reasonable to assume that TNR activities would increase citywide due to the availability of 20,000 new free vouchers for free-roaming cat sterilization in the City, the adoption of TNR as the City's preferred method of dealing with the City's free-roaming cat population, and increased community outreach and education on TNR. Because the City is not directly partaking in TNR activities, any potential TNR effects related to the proposed Project would be considered indirect in nature.

TNR typically minimally entails the trapping, examination, sterilization (spay or neuter), vaccination, ear tip removal, and subsequent return of free-roaming cats to where they were trapped. The activities that have the potential to indirectly affect water quality include the trapping and subsequent return of free-roaming cats to where they were trapped. The subsequent return of free-roaming cats to where they were trapped is not anticipated to have a new indirect impact that was not present prior to the free-roaming cat trapping, given the free-roaming cat was already indirectly causing an impact on the water quality of that area. No new indirect impacts related to return of free-roaming cats would be anticipated.

The trapping could potentially result in minor indirect water quality impacts, though these potential impacts are expected to be infrequent. The trap mechanism is not technically considered a source of pollutants, and the traps are not anticipated to be placed directly in streams, rivers, ponds, lakes, marine intertidal, and marine offshore environments. The additional trapping activities that would result under the proposed Project could increase the potential to inadvertently result in the discharge of nutrients from food and feces from the trapped free-roaming cat. For example, a small amount of food is typically used within and around the trap to lure the free-roaming cat into the trap. Should this food not be consumed by the free-roaming cat and not be removed, there is a potential, albeit small, for this food to be discharged into waterways during storm events, potentially increasing nutrients and suspended solids within the waterway and contributing to a water quality impairment. However, most of the food is anticipated to be consumed by free-roaming cats or removed by TNR practitioners to reduce the potential for this discharge to occur.

The spatial distribution of TNR and free-roaming cat care activities throughout the City is not expected to differ relative to baseline conditions and the future baseline without Project because the proposed Project is not proposing any direct elements that are expected to change the distribution of such activities. However, the proposed Project also includes program implementation guidelines and ecological conservation measures for TNR, responsible feeding, and medical treatments for free-roaming cats. All recipients of CCP vouchers will be required to commit to adhering to these guidelines through a signed affidavit. Over time, this would further help reduce potential impacts from free-roaming cats in and near sensitive waterbodies in the City. In addition, the Project includes the creation of a WCP that would prioritize admission of cats found in or near ESAs. Further, the magnitude of free-roaming cat feeding and care activities in the study area is expected to decrease over time as the free-roaming cat population declines citywide.

It is not currently possible for this analysis to estimate the exact quantity of water quality impacts of TNR in the study area. However, it is important to consider that by Year 2 (the first effective population change under the population dynamics model) a net decrease of 891 free-roaming cats and prevention of 6,539 kitten births throughout the City would have occurred as a result of Year 1's 20,000 additional TNR trapping events and release of up to 831 free-roaming cats (see Table 4.1-2 and Figures 4.1-4, 4.1-5, and 4.1-7 in Section 4.1.1). Trapping efforts would continue over the life of the proposed Project, and this population trend would continue throughout the 30-year proposed Project time horizon, resulting over time in a decrease in free-roaming cats throughout the City. This would in turn result in reduced free-roaming cat care and maintenance activities and associated contribution of water quality impacts. Potential trapping-related impacts on water quality would continue to occur throughout the project area due to the annual addition of 20,000 TNR vouchers, which would result in 20,000 trapping events. However, the overall indirect impacts from TNR trapping on water quality are anticipated to be minimal compared to existing conditions.

HyWQ-1 CEQA Significance Determination

Considering (1) the projected net decrease in the free-roaming cat population, (2) decreased free-roaming cat reproduction, (3) anticipated net reduction in free-roaming cat feeding and care activities (as a result of the declining citywide free-roaming cat population), and (4) relatively lower magnitude of indirect effects related to TNR impacts on receiving water bodies due to the progressively decreasing free-roaming cat population in the City, the proposed Project would not result in discharges that could create pollution, contamination, or a nuisance, or cause regulatory standards to be violated for the receiving water body within the study area, relative to baseline conditions and the future baseline without Project; therefore, impacts would be less than significant under CEQA.

4.3.4 Mitigation Measures

Water resources impacts, specifically related to surface water quality, from the proposed Project would be less than significant. Therefore, no mitigation is required.

4.3.5 Significant Unavoidable Adverse Impacts

The proposed Project would not result in significant unavoidable adverse impacts related to water resources.

4.4 Human Health Hazards

This Human Health Hazards section describes the regulatory setting, environmental setting, and potential impacts related to human health hazards that could result from implementation of the proposed Project. As presented in Table 3-7, Hazards Screening Analysis, and noted in Section 3.1.6.3, *Conclusion*, further study of the proposed Project's potential impacts related to human health hazards is required and accordingly presented in this section. As analyzed below, impacts from the proposed Project related to human health hazards, which are considered to be zoonotic diseases that cats may host and transmit to humans for the purposes of this analysis, would be less than significant, and no mitigation measures are required.

4.4.1 Regulatory Setting

This section describes existing regulations related to human health hazards that are applicable to the proposed Project.

4.4.1.1 Federal

There are no federal laws and regulations related to human health hazards that are applicable to the Project.

4.4.1.2 State

There are no state laws and regulations related to human health hazards that are applicable to the Project.

4.4.1.3 Local

City of Los Angeles

City of Los Angeles (City) Municipal Code Chapter III, Section 31.00, Health Regulations, incorporates the Los Angeles County (County) Code, Title 11. Health Code (with two exceptions not related to the proposed Project), stating that the provisions in the County Health Code "fully express the will and intention of the Council of the City of Los Angeles as to those matters relating to public health." The County health code is discussed below.

Article 3 of the City of Los Angeles Municipal Code addresses animals and fowl in the city. The City of Los Angeles Department of Animal Services (LAAS) has the power and duty to enforce all ordinances of the City of Los Angeles and penal laws of the state related to the care and impoundment of animals for the prevention of cruelty to animals and enforce ordinances related to the payment of money for licenses for animals within the city. Section 53.06, Animals at Large, forbids allowing pets to roam at large but exempts cats, except when they are in heat.

County of Los Angeles

The County of Los Angeles has established within the Code of Ordinances, Title 11. Health and Safety, which contains measures related to general sanitation and pest control and Title 10. Animals, which contains measures on animal health and control. County agencies are involved in issues

related to free-roaming cats: the Los Angeles County Department of Public Health and the Los Angeles County Department of Animal Care and Control. The Los Angeles County Department of Public Health responds to residents' complaints and determines whether site conditions represent a public health risk or public nuisance. The Los Angeles County Department of Animal Care and Control receives free-roaming cats in its six shelters. Both agencies address cat-related problems in response to complaints from the public; neither of these departments engages in routine trapping and removal of free-roaming cats.

The presence of free-roaming cats is not a violation of the County Health Code. However, when the Los Angeles County Department of Public Health finds, in response to a complaint from the public, a flea infestation or accumulation of feces, a Notice of Violation is issued to the property owner/responsible party to abate these conditions (Los Angeles County Departments of Public Health and Animal Care and Control 2009).

The jurisdiction of the Los Angeles County Department of Animal Care and Control extends to Los Angeles County, including unincorporated areas of the county, and the 50 cities it contracts with to provide animal care and control services; the City of Los Angeles does not contract with the Los Angeles County Department of Animal Care and Control.

4.4.2 Environmental Setting

4.4.2.1 Introduction

This section describes the human health hazard settings of the city of Los Angeles with respect to domestic cats. This section identifies existing human health hazards conditions in the study area, with a focus on the existing effects of the populations of free-roaming cats (i.e., all unowned, roaming cats, including feral cats and stray cats). The human health hazards associated with domestic cats were determined to include various zoonotic diseases. Zoonotic diseases include viruses, bacteria, and parasites, which may be transmitted between animals and humans. A variety of zoonotic diseases exist within the city of Los Angeles that may be contracted by humans from domestic cats. Such zoonotic diseases may be contracted directly (e.g., bites or scratches from an infected cat) or indirectly (e.g., through a disease vector such as a flea, human exposure to bodily fluids or excretions from an infectious cat, or contaminated food or water). For the purposes of this analysis and discussion, human health hazards will be considered zoonotic diseases that cats may host and transmit to humans.

4.4.2.2 Local Setting

The city of Los Angeles is home to approximately 3.7 million residents. It is the most populated city in California and the second-most populated city in the United States. The city is geographically diverse, stretching across coastal beaches, coastal valleys, and various foothills and mountains. The city, which is within Los Angeles County, covers 467 square miles, or 302,596 acres. As discussed in Chapter 2, *Project Description*, of this draft EIR, approximately 76% of the city (230,337 acres) is developed, and 24% (72,219 acres) is undeveloped. Land uses within the city are primarily residential (60%), along with public land (20%), commercial uses (7%), and industrial uses (7%). Approximately 15% of the city consists of streets and transportation infrastructure.

4.4.2.3 Susceptible Human Groups

All people are potentially at risk for contracting zoonotic diseases, including those zoonotic diseases associated with domestic cats. The human population groups with higher risks of contracting zoonotic diseases include those with higher potential of susceptibility and/or risk of exposure and include children; the elderly; immunocompromised individuals; the homeless; pregnant women; veterinary staff; trap, neuter, and return (TNR) practitioners[1]; people working in the animal/pet field (e.g., animal breeder, groomer); and people frequenting or dwelling in high-density pet/animal settings (Smith et al. 2002; Lefebvre and Ellis 2018). For the purposes of this analysis these more highly susceptible and/or at-risk human groups will be referred to as susceptible human groups. According to U.S. Census Bureau data, 6.2% of the residents of Los Angeles are under 5 years old, 11.7% are more than 65 years old, 6.3% under the age of 65 are disabled, and 17.2% under 65 years old do not have health insurance (U.S. Census Bureau 2018). These susceptible human groups, their residences, and the areas they frequent are distributed throughout most areas of the city, and no particular region has a higher density susceptible human groups, with the exception of the homeless. In 2018, the City's Greater Los Angeles Homeless Count (Los Angeles Homeless Services Authority 2018) estimated that there were approximately 31,285 homeless people in Los Angeles, with the highest density in the Skid Row area of downtown. In addition, Smith et al. (2002) found that homeless and low-income people treated at a Skid Row free clinic tested positive for antibodies to Bartonella species, similar to those found in rats that were trapped in the same area, though none of the patients tested positive for Typhus antibodies, suggesting that the homeless population in Los Angeles may be exposed to rat-borne diseases.

4.4.2.4 Zoonotic Diseases

Zoonotic diseases with reasonable potential to spread directly or indirectly from domestic cats to humans, and are documented concerns in the Los Angeles region, are presented in Table 4.4-1 and described in detail below. Note that these zoonotic diseases can be transmitted via various mechanisms and animal species, in addition to domestic cats. For the purposes of discussion in this EIR, the mode of transmission related to domestic cats are described below.

Table 4.4-1. Zoonotic Diseases with Reasonable Potential to Be Transmitted to Humans in Los Angeles

Zoonotic Disease	Type of Organism	Mode of Transmission to Humans
Rabies	Virus	Saliva exposure from bite of infected cat
Pasteurella multocida	Bacteria	Cat bite
Cat Scratch Disease (*Bartonella henselae*)	Bacteria	Cat bite and/or cat scratch; contaminated cat flea feces
Toxoplasmosis (*Toxoplasma gondii*)	Parasitic protozoan	Oral ingestion of *T. gondii* oocyst through contaminated soil, food, water, or meat
Giardiasis (Giardia intestinalis)	Parasitic protozoan	Oral ingestion of *G. intestinalis* cyst-contaminated soil, food, water
Cryptosporidiosis (*Cryptosporidium parvum*)	Parasitic protozoan	Oral ingestion of *C. parvum* cyst-contaminated soil, food, water

[1] For an introduction to TNR and a detailed account of existing TNR activities and practices within the City see Section 4.2.2.10.

Zoonotic Disease	Type of Organism	Mode of Transmission to Humans
Toxocariasis (*Toxocara cati*)	Parasitic nematode/ roundworm	Ingestion of contaminated soil, food, water with infectious *T. cati* eggs
Hookworm Infection (*Ancylostoma duodenale* and *Necator americanus*)	Parasitic nematode/ roundworm	Ingestion of contaminated soil, food, water with infectious hookworm eggs
Typhus Fever (*Rickettsia typhi, Rickettsia felis*)	Bacteria	Bite from infected cat flea; contaminated cat flea feces
Plague (*Yersinia pestis*)	Bacteria	Cat flea bites, cat bites, inhalation of contaminated cat bodily fluids
Influenza (e.g., Avian Influenza and Influenza A variants)	Viruses (various influenza variants)	Direct contact with and inhalation of airborne droplets from infected cats

Rabies is caused by variants of the Lyssavirus genus. It reproduces in the nerve fibers and causes a variety of increasingly disabling neurological impairments and behavioral changes; infection is fatal, unless exposed individuals undergo post-exposure prophylaxis vaccination treatment shortly after exposure (Gerhold et al. 2013). Toward the end of the incubation period, the virus is excreted in the animal's saliva (Eckman et al. 2011) and can be transmitted to humans, primarily from the bite of an infected animal (Gerhold et al. 2013). Although rabies is often detected in wild and domesticated animals, which are the most common means of exposure for humans, multiple studies have shown that human exposure to rabies from domestic animals is associated primarily with free-roaming cats because of the likelihood of contact (Gerhold et al. 2013). Since 1988, rabies in the United States has been detected more frequently in cats rather than dogs (Rupprecht et al. 2002). Since 2008, the number of cases of rabies-infected cats reported to the Centers for Disease Control and Prevention was quadruple the number reported for dogs (Centers for Disease Control and Prevention 2016 in Taetzsh 2018). In California, studies have shown that rabies-infected cats exhibit aggressive behavior (55% of cases) more frequently than non-aggressive behavior. They also display aggressive behavior more frequently than rabid dogs (33% of cases). In addition, rabid cats were significantly more likely than rabid dogs to bite a person (62% vs. 36%) (Eng and Fishbein 1990). Rabies occurs throughout the United States. Rabies vaccines to prevent infection are available for humans and for cats.

Pasteurella multocida infection is caused by *P. multocida* bacteria, which are introduced by animal bites, including bites from domestic cats. The bacteria are implicated in approximately 75% of bites from infected cats and carried by more than 90% of cats (Kravetz and Federman 2002). Complications related to bites from infected cats can be severe. Following a bite from a cat, the median time until development of infection is approximately 12 hours. Risk factors for hospitalization following infection include immunosuppression, age (very young or elderly), and initial use of inappropriate antibiotics (Kravetz and Federman 2002). Severe complications related to bites include severe infection resulting in brain and organ inflammation, bone infection, and organ failure (Kravetz and Federman 2002). The management of cat bites involves early treatment, including irrigation of wounds, wound debridement, and an assessment of the patient's tetanus vaccine status and rabies risk (Kravetz and Federman 2002).

Cat scratch disease is caused by *Bartonella henselae* bacteria. Domestic cats are the primary reservoir (i.e., the population within which an infectious disease lives and reproduces) of *Bartonella*

henselae, which causes cat scratch fever (i.e., cat scratch disease) and the bacteria have been documented in 30-40% of domestic cats (Centers for Disease Control and Prevention 2015). Cats were first identified as the reservoir for *Bartonella henselae* in 1994 in the San Francisco Bay Area (Kravetz and Federman 2002). Free-roaming cats are known to be a substantial reservoir for infection and have higher of rates of infection than pet cats, most likely due to increased exposure (Nutter et al. 2004; Breitschwerdt and Kordick 2000). Research in California suggests that the prevalence of infections from Bartonella species is positively correlated to proximity to large urban areas and high domestic cat densities (Bevins et al. 2012). Cat scratch fever may be spread by cats to humans through saliva, scratches, and bites as well as contaminated flea feces (Hariharan 2017). Cat scratch disease infections are usually minor; however, fever, headaches, lethargy, eye disorders, urinary tract diseases, regional lymph node enlargement, and neurological disease can occur with chronic infections. The disease is associated with frequent diagnoses of benign lymphadenopathy in children and young adults (Breitschwerdt and Kordick 2000; Bevins et al. 2012; McElroy et al. 2010). Recently, infections from Bartonella species have been associated with chronic rheumatic symptoms; these are clinically similar to chronic Lyme disease in humans (Maggi et al. 2012). Cat scratch fever occurs throughout the United States and worldwide. No human or animal vaccine against cat scratch fever exists to date. Antibiotic-based treatments are prescribed against the infection.

Toxoplasmosis is a parasitic disease caused by the protozoan parasite *Toxoplasma gondii.* It is capable of infecting virtually all warm-blooded animals, including most bird and mammal species (Dubey et al. 2008; Zhou et al. 2016), and relies on cat species to complete its life cycle. Cat species (*Felids*) are the only hosts that can excrete the environmentally resistant oocysts (Verma et al. 2017), which the infected cats shed in their feces, contaminating water, soil, and the environment. All other hosts, in which only asexual reproduction can occur, are intermediate hosts (Fredebaugh et al. 2011). Humans become infected with *T. gondii* by oral ingestion of water, contaminated produce, or undercooked meat. Infection also results from contact with contaminated soil during play or gardening or, less frequently, feline feces (Robert-Gangneux and Dardé 2012; Zhou et al. 2016). According to the Centers for Disease Control and Prevention (2018) up to 11% of the U.S population have been infected with Toxoplasmosis and up to 60% in other non-U.S. populations. Oocysts can survive in soil for years and are resistant to detergents, alkalis, and, acids (Kravetz and Federman 2002). Humans can also become infected through organ transplants. The chance of receiving infected organs is higher for heart transplant patients compared with liver, lung, or kidney transplant patients (Robert-Gangneux and Dardé 2012). Toxoplasmosis also poses a significant risk for those receiving immunosuppressive therapy and is a major cause of systemic infection and death for immunosuppressed patients (e.g., HIV/AIDS) (Elmore et al. 2010). Infection in intermediate hosts results in larval movements through various migration routes, which vary among host species and cause behavioral changes when migration occurs in the central nervous system. Infection with *T. gondii* may be asymptomatic or may result in diseases ranging from mild to severe. The severity of infection is dependent on the virulence of specific *T. gondii* strains and species specific. Symptoms of initial infection range from no symptoms to moderate to severe, including fever, muscle weakness, diarrhea, abnormal breathing, weight loss, and lethargy. Some forms of the diseases caused by infection can have very serious human health impacts, resulting collectively in serious socio-economic burdens throughout the world (Pappas et al. 2009; Torgerson and Macpherson 2011 as cited in Robert-Gangneux and Dardé 2012).

Toxoplasmosis may also cause behavioral changes when parasite migration occurs in the central nervous system (Robert-Gangneux and Dardé 2012). Behavioral changes include prolongation of

reaction times (Flegr 2013) and increased aggression and impulsivity (Cook et al. 2015). Latent toxoplasmosis is associated with immunosuppression, which could explain the increased probability of Toxoplasma-infected women giving birth to a boy. It is also associated with the high prevalence of toxoplasmosis in mothers of children with Down syndrome (Flegr 2013). Toxoplasma is considered a neglected parasitic infection and targeted for public health action by the Centers for Disease Control and Prevention (Centers for Disease Control and Prevention 2018).

Giardiasis is an intestinal infection caused by the protozoan parasite *Giardia intestinalis*. The parasite, which is shed in human and animal feces and may contaminate water and food, is spread by oral ingestion (Los Angeles County Department of Public Health 2018). The parasite is carried by approximately 2% to 3% of cats; most cases are observed in cats with diarrhea (Kravetz and Federman 2002). Symptoms of *Giardia* infection in humans range from no symptoms to diarrhea, fatigue, gas, nausea, abdominal cramps, and bloating, with a low incidence of complications (Los Angeles County Department of Public Health 2018). The infection is treatable with various medications.

Cryptosporidiosis is an intestinal infection caused by the protozoan parasite *Cryptosporidium parvum.* The parasite, which is shed in human and animal feces and may contaminate water and food, is spread by oral ingestion (Los Angeles County Department of Public Health 2019a). The parasite is carried by approximately 5% of cats (Kravetz and Federman 2002). Symptoms of Cryptosporidium infection in humans range from no symptoms to watery diarrhea, abdominal cramps, and low-grade fever (Los Angeles County Department of Public Health 2019a). The infection typically resolves on its own.

