Attachment No. 2 & 3

Draft Elements



CITY OF NEWPORT BEACH COMMUNITY DEVELOPMENT DEPARTMENT

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Memorandum

To: Co-Chairs Evans and Greer, and GPAC Members

From: Benjamin M. Zdeba, AICP, Planning Manager

Date: June 27, 2025

Re: Agenda Item IV(b) – Attachments 2 and 3, Draft Recreation Element

and Natural Resources Element

As indicated in the agenda narrative, the Recreation/Natural Resources Subcommittee met on May 15, 2025, and appointed GPAC Member Dennis Baker as the Subcommittee's chair. The primary purpose of the meeting was to review the initial drafts of the Recreation and Natural Resources Elements. After discussion on several key points requiring feedback, the Subcommittee opted to allow City staff to work with Dudek on responsive revisions. The updated tracked-changes drafts were distributed virtually through email to the Subcommittee. Comments were received from Subcommittee Chair Baker, as well as Subcommittee Members Virginia Anders-Ellmore, Jim Mosher, and Paul Watkins. The drafts have been revised in response to many of the comments and can continue to be discussed.

City staff, in consultation with Dudek, and the Subcommittee are pleased to share the latest draft Recreation Element and the draft Natural Resources Element for the full GPAC's review. Please know that this is simply the text and is not fully formatted with graphics and photographs.

The recommended action is to support moving the draft Elements forward for concurrence by the GPUSC with additional input by the Parks, Beaches, and Recreation Commission and the public thereafter. The GPAC's support for these drafts will not set them in stone, rather it will allow us to continue sharing for more input from others. The Elements will remain in draft form until they are ultimately adopted by the City Council.

Recreation Element

PURPOSE

The Recreation Element addresses parks and recreation facilities, recreation programs, shared facilities, coastal recreation and support facilities, marine recreation and public access, and the provision of parklands and recreation programs. More specifically, the primary purpose of the Recreation Element is to provide parks and recreation facilities sufficient for the current and future residential, business, and visitor populations of Newport Beach.

OVERVIEW

Recreational spaces and programs play an important role in the physical, mental, social, and environmental health of Newport Beach's residents. Newport Beach's landscape is made up of coastal, beach, tideland, reserve, and urban areas, creating an opportunity for a diverse range of parkland and recreation types.

The Recreation Element overlaps with the Natural Resources, Harbor, Bay and Beaches, Safety, Housing, and Land Use Elements to help support the preservation of open spaces, including beaches and the harbor as recreational spaces.

Parks and Recreation

As of 2025, the City of Newport Beach (City) has approximately 595 acres of City- and state-owned land dedicated to parks and recreational facilities, including 344 acres of parks and 250 acres of recreational beaches. Additional recreational opportunities in the City include 66 acres of parks under school jurisdiction that are under a joint use agreement with the City and approximately 2,478 acres of land dedicated to open space and preservation, much of which offers recreational opportunities such as trails (See Figure X, Parks and Open Space).

The Newport Beach Municipal Code establishes a parkland dedication standard for new subdivisions of 5 acres of parkland for every 1,000 persons allotted to the subdivision. The parkland dedication standard applies to recreational parks and excludes open space and preserves because open space is not always accessible, and its primary purpose is the preservation of open lands. If we apply this same standard citywide, Newport Beach has a surplus of parkland to meet the current and projected population. Based on the City's parkland standards and the 2023 population estimate of 82,627 people, the city needs at least 413 total acres of parkland to serve the population. Given the City's 344 acres of parks and recreational facilities (inclusive of playgrounds, picnic tables, sports fields and courts, passive parks, and community centers) and 250 acres of recreational beaches, there is a current surplus of 151 acres of parkland. In 2045, the total population is estimated to be 88,650 people, which would need to be served by approximately 443 acres of parkland.

For the purposes of planning parks in a manner that meets the geographic needs of residents, the City has divided Newport Beach into 12 park service areas in which the City administers

parkland dedications and fees provided by residential development. When the City's parkland standard of 5 acres per 1,000 residents is applied by service area, 8 of the 12 service areas are considered to be deficient in total park acreage to meet the projected population needs. A map of the public parks and recreational opportunities by service area is shown in Figure R-1, Public Parks and Recreation Opportunities by Service Area. As shown in Table 1 below, and further detailed in the Recreation Element Existing Conditions and Background Analysis, the park service areas that are anticipated to meet and exceed projected population parkland needs include West Newport, Balboa Peninsula, Eastbluff/Newport North, and Harbor View; the eight other service areas are not anticipated to meet the needs of the projected population. Figures X through X provide an overview of parks and open space for each park service area included in Table 1.

Table 1. 2045 Projected Park Need by Service Area

Park Service Area	2045 Projected Park Acreage Need	2024 Recreational Acreage (Parks and Beaches)	Deficit (–) or Excess (+) Acreage
West Newport	64.6	82.79	18.19
Balboa Peninsula	20.5	179.47	158.97
Newport Heights/ Upper Bay	69.6	54.18	-15.42
Santa Ana Heights	9	3.73	-5.27
Lower Bay	17	0.05	-16.95
Balboa Island	13.4	0.28	-13.12
Eastbluff/Newport North	36.4	66.6	30.2
Big Canyon Belcourt	17.9	_	-17.9
Newport Center	26.1	19.93	-6.17
Corona del Mar	42.2	33.31	-8.89
Harbor View	67.1	129.51	62.41
Newport Coast	59.5	25.17	-34.33
Total	443.30	595.02	+151.72

Park Type Classifications

The types of parks in the City vary in size, communities served, and recreational opportunities offered. The specific park types are summarized below.

- **Community Park.** Community parks serve the entire City and are easily accessible via arterial roads. Community parks typically include community buildings, parking, swimming, facilities for picnicking, active sports, and other facilities that serve a larger population.
- Mini Park. Mini parks are smaller parks and have two general purposes. Most mini parks are
 less than one acre in size, serve a 0.25-mile radius, and are located within a neighborhood
 separate from major collector roads. Some mini parks serve the entire City of Newport
 Beach and are located as urban trailheads along major trails or streets.
- Neighborhood Park. Neighborhood parks serve all ages and are generally between 1 and 8
 acres in size. They are located adjacent to public schools when possible. Neighborhood

parks contain amenities such as turf areas, active sport fields and courts, community buildings, playground equipment, and picnic facilities. Some neighborhood parks may also include senior centers, youth centers, and aquatic facilities.

