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May 11, 2018 10786

Paul Finstad
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Subject: Supplemental Biological Technical Report for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project, Santa Barbara County, California

Dear Mr. Finstad:

The purpose of this Supplemental Biological Technical Report is to describe the existing biological resources (including vegetation, flora, fauna, jurisdictional features, and wildlife habitats/movement corridors), potential project impacts, and recommended avoidance, minimization, and mitigation measures associated with the Ritz-Carlton Bacara Beach House Demolition and Replacement Project (project) (*Appendix A - Figure 1*). This report has been provided as a supplement to the *Biological Resources Assessment for the Bacara Beach House Relocation Project* (KMA 2017). The *Biological Resources Assessment* (KMA 2017) provides details on the existing conditions, an impact assessment associated with the overall demolition and relocation project site, and includes recommended mitigation measures to avoid and minimize impacts to biological resources during project implementation.

At the time the *Biological Resources Assessment* (KMA 2017) was produced the exact location of the new proposed beach house was not clearly defined. The proposed beach house location has now been defined and, as a result, this report provides a supplemental analysis of the project site. In addition, this report references the findings of the *Biological Resources Assessment* (KMA 2017) and provides a breakdown of where Dudek's analysis concurs or deviates from Kevin Merk Associates, LLC. (KMA) findings based on Dudek's previous reports for the Bacara Resort (Dudek 2010a,b, 2013, and 2018a,b,c) . Dudek biologists have over 10 years' experience working at the Bacara Resort for the City of Goleta and past and present resort ownerships.

1.0 PROJECT DESCRIPTION AND LOCATION

The Ritz-Carlton Bacara is a hotel and conference center located inland of Haskell's Beach, and half a mile west (seaward) of the intersection of US 101 and Hollister Avenue, in the City of Goleta, Santa Barbara County (*Appendix A - Figure 1*). The current location of the Bacara Beach House at Haskell's Beach (i.e., beach facility, Haskell's Beach House) is on an elevated terrace above the cobble-lined beach. The proposed beach facility is positioned further inland, to the east of the fire access road and adjacent to the northwestern slope of East Terrace (*Appendix A - Figure 2*). The existing Bacara Beach House was undercut by ocean waves which required immediate action and the

construction of temporary measures to prevent the house from falling into the ocean. As a result, the project proposes to demolish the existing Bacara Beach House and construct a new beach facility farther inland. This new Beach House would include two separate structures comprised of a new shower, restroom, and a snack bar building (project site).

2.0 REGULATORY SETTING

This section outlines the local regulations pertinent to the biological resources located on the project site. A review of the general applicable policies described in the City of Goleta General Plan (City of Goleta 2006) is provided below. Additional federal and state regulations that are pertinent to the project site include, but may not be limited to, the California Endangered Species Act, Federal Endangered Species Act, Migratory Bird Treaty Act, California Fish and Game Code, and California Coastal Act. Some of the biological resources that could be affected by the project are regulated by resource agencies, which often overlap in jurisdiction.

2.1 City of Goleta's General Plan

Policy CE 1.1 **Definition of Environmentally Sensitive Habitat Areas. [GP/CP]** ESHAs shall include, but are not limited to, any areas that through professional biological evaluation are determined to meet the following criteria:

a. Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and that could be easily disturbed or degraded by human activities and developments.

b. Any area that includes habitat for species and plant communities recognized as threatened or endangered by the state or federal governments; plant communities recognized by the State of California (in the Terrestrial Natural Communities Inventory) as restricted in distribution and very threatened; and those habitat types of limited distribution recognized to be of particular habitat value, including wetlands, riparian vegetation, eucalyptus groves associated with monarch butterfly roosts, oak woodlands, and savannas.

c. Any area that has been previously designated as an ESHA by the California Coastal Commission, the California Department of Fish and Game, City of Goleta, or other agency with jurisdiction over the designated area.

Policy CE 1.2 **Designation of Environmentally Sensitive Habitat Areas. [GP/CP]** ESHAs in Goleta are generally shown in Figure 4-1, and Table 4-2 provides examples of the ESHAs and some locations of each. The provisions of this policy shall apply to all designated ESHAs. ESHAs generally include but are not limited to the following:

a. Creek and riparian areas.

b. Wetlands, such as vernal pools.

c. Coastal dunes, lagoons or estuaries, and coastal bluffs/coastal bluff scrub.

d. Beach and shoreline habitats.

e. Marine habitats.

f. Coastal sage scrub and chaparral.

g. Native woodlands and savannahs, including oak woodlands.

h. Native grassland.

i. Monarch butterfly aggregation sites, including autumnal and winter roost sites, and related habitat areas.

j. Beach and dune areas that are nesting and foraging locations for the western snowy plover.

k. Nesting and roosting sites and related habitat areas for various species of raptors.

l. Other habitat areas for species of wildlife or plants designated as rare, threatened, or endangered under state or federal law.

m. Any other habitat areas that are rare or especially valuable from a local, regional, or statewide perspective.

Policy CE 1.6 **Protection of ESHAs. [GP/CP]** ESHAs shall be protected against significant disruption of habitat values, and only uses or development dependent on and compatible with maintaining such resources shall be allowed within ESHAs or their buffers. The following shall apply:

a. No development, except as otherwise allowed by this element, shall be allowed within ESHAs and/or ESHA buffers.

b. A setback or buffer separating all permitted development from an adjacent ESHA shall be required and shall have a minimum width as set forth in subsequent policies of this element. The purpose of such setbacks shall be to prevent any degradation of the ecological functions provided by the habitat area.

c. Public accessways and trails are considered resource-dependent uses and may be located within or adjacent to ESHAs. These uses shall be sited to avoid or minimize impacts on the resource to the maximum extent feasible. Measures—such as signage, placement of boardwalks, and limited fencing or other barriers—shall be implemented as necessary to protect ESHAs.

d. The following uses and development may be allowed in ESHAs or ESHA buffers only where there are no feasible, less environmentally damaging alternatives and will be subject to requirements for mitigation measures to avoid or lessen impacts to the maximum extent feasible: 1) public road crossings, 2) utility lines, 3) resource restoration and enhancement

projects, 4) nature education, 5) biological research, and 6) Public Works projects as identified in the Capital Improvement Plan, only where there are no feasible, less environmentally damaging alternatives.

e. If the provisions herein would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the land use plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel. Alternatively, the City may establish a program to allow transfer of development rights for such parcels to receiving parcels that have areas suitable for and are designated on the Land Use Plan map for the appropriate type of use and development.

3.0 METHODS

The analysis of existing biological resources on the project site consisted of a review of the *Biological Assessment Report* (KMA 2017) and a site visit to verify existing vegetation mapping. Vegetation mapping was analyzed using the vegetation community labels identified by KMA to allow for direct comparison of survey results and impact calculations. Dudek has also mapped vegetation in the past for the Bacara Resort Completion EIR for the City (Dudek 2010a,b) as well as the Consent Restoration Plan (Dudek 2013), which was also used as a comparison to KMA vegetation mapping and our recent verification. Additionally, ESHA was mapped in the field by Dudek based on the City of Goleta's GP/CLUP, Dudek's biological technical report (2010), and existing vegetation communities. In support of this project, Dudek recently completed *Monarch Butterfly Surveys for the Beach Facilities Project at the Ritz-Carlton Bacara* (Attachment D; Dudek 2018a); *Environmental Sensitive Habitat Area Review and Proposed Setback Reduction for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project and Emergency Permit (16-002 EMP)* (Attachment E; Dudek 2018c); and, *Haskell's Beach House Demolition Conceptual Restoration Plan* (Attachment F; Dudek 2018b). The survey areas investigated by Dudek in 2018 included a buffer of 100 feet to the east and 25 feet on all other sides of the project site, which was determined to be appropriate to display the project site in the context of the native vegetation and human altered areas surrounding the project site. In addition, the survey area included a 25-foot buffer of the existing Beach House facility to map vegetation in the vicinity of the demolition area.

