Introduction

The City of Gardena's Conservation Element is prepared in accordance with California Government Code Section 65302(d), which requires cities to address the conservation, development, and use of natural resources, including water, soils, vegetation, wildlife, minerals, and scenic and cultural resources. This Element establishes a framework for protecting and managing these resources to support environmental quality and long-term sustainability. While Gardena is a largely built-out community with limited remaining open space, it is home to several important natural, recreational, and cultural assets that contribute to the City's identity and livability. These resources include, but are not limited to, the Gardena Willows Wetland Preserve, the Dominguez Channel and Laguna Dominguez Trail, parks and recreational facilities throughout the City, and historic and cultural landmarks such as the Gardena Cinema.

The Conservation Plan presents a comprehensive vision for how the City will protect, conserve, and responsibly manage its natural and cultural resources. This Plan outlines the long-term goals and policies that will guide Gardena's efforts to support environmental quality, resource conservation, and long-term sustainability.

Authority

California Government Code Sections 65302(d) and 65302(e) require city general plans to include a Conservation Element. For the City of Gardena, the Conservation Plan, together with the Open Space Plan, forms the Community Resources Element of the General Plan. This Element fulfills the State's statutory requirements by establishing goals and policies to conserve and enhance the City's natural and cultural resources. In doing so, it emphasizes the ecological, economic, and social benefits these resources provide to Gardena residents and the surrounding region.

Purpose

The purpose of the Conservation Element is to conserve and protect the City's natural and cultural resources. This includes planning for the sustainable use of water and energy resources to promote resilience to climate change and natural disasters, safeguarding cultural and historical resources that contribute to the City's unique character and identity, identifying areas for growth through the expansion of open space areas and urban habitat linkages, and encouraging compliance with statewide and federal mandates regarding greenhouse gas emissions, air, and water quality.

Relationship with Other Plans and Programs

State laws and local efforts have established a range of plans and programs that are relevant to the Conservation Plan. Together, these efforts support the long-term conservation, protection, and responsible management of natural and cultural resources for the benefit of the community.

General Plan

The Conservation Plan was developed to effectively identify and preserve natural and cultural resources in the City of Gardena. This Element aligns with other elements of the City's General Plan by implementing cohesive goals and guiding principles. In particular:

Land Use Plan: The Land Use Element outlines the proposed uses of land, their intensity, and location. The Conservation Element identifies natural and cultural resource areas that may be designated for open space or recreational purposes in the Land Use Element.

Circulation Plan: The Conservation Element supports the Circulation Element by identifying natural areas, such as wildlife corridors, that should be considered when designing transportation corridors or improvements.

Housing Element: The Conservation Element supports the Housing Element by determining natural or cultural areas that may need to be protected from future development, thereby identifying potential open space areas.

Open Space Plan: The Conservation Element and Open Space and Recreation Element are interconnected, both focusing on the preservation and management of open spaces and natural resources. However, while the Open Space and Recreation Element supports these efforts by designating protected areas and promoting environmentally responsible land management practices, the Conservation Element focuses on natural and cultural resource preservation.

Public Safety Plan: The Conservation Element can enhance the Safety Element by identifying factors such as watersheds, surface waters, groundwater basins, wetlands, soils, geology, and vegetation that are important during natural disasters like floods and wildfires, thereby enabling both elements to complement each other through comprehensive goals effectively.

Noise Plan: The Conservation Element identifies natural resources, such as wildlife, that may be harmed by noise pollution. The Conservation Element may create policies that target noise reduction, which inform the Noise Element.

Environmental Justice Element: The Conservation Element supports the Environmental Justice Element by protecting natural resources, expanding urban greening and tree canopy, improving climate resilience, and promoting equitable access to healthy environments and open space, particularly in underserved communities.

National Pollutant Discharge Elimination System

Like other cities in Los Angeles County, Gardena is required to regulate pollutant discharges in stormwater runoff from construction activities, commercial and industrial operations, and major new development or redevelopment projects. Under the National Pollutant Discharge Elimination System (NPDES) permit, the City must ensure that these projects implement runoff control measures, commonly referred to as Best Management Practices (BMPs), to reduce pollution and protect water quality.

Title 24, Part 6

Title 24, Part 6 of the California Code of Regulations, known as the California Energy Efficiency Standards for Residential and Nonresidential Buildings, was adopted in 1978 to reduce energy consumption statewide. These standards require local jurisdictions to ensure that new development incorporates energy-efficient design features, including efficient appliances, improved weatherization, and effective heating and cooling systems. By reducing energy demand associated with new construction, Title 24 supports statewide energy conservation and long-term sustainability goals.

City Municipal Code

The Conservation Plan of the General Plan establishes the City's long-term goals and policies for the protection, management, and sustainable use of natural and cultural resources. These policies are implemented through the Gardena Municipal Code, which translates General Plan direction into enforceable standards, regulations, and procedures. While the General Plan provides the City's overarching policy framework and vision for resource conservation, the Municipal Code serves as the primary legal mechanism to ensure that development, land use decisions, zoning regulations, and project approvals are consistent with the objectives of the Conservation Plan.

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Hydrology, Flooding, and Water Quality

Watersheds

A watershed is an area of land that drains all streams and rainfall into a common outlet, such as a lake, river, or ocean. The City is located within the Dominguez Channel Watershed and discharges stormwater through five outfalls. The watershed encompasses approximately 70,000 acres in southern Los Angeles County. About 43,400 acres drain to the 15.7-mile-long Dominguez Channel, which begins in Hawthorne and flows south to Los Angeles Harbor. The remaining 26,600 acres, including the Wilmington Drain and Machado Lake areas, drain directly to Los Angeles Harbor. Water quality within the watershed has been affected by pollutants such as trash, metals, bacteria, and nutrients, largely due to the area's dense urban development and extensive impervious surfaces that limit stormwater infiltration into the ground.

The Los Angeles Regional Water Quality Control Board is responsible for regulating the Dominguez Channel Watershed. However, the Board allows permittees the flexibility to develop Watershed Management Programs (WMP) or Enhanced Watershed Programs (EWMP) to implement the requirements of municipal separate storm sewer systems (MS4) at the watershed scale through customized strategies, control measures, and best management practices (BMP). The City of Gardena has been a permittee to the Los Angeles County MS4 program since 1993 and has been subject to the 1990, 1996, and 2001 MS4 permits. Gardena is assigned to the Dominguez Channel Watershed Management Area but was granted conditional approval for an Integrated Monitoring Program by the Los Angeles Regional Water Quality Control Board in 2016. These watershed-based efforts are guided by an Integrated Watershed Management Plan (IWMP), which establishes shared goals and objectives for the long-term management of land and water resources within the watershed.

Surface Waters

The City of Gardena has one naturally occurring surface water feature, the Gardena Willows Wetland Preserve, located at the southeast corner of the City. Historically, the Willows Wetland was part of a much larger marshland system known as the Dominguez Slough. Due to drought conditions and urban development throughout the mid-1900s, the slough's extent was significantly reduced. In an effort to preserve the remaining slough from decline, the City of Gardena adopted a Plan for the Gardena Willows Wetland in 1999, protecting approximately 13.6 acres of wetland habitat. The goal was to preserve and enhance the Willows Wetland’s environmental integrity and quality, while providing a place where the community can experience and enjoy the natural environment. City-wide protection measures, alongside community support and volunteer efforts, have helped ensure the long-term preservation of the Gardena Willows Wetland to the present day.

In addition to the Preserve, there are additional limited surface water bodies within the City. The Dominguez Channel flows through the City at several points. It begins in the

northwest portion of the City at El Segundo Boulevard and travels south until it curves back into the City limits, then runs west-east alongside SR-91.

Groundwater

The City of Gardena is located within the West Coast Subbasin of the Los Angeles Basin, commonly referred to as the West Coast Basin. The basin covers approximately 142 square miles, or about 91,300 acres. It is bounded to the north by the Ballona Escarpment, an ancient channel of the Los Angeles River; to the east by the Newport-Inglewood fault zone; and to the south and west by the Pacific Ocean and the Palos Verdes Hills. Groundwater in the West Coast Basin is primarily stored in confined aquifers, which receive most of their recharge from groundwater flow from neighboring basins and, in some coastal areas, seawater intrusion. The Silverado Aquifer, which underlies much of the basin, is the most productive groundwater source and supplies most of the groundwater extracted from the West Coast Basin each year.

Rapid population growth in the greater Los Angeles area throughout the early 20th century led to groundwater being pumped faster than it could be replenished. This led to falling water levels, dried-up wells, and seawater intruding into freshwater aquifers. To address these problems, the West Coast Basin was adjudicated in 1961, setting a court-approved limit on groundwater pumping of 64,468 acre-feet per year.

Since the amount of groundwater permitted to be pumped from the West Coast Basin exceeds its natural recharge, the California State Legislature created the Water Replenishment District of Southern California (WRD) in 1959 to manage, regulate, and replenish the West Coast Basin. Each year, WRD determines the amount of supplemental recharge needed for the West Coast Basin based on annual groundwater extractions and groundwater levels. As part of its recharge and protective duties, WRD procures imported and recycled water for the West Coast Basin Barrier Project and the Dominguez Gap Barrier Project to prevent seawater intrusion.