- **View Park.** View parks are smaller passive parks at significant vistas or viewpoints. They are often located on coastal bluffs and highlight ocean and bay views. Most view parks are between 0.5 and three acres in size and serve the entire City of Newport Beach. View park amenities include improved landscaping, walkways, and benches.
- **Open Space.** Open space includes passive and active open space areas that do not function as public spaces but do provide open space relief. Some open space areas are open to and accessible by the public.
- Public Beach. Public beaches serve a number of local and regional functions. In some neighborhoods, beaches function as neighborhood or community parks. Easy accessibility, a lack of entrance fees, and a lack of other available parks have contributed to this function. Public beaches all include sandy beach areas adjacent to the bay or ocean and may include active sport areas, snack bars, showers, drinking fountains, restrooms, walkways, docks, benches, shade trees, and parking areas. Active beach area acreage is measured 100 feet from the observed water edge into the water area based on the standard for shoreline swimming and previous observations from the 2004 Newport Beach Technical Report prepared for the adopted 2006 General Plan.
- School. Public schools are a part of the City of Newport Beach's recreation system because
 indoor facilities, outdoor fields, and playground areas can serve the general public during
 weekends and after school.

The number of park types within a service area varies based on the nature of the physical geographic area; for example, a service area with a canyon or bay may have more view parks than a more urbanized and developed service area. Figure X below summarizes the number of park types throughout the City.

Support Facilities

Many of the parks, open spaces, and recreational facilities in the city also provide support facilities. Support facilities such as parking, restrooms, seating areas, and water fountains are crucial for enhancing accessibility, encouraging longer stays, and improving the overall experience. By providing adequate and well-maintained support facilities, the City contributes to cleaner and more-welcoming public spaces.

To further support the recreational needs of the community, there are a number of programs offered within Newport Beach that encourage the activation of public spaces by engaging residents and visitors alike. Some of the programs offered include arts, theater, and dance classes; various sports; hiking and exploring nature; and special events such as movies in the park. Such programs offer structured opportunities for social and physical activity, encourage people to visit and interact with public spaces, and contribute to Newport Beach's culture.

For a full list of public parks and recreational facilities and a summary of the service areas, refer to the Recreation Element Existing Conditions and Background Analysis (April 2024).

GOALS, POLICIES, AND ACTIONS

The Goals, Policies, and Actions support the purpose of the Recreation Element to ensure an appropriate balance between the provisions of sufficient parks and recreational facilities and the current and future residential, business, and visitor populations of Newport Beach. The Goals, Policies, and Actions are categorized into six topics: Recreation Programs, New Parks, Maintenance and Improvements, Funding and Coordination, Beach and Recreation, and Support Facilities.

Recreation Programs

Recreation programs enrich community members' lives by building social connections and providing opportunities for learning and physical activity. High-quality recreation programs that are tailored to the community's needs can foster an engaged and healthy community. Recreation programs vary based on the population they serve, such as children and adolescents, adults, and the older adult population. The senior population in the City is expected to double in size over the next 20 years, creating an increased demand for recreational activities and programming for older individuals. Additionally, Newport Beach's diverse landscapes provide unique programming opportunities that may be tailored to the natural environment and landscape.

Goal R-1: A community with high-quality recreation programs

- Policy R-1.1: Establish and maintain high-quality events and programming for residents, prioritizing seniors and families with children. (Imp. 23.4)
- Policy R-1.2: Continue to inform the community about upcoming events, new facilities and programs, and other pertinent parks and recreation news. (Imp. 29.1)
- Policy R-1.3: Coordinate with homeowners associations to conduct City recreation programs on private parkland. (Imp. 23.3)
- Policy R-1.4: Provide programming and recreational activities compatible with the location and landscape. (Imp. 23.3)
- Policy R-1.5: Protect and enhance specific programs that use the harbor, bay, and ocean, such as the City's sailing program and junior lifeguard program. (Imp. 23.4, 21.4)

Goal R-2: Programs for seniors that benefit and are used by residents

- Policy R-2.1: Continue to maintain partnerships with relevant organizations, such as Friends
 of OASIS, and determine potential improvements to increase participation in recreational
 programs targeted toward seniors. (Imp. 23.3)
- Policy R-2.2: Create senior programs that are financially sustainable. (Imp. 23.4)
- Policy R-2.3: Continue to increase program awareness among seniors. (Imp. 29.1)

Parks and Playgrounds

Parks are a vital asset in any community, providing opportunities for refuge, recreation, and socialization while offering physical and mental health benefits. Increasing park access and recreational opportunities throughout the community can ensure these benefits are available to residents of all ages and needs.

Most residents can walk to a park in 10 to 15 minutes, but the types of parks available vary due to Newport Beach's varying landscape. These variable landscapes provide unique recreational facilities for the community depending on the location of the park, such as access to walking trails or the beach in certain areas of the city. Because land for new parks in urbanized areas is also limited, the design of new parks should consider parks and recreational facilities that are needed in the respective service area. Additionally, new development should be paired with innovative park types to capitalize on limited land opportunities and promote equitable access to parks to improve the quality of life for residents.

Equally as important, the preservation and maintenance of parks and recreation facilities are essential for maintaining community access to recreational opportunities. Maintenance and needed upgrades to these facilities can help protect City investments while ensuring that residents have continued access to high-quality recreational facilities that meet changing needs.

As the environment changes and the population shifts, it is important that parks and recreational facilities continue meeting community needs and providing benefits to human health, well-being, and the environment. Finding opportunities to expand or adapt parks and recreational facilities to serve seniors and people with disabilities can help serve all residents now and in the future. Furthermore, designing parks and recreational facilities to be resilient to extreme heat, flooding, and wildfires can ensure these amenities continue to function despite environmental changes. This can include planning for cooling centers, which are free indoor airconditioned locations where residents can keep cool when there are extreme heat weather conditions, or by using materials for parks, surfaces, or pathways that reflect more solar energy to reduce the amount of heat absorbed and radiated, referred to as cool pavement.