Toxocariasis is a parasitic disease caused by nematode (i.e., roundworm) parasites, such as *Toxocara cati,* the feline roundworm which is the most common intestinal parasite in cats and having an estimated prevalence in cats of 25%–75% (Cornell Feline Health Center 2002). *T. cati* may cause no symptoms; however, it can infect the eye, resulting in eye inflammation, eye damage, or vision loss. It also may infect other organs, resulting in fever, fatigue, coughing, and pain. Humans are infected with *T. cati* by accidental oral ingestion of dirt that is contaminated with cat feces and infectious *T. cati* eggs. *T cati* ova can survive for months to years in the environment, depending on climatic conditions. Toxocariasis infection within the body occurs as the parasite larvae migrate through a person's skin, ocular tissue, heart, and other tissues (Fisher 2015). It is estimated that 14% of people in the United States have antibodies to Toxocara, suggesting exposure to *Toxocara* spp. (Woodhall et al. 2014). The infection is treatable with various medications.

Hookworm is an intestinal infection caused by nematode (i.e., roundworm) parasites. Human infections with hookworms usually include two main species of hookworm: *Ancylostoma duodenale* and *Necator americanus* (Centers for Disease Control and Prevention 2014) though humans can be infected with hookworm species carried by dogs and cats such as *Ancylostoma brazilense*, *A. caninum*, *A. ceylanicum*, and *Uncinaria stenocephala*. Among pet cats, a 2006 study identified a prevalence of 0.63% of pet cats infected with hookworm (De Santis et al. 2006) though feral cat infection has been found to be much greater and in one study in Florida reached 75% (Anderson et al. 2003). Hookworms live in the digestive systems of their hosts and their eggs are released into the digestive system and released into the environment through feces. Hookworm larvae can infect humans by penetrating through the skin; this can occur by walking barefoot in areas where parasite larvae occur. In humans, skin-penetrating hookworm larvae release enzymes that may cause allergic and inflammatory skin reactions, such as rashes or itching. Hookworm can migrate to the intestinal system and cause abdominal discomfort, diarrhea, loss of appetite, fatigue,

anemia, and weight loss (Centers for Disease Control and Prevention 2014). Human infection with animal hookworms usually result in skin infections (called cutaneous larva migrans [CLM]) rather than intestinal infections (Centers for Disease Control and Prevention 2014). CLM causes raised tracks and red itchy skin where the larvae have moved within the skin (Centers for Disease Control and Prevention 2014). The larvae typically die though in rare cases can migrate to the human intestines (Centers for Disease Control and Prevention 2014). The animal hookworm larvae that cause CLM usually do not survive more than 5–6 weeks in the human host. The infection is treatable with various medications.

Typhus fever is caused by infection from *Rickettsia typhi* or *Rickettsia felis* bacteria. Human symptoms of *R. typhi* include fever, fatigue, headache, rash, chills, malaise, myalgia, and anorexia (Tsioutis et al. 2017). Human symptoms of *R. felis* include fever, fatigue, headache, maculopapular rash, and eschar (necrotic tissue). Typhus is not directly transmitted from cats to people; humans become infected through contact with flea-carrying cats (or other mammal species that harbor infected fleas). Cats do not cause Typhus directly; rather, cats, serving as hosts, transport infected fleas into areas where humans would be susceptible to flea bites and thus infection. The cat flea, *Ctenocephalides felis*, is the main vector; however, other flea species are known to host *R. felis*. Arthropods, including mites and lice, may also be hosts. An infected flea remains infected for life. Previously, the *R. typhi* microbe persisted in the urban cycle through closely associated (i.e., commensal) rats and rat fleas; in recent years, however, it has been increasingly found in cat fleas, opossums, and feral cats. Typhus is usually transmitted through the inhalation of dried flea feces. For example, a flea bite wound containing feces becomes itchy; when scratched, the infected material can be inhaled or rubbed into the eyes (Mahajan 2012). Typhus may occur in clusters; it may also occur with high prevalence in certain regions. A metadata analysis discovered that most cases occurred during summer and early fall (Mahajan 2012). Historical records for Los Angeles County show high numbers of typhus cases in the early 1900s (Anderson 1915); over the next several decades, the numbers rapidly declined and remained low (Wekesa et al. 2016). However, flea-borne typhus in Los Angeles County has increased over the last two decades and continues to increase today, with two clusters identified in 2018, including 19 cases in downtown Los Angeles, eight of which were among the homeless; approximately 55% were associated with domestic cat exposure (Wekesa et al. 2016; Los Angeles County Department of Public Health 2016, 2019b). In one Los Angeles typhus study, 90% of resident cats and 16% of resident opossums located in proximity to human infections tested positive for typhus antibodies compared with 0% in both cat and opossum control groups (Sorvillo et al. 1993). Furthermore, Nelson et al. (2018) found that 19% of fleas sampled from both cats and opossums in Los Angeles County tested positive for *Rickettsia bacteria*, with one opossum noted as being infested with 1,087 fleas. Humans are treated with antibiotics, most often tetracyclines such as doxycycline, followed by chloramphenicol (Tsioutis et al. 2017; Wekesa et al. 2016).

Plague is cause by the *Yersinia pestis* bacterium in the family Enterobacteriaceae. If untreated, it is frequently fatal. There are three known clinical forms of plague: bubonic, septicemic, and pneumonic (Mladenova-Hristova and Tsachev 2014). The bubonic form affects the lymph nodes, which become enlarged and painful; symptoms include lethargy, fever, heart arrhythmia, motor difficulties, difficulty breathing, and sometimes lameness. The bubonic form, which can last for a few days or up to 2 to 3 weeks, can result in recovery or death. It can also transform into either the septicemic or pneumonic form of plague (Mladenova-Hristova and Tsachev 2014). The primary difference between the three forms of plague is the extent of the infection in the lungs; however, elevated body temperature is significant in the septicemic form (Mladenova-Hristova and Tsachev

2014). Plague is spread to human beings through bites from infected fleas, contact with or ingestion of infectious animals, or inhalation of *Y. pestis* bacteria, which may be aerosolized or suspended in droplets from a person or animal that has been infected with pneumonic plague (Patronek 1998). A trend in the epidemiology of plague is the emerging role of domestic cats as a source of human exposure to the disease (Pennisi et al. 2013); although plague is primarily a rodent disease, domestic cats have been reported as a source of human plague in the western United States since 1977 (Gage et al. 2000). A research study conducted in California between 1971 and 1991 identified 3.22% of cats tested positive for *Y. pestis* antibodies with a positive antibody test rate of 1.25% in Los Angeles County, with Los Angeles having a low average antibody level (titer) (Chomel et al. 1994). Approximately 8% of plague cases in the United States are attributed to transmission from cats (Gage et al. 2000). Cases of cat-associated plague are reported year-round, while flea-associated plague cases generally are restricted to warmer months of the year (Gage et al. 2000 in Gerhold et al. 2013). Plague is found worldwide; currently, the endemic foci of plague are primarily in Central and Southeast Asia, Africa, South America, and western North America (Mladenova-Hristova and Tsachev 2014). Early treatment with antibiotics is often successful. In the United States, there are reports of cats and dogs being healed by treatment with aminoglycosides (Mladenova-Hristova and Tsachev 2014). Plague vaccines are available for humans, but their precise effectiveness is not known (Centers for Disease Control and Prevention 1982). Vaccines for cats are not yet available.

Influenza is a contagious infectious disease caused by various strains of the influenza virus that can cause moderate to severe illness or even death. Influenza strains infect a wide variety of vertebrate species, although some strains have a limited range of hosts; others, such as Influenza A, infect a variety of species (Neumann and Kawaoka 2006). Influenza has been confirmed in domestic cats, including viral strains of avian influenza (i.e., bird flu) such as H5N1, the avian influenza virus, and H5N6, a highly pathogenic and deadly strain of avian influenza. Reports confirmed that cats contracted the disease from wild birds (pigeon and geese) and died as a result. Both influenza strains are transmissible to humans (Harder and Vahlenkamp 2010; Pontier et al. 2009; Klopfleisch et al. 2007; Marinova et al. 2017; Yu et al. 2015). Cats are most often infected with influenza viruses through close contact or ingestion of infected birds or uncooked poultry. They can also become infected through contaminated saliva, urine, or feces from other cats as well as inhalation or exposure to contaminated saliva associated with an isolated virus strain in humans (Thiry et al. 2007). Although domestic cats have been overlooked as potential influenza reservoirs, one study found antibodies of various influenzas viruses in up to 44% of tested domestic cats in Ohio (Ali et al. 2011). Influenza may be spread to humans by direct and indirect contact with bodily fluids or inhalation of airborne droplets from infected cats (Weinstein et al. 2003). Human symptoms of infection include flu-like symptoms (e.g., fever, muscle aches, runny nose, sore throat) (Poirot et al. 2017). However, the infection is treatable with various antiviral medications.

Diseases discussed in this section may be transmitted to humans through various mechanisms and/or animal species. Domestic cats represent one of the potential exposure/transmission routes (e.g., typhus may be spread by fleas on rats, mice, opossums, and other animals). The transmission of some diseases, such as typhus fever, is more closely associated with exposure of susceptible human groups to domestic cats. However, because of the variability in exposure and transmission mechanisms, citywide presence of susceptible human groups (see Section 4.4.2.3), and the lack of definitive empirical citywide data regarding the specific contribution of free-roaming cats to such diseases and in specific susceptible human groups, it is not feasible to quantify the existing contribution of free-roaming cats to the transmission of or exposure to such diseases in humans, including susceptible human groups in the City. However, areas within the City with higher densities

of domestic cats, and particularly free-roaming cats, may have higher risks of potential human exposure to zoonotic diseases from free-roaming cats (see Figure 4.01-1).

4.4.3 Environmental Impact Analysis

The discussion below considers the threshold of significance relevant to human health hazards, as included in Section F.2-1 of the *L.A. CEQA Thresholds Guide*. As presented in Table 3-7, Hazards Screening Analysis, of the Screening Analysis chapter and noted in Section 3.7.3, *Conclusion*, further study of the proposed Project's potential impacts on human health hazards is required in this EIR. Accordingly, the threshold allows a determination of significance related to human health hazard impacts that could occur from the proposed Project. For the purposes of this analysis and discussion, human health hazards will be considered zoonotic diseases that domestic cats may host and transmit to humans.

4.4.3.1 Impacts Analysis Method

As mentioned above, because of the variability in exposure and transmission mechanisms of diseases from animal species to humans with domestic cats representing one potential exposure/transmission route, and lack of empirical data on specific level of contribution to such diseases from free-roaming cats in Los Angeles, it is not feasible to quantify the change in frequency and severity of exposure as a result of free-roaming cat population changes under the proposed Project. However, to facilitate informed decision-making and impact analyses related to the frequency and severity of exposure to zoonotic diseases transmitted directly or indirectly from free-roaming cats, the contribution of such frequency and severity of exposure is assumed to be proportional to the size of the free-roaming cat population. As with other impacts described in this EIR, it is reasonable to assume that impacts from free-roaming cats are generally proportional and positively correlated to their population size, presuming all other influencing variables are held relatively constant over space and time. Accordingly, the discussion below describes the anticipated change in frequency and severity of human health hazards under the proposed Project in accordance with the modeled free-roaming cat population trend over the Project's 30-year horizon period.

Overall 30-Year Population Trend

As discussed in detail in Section 4.1.2.4 and as shown in Appendix J, Population Modeling, the provision of 20,000 additional annual surgeries for free-roaming cats under the proposed Project would result in a lower rate of population growth compared with baseline conditions. The number of free-roaming cats would be expected to decrease under the proposed Project over the 30-year period leading up to the horizon year of 2049 compared with baseline conditions. Specifically, there would be approximately 29,607 fewer free-roaming cats at the end of the 30-year horizon period under the proposed Project (see Table 4.1-2 in Section 4.1.2.4) compared to existing conditions (i.e., at the time of publication of the Notice of Preparation); this total includes free-roaming cats that would be released under the proposed Project and would make up between 0.18% and 1.05% of the total free-roaming cat population in the City. Under no project conditions, these released free-roaming cats would be euthanized and would not be released back to the environment.

Progressive Free-roaming Cat Population and Reproduction Trends

The proposed Project would be implemented starting with a 5-year program implementation phase wherein the release of free-roaming cats from the shelter population would gradually increase over 5 years (see Section 4.1.1, Table 4.1-2). Over this 5-year program implementation phase, the maximum release of free-roaming cats would ramp up from 416 free-roaming cats to 831 free-roaming cats, 1,247 free-roaming cats, 1,662 free-roaming cats, and finally 2,078 free-roaming cats in Years 1 through 5, respectively. Over this period, the program would provide 20,000 spay and neuter surgeries in each of those 5 years, which constitutes between 8.79% and 10.13% of the estimated total free-roaming cat population in the City. Under the proposed Project, the 5-year free-roaming cat release ramp-up period, combined with the immediate provision of 20,000 annual spay and neuter surgeries in Year 1, and the increase in number of owned cats per household from three to five (with all five owned cats being kept indoors), as modeled, results in a net decrease in the free-roaming cat population and decreased reproductive output (number of kittens born) starting in Year 2 as a result of the decreased reproductive potential of the populations and subsequent reduction in the number of kittens born (see Table 4.1-2 in Section 4.1). The subsequent 10-, 20-, and 30-year proposed Project years occur during the full program horizon period and continue to experience free-roaming cat population declines and decreasing reproductive output. The cumulative provision of an additional 600,000 spay and neuter surgeries would result in the prevention of 760,771 free-roaming kitten births over the life of the Project. The spay and neuter surgeries and subsequent population decreases starting in year 2 would result in a per-year population decrease that would be greater than the proposed release of up to 2,078 free-roaming cats per year (see Table J-3 and Section J-9 in Appendix J); therefore, the population declines would more than offset the contribution of released free-roaming cats to the overall free-roaming cat population. This is illustrated in Figure 4.1-6, which depicts the cumulative number of free-roaming cat releases (58,170).

4.4.3.2 Impacts Analysis

HAZ-1. Would the project increase the probable frequency and severity of consequences to people from exposure to the health hazard?

Frequency and Severity of Exposure to Human Health Hazards

As described above in Section 4.4.2.3, human population groups with higher risks of contracting zoonotic diseases associated with domestic cats include children, the elderly, immunocompromised individuals, the homeless, pregnant women, veterinary workers, TNR practitioners, people working in the animal/pet field, and people in high-density pet/animal settings. Locations where these groups are likely to dwell or frequent, and where zoonotic disease exposure risk may be increased (i.e., due to presence for sustained time periods at these locations), may include workplaces, residences, schools, playgrounds, childcare centers, homeless encampments, health care facilities, convalescent centers, retirement homes, and locations with high cat or animal densities. Higher free-roaming cat densities are typically associated with developed areas of the City, particularly locations where free-roaming cats are provided or have access to food and other resources (see Chapter 2, Section 2.1.3 and Chapter 4, Section 4.1.2.2 for details on free-roaming cat behavior and spatial distribution, respectively).

Of the above susceptible human groups, people with relatively higher frequency of interaction and contact with domestic cats, such as homeless, TNR practitioners, veterinary staff, and free-roaming cat

caretakers may have relatively higher potential for exposure/transmission risk to zoonotic diseases associated with domestic cats. Modes of disease transmission may include cat bites, flea bites, and ingestion of bacteria and viruses (as listed in Table 4.4-1). The susceptible human groups and the locations that they frequent/dwell are prevalent and distributed throughout most developed areas of the city, thereby making it difficult to specifically quantify potential risks of exposure and transmission of zoonotic diseases associated with free-roaming cats across such groups and across the city. However, taking into consideration available data on existing prevalence and incidence of zoonotic diseases, existing spatial distribution of free-roaming cats, confirmed locations of some highly susceptible human groups, as well as projected changes in the citywide free-roaming cat population under the proposed project, there would be potential changes to the frequency and severity of exposure to zoonotic diseases associated with free-roaming cats under the proposed Project.

As mentioned above, susceptible human groups are largely evenly distributed throughout the City. However, of these susceptible human groups, homeless populations in the city of Los Angeles are distributed throughout high-density urban and developed areas, particularly within the central, south, west, and downtown areas of the city and the San Fernando Valley (Los Angeles Homeless Services Authority 2018) where free-roaming cat densities are estimated to be high (see Figure 4.1-1). As stated in Section 4.4.2, this group is known to be at high risk for exposure to zoonotic diseases associated with free-roaming cats, due to factors such as likely increased frequency of interaction with animals including free-roaming cats, exposure to feces, fleas, potential for cat bites or scratches, combined with higher likelihood of immunocompromised individuals in this population and limited access to medical care. Due to the overlapping high-density homeless and high-density cat areas, potential exposure and transmission risks are further exacerbated among this group compared to others. However, under the proposed project, the free-roaming cat population is projected to decline over the entire City, thereby reducing potential risk of exposure to zoonotic diseases associated with free-roaming cats.

Additionally, under the proposed project, a Working Cat Program (WCP) would be implemented to provide non-lethal options for removal of unadoptable free-roaming cats from the environment (see Section 2.5.3 for proposed WCP details). Free-roaming cats trapped during TNR efforts would be eligible for the WCP. Free-roaming cats trapped within Environmentally Sensitive Areas or within 1 mile of Environmentally Sensitive Areas (see Figures 4.2-2a and 4.2-2b) would be prioritized for participation into the WCP. Cats participating in the WCP would be processed and treated similarly to adoptions under LAAS protocols. Exceptions include that the WCP cats would be placed in pairs and would be required to remain in an enclosed space without access to the outdoors. Prior to placement, all cats would be sterilized; vaccinated for rabies virus and feline viral rhinotracheitis, calicivirus, and panleukopenia virus (FVRCP); ear tipped; microchipped; dewormed; and treated for fleas. As with current LAAS adoption protocols, adopters would be required to provide ongoing care—such as daily feeding, watering, and litter box maintenance—and regular vaccinations, flea treatment, and as-needed medical treatments. WCP opportunity sites would include enclosed spaces where the cats would not have routine interactions with vulnerable populations, such as children, the elderly, or those with compromised immune systems.

Because cats participating in the WCP would not have access to the outdoors, would not be placed near susceptible human populations (e.g., schools, hospitals, playgrounds), would have their urine and feces disposed of properly, and would be regularly treated for fleas and parasites, opportunities for WCP cats to cause direct or indirect impacts on vulnerable human populations would be negligible. Furthermore, because the WCP is removing cats from the environment, it would

contribute to the reduction of impacts from free-roaming cats on vulnerable human populations citywide.

Existing TNR activities, veterinary care services, and free-roaming cat care activities are largely conducted within developed and residential areas of the City (City of Los Angeles 2019). TNR activities, veterinary care services, and free-roaming cat care activities include an inherent level of risk of human exposure to zoonotic diseases associated with free-roaming cats due to factors such as increased frequency of interaction with free-roaming cats and potential exposure to cat feces, fleas, and potential for cat bites or scratches. Under the proposed Project, the spatial distribution of TNR activities, veterinary care services, and free-roaming cat care activities throughout the City is not expected to differ relative to baseline conditions because the proposed Project is not proposing any direct elements that would change the distribution of such activities.

It is reasonable to assume that TNR activities would increase citywide under the proposed Project because of the availability of an additional 20,000 discounted/free vouchers for free-roaming cat sterilization in the City, the adoption of TNR as the City's preferred method of dealing with the free-roaming cat population, and increased community outreach and education regarding TNR. These proposed Project elements could increase free-roaming cat trapping activities and associated veterinary care services in the study area, with as many as 20,000 additional annual trapping and sterilization events. However, because the City is not directly implementing TNR activities, any potential TNR impacts related to the proposed Project would be considered indirect in nature. The anticipated increase in TNR activity as a result of the proposed Project is expected to be distributed primarily across established TNR organizations, volunteers, and veterinary clinics that already routinely participate in TNR operations across the City (see Section 4.2.2.10). As a result of increased TNR activities, there is a potential for increased frequency and severity of exposure to zoonotic diseases transmitted directly or indirectly from free-roaming cats to TNR practitioners and veterinary staff. Although it is not possible to quantify this potential increase in risk of exposure, any change is expected to be nominal because TNR practitioners should not be handling cats directly (cats are kept in secure cages and covered with a cloth until delivered to veterinary practices for sterilization procedures) and they should be trained in proper hygiene and personal protective equipment and practices. In addition, the magnitude of cat care activities in the study area is expected to decrease over time as the free-roaming cat population declines citywide. Due to this estimated decrease in the free-roaming cat population, the expected citywide frequency and severity of human exposure to zoonotic diseases associated with free-roaming cats is expected to decrease.

