

Attachment 4

Guiding Policies from the Ellwood-Devereux Coast Open Space and Habitat Management Plan

This plan is also available online at:

<https://www.cityofgoleta.org/city-hall/planning-and-environmental-review/advance-planning-division/environmental-programs>

Ellwood Mesa/Sperling Preserve Open Space Monarch Butterfly Habitat Management Plan: Related Open Space Plan Policies

3.1.2 Environmentally Sensitive Habitat Areas

The GCP, which applies to the unincorporated areas of the County, contains a list of ESHAs that occur in the Open Space Plan Area. Key policies related to ESHAs are as follows:

GCP Policy BIO-GV-6. Monarch butterfly roosting habitats shall be preserved and protected.

3.1.6 Exotic Species Management Approach

“Invasive exotics” are insects, plants, or wildlife species that exhibit rapid and aggressive ability to colonize suitable areas and that displace native species by competitive abilities or predatory actions. Invasive exotics can cause adverse impact to habitats through various means besides physical displacement. They can hybridize with native stock and cause undesirable traits in native plants, support other invasive species, and create new microclimates and alter physical conditions in the ecosystem.

The habitat protection and management element is designed to reduce the extent of, and if feasible, eradicate, invasive exotic species. This will be accomplished by targeted removal of invasive exotics with or without associated habitat restoration. The primary objectives of invasive exotic species management are to protect the various biological, hydrological, and geophysical functions of ESHAs in the Open Space Plan Area, as well as to protect the genetic integrity and reproductive capability of native species populations in the Open Space Plan Area.

Control and eventual eradication of the following invasive exotic species will be an opportunity throughout the implementation of the Open Space Plan:

- Long-horned beetle (which attack eucalyptus trees)
- Fennel (*Foeniculum vulgare*). Fennel is scattered through non-native grasslands, along the Devereux Creek drainage, and in large patches on the South Parcel Nature Park.
- Pampas Grass (*Cortaderia selloana*). Pampas grass occurs in dense patches on the South Parcel Nature Park.
- Harding Grass (*Phalaris aquatica*). Harding grass occurs in scattered locations on Ellwood Mesa, the South Parcel Nature Park, and West Campus Bluffs Nature Park.
- Hottentot Fig (*Carpobrotus edulis*). Hottentot fig (a species of iceplant) occurs in dense patches on the coastal bluffs and dunes in the Open Space Plan Area.
- Tamarisk (*Tamarix aphylla*). Tamarisk occurs in patches on the West Campus Bluffs Nature Park.

Eucalyptus trees on the City of Goleta’s Ellwood Mesa and Santa Barbara Shores and the University’s large ornamental pine and cypress trees on the West Campus will not be removed as part of the habitat protection and management plan. These trees provide important monarch butterfly aggregation and roosting habitat and also serve as raptor roost and nest sites.

Areas where the vegetation and soil have been disturbed by humans or domestic animals are more susceptible to invasion of exotic species. Previous grazing activity, uncontrolled recreation uses, and other land disturbances within the Open Space Plan Area support the conditions to sustain exotic species. A more complete list of invasive exotic species occurring within the Open Space Plan Area and a description of the species’ general location is provided in Appendix A.

The phrase “native species” used in this Open Space Plan refers to plants, insects, fish, and wildlife indigenous to the South Coast and/or southern California. “Non-native species” refers to species that are from areas outside of the region, state, or continent. “Naturalized species” refers to non-native species

which have become common since the European settlement of California, and which now are integral elements of the coastal ecosystem. Examples of naturalized species include the annual grasses that dominate most of the grassy foothills and meadows of the South Coast (e.g., wild oats, plantain, Italian ryegrass, filaree, ripgut brome), and eucalyptus trees.

3.1.7 General Policies for Habitat Protection and Management

The following goal and associated policies guide the overall implementation of the Habitat Protection and Management Element of the Open Space Plan.

Habitat Goal 1. Protect, enhance, and, where feasible, restore ESHAs in the Open Space Plan Area.

Habitat Policy 1. Focus high priority habitat enhancement and restoration initial improvements and opportunities on invasive exotic species control in wetlands, enhancement and restoration of riparian and non-riparian wetlands, ensuring the long-term vitality of the monarch groves, and enhancement and restoration of native habitats that are under-represented in the Open Space Plan Area.

