Ellwood Mesa/Sperling Preserve Monarch Butterfly Habitat Management Plan

Final Initial Study – Mitigated Negative Declaration

prepared by

City of Goleta
130 Cremona Drive, Suite B
Goleta, California 93117
Anne Wells, Advance Planning Manager

prepared with the assistance of

Rincon Consultants, Inc.
209 East Victoria Street
Santa Barbara, California 93101

March 2019

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Environmental Scientists | Planners | Engineers
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Initial Study

1. Project Title

Ellwood Mesa/Sperling Preserve Monarch Butterfly Habitat Management Plan (MBHMP)

2. Lead Agency Name and Address

City of Goleta, Planning and Environmental Review
130 Cremona Drive, Suite B
Goleta, California 93117

3. Contact Person and Phone Number

Anne Wells, Advance Planning Manager
(805) 961-7557

4. Project Location

The coverage area for the MBHMP (Coverage Area) encompasses approximately 75 acres of habitat supporting monarch butterfly (*Danaus plexippus*) seasonal aggregation areas in Ellwood Mesa/Sperling Preserve Open Space (Ellwood Mesa Open Space), a 137-acre open space area located on Ellwood Mesa and owned by the City of Goleta (City). The Coverage Area is south of Hollister Avenue, north of Ellwood Bluffs, east of Sandpiper Golf Club, and west of Ellwood Beach Drive and the University of California, Santa Barbara (UCSB). Figure 1 shows the MBHMP's regional location, and Figure 2 shows the Coverage Area and Ellwood Mesa Open Space.

5. Project Sponsor's Name and Address

City of Goleta, Planning and Environmental Review
130 Cremona Drive, Suite B
Goleta, California 93117

6. General Plan Designation

In October 2010, the City authorized a contract for development of the MBHMP, which outlines strategies to manage the monarch butterfly population in Ellwood Mesa Open Space. The MBHMP is scheduled for City Council consideration in March 2019.

Figure 1 Regional Location

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MBHMP Location

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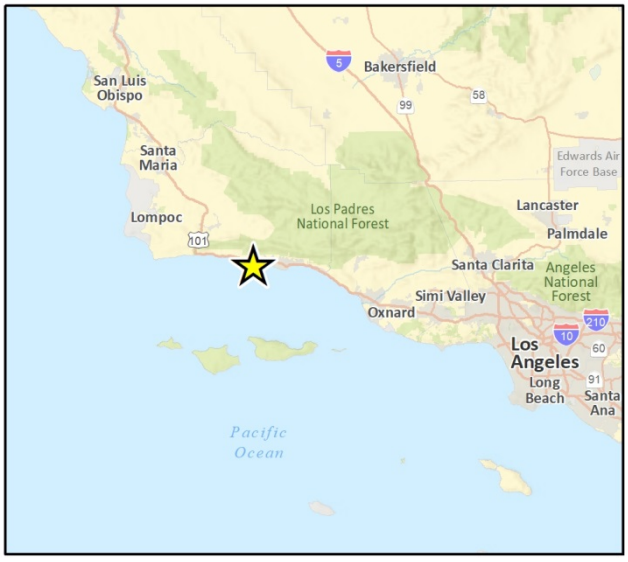

Figure 2 MBHMP Coverage Area Location

7. Background Information

Ellwood Mesa Open Space

Ellwood Mesa Open Space is a City-owned, 137-acre open space area on the coastal bluffs between Sandpiper Golf Course and UCSB. The current configuration of Ellwood Mesa Open Space was formed in 2004 when private development rights transferred from coastal parcels to a portion of what was formerly Santa Barbara Shores Park. This location was subsequently used for development of a Comstock Homes housing development, "The Bluffs," at which time the coastal parcels and remaining portion of the park were designated as permanent open space and zoned for Recreation (City of Goleta et al. 2004). The adjoining Coronado Butterfly Preserve is privately owned and managed by the Land Trust for Santa Barbara County, and is not part of Ellwood Mesa Open Space.

Eucalyptus Groves

Ellwood Mesa was cultivated by Ellwood Cooper in the 1870s. Cooper was a horticulturalist, entrepreneur, and a Goleta Valley rancher who introduced eucalyptus trees (*Eucalyptus* spp.) to Goleta in 1872. By the mid-1870s Cooper had successfully planted approximately 50,000 eucalyptus trees, comprised of more than 50 varieties. The eucalyptus trees thrived in the area and were intended to provide a source of lumber and pier pilings. However, the wood's grain made it difficult to cut and the wood rotted in sea water. The eucalyptus groves eventually matured and became useful for windbreaks. Eucalyptus groves present on Ellwood Mesa today are a remnant of Cooper's early attempt at eucalyptus forestry.

Ellwood Mesa is currently threatened by drought and pest infestation. The Goleta Valley is in its seventh year of the most severe drought on record, which began in 2012 (Goleta Water District [GWD] 2018). The drought has compromised the health of eucalyptus trees on Ellwood Mesa, exacerbating wildfire risk and increasing the vulnerability of eucalyptus trees to pest infestation.

Eucalyptus trees are subject to a variety of pests and diseases that can injure or kill trees. When trees occur in groves, the spread of pests and disease is facilitated by proximity, resulting in potential widespread losses. Current and past infestations at Ellwood Mesa of blue gum (*Eucalyptus globulus*) and river red gum (*E. camaldulensis*) include redgum lerp psyllids (a parasitic insect that attacks red gum eucalyptus; *Glycaspis brimblecombei*) on leaves, tortoise beetles (family Chrysomelidae), longhorned borer beetles (*Phoracantha* spp.), and orange sulfur fungus (*Laetiporus sulphureus*). Invasive, non-native species such as English ivy (*Hedera helix*) and cape ivy (*Delairea odorata*) also can be problematic, smothering entire trees and changing or destroying wildlife habitat.

The ongoing drought conditions and associated pest infestations have degraded the habitat at Ellwood Mesa, resulting in the degradation and death of numerous eucalyptus trees. According to a field study performed by Althouse and Meade, Inc., in July 2017, over 1,200 trees in the eucalyptus forest were dead, with hundreds more highly degraded and dying.

Monarch Butterflies

The monarch butterfly uses eucalyptus groves and windrows on Ellwood Mesa as winter habitat. Each fall, monarch butterflies in the western U.S. migrate to the coast of California from various locations throughout western North America. Up to tens of thousands of these butterflies converge on Ellwood Mesa annually, making this area one of the most important sites for monarch butterflies

in California. The butterflies arrive at Ellwood Mesa in mid-September and, as winter approaches, cluster into aggregation roosts, often called overwintering or wintering colonies. The butterflies remain until about mid-February, when they generally disperse inland. The congregation of butterflies attracts tourists to the site during the overwintering period. Figure 3 shows monarch butterfly aggregation sites in and around Ellwood Mesa Open Space. These include Ellwood North, Sandpiper, Ellwood West, Ellwood Main, Ellwood East and Ocean Meadows.

Monarch butterfly populations at Ellwood Mesa, and throughout California, have been in decline for several years. On average, approximately 13,800 butterflies visit Ellwood Mesa per year. In 2011, the monarch population at Ellwood Main was at a 30-year high with approximately 47,500 butterflies, as shown in Figure 4. The population has since declined to less than 0.5 percent of that level, to approximately 230 butterflies in 2018. Similarly, the state has experienced a dramatic decline in monarch populations over the last two decades, with populations in western North America currently at their lowest point in five years, despite recovery efforts (The Xerces Society 2018).

The monarch butterfly is included on the California Department of Fish and Wildlife (CDFW) Special Animals List, with overwintering roosts designated as imperiled to vulnerable in the state. The species is under review for potential listing under the federal Endangered Species Act (ESA), and the United States Fish and Wildlife Service (USFWS) plans to make its determination whether this species warrants federal ESA listing by June 30, 2019.

Community Wildfire Protection Plan

Goleta is prone to large wildfires and the combination of hot, dry weather and ignitable vegetation adjacent to structures creates a fire environment that could potentially threaten public safety. Santa Barbara County typically experiences numerous small fires throughout the summer and occasionally is hit by large, catastrophic fires. Recent large wildfires that burned near Goleta's boundaries include the 1990 Painted Cave Fire, 1997 Eagle Canyon Fire, 2008 Gap Fire, 2009 Jesusita Fire, 2016 Sherpa Fire, 2017 Whittier Fire, and 2017/2018 Thomas Fire. The Jesusita Fire burned 8,733 acres east of Goleta, destroying 74 residences and damaging 18 residences. The Thomas Fire burned 281,893 acres from Fillmore to Santa Barbara, destroying 1,063 structures and damaging 280 structures.

The City Council adopted the Community Wildfire Protection Plan (CWPP) in March 2012 to enhance the City's wildlife protection by identifying key hazard treatments that are in balance with sustainable ecological management and fiscal resources (City of Goleta 2012). The CWPP covers the city of Goleta, including the Ellwood Mesa area, identifies and prioritizes areas for hazardous fuel reduction treatments, and recommends the types and methods of treatment and measures to reduce the ignitability of structures throughout Goleta. The protection of human life and safety is the highest priority for all fire management strategies in Goleta, followed by the protection of property. Given the CWPP has been approved, activities under the CWPP would occur in Ellwood Mesa Open Space regardless of whether the MBHMP is implemented.

The CWPP was developed with consideration of the butterfly aggregation sites on Ellwood Mesa, and includes policies intended to minimize adverse effects on butterfly habitat while reducing fire hazards from fuel loads in these areas. The CWPP acknowledges conditions in the eucalyptus groves can change and butterfly aggregation locations may shift. The CWPP also notes the need to coordinate with City-approved butterfly and wildland fire experts during planning and implementation of any fuel treatments to minimize potential effects to butterflies. In addition, the CWPP requires any work performed near butterfly aggregation areas be conducted between April 1 and September 15, outside the monarch butterfly overwintering season.

Figure 3 Monarch Butterfly Aggregation Sites

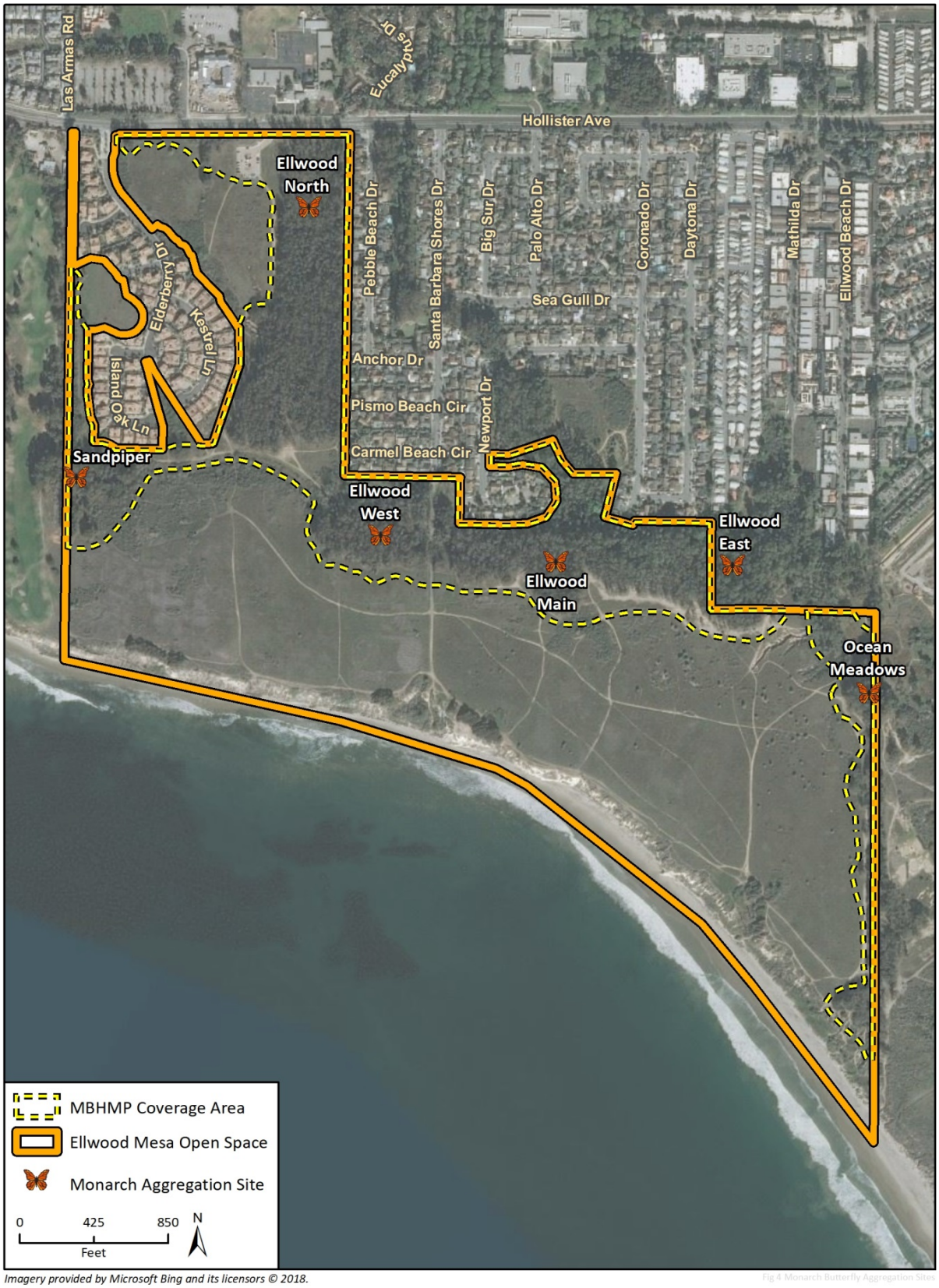

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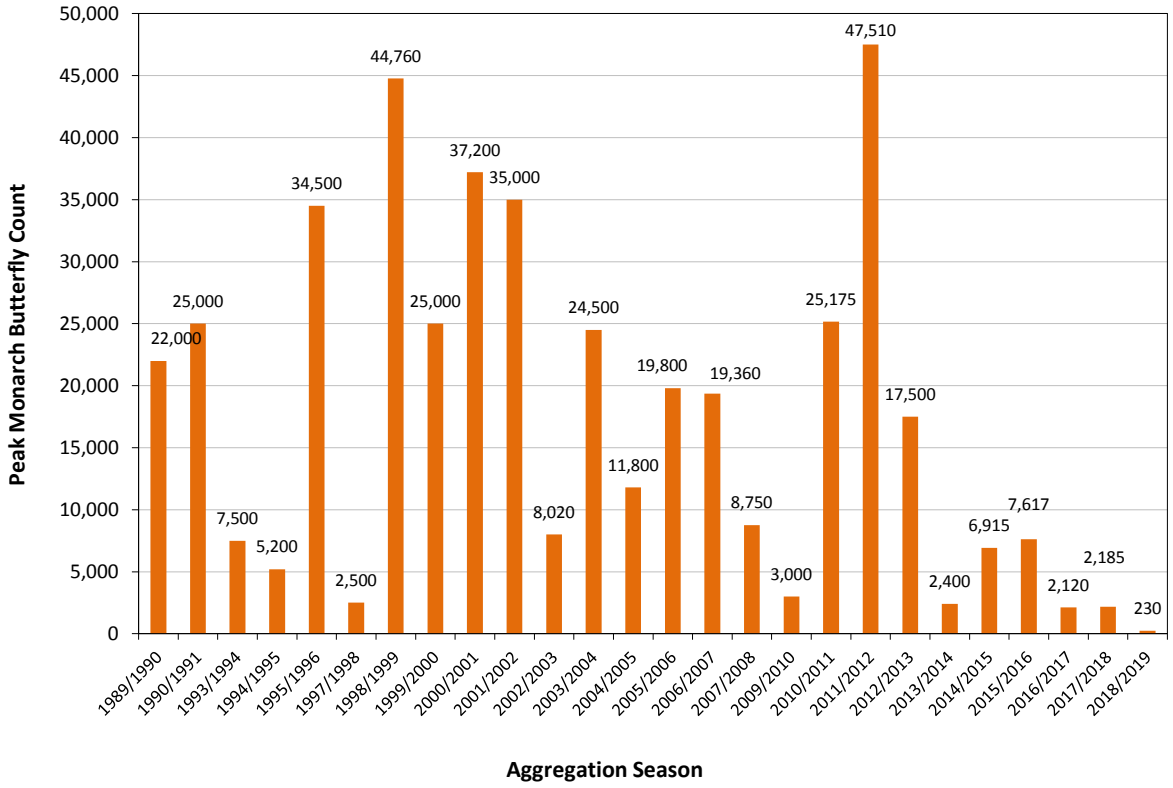
Figure 4 Peak Monarch Populations at Ellwood Main, 1997-2018



Fuel treatments in areas near human developments are critical measures in the wildfire protection strategy for residences and butterfly aggregations and habitat. The CWPP includes prescription guidance for fuel treatments specific to the butterfly aggregation areas adjacent to structures that is less intensive than the prescription guidance for non-aggregation areas to balance fire safety with protection of butterfly aggregation areas. Table 1 details prescription guidance measures for the primary defense zone (0 to 30 feet from structures) and fuel reduction zone (30 to 100 feet from structures) by fuel type.

Because trees along the grove edges buffer aggregation sites from wind and weather, fuel treatment strategies are designed to maintain adequate tree density in these areas. These large trees are not the primary fuel of concern in the spread potential of wildfire. Instead, the greater threat is from the understory vegetation, dead-downed trees, and fuels that can create fire ladders. Therefore, fuel treatment activities focus on removing hazardous fuels rather than large trees, and the CWPP's prescription guidance for areas within 100 feet of residences and structures states only trees that do not provide protection to monarch butterfly aggregation sites should be trimmed or thinned.

The CWPP also provides prescription guidance for fuel treatment in areas not adjacent to structures; however, the CWPP limits fuel treatments for aggregation areas to mowing along the outside edge of the grove. This limited fuel treatment would apply to the Sandpiper aggregation site, adjacent to the Sandpiper Golf Course on the western edge of Ellwood Mesa Open Space, and to the Ocean Meadows aggregation site, adjacent to the undeveloped property on the eastern edge of the open space owned by UCSB.

Table 1 Prescription Guidance for Butterfly Aggregation Areas Adjacent to Structures

Fuel Type	Primary Defense Zone (A)*** (0 – 30 feet from structures)	Fuel Reduction Zone *** (30 – 100 feet from structures)
	Based on Defensible Space PRC – 4291 and Firefighter Safety	
Grass/forbs	Reduce fuel depth to 4 inches; methods include mowing, masticating, weed-whacking, biological browsing.	Same treatment as in the Primary Defense Zone; longer grass in isolated open areas is acceptable.
Surface dead/ down material	Clear dead/down flammable materials; methods include raking, hand-piling/removal, masticating chipping/dispersal on site.	Reduce dead/down flammable material to less than 3-inch depth; methods same as in the Primary Defense Zone.
Brush/shrub fuel	Remove to a spacing (between edges of brush) generally 2 times brush height on <20% slopes; methods include masticating or hand-cutting, biological browsing.	Same treatment as in the Primary Defense Zone; a pocket or clump of brush can be treated as one large shrub in more open site conditions.
Trees overstory (without brush understory)	**Trim or thin only trees that do not provide protection to monarch butterfly aggregation sites.*** Thin smaller or unhealthy trees at 10-20 foot crown spacing (as determined by slope, tree size, and type). Leave larger trees unless toppling hazard.** Reduce ladder fuels by pruning lower branches 6-15 feet up, or lower third of tree height on trees smaller than 18 feet.	**Trim or thin only trees that do not provide protection to monarch butterfly aggregation sites.*** Thin smaller or unhealthy trees at approximately 10-foot crown spacing (as determined by slope, tree size, and type). Leave larger trees unless toppling hazard.** Reduce ladder fuels by pruning lower branches approximately 6 feet up, or lower third of tree height on trees smaller than 18 feet.
Trees overstory (with brush understory)	**Trim or thin only vegetation that does not provide protection to monarch butterfly aggregation sites.*** Thin small or unhealthy trees at 10-20 foot crown spacing (based on slope, tree size, and type). Leave larger trees at 10 foot crown spacing unless toppling hazard.** Reduce ladder fuels by pruning lower branches 6-15 feet up, or lower third of tree height on smaller trees. In understory: remove brush ladder fuel. Methods include masticating or hand-cutting.	**Trim or thin only vegetation that does not provide protection to monarch butterfly aggregation sites.*** Thin small or unhealthy trees to approximately 10 foot crown spacing. Leave larger trees unless toppling hazard.** Reduce ladder fuels by pruning lower branches approximately 6 feet up, or lower third of tree height on smaller trees. In understory remove brush ladder fuel. In non-canopied areas, non-continuous patches of shrubs or small trees in openings are acceptable. Methods include masticating or hand-cutting.

*As determined by the Goleta City Project Manager overseeing mitigation work in consultation with a City-approved monarch butterfly specialist and a City-approved wildland fire specialist.

**As determined by the Goleta City Project Manager and Goleta City arborist.

***For further information specific to homeowner/structure mitigation measures, see City of Goleta CWPP Section 6.2.1.

Source: Table 14 of the CWPP (City of Goleta 2012)

8. Monarch Butterfly Habitat Management Plan

The purpose of the MBHMP is to provide a programmatic approach to management of habitats that support monarch butterfly seasonal aggregations, while maintaining the Coverage Area's functionality as habitat for other plants and other animals, such as red-shouldered hawks (*Buteo lineatus*), turkey vultures (*Cathartes aura*), and acorn woodpeckers (*Melanerpes formicivorus*). The City prepared the MBHMP in compliance with the two, key policy documents that drive the protection of monarch butterflies in Goleta: the City of Goleta General Plan/Coastal Land Use Plan (General Plan; City of Goleta 2006a) and Ellwood-Devereux Coast Open Space and Habitat

Management Plan (Open Space Plan; City of Goleta et al. 2004). In addition to Ellwood Mesa Open Space, the Open Space Plan area includes properties under the jurisdiction of UCSB and the County of Santa Barbara east of Ellwood Mesa; however, the properties under UCSB and County jurisdiction are not included in the MBHMP Coverage Area.

The MBHMP is composed of 22 programs organized into 4 categories: administrative programs; natural resources management programs; outreach programs; and monitoring, research, and adaptive management programs. Each program contains a goal, one or more policies, and one or more actions to implement each policy. The MBHMP is incorporated by reference and summarized below. Analysis in this Initial Study – Mitigated Negative Declaration (IS-MND) focuses on several programs with actions that could have direct, indirect, and/or cumulative physical effects on the environment, as summarized in Table 2. These programs include five administrative programs, six natural resource programs, one outreach program, and one monitoring, research, and adaptive management program.

The specific activities that could occur under each of the MBHMP programs and have the potential to result in direct, indirect, and/or cumulative physical effects to the environment are referred to as covered activities, and are described for each applicable program below. Restrictions or limitations to activities that could otherwise occur in Ellwood Mesa Open Space are included as covered activities because they could result in physical effects to the environment, some of which may be beneficial effects or reductions in adverse effects from other covered activities.

Administrative Programs

The MBHMP includes nine administrative programs articulating the goals, policies, and actions necessary for the City and stakeholders to implement the MBHMP. The purpose of the programs is to establish a well-organized and efficient process that supports a management strategy for the sustainability of habitat(s) for the monarch butterfly and other wildlife at Ellwood Mesa. The administrative programs include:

- Municipal Management Program
- Fiscal Program
- Interagency Cooperative Program
- Community Wildfire Protection Program
- Trail Management Program
- Waste Management Program
- Aesthetic Resources Management Program
- MBHMP Review, Update, and Amendment Program
- Catastrophic Event Response Program

Four of the administrative programs—the Municipal Management Program; Fiscal Program; Interagency Cooperative Program; and MBHMP Review, Update, and Amendment Program—relate to administrative structure, funding, agency coordination, and review and update of key planning documents. These four programs do not relate to physical effects to the environment, and therefore are not analyzed in this IS-MND. The remaining five administrative programs include covered activities that have the potential to result in direct, indirect, and/or cumulative physical effects to the environment, as described below.

Community Wildfire Protection Program

The goal of the Community Wildfire Protection Program is to provide management practices in the eucalyptus groves and windrows that support healthy monarch butterfly habitat and are compatible with the CWPP. As discussed in Section 7, Background Information, the CWPP includes policies intended to minimize adverse effects on butterfly habitat while reducing fire hazards from fuel loads in these areas. Because the CWPP was adopted in March 2012, activities that would occur under the CWPP, such as reducing ladder fuels by pruning lower branches and clearing dead wood and brush, would occur regardless of whether the MBHMP is implemented.

The Community Wildfire Protection Program pledges support for the policies and activities contained in the CWPP, particularly those related to minimizing adverse effects on butterfly habitat, and reiterates some of the restrictions contained in the CWPP. Given these activities would occur under the CWPP regardless of whether the MBHMP is implemented, the potential environmental effects of these activities are not a result of the MBHMP and are therefore not considered in this IS-MND.

The Community Wildfire Protection Program also calls for implementation of the Tree Management Program. Covered activities related to the Tree Management Program are discussed under the Natural Resource Programs. The Community Wildfire Protection Program includes one covered activity separate from the CWPP, but designed to be consistent with the intent of the CWPP:

- Maintain and revegetate moderate cover of understory in and around aggregation sites with fire-resistant, native plant species

Trail Management Program

The goal of the Trail Management Program is to develop and maintain public access trails that provide a safe and meaningful experience for visitors while limiting impacts to habitats and wildlife, in particular monarch butterflies and their seasonal aggregation sites. This program includes the following covered activities:

- Remove safety hazards such as hanging branches
- Remove tripping hazards such as fallen branches, protruding roots, and rocks
- Install and maintain trail boundary posts, ropes, rails, and signs
- Use wood chips on trails to reduce soil compaction and decrease erosion during wet months
- Adjust locations of trail and viewing areas if needed to protect trees or butterflies
- Install water bars and/or culverts to reduce erosion
- Perform minor trail relocations to avoid wet or eroded areas
- Construct and maintain crossings over drainages or other sensitive features

Waste Management Program

The goal of the Waste Management Program is to maintain a waste-, trash-, and debris-free butterfly habitat management area. This program includes the following covered activities:

- Post signs citing anti-dumping ordinances and butterfly rules
- Place trash cans in the parking lot

Aesthetic Resources Management Program

The goal of the Aesthetic Resources Management Program is to integrate the MBHMP's programs into an effort to improve the quality of Ellwood Mesa aesthetic resources, in particular the eucalyptus groves and windrows supporting monarch butterfly aggregation sites. The Aesthetic Resources Management Program relates to maintaining a consistent theme and aesthetic compatibility with natural conditions for any signage, fencing, and restoration plantings installed under some of the other programs of the MBHMP. The physical effect to the environment related to the installation of such features, and not the aesthetic components of the features, are discussed in the applicable MBHMP programs. The Aesthetic Resources Management Program includes the following covered activities:

- Ensure signs for the interpretive program are consistently designed
- Ensure any new signs, fencing, and restoration plantings are aesthetically compatible with natural conditions

Catastrophic Event Response Program

The goal of the Catastrophic Event Response Program is to prepare for possible catastrophic environmental events in the monarch butterfly aggregation sites by adopting actions that potentially minimize the impacts and plan for a response should such events affect the groves in which aggregation sites are located. This program includes implementation of some of the other programs outlined in the MBHMP. The covered activities related to these other programs are discussed under each of the applicable programs. The following covered activities would potentially occur under the Catastrophic Event Response Program:

- Install warning signage
- Implement closures of areas that are not safe for public use
- Remove trees that are dead, dying, diseased, burnt, hazardous, or otherwise affected by the catastrophic event
- Dispose of trees off site or chip for use on site as ground cover
- Plant new trees to replace trees that were removed
- Monitor the success of the plantings and irrigation over a set time
- Replace plantings as needed

Natural Resources Management Programs

The MBHMP describes seven natural resources management programs that articulate the goals, policies, and actions necessary to maintain and improve the many important natural resources, including biological diversity and ecosystem functions, associated with the Ellwood Mesa eucalyptus groves and the monarch butterfly aggregation sites the groves support. The natural resources management programs include:

- Monarch Butterfly Management Program
- Wildlife Habitat Management Program
- Tree Management Program
- Integrated Pest Management Program
- Habitat Enhancement and Restoration Program

- Invasive Plant Management Coordination Program
- Ecosystem-wide Management Coordination Program

The Ecosystem-wide Management Coordination Program includes actions focused on coordinating activities under other MBHMP programs. Such actions would not generate physical impacts beyond those associated with covered activities in other MBHMP programs. The remaining six natural resources management programs include activities that have the potential to result in direct, indirect, and/or cumulative physical effects. These programs and associated covered activities are described below.