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Figure 1: Groundwater

Water Quality

Protecting water quality is a key conservation concern, as pollution from urban runoff, development, and other sources can impair surface water and groundwater resources. Water pollution is generally categorized as originating from either point or nonpoint sources. Point-source pollution is associated with a discrete, identifiable discharge location, such as a pipe releasing treated wastewater into a river or other surface water body. In contrast, nonpoint source pollution is pollution that does not originate from a single identifiable discharge point, such as stormwater runoff, precipitation, drainage, seepage, or modifications to natural hydrologic systems. Common nonpoint source pollutants include fertilizers and pesticides transported during runoff from agricultural and residential areas, as well as sediment generated from eroding stream banks and disturbed soils.

The Clean Water Act (CWA) requires the State of California to assess and report on the condition of its surface waterbodies, including rivers, streams, reservoirs, bays, and other waters, on a biennial basis. To meet this requirement, California prepares the Integrated Report, which combines the CWA Section 303(d) List of Impaired Waters with the Section 305(b) report on overall water quality conditions. Inclusion of a waterbody on the Section 303(d) list triggers prioritization for the development of a total maximum daily load (TMDL) or implementation of an alternative restoration approach to achieve and maintain applicable water quality standards. Waters that are listed on the Section 303(d) list are considered “impaired”. The Dominguez Channel (lined portion above Vermont Avenue) is listed on the California 303(d) List of Impaired Waters. The Dominguez Channel is listed as Category 5, meaning states are required to develop a TMDL or another applicable restoration measure for each pollutant causing the impairment because water quality standards are not being met.

The City of Gardena falls within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB), which protects ground and surface water quality in the Los Angeles Region. The LARWQCB is responsible for developing a Basin Plan, which is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Improving surface water quality within the City of Gardena requires ongoing collaboration with the LARWQCB to meet the Basin Plan requirements and TMDL requirements for the Dominguez Channel. Further, pollutant discharge regulation measures that the City can implement include strategies like expanding green infrastructure, such as bioswales, permeable pavement, and stormwater capture and treatment features, to reduce runoff volumes and filter pollutants before they enter local waterways. Improving water quality is essential to protecting public health and ensuring the long-term sustainability of local and regional water resources.

Maintaining the Gardena Willows Wetland Preserve is also important from a water quality perspective because of its historical connection to the ecological history of Los Angeles and its role in filtering runoff before it reaches the Dominguez Channel. The City has received grant funding to pursue water quality improvements within the Gardena Willows Wetland Preserve and to improve the quality of water discharged from the Preserve. A feasibility study is currently underway to evaluate potential improvement measures and guide future project scope and implementation efforts.

Wetlands

Wetlands are natural areas where water collects at or near the surface, supporting specialized plants and wildlife and providing important environmental benefits. The National Wetlands Inventory (NWI) identifies several wetlands within the City of Gardena.

One major wetland feature is the Dominguez Channel, which runs through the City in two locations: a 34-acre north–south section in the northwestern area near Crenshaw Boulevard and an 8.5-acre east–west section near West Artesia Boulevard. Although it is mapped as a riverine feature, the Dominguez Channel is a concrete-lined flood control channel and provides limited habitat value for wildlife.

Another mapped wetland located in the southeast corner of the City is a 9.07-acre Freshwater Forested/Shrub Wetland associated with the Gardena Willows Wetland Preserve. The Gardena Willows Preserve is one of the few remaining natural wetland areas in the region.

Gardena Willows Wetland Preserve Entrance

Biological Resources

Biological resources are evaluated using several related but distinct classifications that describe existing vegetation, protected species, habitat types, and areas designated for conservation, as summarized below.

- **Vegetation**: The plants growing on the ground, including native and non-native species.
- **Special-status species**: Plants and animals that are rare, threatened, endangered, candidates for listing, or otherwise protected or designated by the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service, the California Department of Fish and Wildlife (CDFW), or recognized by the California Native Plant Society.
- **Natural community**: A naturally occurring habitat or vegetation type characterized by a distinct assemblage of primarily native plant species.
- **Sensitive natural community**: A rare or ecologically significant habitat or vegetation community identified by the California Department of Fish and Wildlife.
- **Critical habitat**: A federally designated geographic area identified by the U.S. Fish and Wildlife Service or National Marine Fisheries Service as essential to the conservation and recovery of a listed species.

Gardena is a fully built-out, urbanized community with a long history of development, which has limited the presence of significant biological resources within the City. One of the few remaining examples of natural open space within the City is the Gardena Willows Wetland Preserve. Ongoing restoration and maintenance efforts support native wildlife, a mix of native and non-native plant species, and serve as a natural purification system for the Dominguez Channel Watershed.

Aside from the Preserve, biological resources are largely limited to City parks and open spaces, such as Freeman Park, Rosecrans Park, and Mas Fukai Park, among others, as well as urban landscaping. These areas provide small areas of natural space and vegetation; however, they do not constitute extensive or connected natural communities. No other significant natural communities remain in Gardena.

Vegetation

The City of Gardena is situated within a densely developed area of southwestern Los Angeles County. Extensive urbanization and high levels of impervious surfaces have limited the presence of natural vegetation, and most native plant communities have been lost over time. As shown in **Figure 2,** existing vegetation within the City is sparse. Vegetation is primarily composed of maintained urban landscaping, including street and residential trees in developed areas. Vegetated areas are largely confined to public parks,

landscaped rights-of-way, and recreational facilities, where turf grass, non-native plantings, and select native tree species are managed for visual quality and recreational use. The Gardena Willows Wetland Preserve constitutes the City's most prominent area of natural vegetation.

The Gardena Willows Wetland Preserve includes a mix of wetland and upland plant communities that together form a marsh system. The wetter areas support dense vegetation such as willows, cottonwoods, grapevines, and tule, creating cooler, shaded conditions along the riparian corridor. Drier upland areas support plants adapted to sunnier conditions, including oaks, native shrubs, sages, buckwheats, and bunch grasses. These vegetation communities help filter stormwater before it enters the Dominguez Channel, provide wildlife habitat, and contribute to the preserve's function as urban green space. Notable plants found in the preserve include arroyo willow, Goodding's black willow, toyon, black elderberry, Ray Hartman ceanothus, Munz's sage, sourberry, and chokecherry.

Special Status Species and Natural Communities

In addition to the entities listed in the definition in the previous section, the special-status species also include species considered rare or endangered under State CEQA Guidelines Section 15380, as well as species considered sensitive or of special concern due to limited distribution or lack of information. Special status species are vital for ecosystem balance and biodiversity and serve as important indicators of environmental quality.

To identify the potential occurrence of special-status species within the City of Gardena, a search was conducted using the CDFW's California Natural Diversity Database (CNDDB) RareFind 5 viewer, which provides information on the status and locations of rare plants and animals within California. The search identified nine recorded species occurrences within City limits, including three plants, two insects, one bird, and one mammal, as summarized in **Table CP-1**. Species identified were either listed under the Endangered Species Act (ESA), the California Endangered Species Act (CESA), recognized as a Species of Special Concern (SSC) by CDFW, or ranked as rare or endangered by the California Native Plant Society (CNPS). Although several special-status species have been documented within the City, CDFW has not identified or mapped any sensitive natural communities within City limits.

The special-status species occurrences identified in the CNDDB are classified as either presumed extant or possibly extirpated. "Presumed extant" indicates that a species is believed to still occur in the region but has not been observed in over 20 years, while "possibly extirpated" suggests the species may have been eliminated from the area. As a result, the likelihood of encountering these species within the City is considered low.

This information provides important regional and city-wide context for understanding Gardena's biological makeup. However, any future development will require site-specific biological resource evaluations to determine whether these species are present.

Table CP-1: Special-Status Species Occurrences in the City of Gardena (CNDDB)

Species	Scientific Name	Federal Status	State Status	CDFW Status*	CNPS Rank**
Plants					
Prostrate vernal pool navarretia	*Navarretia prostrata*	-	-	-	1B.2
Coulter's saltbush	*Atriplex coulteri*	-	-	-	1B.2
California Orcutt grass	*Orcuttia californica*	Endangered	Endangered	-	1B.1
Insects					
Palos Verdes blue butterfly	*Glaucopsyche lygdamus palosverdesensis*	Endangered	-	-	-
American bumble bee	*Bombus pensylvanicus*	-	-	-	-
Birds					
Tricolored blackbird	*Agelaius tricolor*	-	Threatened	SSC	-
Reptiles					
South coast gartersnake	*Thamnophis sirtalis pop. 1*	-	-	SSC	-
Mammals					
Western mastiff bat	*Eumops perotis californicus*	-	-	SSC	-

Source: California Department of Fish and Wildlife (CDFW) California Natural Diversity Database Commercial [ds85], GeoFind Layer, https://apps.wildlife.ca.gov/bios6/?al=ds85.

***CDFW Status-** SSC (Species of Special Concern): Species at risk that do not yet have formal state or federal listing but warrant monitoring and protection efforts.