3.1 Literature Review

Prior to conducting the site visit, Dudek conducted a review of the *Biological Assessment Report* (KMA 2017) and existing biological resources and species documented within the survey area using the CDFW California Natural Diversity Database (CNDDB) (CDFW 2018), the California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2018), and USFWS Critical Habitat and Occurrence Data (USFWS 2018). Dudek obtained special-status species occurrence data from the above sources by querying records within the surrounding six USGS quadrangles, including Santa Ynez, Lake Cachuma, San Marcos Pass, Tajiguas, Dos Pueblos Canyon, and Goleta. U.S. Fish and Wildlife Service (USFWS) Critical Habitat and Occurrence Data (USFWS 2018a) also assisted in determining

other species present in the region with potential to occur on site. In addition, Dudek reviewed the following available resources to assess the potential for biological and wetland resources within the Project site and vicinity:

- List of potentially occurring listed species generated from a review of the U.S. Fish and Wildlife Service's (USFWS's) IPaC Trust Resources Report (USFWS 2018b) list of federal and threatened species;
- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD; USGS 2018a);
- USFWS National Wetlands Inventory (NWI; USFWS 2018c);
- StreamStats (USGS 2018b); and
- U.S. Department of Agriculture, Natural Resources Conservation Service Web Soil Survey (USDA-NRCS 2018).

This report follows the same plant and wildlife special-status definitions provided in KMA (2017).

3.2 Site Visit

Dudek biologist visited the survey area on April 19, 2018, to confirm vegetation mapping. All mapping was performed in the field, through interpretation of field maps with a high quality aerial photographic base. The maximum scale of the field map was 200 scale (1 inch = 200 foot) base. The GPS data was downloaded into GIS ArcView for placement onto an aerial figure. In combination with the GPS data, GIS technicians digitized the delineated vegetation boundaries from field maps using ArcView to create the vegetation community map.

4.0 EXISTING CONDITIONS

4.1 Vegetation Communities and Land Covers

The KMA *Biological Resources Assessment* (KMA 2017) provides details on the vegetation communities and land cover types identified within the survey area. The results of the field assessment completed by Dudek are presented below and are displayed on *Figure 2 (Appendix A)*.

Coastal Sage Scrub

In a regional context, this vegetation community contains coastal sagebrush (*Artemisia californica*) as the sole or dominant shrub species. It has a continuous or intermittent shrub canopy of less than 2 meters (7 feet) in height with a variable ground layer. This vegetation community often occurs on steep, north-facing slopes and rarely in flooded low-gradient deposits along streams in shallow alluvial or colluvial-derived soils. Within the survey area, this vegetation community is found to be comprised of several native shrub species including California sagebrush, bush sunflower (*Encelia californica*), black sage (*Salvia mellifera*), Menzies' goldenbush (*Isocoma menziesii*), and coyotebrush (*Baccharis pilularis*). California sagebrush scrub is present surrounding the project site, outside of the impact area as

shown on *Figure 2 (Appendix A)*. Dudek coastal sage scrub mapping is largely consistent with mapping completed by KMA (2017). According to A Manual of California Vegetation Second Edition, California Sage Scrub is a common vegetation type in California, and wouldn't necessarily qualify as ESHA unless occupied by a special-status species. However, the City of Goleta's GP/CLUP identifies coastal scrub growing on bluffs as ESHA and Dudek (2010a,b followed this designation, including the East Terrace and the restored area to the west of the fire road. In 2018, Dudek remapped the boundaries of coastal sage scrub and other scrub ESHA near the project site. For a further discussion on ESHA, please refer to *Appendix E: Environmental Sensitive Habitat Area Review and Proposed Setback Reduction for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project and Emergency Permit (16-002 EMP)* (Dudek 2018b).

Monterey Cypress

This vegetation community, including planted areas, includes Monterey cypress (*Hesperocyparis macrocarpa*) as the dominant species in the canopy. Monterey cypress is not native to the project region and has been planted on-site. Monterey cypress occurs in two stands within the project site, including a long established stand to the east of the project site and a more recently planted area to the north of the project site, as shown in *Figure 2 (Appendix A)*. Shading by Monterey cypress in this community limits the growth of shrubs. Black mustard and bromes are among the species that make up the relatively sparse herbaceous layer. Dudek vegetation community mapping is largely consistent with mapping completed by KMA (2017); however, Dudek included the planted Monterey cypress as a vegetation community as opposed to a developed/ landscaped area as indicated by KMA (2017).

Beach

Beaches are characterized as narrow, sandy, and stony areas along the ocean that are partly or completely covered by water during high tide and exposed during low tide. The stony stretches of beach are mainly at the mouths of drainage ways and the bases of cliffs, though beaches may change from sandy to stony, or stony to sandy, during storms. Where beach materials (sand, pebble, and cobble) occur above the mean high tide line they may become stabilized over time with the establishment of saline-tolerant perennial plant species. Dudek beach mapping is consistent with mapping completed by KMA (2017). Beaches are displayed on *Figure 2 (Appendix A)*.

Disturbed

Disturbed area consists of the lands that have experienced physical anthropogenic disturbance, and as a result cannot be identified as native or naturalized vegetation communities. However, these areas do have a recognizable soil substrate. The existing vegetation is typically composed of non-native ornamental or exotic species. There can also be impacts from animal uses, grading, or repeated clearing for fuel management on disturbed lands, which leave the land incapable of providing a suitable or sustainable habitat for in which native species can persist. Disturbed areas were not mapped by KMA; however, these areas were determined by Dudek to differ from developed/landscaped areas

due to the lack of clearly defined development (e.g. paving) or landscape (e.g. irrigation) components. Disturbed areas are displayed on *Figure 2 (Appendix A)*.

Developed/ Landscaped

Areas mapped as developed/landscaped in the survey area include roads (i.e., beach access trail, maintenance/access road), buildings, and structures. Vegetation in these areas, if present at all, is usually sparse, dominated by weedy herbaceous species, or part of the landscaping associated with development. The Dudek mapping results differ from the KMA mapping results slightly in that the trails and roads were described by Dudek as developed/landscaped areas. Developed/landscaped areas are displayed on *Figure 2 (Appendix A)*.

4.2 Special-Status Plant Species

A search of the CNDDB (CDFW 2018) and CNPS Inventory of Rare and Endangered Plants (CNPS 2018) resulted in the identification of forty-two (42) special-status plant species known to occur in the region. Of these forty-two species, twenty-nine (29) special-status plants were not described in the *Biological Resources Assessment* (KMA 2017). The KMA biological surveys included spring botanical surveys, which were negative for special-status plants. However, the expanded literature review resulted in the identification of these 29 additional special-status plants known from the region. *Appendix B* provides a review of the habitat requirements for these 29 special-status plant species and their potential to occur in the project site. Based on the habitat present within the project site, the results of previous botanical surveys, and the past and on-going disturbance to the project site, no special-status plant species are expected to occur.

4.3 Special-Status Wildlife Species

A search of the CNDDB (CDFW 2018) and USFWS Critical Habitat and Occurrence Data (USFWS 2018) resulted in the identification of forty-three (43) special-status wildlife species known to occur in the region. Of these forty-three species, twenty-eight (28) special-status wildlife were not described in the *Biological Resources Assessment* (KMA 2017). The KMA *Biological Resource Assessment* included an analysis of special-status wildlife species potential to occur. Based on their analysis, no special-status wildlife were anticipated to occur within the project site, with the exception of nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Department of Fish and Game Code (DFG Code). Based on Dudek's analysis of special-status wildlife species known to occur in the region, one species, southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) has potential to occur in the vicinity. Based on the habitat present within the project site and the past and on-going disturbance to the project site, no other special-status wildlife species are expected to occur. *Appendix C* provides a review of the habitat requirements for these 28 special-status wildlife species and their potential to occur in the project site. Per a request from the City, Dudek surveyed for the monarch butterfly in 2018 and determined absence of overwintering habitat within or adjacent to the project site (Dudek 2018a). Please refer to *Appendix D* for the technical memorandum: *Monarch Butterfly Surveys for the Beach Facilities Project at the Ritz-Carlton Bacara.*

4.4 Jurisdictional Features

No jurisdictional waters were identified within the survey area. The Pacific Ocean is present immediately south of the project site and Tecolote Creek is located to the west and Bell's Canyon to the east; however, no project components, equipment, or materials will be located in the vicinity of these waterbodies.

4.5 Wildlife Corridors

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by assuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping stones for dispersal.

To function effectively, a wildlife corridor must link two or more patches of habitat for which connectivity is desired, and it must be suitable for the focal target species to achieve the desired demographic and genetic exchange between populations. Natural areas that link habitat, or larger blocks of habitat on a more local level provide food, shelter, water, breeding areas, and other wildlife resources. Local corridors and linkages facilitate wildlife movement between habitats; in the case of inter-mountain/forest linkages, from larger habitat blocks to another, thus providing critical open space for the dispersal of young to locate breeding territory, for animals to access food or other life needs, and to keep populations from declining due to habitat disturbances (City of Goleta 2006).