Goal R-3: New parks and connections that increase resident access to recreation, parks, and open space opportunities

- Policy R-3.1: Support innovative park types that encourage community gathering and integrate nature into the urban environment. This could include publicly accessible open spaces that create or enhance mobility connections, such as paseos, promenades, or small accessible spaces that offer refuge, such as courtyards, pocket parks, rooftop gardens, and other park types not identified in the park type classifications. (Imp. 23.2)
- Policy R-3.2: Support recreation needs of residents by service area by reviewing and
 possibly revising the methodology for determining park needs in each service area by
 considering existing park types, demographics, physical geography, and connectivity,

- including to nearby parks and open spaces as well as access across and between different service areas. (Imp. 23.1)
- Policy R-3.3: Continually evaluate open space acreage and park type classification across the City to identify areas to prioritize for new parks and greenspace, tailored to community needs. (Imp. 23.1)
- Policy R-3.4: Consider establishing a parks master plan to comprehensively assess and plan for park needs across the city. (Imp. 23.1)
- Policy R-3.5: Continually evaluate potential development incentives for developers to contribute to new parks or improvements to existing parks in addition to the required park dedication and/or fees. (Imp. 23.5)
- Policy R-3.6: Support the increase of parkland through joint use agreements. (Imp. 14.2)
- Policy R-3.7: Develop new community parks near public facilities such as schools, libraries, or community centers to create hubs for community gathering. (Imp. 23.2)
- Policy R-3.8: Design public facilities to incorporate recreational elements, such as children's play areas, pocket parks, and usable public plazas. (Imp. 23.2)
- Policy R-3.9: Support the assessment of the Park Dedications and Fees Ordinance to consider the benefit and feasibility of expanding the in lieu park fees to for-rent residential development. (Imp. 23.5)

Goal R-4: Parks and recreation facilities that are preserved, upgraded, and well-maintained

- Policy R-4.1: Conduct outreach at a neighborhood or district scale to identify desired improvements to parks and recreational facilities which may include a community pool or aquatic center. (Imp. 23.3)
- Policy R-4.2: Prioritize park improvements based on identified needs, including shade structures, dog parks, and other improvements identified through community outreach. (Imp. 23.1)
- Policy R-4.3: Identify areas with lower-than-average park access, park variety, or based on findings from the methodology analyzing parks in each service area identified in Policy 3.2 to prioritize improvements by service area. (Imp. 23.1)
- Policy R-4.4: Continue funding park improvements through the Park Dedications and Fees Ordinance. (Imp. 23.5)
- Policy R-4.5: Ensure continued protection of public parkland for recreational uses.
 (Maintenance/Protection Program)
- Policy R-4.6: Prevent to the extent possible, any net loss of parkland or open space. (Maintenance/Protection Program)
- Policy R-4.7: Preserve, where possible, natural watercourses or provide naturalized drainage channels within the city. Where feasible, implement restoration and rehabilitation opportunities. (Policy S-3.1.1)

Goal R-5: Parks and recreational facilities that are adapted to meet a variety of needs for existing and future residents

- Policy R-5.1: Enhance recreational facilities to ensure adequate capacity for future user demands and adapt to evolving services and facility needs. (Maintenance/Protection Program)
- Policy R-5.2: Develop design standards for parks that are reasonably adaptive to extreme heat (shade, seating, water fountains, etc.) (Maintenance/Protection Program, Imp. 23.2)
- Policy R-5.3: Continue efforts to expand accessibility and serve diverse populations by using reasonable efforts to retrofit existing facilities and encourage development of new facilities to ensure people with disabilities have adequate access. (Maintenance/Protection Program)
- Policy R-5.4: Develop reasonable design standards to ensure Americans with Disabilities Actcompliant accessibility at parks, piers, trails, and public viewing areas for people who require mobility aids. (Maintenance/Protection Program, Imp. 23.2)
- Policy R-5.5: Maintain reasonable flood management standards for development, public facilities, and infrastructure located within an officially designated 100-year floodplain. Use reasonable efforts to design development in a manner that does not negatively impede or redirect floodwaters or raise anticipated flood heights as identified in the Newport Beach Public Trust Lands Sea Level Rise Vulnerability Assessment. (Policy S-3.1.3)
- Policy R-5.6: Use reasonable efforts to improve cooling centers with resilience improvements such as battery backup power and amenities that help promote a sense of community and socialization. (Policy S-7.1.2)
- Policy R-5.7: Consider creating a pilot cool pavement program to implement materials that reduce the effects of extreme heat. (Policy S-7.1.1)
- Policy R-5.8: Use reasonable efforts to evaluate tree canopy cover in parks and the public right-of-way, considering shade and priority active transportation corridors. (Policy S-7.1.5)

Partnerships

Coordination with internal City departments and outside agencies and organizations creates opportunities to share resources, promotes effective communication, and can help facilitate the successful implementation of General Plan goals and policies. Moreover, such coordination can increase the quality of and access to parks and open space through integrated strategies and efficient use of resources.

There are several open space areas, preserves, and beaches within the boundaries of the City and its sphere of influence that are managed by the County of Orange (County), the California Department of Fish and Wildlife, and the California Department of Parks and Recreation. Additionally, school facilities provide indoor and outdoor recreational opportunities in Newport Beach on approximately 66 acres of Newport-Mesa Unified School District land, which are available to the public under joint use agreements. These other types of recreational opportunities provide a significant resource for the community, and continued coordination between various City, County, and State departments and agencies ensures that these diverse recreational resources continue to serve the needs and enhance the quality of life for all residents of and visitors to Newport Beach.

Goal R-6: A city with established and well-maintained relationships to facilitate interagency and interorganizational coordination

- Policy R-6.1: Maintain and expand existing joint use agreements with the Newport-Mesa
 Unified School District for use of school recreational facilities as public parks and to provide
 public access to play areas, pool facilities, gymnasiums, and sports fields. (Imp. 14.2)
- Policy R-6.2: Develop appropriate new, long-term, joint use agreements with other public and private agencies to expand the use of non-city recreational facilities/amenities and supplement the park and recreational needs of the community. (Imp. 14.2, 14.3, 14.8)
- Policy R-6.3: Continue collaborating with County and State agencies to maintain trails in public open space, such as Upper Newport Bay. (Imp. 14.3, 14.7, 14.8, 14.16)
- Policy R-6.4: Continue providing city facilities for City-operated recreational programs and other purposes. (Imp. 23.4)
- Policy R-6.5: Continue efforts to protect and enhance recreational activities and support facilities at county and state beaches and parks in cooperation with the State Department of Parks and Recreation, the State Department of Fish and Game, and County of Orange. (Imp. 14.3, 14.7, 14.8)
- Policy R-6.6: Coordinate with the Orange County Community Resources Department (OC Parks) to provide facilities in the harbor where appropriate and feasible. (Imp. 14.3, 21.2)
- Policy R-6.7: Encourage interagency coordination to support planning efforts for the Frank and Joan Randall Preserve (formerly Banning Ranch). (Imp. 14.16)

Beach Recreation

The city has approximately 250 acres of public beach recreation area, offering numerous opportunities for passive and active beach and coastal recreation. There are more than 8 miles of sandy beaches in Newport Beach that provide public facilities and opportunities for sunbathing, volleyball, swimming, surfing, windsurfing, and other recreational activities. Maintaining physical access points, the current boardwalk from 36th Street to just beyond E Street, and supportive facilities and services can help protect continued public beach access. Additionally, Newport Beach offers a diversity of water use opportunities to support recreation on Newport Bay and the wider Pacific Ocean. The recreational and boating activities include but are not limited to sailing, motorized, and human-powered vessels. These water-dependent recreational and commercial activities and uses along the beaches and in Newport Bay are addressed in part in the Harbor, Bay, and Beaches Element.