Monarch Butterfly Management Program

The goal of the Monarch Butterfly Management Program is to facilitate the ongoing use of Ellwood Mesa by the monarch butterfly. This program incorporates actions under the Tree Management Program, Biological Monitoring Program, and Habitat Enhancement and Restoration Program, and includes the following covered activity:

- Unless authorized by a qualified biologist, limit all potentially invasive activities to the period between April 1 and September 30, including site maintenance, habitat restoration, exotic plant removal, and tree trimming and removal

Wildlife Habitat Management Program

The goal of the Wildlife Habitat Management Program is to manage eucalyptus groves at Ellwood Mesa for monarch butterflies in a manner consistent with ecosystem functions for other wildlife species that use the groves as habitat. This program includes the following covered activities:

- Preserve some trees with cavities for cavity-nesting birds
- Avoid tree or woody vegetation removal during the nesting season (March 15 to August 15), when feasible
- Limit vegetation removal and ground disturbance activities to the dry season
- Plant native trees, shrubs, and groundcover, including mid-canopy and low-stature or groundcover species in eucalyptus groves
- Plant riparian trees and vegetation along Devereux Creek
- Install irrigation system and irrigate newly planted vegetation

Tree Management Program

The goal of the Tree Management Program is to manage the eucalyptus groves in monarch butterfly aggregation sites at Ellwood Mesa in a manner that provides for healthy trees, suitable aggregation site structure, sustainable butterfly aggregation sites, public safety while visitors are on trails in the groves, and sensitivity to wildfire hazards. The program implements activities included under the Community Wildfire Protection Program, Monarch Butterfly Management Program, Integrated Pest Management Program, and Biological Monitoring Program. This program includes the following covered activities:

- Selectively prune or remove standing dead, dying, or vulnerable trees that pose a threat to public safety or monarch aggregation sites
- Selectively remove downed trees and debris that pose a threat to public safety or grove health
- Remove tree tangles or debris that interfere with monarch patrolling

- Plant new eucalyptus trees, native and/or fire-resistant understory species, and native nectar sources
- Use downed trees or logs to provide seating, slope stability, or erosion control, as feasible
- Irrigate existing and newly planted trees and other vegetation with potable and/or reclaimed water using water trucks with driplines or irrigation systems with above-ground water tanks
- Install irrigation systems, using the following steps:
  - Site above-ground water tanks such that they avoid existing eucalyptus trees
  - Utilize solar pumps to distribute water
  - Remove vegetation, as needed, to install driplines
  - Bury driplines a maximum of six inches below the surface
  - Replace soil to existing contours
  - Perform replacement plantings along disturbed soils
- Drive trucks on trails/paths to deliver and apply irrigation water
- Prune or remove understory plants
- Re-contour or grade drainage channels following flood events to protect trees
- Apply seed or mulch to disturbed soils
- Mow or weed-whack grass along the margins of eucalyptus groves

Integrated Pest Management Program

The goal of the Integrated Pest Management Program is to control or eradicate, as feasible, plant, animal, fungal, and other pests that would result in impacts on monarch butterflies or degrade monarch butterfly habitat. This program would implement management actions contained in the Invasive Plant Management Program and Tree Management Program, and includes the following covered activities:

- Introduce natural enemies of identified pests as part of planned biological control strategies
- Limit stress-inducing activities (e.g., pruning, transplanting) to periods of reduced pest activity
- Apply insecticides, herbicides, and other pesticides, as necessary
- For replacement plantings, use species that are resistant to pests and tolerant of site conditions

Habitat Enhancement and Restoration Program

The goal of the Habitat Enhancement and Restoration Program is to provide for the enhancement of native plant and animal habitats in the context of preserving the monarch butterfly habitat associated with established eucalyptus groves. This program includes the following covered activities:

- Plant experimental plots of native ground cover species
- Enhance existing native species, such as toyon (*Heteromeles arbutifolia*) and plants with nectar sources
- Plant new and replace/replant unhealthy existing native plant species individuals
- Apply chemical or mechanical weed control, as necessary
- Apply fertilizers to support new or existing native plantings, as necessary

- Apply organic material and wetting agents to soil around new plantings
- Plant native species in areas between eucalyptus groves
- Eradicate non-native herbaceous cover (except for eucalyptus saplings) in areas between eucalyptus groves through hand removal or herbicide application
- Remove vegetation along Devereux Creek riparian corridor, as needed
- Plant native riparian tree species along Devereux Creek
- Install irrigation systems and water native plantings

Invasive Plant Management Program

The goal of the Invasive Plant Management Program is to eradicate existing stands of invasive, non-native species and prevent or control new occurrences of invasive, non-native plant species in the monarch butterfly habitat at Ellwood Mesa. This program would incorporate activities under the Biological Monitoring Program and includes the following covered activities:

- Conduct hand removal of invasive, non-native plant species (excluding eucalyptus)
- Apply herbicides as needed to control invasive, non-native plant species
- Avoid removal of invasive, non-native plant species upon which monarch butterflies depend

Outreach Programs

Outreach programs are designed to provide information to visitors, educators, and students to help develop a broad appreciation for natural resources and local natural heritage, with a focus on monarch butterflies. The three outreach programs include the Community Advisory and Docent Program, Interpretive Program, and Education Program. The Community Advisory and Docent Program and Education Program would include actions targeted at improving administrative and interdepartmental coordination, creating educational materials and opportunities, and providing training to butterfly docents. Such activities would not result in physical effects on the environment and, as such, these programs are discussed no further in this IS-MND. The Interpretive Program could result in physical effects on the environment and is discussed below.

Interpretative Program

The goal of the Interpretative Program is to establish a useful and informative interpretive signage program at Ellwood Mesa monarch butterfly aggregation sites that is environmentally sensitive and minimally intrudes into habitats. This program includes the following covered activities:

- Install interpretive signage that is sensitive to the environment
- Locate interpretive signage in key locations minimally intrusive to the sensitive habitats of Ellwood Mesa

Monitoring, Research, and Adaptive Management Programs

Monitoring and research programs provide the mechanism for assessing environmental conditions and conducting original studies to help understand the ecology of monarch butterflies, particularly at Ellwood Mesa. Information obtained from these programs and other sources can be used to adapt the MBHMP to account for improved or additional information or changing conditions. The three monitoring, research, and adaptive management programs include the Biological Monitoring Program, Monarch Research Program, and Adaptive Management Program. The Biological Monitoring Program would involve maintaining butterfly counts, assessing ecosystem health using

spectral imaging, and creating monitoring reports. The Adaptive Management Program would incorporate adaptive management actions into other MBHMP programs, and includes policy review and reporting requirements. None of the actions associated with the Biological Monitoring Program or Adaptive Management Program would result in physical effects on the environment beyond those associated with other MBHMP programs, and actions associated with these programs are not discussed further in this IS-MND. The Monarch Research Program could result in physical effects on the environment and is discussed below.

Monarch Research Program

The goal of the Monarch Research Program is to encourage research projects and identify funding for research associated with monarch butterflies and their habitats at Ellwood Mesa. This program includes the following covered activities:

- Capture, tag, and release monarch butterflies for tracking
- Modify habitat structure and composition through pruning, trimming, or debris removal
- Plant plots of native species as part of experimental designs

Table 2 MBHMP Programs, Policies, and Actions with Potential Effects on the Environment

Programs		Goal	Policies	Actions
4	Community Wildfire Protection	To provide management practices within the eucalyptus groves and windrows that support healthy monarch butterfly habitat and are compatible with the City's Community Wildfire Protection Plan.	**4-1:** The goals, policies, and actions of this MBHMP shall be consistent with the intent of the *Community Wildfire Protection Plan* to reduce the ignitability of homes and structures.	**4-1.1:** Support implementation of Goleta's CWPP in the 100 ft. buffer from homes and structures as the 100 ft. extends into the Ellwood Mesa eucalyptus groves with actions outlined in Table 1 (Table 14 of the CWPP). **4-1.2**: Support implementation of Goleta's CWPP, specifically in regard to guidelines that are not in potential conflict with the management of the eucalyptus groves that support monarch butterfly aggregation sites, as noted below. **4-1.3:** Maintain and revegetate moderate cover of understory in and around aggregation sites with fire-resistant, native plant species (The Xerces Society 2017). **4-1.4:** Conduct all wildfire protection work within 300 feet of butterfly aggregation areas between April 1 and September 15, outside of monarch butterfly overwintering season. **4-1.5:** Coordinate with City-approved butterfly and wildland fire experts during planning and implementation of any fuel treatments since conditions within groves can change and aggregation locations may shift. **4-1.6:** Install a large, bilingual "NO PARKING -FIRE LANE" sign at Santa Barbara Shores access gate.
			4-2: Eucalyptus trees in the groves containing monarch butterfly aggregation sites shall be managed, as feasible, to ensure their health and longevity in the context of a high fire hazard environment.	**4-2.1:** Implement *Program 12, Tree Management Program*, to reduce fire hazard, improve public safety, and eliminate trees that are threatening the sustainability of the aggregation sites, including dead, diseased, and dying trees.
5	Trail Management	To develop and maintain public access trails that provide a safe and meaningful experience for visitors while also limiting impacts to habitats and wildlife, in particular monarch butterflies and their seasonal aggregation sites.	**5-1:** The City shall maintain existing public access trails that provide a safe experience for visitors to the eucalyptus groves supporting seasonal monarch butterfly aggregation sites.	**5-1.1:** Maintain existing public access trails through the eucalyptus groves supporting monarch butterfly aggregation sites by reducing threats of trips, slips, and falls. May use Trails council and CCC to help with maintenance. **5-1.2:** Implement *Program 12, Tree Management Program*, to reduce the threats from falling tree limbs and trunks. **5-1.3**: Repair damage to trail boundary ropes and posts, as needed. **5-1.4:** Prevent damage to seasonal monarch habitat by installing additional trail boundary posts, ropes, and signs, as necessary, consistent with those at the Ellwood Main monarch aggregation area. **5-1.5:** Use wood chips on trails to reduce soil compaction and decrease erosion during wet months. **5-1.6:** Retain and maintain Ellwood Main visitor viewing area boundary signs and rails.

Programs		Goal	Policies	Actions
				5-1.7: Review locations of trail and viewing area delineations and adjust if needed to protect trees or butterflies, annually. **5-1.8:** Review trail conditions on an annual basis and provide recommendations on improvements and modifications regarding human safety, trail maintenance, and ecosystem health, including conservation of monarch butterfly habitat in relationship to location, condition, use of trails, and number of visitors. Include recommendations for any tree trimming, removal recommendations, or other tree safety issues in the annual Implementation Plan. **5-1.9:** Long-term closure of official trails is undesirable and should not be used as a management approach. It is preferable to remedy trail hazards promptly, or to allow trails to remain open with appropriate signage alerting users to the risks present.
			5-2: Maintain and improve existing links between trails associated with eucalyptus groves that support monarch butterfly aggregation sites at Ellwood Mesa with the adjacent Coronado Butterfly Preserve.	**5-2.1:** Coordinate trail improvement activities with the Santa Barbara Land Trust and UCSB staff to ensure that improvements are compatible. **5-2.2:** Coordinate trail improvements with proposals for the Coastal and Juan Bautista De Anza trails that traverse Ellwood Mesa, which also link to trails within the eucalyptus groves that support monarch butterfly aggregation sites, to ensure protection measures are addressed for the aggregation sites.
6	Waste Management	To maintain a waste-, trash-, and debris-free butterfly habitat management area.	**6-1:** The City shall collect, remove, and appropriately dispose of all waste, trash, and debris that accumulates in monarch butterfly habitat on Ellwood Mesa.	**6-1.1:** Continue to remove existing accumulations of waste, trash, and debris from monarch butterfly habitat and dispose of them in an appropriate manner. Coordinate with the Sheriff's Office for removal of homeless encampments, if necessary.
			6-2: The City shall inform visitors of the monarch butterfly habitat of rules relating to trash and debris policies associated with monarch butterfly habitat.	**6-2.1:** Post signs at appropriate locations stating open space user rules; for example, "Please take out your trash" And, "Day Use Only = Camping Prohibited." **6-2.2:** Educate the public through seasonal, on site presence by the City's butterfly docents about the importance of maintaining the groves free of trash. **6-2.3:** Place trash cans in the parking lot. Inspect annually and replace as needed.

Programs		Goal	Policies	Actions
7	Aesthetic Resources Management	To integrate the MBHMP's programs into an effort to improve the quality of aesthetic resources of the Ellwood Mesa, in particular the eucalyptus groves and windrows supporting monarch butterfly aggregation sites.	**7-1:** The City shall provide stewardship and management oversight of the eucalyptus groves, in particular those groves supporting monarch butterfly aggregation sites.	**7-1.1:** Adopt and implement the MBHMP, including its 22 management programs. **7-1.2:** Provide integration of program goals, policies, and actions to improve the overall aesthetics of the various groves, including installation of a consistently designed interpretive program and strategically placed fencing, as more specifically outlined in Program 18, Interpretive Program.
			7-2: Signs, fencing, and restoration efforts associated with monarch butterfly habitat on Ellwood Mesa shall be aesthetically compatible with natural conditions.	**7-2.1:** Review signage and fencing design for compatibility with the Ellwood Mesa natural areas. **7-2.2:** Review restoration plantings and activities for appropriate aesthetic compatibility.
9	Catastrophic Event Response Program	To prepare for possible catastrophic environmental events within the monarch butterfly aggregation sites by adopting a set of actions that potentially minimize the impacts and plan for a response should such events affect the groves in which aggregation sites are located.	**9-1:** The City shall adopt a set of protocols that could minimize the impacts from potential catastrophic environmental events.	**9-1.1:** Implement *Program 12, Tree Management Program*, to reduce potential impacts on eucalyptus groves that support monarch butterfly aggregation sites. **9-1.2:** Implement *Program 4, Community Wildfire Protection Program*, to reduce potential impacts on monarch butterfly aggregation sites from wildfire. **9-1.3:** Implement *Program 13, Integrated Pest Management Program*, to reduce the potential impacts from pest infestations.
			9-2. The City shall assess the damage of catastrophic events as they occur and respond with corrective action to restore damaged monarch butterfly habitat.	**9-2.1:** Measure the extent and assess the magnitude of the damage to the monarch butterfly overwintering habitat. **9-2.2:** Design and implement a response strategy with actions to correct and restore the habitat after the catastrophic event and include them in the annual Implementation Plan if practical. When feasible, employ phased approaches with consistent monitoring to evaluate success or need for changes in strategy or actions. Assign priorities, including sources of materials, constraints, and methods for debris management. 9-2.3: Request City Council approval for supplemental funding, with a finding that the condition is a catastrophic event. Use funding received from the State Budget, apply for grants, and/or accept private donations for the dedicated mission of monarch butterfly overwintering habitat restoration.

Programs		Goal	Policies	Actions
10	Monarch Butterfly Management	To ensure the ongoing use of Ellwood Mesa by the monarch butterfly.	**10-1:** The City shall implement management strategies that facilitate the use of Ellwood Mesa by monarch butterflies.	**10-1.1:** Implement *Program 12, Tree Management Program,* to help facilitate the conservation of the monarch butterfly aggregation sites. **10-1.2:** Implement *Program 20, Biological Monitoring Program*, and *Program 21, Monarch Research Program*, to expand the body of knowledge and further the understanding of monarch butterflies' use of the resources at Ellwood Mesa.
			10-2: Preservation of aggregation sites on Ellwood Mesa shall be the focus of management activities, as feasible, and in coordination with *Program 9, Catastrophic Event Response Program*.	**10-2.1:** Should one or more catastrophic events result in impacts on the sustainability of monarch butterfly aggregation sites, consider alternative management and recovery strategies that incorporate goals for sustaining aggregation sites at Ellwood Mesa.
			10-3: Ecosystem functions proposed for habitat restoration projects at Ellwood Mesa shall consider inclusion of native plant species.	**10-3.1:** Implement *Program 14, Habitat Enhancement and Restoration Program,* as feasible, to improve conditions for native plants and animals and the ecosystem functions they provide, in and adjacent to the eucalyptus groves containing monarch butterfly aggregation sites.
			10-4: To avoid impacts on monarch butterflies while they are present at the Ellwood aggregation sites, no maintenance or restoration work shall be conducted in the aggregation sites from October 1 through March 31 of each year, unless authorized by a qualified biologist.	**10-4.1:** Unless authorized by a qualified biologist, conduct all site maintenance, tree trimming and removal, habitat restoration, exotic plant removal, and other potentially invasive activities between April 1 and September 30 of each year, when there would not likely be direct impacts on monarch butterflies.
11	Wildlife Habitat Management	Manage eucalyptus groves at Ellwood Mesa for monarch butterflies in a manner consistent with ecosystem functions for other wildlife species that use the groves as habitat.	**11-1:** The eucalyptus groves at Ellwood Mesa that support monarch butterfly aggregation sites shall be managed in a manner consistent with the ecosystem functions supporting other wildlife species, where feasible.	**11-1.1:** All personnel associated with the implementation of the MBHMP will receive educational information regarding the presence of monarch butterfly and other native wildlife species and the need to protect all native wildlife species. **11-1.2:** Preserve some trees with cavities to provide opportunities for cavity-nesting birds, such as acorn woodpeckers. **11-1.3:** Avoid removal of or disturbance to trees or other woody vegetation during nesting bird season (March 15 to August 15), when feasible. If not feasible, a biological monitor will survey for nesting birds in the area of proposed vegetation removal and ensure no active nests are present prior to removal or disturbance. **11-1.4:** Limit vegetation removal and ground disturbance activities to the dry season. Avoid areas with open water in Devereux Creek and tributaries.

Programs		Goal	Policies	Actions
			11-2: *Program 14, Habitat Enhancement and Restoration Program*, shall complement the Wildlife Habitat Management Program.	**11-2.1:** Include native plant species that are important for wildlife habitat and food in enhancement and restoration projects. **11-2.2:** Require a Planting Plan for any proposed enhancement plantings near the groves containing aggregation sites. **11-2.3:** Consider increasing mid-canopy and low-stature or groundcover native plant species to enhance wildlife habitat complexity and increase potential use of eucalyptus groves by a variety of wildlife species. **11-2.4:** Implement restoration for the Devereux Creek riparian corridor to improve functions for wildlife, consistent with the goals of the MBHMP for monarch butterflies.
12	Tree Management	To manage the eucalyptus groves within monarch butterfly aggregation sites at Ellwood Mesa in a manner that provides for (1) healthy trees, (2) sustainable aggregation site structure, (3) sustainable butterfly aggregation sites, (4) public safety while visitors are on trails within the groves, and (5) sensitivity to wildfire hazards.	**12-1:** Eucalyptus trees in the groves within the MBHMP coverage area ~~containing monarch butterfly aggregation sites~~ shall be managed, as feasible, to ensure their health and longevity.	**12-1.1:** Include guidance for necessary tree work in the annual Implementation Plan (Action 1-4.1 of the MBHMP). Tree work will take place in the month of September each year. The Implementation Plan should specify responsible parties, work locations, individual trees addressed, work to be accomplished, restoration measures, and methods and procedures for managing tree health. An annual plan is recommended but may be prepared on an as-needed basis based on conditions and progress of the previous Implementation Plan. **12-1.2:** Preliminarily identify potential threats to aggregation sites that may occur over time, and develop a framework for mitigating the threats and maintaining/recovering suitable overwintering habitat. Threats may include, but are not limited to, the following: ▪ Drought ▪ Pests ▪ Disease ▪ Fire ▪ Flood/erosion ▪ Vandalism ▪ Invasion by non-native plants (not including eucalyptus) These threats, as well as others, may arise and impair the function of Ellwood Mesa as habitat for overwintering monarch butterflies. When threats are encountered, a specific plan of action should be undertaken to address the needs of the situation. However, for planning purposes, the City should be prepared to undertake the response measures outlined in Table 2 of the MBHMP. Although not exhaustive, these measures represent a prudent suite of response tools to address future conditions. Measures listed below may prevent or rectify impacts from multiple types of threats, as the intent of the measures is to restore and encourage healthy habitat.

Programs	Goal	Policies	Actions
			12-1.3: Thresholds should be established to direct professional review and potential action to address conditions in the groves. Ultimately, it is envisioned that quantitative thresholds will be established based on the results of monitoring and scientific study within the groves (Programs 20, 21, and 22). However, until adequate reference data are available, action thresholds will be determined qualitatively by the City in consultation with a qualified monarch butterfly biologist. **12-1.4:** Implement *Program 13, Integrated Pest Management Program*, to help maintain tree health and control infestation in the eucalyptus groves supporting monarch butterfly aggregation sites. **12-1.5:** Cut down or prune trees identified as a threat to butterfly aggregation sites because they may fall and cause injury or collapse on other trees important to sustaining aggregation sites. **12-1.6:** Maintain a living forest within the outline of pre-drought forest extent as determined with historic aerial photographs. Restore sections of the forest where dead zones occur due to multiple tree die-offs. **12-1.7:** Implement *Program 14, Invasive Plant Management Program*, particularly regarding non-native vines that could affect the quality of monarch butterfly habitat, following recommendations for eradication consistent with the California Invasive Plant Council (Cal-IPC) and conservation priorities of monarch butterflies and their habitat. **12-1.8:** Implement *Program 20, Biological Monitoring Program*, to provide information regarding management of eucalyptus groves to ensure their health and longevity. **12-1.9:** Annually, identify conditions that threaten eucalyptus trees at aggregation sites and include recommended actions in the Implementation Plan to reduce perceived threats. **12-1.10:** Plant trees as needed to maintain grove density and improve monarch butterfly habitat. Plant in locations that improve aggregation site conditions as per the best available scientific analysis, and replant areas within historic eucalyptus grove extent where gaps have occurred from drought die-back. **12-1.11:** Following evaluation of compatibility with existing habitat and functionality with respect to butterfly habitat, conduct a pilot planting for any eucalyptus species considered for tree restoration that is not present in the MBHMP area as of 2018.

Programs	Goal	Policies	Actions
		12-2: Eucalyptus trees in the groves containing monarch butterfly aggregation sites shall be managed, as feasible, to provide sustainable habitat for butterfly aggregation sites.	**12-2.1:** When considering eucalyptus or other tree replacement actions, consider tree configurations that retain open areas for monarch butterfly patrolling and monarch overwintering preferences. **12-2.2:** Investigate potential enhancement to monarch butterfly patrolling habitat by reducing tree tangles and fallen debris. **12-2.3:** Remove hazard trees as necessary to protect monarch butterfly cluster locations, as consistent with goals for public safety. **12-2.4:** Implement, as feasible *Program 10, Monarch Butterfly Management Program*, to facilitate improvements in eucalyptus groves that help sustain aggregation sites. **12-2.5:** Protect blue gum saplings as necessary to encourage natural recruitment of trees in the eucalyptus forest.
		12-3: Eucalyptus trees within the groves containing monarch butterfly aggregation sites shall be managed, as feasible and consistent with conservation of monarch habitat, to provide safe conditions for the visiting public.	**12-3.1:** Prune and remove dead, dying, or particularly vulnerable tree trunks and branches that overhang trails and seating areas, or lay across trails, inside and near monarch butterfly aggregation sites to reduce the threat of injury from falling trunks and branches, debris on trails (trip hazards), or low-hanging material across trails that visitors could bump heads on. **12-3.2**: As recommended by the City arborist and detailed in the annual Implementation Plan, conduct work designed to protect the structure of aggregation sites. **12-3.3:** As recommended by the City arborist and detailed in the annual Implementation Plan, remove or prune dead standing, dead suspended, dead on the ground, or thick understory trees both to improve grove tree health and monarch butterfly habitat and to correct hazard conditions for human safety along trails and at observation sites. **12-3.4:** Consider using downed, dead trees for seating along trails, or to add to slope stability or help control erosion, for preservation rather than removal, as feasible, considering human safety or wildfire threat. **12-3.5:** Remove ground debris, such as accumulations of branches and leaves, at trailheads in particular to reduce threat from wildfires, to reduce threat to human safety from obscured view, and to increase aesthetic appeal. **12-3.6:** In consultation with the City arborist, conduct an annual review of tree health in April and May at aggregation sites. Develop and implement an annual Implementation Plan to address issues identified during the review, including potential need for tree removal or pruning, treatment of diseases or pests, and other potential recommendations.

Programs	Goal	Policies	Actions
		12-4: Eucalyptus trees within the groves containing monarch butterfly aggregation sites shall be managed, as feasible, to provide for low wildfire hazards.	**12-4.1:** Implement *Program 4, Community Wildfire Protection Plan*, to provide wildfire protection consistent with the City's adopted CWPP. **12-4.2**: Reduce accumulations of dead, dry, and loose organic and other flammable material within eucalyptus groves to decrease potential for ground-level fires becoming canopy fires as a result of ladder effect of fire hazard materials. Sufficient downed wood, debris, and ground cover will be left in place to provide substrate and shelter for monarchs dislodged from clusters. **12-4.3:** Remove accumulations of dead plant material along southern grassland margins of eucalyptus groves and at southern trailheads to reduce threat of grassland fires becoming eucalyptus grove fires as a result of fire hazards at the boundary between grasslands and groves via mowing or selective weed-whacking. Herbicides shall not be used. **12-4.4:** Replace removed understory plants as recommended by the City monarch butterfly biologist with fire-resistant native shrubs to restore and improve habitat structure for monarch butterflies. **12-4.5:** Coordinate (1) butterfly habitat management, (2) public access and safety needs, (3) fire management requirements, and (4) wildlife habitat restoration proposals to ensure fire management priorities and implementation of procedures that provide the most compatible result for the conservation of monarch butterflies, while also respecting the goals of other MBHMP programs, as feasible.
13 Integrated Pest Management	Control or eradicate, as feasible, plant, animal, fungal, and other pests that would result in detectable impacts on monarch butterflies or degrade monarch butterfly habitat.	**13-1:** To maintain current knowledge of pests and diseases, the City shall conduct an annual inventory of organisms negatively affecting eucalyptus trees in the groves at Ellwood Mesa.	**13-1.1:** Conduct an inventory of pests and diseases throughout the groves and windrows at Ellwood Mesa. **13-1.2:** Conduct an inventory of pests and diseases within the monarch butterfly aggregation sites within the Ellwood North, Ellwood West, Ellwood Main, Ellwood East, Sandpiper, and Ocean Meadows groves.
		13-2: The City shall consider using a variety of approaches to pest management to prevent pests and diseases from impacting Eucalyptus groves, particularly those supporting seasonal aggregation sites for monarch butterflies.	**13-2.1:** As feasible, experiment with different IPM approaches for different pests and diseases to determine which approach best suits the conditions within eucalyptus groves at Ellwood Mesa. **13-2.2:** Implement wise management practices within the eucalyptus groves at Ellwood Mesa that do not facilitate the spread of pests and diseases with groves. **13-2.3:** Identify current problems that require immediate treatment and implement appropriate treatment protocols. **13-2.4**: Implement a pest and disease monitoring program, as feasible, to determine success of treatments and any new infestations requiring treatment.

Programs	Goal	Policies	Actions
14 Habitat Enhancement and Restoration	To provide for the enhancement of native plant and animal habitats in the context of preserving the monarch butterfly habitat associated with established eucalyptus groves.	**14-1:** Establishment of appropriate native plants – in particular ground cover, shrub, and mid-canopy species – shall be encouraged within the eucalyptus groves and along the Devereux Creek corridor outside of the eucalyptus forest.	**14-1.1:** Plant experimental plots of native ground cover species to determine which may result in sustainable populations. **14-1.2:** Focus enhancement efforts on native plants existing within the eucalyptus groves, such as toyon (*Heteromeles arbutifolia*), and native plants with nectar sources for monarchs. **14-1.3:** Coordinate with *Program 13, Integrated Pest Management Program*, and *Program 15, Invasive Exotic Plant Management Program*.
		14-2: Areas between eucalyptus groves shall be considered for habitat enhancement and restoration alternatives.	**14-2.1:** Implement priority native restoration activities along Devereux Creek in areas outside of eucalyptus groves. **14-2.2:** Eradicate non-native herbaceous cover, seedlings, and saplings (not including eucalyptus saplings) in areas between eucalyptus groves to encourage or actively plant local natives.
		14-3: Restoration of Devereux Creek shall include appropriate actions to improve the habitat structure, ecological functions and processes, and native biodiversity of the existing riparian areas.	**14-3.1:** Restoration activities include establishment of a riparian area along the banks of Devereux Creek composed of native riparian tree species. **14-3.2:** Ensure that no restoration activities along Devereux Creek shall result in increased flooding. **14-3.3:** Coordinate to align efforts with other restoration projects under separate permits or mitigation plans for Devereux Creek.
		14-4: Native plant species are considered to be local genotypes of plants occurring naturally within the Ellwood Mesa/Devereux Creek Ecosystem.	**14-4.1:** Collect all plant materials for use in restoration projects from existing native plant populations in the Ellwood Mesa/Devereux Creek Ecosystem, where feasible. **14-4.2:** Collect plant material from the nearest existing populations for re-introduction of extirpated species. **14-4.3:** Obtain native plants for use in restoration from local nurseries or growers within the Santa Barbara area, emphasizing contract-grown material of local genotypes.
		14-5: No enhancement or restoration actions shall result in negative impacts on the quality of the eucalyptus groves that provide monarch butterfly habitat.	**14-5.1:** Coordinate with *Program 10, Monarch Butterfly Management Program*, *Program 11, Wildlife Management Program,* and *Program 12, Tree Management Program*.
		14-6: No enhancement or restoration actions shall conflict with the goals and policies of the *Community Wildfire Protection Plan*.	**14-6.1:** Coordinate all enhancement and restoration activities with the guidelines and recommendations of the CWPP.

Programs		Goal	Policies	Actions
15	Invasive Plant Management	To eradicate existing stands of invasive non-native species and prevent or control new occurrence of invasive non-native plant species within the monarch butterfly habitat at Ellwood Mesa.	**15-1:** The City shall undertake an inventory and generalized mapping program to identify, locate, and prioritize for eradication or control all invasive non-native plants species within the butterfly habitat at Ellwood Mesa.	**15-1.1:** Identify and map all invasive non-native species identified by Cal-IPC as "High" priority species. **15-1.2:** Identify and map all invasive non-native species identified by Cal-IPC as "Moderate" priority invasive species. **15-1.3:** Identify all invasive non-native species identified by Cal-IPC as "Limited" or unrated priority species and map any medium to large populations.
			15-2: The City shall control all "High," "Moderate," and "Limited" priority invasive plant species within the monarch butterfly habitat, as except those species for which monarch butterflies are dependent, as feasible.	**15-2.1:** Control all "High" priority non-native invasive plant species. **15-2.2:** Control all "Moderate" priority, non-native invasive plant species. **15-2.3:** Eradiate or control all medium or large stands of "Limited" or unrated priority non-native invasive species.
			15-3: The City shall undertake annual monitoring as feasible to identify and eradicate or control new occurrences of "High" or "Moderate" priority invasive non-native plant species.	**15-3.1:** Implement monitoring of eradication efforts and potential new occurrences as part of *Program 20, Biological Monitoring Program.* **15-3.2:** Coordinate with other programs in the MBHMP including *Program 14, Habitat Enhancement and Restoration Program.*
18	Interpretative Program	To establish a useful and informative interpretive signage program at Ellwood Mesa monarch butterfly aggregation sites that is environmentally sensitive and creates a minimum of intrusion into the habitats.	**18-1:** The City shall design and install an interpretive signage program that provides important information on the biology of monarch butterflies, the significance of the aggregation sites, and general information on Ellwood Mesa and the eucalyptus groves, when feasible.	**18.1-1:** Apply for grant funding to design, construct, and install the interpretive program signage. **18-1.2:** Design, construct, and install an interpretive signage program that is sensitive to the environment. **18-1.3:** Locate the interpretive signage program in key locations minimally intrusive to the sensitive habitats of Ellwood Mesa.
			18-2: The Butterfly Docent Coordinator shall provide input during design, review the draft interpretive program, and make recommendations to the City.	**18-2.1:** Involve the butterfly docents, as feasible, in ~~all phases of~~ development and review of the content and design of signs for the interpretative signage program.

Programs	Goal	Policies	Actions
21 Monarch Research Program	Encourage research projects and identify funding for research associated with monarch butterflies and their habitats at Ellwood Mesa.	**21-1:** The City shall allow for certain research projects that investigate the biology of monarch butterflies and their habitats at Ellwood Mesa and that provide information helpful to this MBHMP management programs.	**21-1.1:** Evaluate requests for research and, where approved, issue Scientific Research Permits to regulate the research efforts. **21-1.2:** Ensure that scientists use non-invasive research projects at Ellwood Mesa, in particular those that focus on monarch butterflies and their habitats, and require that the results of the research are provided to the City and posted on the City's website at www.goletabutterflygrove.com. **21-1.3**: Encourage research of the plants native to Santa Barbara County with regard to their ability to provide suitable monarch butterfly overwintering habitat and their applications for the restoration of the Ellwood Mesa.

