

Natural Resources Element

PURPOSE

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

OVERVIEW

The Natural Resources Element guides the conservation, protection, development, and use of natural resources, as well as the preservation of cultural and historic resources. This element addresses a wide range of topics including air quality, energy transition, mineral and oil resources, biological resources, rivers and waterbodies, sandy beaches, water conservation, visual resources, and archaeological and paleontological resources.

The Natural Resources Element includes policies, to restore, improve, preserve, conserve, and manage natural resources to improve ecosystem services and function in the natural and built environment.

GOALS, POLICIES, 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 Geronio Pass of 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, or 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 the majority of air pollutants within the Basin. Newport Beach is a relatively low-density community with fewer public transportation routes, which results in an increase in motor vehicle trips and associated air pollutants. Notably, two major highways run through Newport Beach: Highway 1 along the coast and Highway 73 along the eastern 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 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 protect public health. The South Coast Air Quality Management District (SCAQMD) is responsible for bringing air quality within the Basin into conformity with the national 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 include ozone, carbon monoxide (CO), nitrogen dioxide, and sulfur dioxide. As of 2025, SRA 18 exceeds State or national 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, such as respiratory illness and heart disease, especially among individuals with chronic heart and lung diseases. Ground-level ozone, or “smog,” also affects lung and heart health. Together, these pollutants can 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 affect residents and visitors of Newport Beach. Specifically, 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. 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 mobile source emissions to improve air quality

- Policy NR-1.1: Promote walkable and bikeable neighborhoods by providing human-scaled 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 reduce and eliminate vehicle trips.

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

- Policy NR-2.1: Create public and/or private partnerships to increase EV charging stations at visitor lodging and popular tourist destinations. (Mobility Infrastructure)
- Policy NR-2.2: Identify, prioritize, and incentivize the installation of EV charging stations in residential areas with limited charging options, such as apartments. (Mobility Infrastructure)
- Policy NR-2.3: Install additional electric boat charging stations. (Harbor Resources)

Goal NR 3: Reduced air pollution emissions from aircraft 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 reduced-emission ground service equipment and transit vehicles. (Imp. 14.3)

Mineral and Oil Resources

There has been a long history of drilling for oil in this part of Orange County, which began as early as 1904, with a commercial oil field developed 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 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 oil and gas, which is deposited into the Tidelands Fund to support and maintain tidelands.¹ California's climate goals include phasing out the extraction of oil and gas by 2045. The City should monitor and proactively address implementation of these laws to facilitate a sustainable transition and dependable revenue streams.

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: Engage with community members and interest groups in the phaseout analysis process.
(Community Involvement)
- Policy NR-4.2: Pursue alternate funding sources to replace oil revenue funding for the Tidelands Fund.
(Economic Development)

Energy Transition

Meeting California's greenhouse gas reduction goals will 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. 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 legislation reducing natural gas; however, electrification of landscape equipment, heating, and cooking systems are popular strategies to reduce greenhouse gas emissions and energy costs. Consequently, Southern California Edison and other utilities across the state must significantly boost their renewable energy supply over the next two decades.

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

- Policy NR-5.1: Adopt a schedule for replacing the City vehicle fleet. (Community Facilities)
- Policy NR-5.2: 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)

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

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

- Policy NR-6.1: Incentivize the transition from natural gas appliances to electric appliances, including advertising South Coast Air Quality Management District and Southern California Edison programs. (Community Involvement)
- Policy NR-6.2: Perform outreach to raise awareness of the electrification incentive programs. (Community Involvement)
- Policy NR-6.3: 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, wildlife corridors should be developed to connect ESHAs and other core habitat areas to each other. This can 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 segments 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: Adopt a revised plant, shrub, and tree palette featuring native and naturalized non-invasive species. (New code)
- Policy NR-7.2: Adopt standards for new public parks to include only vegetation featured on the revised plant, shrub, and tree palette. (Parks and Rec)
- Policy NR-7.3: Perform regular removal of invasive species on public lands to protect native habitats. (Parks and Rec)
- Policy NR-7.4: Educational resources and incentives to increase awareness and use of native and climate-appropriate species in landscaping on private properties.
- Policy NR-7.5: Work with local nurseries to highlight native and naturalized non-invasive species and prevent the sale of invasive species. (Community Involvement)
- Policy NR-7.6: Create or promote backyard habitat certification programs that support 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: 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: 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, protect sensitive or rare resources against any significant disruption of habitat values. (Imp. 2.1)
- Policy NR-10.4: 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 minimum amount necessary to avoid a taking and the development is consistent with all 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, if present, 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)
- Policy NR-10.6: Shield and direct exterior lighting away from significant or rare biological resources to minimize impacts to wildlife. (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, estuarine, riverine, and lake ecosystems. Of particular importance are Upper Newport Bay and the Santa Ana River. Upper Newport Bay, designated as a nature preserve, 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 northwest 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, encroachment limits for residential homes near the riverfront, and other property development standards.

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 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 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: Require incorporation of natural drainage systems and stormwater detention facilities into new developments, where appropriate and feasible, to retain stormwater in order to increase groundwater recharge. (Policy HB 8.19) (Imp. 6.1)
- Policy NR-12.4: 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-12.5: 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. 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 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. (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 adverse impacts on water quality. Investigate the possibility of treating or diverting street drainage to minimize 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 directly connected impervious areas, to the maximum extent practicable. Require redevelopment to increase area of pervious surfaces, where feasible. (Policy HB 8.20) (Imp. 6.1, 7.1)
- Policy NR-13.12: Conduct 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 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 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 of sea-level rise increasing erosion. Sand nourishment 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 and retention 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)

Water Conservation

The city's water supply comes from a combination of imported water (28.5%), which includes water from the Colorado River and the State Water Project; recycled water (3.5%); and local groundwater, with groundwater from the Orange County Basin comprising the largest share (82%). 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

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>.

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 can 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 Assembly Bill 1572 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 Assembly Bill 1572, 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 can help build a connection to an area. Public access to visual resources is not only essential for connecting individuals to these resources but is 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 view points to ensure that public access to visual resources is preserved.

Viewpoints and view corridors are often situated near dynamic 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 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 for current and future generations. Preserving viewpoints and corridors allows the public to appreciate the city's beauty and character.

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 provide 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. (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, 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 Banning Ranch 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 Banning Ranch, 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 vital 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: 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)