

NCC Quarterly

The Intersection of General Plans and Conservation



General plans for cities and counties are long-term policy documents which serve as a comprehensive framework for guiding growth and development. General plans reflect community priorities, values, and include supporting goals and implementation measures to achieve a governmental agency's vision. They typically consist of several key elements which address various aspects of land use, housing, transportation, economic development, community services and conservation/open space.

With the Natural Communities Coalition serving as a coordinating agency for the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) of Central and Coastal Orange County, this article will examine the evolution and purpose of conservation and open space elements and spotlight the outstanding early planning efforts of several participating landowners in the Nature Reserve of Orange County.

In 1970, the State of California mandated the inclusion of conservation and open space elements as part of city and county general plans. The original intent of integrating a conservation and open space element at the county level was to address the conservation, protection, development, utilization and reclamation of natural resources. At the municipal level, the original intent was to address the remaining natural or other open space resources within a city.

The conservation and open space elements of city and county general plans today are much more comprehensive and

sophisticated. The types of policies and goals which may be considered as part of an agency's plan in 2024 may include:

- a. Preserving and enhancing biodiversity.
- b. Applying adaptive management protocols to address monitoring and restoration.
- c. Conserving, restoring and connecting native habitats across jurisdictions.
- d. Complying with regional conservation permits administered by wildlife agencies.
- e. Protecting mineral resource areas from incompatible land uses.
- f. Limiting development in areas containing significant or rare biological resources.
- g. Promoting responsible human interfaces with unique natural environments.

There are several outstanding examples of conservation and open space planning documents in Orange County which go above and beyond in guiding sound environmentally focused decision making. [The City of Newport Beach's Natural Resource Element](#) of its General Plan addresses conservation, development and utilization of natural resources in the areas of open space, water supply, water quality, air quality, marine biological resources, mineral resources and more. [The County of Orange's General Plan Resources Element](#) articulates a scientific approach to overseeing the development, management, preservation, and conservation of resources that are necessary to meet Orange County's existing and future demands. Like the Newport Beach Plan, the County of Orange goes to extensive measures to communicate its vision for its vast wealth of natural resources.

In summary, the conservation and open space elements of city and county general plans play a pivotal role in shaping sustainable development, preserving natural assets, and maintaining a harmonious balance between human needs and environmental well-being.

NCC Releases Its Annual Report

The Implementation Agreement for the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) of the Central and Coastal Orange County specifies the preparation of an annual report to describe the activities of the Natural Communities Coalition (NCC) and of landowners and land managers within the 37,378-acre Nature Reserve of Orange County (NROC).

NCC's 2023 draft Annual Report was recently compiled and circulated to the United State Fish and Wildlife Service, California Department of Fish and Wildlife, NROC landowners, and the general public on March 21, 2024.

The Annual Report offers a comprehensive overview of the collaborative planning efforts and activities undertaken for the purpose of providing regional protection and recovery of multiple species and habitats across the Reserve, while allowing for compatible land use and appropriate development. The 278-pages of content offer a detailed perspective of NCC 's role as a coordinating organization and demonstrates the extensive scientific processes under implementation to preserve the quality of habitat on NROC designated properties through 2071.

A few of the highlights from the report are as follows:

■ Target Bird Monitoring

With the intention of developing and implementing an on-going Target Bird Species Monitoring Program, NCC has launched a collaborative planning project with US Geological Survey, The Nature Conservancy, and others. The nearly \$1 million investment will fund the ongoing monitoring of the Coastal California gnatcatcher and the coastal cactus wren across the Reserve while informing landowning agencies of the adaptive management actions they may implement within the properties they manage.

■ Vegetation Monitoring

Vegetation monitoring provides defensible, objective measures of the quality and extent of coastal sage scrub and associated habitats within the Reserve. NCC funds the coordination of vegetation monitoring across the Reserve. The delivery of vegetation data to landowning agencies facilitates early detection and rapid response processes, which are considered a best practice for managing invasive plants.

■ Pond Turtle Site Assessment and Recovery

On September 29, 2023, the United States Fish and Wildlife Service proposed federal protection for the southwestern pond turtle based on the increasing risk of its extinction



due to population losses, decreased genetic diversity, and a reduced ability to adapt to changing environmental conditions. The southwestern pond turtle is the only native freshwater turtle in coastal California. Habitat loss, altered hydrology, and introduction of non-native species has resulted in a 95% loss of range.