The above data and discussion indicate that, under the proposed Project, the free-roaming cat population would experience a net decline over time, resulting in a net citywide decrease in the free-roaming cat population and free-roaming cat reproductive output. Because the Project would result in fewer free-roaming cats over time, the proposed Project could result in an incremental reduction in the frequency and severity of exposure to human health hazards resulting from zoonotic diseases transmitted directly or indirectly by free-roaming cats. This reduction in the frequency and severity of exposure to human health hazards would apply to all populations in the city, including across all susceptible human groups. It is not possible to quantify the exact potential reduction in the frequency and severity of exposure or the exposure risk associated with fewer cats under the proposed Project; however, overall, the proposed Project would not be expected to increase the frequency or severity of exposure to human health hazards. The proposed Project also includes program implementation guidelines and ecological conservation measures for TNR, responsible feeding, and medical treatments for free-roaming cats. All recipients of vouchers for free-roaming cat sterilization would be required to commit to adhering to these guidelines through a signed

affidavit. Over time, this would further help manage the potential exposure risk to diseases associated with the presence of free-roaming cats in the City.

HAZ-1: CEQA Significance Determination

Considering the projected net decrease in the free-roaming cat population and the anticipated net reduction in cat care over the 30-year timeframe as a result of the declining free-roaming cat population citywide, the proposed Project would not result in an increase in the probable frequency and severity of consequences to people from exposure to health hazards relative to baseline conditions and the future baseline without project. Increased TNR activities would occur under the proposed Project, thereby resulting in a nominal increase in the frequency and severity of exposure to zoonotic diseases associated with free-roaming cats by TNR practitioners and veterinary staff. Impacts would be less than significant under CEQA.

4.4.4 Mitigation Measures

Human health hazards impacts from the proposed Project would be less than significant. Therefore, no mitigation is required.

4.4.5 Significant Unavoidable Adverse Impacts

The proposed Project would not result in significant unavoidable adverse impacts related to human health hazards.

4.5 Cumulative Impacts

4.5.1 Introduction

This section examines the cumulative impacts that could result from implementing the proposed Project when considered in combination with identified past, present, and foreseeable future projects. The proposed Project has been determined to have less-than-significant impacts on the environment due to the resulting decrease in the free-roaming cat reproduction, decrease in the free-roaming cat population, subsequent decrease in free-roaming cat care and maintenance activities, and negligible effects of indirect trap, neuter, and return (TNR) activities, which would result in an overall decrease in environmental impacts associated with free-roaming cats over the 30-year proposed Project period.

4.5.2 Regulatory Setting and Approach to Cumulative Impacts Analysis

According to State CEQA Guidelines Section 15130(a)(1), a "cumulative impact" consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. As stated in State CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result in part from the project evaluated in the EIR. Therefore, those thresholds of significance that result in no adverse impacts from the proposed Project are not required to be subjected to cumulative impact analysis.

Section 15355 of the State CEQA Guidelines defines cumulative impacts as two or more individual effects that, when considered together, are considerable and may compound or increase other environmental impacts. Cumulative impacts can result from individually minor, but collectively significant, projects occurring over a period of time (Section 15355(b)). Section 15130 of the State CEQA Guidelines stipulates that EIRs must consider the significant environmental effects of a proposed project as well as its contribution to cumulative impacts when the project's incremental effect is cumulatively considerable. Per Section 15065(a)(3), *cumulatively considerable* means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The standards for "significant" or "cumulatively considerable" are based on the established significance thresholds for each resource area. Per Sections 15130(b)(1)(B) and 15130(d), consistency with the projections or requirements of previously approved local, regional, statewide, or planning documents may also be a guide to determining whether a project's impact is cumulatively significant.

State CEQA Guidelines Section 15130(b) identifies the following elements as necessary for an adequate discussion of cumulative effects:

- Cumulative context in the form of a list of past, present, and probably future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified and that described or evaluated regional or area-wide conditions contributing to the cumulative impact.

- The geographic scope of the area affected by the cumulative effect and a reasonable explanation for the geographic limitation used.
- A summary of the expected environmental effects to result from those projects with specific reference to additional information stating where that information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

The cumulative impacts analysis considers long-term effects of the proposed Project—over the 30-year horizon period. These impacts may not be apparent in the near term, but they may evolve into beneficial or adverse impacts in the long term. According to the State CEQA Guidelines, the discussion and evaluation of cumulative impacts need not be as detailed as the discussion of environmental impacts attributable to the proposed Project alone. Additionally, the discussion should be guided by the standards of practicality and reasonableness. Beneficial impacts are also considered in this analysis of cumulative impacts. Beneficial impacts could be associated with reduced impacts due to the reduction in the free-roaming cat population estimated under the proposed Project or improvements to the environment from regional plan goals, policies, and mitigation measures.

4.5.3 Past, Present, and Reasonably Foreseeable Related Actions

There are two ways to address the question of which related actions should be considered in the context of past, present, and reasonably foreseeable actions when considered with the proposed Project. State CEQA Guidelines Section 15130(b) allows the discussion to proceed along the lines of either a "list of past, present, and probable future projects producing related or cumulative impacts," or to proceed with "a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative impact. Such plans may include: a general plan, regional transportation plan or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified environmental document for such a plan."

For this EIR, related plans and programs with a potential to contribute to cumulative impacts were identified using the "projection" methodology. Therefore, the cumulative impacts analysis for each resource area considers impacts related to general growth projected for the area, as well as policies and programs that are in place to protect and conserve environmental resources (i.e., biological resources and water quality) and minimize impacts on human health. The regional plans and programs for land use and natural resource conservation were consulted for the planned future conditions. General plans prepared by the City and County of Los Angeles provide information on trends and forecasts relevant to the cumulative impact analysis for specific disciplines.

The discussion below describes the plans, programs, and projections, and the context in which the proposed Project may contribute to potential cumulative impacts.

4.5.3.1 City of Los Angeles General Plan

The City of Los Angeles General Plan, approved by the City Council, is a comprehensive, long-range declaration of purposes, policies, and programs for the development of the City of Los Angeles. The

General Plan includes a Framework Element, as well as several other elements that help to guide land use and planning decisions in the City. For the purposes of the cumulative impacts analysis for the proposed Project, the Framework Element and the Conservation Element are addressed herein.

Framework Element

The General Plan Framework Element (City of Los Angeles 2001a) is a strategy for long-term growth that sets a citywide context to guide the update of the community plan and citywide elements. The Framework Element does not mandate or encourage growth. Because population forecasts are estimates about the future and not an exact science, it is possible that population growth as estimated may not occur—it may be less or it may be more. The City could be at the beginning of a long decline in population or at the beginning of a sharp increase. Should the City continue to grow, the Framework Element provides a means for accommodating new population and employment in a manner that enhances rather than degrades the environment. The Framework Element is based on a planning horizon for population and employment growth—that the City's population could increase by approximately 820,000 residents and employment by approximately 390,000 jobs.

The Framework Element's open space and conservation objectives are oriented around the conservation of significant resources, provision of outdoor recreational opportunities, minimization of public risks from environmental hazards, and use of open space to enhance community and neighborhood character. The resource conservation and management goals and policies are primarily geared toward protection of open space and natural resources from urban development and protecting open spaces for resource protection.

Conservation Element

The Conservation Element of the City of Los Angeles General Plan (City of Los Angeles 2001b) was designed to address the need to conserve and protect natural resources and open space in the City of Los Angeles. The Conservation Element provides an official guide for the City Planning Commission, the City Council, the Mayor, and other governmental agencies and interested citizens concerning the conservation, protection, development, utilization, and reclamation of natural resources. Natural resources addressed in this element include water and hydraulic force, habitats, wildlife corridors, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. As a part of the Conservation Element, the General Plan Infrastructure Element addresses water supply and demand, measures related to energy conservation and reducing the City's reliance on oil, landfill capacity assessment, wastewater discharge into the ocean and other water bodies, protection of groundwater and watershed resources, solid waste management, and electrical and other City-managed resource areas.

Primary elements that are germane to the proposed Project include, but are not limited to, conservation, endangered species, and habitats. The Conservation Element concludes that the City has a primary role in protecting endangered and other at-risk plant and animal species. The primary endangered species objective is to protect and promote the restoration, to the greatest extent practical, of sensitive plant and animal species and their habitats. Additionally, Policy 1 under this objective is to continue to require evaluation, avoidance, and minimization of potential significant impacts, as well as mitigation of unavoidable significant impacts on sensitive animal and plant species and their habitats and habitat corridors relative to land development activities. Policy 2 entails that the City continue to administer City-owned and -managed properties to protect and/or enhance the survival of sensitive plant and animal species to the greatest practical extent. The

primary habitats/ecological areas objective is to preserve, protect, restore, and enhance natural plant and wildlife diversity, habitats, corridors, and linkages to enable the healthy propagation and survival of native species, especially those species that are endangered, sensitive, threatened, or species of special concern. Policy 1 supports this objective, which is to continue to identify significant habitat areas, corridors, and buffers and to take measures to protect, enhance, and/or restore them.

Plan for a Healthy Los Angeles

The Plan for a Healthy Los Angeles (City of Los Angeles 2015) is an Element of the General Plan that lays the foundation to create healthier communities, with a new focus on public health from the perspective of the built environment and City services. The City of Los Angeles has partnered with the Los Angeles County Department of Public Health (DPH) on this initiative to build a policy foundation for healthy communities. DPH is responsible for protecting health, preventing disease, and promoting health and well-being for all persons in Los Angeles County, including providing public health services to the City. To execute its responsibilities, DPH operates a number of programs to carry out this work. Some of the specific DPH duties include data collection and analysis; health education; communicable disease control; food and water inspection and other environmental health services; maternal, child, and adolescent health services; emergency preparedness; and laboratory and clinical services.

By articulating a vision for health in Los Angeles with the assistance of Angelenos, the City is committed to creating neighborhoods of opportunity that give residents the tools to take preventive and proactive measures to prevent disease, injury, and premature death. The City influences health by shaping the urban form through land use and zoning, providing municipal services that improve residents' quality of life, and through its allocation of public resources. City departments are responsible for building and maintaining parks, providing sanitation services that keep communities clean, enforcing the City's codes, ensuring the quality and safety of housing, and maintaining public safety, among many other services that influence and promote health for Angelenos. The City's goals and vision include clean air, soil, and water, and minimized toxins, greenhouse gas emissions, and waste.

4.5.3.2 Los Angeles County General Plan

The Los Angeles County General Plan (County of Los Angeles 2015a) provides the policy framework and establishes the long-range vision for how and where the unincorporated areas will grow. It establishes goals, policies, and programs to foster healthy, livable, and sustainable communities. The General Plan uses a regional strategy to guide growth in a way that plans for more efficient and sustainable land use patterns to address climate change, mobility, and community development. The General Plan plans for total growth by encouraging development in areas with infrastructure and access to transit, and by discouraging growth in undeveloped areas and environmentally sensitive and hazardous areas. The General Plan's growth forecast is from the Southern California Association of Governments' 2012 Regional Transportation Plan, which accounts for 11.35 million people in the county (1.39 million in unincorporated areas) and 3.85 million households in the county (405,500 in unincorporated areas) by 2035.

One of the guiding principles of the General Plan includes promoting excellence in environmental management: carefully managing the county's natural resources, such as air, water, wildlife habitats, mineral resources, agricultural land, forests, and open space in an integrated way that is both

feasible and sustainable. The county contains over 844,000 acres of natural resources,[1] which represents over 51% of the county lands.

Conservation and Natural Resources Element

Per the Los Angeles County General Plan (County of Los Angeles 2015a), the County's role in the protection, conservation, and preservation of natural resources and open space areas is vital. The General Plan also states that the County must (1) act as the steward for Los Angeles County's natural resources and available open space areas, and (2) conserve and protect these lands and resources from inappropriate development patterns. The Conservation and Natural Resources Element of the General Plan guides the long-term conservation of natural resources and preservation of available open space areas. Policy C/NR 3.1 for biological resources is related to conserving and enhancing the ecological function of diverse natural habitats and biological resources, and Policy C/NR 3.10 for biological resources requires environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanent preservation of mitigation sites. The County also recognizes that the effective management and preservation of its local water resources are vital to preserving a high quality of life for residents and businesses, as well as for sustaining the functioning of watersheds and the natural environment. The County implements and enforces local programs to comply with the Clean Water Act and manage protection, conservation, and restoration of watershed functions.

Significant Ecological Areas Program

Significant Ecological Areas (SEAs) are officially designated areas within Los Angeles County with irreplaceable biological resources. The SEA Program objective is to conserve genetic and physical diversity within the County by designating biological resource areas that are capable of sustaining themselves into the future. The SEA Ordinance establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights. The SEA Program, through goals and policies of the General Plan and the SEA ordinance (Title 22 zoning regulations) helps guide development within SEAs. The General Plan goals and policies are intended to ensure that privately held lands within the SEAs retain the right of reasonable use, while avoiding activities and developments that are incompatible with the ability of SEAs to thrive in the long term. The County of Los Angeles has established, through its General Plan, conservation of SEAs (County of Los Angeles 2015a). Twenty-eight SEAs occur within Los Angeles County, 11 of which are located within the City of Los Angeles and are depicted on Figure 4.2-5.

4.5.3.3 County of Los Angeles Policies Relating to Free-Roaming Cats

The County of Los Angeles has published policies relating to free-roaming cats (County of Los Angeles 2009). There are two County agencies involved in responding to public complaints about free-roaming cats and the frequently associated problems of accumulated fecal material and flea infestations: DPH and the Department of Animal Care and Control (DACC). DPH responds to residents' complaints and determines whether site conditions represent a public health risk or public nuisance. DACC receives free-roaming cats in its six shelters. Both DPH and DACC address cat-

[1] Natural resources include all natural resources and categories (including natural areas, developed parks, waterways, golf courses, etc.), and military areas (San Clemente Island and Edwards Air Force Base).

related problems only in response to complaints from the public, and neither of these departments engage in the routine trapping and removal of free-roaming cats.

When DPH finds, in response to a complaint from the public, a flea infestation or accumulation of feces, a Notice of Violation is issued to the property owner/responsible party to abate these conditions. In response to a Notice of Violation, the responsible party may elect to trap the cats themselves or with the assistance of a licensed pest control company and surrender the cats to a local shelter. Alternatively, the responsible party may choose to chemically control the fleas on the cats and in the yard and regularly dispose of fecal material where there is a risk of human infection. In either case, DPH considers the Notice of Violation to be complied with as long as the conditions that presented the potential health risk or public nuisance have been abated. DPH does not trap cats from public or private property, nor does DPH require the responsible party to trap and eliminate cats from affected properties.

DACC's jurisdiction over animals in Los Angeles County is limited geographically to the unincorporated areas of the County and to the 50 cities it contracts with to provide animal care and control services. Other animal care and control agencies within the County may respond differently to challenges raised by free-roaming cats.

DACC does not usually trap cats unless they are sick or injured, or have bitten a member of the public. The majority of cats in County shelters are cats that have been surrendered to DACC by private owners who can no longer care for their cats, or by property owners who remove cats causing a nuisance on their property. All cats brought to County shelters are examined, treated, and held for the period required by law. With some exceptions, cats are required to be held for 6 days, pending retrieval by their owners or adoption by the public or rescue organization, but many healthy, adoptable cats are held much longer. In the event a cat required to be held at a shelter is not retrieved by its owner or adopted, the County will, as a last resort, euthanize the cat.

DACC may order a property owner to reduce the number of animals to the legally allowed number of animals. In the unincorporated areas of Los Angeles County and in many of the contract cities, a property owner may legally keep three cats, or up to five cats if all cats are spayed and neutered and live primarily indoors. Citations may be issued for failure to comply with this order.

The County of Los Angeles encourages all pet owners to act responsibly and have their cats vaccinated, microchipped, treated regularly for fleas, spayed or neutered, and confined to the owner's property. All persons interested in adopting a cat from a Los Angeles County shelter are warmly encouraged to do so.

4.5.4 Cumulative Impacts Analysis

The following impact analysis considers whether the proposed Project would make a considerable contribution to significant cumulative impacts related to biological resources, water resources, and human health hazards in the context of the past, present, and foreseeable related actions. The remaining environmental topics were screened out in Chapter 3 of the EIR.

4.5.4.1 Biological Resources

Because the proposed Project would occur throughout the City of Los Angeles, the geographic scope for cumulative impacts for biological resources includes the City of Los Angeles limits as well as those adjacent areas with overlapping or extended sensitive biological resources.

The Los Angeles Citywide General Plan Framework Final EIR (City of Los Angeles 2001c) concluded that the Framework Plan would not generate significant impacts on biological resources due to the plan's attempts to reduce ongoing effects through its policies regarding the use of open space and targeting growth within previously developed areas. The Framework Plan forecasts that population increases are to be accommodated through the reuse and intensification of development of existing developed and lower density properties. Existing natural open space that supports native plant and animal communities is not targeted for development in the Framework Plan. Because no natural open space areas would be lost as a result of placement of other targeted growth areas, no significant direct impacts on biological resources are expected under the Framework Plan.

However, the EIR noted that the current and future zoning that may be included in individual Community Plans may not provide protection of open space and natural resources. Additionally, the EIR noted that indirect impacts are mostly likely to increase in areas where targeted growth is close to natural open space. This is because of the likelihood of increased human access into natural open space surrounding the City and the effects of night-lighting, noise, and pollution that could increase with a larger population. These indirect effects constitute a significant impact on biological resources.

The EIR further acknowledges that because of its policies, growth could be pushed out to other areas of the county or neighboring counties, where protection of biological resources may be less important than growth. These effects could result in the loss of habitat for plants and animals (including some sensitive species) in these other areas. In this context, the Framework Plan is considered to have general significant cumulative impacts on biological resources. Despite policies that are designed to minimize future impacts on biological resources, further piecemeal loss of biological resources on the periphery of the City could occur. The cumulative effect of numerous small projects in natural open space would have a significant impact, as the remaining habitat for plants and animals would be fragmented and lost to piecemeal evaluation of potential projects effects.

The Los Angeles County General Plan Update EIR (County of Los Angeles 2015b) noted that implementation of the policies would have both direct and indirect beneficial effects for special-status species by emphasizing avoidance and minimization of impacts on habitats (e.g., by avoiding the most biologically sensitive areas and concentrating development in previously disturbed areas) and encouraging greater protection for habitat and resources. However, the buildout of the General Plan would result in impacts on various habitat types, which would result in the loss of special-status species through direct mortality or via indirect effects (e.g., through wildlife habitat loss and edge effects at the urban-wildland interface). As a consequence, buildout of the General Plan would have a significant adverse effect on sensitive biological resources.

Although direct impacts on sensitive biological resources would be mitigated, there is no mitigation provided for the indirect impacts on sensitive biological resources through the loss of common (i.e., non-sensitive or unprotected) habitats. Special-status species are dependent on a variety of habitat types (comprising both common and sensitive habitats), and the conversion of common habitat types with the buildout of the General Plan would result in the overall reduction of habitat and resources that support special-status species. Therefore, due to the loss of common habitats capable of supporting special-status species and diminished resource availability, impacts on special-status species remain significant at the General Plan level.

Although any direct impacts on special-status species and the loss of sensitive habitats would be mitigated, due to the loss of common habitats and diminished resource availability, impacts on special-status species remain significant at the General Plan level. It is presumed that direct impacts on special-status species and the loss of sensitive habitats would be similarly mitigated in other regions of the cumulative impacts study area. However, for the same reasons as analyzed at the General Plan level (i.e., loss of common habitats and diminished resource availability), cumulative impacts on special-status species would be cumulatively significant.