The project site is located in the southeastern portion of the Ritz-Carlton Bacara property. The Ritz-Carlton Bacara northern property line is adjacent to and south of Hollister Avenue, Union Pacific Railroad, and Highway 101 and as such is relatively discontinuous from the larger blocks of higher quality habitat associated with the Santa Ynez Mountains and foothills, located off-site and north of the project site. Because the Bacara Resort is approximately 0.18 miles to the west of the project site and is built out between the Pacific Ocean and Hollister Avenue, terrestrial wildlife movement to the west of the project site is also severely restricted; therefore, it is unlikely that wildlife would use the property as a habitat linkage or movement corridor to directly access off-site habitat patches to the north or west. Located to the east are Bell's Canyon, Onshore Ellwood Facility (Venoco, Inc.), Sandpiper Golf Course, Ellwood Mesa, Deveraux Slough, and UCSB's North Campus Open Space, all bound by Hollister Avenue, Union Pacific Railroad, and Highway 101 to the north and further to the north and east dense residential and commercial development. While coastal plain and wetland habitats are available further to the east along the coast and certainly qualifies as a habitat patch for terrestrial wildlife species tolerant of human presence, the project site is not a linkage between these habitats and habitats to the north (Santa Ynez Mountains and foothills) and west (Gaviota Coast) of

the site. Tecolote Canyon to the west and Bell's Canyon to the east of the project site provides narrow, constricted linkages between habitats south and north of Highway 101 and are discussed below.

Tecolote Creek is a north to south trending intermittent stream channel that is located approximately 370 feet northwest of the survey area. Tecolote Creek has an opportunity to provide, on a limited basis, potential dispersal habitat for resident breeding birds and larger mammals such as coyote and mule deer. Riparian habitat south of Hollister Avenue is separated from other suitable habitat along Tecolote Creek north of Highway 101 by an approximately 575-foot long, approximately 15-foot high, arched, and concrete-floored culvert. The inhospitable conditions of this crossing (i.e., length of culvert and lack of light) likely restrict wildlife use and preclude terrestrial species from accessing the project site via Tecolote Canyon. Wildlife species that traverse the project site likely do so in an east to west fashion travelling to and from Tecolote and Bell Canyon Creek using the shorelines or existing trails within the larger Bacara Resort property.

It is possible that wildlife would traverse the survey area; wildlife may utilize the adjacent Monterey cypress for cover and the existing trails/access roads. However, this project does not propose to disturb the existing native vegetation that may be used as cover by wildlife species traversing the site. All project components will be located on disturbed, landscaped, or developed land. Therefore, any wildlife traversing the area may temporarily encounter exclusion fencing during construction. Any wildlife traversing the area during construction will still have opportunities to cross the property along the shoreline, in gaps of vegetation near the tennis courts, or directly through the existing coastal sage scrub habitat on site. Therefore, although construction may temporarily re-route any wildlife traversing the site, there is suitable habitat and cover that wildlife may use to cross the site.

5.0 PROJECT IMPACTS AND RECOMMENDED AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

5.1 Impact Definitions

This section defines the types of impacts considered in this report to analyze the potential effects of the Proposed Project on biological resources. These impacts are discussed in more detail as follows.

Direct Impacts refer to 100% permanent loss of a biological resource. For purposes of this report, it refers to the area where the limits of grading and fuel modification are proposed (i.e., Development Footprint). Direct impacts were quantified by overlaying the limits of grading on geographic information system (GIS)-located biological resources (*Appendix A - Figure 3*).

Indirect impacts are reasonably foreseeable effects caused by project implementation on remaining or adjacent biological resources outside the direct limits of grading. Indirect impacts may affect areas within the defined project area but outside the limits of grading, including non-impacted areas and areas outside the project area, such as downstream effects. Indirect impacts include short-term effects immediately related to construction activities and

long-term or chronic effects. In most cases, indirect effects are not quantified, but in some cases quantification might be included, such as using a noise contour to quantify indirect impacts to nesting birds.

Cumulative impacts refer to the combined environmental effects of the Proposed Project and other relevant projects. In some cases, the impact from a single project may not be significant, but when combined with other projects, the cumulative impact may be significant.

As shown in *Figure 3 (Appendix A)*, the project will not impact native vegetation with the survey area.

5.2 Vegetation Communities and Land Covers

Impacts to vegetation communities and land covers are based on the mapping provided in *Figure 3 (Appendix A)* and are summarized in *Table 1* below.

Table 1. Project Impacts to Vegetation Communities and Land Covers

Vegetation Communities/ Land Cover Type	New Building Related Impacts (acres)	Demolition Related Impacts (acres)
Coastal Sage Scrub	0.0	0.0
Monterey Cypress (including planted areas)	0.0	0.0
Beach	0.0	0.0
Disturbed	0.013	0.0
Developed/ Landscaped	0.0004	0.14

As shown in *Table 1,* no impacts to native vegetation communities, including Monterey cypress, will occur from the implementation of the project. Consistent with this assessment, it has been determined that no Environmentally Sensitive Habitat Areas (ESHA) will be impacted by the project (see *Appendix E* - Environmental Sensitive Habitat Area Review and Proposed Setback Reduction). The KMA *Biological Resources Assessment* (KMA 2017) concluded that the project would impact approximately 500-square feet of coastal sage scrub vegetation; however, with the changes to the project footprint, these potential impacts have been eliminated. Impacts resulting from project will now be limited to currently disturbed and developed/landscaped areas and subsequent to the implementation of the project, the existing Beach House demolition area will be revegetated with native species and restored to public open space (see *Appendix F* – Haskell's Beach House Demolition Restoration Plan). The beach facilities are located within a 25-foot ESHA buffer; however, this area is disturbed and directly adjacent to the existing dirt fire road. Please also refer to *Appendix E: Environmental Sensitive Habitat Area Review and Proposed Setback Reduction for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project and Emergency Permit (16-002 EMP)* (Dudek 2018b).

5.3 Special-Status Plant Species

As no special-status plants are expected to occur within the project site, no impacts are anticipated.

5.4 Special-Status Wildlife Species

Although special-status wildlife species are not expected to occur within the project site, nesting birds may utilize the surrounding habitat during the bird breeding season. The assessment of impacts to special-status wildlife identified in the KMA *Biological Resources Assessment* (KMA 2017) are determined to be appropriate and the mitigation measures contained therein (Bio Impact 3) are recommended for implementation. No further mitigation measures are recommended.

5.5 Jurisdictional Features

No jurisdictional waters are present within the project site; however, the Pacific Ocean is located immediately south of the project site and must be completely avoided during project implementation. Best Management Practices (BMPs) for erosion and sediment control during and following completion of all project activities must be incorporated into project plans and implemented accordingly. BMPs will need to be maintained to ensure proper function and replaced if determined to be insufficient.

5.6 Wildlife Corridors

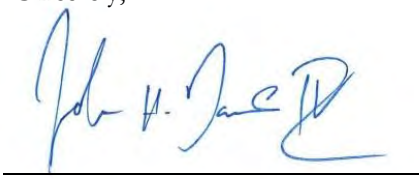
This project does not propose to disturb the existing native vegetation that may be used as cover by wildlife species traversing the site or considered as part of a larger wildlife corridor. Although construction may temporarily re-route any wildlife traversing the site, there is suitable habitat and cover that wildlife may use to cross the site. Therefore, impacts to potential wildlife movement routes or corridors would not occur.

6.0 CONCLUSIONS

Overall, Dudek's supplemental impact assessment concurs with that provided by KMA (2017). Although there were some discrepancies between the vegetation mapping provided Dudek and described by KMA (2017), the overall project design was refined to avoid any impacts occurring to Environmentally Sensitive Habitat Area (ESHA) that was reported by KMA (2017, see Bio Impact 2). As shown in *Table 1*, any new impacts would occur on disturbed or developed/landscape land, but within the 25-foot ESHA buffer. In Dudek's opinion, a buffer reduction to accommodate the beach facilities is warranted due to the disturbed nature of the site, location adjacent to the dirt fire road, and the common vegetation type, California sage scrub, which may not qualify as ESHA unto itself; thereby not requiring a buffer. In fact, the City did not map the East Terrace as ESHA in their GP/CLUP. Lastly, Dudek has reviewed the mitigation measure provided by KMA (2017) and conclude that the assessment of impacts to special-status wildlife identified in the KMA *Biological Resources Assessment* (KMA 2017) are appropriate and the mitigation measures contained therein (Bio Impact 3) continue to be recommended for implementation.

