5.2 Biological Resources

This section analyzes the potential biological resources impacts associated with the proposed Project. Information in this section is based on the Biological Resources Impact Analysis Report (Biological Report) prepared by Merkel & Associates, Inc. dated February 7, 2017 (Appendix H) and the Operational Photometric Assessment (Photometric Assessment) prepared by Investigative Science and Engineering, Inc. dated January 17, 2017 (Appendix C). The Photometric Assessment analysis was included in more detail in Section 5.1, Aesthetics (beginning on page 59) herein.

The scope of the Biological Report includes existing conditions of the approximately 60.4-acre Project site, all methods employed regarding general and focused biological surveys, documentation of botanical and wildlife resources, and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature and data pertaining to the Project area, review of aerial photography, and field surveys. Photographs of the Project study area were taken to record the biological resources present, and data collected was digitized into current GIS Environmental Systems Research Institute (ESRI) software platforms. The Biological Report is consistent with accepted scientific and technical standards and survey guidelines requirements of the U.S. Fish & Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies and organizations.

The Biological Report also identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the California Environmental Quality Act (CEQA), applicable state and federal regulations, and the Orange County Southern Subregion Habitat Conservation Plan (HCP).

The Photometric Assessment examined three scenarios for the analysis:

- Baseline Conditions - the condition at the Project site absent the proposed 36 illuminated freeway-oriented signs
- Project Condition - the effect of the 36 illuminated signs alone
- Cumulative Condition - the combination of the baseline and Project conditions acting together

Discussion of lighting in this section is limited to potential impacts to biological resources due to the addition of 36 illuminated freeway-oriented signs.

5.2.1 Existing Conditions

An isolated remnant canyon is located partially within the study area directly adjacent to the northern parking lot of the outlet center and to the south of the hotel portion of the site. The canyon was previously impacted and revegetated with native habitat as evidenced by an irrigation system running throughout the slopes of the canyon area. The Project is located in Subarea 4 of the Orange County Southern Subregion HCP, but the Project site specifically is located outside any reserve or lands protected under the HCP. The adjacent canyon located in
the northwestern portion of the study area is designated as Supplemental Open Space in the HCP. No USFWS-designated critical habitat for any listed species is located within the Project area.

The Project site has night lighting consistent with a developed outlet center, restaurants, and a parking lot. Existing signage lighting is generally internal to the outlet center with no freeway-oriented lighted signage under the existing condition. Additional lighting will result from construction of the approved but as yet unbuilt hotel. A complete analysis of lighting impacts generally is included in Section 5.1, Aesthetics (beginning on page 59) herein.

5.2.2 Regulatory Setting

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species that are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

1. State of California Endangered Species Act

The California Endangered Species Act (CESA) defines endangered species as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.” The state defines a threatened species as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.”

Candidate species are defined as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.” Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080-2085 of the CESA addresses the taking of threatened, endangered or candidate species by stating “No person shall import into this state, export out of this state, or take, possess, purchase or sell within this state any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of these acts except as otherwise provided.” Under CESA, “take” is defined as “hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture or kill.” Sections
1901 and 1913 of the *California Fish and Game Code* provide that notification is required prior to disturbance.

2. **Federal Endangered Species Act**

The Federal Endangered Species Act (FESA) of 1973 defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA, it is unlawful to “take” any listed species. “Take” is defined as “… harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct.” USFWS has interpreted the terms “harm” and “harass” to include certain types of habitat modification that result in injury to, or death of species as forms of “take.” When a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and the agency are required to consult with USFWS, which makes determinations about “take” on a case-by-case basis.

3. **Migratory Bird Treaty Act**

The Migratory Bird Treaty Act of 1918 (MBTA) makes it illegal for anyone to “take, possess, import, export, transport, sell, purchase, barter or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations.” Applied to development projects, the MBTA prohibits the impact to the active nests of birds protected by the MBTA. The definition for “take” as identified under the MBTA is not synonymous with “take” as defined under the FESA. The MBTA definition lacks a “harm and harassment” clause comparable to the FESA definition. Thus, the MBTA authority does not extend to activities beyond the nests, eggs, feathers, or specific bird parts (i.e., activities or habitat modification in the vicinity of nesting birds that do not result in “take” as defined under the MBTA are not prohibited).