In the context of both the City of Los Angeles General Plan and the County of Los Angeles General Plan, the cumulative impact on biological resources would be considered cumulatively significant. However, for the reasons discussed below, the proposed Project would not contribute to this cumulative impact in a cumulatively considerable manner.

As discussed in Section 4.2 of this EIR, the proposed Project would allow for the return of free-roaming cats that have been spayed or neutered to the environment where they resided prior to being trapped and altered. Cats are predators, and wild mammals, birds, and reptiles are typical prey for many cats. While return of free-roaming cats within the City has the potential to result in impacts on sensitive biological resources residing within or migrating through the City, the proposed Project is consistent with the City of Los Angeles General Plan Conservation Element goals and policies pertaining to sensitive species and habitat protection. In accordance with Endangered Species Policy 1, the proposed Project would result in fewer free-roaming cats throughout the City. By the proposed Project horizon year of 2049, it is estimated that fewer free-roaming cats would be present in the City, thereby resulting in less-than-significant impacts compared to baseline and future baseline without Project (see Section 4.2). Additionally, the proposed Project includes program implementation guidelines and ecological conservation measures to reduce impacts from the existing population of free-roaming cats on the environment, including Environmentally Sensitive Areas (ESAs). It also includes the creation of a City Working Cat Program (WCP) (see Chapter 2). In accordance with habitats/ecological areas Policies 1 through 3, the proposed Project would not restrict the City's ability to identify, designate, or protect significant habitat areas, corridors, or buffers; restrict the City's ability to protect or enhance habitat areas, linkages, or corridor segments within City-owned or managed areas; or affect the ability of the City to work cooperatively with other agencies and entities in protecting local habitats and endangered, threatened, sensitive, and rare species.

While the proposed Project would result in the return of some free-roaming cats to the environment and these cats would have impacts on sensitive species and habitats, over the 30-year horizon period there would be 30,714 fewer free-roaming cats in the City under the proposed Project. Therefore, the proposed Project would not exacerbate or otherwise increase any impacts on habitat areas. The biological resources impact analysis in this EIR identified and considered the significant habitat areas throughout the City and concluded that there would be less-than-significant impacts on biological resources from the proposed Project (Section 4.2). In addition, as stated above, the proposed Project includes program implementation guidelines and ecological conservation measures to reduce impacts from the existing population of free-roaming cats and the creation of a City WCP. Ecological conservation measures include recommendations to relocate cats found in or near ESAs and avoid release of cats within 1 mile of an ESA. The proposed Project also includes measures for coordination and cooperation with third-party entities to implement the modified TNR program, to provide training for trappers, and to protect ESAs.

In conclusion, the proposed Project would not make a cumulatively considerable contribution to significant cumulative impacts on sensitive biological resources because Project impacts have been identified as less than significant due to the estimated reduction in the free-roaming cat population over time (see Section 4.2); the proposed Project would be consistent with the related plans and programs; and the proposed Project includes program implementation guidelines and ecological conservation measures that are intended to reduce the environmental impacts of the existing population of free-roaming cats, including guidelines that include restricting release of free-roaming cats into ESAs in the City, as feasible. Therefore, impacts on biological resources from the proposed Project are considered less than cumulatively considerable.

Furthermore, the related plans and programs contain goals, policies, and measures that are designed to protect, conserve, and enhance sensitive biological resources, when combined with the proposed Project, which would decrease the impacts of free-roaming cats on biological resources. Therefore, there would be a beneficial contribution to cumulative effects on sensitive biological resources within the City of Los Angeles.

4.5.4.2 Water Resources

The geographic context for the cumulative impact analysis for water resources is the area where there is a potential for impacts on water resources to occur, which includes the watersheds and receiving waters in and near the City of Los Angeles. As identified in Section 4.3, *Water Resources,* these watersheds extend beyond City boundaries. As noted in Table 4.3-2, many of the water bodies within this geographic context are identified as impaired because of bacteria, trash, excess nutrients, metals, or other toxic elements.

The Los Angeles Citywide General Plan Framework Final EIR (City of Los Angeles 2001c) notes that further urbanization from the buildout of the General Plan within Los Angeles County could result in a continuing increase in water quality degradation, and development under the plan would contribute significantly to this cumulative impact.

The Los Angeles County General Plan Update EIR (County of Los Angeles 2015b) notes that buildout in the county would involve soil disturbance, construction, and operation of developed land uses that could each generate pollutants affecting stormwater. Pollutants associated with stormwater include sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, oxygen-demanding substances, pesticides, and trash and debris. Specifically, the EIR notes that water contamination by animal fecal waste and contamination by excess organic waste are common causes of proliferation of bacteria and virus microorganisms. These impacts were determined to be less than significant upon compliance with regulatory requirements and General Plan policies. Also, as cumulative projects would be required to comply with the water-quality requirements, significant cumulative impacts would not occur.

In the context of both the City of Los Angeles General Plan and the County of Los Angeles General Plan, the cumulative impact on water resources would be considered cumulatively significant. However, for the reasons discussed below, the proposed Project would not contribute to this cumulative impact to a cumulatively considerable degree.

The proposed Project would be consistent with the related plans and programs. The City's General Plan has a number of policies and programs that are designed to improve water quality, including Stormwater Policy 9.6.3, which considers a range of strategies designed to manage stormwater pollution, including but not limited to supporting regional and City programs that intercept runoff

for beneficial uses and protect and enhance the environmental quality of natural drainage features. Additionally, Stormwater Objective 9.7 and Policy 9.7.1 encourage the City to continue to develop and implement a management- and practice-based stormwater program that maintains and improves water quality and continues the City's active involvement in the regional National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit. Similarly, the County's Goal C/NR 5, Protected and useable local surface water resources, contains policies that require compliance with adopted Municipal Separate Storm Sewer System (MS4), General Construction, and point source NPDES permits (Policy C/NR 5.2), and minimize point- and nonpoint-source water pollution (Policy C/NR 5.6). The proposed Project would not affect the City's or County's ability to implement or enforce these goals or policies, or otherwise be inconsistent with such goals or policies relating to the improvements to water quality.

While the proposed Project would result in the return of some free-roaming cats to the environment and these cats would have impacts on water quality, over the 30-year horizon period there would be 30,714 fewer free-roaming cats in the City under the proposed Project. Consequently, impacts such as the potential for the deposit of feces and associated pollutant impacts on water resources would continue to decrease over the 30-year horizon period (see Section 4.3). The proposed Project includes program implementation guidelines and ecological conservation measures that are intended to minimize the environmental impacts of the existing population of free-roaming cats, including guidelines that restrict the release of free-roaming cats into ESAs in the City, as feasible. Additionally, the proposed Project includes the creation of a City WCP (see Chapter 2) that would prioritize free-roaming cats trapped in ESAs to further reduce the number of cats being returned to the ESAs, thereby further helping reduce impacts on water quality.

In conclusion, the proposed Project would not make a cumulatively considerable contribution to significant cumulative impacts on water resources because Project impacts have been identified as less than significant due to the estimated reduction in the free-roaming cat population over time (see Section 4.3); the proposed Project would be consistent with the related plans and programs; the program implementation guidelines and ecological conservation measures would help reduce the water quality impacts of the existing population of free-roaming cats; and existing regulations would further protect water quality, including the Clean Water Act, NPDES regulations of nonpoint-source pollution, the City/County MS4 permits that include best management practices to reduce discharge of pollutants, and the Regional Water Quality Control Board LA Basin Plan to protect beneficial uses and achieve water quality objectives. Therefore, impacts on water resources from the proposed Project are considered less than cumulatively considerable.

Furthermore, the related plans and programs contain goals, policies, and measures that are designed to protect, conserve, and enhance water resources, when combined with the proposed Project, which would decrease the effects of free-roaming cats on water resources. Therefore, there would be a beneficial contribution to cumulative effects on water resources within the City of Los Angeles.

4.5.4.3 Human Health Hazards

The geographic context for the cumulative impact analysis is the area where there is a potential for impacts to occur from exposure to human health hazards. Because the proposed Project would occur throughout the City of Los Angeles, the geographic context is the City of Los Angeles.

Neither the Los Angeles Citywide General Plan Framework Final EIR (City of Los Angeles 2001c) nor the Los Angeles County General Plan Update EIR (County of Los Angeles 2015b) discuss human health hazards that are similar to those that could occur as a result of the proposed Project. The closest topics addressed are those related to potential impacts from hazardous materials or risk of upset. Therefore, the cumulative impacts related to human health hazards are addressed in this context.

The Framework EIR notes that the implementation of the Framework Plan may result in greater local exposure of populations to various hazards. Because increased development would be exposed to existing hazardous materials risks, the impact is significant. The Framework Plan would generate risk of upset by supporting activities that require the use of hazardous materials. The increase in activity levels would result in the increase of hazardous materials, thereby increasing the risk of upset. However, the Framework Element does not itself result in land use changes that would exacerbate risks or hazardous materials impacts. The County General Plan EIR concludes that additional hazards that may result are not considered to generate cumulatively significant impacts within Los Angeles County with adherence to existing federal, state, and local regulations that would minimize the risks associated with hazardous materials/wastes. Overall increase in potential upsets is considered to be adequately controlled.

In the context of both the City of Los Angeles General Plan and the County of Los Angeles General Plan, the cumulative impact on human health hazards would not be considered cumulatively significant. Additionally, for the reasons discussed below, the proposed Project would not contribute to this cumulative impact to a cumulatively considerable degree.

The proposed Project would be consistent with the related plans and programs. The City of Los Angeles Plan for Healthy Los Angeles has a number of policies and programs that are designed to promote and improve health throughout the City. For instance, Policy 1.3, Prevention, promotes healthy communities by focusing on prevention and interventions, and by addressing the root causes of health disparities and inequities in Los Angeles, and Policy 1.5, Plan for Health, is intended to improve Angelenos' health and well-being by incorporating a health perspective into land use, design, policy, and zoning decisions through existing tools, practices, and programs. Additionally, the County's policies on free-roaming cats help to minimize health problems related to flea infestation and accumulation of feces, and human infection associated with these issues. The County also examines, treats, and holds cats that are surrendered to shelters, and may order owners to reduce the number of animals allowed by a property owner. The proposed Project would not affect the City's or County's ability to implement these goals or policies, or otherwise be inconsistent with such goals or policies relating to public health.

The proposed Project would not result in an increase in the probable frequency and severity of consequences to people from exposure to health hazards, and impacts have been identified as less than significant (see Section 4.4). Human health hazards are regulated and monitored by various local and state regulations and agencies with regard to zoonotic, vector-borne, and other transmissible diseases. The proposed Project would be consistent with related goals, objectives, and policies. In addition, as described in Chapter 2, the proposed Project includes program implementation guidelines and ecological conservation measures (see Chapter 2) that are intended to minimize the environmental and human health impacts of the existing population of free-roaming cats.

In conclusion, the proposed Project would not make a cumulatively considerable contribution to significant cumulative impacts on human health because Project impacts have been identified as less than significant due to the estimated reduction in the free-roaming cat population over time (see Section 4.4); the proposed Project would be consistent with the related plans and programs; and the implementation guidelines would reduce the human health impacts of the existing population of free-roaming cats. Therefore, impacts related to human health hazards from the proposed Project are considered less than cumulatively considerable.

Chapter 5
Comparison of Alternatives

5.1 Introduction

This chapter identifies alternatives to the proposed Project and compares the environmental effects associated with them to those of the proposed Project. State CEQA Guidelines Section 15126.6(a) requires that an EIR evaluate "a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects, and evaluate the comparative merits of the alternatives."

An EIR need not consider every conceivable alternative to the project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives that are infeasible.

State CEQA Guidelines Section 15126.6(b) requires that the alternatives discussion focus on alternatives to the project or to the project location that can avoid or substantially lessen any significant effects of the project, even if these alternatives would impede, to some degree, the attainment of the project objectives, or would be more costly. Furthermore, as noted in State CEQA Guidelines Section 15126.6(c), the range of potential alternatives to the proposed project evaluated in an EIR must feasibly accomplish most of the basic objectives of the project and avoid or substantially lessen one or more of the significant effects. The lead agency is responsible for selecting a range of project alternatives to be evaluated and must disclose in the EIR its reasoning for selecting those alternatives as well as identify and explain why alternatives that may have been considered by the lead agency during the scoping process were rejected as infeasible. The lead agency may use the following factors to eliminate alternatives from detailed consideration: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

The proposed Project has the following objectives:

1. Facilitate spaying and neutering of cats in the City.
2. Reduce the relative number of free-roaming cats in the City over time.
3. Facilitate more public and community education on animal-related topics, including free-roaming cats.
4. Train Animal Services Center staff members on cat management programs and engage in collaborative efforts with local rescue groups to help respond to and address free-roaming cat issues.
5. Further implementation of the City's no-kill policy by reducing the rate of euthanasia of cats in City animal services centers.
6. Adopt trap, neuter, and return (TNR) as the preferred policy to humanely address free-roaming cats.

5.2 CEQA Alternatives Considered

State CEQA Guidelines Section 15126.6(f) notes that the range of alternatives evaluated in an EIR are governed by rule of reason and must include only those alternatives that are necessary to permit a reasoned choice. Further, identified alternatives should avoid or substantially lessen the project's significant effects, and, of these, only the alternatives that the lead agency determines could feasibly attain most of the basic objectives of the project should be analyzed in detail.

5.2.1 No Project Alternative

State CEQA Guidelines Section 15126.6(e) requires that, among the project alternatives, a "no project" alternative be evaluated. State CEQA Guidelines Section 15126.6(e)(2) requires that the No Project Alternative analysis "discuss the existing conditions…as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and policies and consistent with the available infrastructure and community services."

Under the No Project Alternative, the City would not be able to engage in TNR, nor would it be able to facilitate others to engage in TNR in any way, such as through funding, outreach, education, or collaboration with organizations that engage in TNR. The City will continue to operate in accordance with its current regulatory approach wherein the City provides traps and trapping permits for City residents wishing to trap nuisance cats (which could include owned or free-roaming cats) and take them to one of the six City animal services centers that accepts trapped cats. Once the cats are received, they would be scanned for a microchip to determine if they are owned, in an attempt to reunite them with their owners. If no owner can be identified, they would typically be held at the animal services center for the 4-day holding period and then made available for adoption at the center. In accordance with California law requirements, Los Angeles Animal Services (LAAS) will continue to release any impounded stray cat to any nonprofit, animal rescue or adoption organization if requested by the organization prior to the scheduled euthanasia of that animal. However, LAAS could continue to release a free-roaming cat to a nonprofit, animal rescue, or adoption organization only if the organization signs an affidavit with the City that it will not return the cat back to the environment and will sterilize it within 30 days of taking it in and produce a veterinary certification. In addition, any cat that has not been spayed or neutered will not be released by LAAS, public animal control agencies or shelters, Society for the Prevention of Cruelty to Animals shelters, Humane Society shelters, and rescue groups to a new owner (California Civil Code Sections 1815, 1816, 1834, 1834.4, 1845, 1846, 1847 and 2080; and California Food & Agricultural Code Division 14.5, Regulation of Cats). For any cats kept at the animal services centers, City-contracted clinics at these centers would continue to provide spay and neuter services to owned cats of the general public and also to stray cats that are past their holding period at the centers. Any cats that are not adopted, transferred to a nonprofit, animal rescue, or adoption organization organizations (who have signed the aforementioned affidavit), or returned to their owners, would be humanely euthanized.

There would be no City-funded sterilization of all cats in the City, regardless of the cat's status as either owned pet, stray, or feral, nor would there be any spay and neuter of free-roaming cats that would be returned by their caretakers or a rescue organization to where they were found, relocated to a working cat program, or adopted. The free-roaming cat population would not decline under the No Project Alternative; instead, as indicated by the population modeling results in Section 4.1 and

Appendix J, the free-roaming cat population would continue to increase from 226,970 cats at baseline to 228,077 cats at the end of the 30-year horizon period, an increase of approximately 1,107 cats. In addition, euthanasia of free-roaming cats that are not or cannot be adopted would continue, and they would not be released to the environment. Thus, up to approximately 4,065 free-roaming cats would continue to be euthanized each year by LAAS; none of these cats would be released to TNR organizations, who may return them to free-roaming status.

The Animal Sterilization Funds would continue to be used for sterilization of "pets" only per Section 5.199 of the Los Angeles Administrative Code (LAAC); no funds would be used toward sterilization of free-roaming cats.

The definition of *cat kennel* would exclude any location where three or fewer cats are kept; anything above that would require a permit in accordance with Los Angeles Municipal Code (LAMC) Section 53.50, which requires a permit from the City to "conduct or operate within the City of Los Angeles any dog kennel, cat kennel, zoo, animal rental establishment, animal grooming parlor, riding academy, livery stable, boarding stable, pony ring or pony ride, horse market, mule market, circus, rodeo, etc."

Under the No Project Alternative, the City would not adopt TNR as its preferred policy to humanely address free-roaming cats, and would not in any way facilitate or conduct education or public outreach activities related to TNR. No discounted or free vouchers would be provided to the public for TNR activities for feral cats.

5.2.2 Citywide Cat Program Alternatives Considered

The proposed Project would not result in significant impacts on the environment (Sections 4.2, 4.3, and 4.4); accordingly reduction of significant impacts was not a factor considered in the development of alternatives to the Project. Scoping comments received for this EIR inform the identification and development of alternatives to the proposed Project. Based on initial consideration, the following represent a reasonable range of alternatives to the proposed Project and have been identified by the City for consideration in this EIR.

1. **Alternative 1: Use of resources (for approximately 20,000 spay/neuter vouchers) for free/low-cost sterilization of owned cats instead of unowned cats.** Additional LAAS resources would be used to subsidize the sterilization of owned cats only and would not be used for free-roaming cats as being proposed under the Citywide Cat Program. This would provide an additional 20,000 free/discounted sterilization vouchers to the public for owned cats.
2. **Alternative 2: Enact a no-roaming ordinance for owned cats.** A no-roaming ordinance for owned cats or enacting limits on roaming of owned cats would prohibit or restrict roaming of owned cats outside their owner's property.
3. **Alternative 3: Require licensing for owned cats**. Required licensing for owned cats would entail registering all owned cats with LAAS and the cats being issued a unique identification number on a license tag that can be worn on a collar. The issued license tag would also identify the owner of the cat. Under this alternative, people who find a cat with a tag would be able to call LAAS on the number printed on the tag for identification of the owner, so the cat can be reunited with its owner. If a lost cat with a license tag is brought into one of the City's animal services centers, LAAS staff can identify the registered owner by the tag number and contact them; during this time the animal would be held at the animal services center.