Please feel free to contact me at 805.308.8524 (office) or 805.252.7996 (cell) if you have any questions regarding this letter report.

Sincerely,



John H. Davis IV, MS, CE
Project Manager/Senior Coastal Ecologist

App.: *A - Figures*
B - Special-Status Plants Species Potential to Occur
C - Special-Status Wildlife Species Potential to Occur
D - Monarch Butterfly Surveys for the Beach Facilities Project at the Ritz-Carlton Bacara
E - Environmentally Sensitive Habitat Area Review and Proposed Setback Reduction for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project and Emergency Permit (16-002 EMP) (Dudek 2018)
F - Haskell's Beach House Demolition Restoration Plan (Dudek 2018)

cc: *Anne Blemker, McCabe & Company*

7.0 REFERENCES

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APPENDIX A

Figures

SOURCE: NAIP 2016

FIGURE 1

Project Location

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0 500 1,000 Feet

Supplemental Biological Technical Report for the Ritz Carlton Bacara Beach House Demolition and Replacement Project

Survey Area

Project Componets

New Building

Proposed Restoration Grading Limits

cypress

ESHA Boundary

Monterey Cypress

Vegetation and Land Cover

B - Beach

CSS - Coastal Sage Scrub

D - Disturbed

D/L - Developed/Landscaped

MC - Monterey Cypress

MC(P) - Monterey Cypress (Planted)

SOURCE: CIRGIS 2010

DUDEK

0 20 40 Feet

FIGURE 2

Biological Survey Results

Supplemental Biological Technical Report for the Ritz Carlton Bacara Beach House Demolition and Replacement Project

Survey Area

Project Componets

New Building

Proposed Restoration Grading Limits

Monterey Cypress

ESHA Boundary (Dudek)

City of Goleta ESHA

Beach and Shoreline

Riparian/Marsh/Vernal

Scrub

25-foot ESHA Buffer

Vegetation and Land Cover

B - Beach

CSS - Coastal Sage Scrub

D - Disturbed

D/L - Developed/Landscaped

MC - Monterey Cypress

MC(P) - Monterey Cypress (Planted)

SOURCE: CIRGIS 2010; Stantec 2018

DUDEK

0 20 40 Feet

FIGURE 3

Impact Analysis

Supplemental Biological Technical Report for the Ritz Carlton Bacara Beach House Demolition and Replacement Project

APPENDIX B

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status[1] (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia maritima	red sand-verbena	None/None/4.2	Coastal dunes/perennial herb/Feb–Nov/0–330	Not expected to occur. No suitable sand dunes are present on site.
Amsinckia douglasiana	Douglas' fiddleneck	None/None/4.2	Cismontane woodland, Valley and foothill grassland; Monterey shale, dry/annual herb/Mar–May/0–6400	Not expected to occur. No suitable vegetation is present in the survey area.
Anomobryum julaceum	slender silver moss	None/None/4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest; damp rock and soil on outcrops, usually on roadcuts/moss/N.A./325–3280	Not expected to occur. The site is outside of the species' known elevation range.
Arctostaphylos refugioensis	Refugio manzanita	None/None/1B.2	Chaparral (sandstone)/perennial evergreen shrub/Dec–Mar(May)/895–2690	Not expected to occur. The site is outside of the species' known elevation range.
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	Marshes and swamps (freshwateror brackish); sandy, openings/perennial stoloniferous herb/May–Aug/5–560	Not expected to occur. No suitable marshes, swamps, or suitable sandy openings are present on site.
Calandrinia breweri	Brewer's calandrinia	None/None/4.2	Chaparral, Coastal scrub; sandy or loamy, disturbed sites and burns/annual herb/(Jan)Mar–June/30–4005	Not expected to occur. Although there are disturbed areas on site, the closest known occurrence of this species is over 5 miles northeast of the survey area (Jepson Flora Project 2018).
Calochortus catalinae	Catalina mariposa lily	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/perennial bulbiferous herb/(Feb)Mar–June/45–2295	Not expected to occur. The site is outside of the species' known elevation range.
Calochortus fimbriatus	late-flowered mariposa lily	None/None/1B.3	Chaparral, Cismontane woodland, Riparian woodland; often serpentinite/perennial bulbiferous herb/June–Aug/900–6250	Not expected to occur. The site is outside of the species' known elevation range.
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	Not expected to occur. No suitable vegetation is present on site.
Chorizanthe palmeri	Palmer's spineflower	None/None/4.2	Chaparral, Cismontane woodland, Valley and foothill grassland; rocky, serpentinite/annual herb/Apr–Aug/180–3100	Not expected to occur. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status[1] (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Cordylanthus rigidus ssp. littoralis	seaside bird's-beak	None/SE/1B.1	Closed-cone coniferous forest, Chaparral (maritime), Cismontane woodland, Coastal dunes, Coastal scrub; sandy, often disturbed sites/annual herb (hemiparasitic)/Apr–Oct/0–1690	Not expected to occur. No suitable vegetation is present on site.
Deinandra paniculata	paniculate tarplant	None/None/4.2	Coastal scrub, Valley and foothill grassland, Vernal pools; usually vernally mesic, sometimes sandy/annual herb/(Mar)Apr–Nov/80–3085	Not expected to occur. No suitable vegetation or vernal pool habitat is present on site.
Delphinium umbraculorum	umbrella larkspur	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/Apr–June/1310–5250	Not expected to occur. The site is outside of the species' known elevation range.
Eriodictyon capitatum	Lompoc yerba santa	FE/SR/1B.2	Coastal bluff scrub, Closed-cone coniferous forest, Chaparral (maritime); sandy/perennial evergreen shrub/May–Sep/130–2955	Not expected to occur. The site is outside of the species' known elevation range.
Eriogonum elegans	elegant wild buckwheat	None/None/4.3	Cismontane woodland, Valley and foothill grassland; Usually sandy or gravelly, often washes, sometimes roadsides/annual herb/May–Nov/655–5005	Not expected to occur. The site is outside of the species' known elevation range.
Fritillaria ojaiensis	Ojai fritillary	None/None/1B.2	Broadleafed upland forest (mesic), Chaparral, Cismontane woodland, Lower montane coniferous forest; rocky/perennial bulbiferous herb/Feb–May/735–3275	Not expected to occur. The site is outside of the species' known elevation range.
Juncus luciensis	Santa Lucia dwarf rush	None/None/1B.2	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools/annual herb/Apr–July/980–6695	Not expected to occur. The site is outside of the species' known elevation range.
Layia heterotricha	pale-yellow layia	None/None/1B.1	Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; alkaline or clay/annual herb/Mar–June/980–5595	Not expected to occur. The site is outside of the species' known elevation range.
Micropus amphibolus	Mt. Diablo cottonweed	None/None/3.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Valley and foothill grassland; rocky/annual herb/Mar–May/145–2705	Not expected to occur. The site is outside of the species' known elevation range.
Monardella hypoleuca ssp. hypoleuca	white-veined monardella	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/(Apr)May–Aug(Sep–Dec)/160–5005	Not expected to occur. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status[1] (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Monardella sinuata ssp. sinuata	southern curly-leaved monardella	None/None/1B.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub (openings); Sandy./annual herb/Apr–Sep/0–985	Not expected to occur. No suitable vegetation is present on site.
Nasturtium gambelii	Gambel's water cress	FE/ST/1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb/Apr–Oct/15–1085	Not expected to occur. No suitable vegetation is present on site.
Phacelia hubbyi	Hubby's phacelia	None/None/4.2	Chaparral, Coastal scrub, Valley and foothill grassland; gravelly, rocky, talus/annual herb/Apr–July/0–3280	Not expected to occur. No suitable vegetation is present on site.
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	None/None/3.2	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt); sandy, sometimes rocky/perennial herb/Mar–Aug/15–985	Not expected to occur. No suitable vegetation is present on site.
Pleuridium mexicanum	Mexican earthmoss	None/None/2B.1	Chaparral; Sandstone/moss/N.A./1440–1445	Not expected to occur. The site is outside of the species' known elevation range.
Ribes amarum var. hoffmannii	Hoffmann's bitter gooseberry	None/None/3	Chaparral, Riparian woodland/perennial deciduous shrub/Mar–Apr/15–3905	Not expected to occur. No suitable vegetation is present on site.
Senecio aphanactis	chaparral ragwort	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub; sometimes alkaline/annual herb/Jan–Apr(May)/45–2625	Not expected to occur. The site is outside of the species' known elevation range.
Senecio astephanus	San Gabriel ragwort	None/None/4.3	Coastal bluff scrub, Chaparral; rocky slopes/perennial herb/May–July/1310–4920	Not expected to occur. The site is outside of the species' known elevation range.
Thermopsis macrophylla	Santa Ynez false lupine	None/SR/1B.3	Chaparral (sandy, granitic, disturbed areas)/perennial rhizomatous herb/Apr–June/1390–4595	Not expected to occur. The site is outside of the species' known elevation range.