Habitat Policy 2. Enhance and restore native habitats to be self-sustaining and not reliant on long-term human management and intervention.

Habitat Policy 3. Control and, where feasible, eradicate invasive exotic species within the Open Space Plan Area in a manner that protects ESHAs from adverse impacts.

3.2.2 Management Issues

The monarch butterfly groves have been subject to past and ongoing human impacts due to unmanaged access by pedestrians, bicyclists, equestrian users, and pets. Unmanaged and excessive access has compacted soils, destroyed the layer of litter (dead leaves and small twigs), and trampled vegetation. Evidence of damaging public access is very evident in the Ellwood Main site. The loss of the litter layer exposes soils to erosion. Compaction of soil can cause stress to the trees and hinders natural regeneration by seedling and saplings in the understory. In some experts' opinions, the absence of a diverse size and age structure of trees in the Ellwood Main site makes the groves vulnerable to disease.

Another major management issue is the growing number of eucalyptus pests that have arrived in California, including the long horned beetle (*Phoracantha semipunctata*), several species of psilid (*psilids*), and at least two species of weevils. The long horned beetle is probably the best known of these pests and can kill a eucalyptus tree in a matter of months. There are few tools presently available to control this pest. The best defense is healthy trees free of stress by drought, soil compaction, or overcrowding. The Ellwood Main site exhibits limited signs of beetle infestation (Meade, 1999).

Eucalyptus trees are very vulnerable to fire because of the abundance of oil within their leaves. In the long-term, fire may be beneficial to a eucalyptus grove because it regenerates old groves. However, in the Open Space Plan Area, fire is not an acceptable management tool due to obvious public safety concerns to adjacent residences.

Finally, a number of educational and scientific organizations and community groups monitor monarchs in the Ellwood Complex. Many times these efforts include tagging or handling the butterflies. The high level of interest and direct interaction with this species from school children to scientists could harm the population if not properly managed and coordinated.

3.2.3 Regulatory Considerations

Monarch butterfly overwintering sites in the Open Space Plan Area are considered ESHAs because the occupied groves meet the definition of an ESHA in Section 30107.5 of the Coastal Act. As such, autumnal and overwintering sites are afforded the protection under the Coastal Act described in Section 3.1. Unoccupied eucalyptus groves within the City of Goleta in areas adjacent to the overwintering sites that

contain suitable conditions to support overwintering butterflies are also considered ESHAs because they could be used at any time in the future, and because they provide additional habitat in the event that the occupied groves are damaged.

3.2.4 Management Goals and Policies

The following goal and policies will guide the overall implementation of the monarch butterfly Habitat Protection and Management Element of this Open Space Plan. The three sponsoring agencies will formally adopt these goals and policies into their local coastal programs. Management actions and projects by each agency associated with the implementation of the Open Space Plan within their jurisdiction must be consistent with these goals and policies.

Monarch Goal 1. Protect and maintain existing monarch butterfly populations in the Open Space Plan Area, and manage the habitats to be self-sustaining.

Monarch Policy 1. Manage public access to protect butterflies and their habitat, while promoting public enjoyment, education, and scientific research.

Monarch Policy 2. Conduct scientifically sound studies using appropriate and cautious methods to maintain and improve habitat conditions to ensure long-term viability of the population.

Monarch Policy 3. Implement phased habitat improvements in a manner, using pilot programs, small-scale projects, and adaptive management.

3.2.5 Resource Protection and Management

Trail and Public Access Plan in Butterfly Groves

During the peak overwintering season, especially on weekends and during holidays, a large number of people visit the Ellwood Main site which can cause adverse impacts to the habitat. To reduce the impact, access in the Ellwood Main site would be managed by closing certain duplicative trails and placing low-profile barriers such as post and cable fences or logs to direct foot traffic and discourage bicycle use in sensitive or eroded areas. The fencing and other barriers would be similar to the existing onsite barriers in the Ellwood Main site.