Goal R-7: A city that protects public beach access

- Policy R-7.1: Use reasonable efforts to ensure the preservation and enhancement of public beaches for public recreation. (Imp. 14.6, 14.8, LCP Program)
- Policy R-7.2: Conduct a periodic assessment of at-risk beach access points to determine risk of damage or impairment from coastal hazards, including flooding and erosion. (LCP Program, Imp. 23.1)
- Policy R-7.3: Adapt infrastructure for beach access points to be resilient to coastal hazards.
 (LCP Program)

- Policy R-7.4: Maintain reasonable beach access points to continue providing adequate public access to the beach and coastal resources. (Imp. 23.1, LCP Program)
- Policy R-7-5: Identify appropriate, reasonable, sites for beach nourishment and replenishment, living shoreline restoration, and built structures as part of a comprehensive sea-level-rise adaptation plan (LCP) (Policy NR-7.1.2)

Support Facilities

Support facilities are an important aspect of providing parks and recreational spaces that are highly used and enjoyed by the community. Support facilities include, but are not limited to, restrooms, showers, lifeguard towers, parking, and staffing. Providing and maintaining facilities needed to support varying parks and recreation spaces in the city can help ensure parks and open spaces are enjoyed by the community and provide a high-quality level of service.

Goal R-8: Adequate support facilities in parks and recreation facilities

- Policy R-8.1: Provide reasonable and appropriate support facilities and services needed to serve recreational uses in parks, beaches, the harbor, and other open space areas, and to protect reasonable public access and recreation in coastal areas for residents and tourists. (Imp. 21.2, 23.1, LCP Program)
- Policy R-8.2: Reasonably improve support facilities to ensure they are adaptable to changing needs, interests, and demographics. (Maintenance/Protection Program)

Natural Resources Element

PURPOSE

The Natural Resources Element guides the conservation, protection, development, and use of natural resources in the City, as well as the preservation of cultural and historic resources.

OVERVIEW

This Element addresses a wide range of topics including air quality, energy transition, mineral and oil resources, biological resources, landforms, rivers and waterbodies, sandy beaches, water conservation, visual resources, and archaeological and paleontological resources.

The Natural Resources Element includes policies designed to help restore, improve, preserve, conserve, manage natural resources, and to help improve ecosystem services and function in the natural and built environment. Ecosystem services are the benefits that humans derive from ecosystems – such as clean water filtration, pollination of crops, carbon storage, and recreational opportunities. They represent the direct and indirect contributions of ecosystems to human well-being and economic value. Ecosystem functions are the underlying biological, chemical, and physical processes that occur within ecosystems - such as nutrient cycling, energy flow, decomposition, and photosynthesis. This Element seeks to support both the natural function of the systems as well as their continued provisions of benefits to the Newport community.

The Natural Resources Element overlaps with the Recreation, Habor, Bay and Beaches, Safety, and Land Use Elements, all of which help support the conservation, protection, development, and use of natural resources, as well as the preservation of cultural and historic resources effected through the Arts and Culture and Historical Resources Elements.

GOALS, ROLICIES, AND ACTIONS

Air Quality

South Coast Air Basin

The City of Newport Beach is located within the South Coast Air Basin (Basin), named so because its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or low-lying areas below. The Basin includes all of Orange County and non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass in Riverside County. The region's climate is generally mild and tempered by cool sea breezes but is interrupted infrequently by periods

of hot weather, winter storms, and Santa Ana winds. The extent and severity of the air pollutants in the Basin is a function of the region's natural weather and topography, as well as human influences such as land use patterns, density of development, and the location of major roadways. More specifically, mobile sources, such as those from motor vehicles, account for a significant portion of air pollutants within the Basin. Newport Beach is a relatively low-density community with fewer public transportation routes, which may result in more motor vehicle trips and associated air pollutants. Notably, two major highways run through Newport Beach: Highway 1 along the coast (i.e., Pacific Coast Highway) and Highway 73 along the northeastern boundary of the City. Air pollution from motor vehicles along these major highways is most concentrated within 1,000 feet of the source; therefore, neighborhoods adjacent to these routes may have higher exposure to air pollutants.

Ambient Air Quality

Both the Federal and State governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to help protect public health. The South Coast Air Quality Management District (SCAQMD) is responsible for bringing air quality within the Basin into conformity with the Federal and State standards. In an effort to monitor the various concentrations of air pollutants throughout the Basin, SCAQMD has divided the region into 27 source receptor areas (SRAs). Newport Beach is located within SRA 18, which encompasses the northern coastal Orange County area. The air pollutants most relevant to air quality planning and regulation in SRA 18 include ozone, carbon monoxide (CO), nitrogen dioxide, and sulfur dioxide. As of 2025, SRA 18 exceeds State or Federal standards for two pollutants: ozone and fine particulate matter (PM_{2.5}). Due to its small size, PM_{2.5} can be inhaled, and prolonged exposure to these particles can result in negative health effects. Ground-level ozone, often referred to as "smog," also affects lung and heart health. Together, these pollutants may lead to potential health concerns such as breathing difficulties, inflamed and irritated airways, asthma attacks, and heart disease.

Aircraft Pollution

Aircraft operations at the John Wayne Airport also contribute air pollutants that may affect residents and visitors of Newport Beach. Specifically, jet aircraft engines emit water vapor, carbon dioxide, small amounts of nitrogen oxides, hydrocarbons, CO, sulfur gases, and soot and metal particles formed by the high temperature combustion of jet fuel during flight. Piston aircraft engines burning leaded gasoline can emit other pollutants, including lead. These emissions can cause pulmonary and respiratory health effects.

The City does not have aircraft emissions standards. Rather, the Secretary of Transportation and the U.S. Environmental Protection Agency (EPA) set and enforce emissions standards, and the Federal Aviation

Administration administers certification requirements. The EPA collaborates with the International Civil Aviation Organization (ICAO) to develop standards and recommended practices for aircraft emissions; thus, EPA standards are highly aligned with those of ICAO.

Goal NR-1: Reduced transportation related emissions to improve air quality

- Policy NR-1.1: Promote walkable and bikeable neighborhoods by providing amenities such as
 wayfinding, maintained sidewalks, bike lanes, secure bike and stroller parking, well-designed
 intersections, and Americans with Disabilities Act—compliant infrastructure to support people of all
 abilities. (Mobility Infrastructure)
- Policy NR-1.2: Encourage mixed-use development as a way to preserve natural resources. (Code Amendment)
- Policy NR-1.3: Identify high-volume roadways near sensitive uses, such as residences and schools, and encourage trees and hedge barriers to reduce air pollution, when not already present. (Mobility Infrastructure)
- Policy NR-1.4: Employ incentives, regulations, and/or Transportation Demand Management programs in cooperation with other jurisdictions in the South Coast Air Basin to reasonably reduce vehicle trips.
- Policy NR-1.5: Continue to advocate for phase-out of sales of leaded aviation gasoline at JWA.