****CNPS Rank**

- *1B: Rare, threatened, or endangered in California and elsewhere*
- *Threat-level modifier- .1 = seriously threatened; .2 = moderately threatened*

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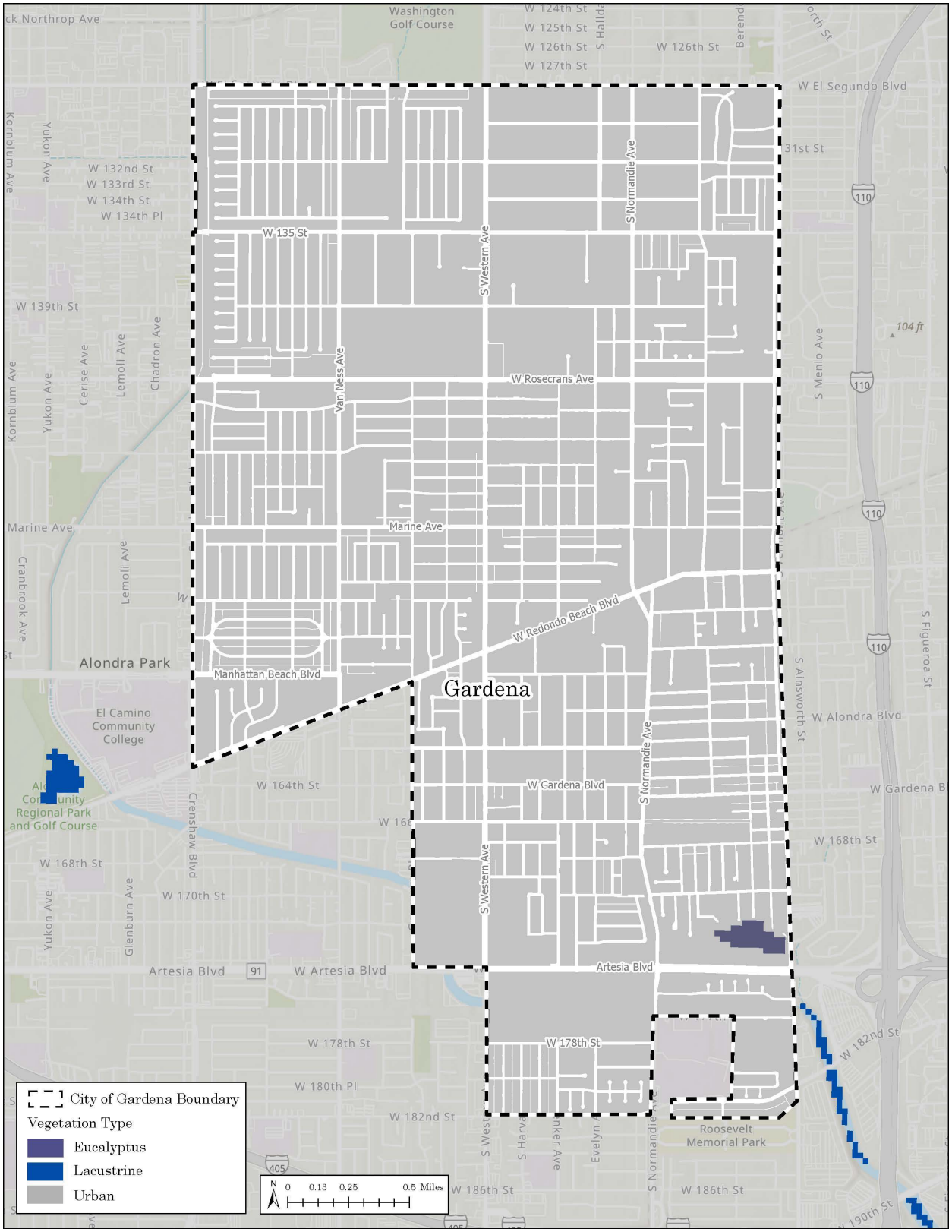
Figure 2: Vegetation



Critical Habitat

Critical habitat consists of specific geographic areas containing physical or biological features essential to the conservation of threatened or endangered species. These areas may need special management or protection to ensure their conservation. Critical habitats may include areas that were not occupied by the species at the time of listing but are essential to its conservation.

The USFWS developed a digital, web-based tool called Information for Planning and Consultation (IPaC) to help users identify threatened or endangered species, critical habitats, and migratory birds within a region. A search of the IPaC database was conducted to locate designated or proposed critical habitats for endangered species within Gardena. The IPaC results identified designated critical habitat for 10 species within the greater Los Angeles region, including 1 mammal, 4 birds, 2 reptiles or amphibians, 1 insect, 1 flowering plant, and 1 crustacean **(**see **Table CP-2).** However, none of these designated critical habitat areas occur within the City of Gardena. A site-specific biological review will be needed for any future development to determine potential impacts on endangered species and their critical habitats, if any.

Table CP-2: City of Gardena Threatened and Endangered Species

Species	Status	Critical Habitat Status
Mammals		
Pacific pocket mouse	Endangered	No critical habitat designated
Birds		
California least tern	Endangered	No critical habitat designated
Coastal California gnatcatcher	Threatened	Final critical habitat designated
Least bell's vireo	Endangered	Final critical habitat designated
Western snowy plover	Threatened	Final critical habitat designated
Reptiles/Amphibians		
Southwestern pond turtle	Proposed Threatened	No critical habitat designated
Western spadefoot	Proposed Threatened	No critical habitat designated
Insects		
Monarch butterfly	Proposed Threatened	Proposed Critical habitat
Flowering Plants		
Nevin’s barberry	Endangered	Final critical habitat designated
Crustaceans		
Riverside fairy shrimp	Endangered	Final critical habitat designated
Source: U.S. Fish and Wildlife Service (USFWS). 2025. IPaC Resource List for Los Angeles County. Accessed via https://ipac.ecosphere.fws.gov/		

Wildlife Connectivity

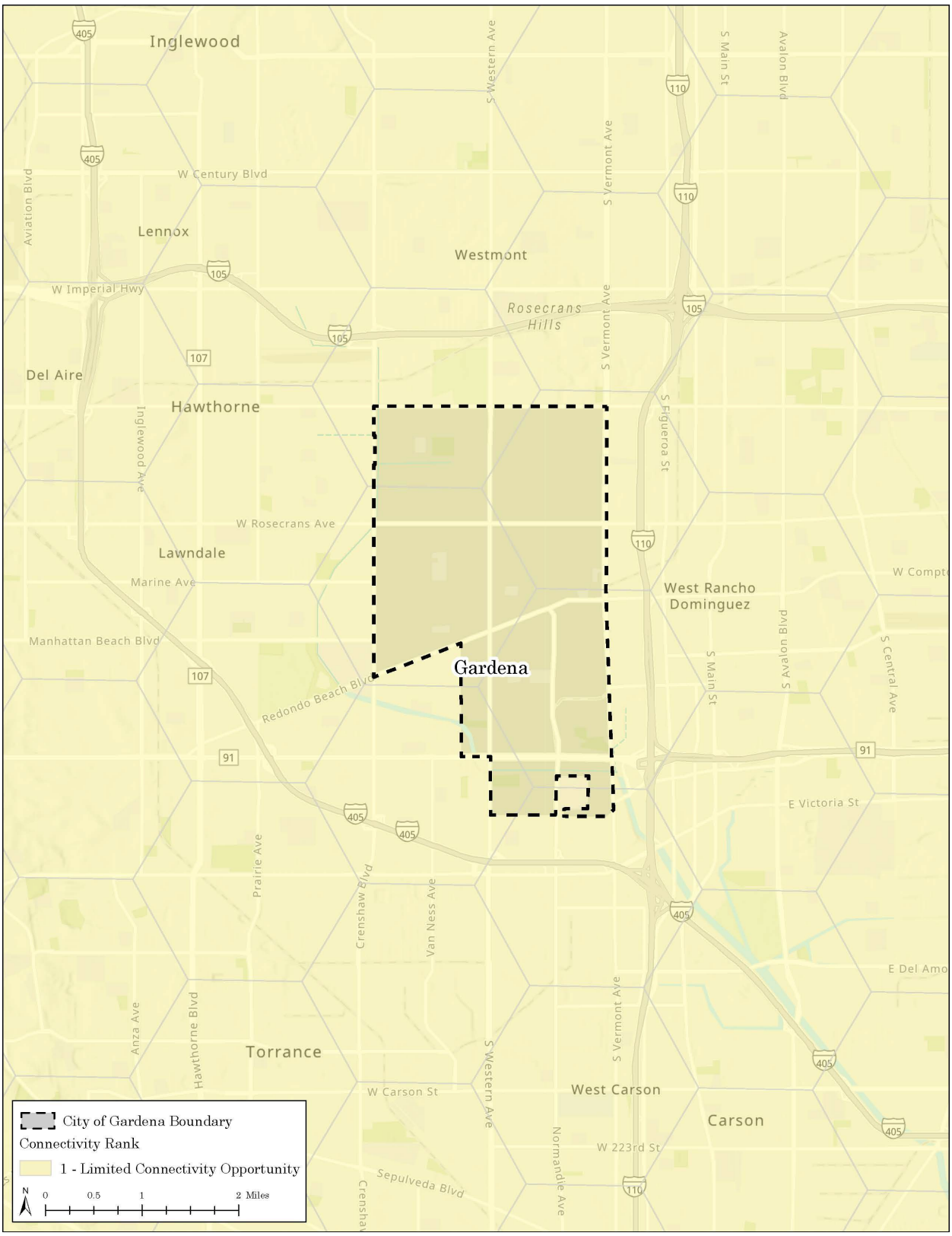
Increasing urbanization can restrict the ability of animals to move across the landscape in search of food, habitat, and mates. Wildlife connectivity refers to the degree to which landscapes allow this movement. Human-made structures such as highways and urban development displace open spaces and potential animal habitats, isolating populations and making animals less resilient to the urban environment. This is especially relevant for Gardena because it is in a highly developed portion of Los Angeles County. The California Department of Fish and Wildlife developed a Terrestrial Connectivity dataset through the Area of Conservation Emphasis (ACE) initiative to compile, analyze, and display statewide data on biodiversity, significant habitats, connectivity, and climate resilience. **Figure 3** shows the results of a search of the Terrestrial Connectivity dataset for the City of Gardena. The City received a connectivity ranking of "1" on a scale of 1 to 5, indicating limited connectivity opportunities.