4. **Alternative 4: Enact a City ban on outdoor feeding of owned or free-roaming cats.** Enacting an express ban on outdoor feeding of owned and free-roaming cats would reduce access to human-subsidized food by banning feeding of all cats outdoors or in an unenclosed space. At present, except as permitted by the California Department of Fish and Wildlife, no person may "feed or, in any manner, provide food or cause to be fed any non-domesticated mammalian predator, including, but not limited to, coyotes, foxes, possums, raccoons, and skunks" (LAMC Section 53.06.5). Cats are domestic animals and not considered to be non-domesticated mammalian predators, and thus feeding cats is not currently banned in the City.
5. **Alternative 5. Enforce mandatory spay/neuter of owned cats.** The City of Los Angeles already requires owned cats to be spayed or neutered; this alternative proposes increased enforcement activities to ensure compliance with the existing mandatory spay/neuter ordinance, which was approved by City Council on February 12, 2008, and requires all cats and dogs in the City to be spayed or neutered after the age of 4 months, with some specific exemptions allowed (LAMC Section 53.15.2).
6. **Alternative 6: Facilitate free trapping/certified trapping and streamlined permitting to surrender stray/feral cats to shelter without return to the environment/direct removal.** Free-roaming cat trapping would be streamlined and/or facilitated, and trapped cats would not be returned to the environment; they would either be adopted out, transferred to a City partner who signs an affidavit noting they will not release the cat back to the environment, transferred to a working cat program or a cat sanctuary, or, as a last choice, euthanized if none of the aforementioned options are feasible. Streamlining and/or facilitating trapping efforts would aim to increase trapping rates relative to the No Project Alternative conditions.
7. **Alternative 7: Reduce the number of permissible cats per residence in the City of Los Angeles.** This alternative would reduce the number of cats permitted per residence in the City to less than the currently permitted three. Beyond this number of cats, in accordance with LAMC Section 53.50, a permit is required from the City to "conduct or operate within the City of Los Angeles any dog kennel, cat kennel, zoo, animal rental establishment, animal grooming parlor, riding academy, livery stable, boarding stable, pony ring or pony ride, horse market, mule market, circus, rodeo, etc."
8. **Alternative 8: Enact dusk-to-dawn curfews for owned cats so that they are kept in at night when most predation occurs.** This alternative would enact a City ban on owned cats being allowed outdoors by their owners during the hours between dusk and dawn (typically between sunset and sunrise). During this time, pet owners would not allow their cats to roam outdoors and would keep them indoors or in an enclosed space within their property.
9. **Alternative 9: Limit number of permissible cats based on residence square footage (Minimum square footage required per cat)**. The City of Los Angeles currently allows up to three cats per residence in the City irrespective of the square footage of the residence. This alternative would link the number of owned cats allowed per residence in the City to the size or square footage of the residence.
10. **Alternative 10. Ban pet owners from allowing their animals to trespass on the private property of another person without the consent of such person, any unenclosed private property or any public property.** This alternative would ban pet owners from allowing their cats to be outdoors and trespass on the private property of another person without the express consent of such a person; it would also ban cats on any unenclosed private property or public property. Currently, spayed or neutered cats can be indoor, indoor/outdoor, or outdoor cats

(LAMC Section 53.06). Cats that have not been spayed or neutered that are also not in heat or season are exempted from the general proscription against allowing animals to roam at large, as follows: "No person owning or having possession, charge, custody, or control of any animal, except cats that are not in heat or season, shall cause, permit, or allow the animal to stray, run, or, in any manner, be at large in or upon any public street, sidewalk, or park, except as otherwise expressly provided in Section 63.44 of this code, or in the bed of the Los Angeles River or upon any unenclosed lot or land" (LAMC Section 53.06).

11. **Alternative 11**: **Alternative locations in areas with lower resource sensitivity where appropriate.** This alternative would implement the Citywide Cat Program in alternative locations to the City of Los Angeles.
12. **Alternative 12: Trap and euthanize free-roaming cats.** This alternative proposes trapping and euthanizing free-roaming cats in the City. Under this alternative there would be no options to euthanasia such as adoption, or transfer to a nonprofit, animal rescue, or adoption organization; a working cat program; or a cat sanctuary for cats impounded at the animal services centers and whose owner cannot be identified.

5.3 Screening of Alternatives Considered

Pursuant to State CEQA Guidelines §15126.6(c), an EIR should "identify any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination." The screening process for identifying viable EIR alternatives included consideration of an alternative's ability to meet the Project objectives.

As stated in Section 5.1, the proposed Project has the following six objectives:

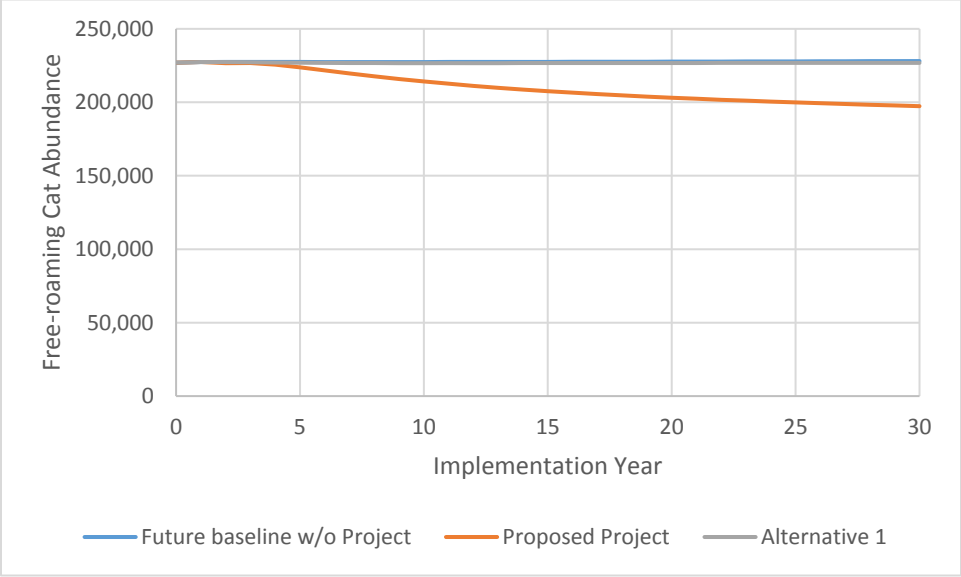
1. Facilitate spaying and neutering of cats in the City.
2. Reduce the relative number of free-roaming cats in the City over time.
3. Facilitate more public and community education on animal-related topics, including free-roaming cats.
4. Train Animal Services Center staff members on cat management programs and engage in collaborative efforts with local rescue groups to help respond to and address free-roaming cat issues.
5. Further implementation of the City's no-kill policy by reducing the rate of euthanasia of cats in City animal services centers.
6. Adopt TNR as the preferred policy to humanely address free-roaming cats.

Of the six Project objectives, the screening of alternatives focuses on the key Project objectives #1, #2, and #5. These objectives are considered key as the remaining objectives #3 and #4 are broad enough that they can be accomplished by addition to any of the considered alternatives presented in Section 5.2.2 above, and objective #6 is too narrowly defined to apply to the other alternatives. Therefore, to ensure that each considered alternative is evaluated objectively, meaningfully, and systematically the alternatives screening analysis focuses on whether an alternative meets the proposed Project's objectives #1, #2, and #5.

To substantiate whether an alternative meets objective #2, where feasible, the population model described in Appendix J was iterated to show how the free-roaming cat population changes over the 30-year horizon period under a considered alternative; this was quantitatively feasible for Alternatives 1, 2, 3, and 6 and is discussed in Table 5-1. The free-roaming cat population abundance results under each of these alternatives are presented below (along with the proposed Project and No Project Alternative results) and referenced in the subsequent Table 5-1.

Under Alternative 1, (where resources of approximately 20,000 spay/neuter vouchers would be used for free/low-cost sterilization of owned cats instead of unowned cats), 20,000 sterilization surgeries annually were added to the estimated baseline owned cat population in the model over the 30-year horizon period. This allows for a comparison of the free-roaming cat population abundance under Alternative 1, compared to the future baseline without Project and the proposed Project. Figure 5-1 presents the results; Table 5-1 describes these results under the screening analysis for Alternative 1 against objective 2. As seen in Figure 5-1, over the 30-year time horizon identified for the proposed Project, under Alternative 1, the free-roaming cat population is larger (by 808 cats in year 2, increasing to 29,476 cats in year 30) compared to under the proposed Project. Compared to the future baseline without Project (where no additional surgeries would be implemented in the owned cat population), the free-roaming cat population under Alternative 1 is only slightly smaller (by 1,238 cats) over the same time horizon.

Figure 5-1. Alternative 1: Free-roaming Cat Population Abundance



Under Alternative 2 (where the City would enact a no-roaming ordinance for owned cats) and Alternative 3 (where the City would require licensing for owned cats), for purposes of discussion and to be conservative, in the model it was assumed that 0% of cats transition from the owned to the stray subpopulation (see Appendix J, Section J.6, *Subpopulation Interactions*). That is, theoretically, Alternatives 2 and 3 could result in a 0% transition rate of cats from the owned cat subpopulation to the stray subpopulation (i.e., getting lost or abandoned) over the 30-year horizon period. This allows a comparison of the free-roaming cat population abundance under Alternatives 2 and 3, to the future baseline without Project and the proposed Project.

Figures 5-2 and 5-3 present the results for Alternatives 2 and 3, respectively – they are the same. Table 5-1 describes these results under the screening analysis against objective 2 for Alternatives 2 and 3, respectively. As seen in both figures, under Alternatives 2 and 3, while initially the free-roaming cat population would be smaller than the proposed Project over the first few years (1,080 smaller in year 1; 295 smaller in year 2; 303 smaller in year 3) owing to the effective elimination of the stray subpopulation in the model due to a zero transition rate from the owned cat subpopulation to the stray cat subpopulation in the model, over the 30-year horizon period, the free-roaming cat population would be larger (over 29,535 cats in year 30) compared to the proposed Project. When compared to the future baseline without Project (wherein there would not be a no-roaming ordinance), the free-roaming cat population would be smaller by 1,180 cats at the end of the 30-year horizon period.

Figure 5-2. Alternative 2: Free-roaming Cat Population Abundance

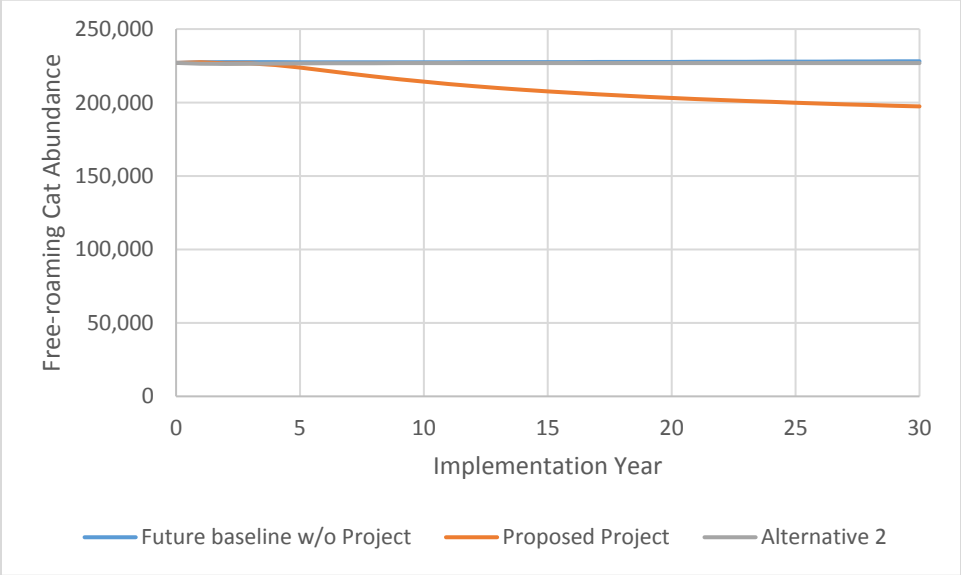
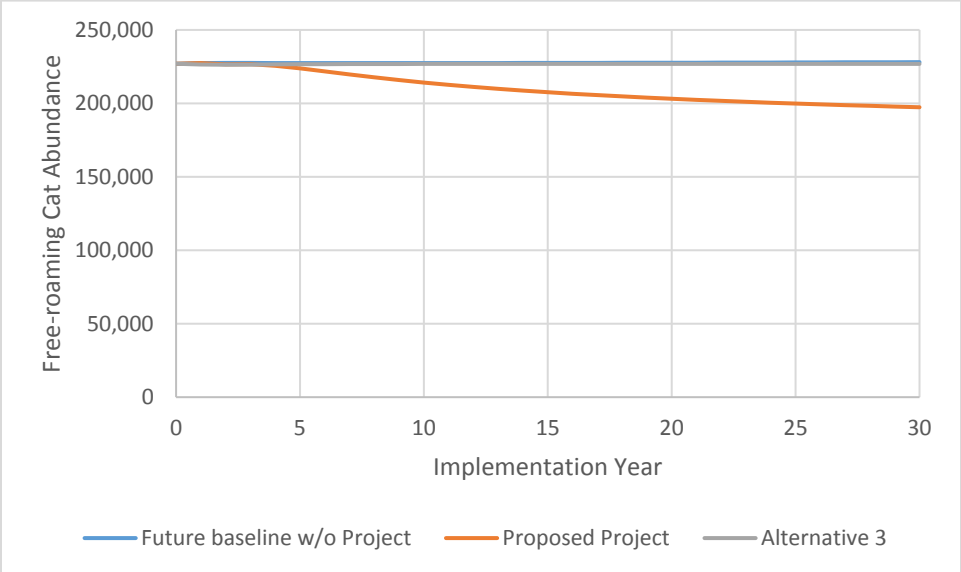


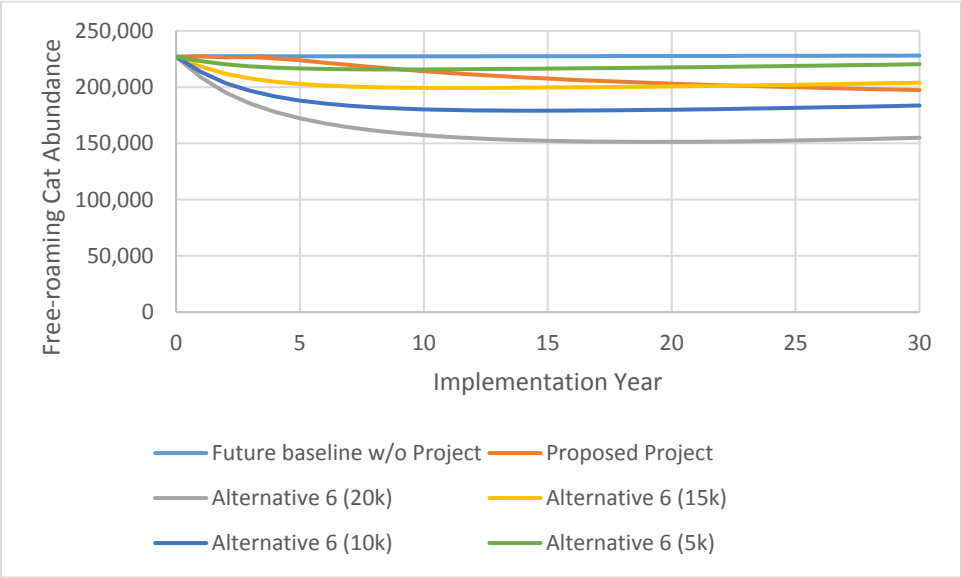
Figure 5-3. Alternative 3: Free-roaming Cat Population Abundance



Under Alternative 6 the City would facilitate free/certified trapping and streamlined permitting of traps for surrender of free-roaming cats to animal services centers without return to the environment/direct removal from the environment;, the cats would be adopted out; transferred to a City partner who signs an affidavit noting they will not release the cat back to the environment; transferred to a working cat program, or a cat sanctuary; or, as a last choice, euthanized if none of the aforementioned options are feasible. Under Alternative 6 it would be reasonable to assume that the magnitude of the reduction in the free-roaming cat population abundance would be commensurate with the magnitude of the trapping effort and cats that are impounded at the animal services centers and transition out of the free-roaming subpopulation to the owned subpopulation (adopted out, transferred to a working cat program, or a cat sanctuary, or as a last choice, euthanized). For discussion purposes, a range of non-return of cats to the environment/direct removal from the environment (i.e., 5,000 cats, 10,000 cats, 15,000 cats, and 20,000 cats) was modeled to demonstrate the impact on the free-roaming cat population under Alternative 6. Thus, the model was iterated at each of the four levels of non-return/direct removal from the environment to demonstrate how the free-roaming cat population abundance would change if 5,000 cats, 10,000 cats, 15,000 cats, and 20,000 cats transition from the free-roaming subpopulation of the model to the owned subpopulation (see Appendix J, Section J.6, *Subpopulation Interactions* for subpopulation transitions). This allows for a comparison of the free-roaming cat population abundance under Alternative 6 at each of the four levels, compared to the No Project Alternative and the proposed Project. Figure 5-4 presents the results; Table 5-1 describes these results under the screening analysis for Alternative 6 against objective 2.

As shown in Figure 5-4, free-roaming cat population modeling of this alternative indicates that non-return/direct removal of free-roaming cats reduces the free-roaming cat population over time, with larger numbers of annual trapping events and subsequent non-returns/direct removals from the environment resulting in larger population declines than smaller efforts (e.g., trapping and removal of 5,000 versus 20,000 free-roaming cats annually). Under Alternative 6, the population model estimated that with 20,000 free-roaming cat trapping and removal events (used as a comparison point for 20,000 spay/neuter surgeries being proposed under the Project), in year 30 the citywide free-roaming cat population would decline to about 155,051 cats (see Figure 5-4) compared to 197,363 cats under the proposed Project and 228,077 cats under the future baseline without Project. Thus, under Alternative 6 there would be 42,312 fewer cats compared to the Project and 73,026 fewer cats compared to the future baseline without Project over the 30-year horizon period.

Figure 5-4. Alternative 6 Scenarios: Free-roaming Cat Population Abundance



It was not feasible to quantitatively analyze the potential impacts of any of the other alternatives being considered using the population model due to the inherent difficulty and uncertainly in expressing the implications of those alternatives in a quantitative manner with a bearing on any of the population model parameters (see Table J-2).

Table 5-1 presents the screening analysis for each of the 12 considered alternatives based on their ability to meet the key objectives #1, #2, and #5, and provides the reasons for eliminating an alternative from further consideration in the EIR, where applicable. An alternative deemed to meet at least two of the three objectives is carried forth for detailed analysis in Section 5.4, *Comparison of Alternatives Analyzed*; if an alternative meets only one of the three objectives, it is eliminated from further consideration and not analyzed in the EIR.

Appendix N presents the alternatives analyses population modeling data underlying the charts presented above.

Table 5-1. Screening of Alternatives Considered

ALTERNATIVE	OBJECTIVE 1 Facilitate spaying and neutering of cats in the City.	OBJECTIVE 2 Reduce the relative number of free-roaming[1] cats in the City over time.	OBJECTIVE 5 Further implementation of the City's no-kill policy[2] by reducing the rate of euthanasia of cats in City animal services centers.	Objectives Met	Carried Forward for Analysis
Alternative 1. **Use of resources (for approximately 20,000 spay/neuter vouchers) for free/low-cost sterilization of owned cats instead of unowned cats.**	Yes This alternative would facilitate spaying/neutering of cats in the City.	Yes Increasing sterilization of owned cats (sterilization is estimated at 93% for owned and stray cats as stated in Table J-2 in Appendix J) would lead to lower fecundity in the owned cat subpopulation, thereby reducing their population growth rate. As presented in Table J-2, 0.14% is the estimated proportion of owned cats that are lost or abandoned (i.e., transition into the stray cat subpopulation) each year; with the lower population growth rate of owned cats and subsequent reduction in the population size under Alternative 1, it is anticipated that the number of owned cats that are typically lost/abandoned and transition to the stray cat subpopulation (of the free-roaming cat population in the City) may accordingly decline, thereby reducing the number of owned cats that transition to the stray subpopulation in the City. Therefore, Alternative 1 would have the indirect effect of a slight relative reduction in free-roaming cat population size in the City due to fewer owned cats transitioning to the stray subpopulation. This alternative would not directly affect the feral cat subpopulation of the City. As seen in Figure 5-1, over the 30-year time horizon identified for the proposed Project, under Alternative 1, the free-roaming cat population is larger (increasing from 808 cats in year 2 to 29,476 cats in year 30) compared to under the proposed Project; compared to the future baseline without Project (where no additional surgeries would be implemented in the owned cat population), the free-roaming cat population under Alternative 1 is only slightly smaller (by 1,238 cats) over the same time horizon. Thus, the free-roaming cat population under Alternative 1 declines initially and over time by 1,238 cats over the 30-year time horizon, largely remaining stable; this is likely due to the sufficiently maintained fecundity of the free-roaming cat population. Accordingly, Alternative 1 would likely result in a nominal reduction in free-roaming cats in the City compared to the future baseline without Project but this would a much smaller decrease compared to the proposed Project. As mentioned in Section 2.3.3, the City has a mandatory spay/neuter ordinance for owned cats. It is also important to consider that each year, LAAS has provided 72,003 free/discounted vouchers to residents of the City for sterilization of owned cats since 2010; in 2019, 54.09% remain unused despite increased public outreach efforts, including mention on TV, radio, and social media channels such as	No The free-roaming cat population fecundity is significantly higher than that of owned cats, because the feral subpopulation has a much lower sterilization rate than the owned subpopulation (see Section E.4.3 in Appendix J). Under Alternative 1, owned cat fecundity is reduced, resulting in fewer owned cats transitioning to the stray subpopulation. The contribution to shelter intakes from the free-roaming population would continue, albeit with a relatively lower projected contribution from the stray subpopulation in accordance with fewer owned cats transitioning to this subpopulation. As seen in Figure 5-1, the free-roaming cat population as modeled under Alternative 1 with 20,000 additional sterilization surgeries being directed to the owned cat population is progressively higher (by 808 cats in year 2 increasing to 29,476 cats in year 30) compared to under the proposed Project over the 30-year horizon period; compared to the future baseline without Project, it is only slightly lower (by an average of approximately 1,238 cats). Thus, despite the slightly lower relative transition of owned cats into the stray subpopulation (due to lower fecundity in the owned cat population under Alternative 1), the free-roaming cat population size would not change considerably compared to the future baseline without Project and would be progressively higher compared to the proposed Project; in addition, the free-roaming cat population reproductive rate would remain high due to the contribution of high fecundity from the feral cat subpopulation. Intake into the animal service centers and specifically the shelter subpopulation considered in the population model for this Project (see Section J.4.1 in Appendix J), typically comprises owned cats (owner-relinquished); stray cats that were previously owned and became lost/abandoned, but are social toward humans; and feral cats who are typically not previously owned and are unsocial toward humans. Owner-relinquished and stray cats that come into the shelter subpopulation are frequently successfully adopted (per data from the LAAS *Chameleon* system, 86% of cats impounded were adopted), barring an unusual medical or behavioral condition that may warrant euthanasia; feral cats that come into the shelter subpopulation are largely unlikely to be adopted due to their unsocial behavior toward humans and thus much more likely to be euthanized or may also be released to an LAAS partner rescue organization that signs an affidavit that they will not release the cat back to the environment and if needed, will sterilize it within 30 days and produce a veterinary certification. Under Alternative 1, the free-roaming cat population size would be slightly smaller compared to the future baseline without Project (see Figure 5-1) but would largely remain stable over the 30-year horizon	Objectives 1 & 2	Yes

[1] As defined in Chapter 2 of this EIR, free-roaming cats include all unowned, roaming cats, including feral cats and stray cats.