4. **California Fish and Game Code**

The *California Fish and Game Code* contains sections (3503, 3503.5 and 3513) that are applied to nesting birds. Section 3503 states that “it is unlawful to take, possess or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Section 3505.3 more specifically applies to birds of prey and states that it is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Section 3513 states: “It is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act.” Similar to the MBTA provisions applied to development projects, the Fish and Game Code sections prohibit the impact to active nests.
5. **California Department of Fish and Wildlife**

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFW definition of “lake” includes “natural lakes or man-made reservoirs.”

6. **California Environmental Quality Act (CEQA) Section 15380**

CEQA requires evaluation of a project’s impacts on biological resources and provides guidelines and thresholds for use by lead agencies to evaluate the significance of proposed impacts. In addition, CEQA Guidelines Section 15380 provides protection for non-listed species that could potentially meet the criteria for state listing. CDFW recognizes that plants on Lists 1A, 1B or 2 of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants in California may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants which are regionally important (locally rare species, disjunct populations of more common plants or plants on the CNPS Lists 3 or 4).

5.2.3 **Thresholds of Significance**

Environmental impacts regarding biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, *California Public Resources Code §21001(c).* Accordingly, the State of California legislature has established it to be the policy of the State of California:

> Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels and preserve for future generations representations of all plant and animal communities.

The thresholds of significance in this SEIR for evaluating Project impacts on biological resources utilized by the City of San Clemente are based on CEQA Appendix G in the CEQA Guidelines. The Project would result in a significant impact if it would:

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, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal...
5.2 – Biological Resources

5.2.4 Project Impacts Prior to Mitigation

1. Methodology

Photometric Analysis

A photometric analysis of potential effects of the freeway-facing signs on the biological resources on-site was performed by Investigative Science and Engineering, Inc. (ISE). The ISE LightMap v3.2 computer model was used and was based on technical information for the proposed signage. ISE then included the proposed increase in lighting conditions in foot-candles (FC) based on the difference between the modeled ambient/baseline photometric data and the cumulative photometric data.

General Biological Survey

A general biological survey was conducted by a qualified biologist within the study area, which included a buffer area of approximately 1,000 feet from the proposed freeway-oriented signage, including an area directly across the I-5 Freeway to the northeast. The large buffer area ensured that the surrounding areas where any potential changes to the existing lighting could occur were represented. The off-site area across the I-5 Freeway was surveyed visually with the aid of binoculars from the Project site. The built-out parking lot and shopping center areas were not buffered as extensively, because no potential biological resources occur in these areas.

Existing vegetation types were delineated onto a 1” = 100’ scale color aerial photograph. Vegetation types were classified according to the Holland (1986) code classification system as modified by Oberbauer (2008). A list of detectable flora and fauna species was recorded in a field notebook, with plant identifications either resolved in the field or determined through verification of voucher specimens. Wildlife species were determined through direct observation, aided by binoculars, identification of songs, call notes, and alarm calls, or by detection of signs (e.g., burrows, tracks, scat). Directed searches for sensitive species with a potential to occur on-site were conducted within the study area. A raptor nesting survey was conducted to determine the presence/location of any active nests.

Photographs of the study area were taken to record biological resources present, and data collected from the survey were digitized into current Geographical Information System (GIS) Environmental Systems Research Institute (ESRI) software platforms.

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.
Biological inventories are generally subject to various survey limitations. The biological survey conducted for the Project was performed during summer daylight hours. Therefore, some potential breeding, wintering species or nocturnal species may not have been detected. However, based on the developed and/or disturbed condition of the site, the surveys conducted were sufficient to obtain a thorough review of the biological resources present on the Project site.

2. **Project Night Lighting**

As described above, a photometric analysis was performed to analyze potential impacts from the 36 freeway-oriented signs by determining the baseline night lighting with an increase in the lighting condition due to the proposed signage. Analysis of comparative illumination measures is provided in Table 5-6 below to analyze potential increases in lighting due to the Project night lighting condition.