9. Approval Required by Other Public Agencies

No approvals from other public agencies are required.

10. Site Information

Existing General Plan Land Use Designation	Open Space/Passive Recreation	
Zoning Ordinance, Zone District	Coastal Zoning Ordinance, zoned Recreation	
Site Size	137 acres	
Present Use and Development	Ellwood Mesa Open Space	
Surrounding Uses/Zoning	North:	Hollister Avenue and residences (City of Goleta, zoned 7-R-1, M-RP, DR-12.3, and MHP)
	South:	Pacific Ocean and Ellwood Bluffs
	East:	Residences (City of Goleta, zoned DR-10 and DR-6) and UCSB
	West:	Sandpiper Golf Club (City of Goleta, zoned REC)
Access	Existing:	Hollister Avenue
	Proposed:	Hollister Avenue
Utilities and Public Services	Water Supply:	Goleta Water District (GWD)
	Sewage:	Goleta West Sanitary District (GWSD)
	Power:	Southern California Edison
	Natural Gas:	Southern California Gas Company
	Cable:	N/A
	Telephone:	N/A
	Fire:	Santa Barbara County Fire Department
	School Districts:	N/A

11. Environmental Setting

The Coverage Area is on a coastal mesa with gentle slopes and terraces immediately north of the steep, coastal Ellwood Bluffs. Devereux Creek passes through the Coverage Area, generally flowing west to east before emptying to Devereux Slough east of the Coverage Area. The Coverage Area is bordered by Hollister Avenue and single- and multi-family residences to the north; residential development in Goleta and undeveloped land zoned residential in unincorporated Santa Barbara County to the east; the Ellwood Bluffs and the Pacific Ocean to the south; and the Sandpiper Golf Club to the west.

Eucalyptus woodlands form dense canopies on the northern portion of the Coverage Area and native and non-native grasslands and coyote brush scrub are the dominant habitats occurring on the mesa or southern portion of the Coverage Area. Non-native ornamental and invasive plants are also present. The area includes a parking lot and numerous trails. Previously, the area was used for oil development and remnants of the facilities are still on site.

Monarch butterflies aggregate in the on-site eucalyptus groves during winter months to "overwinter" or pass the winter season. The Coverage Area includes five monarch butterfly

aggregation areas, referred to as the Ellwood North, Ellwood West, Ellwood Main, Sandpiper, and Ocean Meadows aggregation sites (Figure 3). Ellwood East is not included in the Coverage Area because it is outside Ellwood Mesa Open Space. Based on data collected statewide and at Ellwood Mesa between 1997 and 2009, the butterflies at the Ellwood aggregations sites account for approximately 10 percent of the entire migrating population in the western United States. Therefore, these aggregation sites are important for the western population of the monarch butterfly, and accordingly, management of the eucalyptus trees that support the butterflies in such great numbers is paramount to continued overwintering by the species.

Some species of eucalyptus trees found on Ellwood Mesa, including blue gum, have deciduous bark, which is shed annually and presents a fire hazard. The bark catches fire readily and streamers from the loose bark tend to carry fire into the canopy and cast firebrands ahead of the main fire front. The leaf litter, which is the accumulation of dead, dry, and oily leaves, is also a fire hazard as it is extremely flammable.

12. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

The City prepared and mailed letters to local Native Americans on December 21, 2018. Under Assembly Bill (AB) 52, tribes have 30 days to respond and request consultation, giving tribes until January 21, 2019 to provide a response. As of the data of this draft, the 30-day response period has ended and no tribal representatives requested formal consultation with the City.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

■	Aesthetics	☐	Agriculture and Forestry Resources	■	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
■	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
■	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
■	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	■	Mandatory Findings of Significance

Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Anne Wells
Signature

1-23-19
Date

Anne Wells
Printed Name

Advance Planning Manager
Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	■
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	■	☐	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	■

Existing Setting

The Coverage Area is located in Ellwood Mesa Open Space, an undeveloped open space area categorized in the General Plan as "Open Space/Passive Recreation" where "significant environmental values or resources, wildlife habitats, significant views, and other open space value" exists (City of Goleta 2006a). The visual character of the Coverage Area is dominated by existing eucalyptus groves, creating a forested landscape. The generally evergreen nature of eucalyptus trees creates a patchy- to fully-shaded setting in the Coverage Area, with hanging bark, leaves, and vegetated understory protruding between tree trunks. Parts of the Coverage Area have views of the Pacific Ocean. Hollister Avenue borders the Coverage Area to the north; this road is designated a local scenic corridor in the Visual and Historic Resources Element of the General Plan. U.S. Highway 101 (US-101) is State-eligible for listing as a scenic highway (California Department of Transportation 2018); US-101 parallels and is north of Hollister Avenue near the Coverage Area. The nearest State-designated scenic highway is State Route 154 (SR-154)/San Marcos Pass, located approximately 14

miles away from the Coverage Area. From within its confines, the Coverage Area provides views to the Pacific Ocean and the Santa Barbara Channel Islands in the distance. The General Plan contains policies to safeguard these views by various means. These include restoring and enhancing visual quality in visually degraded areas, such as those created by the dead and dying trees in the Coverage Area. Furthermore, the Santa Ynez Mountains are visible north of the Ellwood Mesa Open Space and are considered a visual resource, along with riparian areas in the Devereux Slough. As with the other scenic resources described here, these views are from the Coverage Area looking outward and, as the images in Figure 5 demonstrate, they are limited by existing dead and fallen tree material throughout the Coverage Area.

Thresholds of Significance

A significant aesthetic impact would occur if the MBHMP would result in any of the impacts noted in the checklist. The City's Environmental Thresholds and Guidelines Manual instructs the project evaluator to assess visual/aesthetic impacts through a two-step process. First, the visual resources of the Coverage Area must be evaluated, including the physical attributes, visual uniqueness, and relative visibility from public viewing areas. Visibility from coastal and mountain areas, as well as visibility from the urban fringe and travel corridors, are of particular concern. Second, the potential impact on visual resources in the Coverage Area and on views in the vicinity that may be partially or wholly obstructed by implementation of the MBHMP must be determined. This step includes an evaluation of the MBHMP's consistency with State and City policies on the protection of visual resources.

Project-Specific Impacts

a. Would the project have a substantial adverse effect on a scenic vista?

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Implementation of the MBHMP would not involve construction of any structures that would block protected views. The nearest State-designated scenic highway is SR-154/San Marcos Pass, located approximately 14 miles away from the Coverage Area. The Coverage Area is visible from points along SR-154, but none of the covered activities or changes proposed in the MBHMP would be visible from that distance. US-101 is approximately 0.2 mile north of the Coverage Area and is State-eligible for listing as a scenic highway. However, trees along the US-101 corridor and structures north of Hollister Avenue obstruct views of the Coverage Area from the freeway. The General Plan designates Hollister Avenue as a local scenic corridor and provides for protection of the "general character of significant natural features" (City of Goleta 2006a). The MBHMP calls for resource preservation measures involving the removal of dead and diseased trees that pose risk to life, prevent General Plan-mandated trail access, and contribute fuel to potentially catastrophic wildfire. Figure 5 includes images of some of the dead and diseased vegetation in the Coverage Area. The implementation of the MBHMP would not substantially damage a scenic resource and would instead improve the eucalyptus grove as a scenic resource, preserving views from Hollister Avenue and SR-154. MBHMP implementation would, therefore, have no adverse effect on a scenic vista and no impact would occur under threshold a. Although the Coverage Area is near a locally-designated scenic corridor and a State-eligible scenic highway, no substantial damage to scenic resources in these areas would occur. Therefore, no impact to scenic resources in a State scenic highway would occur.

NO IMPACT

Figure 5 Site Photographs

Photograph 1. Example of some of the dead/down material in Ellwood North that would be removed as part of the CWPP to reduce the risk of wildfire

Photograph 2. Example of some of the dead/down material in Ellwood Main that would be removed as part of the CWPP to reduce the risk of wildfire

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Implementation of the MBHMP would not involve any changes in land use in the Coverage Area, and resource management in Ellwood Mesa Open Space would be in keeping with the approved policies in the City's General Plan and CWPP. This would involve resource management activities in the eucalyptus grove in Ellwood Mesa Open Space consistent with General Plan policies for Open Space/Passive Recreation land use designations (City of Goleta 2006a). The incremental removal of dead and diseased trees would contribute to grove health, improving its appearance and making it more accessible to passive public use, including public viewing areas. Furthermore, the resource management activities support the MBHMP's intent to provide consistent stewardship of the Coverage Area and would help protect the grove and adjacent neighborhoods from imminent wildfire threat, which would be consistent with the approved CWPP (City of Goleta 2012).

The MBHMP states "portions of Ellwood Mesa eucalyptus groves suffer from … senescence, drought, pests, disease, or lack of formal management efforts that can negatively affect the aesthetic value of that area." Checklist item 4, Biological Resources, includes the requirement to implement Mitigation Measure BIO-7, which requires monitoring and, if necessary, replacement of trees to ensure the groves remain viable habitat for monarch butterflies and retain visual character. The removal of dead and diseased trees or deadfall would not be considered removal of any scenic resources on the Coverage Area as it would benefit the overall health of the groves. The MBHMP Tree Management Program calls for reforestation along with removal of dead and diseased specimens with covered activities that include "plant new eucalyptus trees, native and/or fire-resistant understory species, and native nectar sources" for migrating butterflies. These new plantings would be subject to the replacement tree guidelines detailed in Mitigation Measure BIO-7 and would be consistent with existing open space conservation practices. Therefore, the MBHMP would result in a less than significant impact to the existing visual character with implementation of mitigation.

The MBHMP Aesthetic Resources Program identifies the signs and fencing associated with monarch butterfly habitat on Ellwood Mesa as part of the stewardship program, and intends to ensure the signs and fencing are aesthetically compatible with the natural conditions of the Coverage Area. Designs for signage and other facilities would be subject to review by the City for consistency with the natural conditions of the Coverage Area prior to installation. Adherence to this review process would ensure improvements to the quality of aesthetic resources in the Coverage Area would not result in an impact to scenic visual resources.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Implementation of the MBHMP involves no development that would add new sources of light or glare. Therefore, no impact would occur.

NO IMPACT

Mitigation Measures

No additional mitigation beyond Mitigation Measure BIO-7 is required or recommended.

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

Existing Setting

The Coverage Area is undeveloped open space and surrounded by residential and recreational uses to the north, east, and west and the Pacific Ocean to the south. The Coverage Area is not on or adjacent to land currently under agricultural operation and is not designated for agricultural use in the City's General Plan. Based on the Farmland Mapping and Monitoring Program for the California Resources Agency, no portion of the Coverage Area is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2018a). In addition, no portion of the Coverage Area is zoned for forestland, timberland, or timber production.

Thresholds of Significance

A significant impact to agricultural resources would be expected to occur if the MBHMP would result in any of the impacts noted in the above checklist. Additionally, the MBHMP may pose a significant environmental effect on agricultural resources if it conflicts with adopted environmental plans and goals of the City, converts Prime agricultural land to non-agricultural use, or impairs the agricultural productivity of Prime agricultural land.

Project-Specific Impacts

a. Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

The Coverage Area is currently undeveloped open space and is not in agricultural use. Implementation of the MBHMP would not impact farmland designated as Prime, Unique, or of Statewide Importance (California Department of Conservation 2018). In addition, the City's General Plan does not designate any portion of the Coverage Area for agricultural use (City of Goleta 2017a). Implementation of the MBHMP would not result in the displacement of existing farmland or occur adjacent to any existing farmland or agricultural resources. The MBHMP would not affect any lands designated by the City for agricultural purposes, nor would it affect any parcels zoned for agricultural use or parcels under a Williamson Act Contract (City of Goleta 2017a). The MBHMP would not involve any other changes to the existing environment that could result in conversion of farmland to non-agricultural uses. Because implementation of the MBHMP would not conflict with adopted environmental plans and goals of the City, nor would it convert prime agricultural and to non-agricultural use or impair the agricultural productivity of prime agricultural land, no impact would occur.

NO IMPACT

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

As discussed in Section 10, *Land Use and Planning*, the Coverage Area is zoned Recreation (Rec) and has a General Plan land use designation of Open Space/Passive Recreation. According to the City of Goleta Coastal Zoning Ordinance, the intent of the Recreation district is to encourage outdoor recreational uses that will protect and enhance areas that have both active and passive recreation potential because of their beauty and natural features (City of Goleta 1998). No portion of the Coverage Area is zoned for forestland, timberland, or timber production, and timber production is not a permitted use in the Recreation zone. Therefore, no impact would occur.

NO IMPACT

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The Coverage Area in an open space preserve and contains several tree species, including groves of eucalyptus. Implementation of the MBHMP would remove selected dead, dying, or hazardous trees under the Catastrophic Event Response Program and Tree Management Program. Following tree removal, new tree plantings would be installed to enhance habitat conditions for the monarch butterfly. The trees that would be removed during implementation of the MBHMP are dead, dying, or otherwise hazardous trees that are a risk for recreational users in the Coverage Area because they have the potential to fall down. The MBHMP would have a beneficial effect on the eucalyptus groves in the Coverage Area because it would result in replacement of dead, dying, or otherwise hazardous eucalyptus trees, which generally have reduced canopy and provide minimal forest habitat value, with healthy, young trees.

The City amended and approved the Goleta Urban Forest Management Plan (GUFMP) in February 2017 to outline a policy framework for the restoration, enhancement, and management of the urban forest in Goleta. The tree removal strategy proposed by the MBHMP is consistent with Policy 4.12.4 of the GUFMP, which recognizes tree removal may be necessary, at City staff's discretion, for the protection, public health, and safety of citizens in considering dead, dying, or hazardous trees (City of Goleta 2017b). No other trees would be removed because the Coverage Area in an open space preserve and not zoned for timber harvest. Additionally, eucalyptus trees are not used as timber. Given that the MBHMP would be consistent with the GUFMP and would improve the health of the eucalyptus groves, there would be no impact.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

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3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	■	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	■	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	■	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	■

This section addresses the impacts of the MBHMP on air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. The analysis of emissions focuses on whether the MBHMP would cause an exceedance of a State or national ambient air quality standard or an exceedance of a threshold recommended by the local air quality agency.

Local Climate

The climate in and around Goleta, as well as most of southern California, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. This high-pressure cell typically produces a Mediterranean climate with warm summers, mild winters, and moderate rainfall. This pattern is interrupted occasionally by periods of extremely hot weather brought in by sundowner winds. Almost all precipitation occurs between November and April, although during these months, the weather is sunny or partly sunny the majority of the time. Cyclic land and sea breezes are the primary factors affecting the region's mild climate. The daytime winds are normally sea breezes, predominantly from the west, which flow at relatively low velocities. Additionally, cool, humid, marine air causes frequent fog and low clouds along the coast, generally during the night and morning hours in late spring and early summer.

Surface temperature inversions (0 to 500 feet) are most frequent during the winter, and subsidence inversions (1,000 to 2,000 feet) are most frequent during the summer. Inversions are an increase in temperature with height and directly relate to the stability of the atmosphere. Inversions act as a cap to the pollutants emitted below or within them. The subsidence inversion is common during the summer along the California coast, and is one of the principal causes of air stagnation. Poor air quality is usually associated with air stagnation (high stability/restricted air movement).

Air Quality Standards – Criteria Pollutants

The federal government and the State of California have established air quality standards and emergency episode criteria for various pollutants. Generally, State regulations have stricter standards than those at the federal level. Air quality standards are set at concentrations that provide a sufficient margin of safety to protect public health and welfare. Air quality at a given location can be described by the concentration of various pollutants in the atmosphere. The significance of a pollutant concentration is determined by comparing the concentration to an appropriate federal and/or State ambient air quality standard.

The United States Environmental Protection Agency (USEPA) establishes federal standards, termed the National Ambient Air Quality Standards. The California Air Resources Board (CARB) establishes the State standards, called the California Ambient Air Quality Standards. The region generally has good air quality, as it attains or is considered in maintenance status for most ambient air quality standards. The Coverage Area is in the South Central Coast Air Basin, which encompasses all of Santa Barbara and San Luis Obispo counties. Santa Barbara County Air Pollution Control District (SBCAPCD) is required to monitor air pollutant levels in the South Central Coast Air Basin to ensure federal and State air quality standards are met.

Criteria Pollutants

Criteria pollutants of primary concern include ozone, carbon monoxide (CO), nitrogen oxide (NO_2), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). Although there are no ambient standards for volatile organic compounds/reactive organic compounds (VOCs/ROCs) or nitrogen oxides (NO_X), they are important as precursors to ozone.

Ozone air pollution is formed when NO_X and ROCs react in the presence of sunlight. According to the SBCAPCD, the major sources of ozone precursor emissions in Santa Barbara County are motor vehicles, the petroleum industry, and solvent usage (paints, consumer products, and certain industrial processes). Sources of PM_{10} include grading, demolition, agricultural tilling, road dust, mineral quarries, and vehicle exhaust.

The County currently violates the State 8-hour ozone and PM_{10} standards, but it is in attainment of the federal 8-hour ozone standard and the State 1-hour ozone standard. The SBCAPCD adopted a Clean Air Plan in 2013 demonstrating how the County will maintain and/or meet State and federal air quality standards, including ozone and particulate matter standards.

Thresholds of Significance

A significant air quality impact could occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines.

In addition, per the City's Environmental Thresholds and Guidelines Manual, a significant adverse air quality impact may occur when a project, individually or cumulatively:

- Interferes with progress toward the attainment of the ozone standard by releasing emissions which equal or exceed the established long-term quantitative thresholds for NO_X and reactive organic gases
- Equals or exceeds the State or federal ambient air quality standards for any criteria pollutant (as determined by modeling)

A project has a significant impact on regional air quality if emissions related to project operation exceed the significance threshold established by SBCAPCD, currently set at 25 pounds per day for NO_X and ROC emissions for motor vehicle trips. Furthermore, if a project's emissions exceed these thresholds, that project's contribution to cumulative impacts would be considered significant.

The City's thresholds also include criteria for conducting CO emission modeling. However, due to the relatively low background ambient CO levels in Santa Barbara County, localized CO impacts associated with traffic at congested intersections are not expected to exceed the CO health-related air quality standards. Therefore, CO "hotspot" analyses are no longer required.

The SBCAPCD does not have quantitative emission significance thresholds for short-term construction activities because of their temporary nature. Nevertheless, because Santa Barbara County is not compliant with State standards for PM_{10}, construction-generated fugitive dust (50 percent of total dust) is subject to the SBCAPCD's standard dust mitigation requirements.

Project-Specific Impacts

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Temporary emissions associated with implementation of the MBHMP would be minimal, as the MBHMP would not involve demolition of existing structures or construction of any new structures. The MBHMP would involve programs and activities to improve monarch butterfly habitat such as waste reduction, pest management, trail maintenance, and habitat restoration. Most of these activities would not involve the use of heavy diesel equipment resulting in substantial criteria pollutant emissions. Trail and tree maintenance activities would involve tools such as chainsaws and hand tools. Emissions from such equipment would be minimal, as well as temporary and intermittent.

Certain covered activities, such as drainage clearing following flood events, trail relocations, culvert installations, and tree removals may involve limited ground disturbance and require the intermittent use of heavy construction equipment. Additionally, tree maintenance, vegetation removal, habitat restoration, and trail maintenance and relocation activities could require driving trucks on unpaved roads and trails in the Coverage Area, which may generate fugitive dust emissions.

The trail improvement and educational programs associated with the MBHMP would improve the quality of the experience for visitors to the butterfly habitat, which may lead to an incremental increase in visitors to the Coverage Area. However, the MBHMP would not expand the capacity of Ellwood Mesa Open Space to accommodate additional vehicle trips to the open space through additional parking or site access. Therefore, the MBHMP would not substantially increase operational emissions associated with vehicle trips to and from the Coverage Area above current conditions. The MBHMP would not result in human population growth, and therefore, would be consistent with the population growth assumptions contained in the County's 2013 Clean Air Plan and 2016 Ozone Plan. As a result, the MBHMP would not conflict with or obstruct implementation of an applicable air quality plan.

Implementation of the MBHMP would not result in substantial, long-term, operational air quality emissions. However, smaller ground-disturbing activities would have the potential to temporarily and intermittently generate fugitive dust in the Coverage Area. Because the MBHMP would not involve construction of structures, it would not be subject to SBCAPCD Rule 345, which includes various fugitive dust mitigation requirements for construction activities in the County. Nevertheless, the SBCAPCD recommends standard fugitive dust control measures for construction and demolition activities in its jurisdiction. Mitigation Measure AQ-1 features such measures, the incorporation of which would minimize potential fugitive dust emissions resulting from covered activities that require ground disturbance or from vehicles driven on unpaved roads and trails in the Coverage Area. With adherence to dust control measures contained in Mitigation Measure AQ-1, air quality impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Operational activities associated with the MBHMP would not create objectionable odors for nearby residences or visitors to the Ellwood Mesa Open Space because the MBHMP would not involve new facilities other than signage and improved trails. Covered activities, such as tree pruning, trail maintenance, and habitat restoration, would generally not require heavy diesel equipment and would not produce objectionable odors. Therefore, no impact would occur.

NO IMPACT

Mitigation Measures

AQ-1 Dust Control

All covered activities shall incorporate the following dust control measures to reduce potential PM_{10} emissions during implementation of the MBHMP:

- Covered activities shall minimize the amount of disturbed area to the extent feasible
- On-site vehicle speeds shall be limited to 5 miles per hour or less
- The City or City-approved contractor shall install gravel pads at the access points to Ellwood Mesa Open Space to prevent tracking of dirt/mud onto public roads
- After a ground-disturbing activity is completed, the City or City-approved contractor shall treat the disturbed area by watering, revegetating, or spreading soil binders

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
c. Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	■	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	■	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	■
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	☐	☐	☐	■

Existing Setting

Regional Setting

The Coverage Area is in the South Coast region of Santa Barbara County on a coastal plain, along the south edge of the western Transverse Range. The Coverage Area is in the South Coast subregion as described in the Jepson ecoregion system (Baldwin et al. 2012), which extends from Point Conception to the west southward to Mexico, along the immediate coast in Santa Barbara County, but also extends inland to the San Gabriel and San Bernardino mountains farther east and south. More specifically, the Coverage Area is in the Santa Ynez – Sulphur Mountains subsection of the Southern California Coast, according to the United States Forest Service (USFS) ecoregion system (USFS 2014). This ecological sub-unit extends from the Santa Ynez River mouth in northern Santa Barbara County, south and east into the Sulphur Mountains just west of the Ventura River in northern Ventura County. The ecological unit is defined by its mountainous topography inland, with coastal plains along the coastline. The Santa Ynez Mountains to the north of the Coverage Area form relatively steep hillsides vegetated by with chaparral and scrub vegetation types, drained by incised streams. Some streams in Goleta are lined with narrow bands of oak, while others support riparian shrubs and woodlands. The Coverage Area is on the coastal plain between the southern foot of the mountains and the Pacific Ocean.

The climate in Goleta is influenced by the city's proximity to the Santa Ynez Mountains, whose elevations surpass 4,000 feet. When moist coastal air is pushed up by the mountains, an orographic effect forces the air upward and causes increased precipitation along the South Coastal plain. Annual precipitation in Goleta is typically about 16.3 inches, with the majority of rainfall received between November and April in typical years (Western Region Climate Center 2018). Mean annual temperatures range from 48 to 69 degrees Fahrenheit (°F). Morning fog and sea breezes often moderate summer daytime temperatures. The growing season lasts 340 to 360 days per year (United States Department of Agriculture 2018).

In Goleta, much of the coastal plain between the Santa Ynez Mountains and Pacific Ocean is developed or has been disturbed by historical agriculture or ranching uses. Native vegetation in Goleta is fragmented, but includes riparian and upland woodlands, coastal scrub, native and non-native grasslands, wetlands, and vernal pools. Relatively undisturbed habitats are present along narrow riparian corridors, in scattered undeveloped lands of varying sizes, and in protected open space areas. The Coverage Area in Ellwood Mesa Open Space is one such open space, though vegetation in this area has been disturbed historically for oil development, wood lots, and ranching uses (City of Goleta et al 2004; Campbell Geo 2010).

Coverage Area Setting

The Coverage Area is in the Ellwood Mesa Open Space, situated on Ellwood Mesa, on gentle slopes and terraces immediately north of the Ellwood bluffs. The Coverage Area consists of a series of eucalyptus groves, which were planted on the site beginning in the 1870s, and the immediately adjacent areas. The Coverage Area was selected based on the biology of the monarch butterfly, the focal species of the MBHMP, which is dependent on dense stands of eucalyptus trees for overwintering habitat. Devereux Creek, an intermittent coastal stream, flows through the center of the Coverage Area and likely helps to sustain some of the eucalyptus groves. Two unnamed tributaries to Devereux Creek also occur in the Coverage Area, and flow southward through the eucalyptus forest until joining Devereux Creek.

The Coverage Area is bounded to the north by Hollister Avenue and residential development, to the west by Sandpiper Golf Club, to the east by the City of Goleta/County of Santa Barbara boundary along an undeveloped parcel managed by UCSB, and to the south by Ellwood Mesa Open Space and the Pacific Ocean. The northwest corner of the Coverage Area wraps around the western, southern, and eastern perimeters of the "The Bluffs" residential development. Existing residential development also abuts the northeastern perimeter of the Coverage Area. The majority of MBHMP activities would occur within 150 to 200 feet of existing residential developments along the northern portion of Ellwood Mesa Open Space. Most of the southern coastal plain and bluff habitats on Ellwood Mesa are outside the Coverage Area, and would not be directly affected.

The Coverage Area is on a coastal mesa, within which eucalyptus woodlands form dense canopies with native and non-native grasslands and coyote brush scrub habitats occur in the areas immediately adjacent to the eucalyptus groves. In areas outside the eucalyptus groves, the Devereux Creek corridor supports native riparian and transitional vegetation. Two vernal pools are documented along the southern boundary of the Coverage Area. The Coverage Area also includes a parking lot and numerous trails that are open to the public and used for visiting the monarch butterfly aggregation sites, walking and jogging on Ellwood Mesa, and accessing the beach to the south of Ellwood Mesa. An unpaved fire road along the northern edge of Devereux Creek in the Coverage Area can accommodate vehicle traffic, but is used for emergency purposes only and is not normally open to vehicles. Under normal conditions, this road is used by the public as a walking route through the eucalyptus groves and functions as part of the trail system.

The City's General Plan identifies and maps several Environmentally Sensitive Habitat Areas (ESHA) in the Ellwood Mesa Open Space, including riparian habitat, vernal pools, native grassland, sage scrub, and bluff scrub (City of Goleta 2018). Monarch butterfly aggregation sites and raptor roosting/nesting sites at Ellwood are identified as ESHA in the General Plan. Several of the mapped ESHAs in Ellwood Mesa Open Space are in the Coverage Area (Figure 6). Unmapped ESHA may also be present where native grassland and riparian restoration efforts have expanded these sensitive vegetation types.

Existing Habitat Conditions

Ellwood Mesa Open Space supports both native and non-native communities, as well as non-native ornamental and invasive plants in some areas. Eucalyptus groves (*Eucalyptus [globulus, camaldulensis]* Semi-Natural Woodland Stands) are the dominant vegetation type in the Coverage Area due to their importance for the monarch butterfly. Additional vegetation types in the Coverage Area include:

NON-NATIVE GRASSLANDS

- Wild oats grassland (*Avena [barbata, fatua]* Semi-Natural Herbaceous Stands)
- Annual brome grasslands (*Bromus [diandrus, hordeaceus]-Brachypodium distachyon* Semi-Natural Herbaceous Stands)

NATIVE GRASSLANDS

- Native bunchgrass grassland (*Stipa [=Nassella] pulchra* Grassland Alliance)

COASTAL SCRUB COMMUNITIES

- Coyote brush scrub (*Baccharis pilularis* Shrubland Alliance)
- California sagebrush scrub (*Artemisia californica* Shrubland Alliance)

BLUFF SCRUB COMMUNITIES

- Quail bush scrub (*Atriplex lentiformis* Shrubland Alliance)

RIPARIAN COMMUNITIES

- Arroyo willow thickets (*Salix lasiolepis* Shrubland Alliance)

A field reconnaissance-level biological survey conducted by Rincon Consultants in February 2018 confirmed that previous habitat mapping and identification of ESHAs in the Coverage Area and vicinity (e.g., City of Goleta 2013, City of Goleta 2014c; Storrer 2011, Campbell Geo 2010) are largely consistent with current existing conditions. Plant communities observed during the 2018 survey were identified based on A Manual of California Vegetation, Second Edition (MCV2, Sawyer et al. 2009), the currently accepted standard for vegetation classification in California. Because many of the previous biological studies conducted in the Coverage Area and vicinity are dated and did not use this system, the mapped vegetation types have been cross-referenced to previous systems utilized during the prior studies as appropriate (Table 3). Updates to habitat nomenclature are addressed on an individual basis below.

Table 3 Habitat Types in the Coverage Area with Current Classification

General Habitat Type	MCV2 Vegetation Alliances	Global Rank/ State Rank	CDFW Sensitive Community?
Non-native grassland	Avena *[barbata, fatua]* Semi-natural Herbaceous Stands	not ranked	No
	Bromus [diandrus, hordeaceus]-Brachypodium distachyon Semi-Natural Herbaceous Stands	not ranked	No
Native grassland	Stipa *[=Nassella] pulchra* Grassland Alliance	G4/S3?	Yes
Eucalyptus groves	Eucalyptus [*globulus, camaldulensis*] Semi-natural Woodland Stands	not ranked	No
Coyote brush scrub	*Baccharis pilularis.* Shrubland Alliance	G5/S5	No
California Sagebrush scrub	*Artemisia californica* Shrubland Alliance	G5/S5	No
Bluff scrub	*Artemisia californica* Shrubland Alliance	G5/S5	No
	intermixed with *Atriplex lentiformis* Shrubland Alliance	G4/S4	No
Arroyo willow thickets	*Salix lasiolepis* Shrubland Alliance	G4/S4	Yes

Source: CDFW 2018b, 2018d

The approximate distribution of these habitats in the Coverage Area, based on the February 2018 survey and review of previous habitat mapping, is shown in Figure 7. The current condition of habitats in the Coverage Area is described below and depicted in site photographs presented as Photographs 3 through 6 in Figure 8.