[1] Status Legend:
FE: Federally listed as endangered
FT: Federally listed as threatened
FC: Federal Candidate for listing
DL: Delisted
SE: State listed as endangered
ST: State listed as threatened
SR: State Rare
CRPR 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
CRPR 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
CRPR 2A: Plants Presumed Extirpated in California, But More Common Elsewhere

CRPR 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
CRPR 3: Plants About Which More Information is Needed - A Review List
CRPR 4: Plants of Limited Distribution - A Watch List
.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

APPENDIX C

Special-Status Wildlife Species Potential to Occur

Scientific Name	Common Name	Status[1] (Federal/State)	Associated Habitats	Potential to Occur
Amphibians				
Rana boylii	foothill yellow-legged frog	None/PST, SSC	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur within the project site due to a lack of suitable vegetation. Low potential to occur in the vicinity of the project site.
Taricha torosa (Monterey Co. south only)	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	Not expected to occur within the project site due to a lack of suitable vegetation. Low potential to occur in the vicinity of the project site.
Reptiles				
Anniella pulchra	northern California legless lizard	None/ SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils	Not expected to occur within the project site due to a lack of suitable vegetation and soils. Low potential to occur in the vicinity of the project site.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Not expected to occur within the project site due to a lack of suitable vegetation and soils. Low potential to occur in the vicinity of the project site as this species is not typically found on the immediate coast of southern Santa Barbara County.
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Not expected to occur within the project site due to a lack of suitable vegetation. Low potential to occur in the vicinity of the project site.
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur within the project site due to a lack of suitable vegetation. Low potential to occur in the vicinity of the project site.
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	Moderate potential to forage within and adjacent to the project site. Not expected to nest within the project site

Scientific Name	Common Name	Status[1] (Federal/State)	Associated Habitats	Potential to Occur
				or in the immediate vicinity due to a lack of suitable vegetation.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Moderate potential to forage within and adjacent to the project site. Not expected to nest within the project site due to a lack of suitable vegetation; however, moderate potential to nest in the vicinity of the project site.
Ammodramus savannarum (nesting)	grasshopper sparrow	None/SSC	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches	Not expected to nest or forage within the project site or in the immediate vicinity due to a lack of suitable vegetation.
Aquila chrysaetos (nesting & wintering)	golden eagle	BCC/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to nest or forage within the project site or in the immediate vicinity due to a lack of suitable vegetation.
Ardea herodias (nesting colony)	great blue heron	None/None	Nests in large trees or snags; forages in wetlands, water bodies, watercourses, and opportunistically in uplands, including pasture and croplands	Not expected to nest within the project site or in the immediate vicinity as no known rookeries are present. Low potential for this species to forage due to a lack of suitable vegetation.
Artemisiospiza belli belli	Bell's sage sparrow	BCC/WL	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Low potential to forage within and adjacent to the project site. Not expected to nest within the project site or in the immediate vicinity as this species is a rare visitor to the south coast of Santa Barbara.
Brachyramphus marmoratus (nesting)	marbled murrelet	FT/SE	Nests in old-growth coastal forests, forages in subtidal and pelagic habitats	Not expected to nest or forage within the project site or in the vicinity due to a lack of suitable vegetation.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during	Low potential to forage within and adjacent to the project site during migration. Not expected to nest within

Scientific Name	Common Name	Status[1] (Federal/State)	Associated Habitats	Potential to Occur
			migration	the project site or in the vicinity due to a lack of suitable vegetation.
Falco mexicanus (nesting)	prairie falcon	BCC/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Moderate potential to forage within and adjacent to the project site. Not expected to nest within the project site or the immediate vicinity due to a lack of suitable cliff or bluff habitat.
Haliaeetus leucocephalus (nesting & wintering)	bald eagle	FDL, BCC/SE, FP	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	Not expected to occur within the project site. Moderate potential to forage adjacent to the project site. Species is not known to nest within the region.
Progne subis (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways	Moderate potential to forage within and adjacent to the project site. Not expected to nest within the project site due to a lack of suitable vegetation; however, moderate potential to nest in the vicinity of the project site.
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	Not expected to forage within the project site or in the immediate vicinity due to a lack of suitable habitat. A rare migrant; the project site is outside of current breeding range.
Sternula antillarum browni (nesting colony)	California least tern	FE/SE, FP	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to nest or forage within the project site due to a lack of suitable habitat; however, moderate potential to nest and forage in the vicinity of the project site.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Low potential to forage within and adjacent to the project site. Not expected to nest within the project site or in the immediate vicinity due to a lack of suitable vegetation.
Fishes				
Oncorhynchus mykiss irideus	southern steelhead -	FE/None	Clean, clear, cool, well-oxygenated streams;	Absent within the project site and

Scientific Name	Common Name	Status[1] (Federal/State)	Associated Habitats	Potential to Occur
	southern California DPS		needs relatively deep pools in migration and gravelly substrate to spawn	immediate vicinity. No streams supporting any spawning habitat occur on the project site.
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Not expected to roost. Low potential to forage over the project site.
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Not expected to roost. Low potential to forage over the project site.
Lasiurus blossevillii	western red bat	None/SSC	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Not expected to roost. Low potential to forage over the project site.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Not expected to occur within the project site. Low potential to occur in the immediate vicinity.
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur within the project site. Low potential to occur in the immediate vicinity.
Invertebrates				
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	Not expected to occur within the project site or in the immediate vicinity. No vernal pool habitat present.

[1] Status Abbreviations
FE: Federally Endangered
FT: Federally Threatened
PFE: Proposed Federally Endangered
PFT: Proposed Federally Threatened
FC: Federal Candidate
FDL: Federally Delisted
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

BLM: Bureau of Land Management Sensitive Species
USFS: U.S. Forest Service Sensitive Species
SSC: California Species of Special Concern
FP: California Fully Protected Species
WL: California Watch List Species
SE: State Endangered
ST: State Threatened
PSE: Proposed State Endangered
PST: Proposed State Threatened
SDL: State Delisted
SS: List Special Animals List, but no other status
CDF: California Department of Forestry Sensitive Species
HCP: Habitat Conservation Plan
NCCP: Natural Community Conservation Plan

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APPENDIX D

Monarch Butterfly Surveys for the Beach Facilities Project at the Ritz-Carlton Bacara

DUDEK

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TECHNICAL MEMORANDUM

To:	Paul Finstad, Watermark Capital Partners, LLC.
From:	John H. Davis IV, MS, CE, Senior Coastal Ecologist, Dudek
Subject:	Monarch Butterfly Surveys for the Beach Facilities Project at the Ritz-Carlton Bacara
Date:	April 11, 2018
cc:	Anne Blemker, Coastal Planner, McCabe and Company Ginger Andersen, MCRP AICP, Stantec Melissa Blundell, Biologist, Dudek
Attachment(s):	Figure 1 – Regional/Vicinity Map Figure 2 – Monarch Butterfly Survey Results A - Photo Documentation

This technical memorandum (memo) documents the overwintering monarch (*Danaus plexippus*) butterfly surveys that were conducted by Dudek biologists for Beach Facilities Project at the Ritz-Carlton Bacara (project) in Goleta, Santa Barbara County, California (*Figure 1*). These surveys were conducted at the request of the City of Goleta (City) in support of future California Environmental Quality Act (CEQA) project review per the City's General Plan and Local Coastal Plan (LCP) standards and policies. This memo provides a description of the monarch butterfly's natural history, policies protecting monarch overwintering habitat, methods, and results of the monarch habitat assessment and survey.

MONARCH BUTTERFLY NATURAL HISTORY

The monarch butterfly follows a pattern of seasonal migration. The summer grounds of the species are found in New England, the Great Lakes region, and the northern Rocky Mountains. These areas are occupied from May through late August to mid-September (Urquhart 1987). The New England and Great Lakes populations migrate southwest to wintering grounds in the Sierra Madre mountain range of Mexico. The Rocky Mountains population migrates southwest to wintering grounds along the California coast.