The trail system for the Open Space Plan Area is presented on Figure 12 (as presented in Section 4.0 of this plan). Trail closure opportunities would occur within all of the monarch butterfly overwintering sites, as summarized below:

- Public access in the Sandpiper Aggregation would be reduced as a result of elimination of the north-south connecting trail as a result of the Comstock Homes Development. A 500-foot-long trail that connects the Comstock Homes Development site with the grove would be closed. Pedestrian access would be maintained on Trail 24, located along the perimeter of the aggregation.
- Within the Ellwood West site, a small trail connector, approximately 200 feet in length, would be closed. Pedestrian access would be allowed; bicyclists and equestrians would not be allowed.
- Approximately 400 feet of existing trail between Trails 18 and 23 would be closed in the Ellwood West site. This trail closure would include a Devereux Creek crossing.
- Three trail closures totaling approximately 1,050 feet are proposed within the Ellwood Main site. Trail closures include approximately 300 feet between Trails 18 and 16; approximately 350 feet between Trails 19 and 17; and 400 foot between Trails 18 and 17. Pedestrian access would be allowed. Bicyclists and equestrians would not be allowed.
- Two trail closures totaling 200 feet are proposed within the Ocean Meadows Roost. These small spur trails diverge off Trail 14 and connect to the golf course. Pedestrian access would be

allowed; bicyclists and equestrians would not be allowed. The southern edge of this roost would be accessed via an existing improved trail (Trail 8) on University property that would connect with the unimproved trail (Trail 17) on City of Goleta property.

Eucalyptus Woodland Enhancement Opportunities

The following opportunities to enhance the six monarch overwintering sites in the Open Space Plan Area will be considered during the implementation of the Open Space Plan. The objective of these opportunity projects is to ensure that the eucalyptus groves that provide overwintering habitat remain viable, self-sustaining, and protected from stress factors such as disease, drought, senescence, fire, and storm damage. The sponsoring agencies recognize there is scientific debate and uncertainty about habitat enhancement approaches and methods for monarch groves. Hence, the opportunity projects would only be pursued after consultation with experts, a careful consideration of the scientific and empirical observations concerning the habitat enhancement issues, and input from the public. The following opportunity projects will not be implemented without public involvement and additional environmental review where applicable. Any eucalyptus enhancement and management actions would be implemented in a phased and incremental manner over time, as funding allows. In addition, pilot projects and field experiments would be pursued to evaluate the effectiveness of the opportunity projects.

1. Monitor insect infestation within the monarch butterfly aggregations, overwintering sites, and roosts within the Ellwood Complex. Once infected trees are identified, they should be removed to prevent other trees from being infected. Tree removal would occur under the approval and supervision of a monarch biologist and at the appropriate time of year to avoid impacts to the butterflies.
2. Replace insect-infested trees with blue gum saplings within and outside the occupied areas as determined by the arborist and monarch biologist in order to prevent spread of the insect.
3. Plant eucalyptus trees in the understory of the occupied groves to offset the effects of trampling by visitors, under the direction of a monarch biologist.
4. Allow the natural build-up of leaf litter and downed-wood within the Ellwood Complex sites, per the direction of a monarch biologist. Consultation with the County Fire Department would be required.

Monarch Inventory and Monitoring

A monarch inventory and monitoring program could be implemented for the Open Space Plan Area in order to evaluate the condition of the population and groves; detect trends in butterfly health, number, and behavior; and to support awareness of butterfly migration. The program will be implemented as funding allows. The program could include the following activities at the Ellwood Complex sites:

- Existing and historic monarch overwintering sites in the Open Space Plan Area would be surveyed each year by a qualified biologist. Site surveys would occur at least three times a year, in the fall (late October), in mid-winter (December), and in late winter (late January).
- An annual inventory of the monarch population would be conducted. Monarch tagging would not occur as part of the population inventory.
- A comprehensive inventory of current monarch roosting trees would be conducted to map and characterize the occupied trees, including general information about size, density, and health.
- The sponsoring agencies would designate a monarch specialist who would coordinate all monarch research and inventory work in the Open Space Plan Area by educational and scientific entities. The sponsoring agencies would implement a monarch research and education permit program which would require groups or individuals interested in research or educational programs to apply for a permit. Educational programs involving contact with butterflies or off-trail activity would not be allowed unless a permit is obtained.