Goal NR-2: Electric vehicle (EV) charging infrastructure to serve electric vehicles

- Policy NR-2.1: Create public and/or private partnerships to provide EV charging stations at visitor lodging and popular tourist destinations, as deemed appropriate. (Mobility Infrastructure)
- Policy NR-2.2: Identify, prioritize, and incentivize the installation of an appropriate number of EV charging stations in residential areas with limited charging options, such as apartments. (Mobility Infrastructure)
- Policy NR-2.3: Based on identified demand, encourage the provision of needed additional electric boat charging stations. (Harbor Resources)

Goal NR 3: Reduced air pollution emissions from ground operations at John Wayne Airport

- Policy NR-3.1: Collaborate with John Wayne Airport to minimize air pollution generated by stationary and nonstationary sources. (Imp. 14.3)
- Policy NR-3.2: Collaborate with John Wayne Airport to encourage development and use of reducedemission ground service equipment and transit vehicles. (Imp. 14.3)

Mineral and Oil Resources

There has been a long and lucrative history of drilling for oil in this part of Orange County, which began as early as 1904, with a commercial oil field developed locally in 1922. As of 2025, there are two oil fields: the Newport field within City limits and the West Newport field within the City's sphere of influence. Section 1401 of the City Charter bans oil and gas drilling inside the incorporated area, and any annexed area has 10 years to comply with the standards detailed in the Charter. The City owns 16 oil wells, 14 of which are operational, and 1 of which is used for water injection. There are also 33 abandoned wells, mainly along the northwest boundary. Oil wells are shown in **Figure NR-1** below.

Oil production in Newport Beach has declined from 60,000 barrels in the 1980s to 20,000 barrels per year in 2020. The City earns \$1 million to \$1.2 million annually from offshore oil and gas, which is deposited into the Tidelands Fund to support and maintain tidelands. California's climate goals include phasing out the extraction of oil and gas by 2045.

Figure NR-1. Oil and Gas Wells

Goal NR-4: A city that prepares for the orderly transition of oil and gas resources as deemed appropriate

- Policy NR-4.1: If deemed appropriate, engage with community members and interest groups in the
 phaseout analysis process. The City should monitor and proactively address implementation of
 California laws to facilitate a sustainable transition and dependable revenue streams. (Community
 Involvement)
- Policy NR-4.2: Pursue alternate funding sources to replace the potential loss of oil revenue funding for the Tidelands Fund. (Economic Development)

Energy Transition

Meeting California's greenhouse gas reduction goals may require converting some natural gas appliances and gas cars to electric while simultaneously increasing renewable energy on the grid. Senate Bill 100 (2018) mandates that 100% of the State's electricity retail sales come from renewable and zero-carbon sources by 2045, with interim targets of 90% by 2035 and 95% by 2040. Consequently, Southern California Edison and other utilities across the state may need to significantly boost their renewable energy supply over the next two decades. The Advanced Clean Car rule establishes a year-by-year roadmap so that by 2035, 100% of new cars and light trucks sold in California will be zero-emission vehicles. As of 2024 there is no State legislation

¹ City of Newport Beach. 2023. "Utilities: Oil and Gas." https://www.newportbeachca.gov/government/departments/utilities/oil-and-gas.

reducing natural gas; however, electrification of landscape equipment, heating, and cooking systems may be a strategy to help to reduce greenhouse gas emissions and energy costs.

Goal NR-5: Increased electrification at public facilities to reduce gasoline and natural gas usage and emissions

- Policy NR-5.1: To the extent reasonable, and appropriate adopt a schedule for replacing the City vehicle fleet and consider electric vehicles for any new acquisitions or City programs. (Community Facilities)
- Policy NR-5.2: To the extent reasonable and appropriate, install solar panels on public facilities such as
 parking lot shade structures, rooftops, and other appropriate surfaces, especially where electric vehicle
 charging can be facilitated. (Community Facilities)

Goal NR-6: Electrification incentives for existing buildings to reduce natural gas emissions

- Policy NR-6.1: To the extent reasonable and appropriate, perform outreach to raise awareness of the electrification incentive programs. (Community Involvement)
- Policy NR-6.2: Expand ordinances requiring electric landscaping equipment. (Code updates)

Biological Resources

Newport Beach contains a diverse range of elevations, biogeographic features, and ecosystems. Within Newport Beach, there are 6 plant and 23 animal species classified as endangered, threatened, or both by State or Federal agencies (See Background Report). Many of these species live in **environmental study areas (ESAs)**, as shown in **Figure NR-2**, and **environmentally sensitive habitat areas (ESHAs)**. Both ESAs and ESHAs are subject to stricter regulation implemented through the Local Coastal Program.

Figure NR-2. Environmental Study Areas

Consistent with Assembly Bill 1889 (2024), wildlife corridors should be developed to connect ESHAs and other core habitat areas to each other. This may be accomplished by protecting existing open spaces between habitats, planting native plants that provide food and/or shelter on developed sites, and reducing the introduction of invasive species.

Ecosystems provide important services, such as filtering and storing water, storing carbon in vegetation and soil, purifying the air, providing habitat for wildlife, and creating visually appealing and enjoyable places for people. Well-functioning ecosystems include diverse **native** and **naturalized non-invasive species**, and they support complex food webs, a mix of habitats, and nutrient cycling. Promoting native and environmentally

adapted species across public and private land will enhance and expand an integrated network of resilient ecosystems.

Ecosystem restoration and conservation can reverse the effects of invasive species and support the development of large contiguous or interconnected areas of segmented ecosystems. These ecosystem reserves can serve as nurseries and connected networks for local plant and animal communities to access food, water, shelter, and breeding areas.