In spring and summer, the species' distribution is controlled by the distribution of its larval host plant (i.e., various milkweeds, genus *Asclepias*) for egg deposition/larval development and nectar plants for fuel. Eggs are deposited and hatch on the underside of leaves of the milkweed plant. Upon hatching, the larvae feed upon the fine hairs on the leaves of the plant and stay on

the same plant throughout its molting stages. After molting, the larvae leave the milkweed and construct its chrysalis elsewhere. However, once an adult monarch butterfly emerges from the chrysalis, it soon returns to a milkweed plant for foraging and shelter (Urquhart 1987). Multiple generations are produced during spring and summer. During the fall, the last generation of monarchs migrate to overwintering sites and live for 6-9 months (Xerces Society 2016).

REGULATORY PROTECTION

Monarch butterfly overwintering sites are considered special status by the California Department of Fish and Wildlife (CDFW; CDFW 2017a). Overwintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine) with nectar and water sources nearby, generally near the coast. In addition, the City of Goleta General Plan/Coastal Land Use Plan (City of Goleta 2006) Chapter 4.0 Conservation Element sets forth the following policies protecting monarch butterfly habitat areas:

> **Policy CE 4.1: Definition of Habitat Area. [GP/CP]** The monarch butterfly is recognized as a California and Goleta special resource. Although the species is not threatened with extinction, its autumnal and winter aggregation sites, or roosts, are especially vulnerable to disturbance. Sites that provide the key elements essential for successful monarch butterfly aggregation areas and are locations where monarchs have been historically present shall be considered ESHAs [Environmentally Sensitive Habitat Areas]. These elements include stands of eucalyptus or other suitable trees that offer shelter from strong winds and storms, provide a microclimate with adequate sunlight, are situated near a source of water or moisture, and that provide a source of nectar to nourish the butterflies.
>
> **Policy CE 4.2: Designation of Monarch Butterfly ESHAs. [GP/CP]** Existing and known historical monarch roost sites, as shown on Figure 4-1, are hereby designated as ESHAs. These include about 20 known roosts, eight of which comprise the Ellwood Complex, a series of sites within a network consisting of eucalyptus groves and windrows interspersed by open fields and crossed by small creeks. This network includes several separate but interconnected autumnal and winter roost sites. The Ellwood Main site, the largest roost in Santa Barbara County and one of the largest in the state, occupies a site along Devereux Creek in the Sperling Preserve, a City-owned tract situated near the coastal bluffs in western Goleta.
>
> **Policy CE 4.3: Site-Specific Studies and Unmapped Monarch ESHAs. [GP/CP]** Any area not designated on Figure 4-1 that is determined by a site-

specific study to contain monarch habitats, including autumnal and winter roost sites, shall be granted the same protections as if the area was shown on the figure. Proposals for development on sites shown on this figure or where there is probable cause to believe that monarch habitats may exist shall be required to provide a site-specific study.

Policy CE 4.4: Protection of Monarch Butterfly ESHAs. [GP/CP] Monarch butterfly ESHAs shall be protected against significant disruption of habitat values, and only uses or development dependent on and compatible with maintaining such resources shall be allowed within these ESHAs or their buffer areas. The following standards shall apply:

a. No development, except as otherwise allowed by this policy, shall be allowed within monarch butterfly ESHAs or ESHA buffers.

b. Since the specific locations of aggregation sites may vary from one year to the next, the focus of protection shall be the entire grove of trees rather than individual trees that are the location of the roost.

c. 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.

d. Public accessways are considered resource-dependent uses and may be located within a monarch ESHA or its buffer; however, such accessways shall be sited to avoid or minimize impacts to aggregation sites.

e. Interpretative signage is allowed within a monarch ESHA or its buffer, but shall be designed to be visually unobtrusive.

f. Butterfly research, including tree disturbance or other invasive methods, may be allowed subject to City approval of a permit.

Policy CE 4.5: Buffers Adjacent to Monarch Butterfly ESHAs. [GP/CP] A buffer of a sufficient size to ensure the biological integrity and preservation of the monarch butterfly habitat, including aggregation sites and the surrounding grove of trees, shall be required. Buffers shall not be less than 100 feet around existing and historic roost sites as measured from the outer extent of the tree canopy. The buffer area shall serve as transitional habitat with native vegetation and shall

provide physical barriers to human intrusion. The buffer may be reduced to 50 feet in circumstances where the trees contribute to the habitat but are not considered likely to function as an aggregation site, such as along narrow windrows. Grading and other activities that could alter the surface hydrology that sustains the groves of trees are prohibited within or adjacent to the buffer area.

Policy CE 4.6: Standards Applicable to New Development Adjacent to Monarch ESHAs. [GP/CP] The following standards shall apply to consideration of proposals for new development adjacent to monarch ESHAs or ESHA buffers:

a. A site-specific biological study, prepared by an expert approved by the City who is qualified by virtue of education and experience in the study of monarch butterflies, shall be required to be submitted by the project proponent.

b. The study shall include preparation of a Monarch Butterfly Habitat Protection Plan, which at a minimum shall include: 1) the mapped location of the cluster of trees where monarchs are known, or have been known, to roost in both autumnal and over-wintering aggregations; 2) an estimate of the size of the population within the colony; 3) the mapped extent of the entire habitat area; and 4) the boundaries of the buffer zone around the habitat area.

c. A temporary fence shall be installed along the outer boundary of the buffer zone prior to and during any grading and construction activities on the site.

d. If an active roost or aggregation is present on the project site, any construction grading, or other development within 200 feet of the active roost, shall be prohibited between October 1 and March 1.

METHODS

Literature Review

Prior to conducting field surveys, a literature review for monarch overwintering sites was conducted. The California Natural Diversity Database (CNDDB) includes one occurrence in Tecolote Canyon creek located approximately 600 feet northwest of the project site, directly northwest of the tennis courts, south of the Hollister Avenue Bridge and east of the of the tennis courts (CDFW 2017b, Xerces Site #2744, *Figure 2*). At this location 445 individuals were

counted in 2016 and 2,170 individuals were counted in 2017 in and around this general area (Xerces Society 2018a, Site #2477). This location is also documented as a transitory overwintering site by Meade (1999)(Site #57). This grove is dominated by blue gum eucalyptus (*Eucalyptus globulus*).

A second occurrence is located along Bell Canyon creek approximately 400 feet east of the project site near the eastern edge of the Bacara Resort and Spa and the western edge of the Ellwood Onshore Veneco property (Xerces Site #2745). This location is also dominated by eucalyptus. At this location six individual monarchs were counted in 2016. This location was documented by Meade (1999, Site #58) as an area used by monarchs for patrolling.

Aside from Tecolote Canyon and Bell Canyon, addition suitable overwintering habitat occurs throughout the project area and includes groves of Monterey cypress (*Cupressus macrocarpa*) and eucalyptus. Generally, monarchs begin to arrive at overwintering sites along the Pacific coast in September and first half of October and by mid-November have formed more stable aggregations that persist into January or February (Xerces Society 2016). During a project meeting that occurred on January 24, 2018, which included the City and the California Coastal Commission, a request by the agencies was made for a biologist to survey suitable overwintering habitat for the Monarch butterfly. The Monarch butterfly surveys were conducted shortly thereafter, in early February, as described below.

Field Surveys

A total of two focused monarch butterfly surveys were conducted by Dudek biologist Melissa Blundell and Andrea Dransfield. *Table 1* provides the dates and weather conditions for these surveys. The survey methodology generally followed monitoring guidelines produced by the Xerces Society that are used for state wide regional monarch counts (Xerces Society 2018b). Surveys were conducted two times in the early morning starting when temperatures were low (below 55°F) and monarchs still clustered. Surveys were not conducted during heavy precipitation or strong winds.

Monarch butterfly surveys were conducted both at the project site and at a reference location (*Figure 2*) in order to understand the project survey results within the larger regional context of monarch activity. The Ellwood Butterfly Grove served as a reference site for the project site surveys and is located approximately 1.0 mile southeast of the project survey area (*Figure 2*). Ellwood contains a large complex of eucalyptus groves and is a well-documented monarch aggregation site (Meade 1999). Dudek biologists generally surveyed Xerces Society Site #2749 through #2752 to serve as reference locations (see *Figure 2*).