There are currently two healthy pond turtle populations in NROC – one at Shady Canyon in Irvine and the other at UCI's San Joaquin Marsh. The purpose of NCC's Pond Turtle program is to evaluate viable pond turtle habitat sites and identify potential restoration actions which increase pond turtle suitability and enable the translocation of populations in the future.

■ Conservation Grazing Pilot Study

One of NCC's most ambitious land restoration projects to date involves the need for a timely, cost-effective, and logistically practical management approach for thousands of acres of nonnative annual grasslands found on the Reserve. The science-based pilot project is expected to begin in fall 2024 and continue over the next five years on approximately 200 acres of Reserve land in Weir Canyon. The project aims to evaluate the use of targeted cattle grazing integrated with weed management of broadleaf weeds and seed-based revegetation. If successful, this management practice may be applied to other locations within the Reserve.



San Bernardino Ringneck Snake

The San Bernardino ringneck snake, scientifically known as *Diadophis punctatus modestus*, is one of the identified species receiving regulatory coverage under the NCCP/HCP of Coastal and Central Orange County.

These slender snakes are known for their unique coloration, which includes a dark body with a bright yellow or orange ring around their neck. They are venomous, but their toxin is harmless to humans. The average life expectancy of a ringneck snake is 10 years in the wild and six years in captivity.

As one may expect, the San Bernardino ringneck snake is often found in the San Bernardino Mountains region of Southern California. Its range however extends along the southern California coast from Santa Barbara area south along the coast to San Diego County and inland to the San Bernardino mountains. They are often encountered under rocks, logs, or leaf litter, and they may also inhabit grassy areas near water sources.

San Bernardino ringneck snakes are nocturnal, which means they are most active during the night. They are secretive by nature and tend to avoid human interaction. When threatened, they may coil their bodies and display their brightly colored ventral surface as a warning.

Their diet consists mainly of small prey such as earthworms, slugs, and soft-bodied insects. They are known for their ability to eat prey items that are larger than their own heads by using their flexible jaws.

Ringneck snakes have a complex communication system. They can rub and touch each other and nuzzle using their heads. During mating, females can call upon males by excreting pheromones, which are a chemical substance serving as a stimulus to gain a behavioral response.

Breeding typically occurs in the spring, with females laying eggs in damp, hidden locations such as beneath rocks or logs. Clutch sizes can vary but typically range from 2 to 10 eggs. The young snakes hatch after an incubation period of several weeks and once born can survive by themselves.

The San Bernardino ringneck snake and other snakes serve an important role in local ecosystems by helping to control populations of small invertebrates, such as insects and slugs. They are also prey for larger predators, contributing to the overall balance of the food web.



Coulter's Matilija Poppy

One of the awe-inspiring native plants frequently seen throughout the Nature Reserve of Orange County is Coulter's matilija poppy, commonly known as the fried egg flower.

The plant, which is an identified species receiving regulatory coverage under the NCCP/HCP of Coastal and Central Orange County, grows up to eight feet tall in the wild, with bushy foliage and large leaves. The flowers, which can measure up to 7 inches across, bloom from late spring to early summer.

Coulter's Matilija poppy is found in dry, sunny areas such as canyons, hillsides, and along stream banks. It prefers well-drained soil and is often seen in coastal scrub and chaparral habitats.

The poppy holds cultural significance among Native American tribes in California, who used its parts for various medicinal and ceremonial purposes. Its common name, matilija poppy, is believed to have evolved from fictional Chumash Tribal representative, Chief Matilija.

For those who may be thinking about adding Coulter's matilija poppy to their garden, it is noted to thrive in full sun and requires minimal water once established. According to Roger's Gardens, "Coulter's Matilija Poppy is a fine choice for the garden, but it is also a good selection for planting in outdoor pots and containers. With its upright habit of growth, it is best suited for use as a 'thriller' in the 'spiller-thriller-filler' container combination; plant it near the center of the pot, surrounded by smaller plants and those that spill over the edges. It is even sizeable enough that it can be grown alone in a suitable container."

Additional benefits of the poppy include an active presence of pollinators, such as bees and butterflies, which are attracted to its large flowers.