Figure 6 Environmentally Sensitive Habitat Areas

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Figure 7 Drainages and Vegetation Communities

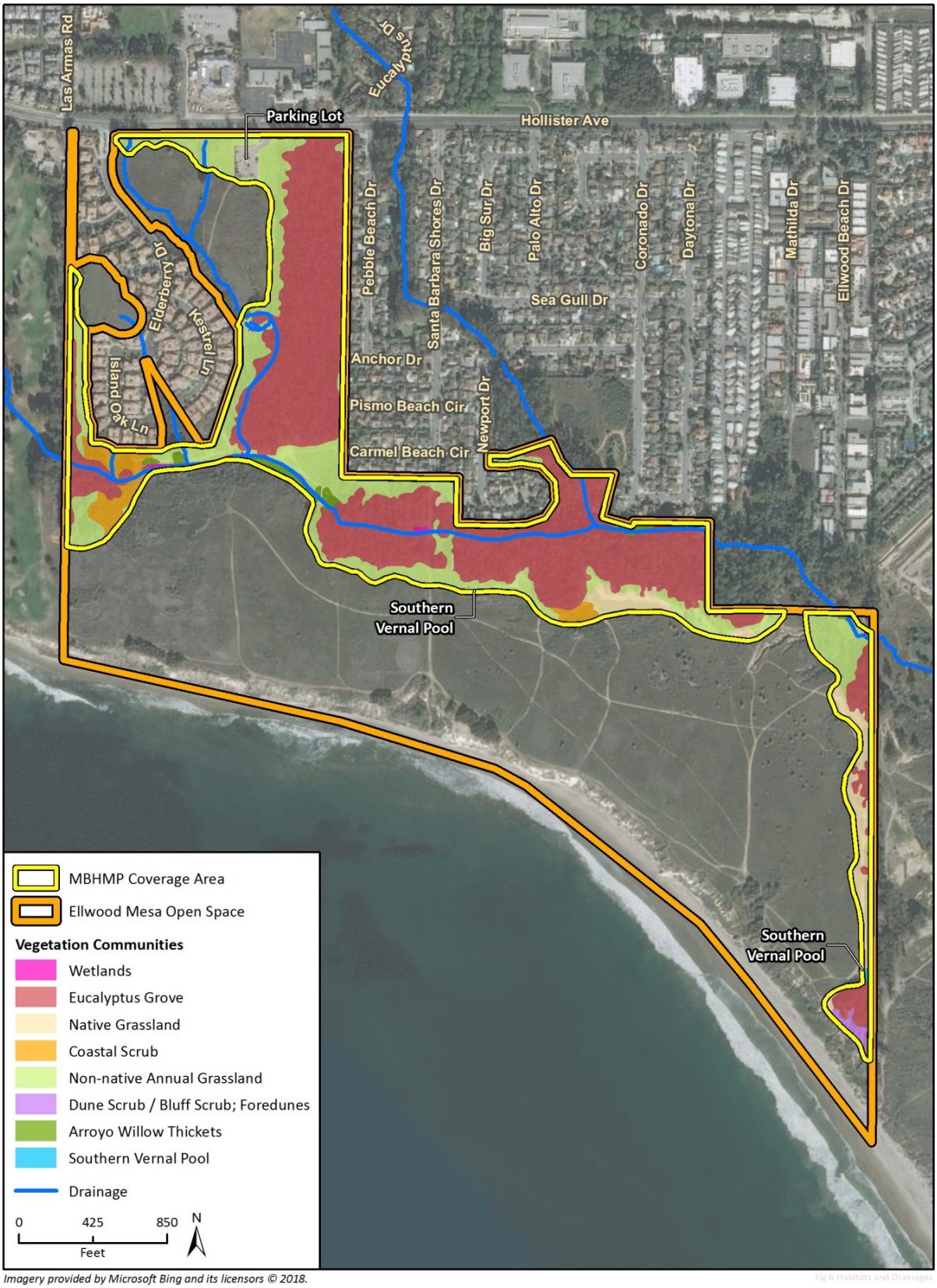

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Figure 8 Site Photographs

Photograph 3. Ellwood North. September 2018.

Photograph 4. Understory Condition in Ellwood North grove, with downed wood, litter buildup, and non-native understory species. September 2018.

Photograph 5. Non-native grassland adjacent to Ellwood Main. September 2018.

Photograph 6. Ellwood Main understory. September 2018.

EUCALYPTUS GROVES

Eucalyptus groves, consistent with *Eucalyptus (globulus, camaldulensis*) Semi-Natural Woodland Stands in MCV2 (Sawyer et al. 2009), form dense canopies throughout the Coverage Area. The tree overstory is almost entirely eucalyptus species, though occasional coast live oak (*Quercus agrifolia*), arroyo willow, and other trees are present in low numbers. Understory in eucalyptus groves is predominantly non-native. Duff layers are thick, and herbaceous vegetation is sparse, with occasional veldt grass (*Ehrharta erecta*), oats, ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), and foxtail barely. Shrubs are also present, including non-native Myoporum (*Myoporum laetum*), pittosporum (*Pittosporum undulatum*), blackwood acacia (*Acacia melanoxylon*), cotoneaster (*Cotoneaster lacteus*). A few native shrub and woody vine species are also present, with poison oak (*Toxicodendron diversilobum*) and toyon (*Heteromeles arbutifolia*) most common. Many of the eucalyptus groves are infested with invasive vines, including Algerian ivy (*Hedera canariensis*). Where Devereux Creek and its tributaries flow through eucalyptus groves, additional weedy perennial plants are present, including cape ivy (*Delairea odorata*), garden nasturtium (*Tropaeolum majus*), and firethorn (*Pyracantha* sp.). However, native species are also more common along the drainage bed and banks than elsewhere in eucalyptus groves, including poison oak, rushes (*Juncus* spp.), elderberry (*Sambucus nigra* ssp. *caerulea*), and blackberry (*Rubus ursinus*), particularly near the Ellwood Main and Sandpiper aggregation sites.

As noted above, five monarch butterfly aggregation areas, referred to as the Ellwood North, Ellwood West, Ellwood Main, Sandpiper, and Ocean Meadows sites, are present in eucalyptus groves in the Coverage Area. As described in Section 7, *Background Information*, eucalyptus trees were introduced in the 1870s to provide a source of lumber. In recent years, the ongoing drought and pest infestations have resulted in the degradation and death of eucalyptus trees. According to a field study performed by Althouse and Meade, Inc. in July 2017, over 1,200 trees in the eucalyptus forest are dead, with hundreds more that are highly degraded and dying. Historically these aggregation sites hosted tens of thousands of monarch butterflies during some years, making Ellwood Mesa one of the most important sites for monarch butterflies in California (Pelton et al. 2016). As shown in Figure 4, overwintering monarch populations on Ellwood Mesa have declined drastically in recent years from 47,510 monarchs at a recent peak in 2011 to an all-time low of 230 monarchs counted in 2018.

Grove and windrow areas between aggregation sites have not been recorded to support monarch butterfly aggregations. Eucalyptus groves in the Coverage Area are predominantly blue gum groves, but some areas of red ironbark (*E. sideroxylon*) and red gum (*E. camaldulensis*) are present, particularly in the areas south of the Ellwood North aggregation site, and occasionally in the Ellwood West, Main, and East sites.

Small stands of eucalyptus are also present on the immediate edge of the Ellwood Mesa Open Space outside the Coverage Area. These include small patches of ironwood, blue gum, and lemon-scented gum (*Corymbia citriodora*). Eucalyptus trees are present in a utility easement near the eastern boundary of the Coverage Area. Monarch aggregations have not been reported and are not expected in these small, exposed stands of trees.

NON-NATIVE GRASSLANDS

The dominant plant community in areas without tree canopy consists of non-native annual grasslands. This vegetation type is most consistent with the *Avena [barbata, fatua]* Semi-Natural Herbaceous Stands alliance and the *Bromus [diandrus, hordeaceus]-Brachypodium distachyon* Semi-Natural Herbaceous Stands alliance in the MCV2 classification system (Sawyer et al. 2009). These

communities are not assigned a rarity rank by the CDFW (2018b), and are not considered sensitive. Typical composition consists of abundant wild oats (*Avena barbata, A. fatua*), with hare barley (*Hordeum murinum*) and a variety of non-native herbaceous plants, including prickly lettuce (*Lactuca serriola*), bristly ox tongue (*Helminthotheca echioides*), cheeseweed (*Malva* sp.), knotweed (*Polygonum aviculare*), and black mustard (*Brassica nigra*). Aggressive weeds such as fennel (*Foeniculum vulgare*) and castor bean (*Ricinus communis*) are common to abundant in patches. Australian saltbush (*Atriplex semibaccata*) is present in many areas. Some native species are also present in non-native grasslands, including tarweed (*Deinandra fasciculata*), horseweed (*Conyza canadensis*), western ragweed (*Ambrosia psilostachya*) and dove weed (*Croton setigerus*). Occasional purple needlegrass (*Stipa pulchra*) plants are present in some areas of non-native annual grassland. Patches and larger areas with at least 10 percent cover of native grasses are classified separately as native grassland. Some ruderal areas consisting of predominantly non-native herbaceous weeds are also present, intermixed with annual grasslands. Patches of ice plant (*Carpobrotus edulis*) are occasional, including several patches near The Bluffs residential development. Non-native annual grasslands occur in the Coverage Area along the margins of the Ellwood North, Sandpiper, Ellwood West, and Ellwood Main aggregation sites, north of the Ocean Meadows site, and areas in between groves.

NATIVE GRASSLANDS

Native grassland in the Coverage Area are present south of the Ellwood Main and Ellwood East aggregation sites, and west of the Ocean Meadows aggregation site and windrow. These areas contain at least 10 percent cover of native grassland species, particularly purple needlegrass, and are consistent with the *Stipa [=Nassella] pulchra* Herbaceous Alliance in MCV2 (Sawyer et al. 2009). These areas are designated ESHA in the General Plan and included on the 2018 CDFW Sensitive Natural Communities list. Restoration of native grasslands in the vicinity of the Coverage Area has been ongoing, beginning with drill seeding over most of the non-native grassland habitats at Ellwood Mesa Open Space in 2008 (City of Goleta 2011a).

COASTAL SCRUB

In the Coverage Area, coastal scrub vegetation is primarily coyote brush scrub habitat consistent with the *Baccharis pilularis* Shrubland Alliance, with small areas of California sagebrush scrub consistent with the *Artemisia californica* Shrubland Alliance in MCV2 (Sawyer et al. 2009). Intermixed with coyote brush are other native shrubs common to coastal scrub habitats, particularly saw-tooth golden bush (*Hazardia squarrosa*) and coastal goldenbush (*Isocoma menziesii*). Non-native weedy species are also present along margins and between shrubs, including annual grasses, fennel, and Italian thistle (*Carduus pycnocephalus*). In the Coverage Area, coyote brush scrub is common adjacent to the Ellwood North, Sandpiper, and Ellwood West groves, as well as along Devereux Creek. This community is not identified as sensitive by the CDFW (2018b).

California sagebrush scrub occurs in small patches on banks of a tributary to Devereux Creek adjacent to The Bluffs development. These patches consist of a mixture of sagebrush (*Artemisia californica*) with toyon, coyote brush, and coast live oak (*Quercus agrifolia*) seedlings. Coast morning glory (*Calystegia macrostegia cyclostegia*) is also present. These patches are not extensive and the majority of coastal scrub on the mesa consists of coyote brush scrub. This community is not identified as sensitive by the CDFW (2018b).

Coastal scrub in the Coverage Area is designated as ESHA as illustrated on Figure 3.4-2 of the Goleta General Plan and shown on Figure 6.

BLUFF SCRUB

Bluff scrub is present in the southeast tip of the Coverage Area adjacent to a patch of eucalyptus grove. Vegetation is primarily California sagebrush scrub (*Artemisia californica* Shrubland Alliance) and quail bush scrub (*Atriplex lentiformis* shrubland alliance). Bluff scrub areas are designated as ESHA in the General Plan; however, neither of these vegetation alliances is considered sensitive by CDFW (2018b). Coastal bluff scrub is restricted to steep slopes and faces of coastal bluffs, and has limited range.

ARROYO WILLOW THICKETS

Portions of Devereux Creek and two unnamed tributaries flow through the Coverage Area. These creeks support some arroyo willow thickets (*Salix lasiolepis* Shrubland Alliance), with scattered young sycamore (*Platanus racemosa*), cottonwood (*Populus trichocarpa*), coast live oak (*Quercus agrifolia*), and box elder (*Acer negundo*) trees, some of which were planted as part of restoration efforts in the past. Arroyo willow thickets occur intermittently along Devereux Creek and one of the unnamed tributaries in the Coverage Area, in areas outside the eucalyptus canopy. Arroyo willow thickets are designated as ESHA in the General Plan, and are included on the 2018 CDFW Sensitive Natural Communities list (CDFW 2018b).

Sensitive Habitats

Sensitive habitats include sensitive natural communities tracked by CDFW, designated critical habitats for species listed under the federal ESA, and other locally designated ESHAs. Sensitive habitats in the Coverage Area include vernal pools (ESHA), riparian habitat adjacent to Devereux Creek (ESHA), arroyo willow thickets (CDFW sensitive), bluff scrub (ESHA), coastal scrub (ESHA), native grasslands (ESHA and CDFW sensitive) and eucalyptus groves (ESHA due to monarch and raptor habitat value).

US FISH AND WILDLIFE SERVICE CRITICAL HABITATS

No designated critical habitat for threatened or endangered species occurs in the Coverage Area. The nearest federally designated critical habitat is for Western snowy plover (*Charadrius alexandrinus nivosus*) on Devereux Beach (Unit CA 34); it extends along the beach at the foot of Ellwood Mesa bluffs outside of the Coverage Area (USFWS 2018a).

LOCALLY DESIGNATED ENVIRONMENTALLY SENSITIVE HABITATS

In the Conservation Element of the General Plan, coastal bluff scrub, native grassland, vernal pools, riparian habitat habitats, and monarch aggregation/raptor roost and nest sites in the Coverage Area are identified as ESHAs (City of Goleta 2017a). Figure 4-1 of the Goleta General Plan Conservation Element identifies and maps these ESHAs. Figure 6 shows these areas in the Coverage Area. Unmapped ESHAs may also be present where native grassland and riparian restoration efforts have expanded presence of these sensitive vegetation types. Due to the MBHMP's focus on monarch butterfly habitat, the vast majority of the Coverage Area is designated ESHA and therefore considered a sensitive habitat.

Special-status Species

For the purposes of this document, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the federal Endangered Species Act (7 U.S.C. § 136, 16 U.S.C. § 1531 et seq.); those listed or candidates

for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act or Native Plant Protection Act; animals designated at the State level as "Fully Protected," "Species of Special Concern," "Special Animals" or "Watch List"; those species on the Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2018c), and species included in the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California, Eighth Edition (CNPS 2018). Section 15125(a) of the State CEQA Guidelines, also directs that special emphasis should be placed on resources that are rare or unique to the region. For example, plants listed by the Santa Barbara Botanic Garden (SBBG) or the Goleta Slough Ecosystem Management Plan may be considered locally sensitive.

The potential for each special status species to occur in the Coverage Area was evaluated according to the following criteria:

- **None.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), or the species is conspicuous and would have been identifiable on site if present (e.g., oak trees).
- **Low Potential.** The species is not likely to be found on the site. Either few of the habitat components meeting the species requirements are present, the majority of habitat on and adjacent to the site is unsuitable or of very poor quality, or protocol surveys were conducted and did not detect the species.
- **Moderate Potential**. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** The species was observed on the site or has been recorded (e.g., California Natural Diversity Database [CNDDB], other reports) on the site recently (within the last 5 years).

SPECIAL-STATUS PLANTS

A five-mile radius search of CNDDB and a six U.S. Geological Survey (USGS) 1:24,000 7.5-minute quadrangle search of the CNPS Online Inventory records identified 21 special-status plant species that have been previously documented in the Coverage Area. Of these, 11 special-status plant species are present or have a high or moderate potential to occur in the Coverage Area based on habitat suitability. One special-status plant species, Santa Barbara honeysuckle (*Lonicera subspicata*), was previously identified in existing biological surveys for this site and is shown on Figure 4-1 of the General Plan Conservation Element, though this location is not currently included in the CNDDB. Table 4 shows the status and habitat requirements for each of these species, with an assessment of their potential to occur in the Coverage Area.

Table 4 Special-status Plant Species in the Vicinity of the Coverage Area

Scientific Name	Status: Fed/State ESA; CRPR; G-Rank/S-Rank	Habitat Requirements	Potential to Occur/Coverage Area Suitability Observations
Amsinckia douglasiana Douglas' fiddleneck	–/– CRPR 4.2 G4/S4	Annual herb. Blooms Mar.-May. Valley and foothill grassland, oak woodland. 0-1950 m (0-6400 ft.)	**Moderate.** Suitable habitat is present in native grassland in the Coverage Area. Could occur.
Arctostaphylos refugioensis Refugio manzanita	–/– CRPR 1B.2 G3/S3	Perennial evergreen shrub. Blooms Dec.-May. Chaparral. On sandstone. 300-820m (985-2690 ft.)	**None.** Appropriate chaparral habitat and sandstone substrates are not present in the Coverage Area. Not expected to occur.
Atriplex coulteri Coulter's saltbush	–/– CRPR 1B.2 G3/S1S2	Perennial herb. Blooms Mar.-Oct. Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. 10-440m (30-1445 ft.)	**Moderate.** Suitable habitat is present in bluff scrub and native grassland in the Coverage Area. Could occur.
Atriplex serenana var. davidsonii Davidson's saltscale	–/– CRPR 1B.2 G5T1/S1	Annual herb. Blooms Apr.-Oct. Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250m (10-820 ft.)	**Low.** Suitable habitat is present in bluff scrub on Ellwood Mesa. Not expected to occur in Coverage Area.
Calandrinia breweri Brewer's calandrinia	–/– CRPR 4.2 G4/S4	Annual herb. Blooms Mar.-Jun. Chaparral, coastal scrub. Sandy or loamy soils. Disturbed sites, burns. 150-1200m (490-3940 ft.)	**High.** Suitable habitat is present in coastal scrub and disturbed areas in the Coverage Area. Could occur.
Calochortus catalinae Catalina mariposa lily	–/– CRPR 4.2 G3G4/S3S4	Perennial bulbiferous herb. Blooms Feb.-Jun. Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush. 30-700m (100-2295 ft.)	**High.** Appropriate fine-textured soils are present in some areas, associated with coastal scrub and grassland habitats. Could occur.
Calochortus fimbriatus Late-flowered mariposa-lily	–/– CRPR 1B.3 G3/S3	Perennial bulbiferous herb. Blooms June-Aug. Chaparral, cismontane woodland, riparian woodland. Dry, open coastal woodland, chaparral; on serpentine. 275-1905 m (900-6250 ft.)	**None.** Appropriate serpentinitic soils are not present. Not expected to occur.
Centromadia parryi ssp. australis Southern tarplant	–/– CRPR 1B.1 G3T2/S2	Annual herb. Blooms May-Nov. Marshes and swamps (margins), valley and foothill grassland. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-425m (0-1395 ft.)	**High.** Suitable habitat is present in mesic sites in grassland, along drainage edges and vernal pool margins in the Coverage Area. Could occur.
Chorizanthe palmeri Palmer's spineflower	–/– CRPR 4.2 G4/S4	Annual herb. Blooms April-Aug. Occurs on rocky serpentinite-influence sites in chaparral, valley and foothill grassland, and woodland. 60-700 m.	**None.** Appropriate serpentinitic sites and rocky areas are not present. Not expected to occur.

Scientific Name	Status: Fed/State ESA; CRPR; G-Rank/S-Rank	Habitat Requirements	Potential to Occur/Coverage Area Suitability Observations
Horkelia cuneata var. puberula mesa horkelia	–/– CRPR 1B.1 G4T1/S1	Perennial herb. Blooms Feb.-Sept. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810m (230-2655ft).	**None.** Appropriately sandy soils are not present. Not expected to occur.
Juncus luciensis Santa Lucia dwarf rush	–/– CRPR 1B.2 G3/S3	Annual herb. Blooms Apr.-Jul. Vernal pools, meadows, lower montane coniferous forest, chaparral, Great Basin scrub. Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. 300-2040m (985-6690ft).	**Low.** Suitable habitat is present in mesic sites along drainage edges and vernal pool margins in Ellwood Mesa Open Space. The Coverage Area is slightly below reported elevation range, but species could potentially occur.
Lasthenia conjugens Contra Costa goldfields	Endangered/– CRPR 1B.1 G1/S1	Annual herb. Blooms Mar.-Jun. Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 1-470m (3-1540ft).	**High.** Suitable habitat is present in mesic sites in grassland habitat and vernal pool margins in the Coverage Area. Could occur.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	–/– CRPR 1B.1 G4T2/S2	Annual herb. Blooms Feb.-Jun. Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400m (3-4595ft).	**High.** Suitable habitat is present in mesic sites in grassland habitat and vernal pool margins in the Coverage Area. Could occur.
Layia heterotricha pale-yellow layia	–/– CRPR 1B.1 G2/S2	Annual herb. Blooms Mar.-Jun. Cismontane woodland, pinyon-juniper woodland, valley and foothill grassland. Alkaline or clay soils; open areas. 270-1365m (885-4480ft).	**Moderate.** Moderately suitable habitat is present in grassland habitat. Could occur.
Lonicera subspicata var. subspicata Santa Barbara honeysuckle	–/– CRPR 1B.2 G5T2?/S2?	Perennial evergreen shrub. Blooms May-Feb. Chaparral, cismontane woodland, coastal scrub. 35-1000m (115-3280ft).	**Present.** Previously reported in the Coverage Area. Coastal scrub in the Coverage Area is suitable; the CNDDB and General Plan report this species in the Coverage Area.
Monardella sinuata ssp. sinuata southern curly-leaved monardella	–/– G3T2/S2 1B.2	Coastal dunes, coastal scrub, chaparral, cismontane woodland. Sandy soils. 20-305 m. annual herb. Blooms Apr-Sep	**Moderate.** Sandy soils and coastal scrub present in Coverage Area. Could occur.
Phacelia hubbyi Hubby's phacelia	–/– CRPR 4.2 G4/S4	Perennial herb. Blooms Feb.–May, occurs in sandy sites with chaparral, coastal scrub near the coast between 60 - 500 meters elevation.	**None.** Appropriately sandy soils and chaparral are not present. Not expected to occur.
Phacelia ramosissima var. austrolitoralis south coast branching phacelia	–/– CRPR 3.2 G5?T3Q/S3	Perennial herb. Blooms Mar.-Aug. Sandy, sometimes rocky substrate. Chaparral, coastal dunes, coastal scrub, and coastal salt marshes and swamps. 5-300 m	**None.** Appropriate sandy or gravelly substrates are not present. Not expected to occur.

Scientific Name	Status: Fed/State ESA; CRPR; G-Rank/S-Rank	Habitat Requirements	Potential to Occur/Coverage Area Suitability Observations
Scrophularia atrata black-flowered figwort	–/– CRPR 1B.2 G2?/S2?	Perennial herb. Blooms Mar.-Jul. Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub. Sand, diatomaceous shale, and soils derived from other parent material; around swales and in sand dunes. 10-250m (30-820ft).	**None.** Appropriate sandy soils or soils derived from diatomaceous shales are not present. Not expected to occur.
Suaeda esteroa estuary seablite	–/– CRPR 1B.2 G3/S2	Perennial herb. Blooms May-Jan. Marshes and swamps. Coastal salt marshes in clay, silt, and sand substrates. 0-5m (0-15ft).	**None.** Coastal salt marsh habitat is not present in the Coverage Area. Not expected to occur.
Thelypteris puberula var. sonorensis Sonoran maiden fern	–/– CRPR 2B.2 G5T3/S2	Perennial rhizomatous herb. Blooms Jan.-Sep. Meadows and seeps. Along streams, seepage areas. 50-550m (165-1805ft).	**Moderate.** Moderately appropriate habitat is present in riparian woodland. Could occur.

FC = Federal Candidate Species
FE = Federally Endangered
FS=Federally Sensitive
ST = State Threatened
SR = State Rare
SS=State Sensitive
G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind3.
SSC = CDFW Species of Special Concern
SA = CDFW Special Animal
FP = Fully Protected
WL = Watch List
Source: CNDDB 2018, CNPS 2018

Special status plants could occur in the Coverage Area, mainly in native habitats along the margins. However, special-status plants are not expected to occur in eucalyptus groves due to lack of suitable habitat. Eucalyptus groves typically have deep accumulations of leaf litter and shed bark, which are not conducive to native plant growth (Cal-IPC 2018, Strathman 2004), and substantial accumulations of leaf litter and debris have been documented in the groves on Ellwood Mesa. Additionally, many other invasive, non-native species documented as understory to the eucalyptus groves out-compete native vegetation, including rare native plants (CNPS 1996).

Based on the analysis in Table 4, one special-status plant species, Santa Barbara honeysuckle, is known to be present with the Coverage Area in coastal scrub habitat. In addition, the nine special-status plant species listed below have a moderate or high potential to occur in native grasslands, coastal scrub, bluff scrub or vernal pools in the Coverage Area:

- Douglas' fiddleneck
- Catalina mariposa lily
- Southern tarplant
- Contra Costa goldfields
- Coulter's goldfields
- Pale-yellow layia
- Sonoran maiden fern

- Coulter's saltbush
- Brewer's calandrinia

The majority of these species are not formally protected by laws or regulations, but are identified as rare plants by the CNPS. The Contra Costa goldfields, however, is a federally listed endangered plant. Activities associated with implementation of the MBHMP are focused primarily on areas with a high degree of disturbance and non-native vegetation (eucalyptus groves), and special status plants are not expected to occur in these areas due to the highly disturbed nature of the area. However, special status plants may occur in native habitats adjacent to eucalyptus groves in the Coverage Area.

SPECIAL-STATUS WILDLIFE

A search of CNDDB records identified 28 special-status wildlife species in a five-mile radius of the Coverage Area (Table 5). Four of the identified special-status wildlife species are present or have a high or moderate potential to occur in the Coverage Area. The potential to occur for each special-status species in or near the Coverage Area is discussed following Table 5.

Table 5 Special-status Animal Species in the Vicinity of the Coverage Area

Scientific Name Common Name	Status Fed/State ESA CDFW G-Rank/S-Rank	Habitat Requirements	Coverage Area Suitability Observations
Invertebrates			
Bombus crotchii Crotch bumble bee	None/None G3G4/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	**Low.** Plant food genera are not known to occur.
Cicindela hirticollis gravida sandy beach tiger beetle	None/None G5T2/S2	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	**Low.** Suitable habitat is limited to the beach, outside the Coverage Area.
Coelus globosus globose dune beetle	None/None G1G2/S1S2	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	**Low.** Suitable habitat is limited to the beach, outside the Coverage Area.
Danaus plexippus monarch butterfly	None*/None SA G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Present.** Species is present.
Tryonia imitator mimic tryonia (=California brackishwater snail)	None/None G2/S2	Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	**Low.** Appropriate lagoon/ perennial stream mouth with perennial water is not present in the Coverage Area.

Scientific Name Common Name	Status Fed/State ESA CDFW G-Rank/S-Rank	Habitat Requirements	Coverage Area Suitability Observations
Amphibians			
Rana draytonii California red-legged frog	Threatened/ None SSC G2G3/S2S3	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. must have access to estivation habitat.	**Moderate.** Suitable seasonal breeding pools are not present in the Coverage Area; however, Devereux Creek could serve are a movement corridor.
Taricha torosa Coast range newt	None/None SSC G4/S4	Coastal drainages from Mendocino County to San Diego County.	**None.** Appropriate deep streams with seasonal pools are not present in the Coverage Area.
Reptiles			
Emys marmorata western pond turtle	None/None SSC G3G4/S3	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6,000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**None.** Appropriate deep streams with seasonal pools are not present in the Coverage Area.
Fish			
Eucyclogobius newberryi tidewater goby	Endangered/ None SSC G3/S3	Brackish water habitats along the Calif coast from Agua Hedionda Lagoon, San Diego Co. to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water & high oxygen levels.	**None.** Appropriate lagoon/perennial stream mouth with perennial water are not present in Coverage Area.
Birds			
Accipiter cooperii Cooper's hawk	None/None WL G5/S4	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	**Present.** Species is present, and one documented nest is known from Ellwood Mesa.
Agelaius tricolor tricolored blackbird	None/ Threatened SSC G2G3/S1S2	Freshwater marsh, swamp, wetlands. Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	**None.** Appropriate freshwater marsh habitat is not present in Coverage Area.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	None/None WL G5T3/S3	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	**Moderate.** Appropriate habitat in Coverage Area is limited.
Ammodramus savannarum grasshoper sparrow	None/None SSC G5/S3	Valley and foothill grassland. Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	**Low.** Appropriate grassland habitat is limited in areas in Coverage Area.

Scientific Name Common Name	Status Fed/State ESA CDFW G-Rank/S-Rank	Habitat Requirements	Coverage Area Suitability Observations
Ardea alba great egret	None/None G5/S4	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	**Low (breeding).** Flyover or roosting individuals could be present, but low potential to nest in the Coverage Area. Suitable nesting habitat present on adjacent property at the Devereux Slough.
Ardea herodias great blue heron	None/None G5/S4	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	**Low (breeding).** Flyover or roosting individuals could be present, but low potential to nest in the Coverage Area. Suitable nesting habitat present on adjacent property at the Devereux Slough.
Athene Cunicularia Burrowing Owl	None/None SSC G4/S3	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	**Low.** Appropriate grassland habitat is limited in the Coverage Area.
Buteo regalis ferruginous hawk	None/None WL G4/S3S4	Open grasslands, sagebrush flats, desert scrub, low foothills & fringes of pinyon-juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	**Low.** Ferruginous hawk may winter in open areas on the Ellwood Mesa, outside the Coverage Area, but Goleta is not in the breeding range.
Charadrius alexandrinus nivosus western snowy plover	Threatened/ None SSC G3T3/S2S3	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**Low.** Documented plover habitat is present along the shore, at the base of Ellwood Mesa to the south; suitable nesting habitat is not present on Ellwood Mesa or in the Coverage Area.
Elanus leucurus white-tailed kite	None/None FP G5/S3S4	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Present.** Species is present. Several nests have been documented on the Ellwood Mesa in eucalyptus groves.
Eremophila alpestris actia California horned lark	None/None WL G5T4Q/S4	Bare dry ground and areas of short sparse vegetation. Prairies, deserts, tundra, beaches, dunes, and heavily grazed pastures..	**Low.** Limited suitable bare ground habitat in the Coverage Area.