The City can expand and strengthen its wildlife connectivity network for small mammals, birds, and pollinators by building on existing natural and open space features. One key opportunity is the Dominguez Channel, particularly the stretch that runs through the northwestern portion of the City along El Segundo Boulevard. This segment is adjacent to the Laguna Dominguez Trail, a paved commuter and recreational path lined with native plants such as deer grass and coyote brush. The trail connects to Alondra Park Lake just west of the City, allowing wildlife to move between Alondra Park and surrounding areas.

The Gardena Willows Wetland Preserve represents another opportunity to enhance wildlife connectivity. As an important urban habitat for native willow trees, birds, and other wildlife, the Preserve provides a significant habitat area within Gardena's otherwise fully built-out environment. It is one of the few remaining natural areas in the City supporting wetland, riparian, and upland habitats.

Additionally, the City can explore expanding pollinator corridors to support bees, butterflies, hummingbirds, and other pollinators. These corridors link small habitat areas across the urban landscape, allowing pollinators to move between flowering plants and helping reduce habitat fragmentation. Potential corridor elements include parks, street medians, stormwater channels, landscaped rights-of-way, private gardens, rooftops, and utility corridors planted with native pollinator-supportive vegetation. Even small or narrow planted areas can be effective when spaced closely together. Pollinators support plant reproduction and overall ecosystem health. Incremental improvements to landscaping and green infrastructure across public and private properties can strengthen these corridors over time.

Figure 3: Wildlife Connectivity



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Geology and Soils

Gardena is located within the West Coast Subbasin of the Coastal Plain of the Los Angeles Basin, more commonly known as the West Coast Basin. It is bounded to the north by the Ballona Escarpment, an abandoned erosional channel from the Los Angeles River. To the east, it is bounded by the Newport-Inglewood fault zone, and to the south and west by the Pacific Ocean and the consolidated rocks of the Palos Verdes Hills. It is underlain by Quaternary-age (less than 1.8 million years old) sediments of gravel, sand, silt, and clay that were deposited in layers from the erosion of nearby hills and mountains and from historic beaches and shallow ocean floors (see **Figure 4**).

The U.S. Department of Agriculture Web Soil Survey provides an overview of soil types present within Gardena. The five soil types found within the City include a range of highly disturbed, human-modified soils resulting from soil compaction and urbanization. The different soil types are typically level and consist of human-transported material (such as asphalt) overlying heavily compacted alluvium. All runoff classifications are considered very high, which aligns with the City's impervious surface area (see **Figure 5)**.

Urban land-Centinela-Typic Xerorthents: This soil type is found in the north and southwest portions of the City. It is well-drained, with slopes ranging from 0 to 2 percent, and is primarily composed of discontinuous human-transported material over mixed alluvium.

Urban land-Aquic Xerorthents complex: Soils of this complex are found in northern and southern Gardena, forming the second-largest type in the City. They are considered somewhat poorly drained, with slopes ranging from 0 to 3 percent, and consist of human-transported mixed alluvium.

Urban land-Typic Xerorthents complex: This soil type is found in northeastern Gardena. Slopes vary slightly, ranging from 0 to 5 percent, and the parent material is human-transported. The drainage class is considered well-drained.

Urban land-Wind fetch-Typic Haploxerolls complex: This complex constitutes the largest portion of the land area within the City and is found in central Gardena. Soils are typically well-drained, with slopes ranging from 0 to 2 percent, and the parent material consists of discontinuous human-transported deposits over mixed alluvium.

Urban land-Thums-Wind fetch complex: Soils of this complex are found in southwestern Gardena. Slopes range from approximately 0 to 2 percent, and the soils are generally well drained. They are characterized by discontinuous human-transported material overlying alluvium and/or palustrine estuarine deposits.