Goal NR-7: Native and naturalized non-invasive species habitats in parks and public open space

- Policy NR-7.1: Review existing policies, procedures, and guidelines regarding plant, shrub, and tree
 palettes, and consider revisions to ensure they feature native and naturalized non-invasive species.
 (New code)
- Policy NR-7.2: Adopt standards for new public parks to include recommended vegetation featured on the revised plant, shrub, and tree palette. (Public Works)
- Policy NR-7.3: Perform regular removal of invasive species on public lands to help protect native habitats. (Parks and Rec)
- Policy NR-7.4: Create and distribute educational resources and incentives to increase awareness and
 use of native, resilient species in landscaping on private properties.
- Policy NR-7.5: Work with local nurseries to highlight native and naturalized non-invasive species and discourage the sale of invasive species. (Community Involvement)
- Policy NR-7.6: Create or promote a yard habitat certification program encouraging landscaping practices that support native ecosystems. (Community Involvement)

Goal NR-8: Cooperation with State and Federal resource protection agencies and private organizations to protect terrestrial and marine resources

- Policy NR-8.1: Comply with the policies contained within the Orange County Natural Communities
 Conservation Plan. (Imp. 2.1)
- Policy NR-8.2: Make reasonable efforts to coordinate with the California Resources Agency,
 Department of Fish and Wildlife, and other relevant State agencies. (Imp. 14.7, 14.15)
- Policy NR-8.3: Support reforestation programs for giant kelp. (Imp. 14.3, 14.11, 14.12)

Goal NR-9: Community-driven initiatives for ecosystem conservation

• Policy NR-9.1: Continue to partner with local non-profits that host beach cleanups and citizen science initiatives. (Community Involvement)

• Policy NR-9.2: Provide informational signage that educates residents and visitors about local ecosystems, stewardship, and opportunities for citizen science. (Community Involvement)

Goal NR-10: Land use and development standards to conserve important ecosystem services and habitats

- Policy NR-10.1: Create and regularly update mapping of habitat corridor areas and evaluate appropriate additional landscaping or study requirements for developments in these areas. (Codes and Ordinances)
- Policy NR-10.2: As appropriate, require a site-specific survey and analysis prepared by a qualified biologist as a filing requirement for any development permit applications where development would occur within or contiguous to areas identified as environmental study areas. (Imp. 2.1, 6.1)
- Policy NR-10.3: Require that the siting and design of new development, including landscaping and public access, reasonably protect sensitive or rare resources against any significant disruption of habitat values.
 (Imp. 2.1)
- Policy NR-10.4: Subject to Federal, State, or other legal requirements, limit uses within an area containing any significant or rare biological resources to only those uses that are dependent on such resources, except where application of such a limitation would result in a taking of private property. If application of this policy would likely constitute a taking of private property, then a non-resource-dependent use shall be allowed on the property, provided development is limited to the reasonable amount necessary to avoid a taking and the development is consistent with and subject to other applicable resource protection policies. Public access improvements and educational, interpretative, and research facilities are considered resource-dependent uses. (Imp. 2.1)
- Policy NR-10.5: Maintain a buffer of sufficient size around significant or rare biological resources to ensure the protection of these resources. Require the use of native vegetation and prohibit invasive plant species within these buffer areas. (Imp. 2.1)

Rivers and Waterbodies

The rivers and waterbodies of Newport Beach significantly contribute to the City's ecological diversity and enhance the experiences of both residents and visitors. As illustrated in Figure NR-3, Newport Beach features freshwater, saltwater, estuarine, riverine, and lake ecosystems. Of particular importance are Upper Newport Bay and the Santa Ana River. Upper Newport Bay, designated as an ecological reserve, is one of the largest remaining natural estuarine ecosystems in Southern California. Meanwhile, the west end of Newport Beach lies within the Santa Ana River watershed, with the river itself forming the City's westernmost boundary.

Upper Newport Bay

Upper Newport Bay, nestled in the heart of the City, is one of the largest remaining wetlands in the region, spanning about 1,000 acres. This area provides sanctuary to a diverse array of fish, birds, reptiles, plants, and other species. Also known as the Back Bay, this estuarine ecosystem is a popular destination for migratory birds, offering numerous birdwatching opportunities. The Upper Bay State Marine Conservation Area, covering just over 1 square mile, includes lagoons, tidal flats, and coastal marsh habitats. It protects a variety of small mammals, fish, birds, crustaceans, and other creatures, including some endangered species, and provides residents and visitors opportunities for recreation.

Santa Ana River

The Santa Ana River, the largest river in Southern California, spans nearly 100 miles across San Bernardino, Riverside, and Orange Counties. Its rich biodiversity supports various ecosystems and provides habitats for numerous species of birds, reptiles, fish, and mammals. The river forms a small boundary with Newport Beach at the City's westernmost edge, where it flows into the Pacific Ocean. To protect the river and its biological resources, the City has implemented regulations, including a maximum speed limit of 5 miles per hour for aquatic vessels transiting the river, encroachment limits for residential homes near the riverfront, other property development standards, and discouragement of off-leash dogs near the river mouth.

Figure NR-3. Rivers and Waterbodies in Newport Beach

Water Quality

Both Lower and Upper Newport Bay have concentrations of pollutants that exceed EPA standards for marine habitat and for fish and shellfish consumption. Unlike Upper Newport Bay, however, Lower Newport Bay is safe for swimming and boating. Coastal waters of the Pacific Ocean are generally safe for swimming and boating. See **Table 1** for the water quality condition of each waterbody in Newport Beach.

Clean water is necessary for human health, recreation, and aquatic habitat and organisms. Improving water quality in Newport Bay and in coastal waters can ensure safe enjoyment of these irreplaceable natural resources for residents and visitors while continuing to support the businesses and employers that rely on close proximity to the coast. Reducing stormwater runoff, restoring floodplains, and preventing waste from entering waterbodies can improve water quality and realize the benefits of clean water.

Goal NR-11: Coordination with relevant agencies to reduce pollutants of concern in Newport Bay

- Policy NR-11.1: Continue coordination through the Newport Bay Watershed Executive Committee.
 (Interagency coordination or Community Involvement)
- Policy NR-11.2: Coordinate with the Santa Ana Regional Water Quality Control Board and neighboring cities to implement measures to reduce stormwater runoff. (Interagency coordination)

Goal NR-12: Enhanced green infrastructure to help prevent runoff into Newport Bay

- Policy NR-12.1: Preserve, where possible, natural watercourses or provide naturalized drainage channels within the City. Where feasible, implement restoration and rehabilitation opportunities.
 (Water)
- Policy NR-12.2: Coordinate the needs of stormwater pollution management with the overlapping (and sometimes competing) needs for habitat management, flood management, capital improvement projects, development, aesthetic, and other open space needs. (Water)
- Policy NR-12.3: Promote the use of natural wetlands, through preservation or restoration, to improve water quality. (Policy HB 8.13) (Imp. 6.1, 19.1)
- Policy NR-12.4: Represent Newport Beach by participating in watershed-based runoff reduction, water
 quality control, and other planning efforts with the California Regional Water Quality Control Board,
 the County of Orange, and upstream cities. Use reasonable efforts to promote regulation of upstream
 dischargers (cities, Orange County, residential and commercial uses) in the San Diego Creek and Santa
 Ana/Delhi Channel watersheds. (Policy HB 8.6) (Imp. 14.3, 14.16)