For each visit, the biologist walked the survey areas and used binoculars to examine all potentially suitable overwintering trees. Areas difficult to access were surveyed using binoculars. Biologists used binoculars (8×42 and 10×42) to record all occurrences of monarch individuals and/or clusters. The locations and number of individuals were counted and recorded on an aerial map. In addition, a brief habitat assessment was conducted for the survey area. This brief assessment included noting down tree clusters, fresh water locations, and possible nectaring plants.

Table 1
Dates and Conditions for Focused Overwintering Monarch Butterfly Surveys

Survey Date	Time[1]	Personnel[2]	Project Site Survey Conditions
02/01/2017	0713-0903 (P) 0915-1020 (R)	MB	48-62 degrees Fahrenheit (°F); 0-10 percent cloud cover (%cc); 0-2 miles per hour (mph) north winds
02/14/2017	0635-0745 (R) 0800-0930 (P)	AD	51-57°F; 30-55%cc; 0-1 mph south to southwest winds

Notes:
[1] P = Project Site; R = Reference Site
[2] Biologists' Initials: MB = Melissa Blundell; AD = Andrea Dransfield

RESULTS AND DISCUSSION

In the project survey area a maximum of five individuals were observed approximately 760 feet northwest of the project area directly north of Hollister Avenue Bridge (*Figure 2*). On the first visit, five individuals were observed flying and sunning (wings open) throughout the eucalyptus grove. On the second visit, one individual was observed sunning within the grove at this same location. No additional individuals or overwintering clusters were observed within any areas of the project survey area.

A similar pattern of general low monarch presence has been observed by Dudek staff working around the project area. Over a period of over three years, multiple Dudek biologists have regularly visited the project site and have not noticed abundant numbers of monarchs or any clustering in or near the project area. Similarly, only six individuals were documented at the large eucalyptus grove approximately 400 feet east of the project area in 2016 (Site #2745, *Figure 2*) and Meade (1999) documented this site as area used for monarch patrolling (not overwintering). In November 2017 a total of 2,170 individuals were recorded in eucalyptus groves around the Hollister Avenue Bridge (Site# 2744, Xerces Society 2018a). It is likely that monarch individuals traversing through the area seeking overwintering shelter are more likely to be attracted to the microhabitat conditions provided in Site #2744 than the cypress trees adjacent to the project area. The cypress trees directly east of the project area were planted approximately three years ago and have not yet formed microhabitat conditions that monarchs require for

overwintering including appropriate levels of sunlight, canopy cover, wind protection, humidity, and temperature. There is a large grove of Monterey cypress east of the project area that may provide suitable overwintering conditions, but no clusters have been documented here or observed in the past three years of Dudek staff regularly visiting the site. In addition, this Monterey cypress grove is not documented as an overwintering site by Meade (1999) and may experience heavy onshore winds as they are located on a bluff and exposed to direct winds influenced by the Pacific Ocean.

However, monarchs would still likely be attracted to the general area due to the abundant nectar sources within the survey area. The habitat surrounding the project area consists of a mixture of scrub habitats, including coastal sage scrub. The scrub habitats provide a variety of nectar plants for monarchs such as California brittlebrush (*Encelia californica*), coyotebrush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), black sage, (*salvia mellifera*). In addition, Tecolote Canyon and Bell Canyon creeks along coastal fog and precipitation may provide freshwater for drinking opportunities.

Overwintering Monarch butterfly individuals were still clustering in the larger Goleta area. On the first visit at the Ellwood reference site single monarch individuals were observed flying at the four westernmost observation points in Site #2749 and approximately 30-45 individuals (assumed to be clustering earlier in the day) were observed flying and sunning at the easternmost observation point in Site 2751 (*Figure 2*). However, no monarch individuals were observed on the second site visit in Ellwood.

It should also be noted that these surveys are occurring during a time that is towards the end of the typical time period when monarchs are observed overwintering at Ellwood. Monarchs are typically observed overwintering in Ellwood from November through February. Although our surveys were conducted in early and mid-February, monarchs were still present. Our observation numbers were less than those documented in November 2017 with a total of 4,367 individuals counted across the four references sites shown in *Figure 2*; nevertheless, it appears some individuals were still present.

In summary, it is unlikely that monarch butterflies traversing through the area would overwinter in habitat adjacent to the project site. No overwintering clusters have been observed by Dudek staff adjacent to the project site in the past three years of regular visits to the site and the Monterey cypress trees directly adjacent to the project area were planted only three years ago. Any monarchs traversing through the project site are more likely to overwinter in the protected groves of eucalyptus over 400 feet from the project area.

Should you have any questions regarding this technical memorandum, please feel free to contact Melissa Blundell at 805.308.8539 (office), 760.214.1878 (cell), or mblundell@dudek.com; or, John Davis IV at 805.308.8524 (office), 805.252.7996 (cell), or jdavis@dudek.com.

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SOURCE: NAIP 2016

DUDEK

0 1,150 2,300 Feet

FIGURE 1

Project Location

Bacara Resort and Spa Beach Facilities Project

SOURCE: NAIP 2016, Meade 1999, Xerces Society, DUDEK 2018

DUDEK

0 550 1,100 Feet

FIGURE 2

Monarch Butterfly Survey Area and Results

Bacara Resort and Spa Beach Facilities Project

Attachment A – Photo Documentation

Photo 1. Eucalyptus grove north of Hollister Ave. February 14, 2018.

Photo 2. Eucalyptus grove north of Hollister Ave. February 14, 2018.

Photo 3. Monarch observed north of Hollister Ave. February 14, 2018.

Photo 4. Ellwood location where monarchs observed. February 1, 2018.

APPENDIX E

Environmentally Sensitive Habitat Area Review and Proposed Setback Reduction for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project and Emergency Permit (16-002 EMP)

DUDEK

May 14, 2018 10786

Bret McNulty
City of Goleta
Planning and Environmental Review Department
130 Cremona Drive, Suite B
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bmcnulty@cityofgoleta.org

Subject: ***Environmental Sensitive Habitat Area Review and Proposed Setback Reduction for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project and Emergency Permit (16-002 EMP)***

Dear Mr. McNulty:

It is our understanding that the City of Goleta (City) has requested the applicant and owners of the Ritz-Carlton Bacara (resort), Watermark Capital, to review the Environmental Sensitive [Habitat] Area (ESHA) setback for the replacement project (i.e., proposed beach facilities or proposed project) in the eastern portion of the resort. The resort and proposed beach facilities are located entirely in the coastal zone within the City of Goleta, Santa Barbara County, California (*see attached Figure 1*). Dudek prepared the Bacara Complete Project Phase EIR and Biological Technical Report in 2010 for the City of Goleta, and the Consent Restoration Plan in 2013 for previous ownership and provided Resource Specialist oversight of restoration through 2018. Dudek has extensive experience working in the Coastal Zone along the Gaviota Coast, U.C. Santa Barbara, County and City of Santa Barbara, and the City of Goleta (City), and inland portions of the City outside of the Coastal Zone. Our professional opinions herein reflect current environmental conditions, our experience with ESHA, and the proposed project.

PROJECT LOCATION

The Ritz-Carlton Bacara is a hotel and conference center located inland of Haskell's Beach, and half a mile west (seaward) of the intersection of US 101 and Hollister Avenue, in the City of Goleta, Santa Barbara County. The current location of the beach facilities is on an elevated terrace above the cobble lined beach. The proposed beach facility is positioned further inland, to the east of the fire access road and adjacent to the northwestern slope of East Terrace (see *attached Figures 1 and 2*).

ESHA POLICIES UNDER THE GENERAL PLAN

2.1 City of Goleta's General Plan

Policy CE 1.1 Definition of Environmentally Sensitive Habitat Areas. [GP/CP] ESHAs shall include, but are not limited to, any areas that through professional biological evaluation are determined to meet the following criteria:

a. Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and that could be easily disturbed or degraded by human activities and developments.

b. Any area that includes habitat for species and plant communities recognized as threatened or endangered by the state or federal governments; plant communities recognized by the State of California (in the Terrestrial Natural Communities Inventory) as restricted in distribution and very threatened; and those habitat types of limited distribution recognized to be of particular habitat value, including wetlands, riparian vegetation, eucalyptus groves associated with monarch butterfly roosts, oak woodlands, and savannas.

c. Any area that has been previously designated as an ESHA by the California Coastal Commission, the California Department of Fish and Game, City of Goleta, or other agency with jurisdiction over the designated area.