Scientific Name Common Name	Status Fed/State ESA CDFW G-Rank/S-Rank	Habitat Requirements	Coverage Area Suitability Observations
Passerculus sandwichensis beldingi Belding's savannah sparrow	None/ Endangered G5T3/S3	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in Salicornia on and about margins of tidal flats.	**None.** Appropriate salt marsh habitat is not present at Ellwood Mesa, including the Coverage Area; however salt marsh is present along Devereux Slough on the adjacent open space property.
Pelecanus occidentalis californicus California brown pelican	Delisted/ Delisted FP G4T3T4/S3	Colonial nester on coastal islands just outside the surf line.	**Low.** Appropriate foraging habitat is present at the beach on the southern boundary of Ellwood Mesa outside the Coverage Area. May fly past the site.
Phalacrocorax auritus double-crested cormorant	None/None WL G5/S4	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state.	**Low.** Appropriate foraging and roosting habitat is present at the beach outside the Coverage Area. May fly past the site.
Rallus longirostris levipes light-footed clapper rail	Endangered/ Endangered FP G5T1T2/S1	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans.	**None.** Appropriate salt marsh habitat is not present at Ellwood Mesa, including the Coverage Area; however salt marsh is present along Devereux Slough on the adjacent open space property.
Stemula antillarum browni *California least tern*	Endangered/ Endangered FP G4T2T3Q/S2	Coastline. Nests along the coast from San Francisco Bay south to northern Baja California.	**Low.** Appropriate foraging habitat is present at the beach, south of the southern boundary of the Coverage Area.
Mammals			
Antrozous pallidus pallid bat	None/None SSC G5/S3	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	**None (roosting).** Appropriate rocky areas for roosting are not present in the Coverage Area. Foraging habitat is present.
Corynorhinus townsendii Townsend's big-eared bat	None/None SSC G3G4/S2	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. extremely sensitive to human disturbance.	**None (roosting).** Foraging habitat is present, but suitable roosts are not present.
Lasiurus blossevilii Western red bat	None/None SSC G5/S3	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	**None (roosting).** Foraging habitat is present, but suitable roosts are not present.

Scientific Name Common Name	Status Fed/State ESA CDFW G-Rank/S-Rank	Habitat Requirements	Coverage Area Suitability Observations

Regional Vicinity refers to occurrence in the quadrangle containing the Coverage Area and/or in the surrounding 5 quadrangles.

FT = Federally Threatened SE = State Endangered

FC = Federal Candidate Species ST = State Threatened

FE = Federally Endangered SR = State Rare

FP = Fully Protected SSC = CDFW Species of Special Concern

WL = Watch List SA = CDFW Special Animal

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind3.

*Monarch butterfly is currently under review for potential federal ESA listing

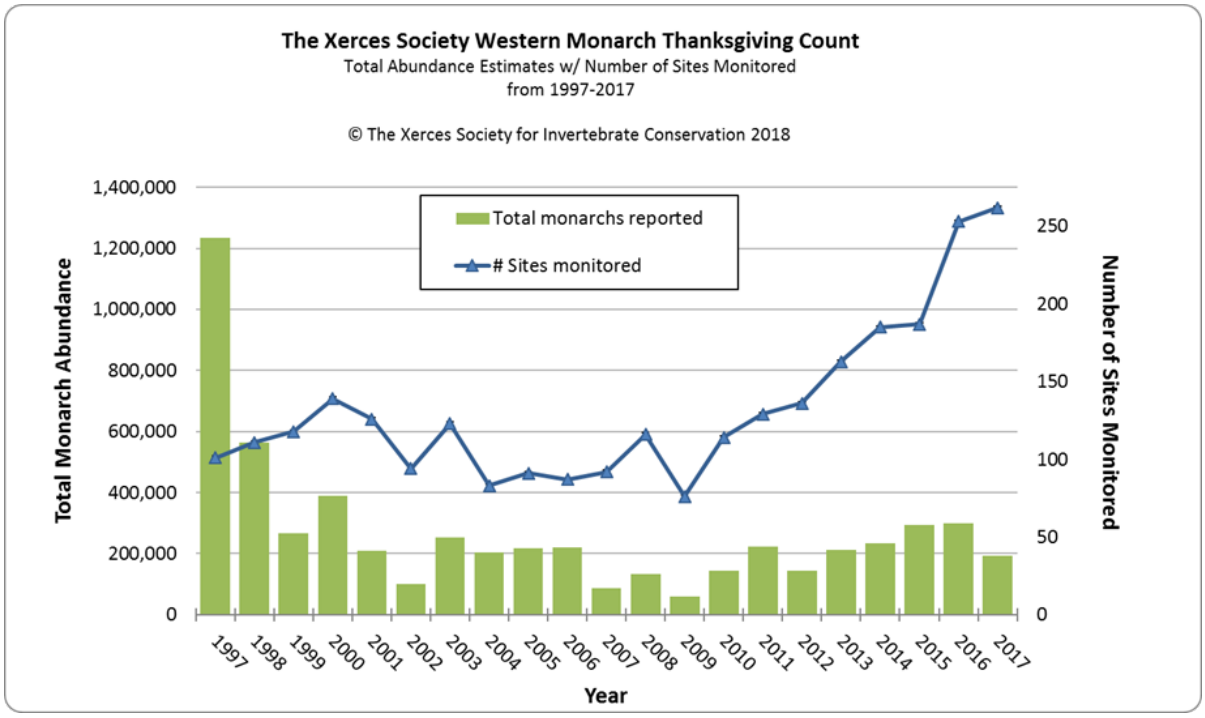
Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is a conspicuous black and orange butterfly that occurs in the United States, Mexico, northern South America, southwestern Europe, and Oceania. In the United States the species occurs as two populations, separated by the Rocky Mountains. Both of these populations are migratory, and most of the butterflies in the western population (which overlaps the Coverage Area) spend the summer months distributed across habitats between the Rocky Mountains and the coast, and migrate to sheltered sites along the California coast to aggregate and pass the winter. Overwintering sites are predominately in dense eucalyptus groves, and breeding sites are variable but characterized by the presence of milkweed (*Asclepias* spp.), the larval host plant. The migratory phenomenon causes butterflies to become concentrated at suitable overwintering sites, making overwintering habitat the single most valuable resource needed to complete the monarch's life cycle. The Ellwood Mesa complex of eucalyptus trees is the largest contiguous area of preserved monarch aggregation habitat in Southern California, and the aggregation sites in the Coverage Area provide significant habitat value to the monarch butterfly population. Monarchs typically arrive in the Coverage Area in October and depart between late February and April, depending on conditions. (Warmer temperatures lead to earlier departures).

The monarch butterfly population in California has declined at least 74 percent since the 1990s (Pelton et al. 2016) and by over 95 percent since the 1980s, and the migratory population is at a high risk of extinction (The Xerces Society 2017). The monarch butterfly is listed on the CDFW's Special Animals List, with aggregation roosts designated as imperiled to vulnerable in the state (CDFW 2018c). Currently, the species is under federal review for potential listing under the federal ESA, and the USFWS plans to make its determination of whether this species warrants federal ESA listing by June 30, 2019. Monarch butterfly aggregation sites, including historic aggregation sites that are no longer used, are designated as ESHA in the City's General Plan.

Consistent with the range-wide trend, the western monarch butterfly population has declined throughout its overwintering range in California. This decline is statistically significant despite the fact that the size of the western migrating monarch population fluctuates annually based on a number of environmental factors, including rainfall and milkweed availability. Figure 9 shows the western monarch population trends along with the number of sites counted during the Thanksgiving Count, a yearly effort of volunteer citizen monitors to collect data on the status of monarch populations overwintering along the California coast. These data show that in recent years, the number of sites monitored has increased dramatically while the number of monarchs encountered has remained relatively constant. This marked decrease in observations per unit effort indicates that monarch butterfly abundance has been reduced.

Figure 9 Western Monarch Population, 1997-2017



The long-term decline of the monarch population in California may be attributed to the loss of milkweed and nectar plants (caused by herbicides, drought, and removal), loss and degradation of overwintering groves (removal and aging) and other factors including use of insecticides, disease, and fluctuations in weather and temperatures associated with climate change (The Xerces Society 2017). Scientists, wildlife agencies, and conservation advocates are calling for the protection of this species through the conservation and management of breeding, nectar, and overwintering habitat.

In 2016, The Xerces Society evaluated the overwintering sites in California and created a list of the top 50 priority sites (Pelton et al. 2016). This list prioritizes sites for protection and active management. The highest rank is for sites with the greatest declines that still host the largest proportion of the remaining western overwintering population. These sites have suffered population decline but still hold potential for recovery to support the monarch population. The Xerces Society states that these sites demand the most urgent attention. Ellwood Main is #4 on the list with a decline of 58 percent from the 1997-2001 average, and Ellwood North is #45 on the list with a decline of 98.3 percent. Having two of Ellwood Mesa's five overwintering locations included in this list of 50 shows the importance of this area for the recovery of the migratory monarch butterfly population.

Consistent with the pattern of declining monarch populations statewide, the population at Ellwood Main is in decline, but also fluctuates greatly. Figure 4 shows the annual peak population at Ellwood Main between 1989 and 2018. The overwintering population at Ellwood Mesa between 2013 and 2018 has shown the lowest recorded population numbers for six consecutive years since 1989. Additionally, recent data collected during the 2018 winter season showed an all-time low peak population of 230 monarch butterflies observed. Despite recent population declines, the Ellwood Mesa aggregation sites remain important for the western population of the monarch butterfly and accordingly, agencies and resource experts maintain that management of the eucalyptus trees that support the butterflies are paramount to continued overwintering by the species.

California Red-legged Frog

California red-legged frog (CRLF; *Rana draytonii*) is a federally listed threatened amphibian that requires aquatic habitat for breeding, and typically occurs in or near permanent sources of deep water with emergent vegetation. Recent reports of CRLF from the vicinity include sightings in Bell Canyon and Winchester Canyon, Eagle Canyon Creek, and Tecolote Creek. Sandpiper Golf Course, which contains perennial pools, separates the Bacara resort site from the Ellwood Mesa. CRLF are known to move overland for distances up to one mile, and could move from Tecolote Creek to golf course ponds, and subsequently through Devereux Creek at Ellwood Mesa. CRLF are not reported from Devereux Creek currently, and perennial water is not present on Ellwood Mesa most years, but the creek corridor could serve as a movement corridor for CRLF during the rainy season.

Raptors and Vulture

Nesting and roosting habitat for raptors and vultures, including white-tailed kite, Cooper's hawk, and turkey vulture, are protected as ESHA under Policy CE 8 of the General Plan (City of Goleta 2017a). Small vulture roosts occur in the eucalyptus groves on Ellwood Mesa, particularly Ellwood Main. Foraging territories typically encompass several miles. Turkey vultures (*Cathartes aura*) are frequently observed foraging and/or roosting throughout the Coverage Area. Cooper's hawks (*Accipeter cooperii*) are reported to breed at Ellwood Mesa occasionally, with a documented nest in the Sandpiper grove.

White-tailed kite (*Elanus leucurus*) is a State "Fully Protected" species, and their nest sites are thus protected year-round, even when not in use. The species occurs as a year-round resident breeder at Ellwood Mesa. Seven nest sites were previously documented at Ellwood Mesa. Observations suggest that the Ellwood Mesa Open Space Plan Area serves as a primary foraging territory for kites nesting in the vicinity (City of Goleta 2014c, Storrer 2011). Kites have been recorded nesting in the eucalyptus trees in and surrounding the Coverage Area (City of Goleta 2017a, Santa Barbara Audubon Society 2018). A kite nest was observed in the vicinity of Ellwood North during monarch butterfly population surveys in January and February 2018 by a Rincon biologist. Great horned owls are known to breed in the Ellwood Mesa and are regularly observed by visitors.

Nesting Birds

The Coverage Area contains habitat that can support other nesting birds, including raptors, protected under the California Fish and Game Code Section 3503. Native and non-native trees and woody shrubs are present in and adjacent to the Coverage Area that could provide suitable nesting habitat. As previously stated, known raptor nests are documented in eucalyptus groves at Ellwood Mesa Open Space, and nests of passerine birds are expected in grasslands, scrub, and riparian habitats.

Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are defined generally as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging areas, or they may be regional in nature. The Ellwood Mesa Open Space is situated between open space managed by the University of California, Santa Barbara, to the east, and a golf course to the west. It provides an important linkage in a movement corridor between the eastern natural area and undeveloped lands north and west of the City limits. Devereux Creek and its northern tributaries are the last remaining physical linkages between the Ellwood Mesa Open Space Area and

relatively undisturbed and intact habitats in the foothills to the north. However, these linkages are tenuous and may serve only as semi-permeable movement corridors for many species (City of Goleta 2004). The adjacent golf course, which has large areas of vegetation and a relatively low proportion of hardscape and structures, may also serve as a movement corridor for wildlife that cross the Ellwood Mesa Open Space, particularly during night hours.

Although bird flyways are not traditionally considered wildlife movement corridors, Devereux Slough, located southeast of the Coverage Area, is an important habitat for bird species during migration along the Pacific Flyway. Many bird species use this area as an annual stopover location for several days of rest and feeding prior to continuing migration to their seasonal destinations (City of Goleta 2004). Ellwood Mesa Open Space, including the Devereux Creek riparian corridor within the Coverage Area, is also part of the Goleta Coast Important Bird Area, designated by the National Audubon Society. It is considered to be globally important due to its location on the Pacific Flyway.

Jurisdictional Drainages and Wetlands

As described in Policy CE 3.1 in the City's General Plan, wetlands are any area that meets the definition of a wetland as defined by the California Coastal Commission, CDFW, and the USFWS using presence of a single indicator (hydrophytic vegetation, hydric soils, or wetland hydrology). Drainages and wetlands occur in the Coverage Area, and have been mapped during previous biological studies. Based on those studies, potentially jurisdictional areas in the Coverage Area consist of Devereux Creek, which crosses the Coverage Area from east the west, its tributaries, and associated riparian vegetation. Additionally, the limited vernal pools that have been previously mapped in the Coverage Area are likely wetlands as defined by the City. These features are illustrated on Figure 7.

Local Policies

Policies in the Conservation Element of the City's General Plan reinforce State and federal regulations that protect aquatic habitats and listed species, and apply additional local restrictions to identify, preserve, and protect the City's biological resources. Protected resources include ESHAs, creeks and riparian Stream Protection Areas, wetlands, monarch butterfly aggregation habitat, certain terrestrial habitat areas, marine habitat areas, beach and shoreline habitats, special-status species, native woodlands, and the urban forest, among others. Below is a discussion of the biological resource policies in the Conservation Element that apply to the MBHMP.

ENVIRONMENTALLY SENSITIVE HABITAT AREA

The objective of General Plan Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy, is to "identify, preserve, and protect the city's natural heritage by preventing disturbance of ESHAs." Policy CE 1.2 designates ESHA in the City of Goleta, which are shown on Figure 4-1 of the General Plan and include the following located in the Coverage Area (Figure 6): creek and riparian areas; wetland, such as vernal pools; coastal bluff scrub; coastal sage scrub; native grassland; monarch butterfly aggregation sites; and nesting and roosting sites of various species of raptors. Policy 1.6 establishes restrictions for development in ESHAs and their buffers. The policy restricts all development inside ESHA with a number of exceptions including resource protection and enhancement projects. Lastly, Policy CE 1.10, prohibits the use of insecticides, herbicides, artificial fertilizers, and other toxic substances in an ESHA except where necessary to protect or enhance the ESHA itself.

As illustrated in Figure 6, a large portion of the Coverage Area is designated as ESHA for monarch butterfly aggregation. In addition, native grassland, vernal pool, bluff scrub, and riparian EHSAs are in the Coverage Area.

RIPARIAN/WETLANDS/VERNAL POOLS

The objective of General Plan Policy CE 2: Protection of Creeks and Riparian Areas is to "Enhance, maintain, and restore the biological integrity of creek courses and their associated wetlands and riparian habitats as important natural features of Goleta's landscape." Policy CE 2.1 designates certain creeks in Goleta, including the portion of Devereux Creek in the Coverage Area, as an ESHA. Policy CE 2.2 establishes a 100-foot wide Streamside Protection Area around all creeks, although the width can be reduced to 25 feet on a case-by-case basis, if certain criteria are met. Policy CE 2.3 establishes a list of allowable uses and activities in streamside protection areas, including fencing, existing roads, driveways, utilities, structures, drainage improvements, foot trails, resource restoration and enhancement, low impact interpretive and public access signage, and nature education and research activities. Policy CE 2.6 specifies restoration activities for improving degraded creek resources. Policy CE2.6(d) specifically states "restoration of native riparian vegetation and removal of exotic plant species shall be implemented, unless such plants provide critical habitat for monarch butterflies, raptors, or other protected animals".

The objective of General Plan Policy CE 3: Protection of Wetlands is to "preserve, protect, and enhance the functions and values of Goleta's wetlands." Policy CE 3.2 designates all wetlands as ESHA and Policy 3.4 sets protection standards for wetlands prohibiting filling, diking, and dredging unless certain criteria can be demonstrated and sets a wetland buffer of 100 ft. which can be reduced to 50 ft. in certain circumstances. Policy 3.8 states that vernal pools shall be protected and preserved.

MONARCH BUTTERFLIES

General Plan Policy CE 4: Protection of Monarch Butterfly Habitat Areas is intended to "preserve, protect, and enhance habitats for monarch butterflies in Goleta, including existing and historical autumnal and winter roost or aggregation sites, and promote the long-term stability of over-wintering butterfly populations." Policy CE 4.2 designates monarch butterfly ESHAs, which include the eucalyptus groves in the Coverage Area (referred to as the "Ellwood Complex" in the General Plan). Policy CE 4.4 restricts development in monarch butterfly ESHA, sets forth development standards adjacent to monarch butterfly ESHA. Subsection "c" of Policy CE 4.4 specifically states "removal of vegetation within monarch ESHAs shall be prohibited, except for minor pruning of trees or removal of dead trees and debris that are a threat to public safety." Policy CE 4.5 defines a protective buffer (100 feet wide in most cases) around active and historic aggregation sites, and restricts the activities that may occur in the butterfly ESHA buffer.

PROTECTED TREES

The City of Goleta does not have a specific tree protection plan or ordinance, but the General Plan Conservation Element and the GUFMP (City of Goleta 2017b), regulate protection of trees in the city. The objective of General Plan Policy CE 9: Protection of Native Woodlands is "to maintain and protect existing native trees and woodlands as a valuable resource needed to support wildlife and provide visual amenities." Protected trees for areas of new development are defined (Policy CE 9.1) as native oaks (*Quercus* spp.), walnut (*Juglans californica*), sycamore (*Platanus racemosa*),

cottonwood (*Populus* spp.), willows (*Salix* spp.), or other native trees not otherwise protected in ESHAs.

The objective of General Plan Policy CE 14: Preservation and Enhancement of Urban Forest is to "protect, preserve, and enhance Goleta's urban forest for its aesthetic, visual, and environmental benefits to the community." Trees on public lands are considered valuable resources to be conserved as part of the Goleta urban forest. Policy CE 14.7 identifies a City effort to consider an Urban Forest Ordinance. The GUFMP refers to open spaces as potential planting sites for trees, but does not specifically discuss management of the Ellwood eucalyptus groves.

In 2017, a tree inventory in the eucalyptus groves was completed to investigate safety concerns over the catastrophic die off of eucalyptus trees in the Coverage Area. The survey identified over 1,200 trees in the eucalyptus groves which are dead, with hundreds more that were highly degraded and dying (Althouse and Meade, Inc. 2017). Following this study in 2017, 27 trees which posed a public safety risk were removed, and two were pruned, under an emergency permit from the California Coastal Commission. However, the majority of the dead trees were not addressed or abated, and remain on site.

The MBHMP Coverage Area is focused on eucalyptus groves dominated by three species of non-native tree: blue gum (*Eucalyptus globulus*), red gum (*Eucalyptus camaldulensis*), and red iron bark (*Eucalyptus sideroxylon*), and these areas have a low percentage of native vegetation. However, limited numbers of native trees are also present in the Coverage Area, including coast live oak (*Quercus agrifolia*), black cottonwood (*Populus trichocarpa*), sycamore (*Platanus racemosa*), and willow (*Salix* spp.). Native trees occur outside the eucalyptus groves, primarily in riparian areas, and have not been inventoried fully.

Habitat Conservation Plans

The Coverage Area is not subject to any approved federal, State, or local Habitat Conservation Plan.

Thresholds of Significance

A significant impact on biological resources would be expected to occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. Additionally, per the City's Environmental Thresholds and Guidelines Manual (City of Goleta 2003), a project would pose a significant environmental impact(s) on biological resources if any of the following would result:

a. A conflict with adopted environmental plans and goals of the community in which it is located
b. Substantial effect on a rare or endangered plant or animal species
c. Substantial interference with the movement of any migratory or resident fish or wildlife species
d. Substantial diminishment of habitat for fish, wildlife, or plants

Project-Specific Impacts

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Special-status Plants

The majority of plant species documented in the Coverage Area are non-native, and those native species that do occur are mostly common and located in areas outside of eucalyptus groves, as reported in the tree inventory as well as in field observations made during a February 2018 reconnaissance-level site survey. However, as described above, some special-status plants have potential to occur in suitable habitat in the Coverage Area, outside the eucalyptus groves.

Impacts to special-status plant species could occur if their habitats are altered or individuals are removed during implementation of the MBHMP. Implementation of the MBHMP would occur primarily in eucalyptus groves and outside suitable habitat for special-status plants. However, activities could occur outside existing eucalyptus groves and in suitable habitat for special-status plant species including Santa Barbara honeysuckle (known to be present), Douglas' fiddleneck, Catalina mariposa lily, southern tarplant, Contra Costa goldfields, Coulter's goldfields, pale-yellow layia, Sonoran maiden fern, Coulter's saltbush, and Brewer's calandrinia, all of which have a moderate or high potential to occur in the Coverage Area.

Taking down dead or dying eucalyptus trees could involve the staging or placement of debris piles, equipment, or personnel in areas where special-status plant species have a potential to occur and would impact these species, if present. Impacts could occur to special-status plant species if the installation of physical structures or features, such as irrigation, interpretive signs, and fencing, occurred in habitats where special-status plant species were present. Further, the Habitat Enhancement and Restoration Program includes plantings of native species to enhance habitat values in portions of the Coverage Area outside the eucalyptus groves, and these activities could occur in native grasslands or coastal scrub habitat. Personnel, equipment, and ground disturbance in these areas could impact special-status plant species during the revegetation process. Supplemental irrigation and changes in overall plant density in restoration areas could indirectly impact special-status plants, if present.

Special-status plant species in the Coverage Area could be impacted by implementation of the MBHMP if covered activities occur in habitats such as native grasslands, coastal scrub, bluff scrub, wetlands, arroyo thickets, or vernal pools. Because the covered activities would primarily occur in eucalyptus groves, impacts to special-status plant species would be minor. Nonetheless, these impacts could be potentially significant absent mitigation, considering that the proposed activities would occur over a long period of time and that one of the potentially occurring plants is an endangered species. Impacts would be reduced to a less than significant level with implementation of mitigation measure BIO-4, which requires periodic surveys for rare plants during the course of the MBHMP's implementation and avoidance of all special status plants detected. In addition, mitigation measures BIO-1, BIO-2, and BIO-3 would further reduce impacts by ensuring site housekeeping, presence of a biological monitor, and worker environmental awareness.

In addition, given that the MBHMP is a long-term program implemented for the purpose of enhancing habitat, it is reasonable to expect that in the long term, the Habitat Enhancement and Restoration Program would improve habitat in the Coverage Area and could create additional

suitable habitat for special-status plant species. Special-status plants could recruit in the future to native habitats in the Coverage Area, consistent with the MBHMP's objective of increasing biological diversity outside the eucalyptus groves.

Special-status Wildlife Species

Special-status wildlife species with the potential to occur or known to be present in the Coverage Area, include monarch butterfly, nesting white-tailed kite, nesting Cooper's hawk, and California red-legged frog. Other raptor and turkey vulture nest sites are documented in the Coverage Area (City of Goleta 2017a; CNDDB 2018).

Monarch Butterfly

Monarch butterflies aggregate in the on-site eucalyptus groves during winter months to "overwinter" or pass the winter season. The Coverage Area includes five monarch butterfly aggregation areas, referred to as the Ellwood North, Ellwood West, Ellwood Main, Sandpiper, and Ocean Meadows aggregation sites (see Figure 4). Historically, tens of thousands of monarch butterflies have converged on Ellwood Mesa, making this area one of the most important sites for monarch butterflies in California. The overwintering population at Ellwood Mesa between 2013 and 2019 has shown the lowest recorded population numbers for six consecutive years since 1989. In addition, 2018 was the lowest recorded population at 230. However, these aggregation sites remain important for the western population of the monarch butterfly and accordingly, management of the eucalyptus trees that support the butterflies is paramount to continued overwintering by the species.

The MBHMP Natural Resources Program identifies programs with goals, policies, and actions to sustain and enhance suitable habitat for monarch butterflies. The MBHMP also includes Administrative Programs, Outreach Programs, and Monitoring, Research, and Adaptive Management Programs. These include actions that could impact monarch butterfly habitat or individuals, if they are present in the Coverage Area. Examples include dead tree removals, trail management, fencing installation, irrigation and interpretive sign implementation, and revegetation and non-native species eradication that creates ground disturbance. A list of the goals, policies, and actions for the Coverage Area can be found in Table 2.

Implementation of the MBHMP could create short-term impacts to monarch butterfly through disturbance of suitable habitat through actions such as tree trimming and removal; application of pesticides, herbicides, and insecticides; and disturbance created by restoration activities and trail management. Unless authorized by a qualified biologist, Action 10-4.1 of the Monarch Butterfly Management Program requires all potentially invasive activities to be conducted during April 1 to September 30 of each year which would ensure there are no direct impacts to monarch butterfly by the covered activities as they would not be present during this time. In addition, mitigation measure HWQ-2, Chemical Application Control Plan, found in Section 9, *Hydrology and Water Quality*, would place restrictions on chemical applications in the Coverage Area which would further reduce potential impacts to monarch butterflies. Less than significant indirect impacts could occur to monarch butterflies if their habitat is altered in a manner that decreases its suitability for the species. However, implementation of the Natural Resource Program in the MBHMP would maintain and enhance suitable habitat for the monarch butterfly. Replanting habitats where dead or dying eucalyptus trees are removed will help sustain the long-term viability of the eucalyptus groves as monarch butterfly habitat. Planting native species and eradication of non-native species (excluding eucalyptus), along with integrated pest management to reduce pests that stress monarch butterflies

or their habitat, would further enhance suitable habitat for the species in the Coverage Area. Therefore, the MBHMP would have a beneficial impact for the species over the long term. Impact to monarch butterfly would be less than significant, and would be further reduced through implementation of the pesticide restrictions in mitigation measure HWQ-2 and the site housekeeping, biological monitoring, and worker awareness provided by Mitigation Measures BIO-1, BIO-2, and BIO-3. No additional mitigation measures would be required.

California Red-legged Frog

CRLF is known to occur in drainages to the northwest and west of the Coverage Area and could occur in the riparian and wetland areas associated with Devereux Creek. This species could be impacted by vegetation management, if conducted adjacent to riparian and wetland vegetation. Impacts to CRLF would less than significant with implementation of mitigation measure BIO-1, BIO-2, BIO-3, and BIO-5, which would avoid take of CRLF by requiring work be performed when CRLF are not present or requiring an on-site biological monitor to ensure CRLF are avoided during work.

White-tailed Kite and Other Raptors

White-tailed kites are fully protected and proposed habitat management actions could result in significant impacts to white-tailed kites. Impacts could occur directly, if a nest site is impacted by tree pruning or removal, regardless of time of year; or indirectly, by altering grove conditions or disturbing active nests through management actions taken on surrounding vegetation. Kites typically select nest sites that are hidden from view by dense foliage, and removal of vegetation around the nest tree that results in substantially reduced cover for the nest could impact re-use of existing nest sites. However, the MHBMP does not call for the removal of healthy trees, and removing standing dead eucalyptus trees (which lack leaves) is not likely to reduce visual screening of nests.

Cooper's hawks typically occur as a wintering species throughout Santa Barbara County but occasional nests are reported, including one in the Ellwood Open Space adjacent to Sandpiper Golf Course (City of Goleta 2017a). This species prefers wooded habitats such as oak, riparian, and urban woodlands for foraging and roosting purposes. Other raptors documented to nest on or near the Coverage Area include red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), and great horned owl (*Bubo virginianus*). A turkey vulture roost is known in the Ellwood East grove. If conducted near nesting sites in the nesting season, covered activities could disrupt existing nesting activities in the Coverage Area or in the vicinity and cause nesting raptor pairs to abandon their nests. In addition, the removal of standing dead trees could reduce the availability of nesting and roosting sites for raptors. However, this effect would be minor because the forest in the Coverage Area contains several thousand trees, and removal of dead trees on a large scale over a short time period is not proposed. Further, removed trees would be replaced through the MBHMP's restoration and habitat enhancement efforts.

Because of the potential to cause nest abandonment, impacts on raptor nesting activity would be considered potentially significant absent mitigation. However, Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-6 would reduce impacts to a less-than-significant level by requiring pre-activity surveys and nest avoidance, biological monitoring, and worker education.

Other Nesting Birds

The Coverage Area contains suitable habitat for other nesting birds, including ground-nesting and shrub-nesting species. Covered activities including dead tree removal, trimming or other

disturbance to trees and woody vegetation may affect bird species during the typical nesting season from March 15 to August 15. Additionally, other covered activities such as mowing could affect nesting birds if present on the ground or in non-native herbaceous vegetation. The MBHMP clarifies these activities should be avoided during the nesting bird season to the maximum extent feasible.

As covered activities could occur during the nesting bird season, the covered activities could result in potentially significant impacts to nesting birds. These impacts would be reduced to a less than significant level with implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-6, which require pre-activity surveys and nest avoidance, biological monitoring, and worker education.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c. Would the project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Sensitive vegetation types and ESHAs occur in the Coverage Area. These include native grassland, riparian/wetland habitats, vernal pools, coastal scrub, and bluff scrub. Habitat management activities would focus primarily on existing eucalyptus groves. These groves are mapped as an ESHA in the General Plan due to documented use of these groves as monarch aggregation/raptor roost and nest sites. The MBHMP identifies threats to the eucalyptus groves and offers actions in response, including removing dead and dying trees, removing downed trees and debris, watering, planting eucalyptus trees and understory plants, and pruning trees. The MBMHP calls for the replacement of the removed trees and enhancement of the groves with planting of eucalyptus in the historical grove footprint only, and the planting of native species in other portions of the Coverage Area. No expansion of eucalyptus groves beyond historical footprints would occur under the MBHMP, although gaps or reductions in the grove caused by tree die off would be replenished. Proposed habitat management activities, if successful, would have a beneficial impact on monarch butterfly ESHA by maintaining and enhancing suitable aggregation habitat. Mitigation measure BIO-7 would ensure the long-term success replacement trees and the viability of the designated ESHA.

Negative effects to native grasslands, coastal scrub, riparian/wetland areas or vernal pools could occur if temporary stockpiling or staging dead trees, tree trimmings, other brush material, vegetation maintenance equipment, or other MBHMP materials were to occur in these sensitive habitats. These impacts would be less than significant with mitigation measure BIO-8, which requires MBHMP activities such as staging and stockpiling avoid sensitive habitats.