Goal NR-13: Standards and programs to limit runoff of pollution

- Policy NR-13.1: Support regulations limiting or banning the use of insecticides, fertilizers, and other chemicals shown to be detrimental to water quality. (Policy HB 8.1) (Imp. 6.1, 17.1)
- Policy NR-13.2: Promote pollution prevention and elimination methods that minimize the introduction of pollutants into natural waterbodies. (Policy HB 8.2) (Imp. 6.1, 8.1, 17.1, 18.1, 19.1)
- Policy NR-13.3: Suspend activities and implement appropriate health and safety procedures in the
 event that previously unknown groundwater contamination is encountered during construction.
 Where site contamination is identified, implement an appropriate remediation strategy that is
 approved by both the City, and the State or Federal agency with appropriate jurisdiction. (Policy HB
 8.3) (Imp. 6.1)

- Policy NR-13.4: Require all development to comply with the regulations under the City's municipal separate storm drain system permit under the National Pollutant Discharge Elimination System (NPDES). (Policy HB 8.4) (Imp. 8.1, 19.1)
- Policy NR-13.5: Develop and maintain a water quality checklist to be used in the permit review process to assess potential water quality impacts. (Policy HB 8.8) (Imp. 17.1)
- Policy NR-13.6: Continue to require new development applications to include a water quality management plan to minimize runoff from rainfall events both during and after construction. (Policy HB 8.9) (Imp. 7.1)
- Policy NR-13.7: Implement and improve upon best management practices (BMPs) for residences,
 businesses, development projects, and City operations. (Policy HB 8.10) (Imp. 8.1, 17.1, 18.1, 19.1)
- Policy NR-13.8: Include site design and source control BMPs in all developments. When the
 combination of site design and source control BMPs are not sufficient to protect water quality as
 required by the National Pollutant Discharge Elimination System, structural treatment BMPs will be
 implemented along with site design and source control measures. (Policy HB 8.11) (Imp. 7.1)
- Policy NR-13.9: Include equivalent BMPs that do not require infiltration, where infiltration of runoff would exacerbate geologic hazards. (Policy HB 8.12) (Imp. 6.1, 19.1)
- Policy NR-13.10: Require all street drainage systems and other physical improvements created by the
 City or developers of new subdivisions to be designed, constructed, and maintained to minimize or
 reduce adverse impacts on water quality. Investigate the possibility of treating or diverting street
 drainage to minimize or reduce impacts to waterbodies. (Policy HB 8.15) (Imp. 7.1)
- Policy NR-13.11: Require new development and public improvements to minimize the creation of and increases in impervious surfaces, especially those directly adjacent to existing impervious areas, to the maximum extent possible. Require redevelopment to increase the area of pervious surfaces, where feasible. (Policy HB 8.20) (Imp. 6.1, 7.1)
- Policy NR-13.12: Conduct periodic analysis of the overall effectiveness of the pollution prevention programs in Newport Beach. (Water)
- Policy NR-13.13: Require grading/erosion control plans with structural BMPs that prevent or minimize or reduce possible erosion during and after construction for development on steep slopes and on graded or disturbed areas. (Imp. 6.1)

Goal NR-14: Minimized adverse effects to water quality from sanitary sewer outflows

- Policy NR-14.1: Implement the Sewer System Management Plan and the Sewer Master Plan. (Imp. 18.1)
- Policy NR-14.2: Require waste discharge permits for all applicable food preparation facilities that produce grease. (Imp. 18.1)
- Policy NR-14.3: Renovate all older sewer pump stations and install new plumbing according to the most recent standards. (Imp. 18.1)
- Policy NR-14.4: Comply with the California Regional Water Quality Control Board's Waste Discharge Requirements associated with the operation and maintenance of the city's sewage collection system.
 (Imp. 18.1)

Sandy Beaches

Sandy beaches are at risk as a result of coastal development interrupting natural beach nourishment and replenishment and of sea-level rise. Sand nourishment and replenishment projects have been conducted locally since the 1960s, first by the U.S. Army Corps of Engineers, then by local governments in the 2000s.² Sand naturally migrates, and effective nourishment requires regional efforts. Comprehensive sand nourishment, retention, and replenishment recognizes the role of both natural and built solutions where appropriate.

Goal NR-15: Beach nourishment, sand retention, and sediment restoration projects

- Policy NR-15.1: Work with regional governments to create partnerships and cross-boundary projects that benefit the region. (Interagency Coordination)
- Policy NR-15.2: Identify appropriate sites for beach nourishment, living shoreline restoration, and built structures as part of a comprehensive sea-level rise adaptation plan. (LCP)
- Policy NR-15.3: Monitor progress of sand nourishment and retention projects. (Database Management and Development Tracking and Monitoring)

² Connelly, Laylan. "Dates Set for Sand Replenishment Project for Orange County Beaches." *Los Angeles Times*, November 22, 2023. https://www.latimes.com/socal/daily-pilot/news/story/2023-11-22/dates-set-for-sand-replenishment-project-for-orange-county-beaches.

Brey, Jared. "California Neighbors and Cities Fight over Sand as Beaches Shrink." *Governing*. Accessed November 25, 2024. https://www.governing.com/resilience/california-neighbors-and-cities-fight-over-sand-as-beaches-shrink.

Water Conservation

As of 2025, the City's water supply comes from a combination of imported water (18.5%), which includes water from the Colorado River and the State Water Project; recycled water (1.5%); and groundwater from the Orange County Basin (80%). As outlined in the City's 2020 Urban Water Management Plan, the City intends to reduce reliance on imported water by improving efficiency and through increased reliance on groundwater. To plan for the event of water shortage due to drought, a catastrophic event (e.g., earthquake), or other circumstances, the City has created a Water Shortage Contingency Plan, most recently updated in 2020, to help maintain adequate, reliable supplies and reduce impacts of supply interruptions. The Water Shortage Contingency Plan provides real-time water supply availability assessments and strategic steps to respond to actual conditions.

Clean water is a precious resource in Southern California. Reduced indoor and outdoor water use can play an important role in conserving water. By implementing best practices for landscaping and irrigation on public property and offering incentives for residents and commercial businesses to conserve potable water on their property, the City may be able to reduce reliance on imported fresh water.

Goal NR-16: Reduced potable water use for landscaping on public lands

- Policy NR-16.1: Create demonstration water-saving gardens with educational signage on public property. (Community Involvement)
- Policy NR-16.2: Evaluate the feasibility of graywater systems for irrigation of landscaped public property. (Public Service Facility Plans)
- Policy NR-16.3: Implement the Assembly Bill 1572 (2023) non-functional turf ban for properties owned by the City by 2027.