<table>
<thead>
<tr>
<th>Outdoor Condition</th>
<th>Average Illumination in Foot-Candles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcast Day</td>
<td>100</td>
</tr>
<tr>
<td>Dusk</td>
<td>10</td>
</tr>
<tr>
<td>Twilight</td>
<td>1.0 - 0.1</td>
</tr>
<tr>
<td>Full moon</td>
<td>0.01</td>
</tr>
<tr>
<td>Quarter moon</td>
<td>0.001</td>
</tr>
<tr>
<td>New moon</td>
<td>0.0001</td>
</tr>
<tr>
<td>Overcast night</td>
<td>0.00001</td>
</tr>
</tbody>
</table>

The ambient/baseline night light levels obtained within the outlet center and for surrounding areas range from approximately 162 foot-candles (FC) closest to the outlet center to 107 FC within the northern parking lot. Lower levels between approximately 20 FC and 7 FC were detected within the adjacent canyon north of the outlet center/south of the planned hotel. As noted herein, a complete analysis of lighting and glare impacts is included in Section 5.1, Aesthetics (beginning on page 59). Analysis within this section is limited to potential impacts of lighting on biological resources.

3. **Biological Resources**

Biological resources analysis consists of flora (vegetation) and fauna (animal) species as detected and observed during the biological resources survey conducted on August 15, 2016. Species listed as endangered or threatened under the FESA and the CESA, species designated as California Special Concern species or Fully Protected species by the CDFW or species designated as Covered Species in the Orange County Southern Subregion HCP are considered “sensitive.” Species considered rare by the California Native Plant Society (CNPS) or as Special Plants or Animals in the CNDDB may be considered “sensitive” if they meet the CEQA Guidelines §15380 (Title 14, Chapter 3, Article 20) definition for “endangered, rare or threatened species.” Exhibit 5-70 depicts the location of the biological resources identified herein and also shows the results of the lighting analysis.
a. **Botanical Resources – Flora**

The biological survey identified seven vegetation types including conserved and non-conserved vegetation communities as defined by the Orange County Southern Subregion HCP. While the Project site is developed, the surrounding areas within the study area include remnants of native habitat and/or naturalized vegetation. The Biological Report, Appendix 1 (Appendix H herein) includes a complete list of the floral species observed. The following table identifies habitats/vegetation communities which are detailed herein.

### Table 5-7 Habitats/Vegetation Communities within Project Study Area

<table>
<thead>
<tr>
<th>Vegetation Type</th>
<th>Holland/Oberbauer Code</th>
<th>HCP Habitat Type</th>
<th>Total Area (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern willow scrub</td>
<td>63320</td>
<td>Conserved</td>
<td>0.98</td>
</tr>
<tr>
<td>Mule fat scrub</td>
<td>63310</td>
<td>Conserved</td>
<td>0.44</td>
</tr>
<tr>
<td>Diegan coastal sage scrub-revegetated</td>
<td>32500</td>
<td>Conserved</td>
<td>10.02</td>
</tr>
<tr>
<td>Eucalyptus woodland</td>
<td>79100</td>
<td>Non-conserved</td>
<td>2.32</td>
</tr>
<tr>
<td>Non-native vegetation</td>
<td>11000</td>
<td>Non-conserved</td>
<td>7.58</td>
</tr>
<tr>
<td>Disturbed land</td>
<td>11300</td>
<td>Non-conserved</td>
<td>85.45</td>
</tr>
<tr>
<td>Urban/developed</td>
<td>11100</td>
<td>Non-conserved</td>
<td>6.22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>113.01</strong></td>
</tr>
</tbody>
</table>

1. **Southern Willow Scrub**

A small patch of southern willow scrub habitat occurs within the bottom of the adjacent canyon along an unnamed drainage. The habitat predominantly consists of arroyo willow, Goodding’s black willow, and narrow-leaved willow with inclusions of mule fat. Due to the surrounding urban development and lack of connectivity with other larger areas of riparian habitat and intact habitat structure, the southern willow habitat contains relatively low to moderate habitat values. Anna’s hummingbird and California towhee are common bird species observed in this habitat. However, the existing habitat values are low for urban-tolerant birds. Potential mammals include common species such as raccoon, opossum, striped skunk, and coyote. Potential reptiles and amphibians include common species such as gopher snake and Pacific tree frog.
Exhibit 5-70  – Candidate Key View Simulations
2. **Mule Fat Scrub**
   
   A relatively small patch of mule fat scrub was located adjacent to the southern willow scrub habitat. This habitat is almost entirely mule fat scrub and likely functions as a component of the willow scrub habitat. Similarly, this habitat possesses relatively low values due to the small size, lack of connectivity, and lack of diversity of structure.