Program 14, Habitat Enhancement and Management, would include activities outside of the eucalyptus groves including planting of native species, eradiation of non-native herbaceous cover, and restoration of riparian areas along Devereux Creek. These activities would have a beneficial impact on the sensitive communities through habitat enhancement and restoration.

The General Plan and the 2004 Open Space Plan (City of Goleta et al., 2004) identify riparian and marsh habitat associated with some portions of Devereux Creek. A reconnaissance-level biological survey conducted in February of 2018 (Rincon Consultants, Inc.) verified the presence of wetland vegetation in the bed and on lower banks of Devereux Creek in portions of the Coverage Area. Mexican rush (*Juncus mexicanus*), alkali heath (*Frankenia salina*), and salt grass (*Distichlis spicata*) were common, and spikerush (*Eleocharis* sp.) was present. Bed and bank of the creek also

supported willow, occasional cottonwood, and sycamore riparian vegetation. Some of these areas are expected to meet all three criteria of the U.S. Army Corps of Engineers' jurisdictional wetland definition (hydric soil, wetland hydrology, and wetland vegetation), and would meet the Central Coast RWQCB, CDFW, California Coastal Commission, and City of Goleta criteria for wetlands, because at least one of the parameters was present.

Habitat management activities proposed under the MBHMP would not require significant placement of fill or permanent removal of vegetation in riparian or wetland areas, though trimming, mowing, and non-native invasive plant removal activities may occur for restoration purposes. However, if any dead eucalyptus trees are identified in riparian areas and therefore removed, they would be replaced in the same place they were removed from. In addition, covered activities in the Trail Management Program include "Construct and maintain crossings over drainages and other sensitive features." Impacts to jurisdictional areas would occur if the footprint of such activities were located in riparian areas, in the bed and bank of Devereux Creek, or in another jurisdictional area such as a wetland. Additionally, riparian and wetland vegetation associated with Devereux Creek could be impacted by vegetation management or through removal and replanting of dead or dying trees as described above. Thus, activities proposed under the MBHMP could have a potentially significant impact on wetland and riparian vegetation. Impacts would be less than significant with incorporation of mitigation measure BIO-9, which requires the City to avoid impacts to streams and wetlands where feasible, secure all applicable resource agency permits prior to conducting regulated activities in a jurisdictional stream or wetland, and adhere to all permit conditions, including any required compensatory mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Implementation of the covered activities in the MBHMP would not interfere with wildlife movement. The Coverage Area is located in the Ellwood Open Space Mesa with is an important wildlife open space area. The MBHMP would not place any new structures or features, such as buildings, walls, or other permanent structures that would limit the travel of wildlife through the site. Fencing would be placed in the Coverage Area as part of the Aesthetic Resources Management Program, but would be constructed in a manner that would not restrict the movement of wildlife. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

ESHA

ESHAs are designated throughout the Coverage Area. The primary activities to occur under the MBHMP would involve the restoration and enhancement of eucalyptus groves; these are allowed under General Plan Policy CE 1. Restoration and habitat enhancement may occur in other designated ESHA areas, such as native grasslands, also consistent with General Plan Policy CE 1. Other covered activities in the MBHMP include the installation of interpretive signs, fencing, and trail management. General Plan Policy CE 1 prohibits development in the ESHA but makes exceptions for public trails, limited fencing, and signage as these uses are resource-dependent uses

that may be located in or adjacent to ESHA. Policy CE 1 restricts the use of insecticides, herbicides or other chemical in ESHA. The use of these substances is included in the Integrated Pest Management Program with the objective of protecting ESHA from pests contributing to the die off of the eucalyptus groves. Therefore, implementation of the MBHMP would not conflict with the General Plan ESHA policies and no impact would occur.

Riparian/Wetlands/Vernal Pools

Implementation of the covered activities in the MBHMP would include restoration and habitat enhancement and could occur in riparian, wetland or vernal pool habitats present in the Coverage Area. General Plan Policy CE 2, restricts activities than can occur in Streamside Protection Areas. The covered activities included in the MBHMP, such as fencing, foot trails, resource enhancement and restoration, signage, and nature education and research activities, are allowable uses in these areas. Further, dead or dying eucalyptus trees which are removed and replaced could occur in riparian areas along Devereux Creek. While General Plan Policy CE 2 generally prohibits the planting of non-native species in riparian areas, non-natives species are allowed to occur where they provide critical habitat for monarch butterflies, raptors, or other protected animals. As the eucalyptus groves are critically important aggregation sites for monarch butterflies and designated as ESHA, the planting of eucalyptus trees would be consistent with Policy CE 2. In addition, eucalyptus trees are not located in vernal pools or wetlands in the Coverage Area and therefore would not be replanted in these locations. The proposed MBHMP would restore monarch butterfly ESHA in areas historically occupied by monarch butterfly ESHA, and other ESHA types in areas either historically occupied by those types or occupied by non-ESHA. The MBHMP would not convert one type of ESHA to another, or replace ESHA with any other vegetation or use.

If equipment or downed trees were stored or staged in ESHA or signage was installed in a vernal pool or other sensitive habitat, implementation of the MBHMP would conflict with General Plan Conservation Element policies. However, this sort of conduct would be prevented by mitigation measures BIO-2, BIO-3, BIO-8 and BIO-9, which would ensure only appropriate activities are allowed in riparian areas, and would reduce this potential impact to a less than significant level.

Monarch Butterflies

General Plan Policy CE 4 prohibits the removal of vegetation in monarch ESHA, with the exception of dead trees and debris that are a threat to public safety. Aside from habitat restoration activities, trees removed or pruned under implementation of the MBHMP would only include dead or dying trees that pose a public safety risk. In addition, these trees would be replaced with the objective of monarch butterfly habitat restoration and enhancement. Therefore, implementation of the MBHMP would not conflict with General Plan Policy CE 4.

Protected Trees

The City of Goleta does not have a specific tree protection plan or ordinance. The General Plan Conservation Element and the GUFMP regulate tree protection in Goleta (City of Goleta 2017a). The GUFMP provides a five-year policy framework for how trees in public areas will be managed (City of Goleta 2011b). Section 4.12 of the GUFMP contains guidelines regarding tree risk management and removal. The risk management program in the GUFMP ensures proper management of trees to allow for healthy attractive communities while reducing risks. Implementation of the MBHMP would result in the removal of eucalyptus trees that pose an unacceptable risk to residents and recreational users ~~on~~ within and adjacent to the Coverage Area. The GUFMP Guideline 4.12.4 states

that tree removal may be necessary at the City Staff's discretion for the protection, public health, and safety of citizens in considering if trees are dead, dying, or hazardous.

The MBHMP includes tree protection programs and policies including Program 12, specific to tree management. The MBHMP identifies threats to the eucalyptus trees and offers responses, including removing dead and dying trees, removing downed trees and debris, watering, planting eucalyptus trees and understory plants, and pruning trees. The Tree Assessment Survey (Althouse & Meade, Inc. 2017) found over 1,200 dead and dying eucalyptus trees in the forest on Ellwood Mesa. These trees may be determined to threaten the well-being and health of living trees or to be a hazard to recreational users in the forest and may be recommended for removal by the City during implementation of the MBHMP.

The MBHMP allows replacement and habitat enhancement plantings to be eucalyptus in the historical grove footprint only, and requires native species to be used in other parts of the Coverage Area. No expansion of eucalyptus groves beyond historical footprints would occur under the MBHMP. All other trees in the Coverage Area would be preserved under the MBHMP unless in the future they are determined to be hazardous to the public. The removal and replacement of dead and dying trees would result in a long-term benefit to the health of the forest and the continued use of the groves by monarch butterflies and other wildlife species. The MBHMP would not conflict with the GUFMP, as it would result in an increase in forested area in the City.

Considering the information presented above, the MBHMP would not conflict with any local policies or implementing ordinances and there would be no impact.

NO IMPACT

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

There are no adopted Habitat Conservation Plans or Natural Community Conservation Plans applicable to the Coverage Area. Other approved local, regional, or State habitat conservation plans relevant to the area include the Coronado Butterfly Preserve Management & Enhancement Plan (2000) and Open Space Plan (2004). The MBHMP would build on many of the recommendations in the 2004 Open Space Plan. The MBHMP identifies actions to implement recommendations of the need to resolve conflicts between the needs of special-status and common native species and habitat types through balanced management. As such, implementation of the MBHMP would not conflict with existing local conservation plans in place in the area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Mitigation Measures

BIO-1 General Housekeeping

General requirements that shall be followed by all personnel are listed below.

- MBHMP-related vehicles shall observe a 5-mile-per-hour speed limit in the Coverage Area at all times
- MBHMP-related vehicles and equipment shall restrict off-road travel to approved routes, which shall be sited by the City to minimize environmental impacts

- All food-related trash items, such as wrappers, cans, bottles, and food scraps, generated during implementation of the MBHMP shall be removed from the site daily
- No deliberate feeding of wildlife shall be allowed
- No pets shall be allowed on in the Coverage Area
- No firearms shall be allowed in the Coverage Area
- If vehicle or equipment maintenance is necessary including refueling of equipment, it shall be performed outside the buffers of ESHAs, bird nests, and monarch aggregation sites
- Any worker who inadvertently injures or kills a special status species or finds one dead, injured, or entrapped shall immediately report the incident to the biological monitor. The monitor shall immediately notify City of Goleta staff. The City of Goleta shall follow up with written notification to USFWS and CDFW as appropriate, depending on the species. The biological monitor shall also independently notify USFWS of any unanticipated harm to any federally listed endangered species associated with implementation of the MBHMP. All observations of federally or State-listed threatened or endangered species shall be recorded on CNDDB field sheets and sent to CDFW by City of Goleta or the biological monitor.

BIO-2 Qualified Biological Monitor

A qualified biological monitor shall be present during all vegetation removal and ground disturbing activities to ensure compliance with all mitigation measures, applicable permit conditions, and any conditions required by federal and State agencies. The monitor shall be responsible for:

- Ensuring that procedures for verifying compliance with environmental mitigation measures are followed.
- Lines of communication and reporting methods.
- Daily and weekly reporting of compliance.
- MBHMP crew training regarding environmentally sensitive areas.
- Authority to stop work.
- Action to be taken in the event of non-compliance.

BIO-3 Biological Resources Awareness Training

Before any ground-disturbing work or vegetation removal/trimming occurs in the Coverage Area, a qualified biologist shall conduct a mandatory biological resources awareness training for all MBHMP personnel about federally and State listed species that could occur on site. The training shall include the natural history, representative photographs, and legal status of each federally listed species. Proof of personnel attendance shall be kept on file. If new MBHMP personnel are added to the crew, the contractor shall ensure that the new personnel receive the mandatory training before starting work. The subsequent training of personnel can include videotape of the initial training and/or the use of written materials rather than in-person training by a biologist.

BIO-4 Special-status Plants

To avoid impacts to special-status plants, periodic rare plant surveys the Coverage Area must occur at least once every five years during a normal rainfall year, following current standard practice for botanical surveys (CDFW 2018), which may require multiple passes to detect or rule out all potential species. If special-status plants remain absent from work areas, no further action is required. If special-status plants are detected in work areas, locations must be mapped and the plants must be

avoided during MBHMP activities. A pre-work training must be provided to the contractor(s) conducting vegetation maintenance activities that identifies special-status plants in and near the work area and locations to be avoided. If weed control is required in areas supporting special-status plants, this work must be conducted with hand tools. Vegetation control in these areas must emphasize control of non-native species, avoid flowering and fruiting seasons of the identified special-status plants to the maximum extent possible, and ensure that activities do not remove special-status plant individuals.

BIO-5 California Red-legged Frog

Any ground disturbing activities in riparian and wetland habitats shall be conducted when the channel is dry to the maximum extent feasible. Additionally, within seven days prior to start of work, a biologist must conduct a survey prior to any ground disturbance to verify that riparian and wetland areas do not contain ponded water and that no California red-legged frogs are present. If ponded water is present, no work may occur within 50 feet of pools. If suitable resident frog habitat is present or frogs are noted during the surveys, a biological monitor must be present during vegetation clearing and removal activities in riparian and wetland habitats. The biologist will have the authority to stop work and identify areas that must be avoided. Listed species must be fully avoided unless take permits are obtained from the USFWS and/or CDFW. Only handheld tools shall be used. Removal of native vegetation shall be limited to dead, damaged, and diseased material.

BIO-6 Nesting Bird Survey

To the maximum extent feasible, tree trimming activities must occur in September to ensure that raptor nests and monarchs are not active in the work area. Surveys for nesting birds and raptors are required prior to any ground disturbance or vegetation removal work conducted in the nesting season, defined to be February 1 to September 15.

If ground-disturbing or vegetation removal work does occur during the nesting season, then not more than three (3) days before ground disturbance and/or vegetation removal commences, a bird and raptor survey must be conducted by a City-approved biologist in the disturbance footprint plus a 300-foot buffer, as feasible. If the MBHMP activity is phased, a subsequent nesting bird and raptor survey is required in the Coverage Area before each phase of the activity. If no raptor or other bird nests are observed no further mitigation is required.

Nesting bird and raptor surveys must be conducted during the time of day when bird species are active and be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors in the 300-foot buffer.

If active nests of species protected by CFG Code 3503 or the MBTA Migratory Bird Treaty Act are found within 300 feet of the Coverage Area, their locations must be flagged and then mapped onto an aerial photograph of the Coverage Area at a scale no less than 1”=200’ and/or recorded with the use of a GPS unit. If active raptor nests are detected, the map will include topographic lines, parcel boundaries, adjacent roads, known historical nests for protected nesting species, and known roosting or foraging areas, as required by Conservation Element Policy 8.3 of the Goleta General Plan. If feasible, the buffer must be 300 feet in compliance with Conservation Element Policy CE 8.4 of the Goleta General Plan. If the 300-foot buffer is infeasible, the City approved biologist may reduce the buffer distance as appropriate, dependent on the species and the proposed work activities. If any active *non-raptor* bird nests are found, a suitable buffer area (varying from 25-300 feet), depending on the species, must be established by the City-approved biologist. No ground disturbance can occur in the buffer until the City-approved biologist confirms that the

breeding/nesting is completed and all the young have fledged. Alternately, a City-approved biologist must monitor the active nest full-time during MBHMP activities in the buffer to ensure MBHMP activities are not indirectly impacting protected nesting birds and raptors.

BIO-7 Tree Replacement

All replacement trees planted in the Coverage Area must be monitored annually for a minimum period of 5 years. At the end of the 5-year monitoring period, replacement trees shall be inspected by a City approved arborist to determine the successful establishment of the trees. The arborist may extend the monitoring period as deemed necessary. If a replacement tree dies during the monitoring period, it shall be replaced and monitored as required by this mitigation measure.

BIO-8 Native Habitats

Staging and stockpiling of debris associated with covered activities shall be temporary in nature, the duration of which shall be specified in the annual Implementation Plan prior to commencement of the covered activity. All staging and temporary stockpiling shall be limited to areas outside of riparian habitats, wetlands, vernal pools, native grasslands, and active nest buffers on site. Absolutely no staging and/or stockpiling of any materials shall be allowed in these buffers at any time. Locations to be avoided must be clearly identified with fencing, flagging, rope, or other conspicuous material, and the contractor(s) conducting vegetation maintenance activities must be trained on the limits of work prior to commencing work. Placement of chipped woody materials must avoid impacting native grasslands, riparian, and wetland vegetation. The biological monitor would ensure avoidance for the duration of activities near these areas.

BIO-9 Riparian/Wetland Areas

Impacts to vernal pools, wetlands, and streambeds shall be avoided to the maximum extent practicable, unless they are affected for the purpose of habitat enhancement. If avoidance is not feasible, the City shall acquire and comply with regulatory permits for any vegetation trimming, removal, or ground disturbing activities to be completed in potentially jurisdictional areas including in the vicinity of Devereux Creek or other riparian/wetland habitats in the Coverage Area. The CDFW shall be notified and a Streambed Alteration Agreement shall be obtained for any activities that will result in impacts to a streambed or riparian vegetation. In addition, authorizations from the U.S. Army Corps of Engineers and Central Coast Regional Water Quality Control Board (RWCB) will be secured for any activities involving discharges of fill material into a wetland or streambed.

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	■	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

Existing Setting

The Goleta area is situated in the traditional tribal territory of the Chumash. The Goleta Valley changed during the Mission Period of the late 1700s when oak forests were cut down for cattle grazing and farming to support the Santa Barbara Mission and Presidio. The area remained primarily under agricultural production until the construction of US 101 in 1947 and the relocation of UCSB to Goleta Point in 1950 (City of Goleta 2006a). In the 1870s, Ellwood Cooper introduced eucalyptus trees to Ellwood Mesa and by the mid-1870s had successfully planted approximately 50,000 trees of more than 50 varieties. The groves have matured and become useful for windbreaks. Today the eucalyptus groves present on Ellwood Mesa are a remnant of Cooper's early attempt at eucalyptus forestry. The Coverage Area is undeveloped open space previously used for oil development. Remnants of the oil facilities are still present on site. There are no known locally significant historic buildings or structures present in the Coverage Area (see Figure 3.5-1 of the General Plan Final Environmental Impact Report, City of Goleta 2006b).

Rincon conducted a records search of the Ellwood Mesa Open Space and a 0.5-mile radius. The records search was conducted at the Central Coast Information Center (CCIC) on January 16, 2019. The records search identified a total of 16 cultural resources (2 historic archaeological sites and 14 prehistoric archaeological sites) within the search radius. Of those resources, two are located directly in the Ellwood Mesa Open Space (SBA-1321 and SBA-38644). Resource SBA-1321 is located along the bluff above the beach and was recorded in 1974. It consists of a shell midden and ground stone artifact scatter. The site was substantially disturbed by oil infrastructure. In 1997, archaeological testing on a portion of the site recommended it ineligible for listing in the California Register of Historical Resources due to a lack of integrity (Onken 1997).

Resource SBA-38644 is an isolated biface fragment recorded on the southern edge of the Coverage Area. The isolate was identified during archaeological monitoring conducted for the remediation of Devereux Creek. No other artifacts were identified with the isolate at the time of monitoring. However, the isolate was identified in the vicinity of resource LRW-90-53, a site that was not

formally recorded but is described in report SR-04937 on file with the CCIC. Site LRW-90-53 was subject to archaeological testing in 1997 on the southern border of the Coverage Area on the banks of Devereux Creek.

In addition to the resources in the Ellwood Mesa Open Space, a total of four previously recorded resources are located directly adjacent to the eastern border of the open space and Coverage Area. The results of the records search indicate a high archaeological sensitivity for the Coverage Area and vicinity.

Thresholds of Significance

A significant impact to cultural resources would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. Additional thresholds are contained in the City's Environmental Thresholds and Guidelines Manual. The City's adopted thresholds indicate that a project would result in a significant impact to a cultural resource if it results in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a cultural resource would be materially impaired.

Project-Specific Impacts

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

No known significant historic buildings or structures are located on the Coverage Area. Implementation of the MBHMP would not involve construction of any structures, and therefore, would not require substantial excavation. However, the Coverage Area is in an area known to be archaeologically sensitive. Minimal grading may occur in association with development of new trails or trail maintenance that may uncover archaeological resources. Additionally, tree removal under the Catastrophic Event Response Program or Tree Management Program would result in ground disturbance with the potential to unearth unknown archaeological resources. With implementation of Mitigation Measure CUL-1 during ground disturbance, potential impacts to archaeological or historic resources would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

The discovery of human remains could potentially occur during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify the most likely descendant. The most likely descendant must complete the inspection of the discovery and provide recommendations for

treatment to the landowner within 48 hours of being granted access. With adherence to existing regulations, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Mitigation Measures

CUL-1 Archaeological and Native American Monitoring

Ground-disturbing activities associated with the MBHMP, including but not limited to trail modification and vegetation and tree removal, shall be observed by a qualified archaeological monitor under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (National Park Service 1983) and a local Native American monitor. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find evaluated for significance. Archaeological and/or Native American monitoring may be reduced or halted at the discretion of the monitors as warranted by conditions including, but not limited to, negative findings during the first 60 percent of ground disturbance. If monitoring is reduced to spot-checking, spot-checking shall occur when ground-disturbing activities occur in a new location in the Coverage Area or when ground disturbance would extend to depths not previously reached (unless those depths are within bedrock).

If archaeological resources are identified during ground disturbance, they shall be left in place and avoided when feasible. If avoidance is infeasible, a Phase II testing and evaluation program shall be implemented. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, appropriate site-specific measures shall be identified in the Phase II evaluation. These measures may include, but would not be limited to, a Phase III data recovery program, capping, or other appropriate actions to be determined by a qualified archaeologist in consultation with the Native American monitor.

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6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	■
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☐	■

Existing Setting

California consumed 7,830 trillion British thermal units (Btu) of energy in 2016. While the state ranked second in the nation for total energy consumption, this is due almost entirely to the state's large population. At 199 Btu per person, the state's per capita energy consumption ranks 48th in the nation. Transportation is the largest consumer of energy in the state, accounting for approximately 39.8 percent of all energy consumption (United States Energy Information Administration 2018).

Energy production in California totaled 2,431 trillion Btu in 2016 (United States Energy Information Administration 2018). According to the California Energy Commission (CEC), total in-state electricity generation in 2017 was 206,328 gigawatt hours (GWh) (CEC 2018). Electricity consumption in Santa Barbara County totaled 2,799 GWh in 2017, with residential consumption accounting for approximately 27.6 percent (CEC n.d.). Statewide, natural gas accounted for more electricity generation than any other fuel type at 43.4 percent (CEC 2018).

California's Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill (SB) 1078 and sets power generation mix goals for the state. Specifically, the RPS specifies minimum renewable energy-sourced power generation goals, with a goal of 100 percent carbon-free energy generation by 2045. Interim RPS goals include a 33 percent renewable standard by 2020, and 60 percent by 2030 (California Public Utilities Commission 2019, CEC 2019).

On July 15, 2014, the City of Goleta adopted a Climate Action Plan (CAP). While targeted toward reducing citywide greenhouse gas (GHG) emissions, the CAP includes energy efficiency measures to reach emissions reduction targets. Energy-related measures described in the CAP include building energy efficiency strategies, conducting outreach programs to encourage renewable energy installation, and encouraging the use of alternatively fueled construction and landscape equipment (City of Goleta 2014a).

The nearest energy infrastructure facility to the Coverage Area is NRG California South LP's Ellwood natural gas power plant, approximately 0.7 mile west of the Coverage Area.

Thresholds of Significance

A significant energy impact would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. The City's Environmental Thresholds and Guidelines Manual does not contain City-specific energy thresholds.

Project-Specific Impacts

a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The Coverage Area is currently recreational open space area and, as a result, consumes minimal energy. The MBHMP would not involve construction of structures, installation of lighting, or otherwise increase operational energy consumption associated with land uses in the Coverage Area.

Covered activities, including, but not limited to, tree pruning, removals, and maintenance; trail maintenance; habitat restoration; and drainage clearing following flood events may require the use of hand tools, trucks, or construction equipment. It is reasonable to assume the City or City-authorized contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during covered activities to reduce costs of MBHMP activities. Should the use of heavy equipment be necessary, the City or City-authorized contractor would comply with the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation, which imposes limits on idling and restricts the use of older vehicles. Such compliance would reduce fuel consumption and lead to the use of fuel-efficient vehicles during covered activities. Equipment would be maintained to applicable standards, and associated fuel consumption and energy use would be temporary. Therefore, the MBHMP would not involve the inefficient, wasteful, and unnecessary use of energy during implementation, and no impact would occur.

NO IMPACT

b. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

As previously discussed, the City's CAP contains emissions-reduction measures the City may implement, several of which are energy-related in nature. The CAP is a voluntary planning study undertaken by the City to quantify emissions through an inventory analysis and forecast and to generate possible measures the City could take in the future. However, the CAP does not contain any mandatory measures or amendments to the City's General Plan or Municipal Code (City of Goleta 2014b). Therefore, the measures contained in the CAP are voluntary by nature and have not been formally adopted as City policy.

The MBHMP would not include construction of any buildings, structures, or facilities, nor would it substantially increase visitors to the Coverage Area. As a result, CAP measures related to building energy efficiency, renewable energy programs for new development, and on-road vehicles are not relevant to the MBHMP. Measure OR-1, Encourage Alternatively Fueled Construction and Landscape Equipment, from the CAP would be relevant to covered activities under the MBHMP. Measure OR-1 encourages the City to provide information to the public regarding financial incentives available to electrify off-road vehicles and equipment. As discussed in Section 3, Air Quality, covered activities would generally not require diesel-powered equipment. Implementation of the MBHMP would not

conflict with or obstruct implementation of this voluntary outreach measure described in the City's CAP. No impact would occur.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	■
2. Strong seismic ground shaking?	☐	☐	☐	■
3. Seismic-related ground failure, including liquefaction?	☐	☐	☐	■
4. Landslides?	☐	☐	☐	■
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	■
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	■
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐

Existing Setting

Goleta occupies a portion of the eight-mile long and three-mile wide flat alluvial plain known as the Goleta Valley (City of Goleta 2006a). The Goleta Valley is bordered on the south by the bluffs of the Pacific coastline and on the north by foothills and terraces of the foreland of the Santa Ynez Mountain Range.

The Coverage Area is generally characterized by gentle slopes and terraces. Similar to much of California, the Coverage Area is located in a seismically active region. The Transverse Ranges are characterized by east-west trending structural features in contrast to the dominant northwest-southeast structural trend of California. According to Figure 5-1 of the General Plan Safety Element, the More Ranch Fault runs through the Coverage Area (City of Goleta 2006a). However, this fault is not considered active by the State Division of Mines and Geology nor is it subject to an Alquist-Priolo Special Studies Zone (City of Goleta 2006a; California Department of Conservation 2018b). However, the More Ranch Fault is considered active by the Santa Barbara County Seismic and Safety Element due to geologically recent movement suggested by a north-facing scarp near the coast at the west end of the fault (County of Santa Barbara 2015). The nearest confirmed seismically active fault to the Coverage Area is the North Channel Slope Fault located four miles offshore. The closest Alquist-Priolo mapped earthquake fault is over 20 miles to the southeast (Pitas Point/Red Mountain Faults).

In addition, according to Figure 5-1 of the General Plan Safety Element, the portion of the Coverage Area that contains bluffs adjacent to the Pacific Ocean is identified as having a high landslide potential (City of Goleta 2006a). The remainder of the Coverage Area is not identified as having any landslide potential.

Prominent geological features are present on the Coverage Area. There are quaternary older alluvial geological formations on the western portion of Goleta, including the Coverage Area, and Pliocene Sisquoc and Miocene Monterey formations present on the Ellwood Mesa area (see Table 3.5-1 of the General Plan Final Environmental Impact Report, City of Goleta 2006b). These geologic formations have the potential for paleontological resources to be present.

Thresholds of Significance

A significant impact on geology/soils would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. The City's Environmental Thresholds and Guidelines Manual assumes that a project would result in a potentially significant impact on geological processes if the project and/or implementation of required mitigation measures could result in increased erosion, landslides, soil creep, mudslides, and/or unstable slopes. In addition, impacts are considered significant if a project would expose people and/or structures to major geological hazards such as earthquakes, seismic-related ground failure, or expansive soils capable of creating a significant risk to life and property.

Project-Specific Impacts

a.1. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.2. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a.3. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a.4. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving landslides?

No Alquist-Priolo mapped earthquake faults or fault zones occur in Goleta. The More Ranch Fault traverses the Coverage Area and may be potentially active. However, implementation of the MBHMP would not involve construction of any buildings or structures or change in land use that would expose people or structures to fault rupture, ground shaking, ground failure, or landslides. No impact would occur.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The MBHMP includes habitat restoration activities involving removal of non-native plant species and planting of native species. Additionally, the Tree Management Program of the MBHMP includes selective removal of downed, dead, dying, or hazardous trees and debris to ensure public safety and manage the risk of wildfire. The program would also allow for recontouring or grading of drainage channels following flood events to protect trees. These activities would involve the movement of soil and potential loss of topsoil. The Tree Management Program would use the removed downed or hazardous trees to provide slope stability and erosion control, where feasible, and would require soil contours and disturbed plantings to be replaced following management actions. Implementation of the MBHMP would not involve construction of any new facilities exposing soils or leading to erosion. A component of the Trail Management Program involves implementation of stormwater Best Management Practices (BMP) to reduce erosion and sedimentation from trails and viewing areas. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Implementation of the MBHMP would not involve construction of any structures. Therefore, the soil and geologic conditions in the Coverage Area would not become unstable as a result of the MBHMP or result in off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. No habitable structures are proposed as part of the MBHMP. No impact would occur.

NO IMPACT

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No habitable structures are proposed as part of the MBHMP. No impact related to expansive soils would occur.

NO IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The MBHMP would not involve the construction of a septic system or alternative wastewater disposal systems. Therefore, no impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Implementation of the MBHMP would not involve construction of any structures, and therefore, would not require excavation. Minimal grading may occur in association with development of new trails or trail maintenance that may uncover previously unidentified paleontological resources. Additionally, tree removal under the Catastrophic Event Response Program or Tree Management Program would result in ground disturbance that has the potential to unearth and potentially destroy unknown paleontological resources. With incorporation of Mitigation Measure GEO-1 during ground disturbance, potential impacts to paleontological resources would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Mitigation Measures

GEO-1 Unanticipated Discovery of Paleontological Resources

In the event of an unanticipated discovery of a paleontological resource during ground disturbance from the implementation of the MBHMP, work in the immediate area shall be temporarily halted and a qualified paleontologist (per Society of Vertebrate Paleontology standards 2010) shall be contacted to evaluate the find. If the discovery proves to be significant and cannot be avoided, additional work, such as salvage excavation, may be required to address any significant impacts.

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	☐	☐	■	☐

Existing Setting

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures.

Project implementation would generate GHG emissions through the burning of fossil fuels or other emissions of GHGs, thus potentially contributing to cumulative impacts related to climate change. In response to an increase in human-made GHG concentrations over the past 150 years, California has implemented AB 32, the "California Global Warming Solutions Act of 2006." AB 32 codifies the Statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. Furthermore, on September 8, 2016, the governor signed SB 32 into law, which requires the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing the CARB to ensure that GHG emissions are reduced to 40 percent below the 1990 level by 2030.

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalent (CO_2e) by 2030 and two MT CO_2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because these goals include all emissions sectors in the State.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a

project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

As discussed in Section 6, *Energy*, the City adopted a CAP on July 15, 2014. The CAP contains an emissions inventory and forecast, as well as voluntary measures to improve building energy efficiency, reduce vehicle miles traveled, reduce water consumption, improve equipment efficiency, and reduce solid waste transport to serve as tools for the community (City of Goleta 2014a, 2014b). The CAP is a planning study and does not adopt any policy or contain any mandatory measures or amendments to the City's General Plan and/or Municipal Code. Because the CAP contains only voluntary measures and does not contain City policies, the City's CAP is not a qualified CAP for purposes of CEQA analysis.