Figure 4: Lithological Types

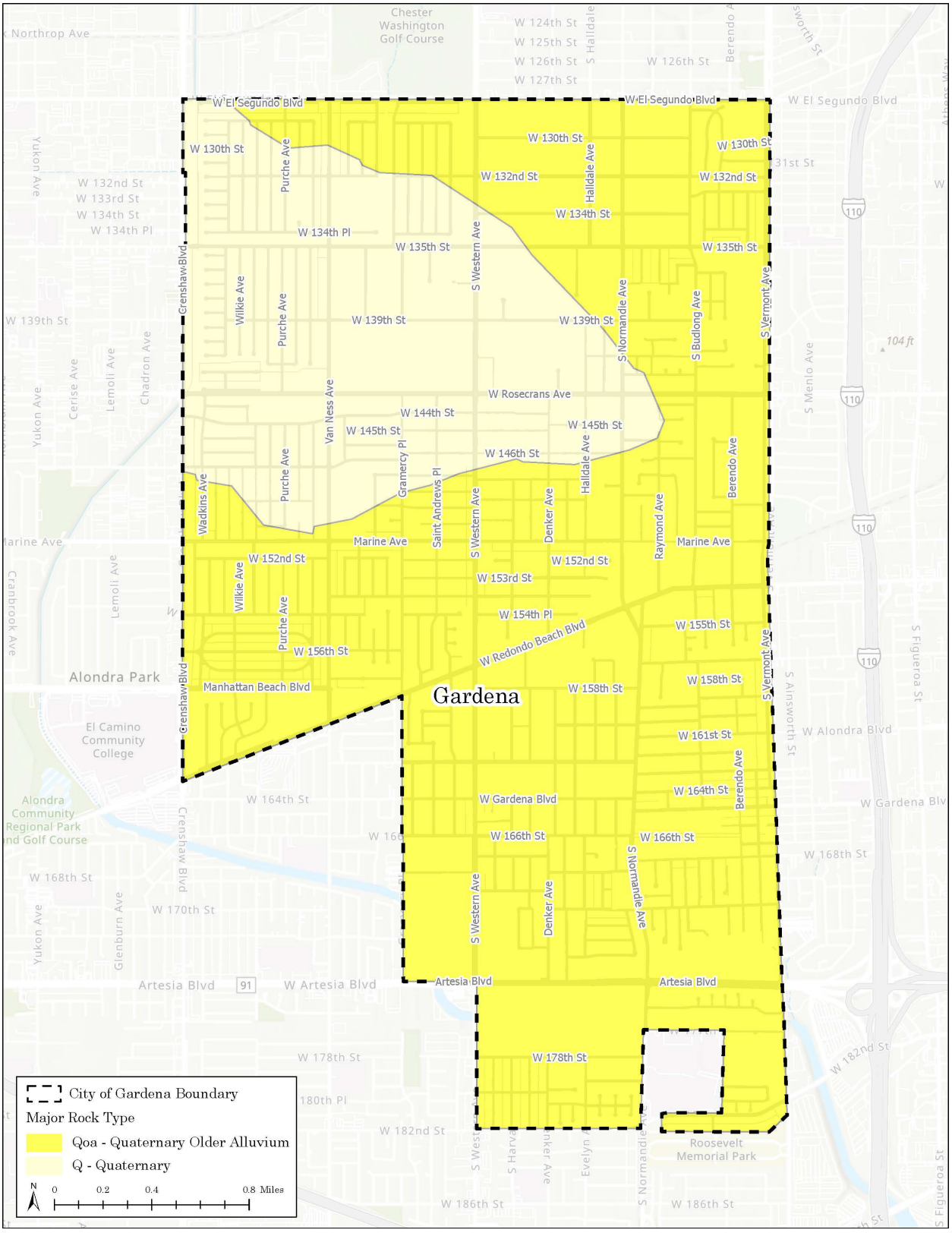

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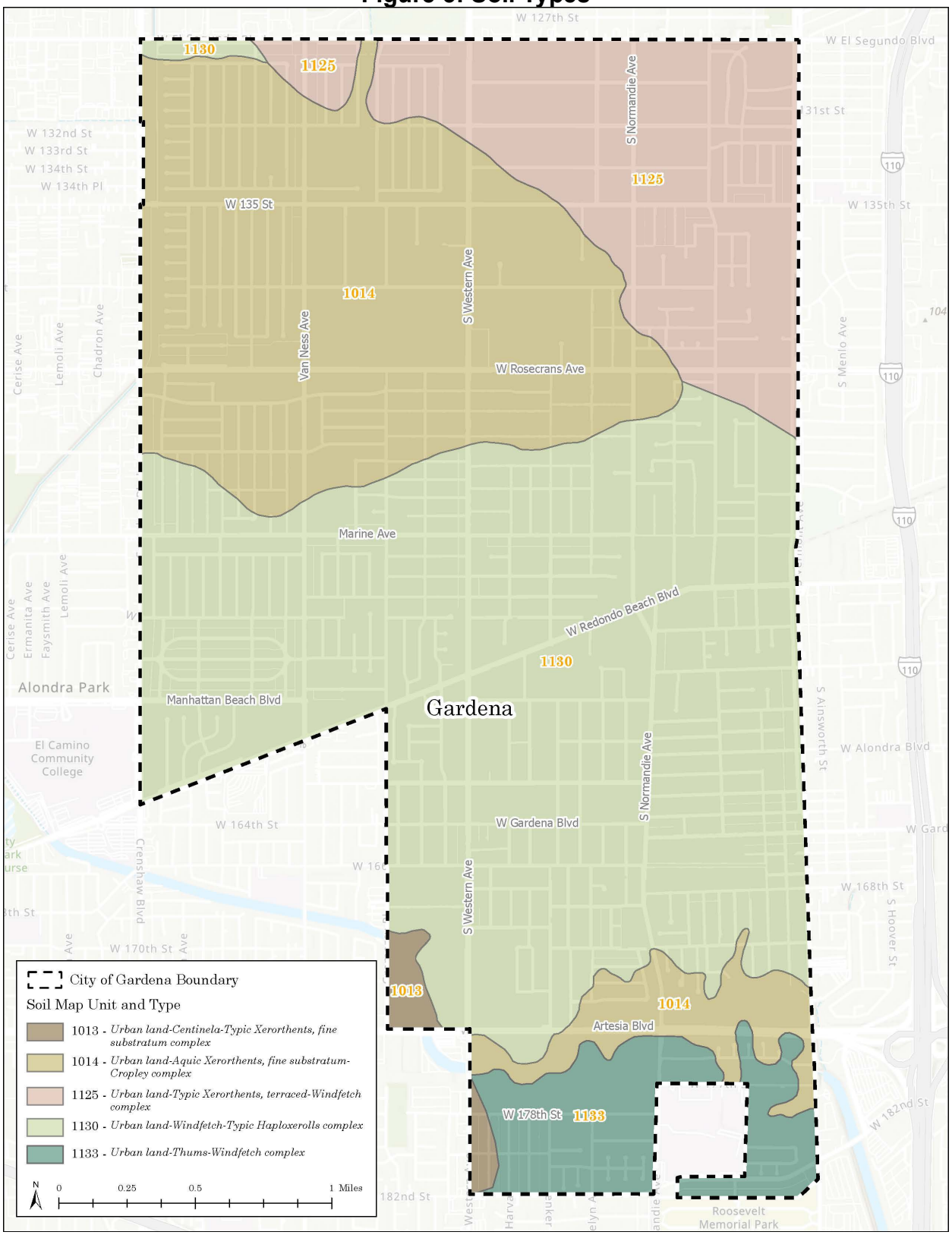
Figure 5: Soil Types



Mineral Resources

The California Geological Survey prepares Mineral Land Classification studies under the direction of the State Geologist pursuant to the Surface Mining and Reclamation Act (SMARA) of 1975 (PRC 2710 et seq.) to address mineral resource conservation. The classification studies evaluate mineral resources and present this information as Mineral Resource Zones (MRZs). The California Department of Conservation, California Geological Survey's *Update of Mineral Land Classification of Portland Cement Concrete Aggregate in Ventura, Los Angeles, and Orange Counties, California, Part II - Los Angeles County, 1994* (Open File Report 94-14) depicts the MRZ zones within the City. The City lies entirely within MRZ-1, signifying areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that there is little likelihood of their presence. This indicates that no mineral resources are considered regionally significant within the City of Gardena.

Cultural and Historical Resources

Incorporated in 1930, the City of Gardena evolved from a nineteenth-century agricultural community, once known as "Berry Land" into a diverse and fully urbanized South Bay city. Situated on former Spanish rancho lands, Gardena's development throughout the twentieth century was strongly influenced by expanding transportation corridors and post-World War II suburban growth. Today, the City is commonly referred to as the "Freeway City" due to its proximity to Interstate 405 and other major regional freeways. Gardena functions as a densely populated residential suburb within Los Angeles County. Cultural resources in Gardena reflect this layered history, including legacy businesses, community institutions, and historic properties that illustrate the City's postwar growth and multicultural development.

Tribal and Pre-Contact History

Gardena is located on the ancestral and unceded territory of the Tongva people (also known as the Gabrielino). Historically, the Tongva have been referred to as the Gabrielinos because of its incorporation into Mission San Gabriel in the late eighteenth century. Many descendants and tribal communities use the name Tongva, due to negative connotations with the Spanish missionaries. The Tongva were a semi-nomadic coastal hunter-gatherer tribe that inhabited a territory spanning almost 4,000 square miles, including both the Santa Catalina and San Clemente Islands and most of modern-day Los Angeles County. These lands sustained food and shelter for a population of nearly 5,000 people. The Tongva traveled among other tribes on foot and in canoes crafted by their artisans from large wooden planks. The canoes allowed them to enjoy a wide variety of sea resources such as fish, shellfish, and marine mammals, and to trade them with their inland neighbors. Archaeological digs within and around the City indicate that the Tongva people hunted and fished near Gardena and used the Gardena Willows Wetland Preserve and the broader Dominguez Slough for sustenance and as a network for travel and trade.

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Historic Development

The City originally was part of a Spanish land grant known as Rancho San Pedro. During the nineteenth century, the land passed through several owners, including Union Army Major General William Starke Rosecrans, whose Rancho encompassed much of present-day Gardena. This land would later be bordered to the north by Florence Avenue, to the south by Redondo Beach Boulevard, to the east by Central Avenue, and to the west by Arlington Avenue. Early Gardena was laid out with Figueroa and 161st streets at its center, assuming that the Los Angeles and Redondo Railway would pass next to it when extended south between those two communities. However, the railway, which opened in April 1890, followed Vermont Avenue. The Dominguez Slough was drained and filled to extend Vermont Avenue in Gardena. The Dominguez Slough, a serpentine inland freshwater lake created from rainwater runoff, made Gardena a well-known “garden spot” in Southern California.

By the early twentieth century, agriculture had become Gardena’s primary economic driver, with the City gaining national recognition as the berry-growing capital of Southern California. Strawberry farming defined the local economy and identity, leading to the nickname “Berry Land” and the establishment of annual Strawberry Day festivals and parades. Japanese Americans played a significant role in shaping Gardena’s early twentieth-century agricultural settlement. Their presence is reflected today in local businesses, institutions, and cultural landmarks. This agricultural prominence declined during and after World War I, as land was gradually converted to other crops and, later, to urban development. In 1930, the rural communities of Gardena, Moneta, and Strawberry Park were formally consolidated and incorporated as the City of Gardena. Over time, Gardena’s evolution into a modern urban city was reinforced by regional transportation infrastructure, ultimately earning it the designation “Freeway City” because it is bordered by the Artesia, Harbor, and San Diego freeways to its south, east, and west, respectively. This transformation reflects a broader shift from an agricultural community to an urban center within Los Angeles County.

Archaeological Resources

Archaeological resources are generally grouped into two types: pre-contact and historic. Pre-contact resources date to before Native American contact with Europeans, which occurred as late as 1769 in California, and include cultural features and artifacts. Historic archaeological resources date to the period after European contact and include remains of nineteenth-century settlements and activities that can help researchers better understand the region’s history. As discussed, the City is located within the ancestral and unceded land of the Tongva (Gabrielino) people. Archaeological evidence for their presence in Southern California dates to the 7th, 8th, or 9th century B.C.E., and their historical presence is woven into the landscape. Evidence of Tongva life includes remnants of village sites, shell and bone middens, stone tools, and other buried materials related to daily living and habitation.

Extensive urban development has disturbed or destroyed many archaeological resources tied to the Tongva people in Gardena and nearby communities. However, these resources could still be found during construction or other ground-disturbing activities, especially near Dominguez Slough or the Gardena Willows Wetland Preserve. The City may also contain archaeological resources associated with historic land uses, including early-20th-century strawberry farming. Any new development would need to undergo site-specific review under the California Environmental Quality Act (CEQA) to ensure that any discovered remains or artifacts are treated in a culturally sensitive and appropriate manner.

Documented Resources

There are no buildings or sites within the City that are designated as a historic resource on the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP). Regardless, there are locations and businesses throughout the City that have historic and cultural significance at the City- and County-wide levels. Notable examples include the Gardena Cinema and Gardena Bowl. Gardena does not currently have a historic preservation ordinance, but one should be considered as a legal tool to protect the City's unique character, history, and architectural heritage.

Gardena Cinema

The Gardena Cinema, located at 14948 Crenshaw Boulevard, is a single-screen movie cinema built in 1946 and operated by the Kim family since 1976. Although it is not formally listed on the NRHP or CRHR, it is a vital local landmark and the last independently owned 800-seat single-screen theater in Los Angeles County. Its designation by the Los Angeles Conservancy as a culturally significant place underscores its importance as a legacy business that strengthens community character and reinforces Gardena's distinct sense of place.

Photograph of the Exterior of the Gardena Cinema

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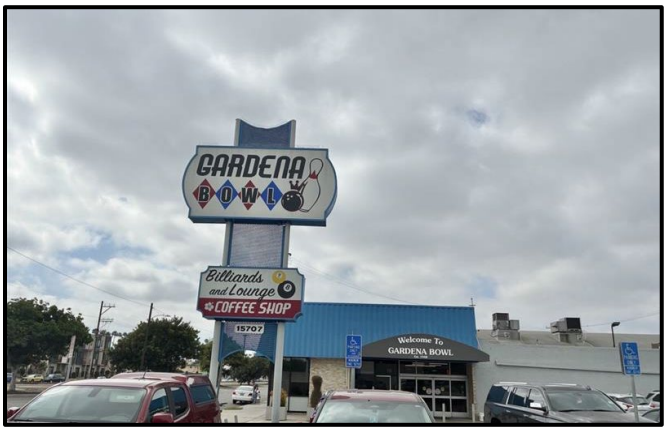
Gardena Bowl

Gardena Bowl, located at 15707 South Vermont Avenue, is not formally listed on the NRHP or CRHR, nor is it designated as a local landmark. Established in 1948 and continuously operated by the same family since 1960, Gardena Bowl is one of the oldest surviving bowling alleys in Southern California and has served multiple generations of residents as a recreational and social gathering space. Beyond bowling, the facility is widely recognized for its on-site coffee shop, which has become a regional landmark for Japanese-American and Hawaiian comfort cuisine, reflecting Gardena's historically significant Japanese-American population.