3. **Diegan Coastal Sage Scrub-Revegetated**
   
   Diegan coastal sage scrub was previously impacted by surrounding development and planted as part of a revegetation effort. The revegetated area is located on the southeast- and northwest-facing slopes flanking the outlet center parking lots. This relatively open habitat is dominated by California sagebrush with inclusions of coastal California buckwheat and coyote brush. Other species such as laurel sumac, lemonade berry, and white sage also are present, but sparsely distributed.

   Due to the isolated configuration, revegetated habitat on manufactured slopes, surrounding urban development, and remaining human disturbance in the form of landscape crews maintaining the sprinkler system and removing weeds, the Diegan coastal sage scrub possesses a low habitat value. However, the predominant native plant species composition provides wildlife habitat. Common and urban-tolerant bird species were observed during the biological survey.

   Diegan coastal sage scrub is considered suitable nesting habitat for the federally threatened coastal California gnatcatcher. The gnatcatcher was detected during the recent survey as further discussed below as Sensitive Fauna. Potential additional mammals are the same common species that could occur in the southern willow scrub habitat (coyote and skunk). Potential common reptiles and amphibians present include the San Diego alligator lizard and garden slender salamander.

4. **Eucalyptus Woodland**
   
   The eucalyptus woodland is a small strip of habitat located north of the freeway and adjacent to the residential development. The non-native habitat consists almost entirely of eucalyptus trees that are moderately disturbed due to the proximity to residential development. The non-native species composition may only support common bird species. The survey did not reveal active raptor nests or remnants of nests, and the area is not likely suitable for raptor nesting due to the open canopy in many of the trees.

5. **Non-Native Vegetation**
   
   Non-native vegetation habitat occurs on either side of the freeway in the form of landscaping on manufactured slopes for the purpose of erosion control. The vegetation consists almost entirely of cyclops acacia and freeway ice plant with low wildlife value. The vegetation likely only supports foraging value for common bird and butterfly species.
6. **Disturbed and Urban/Developed Lands**

Patches of bare ground between the eucalyptus woodland and non-native vegetation east of the I-5 Freeway were mapped as disturbed habitat with little to no wildlife value due to its location. The areas mapped as urban/developed lands include the outlet center and surrounding parking lots, access roads, the already graded portions of the site for future development, the I-5 Freeway, and residential homes to the east of the I-5 Freeway.

b. **Zoological Resources – Fauna**

A total of eight faunal species were observed and/or detected in the Project study area during the biological survey. The majority consist of species that are common and widespread, typically occurring within an urban setting. However, three sensitive fauna species were detected and/or observed within the adjacent canyon. The Biological Report includes, as Appendix 2, a complete list of fauna species observed during the surveys.

1. **Sensitive Fauna**

As noted, the sensitive fauna species were observed or detected only in the adjacent canyon in the northern portion of the study area. The species included coastal California gnatcatcher (federally listed threatened, CDFW Species of Special Concern, CNDDB Special Animal, South Orange County Covered Species), yellow warbler (California Species of Special Concern, CNDDB Special Animal) and Nuttall’s woodpecker (CNDDB Special Animal).

One coastal California gnatcatcher was heard in the Diegan coastal sage scrub in the adjacent canyon. As noted in the Biological Report, the entire canyon has known records for coastal California gnatcatcher (USFWS 2016). Individual yellow warbler and Nuttall's woodpecker were either observed and/or heard in the southern willow scrub habitat also within the canyon. Appendix 3 of the Biological Report (Appendix H herein) provides a list of the sensitive wildlife species identified during the surveys or evaluated for the potential to occur on-site based on suitable habitat.

2. **Wildlife Corridors**

The Biological Report states that wildlife corridors play an important role in maintaining population viability and preserving biological diversity. Fragmented habitats support significantly lower numbers of species and increase the likelihood of extinction for species restricted to small areas. The remnant canyon located in the northern portion of the study area has been previously disturbed and subsequently revegetated. The canyon is isolated and offers no connectivity to large contiguous open habitats. Only the adjacent canyon in the northwestern portion of the study area supports the topography and wildlife habitat that could provide coverage, foraging and breeding opportunities to a variety of common species and a limited number of sensitive bird species.
5.2.5 Impact Analysis

Impacts can be considered either direct or indirect. Direct impacts are those that involve the loss, modification, or disturbance of plant communities, which directly affects the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability. CEQA Guidelines §15358 defines a direct impact or primary effect as “effects which are caused by the project and occur at the same time and place” that can produce a temporary or permanent biologically significant “physical change” in the environment.

Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects and other off-site areas where the effects of the project may be experienced by plants and wildlife. Examples include increases in ambient levels of noise or light, predation by domestic pets, competition with exotic plants and animals, introduction of toxics, including pesticides, and other human disturbances such as hiking, off-road vehicle use, and unauthorized dumping. Indirect effects may be both short-term and long-term. CEQA Guidelines §15358 defines an indirect impact or secondary effect as “effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable” that can produce a temporary or permanent biologically significant, “physical change” in the environment.

1. Direct Impacts

   a. Vegetation Community Direct Impacts

      Because the Project does not propose any ground disturbance or habitat impacts, no focused rare plant surveys were conducted. However, based on the field survey, no sensitive flora species have at least a moderate potential to occur largely due to a lack of suitable habitat and/or soils. Because the proposed Project is the installation of signage on existing walls or towers associated with an already built outlet center, and an approved but unbuilt hotel on previously graded portions of the site, no vegetation community impacts will occur with implementation of the proposed Project.

   b. Sensitive Species Direct Impacts

      The Biological Report states that “No sensitive flora species were detected onsite.” The three sensitive fauna species observed or detected only in the adjacent canyon in the northern portion of the study area will not be impacted, because no development or grading will occur in the canyon. No other potential sensitive faunal species are anticipated to have at least a moderate potential to occur within the Project site.

      The installation of lighted signs on existing walls or towers on developed or previously graded portions of the site will occur at least 200 feet from the nearest potentially suitable habitat as determined in the field survey and Biological Report. Therefore, no direct impacts to sensitive species would occur with implementation of the proposed Project.
c. 
**Jurisdictional Resource Direct Impacts**

The southern willow scrub and mule fat scrub in the adjacent canyon are considered jurisdictional resources. However, they would not be directly impacted by the proposed Project, because no development or disturbance will occur in the canyon. Therefore, no significant direct impacts will occur to jurisdictional resources.

d. 
**Wildlife Corridor Direct Impacts**

Potential impacts to wildlife corridors are less than significant, because due to the location of the Project within an urban area, there is no viable linkage with other larger areas of native habitats. The adjacent canyon is not expected to provide a regional linkage for maintaining population viability and preserving biological diversity for a wide range of wildlife, including large mammals with large home ranges. Therefore, the canyon does not function as a regional wildlife corridor and no significant direct impacts will occur with Project implementation.

2. **Indirect Impacts**

a. 
**Night Lighting Impacts**

The canyon in the northwestern portion of the study area, which is outside the Project site, could be impacted by an increase in night lighting within the sensitive habitat area that supports sensitive species. Coastal California gnatcatchers occupy this area. Analysis in the Biological Report focused on the proposed lighting on the northern edge of the outlet center, which faces the adjacent canyon to the north, and along the southern edge of the planned hotel, which faces the adjacent canyon to the south.

Based on the ISE photometric data, the Project site ambient/baseline night light condition in the adjacent canyon ranges from 20.56 FC at the top of slope closest to the parking lot to 6.69 FC along the northern edge of the canyon farthest from the parking lot and outlet stores. Typical natural darkness in undeveloped areas ranges in orders of magnitude dimmer than 0.1 lux (0.009 FC). However, the Project site is in a nearly built-out urban setting where ambient night lighting conditions are typically greater than for an undeveloped area. Existing lighting on the Project site consists of parking lot lighting, security lighting, and architectural lighting. Section 5.1, Aesthetics (beginning on page 59), provides additional information based on the photometric data analysis.

When the ambient/baseline lighting is compared to the cumulative lighting condition in the adjacent canyon, there is little or no difference (e.g., 0.00-0.49 FC) within the canyon, which is currently exposed to a certain level of night lighting. Therefore, the adjacent canyon that supports gnatcatcher habitat would not be exposed to a substantial increase or change in artificial night lighting from the proposed Project.