Thresholds of Significance

A significant impact with regard to GHG emissions could occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. In addition, on June 10, 2010, the County of Santa Barbara Planning & Development Department produced a memorandum titled *Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards*, which states, "While Santa Barbara County land use patterns differ from those in the Bay Area as a whole, Santa Barbara County is similar to certain Bay Area counties (in particular, Sonoma, Solano, and Marin) in terms of population growth, land use patterns, General Plan policies, and average commute patterns and times. Because of these similarities, the methodology used by [the Bay Area Air Quality Management District (BAAQMD)] to develop its GHG emission significance thresholds, as well as the thresholds themselves, have applicability to Santa Barbara County and represent the best available interim standards for Santa Barbara County" (County of Santa Barbara 2010). In accordance with CEQA Guidelines §§15064.4(b)(2) and 15064.7(c), the City has consistently relied upon the County of Santa Barbara's *Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards* as the expert-recommended threshold for establishing GHG impacts of a project. In addition, the City relies upon the SBCAPCD as a commenting agency to review the GHG analysis, and these thresholds represent a consistent approach and facilitate uniformity for impact determinations for City and County projects under the SBCAPCD's review.

The BAAQMD's GHG emissions thresholds are summarized in Table 6. This analysis uses the BAAQMD/Santa Barbara County Interim Thresholds of Significance to determine the significance of operational GHG emissions related to the MBHMP, based on the 1,100 MT CO_2e per year or 4.6 MT CO_2e per service population per year threshold for commercial and residential land uses (BAAQMD 2017). There is no BAAQMD threshold of significance for construction emissions.

Table 6 BAAQMD/Santa Barbara County Interim Thresholds of Significance

GHG Emission Source Category	Operational Emissions
Commercial and Residential (land use projects)	1,100 MT of CO_2e per year or 4.6 MT CO_2e per SP per yr[1]
Stationary Sources[2]	10,000 MT of CO_2e per year

MT = metric tons

CO_2e = carbon dioxide equivalent

[1] SP = Service Population (residents + employees)

[2] Stationary Sources include stationary combustion sources (industrial-type uses) regulated by the APCD.

Source: Santa Barbara County Planning & Development Department, Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards. Interim GHG Emissions – Evidentiary Support, June 10, 2010

Project-Specific Impacts

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Temporary GHG emissions associated with implementation of the MBHMP would be minimal, as the MBHMP would not involve construction of any new structures or facilities. Most covered activities, such as those associated with waste reduction and pest management programs, would not require the use of heavy equipment. Some covered activities, such as tree removal and pruning, trail maintenance, drainage clearing, invasive species eradication, and planting of native species, would generally be conducted using hand tools but may occasionally require the use of heavy diesel equipment. Consequently, these activities could result in temporary GHG emissions.

While covered activities under the MBHMP may result in minimal temporary GHG emissions, implementation of the MBHMP would also result in substantial GHG reductions. Tree removals conducted under the MBHMP would be limited to dead or dying trees which pose a threat to public safety. These trees function as carbon sources, releasing carbon to the atmosphere as they decay. Covered activities would remove these trees and replace them with living eucalyptus trees, native species, or fire-resistant understory species, in turn increasing the carbon sequestration potential of the Coverage Area. Additionally, covered activities like removal of dead or dying trees and planting of fire-resistant understory species would reduce wildfire risk in the Coverage Area, minimizing the potential for landscape-level carbon emissions associated with a wildfire event. Such impacts would be beneficial.

The trail improvement and educational programs associated with the MBHMP would improve the quality of the experience for visitors to the butterfly habitat, but would not directly increase the number of visitors to the Coverage Area. Furthermore, the MBHMP would not involve expansion of facilities to accommodate or encourage increased vehicle trips, such as additional parking lots or site access points. Therefore, the MBHMP would not substantially increase operational GHG emissions associated with vehicle trips to and from the Coverage Area.

The MBHMP would not involve any change in land use or construction of any structures. Therefore, it would not result in emissions exceeding the BAAQMD thresholds shown in Table 6 or conflict with a plan adopted for the purpose of reducing GHG emissions. Given that the MBHMP would result in

minimal temporary GHG emissions associated with covered activities, no substantial increase in operational GHG emissions associated with vehicle trips, and beneficial impacts by increasing sequestration and reducing wildfire potential in the Coverage Area, overall impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Mitigation Measures

No mitigation is recommended or required.

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	■	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	■

Existing Setting

In the 1970s-1980s, the Ellwood Mesa area was used for oil production activities. The Coverage Area contains three closed State Water Resources Control Board (SWRCB) GeoTracker sites (SWRCB 2015a, SWRCB 2015b, SWRCB 2015c).

The Coverage Area is subject to fire risk. Some species of eucalyptus trees found in the Coverage Area have deciduous bark, which is shed annually and presents a fire hazard. The bark catches fire readily and streamers from the loose bark tend to carry fire into the canopy and cast firebrands ahead of the main fire front. The leaf litter, which is the accumulation of dead, dry, and oily leaves, is also a fire hazard as it is extremely flammable. Additionally, the dead eucalyptus trees in the Coverage Area pose an exacerbated fire risk.

Thresholds of Significance

A significant impact with regard to hazards and hazardous materials would be expected to occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. In addition, the City's Environmental Thresholds and Guidelines Manual addresses public safety impacts resulting from involuntary exposure to hazardous materials. These thresholds focus on activities involving the installation of or modification to facilities that handle hazardous materials, transportation of hazardous materials, or non-hazardous land uses in proximity to hazardous facilities. Since the MBHMP would not include a hazardous materials facility, the City's risk-based thresholds are not applicable.

Project-Specific Impacts

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The MBHMP includes an Integrated Pest Management Program to control plant, animal, fungal, and other pests affecting monarch butterflies or their habitat. The MBHMP recommends the use of biological control methods such as birds, lady beetles, spiders, and other predators, as the use of chemical control such as pesticides and herbicides may be dangerous to butterflies. Nevertheless, application, handling, and transport of chemical pesticides, herbicides, and fertilizers may be necessary to ensure the long-term viability of new plantings or eradication of invasive species. Chemical applications have the potential to create the unintended release of a hazardous material.

Application of chemicals would be required to follow all local, State, and federal regulations to reduce the potential for creation of hazardous conditions and would be administered per manufacturer's specifications by a person certified for application. Therefore, implementation of the MBHMP would not create a significant hazard due to routine transport, use, or disposal of hazardous materials or pose a significant potential for the accidental release of hazardous materials into the environment. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The school closest to the Coverage Area is Ellwood Elementary School, located immediately north of the Coverage Area across Hollister Avenue. Covered activities under the MBHMP would generally not involve hazardous emissions or use of hazardous materials. However, application, handling, and transport of chemical pesticides, herbicides, and fertilizers may occur. The use of chemicals in this area would have the potential to affect students and staff present at the school during application. Application of chemicals would be required to follow all local, State, and federal regulations, including regulations pertaining to pesticide application near schools, to reduce the potential for creation of hazardous conditions and would be administered per manufacturer's specifications by a person certified for application. With adherence to existing regulations, potential impacts on the school resulting from emissions of hazardous chemicals and/or materials in the Coverage Area would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The following databases were checked, pursuant to Government Code Section 65962.5, on December 21, 2018 for known hazardous materials contamination in the vicinity of the Coverage Area:

- **USEPA**
  - Comprehensive Environmental Response, Compensation, and Liability Information System/ Superfund Enterprise Management System/Envirofacts database search
- **SWRCB**
  - GeoTracker search for leaking underground storage tanks and other cleanup sites
- **California Department of Toxic Substances Control**
  - EnviroStor search for hazardous facilities or known contamination sites
  - Cortese List of Hazardous Waste and Substances Sites
  - Cleanup Site and Hazardous Waste Facilities Database

The Coverage Area is not included on a list compiled pursuant to Section 65962.5 of the Government Code. A search of the GeoTracker database identified three closed sites in the Coverage Area: Ali d'Oro Lot 67, Southwest Diversified Property, and S.B. Shores County Park/Arco; all three sites were closed by 2014 (SWRCB 2015a; SWRCB 2015b, SWRCB 2015c).

Given the closed status of the listings and the fact that the MBHMP would not involve construction of any new buildings or structures, the MBHMP would not create a significant hazard to the public or the environment due to the presence of a listed hazardous materials site. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The Coverage Area is not located near a private airstrip but is located approximately two miles from the Santa Barbara Municipal Airport. The Coverage Area is not located in any of the airport's approach or clear zones and is not subject to review by the Airport Land Use Commission. In addition, the MBHMP would not involve construction of any buildings or other occupied facilities. Therefore, the MBHMP would not create any significant airport safety hazards and no impact would occur.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Implementation of the MBHMP would involve fuel management activities under the Community Wildfire Protection Program. These activities would not involve construction of any new facilities or change in land use that would interfere with an adopted emergency response plan. No impact would occur.

NO IMPACT

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The MBHMP includes the Community Wildfire Protection Program to be consistent with the intent of the City's CWPP and ensure fire safety and habitat protection are balanced. This program includes actions supporting the implementation of the CWPP's 100-foot-wide fire buffer around homes and structures in the Ellwood Mesa eucalyptus groves. The Program would also coordinate with City-approved wildland fire experts during the planning and implementation of any fuel treatments. The Tree Management Program would reduce fire hazard, improve public safety, and eliminate trees that are threatening the sustainability of the butterfly aggregation sites, including dead, diseased, and dying trees. Removal of hazardous trees, in combination with the maintenance of fire buffers and understory clearing, would reduce the risk of fire in the Coverage Area. Therefore, implementation of the MBHMP would have the beneficial effect of reducing exposure of people or structures to risk of loss, injury, or death involving wildland fires. No impact would occur.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	■	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
(iv) Impede or redirect flood flows?	☐	☐	■	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	■

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	■	☐	☐

Existing Setting

Devereux Creek and a tributary run through the Coverage Area, and portions of the Coverage Area overlay the western portion of the Goleta Groundwater Basin (Basin 3-016). The Coverage Area includes areas in the 100-year flood zone, as mapped by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FEMA 2018). Portions of the Coverage Area are also in the Potential Tsunami Runup Area as shown in Figure 5-2 of the General Plan Safety Element (City of Goleta 2006a).

Thresholds of Significance

A significant impact on hydrology and water quality would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. In addition, the City's Environmental Thresholds and Guidelines Manual assumes a significant impact on hydrology and water resources would occur if the MBHMP would:

- Be located in an urbanized area of Santa Barbara County and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one or more acres of land
- Increase the amount of impervious surfaces on the project site by 25 percent or more
- Result in channelization or relocation of a natural drainage channel
- Result in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks, or wetlands
- Be an industrial facility that falls under one or more categories of industrial facility regulated under the National Pollutant Discharge Elimination System (NPDES) Phase I industrial storm water regulations
- Discharge pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Central Coast RWQCB Basin Plan, or otherwise impair the beneficial uses of a receiving waterbody
- Result in a discharge of pollutants into an "impaired" waterbody that has been designated as such by the SWRCB or the Central Coast RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act)
- Result in a discharge of pollutants of concern to a receiving waterbody as identified in by the Central Coast RWQCB

Project-Specific Impacts

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Surface Water

The Coverage Area is under the jurisdiction of the Central Coast RWQCB. The Central Coast RWQCB released an update to the Water Quality Control Plan for the Central Coast Basin on September 27, 2017 (2017 Basin Plan; Central Coast RWQCB 2017). The 2017 Basin Plan describes beneficial uses and water quality objectives for surface waters in the basin, monitoring and assessment protocols and policies, and management principles relating to the protection and improvement of surface water quality.

Devereux Creek runs through the Coverage Area. Per the 2017 Basin Plan, Devereux Creek has designated beneficial uses of Municipal and Domestic Supply, Groundwater Recharge, Freshwater Replenishment, Water Contact Recreation, Non-Contact Water Recreation, Commercial and Sport Fishing, Warm Freshwater Habitat, and Wildlife Habitat (Central Coast RWQCB 2017). Devereux Creek is listed as impaired on the SWRCB's 2014-2016 303(d) list due to high levels of fecal coliform and low dissolved oxygen concentrations (SWRCB 2018). Implementation of the MBHMP would not involve construction of new facilities that could substantially degrade water quality and would not increase impervious surface cover generating increased polluted runoff. Covered activities under the MBHMP could involve limited ground disturbance in the Coverage Area, in turn generating temporary runoff of sediment and other pollutants to nearby waterbodies, including Devereux Creek. Application of herbicides, pesticides, and fertilizers associated with native planting, eucalyptus restoration, and invasive species eradication activities could result in runoff of chemical pollutants into adjacent waterbodies.

Ground-disturbing activities greater than one acre are subject to the requirements of the NPDES Construction General Permit (Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). Pursuant to the requirements of the NPDES Construction General Permit, these activities would prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) to minimize construction-related pollutant discharge. Common BMPs required in SWPPPs include installation of silt fences, post-grading revegetation, and regular stormwater quality monitoring. However, given the nature of covered activities under the MBHMP, most, if not all, activities would be smaller in scale and involve less than one acre of ground disturbance. Such activities include adjustments to trail locations, installation of culverts or water bars, construction of drainage crossings, installation of irrigation systems, or small-scale drainage channel clearing following flood events. These activities would have the potential to result in temporary sediment erosion and water quality impacts. Individually, these covered activities would not be subject to the requirements of the NPDES Construction General Permit. Furthermore, application of fertilizers, herbicides, and pesticides could result in runoff into nearby waterbodies, including the impaired Devereux Creek. Increased nutrient loading associated with fertilizer runoff to Devereux Creek could increase eutrophication, ultimately reducing dissolved oxygen and exacerbating the waterbody's existing impairment. These impacts would be potentially significant unless mitigation is incorporated.

Groundwater

Portions of the Coverage Area overlie the western portion of the Goleta Groundwater Basin. In May 2010, GWD and La Cumbre Mutual Water Company published the Final Groundwater Management Plan for the Goleta Groundwater Basin (GWD and La Cumbre Mutual Water Company 2010). The plan contains basin management objectives, basin yield and storage, and recommended future strategies. As the basin is adjudicated under the 1989 Wright Judgment, it has a "Very Low" basin priority under the California Department of Water Resources Final 2018 Basin Prioritization (California Department of Water Resources 2019) and is not required to prepare a Groundwater Sustainability Plan under the Sustainable Groundwater Management Act.

The MBHMP would not include any groundwater pumping or injection which would conflict with the Groundwater Management Plan for the Goleta Groundwater Basin. Similar to surface water impacts, application of chemical fertilizers, herbicides, or pesticides associated with covered activities would have the potential to result in leaching of pollutants to underlying groundwater. This impact would be potentially significant unless mitigation is incorporated.

Overall, impacts related to surface water and groundwater quality would be potentially significant. Incorporation of Mitigation Measures HWQ-1 and HWQ-2 would reduce water quality impacts to a less than significant level by minimizing erosion during ground-disturbing activities and reducing application and migration of chemical fertilizers, pesticides, and herbicides used during covered activities. These mitigation measures would minimize the potential for degradation of surface water or groundwater resources, and therefore, would ensure the MBHMP would not conflict with or obstruct implementation of a water quality plan or sustainable groundwater management plan. As a result, impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No impervious surfaces are proposed under the MBHMP, and the majority of the Coverage Area includes pervious surfaces allowing for groundwater infiltration. The MBHMP would not involve on-site pumping of groundwater. Irrigation may occur in the Coverage Area to support native plantings or eucalyptus restoration. Irrigation water would provide additional recharge benefits to the underlying aquifer, with water supplied from reclaimed water or existing potable supplies. Any potable water would be provided by GWD, which has adjudicated, appropriative groundwater extraction rights based on the Goleta Groundwater Basin's safe yield. GWD does not pump water from the West sub-basin of the Goleta Groundwater Basin, which the Coverage Area overlies. Therefore, the MBHMP would not deplete groundwater supplies or interfere with groundwater recharge. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or situation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would impede or redirect flood flows?

The MBHMP would not involve construction of any new facilities or change in land use that would substantially alter drainage patterns of the area. No new impervious surfaces are proposed, and therefore, runoff patterns would not be substantially altered, nor would any conditions contributing to an exceedance of the area stormwater drainage system be created. The natural drainage of the Coverage Area would result in passive detention and natural filtration of stormwater runoff. The MBHMP would not result in flooding, erosion, or siltation.

Clearing and re-contouring of drainage ways may occur as covered activities under the Tree Management Program. Such activities would repair drainage ways following flood events to protect trees. Impacts associated with alteration of the Coverage Area's drainage pattern would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

According to Figure 5.20 of the 2017 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan, the Coverage Area is not located in a dam inundation zone (County of Santa Barbara 2017). Portions of the Coverage Area along Devereux Creek are in a FEMA-designated flood hazard zone and other portions of the Coverage Area are subject to flooding by a tsunami. Implementation of the MBHMP would not involve construction or installation of any structures or facilities that would use, process, or store pollutants that could be released in the event of inundation. Therefore, no impact would occur.

NO IMPACT

Mitigation Measures

HWQ-1 Erosion Control Best Management Practices

Prior to commencement of any ground-disturbing activities not covered by a SWPPP prepared in compliance with the requirements of the NPDES Construction General Permit, the City or City-authorized contractor shall implement the following erosion control BMPs:

- Ground-disturbing activities shall occur between April 1 and September 30 to coincide with the dry season and avoid impacts to overwintering monarch butterflies.
- Silt fencing, straw bales composed of rice straw (that are certified to be free of weed seed), fiber rolls, gravel bags, mulching erosion control blankets, soil stabilizers, and storm drain filters shall be used, in conjunction with other methods, to prevent erosion throughout the Coverage Area and siltation of stream channels and detention basins.
- Temporary berms and sediment basins shall be constructed to avoid unnecessary siltation into local waterways during ground-disturbing activities.
- Erosion controls which protect and stabilize exposed soils shall be used to prevent movement of materials. Potential erosion control devices include plastic sheeting held down with rocks or sandbags over exposed soils and use of silt fences or berms of hay bales.
- Frequency of sediment removal from detention basins, locations and types of erosion and sediment control structures, and materials that would be used in the Coverage Area during MBHMP activities shall be specified.
- All exposed soils present in and around the disturbed area shall be stabilized within seven days of ground disturbance using mulch, geotextile binding fabrics, and/or native, drought-tolerant revegetation, as necessary.

HWQ-2 Chemical Application Control Plan

Prior to commencement of native planting, eucalyptus grove restoration, invasive species eradication, and pest control activities, the City shall prepare and implement a Chemical Application Control Plan to be approved by the City Biologist. The plan shall identify thresholds to determine when fertilizer, herbicide, or pesticide application is necessary, the chemical to be used, and the rate, timing, and placement of application. Pesticides or insecticides shall be used only when necessary to cure a problem and in positively identified pre-emergent situations, not as a preventive measure or as a regular, periodic application.

When pesticide or herbicide application is deemed necessary, use of chemical forms that are the least toxic to non-target organisms shall be employed. Only slow release organic fertilizers shall be used in the Coverage Area to minimize the potential for eutrophication in Devereux Creek. The application of fertilizers, herbicides, or pesticides shall be minimized during winter months when the greatest precipitation is likely to occur.

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■

Existing Setting

The Coverage Area is an undeveloped area zoned Recreation (Rec) and with a General Plan land use designation of Open Space/Passive Recreation.

Thresholds of Significance

A significant land use and planning impact would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. The City's Environmental Thresholds and Guidelines Manual does not contain City-specific land use and planning thresholds.

Project-Specific Impacts

a. Would the project physically divide an established community?

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Implementation of the MBHMP would not divide an established community because the MBHMP would not change the existing land use or result in any new structures in the Coverage Area. Therefore, implementation of the MBHMP would not conflict with the City's Zoning Ordinance or General Plan. The covered activities are allowed under the City's Zoning Ordinance and General Plan for open space and passive recreation because the MBHMP would preserve habitat for butterflies and promote visitors at the preserve through the outreach programs. The Open Space Element of the City's General Plan includes several goals, policies, and actions intended to achieve the City's vision for open space, parks, and recreation facilities that are accessible to all members of the community. The MBHMP would be consistent with several guiding principles of the Open Space Element, including:

- Provide and maintain, in coordination with other agencies, a system of parks, open spaces, and recreation facilities that are accessible to and will meet the needs of present and future users of all age groups.
- Manage, operate, and maintain park, recreation, and open space facilities (including trails) in a manner that is responsive to the site and adjacent neighborhoods and balances the needs of the community with available funding.
- Preserve Goleta's existing open space areas, including its beaches and Pacific shoreline, sensitive habitat areas, and agricultural lands, and increase the amount of permanently protected open space as opportunities for acquisition arise.
- Provide for convenient public access to Goleta's beach and shoreline areas and protect these areas for coastal-dependent and coastal-related recreation use.
- Manage open space areas in a manner that provides for public access, passive and active recreational use, and enjoyment, consistent with protection of natural and scenic resource values.
- Provide and maintain a system of trails that will connect major parks and open space areas with each other, neighborhoods, the regional trail system, and Los Padres National Forest.

Additionally, the MBHMP would be consistent goals and supporting policies contained in the Open Space Plan, particularly those related to monarch butterfly and habitat protection, including the following (City of Goleta 2004):

- Protect, enhance, and, where feasible, restore ESHAs in the Open Space Plan Area.
    - 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.
- Protect and maintain existing monarch butterfly populations in the Open Space Plan Area, and manage the habitats to be self-sustaining.
    - Manage public access to protect butterflies and their habitat, while promoting public enjoyment, education, and scientific research.
    - Conduct scientifically sound studies using appropriate and cautious methods to maintain and improve habitat conditions to ensure long-term viability of the population.

Figure 3-2, Park and Recreation Plan Map, of the Open Space Element shows the Coverage Area is classified as Regional Open Space. This designation in the General Plan indicates the area is contiguous to or encompasses significant natural resources and may include areas of historical, environmental, or ecological value. These areas may contain special amenities or features that attract people from throughout Goleta and the surrounding region. The MBHMP, including its goals and programs, is consistent with the preservation and protection of natural values and passive recreation in the Regional Open Space designation in the General Plan.

The MBHMP would also implement Policy OS-5 of the General Plan by protecting and enhancing the Coverage Area's ESHAs. The Coverage Area is not included in any adopted Habitat Conservation Plans or natural community conservation plans. No impact would occur.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

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12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■
c. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

Existing Setting

Although oil extraction activities took place on Ellwood Mesa in the 1970s-1980s, according to the mineral yearbook produced by the California Geological Survey and the USGS (2003), no major nonfuel mineral–producing areas are located in Goleta. In addition, the mineral land classification maps for Santa Barbara County (California Division of Mines and Geology 1989) show no known areas of significant aggregate resources in Goleta. According to the General Plan, most of Goleta is mapped as containing mineral deposits of unknown significance, and a small portion of the city is mapped as having no significant deposits (City of Goleta 2006a).

Thresholds of Significance

A significant impact on mineral resources would occur if the MBHMP resulted in any of the impacts noted in the checklist above, pursuant to Appendix G of the CEQA Guidelines. The City's Environmental Thresholds and Guidelines Manual does not contain City-specific mineral resources thresholds.

Project-Specific Impacts

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The MBHMP would not result in the loss of availability of any known mineral resource or identified mineral resource recovery site. No impact would occur.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	■	☐

Noise Background

Noise is unwanted sound resulting in a disturbance of human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels using the A-weighted sound pressure level (dBA). Because of the way the human ear interprets sound level, a sound must be approximately 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1 to 2 dBA changes are typically not perceived. Quiet suburban areas generally have noise levels in the range of 40 to 50 dBA, while arterial streets are in the 50 to 60+ dBA range. Normal conversational levels are in the 60 to 65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of approximately 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of approximately 4.5 dBA per doubling of distance, while noise from heavily traveled roads typically attenuates at approximately 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures. For example, a single row of buildings between the receptor and the noise source reduces the noise level by approximately 5 dBA, while a solid wall or berm breaking the line-of-sight reduces noise levels by 5 to 10 dBA (Federal Transit Administration 2018). The manner in which homes in California are constructed generally provides a

reduction of exterior-to-interior noise levels of about 20 to 35 dBA with closed windows (Federal Highway Administration 2011).

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds occurring over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. The equivalent noise level (Leq) is one of the most frequently used noise metrics and considers both duration and sound power level. The Leq is defined as the single steady A-weighted level equal to the same amount of energy contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. The highest root mean squared (RMS) sound pressure level in the measuring period is the Lmax. The lowest RMS sound pressure level in the measuring period is the Lmin.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.), or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a 10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. Noise levels described by Ldn and CNEL usually do not differ by more than 1 dBA. In practice, CNEL and Ldn are used interchangeably.

Vibration Background

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by human-made activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB).

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources inside buildings such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

Coverage Area Setting

The Coverage Area is an open space preserve; therefore, dominant noise levels in the Coverage Area are from conversations of recreational users and visitors. A small portion of the northern boundary of the Coverage Area adjacent to Hollister Avenue is in the roadway's existing and future 60 dBA CNEL noise contour (see Figures 9-1 and 9-3, General Plan Noise Element, City of Goleta 2006a). The Coverage Area is not in the existing or future 60 dBA CNEL noise contour for the Santa Barbara Municipal Airport (Figures 9-2 and 9-4, General Plan Noise Element, City of Goleta 2006a). Sensitive receptors closest to the Coverage Area include residences adjacent to the northern and western boundaries of the Coverage Area, as well as Ellwood Elementary School and the Mariposa at Ellwood Shores assisted living facility north of the Coverage Area across Hollister Avenue.

Regulatory Setting

City of Goleta General Plan/Coastal Land Use Plan Noise Element

The General Plan Noise Element identifies noise sources in Goleta and land use compatibility standards for proposed development to minimize exposure of residents to excessive noise levels (City of Goleta 2006a). Additionally, the Noise Element contains policies and programs pertaining to noise generation and exposure in Goleta that are relevant to the MBHMP:

POLICY NE 6.2 ENFORCEMENT OF RESTRICTIONS IN OPEN SPACE AREAS

The City shall enforce restrictions or prohibitions on motorized vehicles in City-owned open-space areas unless such operation is allowed by permit. Signage stating such restrictions or prohibitions shall be provided and maintained in good order, and the need for additional signage shall be considered periodically.

POLICY NE 6.4 RESTRICTIONS ON CONSTRUCTION HOURS

The City shall require, as a condition of approval for any land use permit or other planning permit, restrictions on construction hours. Noise-generating construction activities for projects near or adjacent to residential buildings and neighborhoods or other sensitive receptors shall be limited to Monday through Friday, 8:00 a.m. to 5:00 p.m. Construction in nonresidential areas away from sensitive receivers shall be limited to Monday through Friday, 7:00 a.m. to 4:00 p.m. Construction shall generally not be allowed on weekends and State holidays. Exceptions to these restrictions may be made in extenuating circumstances (in the event of an emergency, for example) on a case by case basis at the discretion of the Director of Planning and Environmental Services. All construction sites subject to such restrictions shall post the allowed hours of operation near the entrance to the site, so that workers on site are aware of this limitation. City staff shall closely monitor compliance with restrictions on construction hours, and shall promptly investigate and respond to all noncompliance complaints.

POLICY NE 6.5 OTHER MEASURES TO REDUCE CONSTRUCTION NOISE

The following measures shall be incorporated into grading and building plan specifications to reduce the impact of construction noise:

- All construction equipment shall have properly maintained sound-control devices, and no equipment shall have an unmuffled exhaust system.
- Contractors shall implement appropriate additional noise mitigation measures including but not limited to changing the location of stationary construction equipment, shutting off idling equipment, and installing acoustic barriers around significant sources of stationary construction noise.
- To the extent practicable, adequate buffers shall be maintained between noise-generating machinery or equipment and any sensitive receivers. The buffer should ensure that noise at the receiver site does not exceed 65 dBA CNEL. For equipment that produces a noise level of 95 dBA at 50 feet, a buffer of 1,600 feet is required for attenuation of sound levels to 65 dBA.

City of Goleta Municipal Code

Chapter 9.09 of the Goleta Municipal Code contains the City's noise ordinance. The ordinance broadly prohibits any unnecessary noises or sounds that are physically annoying to persons of ordinary sensitiveness or which are harsh, prolonged, unnatural, or unusual in their use, time or place as to occasion physical discomfort to the inhabitants of Goleta. The ordinance also restricts loud or unreasonable noise, music, percussion, or other sounds amplified by any musical instrument, drum, radio, loudspeaker, or other sound amplifying device during specified hours.

Thresholds of Significance

A significant noise impact would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. Additional thresholds are contained in the City's Environmental Thresholds and Guidelines Manual. The City's adopted thresholds state that exterior CNEL noise levels in excess of 65 dBA would result in a significant noise impact on sensitive receptors. Additionally, noise from grading and construction activity within 1,600 feet of sensitive receptors would be presumed to result in a potentially significant impact. The manual recommends mitigating such impacts by limiting construction within 1,600 feet of sensitive receptors to weekdays between 8:00 a.m. and 5:00 p.m.

Project-Specific Impacts

a. Would the project result generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Existing noise sources in the Coverage Area include cars in the parking area and conversations from people walking through the Coverage Area. Motorized transportation is limited to the parking area adjacent to Hollister Avenue. As shown in Table 9-1 of the General Plan, existing ambient noise level at the residences near the Coverage Area is approximately 58 dBA Leq. Therefore, ambient noise levels are below the City's adopted threshold for residential uses of 65 dBA CNEL.

Permanent Noise Impacts

While trail improvements and educational programs may improve the visitor experience at the Coverage Area, implementation of the MBHMP would not involve construction of new uses in the Coverage Area or expand the existing parking lot facilities, and therefore, would not substantially increase the number of visitors. Accordingly, the MBHMP would not result in a permanent increase in ambient noises above the City's standards.

Temporary Noise Impacts

Implementation of the MBHMP would involve habitat restoration, trail maintenance, and other activities under the Natural Resources Management Programs. These types of activities would mostly involve hand tools, but may involve mowers or other mechanical equipment, such as chainsaws. Tree removals and pruning may require the use of trucks and lifts. Additionally, culvert installation, drainage clearing following flood events, and trail maintenance activities may require occasional use of heavy construction equipment, including backhoes and bulldozers. Table 7 summarizes typical noise levels associated with construction equipment that may be used during covered activities.

Table 7 Typical Construction Equipment Noise Levels

Equipment On-site	Typical Level (dBA) 25 Feet from the Source	Typical Level (dBA) 50 Feet from the Source	Typical Level (dBA) 100 Feet from the Source
Backhoe	86	80	74
Dozer	91	85	79
Loader	86	80	74
Saw	82	76	70
Shovel	88	82	76
Truck	90	84	78

Noise levels assume a noise attenuation rate of 6 dBA per doubling of distance.