[2] In 2003, Mayor James Hahn set a goal for Los Angeles to become a no-kill city by 2008. Although 2008 did not find Los Angeles a no-kill city, the City of Los Angeles has continued efforts to achieve that goal. At a no-kill shelter, at least 90% of the dogs and cats entering the shelter are expected to be a released alive to the owner (if lost), a new home, or a rescue partner. The City of Los Angeles' no-kill statistics are based on total noses in and total noses out. Additional information is available at http://www.laanimalservices.com/no-kill/. As of May 2018, approximately 86% of intake cats at the animal service centers were adopted, released to 501c3 Rescue organization, or returned to owner.

ALTERNATIVE	OBJECTIVE 1 Facilitate spaying and neutering of cats in the City.	OBJECTIVE 2 Reduce the relative number of free-roaming[1] cats in the City over time.	OBJECTIVE 5 Further implementation of the City's no-kill policy[2] by reducing the rate of euthanasia of cats in City animal services centers.	Objectives Met	Carried Forward for Analysis
		Facebook, Twitter, and Instagram; press releases; annual Spay Day Celebrations; and other promotions by City partner groups promoting spay/neuter. Thus, under Alternative 1, even with the provision of additional sterilization vouchers for owned cats, it would be difficult to ensure increased utilization of vouchers toward achieving 100% sterilization of owned cats in the City.	period. The contribution to shelter intakes from the free-roaming cat population would continue, albeit with a slightly lower relative contribution from the stray subpopulation in accordance with fewer owned cats transitioning to this subpopulation. It is reasonable to conclude that the net intake into the animal services centers would remain unchanged under this alternative. In addition, the euthanasia rate at the centers, which is driven mainly by medical necessity, extreme behavioral considerations, or capacity limitations, would not be expected to change due to intake largely remaining unchanged. Thus, Alternative 1 would not further the implementation of the City's no-kill policy by reducing the rate of euthanasia in the City's animal service centers. It is important to consider that with the slight reduction in stray cat abundance and subsequent intake into animal service centers under this alternative, it is possible that the capacity for and intake of feral cats into the centers may slightly increase. Feral cats, due to their unsocialized behavior, are much less likely to be adopted and are more likely to be euthanized compared to stray cats, and thus the euthanasia rate at animal service centers may increase compared to baseline conditions and the future baseline without Project, as well as the proposed Project where the free-roaming cat population abundance would be fewer by thousands of cats over the 30-year horizon period than under Alternative 1. Pet ownership rates in the City are assumed to remain the same under Alternative 1. With the reduced reproduction of owned cats and fewer kittens being born, it is acknowledged that there is potential for pet adoptions to increase to meet the sustained pet ownership demand in the City. Thus, non-owned cats, including stray cats and possibly feral cats, may experience increased adoptions; however, as mentioned above, adoption of feral cats is more unlikely due to their unsocialized behavior, unless they are adopted as kittens (up to 8–12 weeks) when socialization success rates can be higher. Accordingly, it is reasonable to assume that these adoptions would not notably change the euthanasia rates at animal service centers enough to further implementation of the City's no-kill goal or reduce it sufficiently to achieve a no-kill status.		
Alternative 2. **Enact a no-roaming ordinance for owned cats.**	No This alternative would not facilitate spaying/neutering of cats in the City.	Yes A no-roaming ordinance for owned cats would prohibit roaming of owned cats outside their owner's property. It may be inferred that that this could result in fewer instances of owned cats being lost and, thus, a lower transition of owned cats to the stray subpopulation and possibly, eventually, the shelter subpopulation. Data are not reported on the proportion of owned cats that are typically lost as a result of being allowed to roam outdoors, but it is assumed to be a small proportion of owned cats, as cats typically find their way back home for shelter and food. While is it not feasible to quantify the exact reduction in the number of lost cats under this alternative, it can be assumed that the proportion could be relatively smaller than existing conditions, which is estimated to be 0.14% (Table J-2 in Appendix J). Therefore, it can be concluded that this alternative could result in a slightly lower number of lost cats	No See discussion under Alternative 1. In addition, under Alternative 2, similar to Alternative 1, fewer owned cats would transition to the stray subpopulation, because prohibition/restrictions on roaming of owned cats would result in fewer owned cats becoming lost and transitioning to the stray subpopulation and, possibly eventually, the shelter subpopulation. Like under Alternative 1, the contribution to shelter intakes from the free-roaming population would continue, albeit with a relatively lower contribution from the stray subpopulation in accordance with fewer owned cats transitioning to this subpopulation. Thus, for the same reasons as discussed under Alternative 1, Alternative 2 would not be expected to notably change the euthanasia rates at animal service centers enough to further implementation of the City's no-kill goal or reduce it enough to help achieve the no-kill status.	Objective 2	No

ALTERNATIVE	OBJECTIVE 1 Facilitate spaying and neutering of cats in the City.	OBJECTIVE 2 Reduce the relative number of free-roaming[1] cats in the City over time.	OBJECTIVE 5 Further implementation of the City's no-kill policy[2] by reducing the rate of euthanasia of cats in City animal services centers.	Objectives Met	Carried Forward for Analysis
		and lower transition of owned cats into the free-roaming cat population, and hence, a slightly smaller free-roaming cat population size, in accordance with the discussion presented above for Alternative 1. For discussion purposes, as seen in Figure 5-2, where Alternative 2 was modeled with an assumed conservative estimate of 0% of cats transitioning from the owned to the stray subpopulation (leading essentially to an elimination of the stray subpopulation in the model), initially the free-roaming cat population would be smaller than the proposed Project over the first few years (1,080 smaller in year 1; 295 smaller in year 2; 303 smaller in year 3); however, over the 30-year horizon period, the free-roaming cat population would be larger (over 29,535 cats in year 30) compared to the proposed Project. Compared to the future baseline without Project (wherein there would not be a no-roaming ordinance), the free-roaming cat population under Alternative 2 would be smaller by approximately only 1,180 cats at the end of the 30-year horizon period. Thus, even though the free-roaming cat population under Alternative 2 declines a little initially, it remains largely stable over the 30-year time horizon (only about 1,000 fewer cats), likely due to the sufficiently maintained fecundity of the free-roaming cat population. Alternative 2 would likely result in a nominal reduction in free-roaming cats in the City compared to the future baseline without Project but this would be a much smaller decrease compared to the proposed Project.			
Alternative 3. **Require licensing for owned cats.**	No This alternative would not facilitate spaying/neutering of cats in the City.	Yes Under Alternative 3, required licensing for owned cats would entail registering all owned cat with LAAS and the cats being issued a unique identification number on a license tag that can be worn on a collar. The issued license tag would also identify the owner of the cat. Under this alternative, people who find a cat with a tag would be able to call LAAS on the number printed on the tag for identification of the owner, so the cat can be reunited with its owner. If a lost cat with a license tag is brought into one of the City's animal services centers, LAAS staff can identify the registered owner by the tag number and contact them; during this time the animal would be held at the animal services center. Considering this, it is reasonable to assume that fewer owned cats would remain lost as required licensing would make them and their owner easier to identify, resulting in more lost cats being returned to their owner rather than remaining on the street and transitioning to the stray subpopulation,. As the stray subpopulation is part of the free-roaming cat population in the City, this alternative would result in a slightly lower free-roaming cat population size. This reduction is expected to be very minimal as it is estimated that currently only 0.14% of owned cats are lost or abandoned each year (Table J-2 in Appendix J).	No See discussion under Alternative 1. In addition, under Alternative 3, similar to Alternative 1, fewer owned cats would transition to the stray subpopulation of the free-roaming cat population in the City, because required licensing would result in more lost cats being returned to their owners rather than remaining on the street and transitioning to the stray subpopulation and, possibly eventually, the shelter subpopulation. Like under Alternative 1, the contribution to shelter intakes from the free-roaming population would continue, albeit with a relatively lower contribution from the stray subpopulation in accordance with fewer owned cats transitioning to this subpopulation. Thus, for the same reasons as discussed under Alternative 1, Alternative 3 would not be expected to notably change the euthanasia rates at animal service centers enough to further implementation of the City's no-kill goal or reduce it enough to help achieve the no-kill status.	Objective 2	No

ALTERNATIVE	OBJECTIVE 1 Facilitate spaying and neutering of cats in the City.	OBJECTIVE 2 Reduce the relative number of free-roaming[1] cats in the City over time.	OBJECTIVE 5 Further implementation of the City's no-kill policy[2] by reducing the rate of euthanasia of cats in City animal services centers.	Objectives Met	Carried Forward for Analysis
		For discussion purposes, as seen in Figure 5-3, where Alternative 3 was modeled with an assumed conservative estimate of 0% of cats transitioning from the owned to the stray subpopulation owing to required licensing requirements. Similar to Alternative 2, the 0% transition rate (leading essentially to an elimination of the stray subpopulation in the model), initially would result in the free-roaming cat population being smaller than the proposed Project over the first few years (1,080 smaller in year 1; 295 smaller in year 2; 303 smaller in year 3); however, over the 30-year horizon period, the free-roaming cat population would be larger (over 29,535 cats in year 30) compared to the proposed Project. Compared to the future baseline without Project (wherein there would not be a no-roaming ordinance), the free-roaming cat population under Alternative 3 would be smaller by approximately 1,180 cats at the end of the 30-year horizon period. Thus, even though the free-roaming cat population under Alternative 3 declines a little initially (only about 1,000 fewer cats), it largely remains stable over the 30-year time horizon, likely due to the sufficiently maintained fecundity of the free-roaming cat population. Alternative 3 would likely result in a nominal reduction in free-roaming cats in the City compared to the future baseline without Project but this would be a much smaller decrease compared to the proposed Project. Note that all cats adopted from the City's animal services centers are microchipped.			
Alternative 4. **Enact a City ban on outdoor feeding of owned or free-roaming cats.**	No This alternative would not facilitate spaying/neutering of cats in the City.	Yes Reducing access to human-subsidized food by enacting a citywide ban on outdoor feeding of owned and free-roaming cats could potentially result in reduced reproductive output and survival of free-roaming cats. Research has indicated that between 7 and 12% of households feed approximately 3.5 free-roaming cats/household (Levy et al. 2003; Kass et al. 2013). Additionally, 17–38% of pet owners have reported providing some type of care to free-roaming cats, with 92% of those respondents reporting at least weekly provision of food/water to free-roaming cats (American Pet Products Association 2016). It is assumed that under Alternative 4 pet owners would feed their owned cats indoors and any feeding of free-roaming cats would be prohibited. Food sources for free-roaming cats in the City typically include citywide cat caregivers who may be volunteers or employees at animal welfare organizations or private citizens who provide food for free-roaming cats on a regular basis. In addition to this human-subsidized feeding, free-roaming cats utilize garbage dumps and prey, including rodents, birds, and other small animals as sources of food. Enacting a ban to remove human-subsidized feeding as a source of food for free-roaming cats could potentially reduce the free-roaming cat population due to reduced availability of human-subsidized food resulting in reduced free-roaming cat	No If all human-subsidized feeding of free-roaming cats ceased, the free-roaming cat population size may decrease; however, there are other food resources available and known to be consumed by cats such as garbage, rodents, birds, etc. Although the free-roaming cat population may decrease, it is unknown to what extent, and it is unlikely to result in a substantial decrease such that the reduction in the free-roaming cat population size would be sufficient to result in substantially lower shelter intake and euthanasia to a degree that would further implement or meet the no-kill policy goal.	Objective 2	No

ALTERNATIVE	OBJECTIVE 1 Facilitate spaying and neutering of cats in the City.	OBJECTIVE 2 Reduce the relative number of free-roaming[1] cats in the City over time.	OBJECTIVE 5 Further implementation of the City's no-kill policy[2] by reducing the rate of euthanasia of cats in City animal services centers.	Objectives Met	Carried Forward for Analysis
		reproductive output, which would cause reduced population growth and eventually a relatively smaller population over time. Even in the absence of human subsidized food free-roaming cats will still have access to garbage and prey as food sources. It is possible (although to what degree is unknown) that the free-roaming cat population could decrease under Alternative 4 by banning only human-subsidized feeding; though it is not likely that this decrease would be substantial.			
Alternative 5. Enforce mandatory spay/neuter of owned cats.	No This alternative would not facilitate spaying/neutering of cats in the City.	No The City of Los Angeles already requires owned cats to be spayed or neutered. It is legally infeasible to implement such an alternative, because the separation of powers doctrine prohibits such a restraint on enforcement discretion.	No The City of Los Angeles already requires owned cats to be spayed or neutered. It is legally infeasible to implement such an alternative, because the separation of powers doctrine prohibits such a restraint on enforcement discretion.	None	No
Alternative 6. Facilitate free trapping/certified trapping and streamlined permitting to surrender stray/feral cats to shelter without return to the environment/direct removal.	Yes Alternative 6 *indirectly* facilitates sterilization of cats that are not euthanized because under this alternative it is assumed that cats would not be released to a City partner agency, be adopted, or transferred to an indoor working cat program or an enclosed cat sanctuary, unless they are sterilized.	Yes Under Alternative 6, free-roaming cat trapping would be streamlined and/or facilitated, and trapped cats would not be returned to the environment; they would either be adopted out, transferred to a City partner who signs an affidavit noting they will not release the cat back to the environment, transferred to a working cat program, or a cat sanctuary, or, as a last choice, euthanized if none of the aforementioned options are feasible. Streamlining and/or facilitating trapping efforts would aim to increase trapping rates relative to the future baseline without Project. Facilitated and/or streamlined trapping of free-roaming cats without return to the environment would facilitate the reduction in the relative number of free-roaming cats if LAAS intake of free-roaming cats increases under this alternative relative to baseline. The magnitude of the reduction would be commensurate with the magnitude of the trapping effort. For discussion purposes, a range of direct removal of cats (5,000 cats, 10,000 cats, 15,000 cats, and 20,000 cats) was modeled to demonstrate the impact on the free-roaming cat population under Alternative 6. Free-roaming cat population modeling of this Alternative as shown in Figure 5-4 indicates that direct removal of free-roaming cats reduces the free-roaming cat population over time, with a larger number of annual trapping events and subsequent direct removals from the environment resulting in much larger population declines than smaller efforts (e.g., trapping and removal of 5,000 versus 20,000 free-roaming cats annually). Under this scenario, based on the model, even with an estimated 20,000 free-roaming trapping and removal events, the citywide free-roaming cat population would not decline below a population size of 150,000 free-roaming cats. Under Alternative 6, the population model estimated that with 20,000 free-roaming cat trapping and removal events (used as a comparison point for 20,000 spay/neuter surgeries being proposed under the Project), in year 30 the citywide free-roaming cat population would decline to about 155,051 cats (see Figure 5-4) compared to 197,363 cats under the proposed Project and 228,077 cats under the	No Under Alternative 6, the intake of free-roaming cats into LAAS is anticipated to increase due to increased free-roaming cat trapping and subsequent intake. As described in Alternative 1, free-roaming cats include stray cats and unsocialized feral cats. Feral cats are much less likely to be adopted than stray cats due to this unsocialized behavior. Outcome options for trapped free-roaming cats include adoption, release to an enclosed cat sanctuary, introduction into an indoor or enclosed space working cat program, or euthanasia. Availability of adoption, admission to cat sanctuaries, and admission to working cat programs are expected to be limited (see Section 2.5) and not contain capacity for all trapped free-roaming cats. Thus the euthanasia rate at animal service centers would be expected to increase compared to baseline conditions and the future baseline without Project, as well as the proposed Project due to the increased intake of free-roaming cats, prohibition in return to field, and assumed limitations on homing such cats.	Objectives 1 & 2	Yes

ALTERNATIVE	OBJECTIVE 1 Facilitate spaying and neutering of cats in the City.	OBJECTIVE 2 Reduce the relative number of free-roaming[1] cats in the City over time.	OBJECTIVE 5 Further implementation of the City's no-kill policy[2] by reducing the rate of euthanasia of cats in City animal services centers.	Objectives Met	Carried Forward for Analysis
		future baseline without Project. Thus, under Alternative 6 there would be 42,312 fewer cats compared to the Project and 73,026 fewer cats compared to the future baseline without Project over the 30-year horizon period. Under this scenario, as the modeled free-roaming cat population declines, competition declines and immigration continues, both of which eventually offset the population declines due to direct removal and result in an eventual population rebound. This rebound indicates that direct removal at or below 20,000 annual trapping events would result in an initial free-roaming cat population decrease, though over time (e.g., 10–15 years) the population would begin to rebound and grow toward carrying capacity, as inferred from Figure 5-4 when looking at the 20,000 direct removal trendline trajectory. Alternative 6 meets the objective of reducing the free-roaming cat population over time at varying levels dictated by the magnitude of trapping and direct removal from the environment.			
Alternative 7. Reduce the number of permissible cats per residence in the City of Los Angeles.	No Alternative 7 would not facilitate spaying/neutering of cats in the City.	No Alternative 7 does not introduce any elements that would facilitate the reduction in the number of free-roaming cats, such as measures that would impact free-roaming cat fecundity, resource availability, or survival. This alternative does not facilitate any reduction in the free-roaming cat population in the City.	No Alternative 7 does not include any elements that would facilitate reducing the euthanasia rate at LAAS facilities. Reducing the number of cats permissible in households could increase the number of unadoptable pets and could contribute to increased euthanasia rates at animal service centers across the City. Alternative 7 does not facilitate any reduction in euthanasia rate at LAAS facilities and does not further implementation of the City's no-kill policy.	None	No
Alternative 8. Enact dusk-to-dawn curfews for owned cats so that they are kept in at night when most predation occurs.	No Alternative 8 would not facilitate spaying/neutering of cats in the City.	No Alternative 8 does not introduce any elements that would facilitate the reduction in the number of free-roaming cats, such as measures that would impact free-roaming cat fecundity, resource availability, or survival. This alternative does not facilitate any reduction in the free-roaming cat population in the City.	No Alternative 8 does not introduce any elements that would facilitate reducing the euthanasia rate at LAAS animal services centers. This alternative does not facilitate any reduction in euthanasia rate at LAAS facilities and does not further implementation of the City's no-kill policy.	None	No
Alternative 9. Limit number of permissible cats based on residence square footage (Minimum square footage required per cat).	No Alternative 9 would not facilitate spaying/neutering of cats in the City.	No Alternative 9 does not introduce any elements that would facilitate the reduction in the number of free-roaming cats, such as measures that would impact free-roaming cat fecundity, resource availability, or survival. This alternative does not facilitate any reduction in the free-roaming cat population in the City.	No Alternative 9 does not introduce any elements that would facilitate reducing the euthanasia rate at LAAS animal services centers. This alternative does not facilitate any reduction in euthanasia rate at LAAS facilities and does not further implementation of the City's no-kill policy.	None	No
Alternative 10. Ban pet owners from allowing their animals to trespass on the private property of another person without the consent of such person, any unenclosed private property or any public property.	No Alternative 10 would not spay/neuter cats in the City.	No Alternative 10 does not introduce any elements which would facilitate the reduction in free-roaming cats such as measures which would reduce free-roaming cat fecundity, resource availability, and survival. This alternative does not facilitate any reduction in the free-roaming cat population.	No Alternative 10 does not introduce any elements that would facilitate reducing the euthanasia rate at LAAS animal services centers. This alternative does not facilitate any reduction in euthanasia rate at LAAS facilities and does not further implementation of the City's no-kill policy.	None	No
Alternative 11. Alternative locations in areas with lower	No	No	No	None	No