Photograph outside of Gardena Bowl

Air Quality and Climate

Air quality describes how clean or polluted the air is based on the types and concentrations of pollutants present in the atmosphere at a given time. Local and regional agencies regulate air quality through a combination of transportation, land-use planning, and industrial policies. Improving air quality is important to minimize the health impacts associated with air pollution. Certain populations and land uses are particularly vulnerable to poor air quality. Sensitive receptors generally include schools, residences, and medical facilities. This section outlines the existing air quality conditions within the City. It identifies major sources of emissions to guide policy and future development that will support the attainment of state and federal air quality standards for healthier communities.

South Coast Air Basin

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. SCAQMD is responsible for attaining state and federal clean air standards in the South Coast Air Basin (SCAB). All of California is divided into air basins, which are served by either county air pollution control districts or multi-county air quality management districts. The City of Gardena is located within the South Coast Air Basin.

Ambient Air Quality

The Clean Air Act requires the U.S. Environmental Protection Agency (U.S. EPA) to set National Ambient Air Quality Standards (NAAQS) for six commonly found air pollutants, known as criteria air pollutants. These include Carbon Monoxide (CO), Ozone (O_3), Particulate Matter ($PM_{2.5}$ and PM_{10}- particulate matter with diameters of 2.5 micrometers and 10 micrometers or less), Nitrogen Dioxide (NO_2), Sulfur Dioxide (SO_2), and Lead (Pb). Areas that do not meet the NAAQS for one or more criteria pollutants are designated as nonattainment areas. Conversely, attainment areas are those where concentrations of criteria pollutants meet the NAAQS. Below is a brief description of the air quality pollutants that apply to the City.

Ozone (O_3): Ground-level ozone is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are major sources of NOx and VOC. Breathing ozone can trigger a variety of health problems, particularly for children, the elderly, and people of all ages who have lung diseases such as asthma.

Carbon Monoxide (CO): CO is a colorless, odorless gas that can be harmful when inhaled in large amounts. CO is released when something is burned. The greatest sources of CO in outdoor air are cars, trucks, and other vehicles and machinery that burn fossil fuels. A variety of items in homes, such as unvented kerosene and gas space

heaters, leaking chimneys and furnaces, and gas stoves, also release CO and can affect indoor air quality.

Nitrogen Dioxide (NO_2): NO_2 is one of a group of highly reactive gases collectively known as nitrogen oxides. NO_2 is primarily released into the air from the burning of fuel. NO_2 forms from emissions from cars, trucks, buses, power plants, and off-road equipment.

Particulate Matter Less Than 10 Microns (PM_{10} and $PM_{2.5}$): PM stands for particulate matter (also called particle pollution), a mixture of solid particles and liquid droplets in the air. Particle pollution includes PM_{10}: inhalable particles with diameters generally 10 micrometers or smaller, and $PM_{2.5}$: fine inhalable particles with diameters generally 2.5 micrometers or smaller.

Accurately measuring air quality is important for establishing and reducing air pollution. The California Ambient Air Monitoring Network consists of more than 250 monitoring stations operated by federal, state, and local agencies. Air quality monitoring stations are primarily managed by the California Air Resources Board (CARB), local air pollution districts, and the U.S. EPA. The SCAQMD operates 38 permanent monitoring stations and five single-pollutant source-impact Lead (Pb) air monitoring sites in the SCAB and a portion of the Salton Sea Air Basin in the Coachella Valley. SCAB area includes most of Los Angeles County, including Gardena, all of Orange County, and the urbanized portions of Riverside and San Bernardino counties. Each monitoring station is a designated stationary site that measures local air pollutant levels to represent the air quality of a specific region with similar climate and emission patterns.

The City of Gardena is located within the Southwest Los Angeles County Coastal Air Monitoring Area. The Compton monitoring station, located at 700 North Bullis Road in Compton, is the closest air monitoring station to the City. The Long Beach-Signal Hill monitoring station, located at 1710 East 20th Street in Signal Hill, was used for PM_{10} data because the Compton station did not report this pollutant. Air quality data from 2022 through 2024 are presented in **Table CP-3.** During this period, carbon monoxide (CO), nitrogen dioxide (NO_2), and PM_{10} concentrations remained below applicable federal standards, with no recorded exceedances. Ozone (O_3) exceeded the federal 1-hour standard in 2022 and 2023 and the state 8-hour standard in 2022, although no exceedances were recorded in 2024. $PM_{2.5}$ exceeded the federal 24-hour standard on a limited number of days during the reporting period. These data indicate that ozone and fine particulate matter ($PM_{2.5}$) remain the primary regional air quality concerns.

Table CP-3: Ambient Air Quality Data

Criteria Pollutant	2022	2023	2024
Ozone (O_3)			
1-hour Maximum Concentration (ppm)	0.111	0.084	0.087
8-hour Maximum Concentration (ppm)	0.085	0.071	0.064
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.08 ppm)	1	1	0
NAAQS 8-hour (>0.070 ppm)	1	0	0
Carbon Monoxide (CO)			
1-hour Maximum Concentration (ppm)	3.437	3.164	3.512
Number of Days Standard Exceeded			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
1-hour Maximum Concentration (ppm)	0.065	0.053	0.061
Number of Days Standard Exceeded			
NAAQS 1-hour (>0.100 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
Particulate Matter (PM_{10})			
National 24-hour Maximum Concentration	57.9	81.2	83.0
State 24-hour Maximum Concentration	*	*	*
State Annual Average Concentration (CAAQS=20 µg/m^3)	*	*	*
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 µg/m^3)	0	0	0
CAAQS 24-hour (>50 µg/m^3)	*	*	*
Particulate Matter ($PM_{2.5}$)			
National 24-hour Maximum Concentration	52.8	54.6	57.4

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Criteria Pollutant	2022	2023	2024
State 24-hour Maximum Concentration	54.6	54.6	57.4
Number of Days Standard Exceeded			
NAAQS 24-hour (>35 µg/m^3)	6	2	7
NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million. µg/m^3 = micrograms per cubic meter; * = not measured			
Notes: Measurements taken at the Long Beach – Signal Hill Monitoring Station located at 1710 East 20th Street, Signal Hill, CA (CARB# 70033) and the Compton Monitoring Station located at 700 North Bullis Rd, Compton, CA (CARB# 70112).			
Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database (https://www.arb.ca.gov/adam) except for CO and NO_2, which were retrieved from the CARB Air Quality and Meteorological Information System (https://www.arb.ca.gov/aqmis2/aqdselect.php).			

Primary Sources of Air Pollutant Emissions

The U.S. EPA provides information on sources of hazardous air pollutants, including human-made sources such as mobile, stationary, and indoor sources. Some air pollutants are also released through natural mechanisms like volcanoes and forest fires. Exposure to toxic air pollutants can occur in a variety of ways, primarily through inhalation, but also via ingestion of contaminated food, water, or soil. Air pollutants generated by humans that apply to the City are discussed further below.

Mobile Sources

Mobile sources are any vehicles, engines, or equipment that generate air pollution. They are classified as either on-road (passenger cars, trucks, buses, and motorcycles) or non-road (construction equipment, maintenance equipment, locomotives, and marine vessels). Mobile source emissions from cars, trucks, buses, and other vehicles that travel on the regional roadway network are primary drivers of urban air pollution, contribute to GHG emissions, and pose major health risks. The U.S. EPA is responsible for establishing national emissions standards for mobile source emissions under the Clean Air Act. The California Air Resources Board also regulates emissions from mobile sources, including light-duty vehicles (LDV), heavy-duty vehicles (HDV), and off-road equipment (ORE), operating statewide in California. CARB is developing the 2020 Mobile Source Strategy to take an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets.

The City's transportation network includes a variety of roadways, such as arterials, collector streets, and local roads, that contribute to on-road emissions. Major arterials in

the City include Rosecrans Avenue, Western Avenue, Crenshaw Boulevard, Vermont Avenue, and Artesia Boulevard, which handle high-volume traffic. Some examples of smaller collector streets include Normandie Avenue and 144th Street. SR-91 runs east-west in the southern portion of Gardena. Further, Gardena's proximity to the regional freeway network, including I-110 to the east, I-105 to the north, and I-405 to the south and west, is a major contributor to regional mobile-source emissions.

Non-road mobile source emissions in the City are less common, typically occur within a short-term or intermittent time frame, and contribute to overall mobile source emissions. No airports or ports are found within Gardena, but regional airports such as Los Angeles International Airport to the northwest and active freight rail lines operated by Union Pacific Railroad, running along Normandie Avenue in the City, are also contributors to non-road mobile source emissions.

Stationary Sources

Stationary sources of air pollution are non-mobile facilities that emit pollutants from a fixed location, such as power plants, refineries, and factories. Stationary sources are typically divided into point and area sources. Area sources consist of numerous small, dispersed sources that individually emit minor amounts of pollution but collectively contribute significant cumulative emissions, such as residential fireplaces, dry cleaners, and consumer products. The northern and southern portions of Gardena are zoned industrial and are the most likely contributors to point-source emissions. Gardena has a strong manufacturing sector and historically has been a hub for aerospace and automotive companies. Major industrial centers within the City include Jackson Aerospace, located at 460 Rosecrans Ave, Hitco Carbon Composites, located at 1600 West 135th Street, and Brek Manufacturing, located at 1513 West 132nd Street, which specialize in aerospace and advanced manufacturing and may contribute to point source air emissions through industrial activities such as exhaust stacks, vents, ovens, or other equipment. The California Air Resources Board sets statewide standards and coordinates with the state's local air districts, overseeing compliance with the Federal Clean Air Act. The South Coast Air Quality Management District is responsible for issuing permits and operating stationary pollution sources like factories or power plants, regulating emissions through its Air Quality Management Plan.