As detailed in the Operational Photometric Assessment for the Project, which is more fully detailed in Section 5.1, Aesthetics (beginning on page 59), off-site levels under full lighting would average approximately 10 to 20 FC along the frontage of the I-5 Freeway with levels decreasing to between 1.0 to 5.0 FC in adjacent residential and commercial
areas. The analysis concludes that adjacent properties would have no discernable incremental increases in lighting due to the Project.

There are no significance thresholds regarding increases in artificial lighting on sensitive species. However, it is not expected that the minimal proposed increase in lighting within gnatcatcher habitat would substantially reduce the number, restrict the range of, or adversely affect the gnatcatcher. Lighting into sensitive habitat is not expected to result in significant impacts under CEQA. The Project will not increase the lighting currently on the site by significant amounts.

3. CEQA Impacts

As detailed herein, the addition of 36 freeway-oriented signs will not result in significant impacts to biological resources. The proposed Project will not:

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 CDFW or USFWS.**

The Project will not include grading, demolition, or construction that would result in a direct impact to biological resources identified as candidate, sensitive, or special status in any applicable plan or regulation. The sign placement will occur on existing buildings, and the Icon Tower will be erected on previously disturbed ground adjacent to the existing buildings. Habitat located in the adjacent canyon will not be disturbed by Project implementation. The canyon is sufficiently distant from the additional lighting produced by the new signs that no impact will occur.

b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.**

No grading or construction on land that has not previously been disturbed will occur. No sensitive natural community or riparian habitat exists on the Project site, because the outlet center has been constructed and the unbuilt portions of the outlet center have been graded to prepare for construction of the buildings. Asphalt parking lots on three sides of the existing buildings preclude the presence of any habitat.

c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means.**

No wetlands exist on the Project site, which has been graded and partially built with the outlet center. The approved Phase 2 of the outlet center and the approved but unbuilt hotel component will not disturb wetlands, because the site has been graded. No grading will occur in the remnant canyon adjacent to the northern parking lot of the outlet center and south of the hotel site.
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.

There is no portion of the Project site that would support a wildlife corridor, because the site is partially constructed, with the remainder graded and ready for completion. The remnant canyon north of the outlet center has been previously disturbed and isolated, offering no connectivity to contiguous habitats. The adjacent northwestern canyon could provide the topography and coverage for a common and sensitive species, but the Project will not impact either canyon through the addition of the proposed signage.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The Project site is substantially disturbed by existing buildings and graded for approved but unbuilt portions of the Project. There will be no conflict with local policies or ordinances related to biological resources, because no additional grading will occur and the lighting analysis for the proposed signage shows no impacts to resources within the study area.

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.

The Project site is within Subarea 4 of the Orange County Southern Subregion HCP. Seven vegetation types including conserved and non-conserved vegetation communities as defined by the HCP were identified in the biological survey. Identified species occur in the adjacent canyons, which will not be impacted by implementation of the proposed signage program. Therefore, as analyzed, the Project will have no direct or indirect impacts to biological resources or conflict with adopted plans for the protection or conservation of such resources.

5.2.6 Mitigation Measures

The proposed Project will not adversely affect or have a significant impact, either directly or indirectly, on biological resources. Therefore, no mitigation measures are required or proposed.

5.2.7 Level of Significance after Mitigation

As identified in the Biological Report, there will be no impacts to any listed special status vegetation communities, special status animals, sensitive flora species, sensitive fauna species, or wildlife corridors.

5.2.8 Cumulative Impacts

CEQA Guidelines §15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other
environmental impacts.” Cumulative impacts are the direct and indirect effects of a proposed Project that, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the Proposed Project.

The Marblehead EIR fully considered cumulative impacts related to the development of the entire Marblehead Coastal project which included residential and commercial components. The surrounding area is either under development or developed and will not contribute to biological resources impacts in the area.

The Orange County Southern Subregion HCP was designed to compensate for the loss of biological resources throughout the region. Therefore, projects that conform to the HCP would not result in a cumulatively considerable impact for biological resources adequately covered by the program. Even though the Project is within Subarea 4 of the Orange County Southern Subregion HCP, because the Project has been analyzed as having no direct or indirect impacts to biological resources, the Project will not have impacts that are cumulatively considerable.

5.2.9 Unavoidable Adverse Impacts

No impacts to Biological Resources have been identified with implementation of the proposed Project. Therefore, there are no unavoidable adverse impacts associated with the Project as proposed.
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