ALTERNATIVE	OBJECTIVE 1 Facilitate spaying and neutering of cats in the City.	OBJECTIVE 2 Reduce the relative number of free-roaming[1] cats in the City over time.	OBJECTIVE 5 Further implementation of the City's no-kill policy[2] by reducing the rate of euthanasia of cats in City animal services centers.	Objectives Met	Carried Forward for Analysis
resource sensitivity where appropriate	Alternative 11 would not facilitate spaying/neutering of cats in the City.	Alternative 11 does not introduce any elements that would facilitate the reduction in the number of free-roaming cats, such as measures that would impact free-roaming cat fecundity, resource availability, or survival. This alternative does not facilitate any reduction in the free-roaming cat population in the City of Los Angeles.	Alternative 11 does not introduce any elements that would facilitate reducing the euthanasia rate at LAAS animal services centers. This alternative does not facilitate any reduction in euthanasia rate at LAAS facilities and does not further implementation of the City's no-kill policy.		
Alternative 12. Trap and euthanize free-roaming cats.	No Alternative 12 would not facilitate spaying/neutering of cats in the City.	Yes Alternative 12 would directly facilitate the reduction in the free-roaming cat population by direct removal of free-roaming cats from the free-roaming cat population through trapping and then subsequent euthanasia.	No Alternative 12 does not facilitate any reduction in euthanasia at LAAS animal service centers and thus does not further implementation of the City's no-kill policy. Rather, Alternative 12 would increase the rate of euthanasia at LAAS facilities and take away from the City's progress on achieving no-kill status.	Objective 2	No

Note: Grey shaded rows above indicate alternatives that have been carried forward for detailed analysis in the EIR as they meet two or more key objectives.

Based on Table 5-1, the list of alternatives analyzed in this EIR has been narrowed down to those that meet two or more of key Project objectives #2, #3, and #5:

1. **Alternative 1. Use of resources (for approximately 20,000 spay/neuter vouchers) for free/low-cost sterilization of owned cats instead of unowned cats.**
2. **Alternative 6. Facilitate free trapping/certified trapping and streamlined permitting to surrender free-roaming cats to shelter without return to field/direct removal.**

5.4 Comparison of Alternatives Analyzed

State CEQA Guidelines Section 15126.6(d) notes "the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." Accordingly, this section provides a comparative discussion of potential impacts on biological resources, water resources, and human health hazards from the No Project Alternative, Alternative 1, and Alternative 6, in comparison with the proposed Project.

Table 5-2. Comparison of Impacts for Alternatives Carried Forward

Environmental Resource	Proposed Project	No Project Alternative	Alternative 1	Alternative 6
Biological Resources	Less than Significant	+	+	-
Water Resources	Less than Significant	+	+	-
Human Health Hazards	Less than Significant	+	+	-

Notes: All impacts are less than significant over the 30-year horizon period. The + (plus) and - (minus) indicate relative comparison of less-than-significant impacts to the proposed Project, which also has less-than-significant impacts on all environmental resources.
(+) = Alternative would increase impact when compared with the proposed Project over the 30-year horizon period.
(–) = Alternative would reduce impact when compared with the proposed Project over the 30-year horizon period.

5.4.1 No Project Alternative

Under the No Project Alternative, the City would not be able to engage in TNR nor would it be able to facilitate others to engage in TNR. No discounted or free vouchers would be provided to the public for TNR activities for feral cats. There would be no sterilization of the feral subpopulation of free-roaming cats population, which would not decline under the No Project alternative; instead, as indicated by the population modeling results in Section 4.1 and Appendix J, the free-roaming cat population would continue to increase from 226,970 cats at baseline (at the time of Notice of Preparation publication) to 228,077 cats at the end of the 30-year horizon period, an increase of approximately 1,107 cats. Compared to the proposed Project, the population model estimates that there would be 30,714 more cats under the No Project Alternative (Table 4.1-2). As described in detail in Section 4.2.3.1, it is reasonable to assume that impacts from free-roaming cats are generally proportional and positively correlated to their population size, presuming all other influencing variables are held relatively constant. This is foundational to the discussion of potential impacts from Alternative 1 below and should be considered during their review and interpretation.

In addition, euthanasia of free-roaming cats that are not or cannot be adopted would continue, and they would not be released to the environment; thus, up to approximately 4,065 cats would continue to be euthanized each year by LAAS. None of these cats would be released to TNR organizations,

who may return them to free-roaming status. The Animal Sterilization Funds would continue to be used for sterilization of "pets" only per Section 5.199 of the LAAC; no funds would be used toward sterilization of free-roaming cats. The definition of *cat kennel* would continue to exclude any location where three or fewer cats are kept; anything above that would require a permit from the City in accordance with LAMC Section 53.50.

Based on the discussion above, it is evident that the No Project Alternative would not achieve the key objectives #1, #2, and #5 for the proposed Project, nor the remaining objectives #3, #4, and #6 presented in Section 5.1. The No Project Alternative does not facilitate spaying and neutering of cats in the City nor does it reduce the relative number of free-roaming cats in the City. It also does not further implementation of the City's no-kill policy by reducing euthanasia at the LAAS animal services centers. Finally, under the No Project Alternative the City would not be able to conduct any public outreach or education on free-roaming cats or train their staff on cat management programs and collaborate with TNR organizations in the City; the City would not adopt TNR as their preferred policy to humanely address free-roaming cats. The No Project Alternative would not achieve any of the proposed Project's objectives.

As discussed below, existing impacts on the environment from free-roaming cats as presented in Sections 4.2, 4.3, and 4.4 would continue under the No Project Alternative and would be greater than under the proposed Project.

5.4.1.1 Biological Resources

Under the No Project Alternative, the potential direct impacts from domestic cats on biological resources would continue and would be greater in magnitude than the proposed Project due to the estimated modeled net increase in the free-roaming cat population under the No Project Alternative. As detailed in Sections 4.2.2.8 and 4.2.2.9, existing free-roaming domestic cats in the City may directly and indirectly affect the survival, reproductive success, and habitat use of a variety of special-status species that have potential to occur in the study area. Free-roaming cats may directly affect sensitive biological resources via predation effects that result in direct harm, adversely affecting species survival and reproduction, or cause death of special-status species. They may affect invertebrates, fish, reptiles, amphibians, birds (including migratory birds), and mammals. Free-roaming cats may also cause indirect impacts from non-consumptive effects, degraded water quality, and disease transmission, which have the potential to affect the survival of wildlife species. Non-consumptive effects on wildlife not directly caused by predation includes physiologic and biologic stress and altered habitat use, which can affect species distribution, reproduction, and survival. Stress may be induced in response to the presence or perception (e.g., odor) of a predator (such as a free-roaming cat), which can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration ability, and habitat avoidance. All the above potential direct and indirect effects have the potential to affect wildlife movement, migration, and wildlife connectivity. If aquatic habitat was degraded or destroyed due to free-roaming cat waste contamination (e.g., urine and feces), the access to important movement, reproduction, and refugia habitat for aquatic species such as fishes, fairy shrimp, or amphibians could be reduced, resulting in loss of individuals and potential fragmentation of habitats and precluded or constrained movement potential. Domestic cats may also be responsible for an existing level of reduction and degradation of wetland habitats throughout the study area. Due to limitations in data availability and inherent levels of uncertainty (discussed in Sections 4.2.2.8 and 4.2.2.9), it is not feasible to identify and quantify specific impacts from free-roaming cats on wildlife movement and migration.

Under the No Project Alternative, current levels of TNR activities in the City are expected to continue; trapping activities would be fewer by 20,000 trap events per year, and thus trapping-related impacts could be lower than under the proposed Project. However, the free-roaming cat population would be larger over the 30-year horizon period under the No Project Alternative; thus, cat-related care and maintenance activities would be greater in magnitude compared to under the proposed Project. Therefore, related impacts could be greater. Although it is not feasible to defensibly estimate and quantify the impacts of TNR on special-status species or specific habitats in the study area overall (see impacts analysis for BIO-1 and BIO-2 in Section 4.2), it is anticipated that indirect TNR impacts under the No Project Alternative would be similar to or greater than under the proposed Project.

Indirect impacts from currently ongoing TNR activities in the City—such as inadvertent trapping and feeding of wild animals, exposure to diseases, potential disturbance of sensitive vegetation communities and wildlife use areas during trapping activities conducted in Environmentally Sensitive Areas (ESAs), as detailed in Section 4.2.2-11—would also continue to occur. However, the vast majority of TNR activities occur within highly developed and residential areas and not within habitat areas, although TNR activities do occur in areas adjacent to ESAs (e.g., Los Feliz, which is near Griffith Park). Therefore, the existing effects of TNR activities on sensitive biological resources are likely infrequent and do not pose a conservation concern for sensitive biological resources within the study area.

5.4.1.2 Water Resources

The free-roaming cat population under the No Project Alternative would continue to increase from 226,970 cats at baseline to 228,077 cats (an increase of approximately 1,107 cats) at the end of the 30-year horizon period compared to 197,363 cats under the proposed Project at the same time (Table 4.1-2). Accordingly, the potential direct impacts on water resources under the No Project Alternative would be comparatively greater than the proposed Project.

Under the No Project Alternative, existing impacts on water resources from free-roaming cats, as discussed in Section 4.2.3.4, would continue to occur and would be exacerbated due to the increased free-roaming cat population under the No Project Alternative compared to the proposed Project (see Section 5.4.1. above). Specifically, existing level of impacts from pet feces, including feline feces, related to nutrient and bacterial loading of lakes, streams, and coastal waters would continue and would increase due to the increased free-roaming cat population. Because cat feces have the potential to contaminate surface waters with T. gondii oocysts, there would be ongoing potential for waterborne toxoplasmosis outbreaks due to cats. The estimated free-roaming cat population under the No Project Alternative could contribute as much as 3,660 tons of feces to the environment annually within the City; no studies on daily average urine volume of cats could be located for reference. In addition to the mean daily weight of feces presented in Section 4.2.3.4 for discussion purposes to estimate potential discharge loads into surface water bodies in the City, it is not feasible to defensibly estimate and quantify the impacts of TNR on water quality in the study area overall. It is anticipated that indirect TNR impacts under the No Project Alternative would be similar to or greater than under the proposed Project. Under the No Project Alternative, potential indirect water quality impacts related to TNR activities from discharge of nutrients from food used during trapping, or feces and urine from a cat trapped, would continue; however they could be at a slightly lower magnitude due to 20,000 fewer annual trapping events than under the proposed Project. With a larger free-roaming cat population under the No Project Alternative over the 30-year horizon period and an associated greater magnitude of cat-related care and maintenance activities

compared to the proposed Project, related water quality impacts could be greater under the No Project Alternative.

5.4.1.3 Human Health Hazards

The larger free-roaming cat population under the No Project Alternative could result in an incremental increase in the frequency and severity of exposure to human health hazards resulting from zoonotic diseases transmitted directly or indirectly by free-roaming cats. This increase in the frequency and severity of exposure to human health hazards would apply to all populations in the City, including across all susceptible human groups. Because of the variability in exposure and transmission mechanisms, citywide presence of susceptible human groups, and the lack of definitive empirical citywide data regarding the specific contribution of free-roaming cats to such diseases and in specific susceptible human groups, it is not feasible to quantify the existing contribution of free-roaming cats to the transmission of or exposure to such diseases in humans, including susceptible human groups in the City. However, as described in Section 4.4.3, to facilitate informed decision-making and impact analyses related to the frequency and severity of exposure to zoonotic diseases transmitted directly or indirectly from free-roaming cats, the contribution of such frequency and severity of exposure is assumed to be proportional to the size of the free-roaming cat population. With the estimated modeled net increase in the free-roaming cat population over the 30-year horizon period under the No Project Alternative compared to the proposed Project, while it is not feasible to quantify the existing contribution of free-roaming cats to the transmission of or exposure to such diseases in humans, the increase in population could increase the potential risk of exposure to zoonotic diseases associated with free-roaming cats compared to the proposed Project.

Diseases discussed in Section 4.4.2 may be transmitted to humans through various mechanisms and/or animal species; domestic cats represent one of the potential exposure/transmission routes (e.g., typhus may be spread by fleas on rats, mice, opossums, and other animals). The transmission of some diseases, such as typhus fever, is more closely associated with exposure of susceptible human groups to domestic cats. Of the susceptible human groups discussed in Section 4.4.2.3, people with relatively higher frequency of interaction and contact with domestic cats and exposure to feces, fleas, and potential for cat bites or scratches—such as homeless, TNR practitioners, veterinary staff, and free-roaming cat caretakers—may have relatively higher potential for exposure/transmission risk to zoonotic diseases associated with domestic cats. Areas within the City with higher densities of domestic cats, and particularly free-roaming cats, may have higher risks of potential human exposure to zoonotic diseases (see Figure 4.1-1 and Section 4.4-3); this would remain unchanged under the No Project Alternative.

Reduced trapping events under the No Project Alternative could result in a nominal decrease in the frequency and severity of exposure to zoonotic diseases associated with free-roaming cats by TNR practitioners and veterinary staff; however, increased cat care and maintenance with the larger free-roaming cat population under the No Project Alternative compared to the proposed Project could result in an increase of the same.

5.4.2 Alternative 1. Use of resources (for approximately 20,000 spay/neuter vouchers) for free/low-cost sterilization of owned cats instead of unowned cats

Under Alternative 1, over the 30-year horizon period, the free-roaming cat population would be larger than under the proposed Project, increasing from 808 cats in year 2 to 29,476 cats in year 30 (see Figure 5-1). It is assumed that impacts from free-roaming cats are generally proportional and positively correlated to their population size, presuming all other influencing variables are held relatively constant (see Section 4.2.3.1). This is foundational to the discussion of potential impacts from Alternative 1 below and should be considered during their review and interpretation.

The spatial distribution of free-roaming cats is not expected to change directly as a result of Alternative 1, nor is the spatial distribution of TNR and associated cat care activities throughout the City because Alternative 1 is not proposing any direct elements that are expected to change the distribution of such activities. Compared to the proposed Project, the free-roaming cat population under Alternative 1 would experience a net increase over time resulting in a net citywide increase in the free-roaming cat population and free-roaming cat reproductive output compared to the proposed Project. With a larger free-roaming cat population over time in the City under Alternative 1 compared to the proposed Project, it can be anticipated that trapping events citywide could increase, as well as the magnitude of cat care and maintenance activities.

As discussed in Table 5-1, Alternative 1 would meet the proposed Project's key objectives #1 and #3 but would not meet key objective #5. That is, Alternative 1 would facilitate spaying and neutering of cats in the City and would reduce the relative number of free-roaming cats in the City compared to the future baseline without Project; it would not, however, further implement the City's no-kill policy by reducing euthanasia in LAAS animal services centers. See the discussion for Alternative 1 in Table 5-1 for detail.

5.4.2.1 Biological Resources

The larger free-roaming cat population over the 30-year horizon period under Alternative 1 compared to the proposed Project would result in greater impacts on biological resources from free-roaming cats in the study area. In addition, as discussed below, free-roaming cat impacts within and near the sensitive areas are expected to increase compared to the proposed Project with the comparatively larger free-roaming cat population.

Impacts detailed in Sections 4.2.2.8 and 4.2.2.9 from existing free-roaming domestic cats in the City would increase under Alternative 1 compared to the Project. A summary of the impacts includes potential for free-roaming cats to directly and indirectly affect the survival, reproductive success, and habitat use of a variety of special-status species that have potential to occur in the study area. Direct impacts may result via predation, thereby affecting species survival and reproduction, or causing death of special-status species. Indirect impacts include non-consumptive effects, degraded water quality, and disease transmission, which have the potential to affect the survival of wildlife species. Stress can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration ability, and habitat avoidance. All these direct and indirect effects have the potential to affect wildlife movement, migration, and wildlife connectivity. Domestic cats may also be responsible for an existing level of reduction and degradation of wetland habitats

throughout the study area. Under Alternative 1, the aforementioned potential direct impacts from domestic cats on biological resources would continue and would be greater in magnitude than the proposed Project.

Furthermore, as discussed in Section 4.2.2.9, although all biological resources in the study area are at least partially susceptible to free-roaming cat impacts, biological resources that are most at risk or susceptible likely include species that inhabit, roost, nest, forage, or frequent areas in or near (1) smaller blocks of habitat; (2) fragmented habitat; (3) habitat, open space, and wildlife corridors adjacent to developed lands; (4) open space with high total edge habitat (habitat bordering developed lands or urban-wildlife interface); (5) areas more likely to overlap with high cat density areas; and (6) ESAs near high cat density areas (such as residential and developed areas). Under Alternative 1, free-roaming cat abundance and density (see Figure 4.1-1 in Section 4.1) would be expected to increase in such locations because the spatial distribution of free-roaming cats would not be expected to change and there would be a net increase in the free-roaming cat population across the City; therefore, free-roaming cat impacts within and near such areas are expected to increase compared to the proposed Project.

Under Alternative 1, a slightly smaller free-roaming cat population (by 1,238 cats over a 30-year horizon period) would result in similar or slightly less direct biological resources impacts compared to existing and future baseline conditions. The aforementioned potential direct impacts from domestic cats on biological resources would continue and would be similar to or slightly smaller in magnitude than the baseline conditions and future without Project. Impacts would be less than significant.

5.4.2.2 Water Resources

The larger free-roaming cat population over the 30-year horizon period under Alternative 1 compared to the proposed Project would result in greater direct water resources impacts from free-roaming cats in the study area compared to the proposed Project.

Direct water quality impacts in the study area (see Section 4.3.2.4) including impacts from pet feces, including feline feces, related to nutrient and bacterial loading of lakes, streams, and coastal waters would increase and the potential for waterborne toxoplasmosis outbreaks due to cats would also increase compared to the proposed Project. Alternative 1 would lead to an increase in spay and neuter surgeries of owned cats throughout the City; however, impacts on daily wastewater flow resulting from this increase in surgeries would be minimal and would be served by existing animal service centers, animal welfare organizations, and veterinary facilities. Alternative 1 would have little or no effect on existing wastewater treatment facilities. Surface water flows are not anticipated to change compared to existing conditions as Alternative 1 does not include any ground disturbance elements that could affect surface water flows, and thus there would be no change in runoff volumes, which could mobilize pollutants, and potentially create a nuisance or cause regulatory standards to be violated.

Compared to existing and future without Project baseline conditions, a slightly smaller free-roaming cat population (by 1,238 cats over a 30-year horizon period under Alternative 1) would result in similar or slightly less water resources impacts. Impacts would be less than significant.