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Greenhouse Gases and Global Climate Change

Climate Change

Climate change refers to long-term shifts in temperature, precipitation patterns, sea levels, and the frequency and intensity of extreme weather events. These changes can be due to natural processes or can be induced by humans. Recent climate change trends are driven primarily by human activities, particularly the combustion of fossil fuels for electricity generation, transportation, and building energy use. Observable impacts of climate change include rising surface temperatures, more frequent and more intense heat waves, altered precipitation patterns, prolonged droughts, more intense storm events, and sea level rise, among other phenomena. These changes pose long-term challenges for communities, requiring both greenhouse gas reduction strategies and adaptive planning to reduce vulnerability to climate-related risks. In Gardena, climate change is expected to increase extreme heat and urban heat island effects, intensify storm events that can cause localized flooding, and strain energy and infrastructure systems.

Greenhouse Gases

Greenhouse gases (GHGs) are gases in the Earth's atmosphere that trap heat, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), chlorofluorocarbons (CFCs), sulfur hexafluoride (SF_6), hydrochlorofluorocarbons (HCFCs), and nitrogen trifluoride (NF_3). These gases warm the planet by absorbing energy and slowing the rate at which it is released into space. Most greenhouse gas emissions result from the combustion of fossil fuels for electricity generation, transportation, and building heating, as well as from industrial and agricultural activities. Human industrial activities have substantially increased GHG concentrations. This intensifies the greenhouse effect, trapping more heat in the atmosphere and contributing to global climate change.

Climate Action Plan

The City of Gardena, in cooperation with the South Bay Cities Council of Governments, adopted a Climate Action Plan (CAP) in 2017, building upon its 2015 Energy Efficiency Climate Action Plan, to reduce community-wide greenhouse gas (GHG) emissions. The CAP establishes a long-term framework for reducing emissions through strategies focused on five key areas: Land Use and Transportation, Energy Efficiency, Energy Generation, Solid Waste, and Urban Greening. Collectively, these measures were projected to reduce GHG emissions by approximately 54,915 metric tons of CO_2 equivalent (MT CO_2e) annually, supporting the City's reduction targets of 15 percent below 2005 levels by 2020 and 49 percent below 2005 levels by 2035. The City developed GHG inventories for 2005, 2007, 2010, and 2012, with 2005 serving as the baseline year for measuring progress. The inventories indicate that on-road transportation and commercial energy emissions increased between 2005 and 2012, while emissions from

solid waste and water use declined. The CAP continues to serve as the City's guiding framework for reducing emissions and advancing long-term sustainability and climate resilience.

Energy Conservation and Renewable Energy

Southern California Edison (SCE) provides electricity to Gardena, and natural gas is provided by Southern California Gas Company (SoCalGas). Energy is produced by converting natural resources such as natural gas, wind, water, sunlight, or nuclear fuel into usable power, most commonly by spinning generators to produce electricity or by extracting fuels like natural gas. Energy consumption from sources such as natural gas and coal contributes to local and regional greenhouse gas emissions. The City's Climate Action Plan and other initiatives, such as its partnership with SCE's Energy Leadership Partnership Program, address energy efficiency and conservation strategies.

Southern California Edison's Energy Leader Partnership Program

Southern California Edison works closely with local governments and institutions through its Energy Efficiency Partnerships Program to assist them in achieving a joint vision of sustainability. Gardena is a participant in SCE's Energy Efficiency Partnerships Program. Through the Partnerships Program, SCE provides financial and technical support to governments and institutions, helping them lead by example by performing energy efficiency retrofits in government facilities. In addition, the program supports community outreach, serving as a portal to other energy efficiency programs.

Scenic Vista

Scenic resources are officially designated corridors, places, or areas deemed significant by a recognized authority for their beauty. These may include natural, cultural, historic, or recreational resources, as well as high-use areas. Scenic resources that hold aesthetic value include, but are not limited to, coastal bluffs, sandy beaches, forests, mountain ridges, and pastoral farmlands. Because the City of Gardena is in a largely built-out, urbanized portion of Los Angeles County, scenic resources of significant value within the City are not common. The California Department of Transportation does not list any state-designated scenic highways within Gardena. Further, there are no designated resources in the Los Angeles County General Plan or other relevant planning documents that identify scenic resources within the City.

A site that is of local scenic and natural importance is the Gardena Willows Wetland Preserve. This Gardena Willows Wetland provides one of the City's most visually distinctive and publicly accessible natural landscapes within an otherwise fully urbanized setting, serving as a green oasis for community members. The City can strengthen this natural space and further enhance the aesthetic and environmental value of existing

resources by prioritizing the protection, maintenance, and accessibility of natural open spaces that provide scenic, ecological, and recreational value. The City recognized the Friends of the Gardena Willows Wetland Preserve as a community-based organization to enhance environmental education, habitat stewardship, and community engagement. Supporting and expanding these programs enhances the Gardena Willows Wetland by increasing public awareness of its ecological and visual importance and creates a baseline for the expansion and protection of other open space areas within Gardena. The City can also continue to direct investment toward the Laguna Dominguez Trail and the walking paths adjacent to the Dominguez Channel.

Plan Organization

This Conservation Plan includes goals and policies addressing the following areas:

1. Wetland Preservation & Stewardship
2. Water Conservation & Water Supply
3. Solid Waste Reduction & Resource Recovery
4. Energy Conservation & Renewable Energy
5. Cultural, Historic, Archaeological & Scenic Resource Protection
6. Biological Resources, Habitat Conservation & Urban Forestry
7. Climate Action, Air Quality & Greenhouse Gas Reduction
8. Surface Water Quality, Stormwater & Watershed Management

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Goals and Policies

1. Wetland Preservation & Stewardship

CN Goal 1	**Support the preservation, restoration, enhancement, and long-term management of the Gardena Willows Wetland Preserve and protect its natural resources.**

Policies

CN 1.1: Protect, restore, and enhance wetland, riparian, upland, and associated habitat within the Gardena Willows Wetland Preserve while allowing compatible environmental education, stewardship, and passive recreational uses.

- Support habitat restoration and long-term ecological management.
- Manage invasive species and encourage appropriate native vegetation.
- Protect sensitive habitat areas from incompatible activities and disturbance.
- Monitor habitat conditions and identify restoration priorities.
- Coordinate restoration activities with qualified resource agencies and conservation organizations.

CN 1.2: Foster environmental education, community stewardship, volunteer programs, and compatible passive recreation that contribute to the protection and appreciation of the Gardena Willows Wetland Preserve.

CN 1.3: Continue to promote collaboration with regional or State agencies in protecting the biological resources of the Gardena Willows Wetland Preserve.

CN 1.4: Seek grant funding and other financial resources to support the preservation, restoration, maintenance, and enhancement of the Gardena Willows Wetland Preserve.

2. Water Conservation & Water Supply

CN Goal 2	**Conserve water resources and protect groundwater supply.**

Policies

CN 2.1: Continue to encourage water conservation through public education, efficient water use practices, water-conserving technology, water-conserving fixtures and appliances, sustainable irrigation practices, and drought-tolerant and climate-appropriate landscaping.

CN 2.2: Promote the use of reclaimed water for irrigation of public lands and for industrial uses, as feasible.

- Evaluate opportunities to expand recycled-water use at parks, medians, streetscapes, and other public landscapes.
- Coordinate with water providers regarding recycled-water infrastructure and availability.
- Consider recycled water when planning major landscape or irrigation improvements.

CN 2.3: Encourage appropriate rainwater harvesting, graywater reuse, and other on-site water conservation strategies consistent with applicable regulations.

CN 2.4: Collaborate with Golden State Water Company, West Basin Municipal Water District, and other regional partners to support water conservation initiatives, water supply reliability, recycled water use, and integrated water resource management programs.

3. Solid Waste Reduction & Resource Recovery

CN Goal 3 Reduce the amount of solid waste produced in Gardena.

Policies

CN 3.1: Continue to comply with applicable State and local solid waste reduction, recycling, and organics diversion requirements.

CN 3.2: Promote public awareness of all waste reduction, recycling, food recovery, and organics diversion programs.

CN 3.3: Encourage participation in local and County hazardous waste disposal and recycling programs to ensure safe disposal of household hazardous waste items such as automotive products, paints, chemicals, tires, and batteries.

CN 3.4: Encourage the diversion, recycling, and beneficial reuse of construction and demolition materials to reduce landfill disposal and conserve natural resources.

CN 3.5: Support waste prevention and material reuse through education, partnerships, and City practices that conserve resources and reduce waste generation.

CN 3.6: Coordinate with the County, neighboring jurisdictions, responsible agencies, and service providers to support the safe collection, reuse, recycling, treatment, and disposal of waste materials requiring specialized handling.

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4. Energy Conservation & Renewable Energy

CN Goal 4 Conserve energy resources and promote energy efficiency.

Policies

CN 4.1: Continue to encourage innovative and sustainable building designs that improve energy efficiency, conserve resources, and reduce energy demand.