Source: Federal Transit Administration 2018.

While temporary in nature, covered activities—including tree removal and pruning, trail maintenance, and drainage clearing—would occur within 1,600 feet of residences located adjacent to the Coverage Area. Given the proximity of these activities to sensitive receptors, they would be presumed to result in a potentially significant impact unless mitigation is incorporated, according to the City's Environmental Thresholds and Guidelines Manual.

Mitigation Measure N-1 restricts noise-generating MBHMP activities to hours recommended in the City's Environmental Thresholds and Guidelines Manual. The measure would further reduce potential construction noise associated with covered activities by requiring sound-control devices on construction equipment, consistent with Policy NE 6.5 of the General Plan Noise Element. Because the MBHMP would implement the City's recommended construction noise mitigation and would further reduce construction noise through installation of sound-control devices, impacts related to temporary noise associated with MBHMP activities would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Implementation of the MBHMP would not involve construction of new facilities, and therefore, use of heavy construction equipment would be limited. During implementation of the Natural Resources Management Programs, trail and tree maintenance activities would involve equipment such as chainsaws and hand tools. However, these types of equipment are not associated with high vibration levels. Drainage clearing and re-contouring, trail relocation, and culvert installation activities may require the occasional use of heavy equipment. Such activities would not require pile-driving or other construction methods capable of generating substantial ground-borne vibration. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

There are no private airports or airstrips in the vicinity of the Coverage Area. The Coverage Area is approximately 1.7 miles west of the Santa Barbara Municipal Airport but outside the Santa Barbara Municipal Airport's 60 dBA noise contour. Although there may be occasional aircraft overflights, these would occur at high altitudes where noise generation would be expected to be less than 60 dBA. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Mitigation Measures

N-1 Noise Management

Consistent with mitigation recommended in the City's Environmental Thresholds and Guidelines Manual, all noise-generating MBHMP activities, including, but not limited to, tree removal, pruning, trail maintenance, and riparian restoration, shall be limited to between 8:00 a.m. and 5:00 p.m. on weekdays. Noise-generating MBHMP activities shall not occur on weekends or State holidays.

If diesel-powered construction equipment is necessary, all such equipment shall have properly maintained sound-control devices, and no equipment shall have an unmuffled exhaust system. Equipment shall not be left to idle while not in use.

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	■
b. Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

Existing Setting

According to the California Department of Finance (DOF), Goleta's population is 31,949 people (DOF 2018). The estimated average household size is 2.78 persons and there are 12,021 housing units (DOF 2018). Upon buildout of the General Plan (anticipated to occur by the year 2030), Goleta's population is expected to reach 38,100 (City of Goleta 2006a).

The Coverage Area is undeveloped and does not include any dwelling units.

Thresholds of Significance

A significant impact on population and housing would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. The City's Environmental Thresholds and Guidelines Manual does not contain City-specific population and housing thresholds.

Project-Specific Impacts

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Implementation of the MBHMP would not involve construction of any residential units which would increase Goleta's population. The MBHMP would occur at Ellwood Mesa, and therefore, would not displace any existing housing or require the displacement of any people, as no housing is present in the Coverage Area. No impact would occur.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	1 Fire protection?	☐	☐	☐	■
	2 Police protection?	☐	☐	☐	■
	3 Schools?	☐	☐	☐	■
	4 Parks?	☐	☐	☐	■
	5 Other public facilities?	☐	☐	☐	■

Existing Setting

Fire protection/Emergency services for the Coverage Area are provided by the Santa Barbara County Fire Department. The fire station closest to the Coverage Area is Station #11 located at 6901 Frey Way, just off of Storke Road and south of Hollister Avenue and the Camino Real Marketplace (approximately two miles driving distance). During long-term implementation of the MBHMP, Fire Station #10, which has been approved by the City but not yet constructed, will provide additional coverage. This station will be located on the north side of Hollister Avenue west of Cathedral Oaks Road, approximately 0.5 mile from the Ellwood Mesa parking lot. The City's General Plan identifies three standards with respect to the provision of fire protection services, which include:

- A firefighter-to-population ratio of one firefighter on duty 24 hours a day for every 2,000 persons is the ideal goal, however, one firefighter for every 4,000 persons is the absolute maximum population that can be adequately served
- A ratio of one engine company per 16,000 persons, assuming four firefighters per station, represents the maximum population that the Santa Barbara County Fire Department determined can be adequately served by a four-person crew
- A five-minute response time in urban areas

Police services are provided by the County Sheriff's Department under contract to the City. Law enforcement services include 24-hour police patrol for traffic enforcement, accident investigation, vehicle abatement, and parking control, as well as detective services for special investigations. Specialized functions through the Santa Barbara County Sheriff's Department are provided as needed. Services are also available for special events and/or natural disaster response.

Public schools in the vicinity of the project site include the Ellwood Elementary School, located north of the Coverage Area across Hollister Avenue.

The project site includes the Ellwood Mesa Open Space, which is considered a "regional open space" according to the City's General Plan (see Figure 3-2 and Table 3-1 of the Open Space Element).

Thresholds of Significance

A significant impact on public services would occur if the MBHMP would resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. In addition, the City's Environmental Thresholds and Guidelines Manual includes thresholds of significance for potential impacts on area schools. Specifically, under these thresholds any project that would generate enough students to generate the need for an additional classroom using current State standards, would result in a significant impact on area schools. Current State standards for classroom size are as follows:

- Grades K – 2: 20 students/classroom
- Grades 3 – 8: 29 students/classroom
- Grades 9 – 12: 28 students/classroom

Project-Specific Impacts

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.5. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered

governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

The MBHMP includes the Community Wildfire Protection Program, which provides practices to manage the eucalyptus groves and ensure consistency with the City's CWPP to reduce the ignitability of homes and structures. The risk of potential wildfires in the Coverage Area would be reduced by the CWPP and its policies and actions, as well as the Tree Management Program. The Tree Management Program would reduce fire hazards, improve public safety, and eliminate trees threatening the sustainability of the eucalyptus groves. The MBHMP would not involve construction of new residential uses; therefore, the MBHMP would not increase population nor increase demand for fire protection, police protection, schools, parks, or other facilities. No impact would occur.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	■	☐

Existing Setting

Goleta has ~~six City~~16 public parks, 4 private parks, and ~~eight~~18 public open spaces, totaling approximately ~~482~~526 acres (City of Goleta 200618a). This equates to approximately ~~15~~16.4 acres per 1,000 residents (based on a current [2018] population of 31,949 [DOF 2018]). Approximately 40 percent of Goleta's two-mile Pacific shoreline is held in City ownership (City of Goleta 2017a). The City's parks and open space areas provide many opportunities for passive recreation and enjoyment of natural areas. Areas specifically developed for active recreational uses are less abundant, with approximately three acres of developed park land per 1,000 residents.

The Coverage Area encompasses the Sperling Preserve/Ellwood Mesa, a City-owned regional open space preserve. The preserve includes opportunities for recreation with extensive trails linking to a series of regional trails and access to Ellwood Beach. Following the July 2017 field study, which indicated over 1,200 trees in the eucalyptus forest were dead and hundreds more degraded or dying, numerous trails through the Coverage Area were closed indefinitely due to public safety hazards posed by the possibility of dead or dying trees falling.

Thresholds of Significance

A significant impact on recreation would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. The City's Environmental Thresholds and Guidelines Manual does not contain City-specific recreation thresholds.

Project-Specific Impacts

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Coverage Area is located in Ellwood Mesa Open Space and includes passive recreation opportunities, including hiking and wildlife viewing. The MBHMP is designed to preserve and

enhance butterfly habitat with specific programs related to natural resources management and monitoring, research, and adaptive management. Implementation of the MBHMP would also improve safety by allowing for the removal of dead trees that present a risk to recreational users in the Coverage Area. These programs, combined with the MBHMP's outreach programs, would improve conditions in the Coverage Area, thereby improving the visitor experience and possibly increasing recreational use.

Recreational use of the Coverage Area has been temporarily inhibited due to the closure of trails following the discovery of over 1,200 dead trees in July 2017. Since that time, recreational use of the Coverage Area has been diminished below its historical use. Although implementation of the MBHMP may increase recreational use in the Coverage Area, this increase would not be substantial and is not expected to exceed historical use of the Coverage Area prior to trail closures. Furthermore, the MBHMP would not expand the capacity of the Coverage Area because it would not accommodate additional vehicle trips to the area through additional parking or site access. Implementation of the MBHMP would not involve construction of any new residences and would not result in a population increase that would increase demand for recreational facilities.

The Trail Management Program would maintain and enhance the quality and safety of trails in the Coverage Area, thereby avoiding potential long-term degradation and trail closures. Maintaining the quality of and access to passive recreation opportunities in the Coverage Area would ensure that the Ellwood Mesa Open Space, including the Coverage Area, would continue to accommodate existing visitors. If these trails were not maintained, recreational users may choose to visit alternative facilities, resulting in increased demand at the City's other recreational facilities. Therefore, implementation of the MBHMP would have the beneficial impact of preventing increased demand at other recreational facilities by improving and maintaining amenities in the Coverage Area. Given that implementation of the MBHMP would not increase demand for recreational facilities or substantially increase the use of existing neighborhood and regional parks, it would not result in substantial physical deterioration of existing neighborhood and regional parks or other recreational facilities. Therefore, no impact would occur.

NO IMPACT

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Various trail management activities, including but not limited to removal of safety hazards, installation of trail boundary posts, and trail relocations, are covered activities under the MBHMP's Trail Management Program. These covered activities could result in adverse physical effects on the environment, which are documented throughout this IS-MND. All impacts associated with implementation of the MBHMP, including trail management activities, would be less than significant or less than significant with incorporation of applicable mitigation measures contained in this document. As a result, impacts related to recreational facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Mitigation Measures

No mitigation is required or recommended.

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	■	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	■	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	■
d. Result in inadequate emergency access?	☐	☐	☐	■

Existing Setting

The major highways and arterial streets that serve the Coverage Area include US 101 and Hollister Avenue. US 101, located north of the Coverage Area, is a multi-lane interstate freeway serving the Pacific Coast between Los Angeles and the state of Washington. The freeway is the principal route between Goleta and the cities of Santa Barbara, Carpinteria, and Ventura to the south as well as the cities of Buellton and Santa Maria to the north. Access to US 101 from the Coverage Area is via Hollister Avenue to Storke Road to the east or Cathedral Oaks Road to the west.

Hollister Avenue, located immediately north of the Coverage Area, is an arterial roadway which serves as the primary east-west surface street through Goleta south of the freeway. Hollister Avenue is a four-lane, divided arterial with on-street bike lanes. Improvements to the Hollister Road corridor completed in 2018 include separate, off-street bike and pedestrian lanes along the portion of Hollister Avenue north of the Coverage Area and the adjacent residential neighborhood to the east.

Thresholds of Significance

A significant, project-generated traffic impact would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. Additional thresholds of significance are set forth in the City's Environmental Thresholds and Guidelines Manual. According to the manual, a potentially significant traffic impact would occur if:

1. The addition of project traffic to an intersection increases the volume to capacity ratio or number of trips by the values provided below.

Level of Services (including the project)	Increase in Volume to Capacity Ratio (greater than)
A	0.20
B	0.15
C	0.10
Or the addition of:	**Number of Trips**
D	15
E	10
F	5

2. Project access to a major road or arterial road would require a driveway that would create an unsafe situation or a new traffic signal or major revisions to an existing traffic signal.
3. The project adds traffic to a roadway that has design features (e.g., narrow width, road side ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives use which would be incompatible with a substantial increase in traffic (e.g., rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use, etc.) that will result in potential safety problems with the addition of project or cumulative traffic.
4. Project traffic would utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service (A-C) but with cumulative traffic would degrade to or approach LOS D (volume to capacity ration of 0.81) or lower. Substantial is defined as a minimum change of 0.03 for intersections which would operate from 0.80 to 0.85 and a change of 0.02 for intersections which would operate from 0.86 to 0.90, and 0.01 for intersections operating at anything lower.

Project-Specific Impacts

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

While trail maintenance and outreach programs may improve the visitor experience, implementation of the MBHMP would not involve construction of new facilities, expansion of existing facilities, or a change in land use in the Coverage Area. As a result, the MBHMP would not substantially increase the number of visitors to the Coverage Area. Therefore, the number of trips to and from the Coverage Area would remain similar to historical conditions and would not contribute to an exceedance of intersection capacity at nearby intersections.

Covered activities, such as tree removal and pruning, revegetation, habitat restoration, and trail maintenance, may require occasional truck trips to the Coverage Area. Additionally, drainage clearing, trail maintenance, and culvert installation activities would require truck trips by maintenance workers performing these activities. These activities would not require large quantities of soil import or export generating substantial truck trips. Trips associated with covered activities would be temporary and intermittent, adding a nominal number of trips to area roadways. This impact would be less than significant.

The Coverage Area is accessible via the Santa Barbara Metropolitan Transit District bus lines 25, 2630, 2660, and 2740, which stop on Hollister Avenue. The MBHMP would not substantially increase the number of visitors to the Coverage Area or otherwise affect public transit.

The Coverage Area is accessible and would remain accessible via bicycle and pedestrian facilities along Hollister Avenue. Tree removal and pruning, revegetation, trail maintenance, and habitat restoration activities may require temporary closure of trails in the Coverage Area. Many trails in the Coverage Area have been closed indefinitely since July 2017 due to safety hazards posed by dead or dying trees. Implementation of the MBHMP would remove these hazards, in turn restoring access to trails and improving active transportation opportunities and safety in the Coverage Area. Therefore, no impact would occur.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state that vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. As discussed above, the MBHMP would not substantially increase visitors to the Coverage Area and would not involve construction or expansion of facilities to accommodate additional vehicle trips (e.g., expanded parking facilities). Furthermore, the MBHMP would enhance active transportation opportunities by improving the quality and safety of trails in the Coverage Area.

According to Section 15064.3(b)(1) of the CEQA Guidelines, land use projects within 0.5 mile of either an existing major transit stop or a stop along an existing high-quality transit corridor are presumed to have a less than significant impact with respect to transportation. The Coverage Area is located less than 0.1 mile from the Hollister/Viajero bus stop, served by the 25, 2660, and 2740 bus lines. These lines connect to the Hollister Avenue Transit Corridor, which begins east of the Coverage Area at Pacific Oaks Road. Because the MBHMP would not substantially increase visitors to the Coverage Area, the Coverage Area is served by existing transit and active transportation facilities, and the MBHMP would enhance active transportation opportunities in the Coverage Area, implementation of the MBHMP would not substantially increase vehicle miles traveled. The MBHMP would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

The Coverage Area is accessed by vehicle via Hollister Avenue and residential streets to the north. Implementation of the MBHMP would not change access to the Coverage Area. These roadways do not have design features or receive uses that would be incompatible with the nominal number of truck trips that would occur in conjunction with covered activities under the MBHMP. The MBHMP would not install any driveways along a major or arterial roadway, and does not involve any other features that would create or increase hazards. No impact would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

Implementation of the MBHMP does not involve construction of any new structures impeding emergency access. The MBHMP includes the Trail Management Program, which would involve trail maintenance improving trails and access in the Coverage Area. No impact would occur.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	■
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significant of the resource to a California Native American tribe.	☐	☐	☐	■

Existing Setting

As of July 1, 2015, Assembly Bill 52 (AB 52) of 2014 was enacted and expanded CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). It further states the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document may be adopted or certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency.

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?

Tribal cultural resources are defined in PRC Section 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

To date, no tribal cultural resources have been identified in the Coverage Area and no tribal representatives have requested consultation regarding potential resources in the Coverage Area. The City prepared and mailed letters to local Native Americans on December 21, 2018. Under AB 52, tribes have 30 days to respond and request consultation, giving tribes until January 21, 2019 to provide a response. As of the date of this draft document, the 30-day response period has ended and no tribal representatives requested formal consultation with the City.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	■	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	■	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	■	☐
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

Existing Setting

Wastewater Treatment

The Goleta West Sanitary District (GWSD) provides sewer service in the project area via its system of sewer mains which ultimately connect to the Goleta Sanitary District's (GSD) main treatment plant at 1 William Moffett Place adjacent to the Santa Barbara Municipal Airport. Treatment of wastewater collected by GWSD is provided through a contract with GSD. The GSD treatment plant has a capacity of 9.7 million gallons per day (based on average daily flow), but is currently limited to a permitted discharge of 7.64 million gallons per day pursuant to a NPDES permit issued by the USEPA in concurrence with the State's Central Coast RWQCB. The GWSD is allocated 40.78 percent

of the capacity at the sewage treatment plant, which equates to about 3.12 million gallons per day (City of Goleta 2006a).

Water Supply

GWD is the water purveyor for Goleta. GWD operates under the *Wright Judgment,* which prohibits overdrafting of the Goleta Groundwater Basin. GWD draws its water supply from surface water from Lake Cachuma, groundwater from the Goleta Groundwater Basin, recycled water from GSD, and imported water from the State Water Project. In December 2015 GWD acquired 2,500 acre feet of supplemental water from another State Water Project contractor through the Central Coast Water Authority Supplemental Water Purchase Program to augment existing supplies in response to a fourth consecutive year of drought. In the last 10 years, GWD has obtained approximately 60 percent of its water supplies from Lake Cachuma, 15 percent from the State Water Project, 7 percent from recycled water, 17 percent from groundwater, and 1 percent from supplemental water purchases (GWD 2017a).

Landfill Capacity and Solid Waste

All nonhazardous solid waste in Goleta is handled at the Tajiguas Landfill and South Coast Recycling and Transfer Station, both of which are owned and operated by the Santa Barbara County Public Works Department. The management of solid waste by the Santa Barbara County Public Works Department includes collection, recycling, disposal, and mitigation for illegal dumping. Marborg Industries provides collection services in Goleta. Waste generated in Goleta is handled at the South Coast Recycling and Transfer Station where recyclable and organic materials are sorted for recycling and composting. The remaining solid waste is transported to and disposed of at the Tajiguas Landfill. Santa Barbara County Environmental Health Services permits Tajiguas to accept up to 1,500 tons of municipal solid waste and yard waste per day. Tajiguas has a remaining capacity of approximately 4.3 million cubic yards as of March 2016. The South Coast Recycling and Transfer Station processes 550 tons of waste per day and has a maximum permitted capacity of 595 tons per day (City of Goleta 2006a; CalRecycle 2018).

Electrical Service

Electrical service to Goleta and the South Coast region is provided by Southern California Edison Company. Southern California Edison Company maintains substations in Goleta, including the Hollister Avenue and Glen Annie substations, as well as electrical distribution lines (City of Goleta 2004).

Natural Gas

SoCalGas provides natural gas service to approximately six million residential and business customers across 20,000 square miles of southern California, including Goleta (SoCalGas 2019a). Goleta, including the Coverage Area, is located in SoCalGas' Coastal Zone. SoCalGas operates the La Goleta Natural Gas Storage Field, a naturally occurring underground storage reservoir in the porous sandstone of the Vaqueros Formation located approximately 3.4 miles east of the Coverage Area (SoCalGas 2019b). La Goleta is one of four SoCalGas storage facilities in southern California, interconnected by regional transmission lines.

Thresholds of Significance

A significant impact on utilities and service systems would occur if the MBHMP would result in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. In addition, under the City's Environmental Thresholds and Guidelines Manual, a project generating 196 tons of solid waste/year, after receiving a 50 percent credit for source reduction, recycling, and composting, would result in a project-specific, significant impact on Goleta's solid waste stream. Any project generating 40 tons/year, after receiving a 50 percent credit for source reduction, recycling, and composting, would make an adverse contribution to cumulative impacts to Goleta's solid waste stream.

Project-Specific Impacts

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The Coverage Area includes existing restroom facilities at the parking lot along Hollister Avenue and would not involve construction of any new restroom facilities. Implementation of the MBHMP would not result in a substantial increase in the number of visitors to the Coverage Area. Therefore, implementation of the MBHMP would not increase wastewater generation.

Trail improvements and new trails developed under the MBHMP would be unpaved. Therefore, the MBHMP would not increase the extent of impervious surface cover in the Coverage Area. Consequently, the MBHMP would not increase stormwater runoff or result in the need for new or expanded storm water drainage control facilities. No new electric power, natural gas, or telecommunications facilities would be constructed to serve the Coverage Area.

The MBHMP would not involve new development or an increase in population requiring expansion of water treatment or distribution facilities. However, installation of irrigation drip lines and storage tanks is a covered activity under the Tree Management Program. This covered activity may require limited soil disturbance and vegetation removal. Storage tanks would be located above ground to avoid existing eucalyptus trees, and drip lines would be installed a maximum of six inches below ground surface. Following installation of driplines, soil would be replaced to existing contours and irrigation would support new and existing vegetation in the Coverage Area. Other potential environmental impacts of MBHMP covered activities, including installation of irrigation facilities, are assessed throughout this document and were found not to cause any significant environmental effects. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Implementation of the MBHMP would not involve any change in land use or new development that would increase water demand. The MBHMP would not result in construction of new or expanded facilities but would maintain existing facilities in the Coverage Area. Irrigation in the Coverage Area is a covered activity under the Tree Management Program. Irrigation water would be provided via water trucks or on-site water tanks as needed using existing potable or reclaimed water supplies. Assuming an average water tank size of 3,600 gallons (McLellan Industries 2014) and twice weekly

filling of the tank to accommodate water application during the region's approximately 26-week dry season, irrigation water application would total approximately 0.6 acre feet per year. According to the GWD 2015 Urban Water Management Plan, this amounts to less than 0.01 percent of GWD's projected 2020 water supply (GWD 2017b). As discussed in Section 10, *Hydrology and Water Quality*, irrigation water would also provide additional recharge benefits to the underlying aquifer if supplied from reclaimed water. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed under threshold a, the MBHMP would involve no increase in wastewater generation. No impact would occur.

NO IMPACT

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Would the project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Implementation of the MBHMP would not involve any change in land use or expansion of the open space area which would lead to a permanent increase in solid waste generation. Additionally, implementation of the MBHMP would not result in a substantial influx of additional visitors to the Coverage Area. The MBHMP includes a Waste Management Program to remove waste from the Coverage Area. The Waste Management Program includes posting signs to prevent dumping in the butterfly habitat areas and educate visitors about the importance of removing trash from the butterfly habitat. Finally, the program would place trash cans in the parking lot for waste disposal. Therefore, the MBHMP would reduce illegal dumping and disposal of waste.

Tree removals and pruning may generate greenwaste, such as leaf litter and woody biomass. Downed trees would generally remain onsite, either in place in the groves or repurposed along trails as barriers or benches. Downed trees and other greenwaste may occasionally require off-site disposal, particularly tree trunks that cannot be mulched. Greenwaste generated by covered activities would be transported to the South Coast Recycling and Transfer Station, approximately 7.3 miles east of the Coverage Area. The South Coast Recycling and Transfer Station has a permitted capacity of 550 tons per day (County of Santa Barbara 2018). Assuming a eucalyptus tree is 150 feet tall with an average diameter of 3 feet, it would have a mass of approximately 27 tons (Meier 2019). This amount of material would amount to approximately five percent of the facility's daily permitted capacity. Given that off-site disposal of greenwaste would occur infrequently and only when on-site repurposing of downed trees is infeasible, the MBHMP would not generate waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Additionally, the MBHMP would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Mitigation Measures

No mitigation is required or recommended.

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	■
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	■
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

Existing Setting

The entire South Coast region, including Goleta, is prone to large wildfires due to its hot, dry climate and expansive coverage of ignitable vegetation. During the summer and autumn months, strong off-shore "sundowner" winds can create fast-moving fires that spread rapidly from the sparsely-populated Santa Ynez Mountains downslope to developed communities along the coast. Recent wildfires in the vicinity of the Coverage Area include the 1990 Painted Cave Fire, 1997 Eagle Canyon Fire, 2008 Gap Fire, 2009 Jesusita Fire, 2016 Sherpa Fire, 2017 Whittier Fire, and 2017/2018 Thomas Fire.

While a natural ecological process in coastal chaparral systems, wildfire return intervals have decreased throughout southern California, resulting in more frequent ecological disturbance, loss of biodiversity, and colonization by non-native grass species (USFS 2018). Furthermore, post-fire conditions leave exposed mountain slopes and hillsides vulnerable to surface erosion and runoff. Debris flows during post-fire rainy seasons can pose a risk to life and property and occur with little

warning. In southern California, as little as 0.3 inch of rain in 30 minutes can produce debris flows on post-fire landscapes (USGS 2018).

In March 2012, the City adopted the CWPP, which identifies key hazard treatments which are in balance with sustainable ecological management and fiscal resources (City of Goleta 2012). Treatments described in the CWPP serve as general prescriptions intended to guide site-specific fuel reduction strategies.

Given the region's susceptibility to large wildfires, the City of Goleta and County of Santa Barbara have developed "reverse 911" emergency notification systems to deliver fire-related updates, including weather forecasts and evacuation orders. The Santa Barbara County Sheriff's Office's Aware and Prepare notification system alerts residents via text message to impending emergency situations throughout the county. In summer of 2008, the City implemented the Goleta City Alert system, capable of sending two million 60-second voice messages or hundreds of thousands of e-mails and text messages in an hour during fire or other emergency situations (City of Goleta 2019).

Thresholds of Significance

A significant wildfire impact would occur if the MBHMP resulted in any of the impacts noted in the above checklist, pursuant to Appendix G of the CEQA Guidelines. The City's Environmental Thresholds and Guidelines Manual does not contain City-specific wildfire significance thresholds.

Project-Specific Impacts

a. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

According to the Santa Barbara County Fire Hazard Severity Zone Map, the Coverage Area is located entirely within a moderate fire hazard severity zone (California Department of Forestry and Fire Protection [CAL FIRE] 2012). The nearest very high fire hazard severity zone is located northwest of the Cathedral Oaks Road/US-101 interchange, approximately 0.5 mile from the Coverage Area. The MBHMP pledges support for the policies and activities contained in the CWPP, which includes policies intended to reduce fire hazards from fuel loads in the Coverage Area. The MBHMP also supports these efforts by calling for the maintenance and revegetation of the understory in and around aggregation sites with fire-resistant, native plant species. Furthermore, covered activities under the Tree Management Program and Catastrophic Event Response Program, including tree

removals, would reduce wildfire risk in the Coverage Area by removing dead or dying trees that would serve as fuel, thereby providing a beneficial effect. Mitigation measure BIO-8 would require any stockpiling of potentially ignitable debris or greenwaste to be temporary in nature, with the duration of debris stockpiling specified in the annual Implementation Plan prior to commencement of covered activities. Removed dead or dying trees would be replaced with healthy trees, which are less fire-prone, and which, pursuant to mitigation measure BIO-7, would be monitored annually for a period of five years to ensure they remain healthy. Both of these measures would further address community concerns about wildfire impacts associated with implementation of the MBHMP. No expansion of the existing eucalyptus groves would occur.

The MBHMP does not propose construction or maintenance of any new infrastructure which may pose a fire risk. The Coverage Area contains existing power lines owned and operated by SCE. SCE has previously conducted vegetation removal efforts to reduce fuel loads and hazardous trees in the vicinity of these lines. These vegetation removal efforts would continue, subject to SCE's own permits and easement rights.

The MBHMP would not involve construction of any structures, and therefore would not expose any additional people or structures to risk of wildfire. As noted in Section 9, *Hazards and Hazardous Materials*, the project would not interfere with an adopted emergency response or evacuation plan. Given its gentle sloping topography, the Coverage Area would not be susceptible to post-fire flooding, landslides, or slope instability. There would be no impact.

NO IMPACT

Mitigation Measures

No mitigation is required or recommended.

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	■	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As discussed in Section 4, *Biological Resources*, impacts to special-status species would be less than significant with implementation of Mitigation Measures BIO-1 through BIO-9 and HWQ-2. With adherence to these measures, the MBHMP would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section 5, *Cultural Resources*, the Coverage Area is located in an area known to be archaeologically sensitive and, therefore, ground-disturbing activities would have the potential to unearth artifacts exemplifying major periods of California history or pre-history, if present. Mitigation Measure CUL-1 would reduce this impact such that it would be less than significant. Overall, impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Cumulative impacts could occur as a result of planned and pending development in the vicinity of the Coverage Area in combination with MBHMP activities. Certain environmental impacts are generally site-specific, such as impacts related to cultural resources, geology and soils, and hazards and hazardous materials. Consequently, planned and pending projects in the vicinity of the Coverage Area in combination with MBHMP activities are unlikely to result in cumulative impacts related to these resource areas.

Other environmental impacts, such air quality, GHG emissions, biological resources, hydrology and water quality, noise, and transportation, are cumulative in nature. Planned, pending, and approved projects in the City of Goleta within two miles of the Coverage Area include the Old Line 96 Abandonment project, Arco Habitat Restoration project, Citrus Village residential project, NRG Battery Storage project, Rancho Estates Mobile Home Park Fire Improvements, Pacific Beverage warehouse at Cabrillo Business Park project, the Cortona Apartments project, and the Fire Station 10 project. In total, these projects would add approximately 186 residential units, 98,780 square feet of warehouse/office space, an 11,600-square foot fire station, and a 500 KW battery storage facility (City of Goleta 2018b). Cumulative impacts as a result of construction and operation of these projects in concert with implementation of the MBHMP could be potentially significant.

As described in the discussion of environmental checklist Sections 1 through 20, with respect to all environmental issues, the MBHMP would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Additionally, the Coverage Area is adjacent to the existing 9.3-acre Coronado Butterfly Preserve, owned and maintained by the Land Trust for Santa Barbara County. As a result, implementation of the MBHMP would result in potentially beneficial cumulative impacts by restoring and enhancing monarch habitat near an existing preserve. Based on the minor and temporary nature of the activities that would occur under the MBHMP, with incorporated mitigation measures, and considering the impacts associated with other past, current, or probable future development in the area, the potential contribution to cumulative impacts for all issue areas would not be cumulatively considerable. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Effects to human beings are generally associated with impacts related to air quality, hazards, and noise. Short-term air-quality impacts would be minimal and less than significant with implementation of AQ-1 to reduce fugitive dust generation during covered activities. As discussed in

Section 9, *Hazards and Hazardous Materials*, the MBHMP would result in a less than significant impact related to hazards and hazardous materials. Adverse effects on human beings would result mainly from noise generated during fuel management activities such as vegetation clearing and tree trimming near the adjacent residences. However, as stated in the Section 12, *Noise*, this impact would be less than significant with adherence to Mitigation Measure N-1. Implementation of the MBHMP would have the beneficial impact to humans of reducing the risk of falling trees, trail hazards, and wildfires in the Coverage Area. Overall, this impact would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Mitigation Measures

Mitigation Measures AQ-1, BIO-1 through BIO-9, CUL-1, HWQ-2, and N-1 would apply to this environmental resource area.

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