Goal NR-17: Water-efficient landscaping practices incentives for private property

- Policy NR-17.1: Adopt incentives for property owners to install graywater systems, rain gardens, and rain barrels; plant drought-tolerant vegetation; and other practices to increase water-efficient landscaping.
- Policy NR-17.2: Conduct education and outreach to raise awareness of water-efficient landscaping practices and offered incentives.
- Policy NR-17.3: Enforce water conservation measures that limit water usage, prohibit activities that
 waste water or cause runoff, and require the use of water-efficient landscaping and irrigation in
 conjunction with new construction projects. (Imp. 2.1, 7.1, 17.1)

- Policy NR-17.4: Continue to actively promote the use of water conserving devices and practices in both new construction and major alterations and additions to existing buildings. This can include the use of rainwater capture, storage, and reuse facilities. (Imp. 6.1, 7.1, 17.1)
- Policy NR-17.5: Implement the Assembly Bill 1572 (2023), non-functional turf ban, for private properties in accordance with the timeline outlined in legislation.

Visual Resources

Visual resources contribute to a community's quality of life and may help build a connection to an area. Public access to visual resources is not only important for connecting individuals to these resources but may be a key component to ensuring that the preservation of such resources remains a priority for the community. To protect visual resources, the City has identified and designated public viewpoints and corridors to ensure that public access to visual resources is preserved to the extent possible.

Viewpoints and view corridors are often situated near dynamic and inspiring natural environments, including the Pacific Ocean, Crystal Cove State Park, the San Joaquin Hills, and the wetlands and bluffs of Newport Bay. Due to its coastal nature, much of the City's development, as well as its streets and highways, has been designed to capture and preserve picturesque views of the coastline, harbor, and bay. Additionally, the City's approximately 560 acres of parkland and open space and approximately 47.7 miles of total coastline are also considered visual resources.

Public access areas providing vantage points with views of Newport Bay and Upper Newport Bay include West Jetty View Park and Back Bay View Park. **Figure NR-4** below shows public view points, coastal view roads, and existing and proposed beaches and parks.

Sweeping views of the beaches, harbor, and coast distinguish Newport Beach as a city with unparalleled natural beauty. Viewsheds often hold historic or scenic value and should be protected to the maximum extent possible for current and future generations. Preserving viewpoints and corridors allows the public to appreciate the City's beauty, character, and history.

Figure NR-4. Viewpoints and Corridors in Newport Beach

Goal NR-18: Viewsheds and corridors that are preserved

- Policy NR-18.1: Protect and, where feasible, enhance significant scenic and visual resources that
 include views of open space, mountains, canyons, ridges, ocean, and harbor from public vantage
 points, as shown in Figure NR-4. (Imp. 2.1)
- Policy NR-18.2: Require new development to restore and enhance the visual quality in visually
 degraded areas, where feasible, and encourage view easements or corridors designed to protect
 public views or to restore public views in developed areas, where appropriate. (Imp. 20.3)
- Policy NR-18.3: Protect and enhance public view corridors from roadway segments (shown in Figure NR-4) and other locations that may be identified in the future.

Goal NR-19: Minimized visual impacts of signs and utilities

- Policy NR-19.1: Design and site signs, utilities, and antennas to minimize visual impacts. (Imp. 2.1)
- Policy NR-19.2: Implement programs to remove illegal signs. For temporary signage on public or private property, ensure all signs are removed promptly. (Imp. 2.1, 26.1)
- Policy NR-19.3 Continue to support programs to remove and underground overhead utilities, in both new development and existing neighborhoods. (Imp. 2.1, 14.13)

Archaeological and Paleontological Resources

Archaeological and paleontological resources are invaluable and irreplaceable. Fossils in the central Santa Ana Mountains represent the oldest formations in Orange County, at 145 to 175 million years old. Changes in geological land formations over time, brought upon by tectonic activity, have resulted in a mix of aquatic and terrestrial fossils underlying the city. The Miocene-age rock units (26 million years ago [mya] to 7 mya), particularly in the Newport Coast area, are considered to be of high paleontological significance (6 to 9 on a scale of 1 to 10).

Other fossil deposits found in the Newport Beach area include a variety of marine mammals, sea birds, mollusks, and a number of vertebrate animals typically associated with the Ice Age (2.5 mya to 15,000 years ago). Local paleontological sites, particularly near the Castaways area along Dover Drive, have yielded fossils of Ice Age horses, elephants, bison, antelopes, and dire wolves. Also, a number of localities in the portions of the Vaqueros formation that underlie the Newport Coast area have yielded a variety of invertebrate and vertebrate fossils that are also considered to be of high paleontological significance. Other areas with significant fossils and known paleontological deposits include the Randall Preserve area, which contains at least 14 documented sites of high significance, and Fossil Canyon, in the North Bluffs area, which is considered a unique paleontological locality.

Newport Beach also contains many significant archaeological sites. The Upper Newport Bay area has yielded some evidence for the earliest human occupation of Orange County, dated to about 9,500 years before present. Over 50 sites, including human burials, have been documented in the Newport Beach area, including the Newport Coast area and Randall Preserve, with many yielding substantial information regarding the prehistory of the city and of Orange County. At least two and possibly three distinct cultural groups inhabited the area, including the Tongva and Acjachemen tribes, although the boundaries of their tribal territories are unclear.

Protecting archaeological and paleontological resources in Newport Beach is important for preserving the area's rich cultural and natural history. These resources offer invaluable insights into the lives of Indigenous peoples, the evolution of ecosystems, and the region's geological past. Safeguarding these remnants ensures that future generations can study and learn from them, fostering a deeper understanding of human history and the natural world. Additionally, these resources hold significant cultural importance for local communities, particularly for Indigenous groups whose heritage is tied to these lands.

Goal NR-20: Protection of archaeological and paleontological resources

- Policy NR-20.1: Require new development to protect and preserve paleontological and archaeological resources from destruction and to avoid and minimize impacts to such resources in accordance with the requirements of the California Environmental Quality Act (CEQA). Through planning policies and permit conditions, ensure the preservation of significant archaeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA. (Imp. 7.1)
- Policy NR-20.2: As deemed appropriate and necessary, prepare and maintain sources of information regarding paleontological or archaeological sites and the names and addresses of responsible organizations and qualified individuals who can analyze, classify, record, and preserve paleontological and archaeological findings. (Imp. 10.1)
- Policy NR-20.3: Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow qualified representatives of such groups to monitor grading and/or excavation of development sites. (Imp. 14.16)

Policy NR-20.4: Require new development, where on-site preservation and avoidance are not feasible, to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Newport Beach or Orange County whenever possible. (Imp. 11.1)