CN 4.2: Ensure compliance with Title 24 energy efficiency standards and other State building energy conservation requirements.

CN 4.3: Promote the installation of energy-efficient appliances, equipment, and building improvements that reduce energy consumption in existing residential, commercial, and industrial buildings.

CN 4.4: Support municipal, commercial, industrial, and residential energy conservation efforts through education, incentives, partnerships, and participation in regional and utility-sponsored programs.

CN 4.5: Improve energy efficiency and reduce energy consumption in City-owned buildings, facilities, parks, lighting systems, and infrastructure when undertaking improvements or equipment replacement.

- Replace equipment and lighting with energy-efficient alternatives as systems are upgraded.
- Evaluate renewable-energy and energy-storage opportunities at municipal facilities.
- Consider life-cycle energy costs when selecting major equipment.
- Pursue utility incentives, rebates, grants, and financing programs.

CN 4.6: Support appropriate renewable energy and energy storage technologies in residential, commercial, industrial, and municipal settings consistent with applicable regulations and community compatibility considerations.

5. Cultural, Historic, Archaeological & Scenic Resource Protection

CN Goal 5	**Protect the City's cultural, historic, archaeological, tribal, and scenic resources.**

Policies

CN 5.1: Maintain and regularly update an inventory of the City's historical resources, including a survey of buildings of architectural, cultural, or historical significance.

- Update the City's 1981 Cultural and Historical Study to identify currently eligible or potentially significant historical and cultural resources and inform future preservation efforts.

CN 5.2: Provide provisions in the Municipal Code to protect historical and cultural resources.

- Consider development of a historic preservation ordinance or other regulatory mechanisms to identify, protect, and preserve historically and culturally significant resources.

CN 5.3: Protect Tribal cultural, archaeological, paleontological, and other cultural resources through appropriate consultation, review, avoidance, preservation, monitoring, and mitigation consistent with applicable State and federal regulations.

CN 5.4: Protect and enhance locally significant natural and scenic resources, including the Gardena Willows Wetland Preserve and other visually distinctive open spaces, through compatible land use, landscaping, and public improvement practices.

CN 5.5: Recognize that no regionally significant mineral resource areas are currently identified within the City and continue to consider updated State mineral resource information in future planning and development decisions.

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6. Biological Resources, Habitat Conservation & Urban Forestry

CN Goal 6 **Protect and enhance sensitive biological resources, native habitats, and special-status species.**

Policies

CN 6.1: Protect sensitive biological resources, special-status species, and habitat areas through compliance with applicable federal, State, and local regulations and the use of site-specific biological resource evaluations, where appropriate.

CN 6.2: Encourage the incorporation of native, climate-appropriate, pollinator-supportive vegetation in public and private landscaping to support biodiversity, habitat values, and climate resilience.

CN 6.3: Coordinate with responsible regional agencies to identify opportunities to improve the ecological, water quality, habitat, and green infrastructure functions of the Dominguez Channel corridor while maintaining its flood-control function.

- Explore native and pollinator-supportive landscaping along suitable portions of the corridor.
- Evaluate opportunities for green infrastructure and stormwater treatment.
- Coordinate habitat improvements with Laguna Dominguez Trail enhancements.
- Support regional watershed restoration and water-quality initiatives.

CN 6.4: Improve habitat connectivity and develop a network of pollinator-supportive habitat areas and green corridors through native and climate-appropriate landscaping, tree planting, and habitat enhancements in parks, streets, rights-of-way, drainage channels, utility corridors, and other suitable spaces.

- Prioritize native flowering trees, shrubs, grasses, and groundcovers that provide year-round pollinator resources.
- Identify opportunities to close habitat gaps and establish pollinator-supportive connections between existing green spaces.
- Incorporate pollinator-supportive landscaping into City projects where appropriate.

- Encourage pollinator-supportive landscaping on private and institutional properties.
- Incorporate interpretive signage and environmental education where appropriate.
- Coordinate habitat improvements to strengthen connections among the Gardena Willows Wetland Preserve, Dominguez Channel/Laguna Dominguez Trail, parks, and other green spaces.

CN 6.5: Expand and maintain the urban tree canopy to improve air quality, provide shade, support wildlife habitat, reduce urban heat island effects, and enhance community character.

- Establish and periodically evaluate measurable citywide tree canopy objectives based on existing canopy conditions, available planting space, water availability, climate resilience, and State urban forestry objectives.
- Seek to increase citywide tree canopy from the 2022 baseline, with priority given to neighborhoods and corridors experiencing elevated heat exposure and limited existing canopy.
- Prioritize preservation of healthy mature trees and significant tree resources during public improvements and development, where feasible.

CN 6.6: Support comprehensive management of the City's urban forest to promote long-term tree health, preservation, replacement, and expansion of the urban tree canopy.

- Maintain and periodically update the City's tree inventory.
- Identify priority planting locations based on canopy gaps, heat exposure, pedestrian activity, and available planting space.
- Establish appropriate tree planting, establishment, maintenance, pruning, preservation, and replacement practices.
- Monitor tree survival and changes in citywide canopy coverage over time.
- Coordinate tree planting and management with park planning, streetscape improvements, capital projects, and private development.

7. Climate Action, Air Quality & Greenhouse Gas Reduction

CN Goal 7	**Reduce greenhouse gas emissions and improve air quality and resilience to climate change through sustainable development, energy conservation, renewable energy, and climate adaptation strategies.**

Policies

CN 7.1: Integrate climate adaptation strategies into public facilities, infrastructure, development review, and capital improvement planning.

CN 7.2: Continue to maintain and periodically update the City's Climate Action Plan and future updates.

CN 7.3: Support implementation of the City's Climate Action Plan and other applicable local, regional, and State strategies to reduce greenhouse gas emissions and advance long-term community sustainability and climate resilience.

CN 7.4: Promote climate resilience measures that address extreme heat, flooding, and other climate-related impacts.

- Coordinate climate adaptation investments with implementation of the City's urban forestry, green infrastructure, water conservation, and open space policies.
- Coordinate climate adaptation with implementation of the City's green infrastructure and nature-based solutions policies.
- Promote cool roofs, cool pavements, shade structures, and other heat-reduction strategies where appropriate.
- Coordinate climate adaptation investments with the Safety and Environmental Justice Elements.

CN 7.5: Promote land use and development strategies that reduce air pollutant emissions, improve air quality, and minimize exposure to air pollution, particularly for sensitive populations.

CN 7.6: Coordinate with the Circulation Plan to incorporate multimodal transportation planning strategies that support walking, bicycling, transit use, and reduced vehicle dependence to improve air quality and reduce emissions.

CN 7.7: Support community gardens and urban agriculture consistent with the Open Space Plan as part of broader community resilience and local food access strategies.

CN 7.8: Coordinate with SCAQMD and other regional agencies to support attainment of State and federal air quality standards and reduce emissions from stationary and mobile sources, and implement programs that improve local air quality and public health.

- Support community access to air quality information, alerts, and educational resources, particularly during poor air quality conditions.

8. Surface Water Quality, Stormwater & Watershed Management

CN Goal 8	**Protect and improve surface water and groundwater quality through watershed management, pollution prevention, stormwater treatment, groundwater recharge, and sustainable development practices.**

Policies

CN 8.1: Maintain full compliance with the Los Angeles County Regional MS4 Permit, Dominguez Channel Watershed Management Program, applicable Total Maximum Daily Loads (TMDLs), and regional water quality control plans.

CN 8.2: Require Low Impact Development (LID) techniques for applicable new development and redevelopment projects in accordance with the City's LID Ordinance and County MS4 Permit standards. Integrate green stormwater infrastructure (GSI) into public capital improvement projects, where technically and hydrogeologically feasible, to reduce runoff, improve water quality, support groundwater recharge, and enhance urban greening.

- Incorporate bioswales, bioretention areas, permeable surfaces, stormwater capture, and other appropriate green infrastructure techniques.
- Evaluate opportunities for stormwater capture and infiltration during street, park, corridor, and public-facility improvements.
- Encourage multifunctional improvements that combine stormwater management with landscaping, habitat, shade, and public-realm benefits.

CN 8.3: Reduce pollutant discharges, including trash, heavy metails, toxic organic compounds, bacteria, and nutrients, to the Dominguez Channel and Greater Los Angeles Harbor waters through source control, commercial/industrial facility inspections, regular street sweeping, public outreach, and structural BMP implementation consistent with established TMDL waste load allocations (WLAs).

CN 8.4: Promote pollution prevention practices among residents and business operators, while maintaining active commercial and industrial inspection programs to enforce local

stormwater codes, ensure proper waste storage, and prevent non-stormwater illicit discharges.

CN 8.5: Coordinate with regional agencies, watershed groups, and environmental partners to enhance urban runoff water quality and protect habitat within the Gardena Willow Wetlands Wildlife Preserve.

CN 8.6: Maintain an active Illicit Discharge Detection and Elimination (IDDE) program to identify, investigate, isolate, and terminate unauthorized non-stormwater discharges and illegal dumping into the municipal storm drain system.

CN 8.7: Encourage citizens to report illegal dumping and support enforcement efforts to prevent the release of hazardous materials that could contaminate soil, groundwater, surface waters, and the stormwater system.

CN 8.8: Promote the proper disposal of hazardous waste and used oil and support compliance with hazardous waste regulations to protect water quality and public health.

CN 8.9: Promote practices that protect soil health, reduce erosion and soil disturbance, and increase the use of permeable and landscaped surfaces where feasible.