5.4.2.3 Human Health Hazards

As discussed in Sections 4.4.2.4 and 4.4.3, while it is not feasible in this EIR to quantify the contribution of free-roaming cats to the transmission of or exposure to zoonotic diseases in humans, it is reasonable to assume that the increase in population of free-roaming cats under Alternative 1 (by about 29,476 cats in year 30) compared to the proposed Project could increase the potential risk of exposure to zoonotic diseases associated with free-roaming cats. The larger population under Alternative 1 could result in an incremental increase in the frequency and severity of exposure to human health hazards resulting from zoonotic diseases transmitted directly or indirectly by free-roaming cats. This increase in the frequency and severity of exposure to human health hazards would apply to all populations in the City, including across all susceptible human groups.

As mentioned in Section 5.4.1.3, domestic cats represent one of the potential exposure/transmission routes (e.g., typhus may be spread by fleas on rats, mice, opossums, and other animals) for diseases to humans (see Section 4.4.2). The transmission of some diseases such as typhus fever, is more closely associated with exposure of susceptible human groups to domestic cats. Of the susceptible human groups discussed in Section 4.4.2.3, people with relatively higher frequency of interaction and contact with domestic cats and exposure to feces, fleas, and potential for cat bites or scratches—such as homeless, TNR practitioners, veterinary staff, and free-roaming cat caretakers—may have relatively higher potential for exposure/transmission risk to zoonotic diseases associated with domestic cats. As described in Section 5.4.13, it is not feasible to quantify the existing contribution of free-roaming cats to the transmission of or exposure to such diseases in humans; however, areas within the City with higher densities of domestic cats and particularly free-roaming cats, may have higher risks of potential human exposure to zoonotic diseases from free-roaming cats (see Figure 4.1-1).

With a slightly smaller population of free-roaming cats under Alternative 1 compared to baseline conditions and the future baseline without Project, the abovementioned impacts would remain similar or may decrease slightly. Thus, under Alternative 1 there would not be an increase in the probable frequency and severity of consequences to people from exposure to health hazards relative to baseline conditions and the future baseline without Project; it would remain similar to or could be less but would not be greater than baseline conditions and the future baseline without Project. Impacts would be less than significant.

5.4.3 Alternative 6. Facilitate free trapping/certified trapping and streamlined permitting to surrender stray/feral cats to shelter without return to the environment/direct removal

As described in Table 5-1 for Alternative 6, a range of non-return/direct removal of cats to the environment was modeled (5,000 cats, 10,000 cats, 15,000 cats, and 20,000 cats) to demonstrate the impact on the free-roaming cat population under the alternative. Free-roaming cat population modeled results for Alternative 6 in Figure 5-4 indicate that non-return/direct removal of free-roaming cats reduces the free-roaming cat population over time, with larger numbers of annual trapping events and subsequent non-returns/direct removals from the environment resulting in larger population declines than smaller efforts (e.g., trapping and removal of 5,000 versus 20,000 free-roaming cats annually). Under Alternative 6, the population model estimated that with 20,000 free-roaming cat trapping and removal events (used as a comparison point for 20,000 spay/neuter

surgeries being proposed under the Project), in year 30 the citywide free-roaming cat population would decline to about 155,051 cats (see Figure 5-4) compared to 197,363 cats under the proposed Project and 228,077 cats under the future baseline without Project. Thus, under Alternative 6 there would be 42,312 fewer cats compared to the Project and 73,026 fewer cats compared to the future baseline without Project over the 30-year horizon period.

As stated earlier, it is assumed that impacts from free-roaming cats are generally proportional and positively correlated to their population size, presuming all other influencing variables are held relatively constant (see Section 4.2.3.1). This is foundational to the discussion of potential impacts from Alternative 6 below and should be considered during their review and interpretation over the 30-year horizon period for the proposed Project.

The spatial distribution of free-roaming cats is not expected to change directly as a result of Alternative 6, nor is the spatial distribution of TNR and associated cat care activities throughout the City because Alternative 6 is not proposing any direct elements that would change the distribution of such activities. Compared to the proposed Project, the free-roaming cat population under Alternative 6 would experience a net decrease over the 30-year horizon period and would be distributed similarly to baseline conditions and the future baseline without Project, resulting in a net citywide decrease in the free-roaming cat population. With the proposed free/certified trapping program under Alternative 6, it is anticipated that trapping events citywide would increase and at 20,000 would be similar to the proposed Project. With a smaller free-roaming cat population in the City under Alternative 6 compared to the proposed Project over the 30-year horizon period, it is anticipated that the magnitude of cat care and maintenance activities would also decrease over this period.

For discussion purposes, note that with 20,000 free-roaming cat non-returns/direct removals from the environment under Alternative 6 as seen in Figure 5-4, the free-roaming cat population steadily declines; however, starting at year 19, the free-roaming cat population starts to increase and continues the upward trend through the end of the 30-year horizon period. Under Alternative 6, as the modeled free-roaming cat population declines, competition declines, subsequently fecundity increases, and immigration continues, all of which eventually offset the population declines due to the 20,000 annual non-returns/direct removal, resulting in an eventual population rebound. This rebound indicates that non-return/direct removals at or below 20,000 would result in an initial population decline, but over time (e.g., after about 19–20 years) the free-roaming cat population would begin to rebound and grow toward carrying capacity. Based on this rebound under Alternative 6 as shown in Figure 5-4, it can be inferred that at some point in the future the free-roaming cat population will approach or return to carrying capacity. This population increase trajectory will likely exceed the proposed Project free-roaming cat population, which consistently declines after the project implementation phase of 5 years through the 30-year horizon period.

As discussed in Table 5-1, Alternative 6 would meet the proposed Project's key objectives #1 and #3 but would not meet key objective #5. That is, Alternative 6 would facilitate spaying and neutering of cats in the City and would reduce the relative number of free-roaming cats in the City compared to the future baseline without Project; it would not, however, further implement the City's no-kill policy by reducing euthanasia in LAAS animal services centers. It would also not support project objective #6 regarding adopting TNR as the preferred policy to humanely address free-roaming cats. See the discussion for Alternative 6 in Table 5-1 for detail.

5.4.3.1 Biological Resources

The smaller free-roaming cat population (42,312 fewer cats) over the 30-year horizon period under Alternative 6 compared to the proposed Project would result in reduced impacts on biological resources from free-roaming cats in the study area. In addition, as discussed below, free-roaming cat impacts within and near the sensitive areas would be expected to decrease compared to the proposed Project with the comparatively smaller free-roaming cat population.

Impacts detailed in Sections 4.2.2.8 and 4.2.2.9 from existing free-roaming domestic cats in the City would decrease under Alternative 6 compared to the Project. A summary of the impacts includes potential for free-roaming cats to directly and indirectly affect the survival, reproductive success, and habitat use of a variety of special-status species that have potential to occur in the study area. Direct impacts may result via predation, thereby affecting species survival and reproduction or causing death of special-status species. Indirect impacts include non-consumptive effects, degraded water quality, and disease transmission, which have the potential to affect the survival of wildlife species. Stress can cause behavioral changes and anti-threat responses (e.g., predator avoidance) in some species, resulting in behavior responses such as altered habitat use, altered movement/dispersal/migration ability, and habitat avoidance. All these direct and indirect effects have the potential to affect wildlife movement, migration, and wildlife connectivity. Domestic cats may also be responsible for an existing level of reduction and degradation of wetland habitats throughout the study area. Under Alternative 6, the aforementioned potential direct impacts from domestic cats on biological resources would continue but would be smaller in magnitude than the proposed Project.

Furthermore, as discussed in Section 4.2.2.9, although all biological resources in the study area are at least partially susceptible to free-roaming cat impacts, biological resources that are most at risk or susceptible likely include species that inhabit, roost, nest, forage, or frequent areas in or near (1) smaller blocks of habitat; (2) fragmented habitat; (3) habitat, open space, and wildlife corridors adjacent to developed lands; (4) open space with high total edge habitat (habitat bordering developed lands or urban-wildlife interface); (5) areas more likely to overlap with high cat density areas; and (6) ESAs near high cat density areas (such as residential and developed areas). Under Alternative 6, free-roaming cat abundance and density (see Figure 4.1-1 in Section 4.1) would be expected to decrease in such locations because the spatial distribution of free-roaming cats would not be expected to change and there would be a net decrease in the free-roaming cat population across the City. Therefore, free-roaming cat impacts within and near such areas are expected to decrease compared to the proposed Project over the 30-year horizon period.

Under Alternative 6, a smaller free-roaming cat population (by about 73,026 cats over a 30-year horizon period) would result in fewer direct biological resources impacts compared to baseline conditions and the future baseline without Project. The aforementioned potential direct impacts from domestic cats on biological resources would continue and would be of smaller magnitude than the baseline conditions and future baseline without Project. Impacts would be less than significant.

5.4.3.2 Water Resources

The smaller free-roaming cat population over the 30-year horizon period under Alternative 6 compared to the proposed Project would result in reduced direct water resources impacts from free-roaming cats in the study area

Over the 30-year horizon period, direct water quality impacts in the study area (see Section 4.3.2.4) including impacts from pet feces, including feline feces, related to nutrient and bacterial loading of lakes, streams, and coastal waters would decrease, and the potential for waterborne toxoplasmosis outbreaks due to cats would also decrease compared to the proposed Project. Alternative 6 would lead to an increase in spay and neuter surgeries of cats throughout the City, as any cat that is adopted, transferred to a City partner organization, a working cat program, or a cat sanctuary, would be fixed. However, impacts on daily wastewater flow resulting from this increase in surgeries would be minimal and would be served by existing animal service centers, animal welfare organizations, and veterinary facilities. Alternative 6 would have little or no effect on existing wastewater treatment facilities. Surface water flows are not anticipated to change compared to existing conditions as Alternative 6 does not include any ground disturbance elements that could affect surface water flows, and thus there would be no change in runoff volumes, which could mobilize pollutants and potentially create a nuisance or cause regulatory standards to be violated.

Compared to baseline conditions and the future baseline without Project, the smaller free-roaming cat population (by about 73,026 cats over a 30-year horizon period) under Alternative 6 would result in reduced water resources impacts. Impacts would be less than significant.

5.4.3.3 Human Health Hazards

As discussed in Sections 4.4.2.4 and 4.4.3, while it is not feasible in this EIR to quantify the contribution of free-roaming cats to the transmission of or exposure to zoonotic diseases in humans, it is reasonable to assume that the decrease in population of free-roaming cats under Alternative 6 (by about 42,312 fewer cats in year 30) compared to the proposed Project could decrease the potential risk of exposure to zoonotic diseases associated with free-roaming cats over the 30-year horizon period. The smaller population under Alternative 6 could result in an incremental decrease in the frequency and severity of exposure to human health hazards resulting from zoonotic diseases transmitted directly or indirectly by free-roaming cats. This decrease in the frequency and severity of exposure to human health hazards would apply to all populations in the City, including across all susceptible human groups.

As mentioned in Section 5.4.1.3, domestic cats represent one of the potential exposure/transmission routes (e.g., typhus may be spread by fleas on rats, mice, opossums, and other animals) for diseases to humans (see Section 4.4.2). The transmission of some diseases, such as typhus fever, is more closely associated with exposure of susceptible human groups to domestic cats. Of the susceptible human groups discussed in Section 4.4.2.3, people with relatively higher frequency of interaction and contact with domestic cats and exposure to feces, fleas, and potential for cat bites or scratches, such as homeless, TNR practitioners, veterinary staff, and free-roaming cat caretakers, may have relatively higher potential for exposure/transmission risk to zoonotic diseases associated with domestic cats. As described in Section 5.4.13, it is not feasible to quantify the existing contribution of free-roaming cats to the transmission of or exposure to such diseases in humans; however, areas within the City with higher densities of domestic cats, and particularly free-roaming cats, may have higher risks of potential human exposure to zoonotic diseases (see Figure 4.1-1). This would remain unchanged under Alternative 6.

With a smaller population of free-roaming cats under Alternative 6 compared to baseline conditions and the future baseline without Project, the abovementioned impacts would decrease over the 30-year horizon period. Thus, under Alternative 6 there would not be an increase in the probable frequency and severity of consequences to people from exposure to health hazards relative to

baseline conditions and the future baseline without Project; it would be less but would not be greater than baseline conditions and the future baseline without Project. Impacts would be less than significant.

5.5 Environmentally Superior Alternative

In addition to the discussion and comparison of impacts of a proposed project and its alternatives, Section 15126.6 of the State CEQA Guidelines requires that an "environmentally superior" alternative be identified and the reasons for such a selection be disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of adverse impacts. As detailed in Sections 4.2, 4.3, and 4.4, the proposed Project would not have any significant impacts on the environment related to biological resources, water resources, and human health hazards; the remaining environmental issues were screened out in Chapter 3 as clearly having less-than-significant or no adverse impacts. Accordingly, the context for the comparison of potential impacts of the No Project Alternative, Alternative 1, and Alternative 6 over the 30-year horizon period is the relative increasing or decreasing degree of their impacts compared to those under the proposed Project, with all impacts being less than significant (Table 5-2). Therefore, the alternatives would not lessen any significant impacts because there are none that would result from the proposed Project; rather, with the larger or smaller free-roaming cat population under the alternatives, their comparative impacts should be evaluated in the context of increased or decreased degree of effects compared to the proposed Project's less-than-significant impacts.

In this case, as detailed above and presented in Table 5-2, Alternative 6 with 20,000 free-roaming cat trapping and removal events that would result in 42,312 fewer free-roaming cats over the 30-year horizon period, would result in relatively reduced impacts related to biological resources and water resources, and could result in an incremental decrease in the frequency and severity of exposure to human health hazards compared to the proposed Project. Thus, with Alternative 6 resulting in relatively reduced impacts compared to the proposed Project, the No Project Alternative, and Alternative 1 over the 30-year horizon period, it would be considered the environmentally superior alternative, even though it would impeded to some degree the attainment of project objectives.

As noted in Section 5.4.3, Alternative 6 would meet the proposed Project's key objectives #1 and #3 but would not meet key objective #5. That is, Alternative 6 would facilitate spaying and neutering of cats in the City and would reduce the relative number of free-roaming cats in the City compared to the future baseline without Project; it would not, however, further implement the City's no-kill policy by reducing euthanasia in LAAS animal services centers, and thus would not support objective #5. It would also not support project objective #6 regarding adopting TNR as the preferred policy to humanely address free-roaming cats.

Chapter 6
Other Environmental Considerations

This chapter discusses the following aspects of the proposed Project: less-than-significant impacts, significant and unavoidable adverse environmental impacts, significant irreversible changes, and growth-inducement potential.

6.1 Effects Found Not to Be Significant

The City of Los Angeles, as the CEQA lead agency, through the screening analysis (see Chapter 3), determined that the proposed Project would not result in the potential for significant impacts for the following resource areas and, therefore, eliminated them from further analysis in the EIR:

- Aesthetics and Visual Resources
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Land Use
- Noise
- Population and Housing
- Public Services
- Transportation
- Public Utilities
- Greenhouse Gas Emissions
- Tribal Cultural Resources
- Wildfire

The analyses presented in Chapter 4 of this Draft EIR concluded that the proposed Project would result in a less-than-significant impact, without any required mitigation, for the following resource areas:

- Biological Resources
- Human Health Hazards
- Water Resources

6.2 Significant Environmental Effects that Cannot Be Avoided if the Proposed Project Is Implemented

Section 15126.2(c) of the State CEQA Guidelines states that the EIR must describe any significant impacts, including those that can be mitigated but not reduced to a less-than-significant level. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons the project is being proposed, notwithstanding their effect, should be described.

Considering the projected net decrease in the free-roaming cat population and the anticipated net reduction in cat care over the 30-year timeframe as a result of the declining free-roaming cat population Citywide (Sections 4.1.2.4, 4.2.3, 4.3.3, and 4.4.3), the proposed Project would not result in significant environmental effects that cannot be avoided if the proposed Project is implemented. The proposed Project has been determined to result in no impacts or less-than-significant impacts for all resource areas.

6.3 Significant Irreversible Environmental Changes that Would Be Caused by the Proposed Project Should It Be Implemented

Section 15126.2(d) of the State CEQA Guidelines indicates that uses of nonrenewable resources during the initial and continued phases of a project may be irreversible because a large commitment of such resources makes removal or nonuse thereafter unlikely. Irretrievable commitments of resources should be evaluated to ensure that such current consumption is justified.

Assuming the annual number of trips generated by the provision of these vouchers would be 140,000 trips, the proposed Project has the potential to generate up to 467 daily trips throughout the City (Table 3-2). These vehicle trips would involve travel to and from participating veterinary hospitals, spay/neuter clinics, and mobile spay/neuter clinics, for spay/neuter of free-roaming cats. The proposed Project would include irreversible commitment of energy resources in the form of petroleum products (diesel fuel and gasoline), natural gas, and electricity generated by burning fossil fuels for the generated vehicle trips.

6.4 Growth-Inducing Impacts

According to Section 15126.2(e) of the State CEQA Guidelines, growth-inducing impacts of the proposed Project must be discussed in the EIR. Growth-inducing impacts are those effects of the proposed Project that might foster economic or population growth or the construction of new housing, either directly or indirectly, in the surrounding environment. According to CEQA, increases in the population may affect capacity of existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place without implementation of the proposed Project. Typically, the growth-inducing potential of a project would be considered significant if it results in growth or population concentration that exceeds those assumptions included in pertinent master plans, land use plans, or

projections made by regional planning authorities. However, the creation of growth-inducing potential does not automatically lead to growth, whether it would be below or in exceedance of the projected level. Under CEQA, it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. The proposed Project involves provision of funds to support spay/neuter of free-roaming cats and amendments to the Los Angeles Administrative Code (LAAC) to broaden the permitted use of the Animal Sterilization Fund and to the Los Angeles Municipal Code (LAMC) regarding the definition of a cat kennel. The proposed Project would not directly induce new residential development or result in population growth in the service area. Furthermore, the proposed Project does not involve the need for construction or expansion of Los Angeles Animal Services (LAAS) facilities in order to implement the proposed Project. There would be no impact, and no mitigation is required.

6.4.1 Direct Population-Generating Uses

The proposed Project would not include development of new housing or other population-generating uses that would directly induce population growth or attract a substantial number or workers. The proposed Project involves provision of funds to support spay/neuter of free-roaming cats and amendments to the LAAC to broaden the permitted use of the Animal Sterilization Fund and to the LAMC regarding the definition of a cat kennel. The proposed Project would not directly induce new residential development or result in population growth in the service area. There would be no impact, and no mitigation is required.

6.4.2 Economic Growth Inducement

The proposed Project involves provision of funds to support spay/neuter of free-roaming cats and amendments to the LAAC to broaden the permitted use of the Animal Sterilization Fund and to the LAMC regarding the definition of a cat kennel. The proposed Project is a citywide program that affects the City's cat population and does not include housing or commercial/industrial components. The proposed Project would not provide for increased employment opportunity such that there would be any potential for economic growth within the City.

6.4.3 Expansion of Public Services or Utilities

The proposed Project does not include new residential units, commercial space, or industrial space or any development of new land uses. In addition, it would not affect the capacity of existing community service facilities, thereby requiring the construction of new facilities, which could cause significant environmental effects. The proposed Project involves provision of funds to support the spay/neuter of free-roaming cats; amendments to the LAAC to broaden the permitted use of Animal Sterilization Funds and to the LAMC regarding the definition of a cat kennel; implementation of a modified trap, neuter, and return (TNR) program that includes TNR-related community education and outreach and collaboration with TNR organizations; publishing and implementation of program guidelines and ecological conservation measures; and creation of a City of Los Angeles Working Cat Program. Furthermore, the proposed Project does not require the construction of new LAAS facilities or infrastructure, and the proposed Project would be implemented with existing resources.

Chapter 7
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Chapter 9
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9.1 Chapter 1, Introduction

None cited.

9.2 Chapter 2, Project Description and Environmental Setting

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9.4 Chapter 4, Environmental Impact Analysis

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9.5 Chapter 5, Comparison of Alternatives

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9.6 Chapter 6, Other Environmental Considerations

None cited.

9.7 Chapter 7, Persons Consulted

None cited.

9.8 Chapter 8, List of Preparers

None cited.