Policy CE 1.2 Designation of Environmentally Sensitive Habitat Areas. [GP/CP] ESHAs in Goleta are generally shown in Figure 4-1, and Table 4-2 provides examples of the ESHAs and some locations of each. The provisions of this policy shall apply to all designated ESHAs. ESHAs generally include but are not limited to the following:

a. Creek and riparian areas.

b. Wetlands, such as vernal pools.

c. Coastal dunes, lagoons or estuaries, and coastal bluffs/coastal bluff scrub.

d. Beach and shoreline habitats.

e. Marine habitats.

f. Coastal sage scrub and chaparral.

g. Native woodlands and savannahs, including oak woodlands.

h. Native grassland.

i. Monarch butterfly aggregation sites, including autumnal and winter roost sites, and related habitat areas.

j. Beach and dune areas that are nesting and foraging locations for the western snowy plover.

k. Nesting and roosting sites and related habitat areas for various species of raptors.

l. Other habitat areas for species of wildlife or plants designated as rare, threatened, or endangered under state or federal law.

m. Any other habitat areas that are rare or especially valuable from a local, regional, or statewide perspective.

Policy CE 1.6 Protection of ESHAs. [GP/CP] ESHAs shall be protected against significant disruption of habitat values, and only uses or development dependent on and compatible with maintaining such resources shall be allowed within ESHAs or their buffers. The following shall apply:

a. No development, except as otherwise allowed by this element, shall be allowed within ESHAs and/or ESHA buffers.

b. A setback or buffer separating all permitted development from an adjacent ESHA shall be required and shall have a minimum width as set forth in subsequent policies of this element. The purpose of such setbacks shall be to prevent any degradation of the ecological functions provided by the habitat area.

c. Public accessways and trails are considered resource-dependent uses and may be located within or adjacent to ESHAs. These uses shall be sited to avoid or minimize impacts on the resource to the maximum extent

feasible. Measures—such as signage, placement of boardwalks, and limited fencing or other barriers—shall be implemented as necessary to protect ESHAs.

d. The following uses and development may be allowed in ESHAs or ESHA buffers only where there are no feasible, less environmentally damaging alternatives and will be subject to requirements for mitigation measures to avoid or lessen impacts to the maximum extent feasible: 1) public road crossings, 2) utility lines, 3) resource restoration and enhancement projects, 4) nature education, 5) biological research, and 6) Public Works projects as identified in the Capital Improvement Plan, only where there are no feasible, less environmentally damaging alternatives.

e. If the provisions herein would result in any legal parcel created prior to the date of this plan being made unusable in its entirety for any purpose allowed by the land use plan, exceptions to the foregoing may be made to allow a reasonable economic use of the parcel. Alternatively, the City may establish a program to allow transfer of development rights for such parcels to receiving parcels that have areas suitable for and are designated on the Land Use Plan map for the appropriate type of use and development.

RECENT HISTORY OF VEGETATOIN MAPPING OF BACARA (2006 TO 2018)

In the City's General Plan/Coastal Land Use Plan, Figure 4-1, scrub is broadly mapped as ESHA along the coast and valley between Bell and Tecolote Creek within the property (City 2006). The western slope of the East Terrace and existing emergency access road are not included in the City's mapping of ESHA. In 2010, Dudek further refined ESHA mapping on-site identifying the portions of the western slope, primarily comprised of coastal sage scrub, as ESHA (*See attached Figure 2*). The East Terrace is also comprised of poison oak, mixed woodland, and Eucalyptus trees/woodland (Dudek 2010a,b). Project impacts under the Bacara Completion EIR included the area where the current project is proposed and where a portion of coastal sage scrub ESHA had previously existed. During mitigation efforts for the Bacara Consent Orders, Dudek identified several suitable areas that were disturbed, including the area between the East Terrace and emergency access road, for installation of Monterey cypress per the plan (Dudek 2013). In an early siting alternative for this project, Kevin Merk and Associates, LLC (KMA) generally confirmed Dudek's 2010 vegetation mapping with the exception of the developed/landscape

designation at the base of the East Terrace where approved project impacts occurred (KMA 2017). As mentioned, a portion of the developed/landscape area included the mitigation site for the Monterey cypress, hence the landscape designation. ESHA was not delineated as part of KMA's report; however, an ESHA delineation map was included in the appendices using the City's ESHA GIS layer overlaid onto an aerial image. Dudek recently conducted a site visit to verify vegetation mapping for the proposed new beach facilities (Dudek 2018).

EXISTING CONDITIONS

The existing Haskell's Beach House will be demolished and replaced with a new proposed beach facilities positioned inland of the project sea-level rise and coastal hazards. An existing emergency access road connects Hollister Avenue to Haskell's Beach at the Pacific Ocean. The road is compact dirt and is also used by resort maintenance and vendors. To the west of the road is vigorous and healthy coastal scrub, designated as ESHA by the City (2006) and Dudek (2010a,b and 2018). To the east of the road is a maintained 20 to 45 foot wide strip of mainly barren land separated by the road by strategical placed boulders. Vegetation in this disturbed and maintained area consists of a sparse mixture of invasive non-native annual plants (i.e., weeds) and colonizing coastal scrub (i.e., coyote brush and California sage). Six Monterey cypress trees were planted north to south in this area to mitigate for unpermitted activities on the adjacent hill to the east known as the East Terrace, where an unpermitted event venue was placed by previous ownership. The western slope of the East Terrace primarily contains Monterey cypress and eucalyptus trees (i.e., mixed woodland), poison oak, Eucalyptus trees/woodland, and of coastal sage scrub. No special-status species have been documented on the East Terrace or adjacent valley to the west.

ESHA DESCRIPTION

ESHA on the Bacara property includes Tecolote Creek, Monarch butterfly overwintering roost, coastal sage scrub, and the beach and shoreline. The proposed project is located closest to coastal sage scrub on the East Terrace and is distant to other ESHA types. Coastal sage scrub is found to be comprised of several native shrub species including California sagebrush, bush sunflower (*Encelia californica*), black sage (*Salvia mellifera*), Menzies' goldenbush (*Isocoma menziesii*), and coyotebrush (*Baccharis pilularis*). Coastal sage scrub is present surrounding the proposed project site and further outside of the impact area as shown on *Figure 2*. Dudek coastal sage scrub mapping is largely consistent with mapping completed by Dudek (2010a,b) and KMA (2017) with the exception that KMZ (2017) and Dudek (2018) recognized the proposed project site as disturbed, again modified during the approved Bacara Completion project and partly used for Monterey cypress mitigation.

According to A Manual of California Vegetation, Second Edition, California [Coastal] Sage Scrub vegetation alliance is a common vegetation type in California, and wouldn't necessarily qualify as ESHA. However, the City of Goleta's GP/CLUP **Policy CE 1.2** identifies California [coastal] sage scrub and scrub growing on coastal bluffs as ESHA, including the California Sage Scrub vegetation alliance. Dudek (2010a,b) followed the City's policy and definition, including the scrub on the East Terrace and the restored area to the west of the emergency access road and included it as ESHA. In 2018, Dudek remapped the boundaries of California [Coastal] sage scrub and other scrub ESHA near the proposed project site as displayed in the attached *Figure 2*.

ESHA AND ESHA SETBACK ANALYSIS

The proposed project will not impact coastal sage scrub ESHA or any other ESHA types within Bacara's property. However, the relocation site of the beach house is within an ESHA setback or buffer of 25-feet. As mentioned, the nearest ESHA is comprised of California [Coastal] Sage Scrub situated on the western slope of the East Terrace above the flat disturbed area where the new beach house is proposed. The City GP/CLUP **Policy CE 1.6** requires a sufficient setback or buffer from ESHA to ensure habitat value and function isn't degraded directly or indirectly by development of a project. The beach facilities are public serving structures for hotel guests and the general public. The current location of the beach facilities is between two ESHA types, beach and shoreline and [coastal sage] scrub. With approval of this project, the existing facilities will be demolished and restored to native habitat, thereby providing quality habitat along the shoreline. The proposed location of the new beach facilities is properly situated on disturbed land just west of the existing emergency access road that extends down to the beach for in-shore water rescues. The siting of the beach facilities also avoids the Monterey cypress mitigation site to the north. California [Coastal] sage scrub is abundant on the Bacara property, including enhanced scrub habitat through previously project mitigation along the pedestrian trails from the resort and tennis courts to the beach. No special-status species are known to occur within the scrub on the property, nor is the habitat unique for the area. Although common wildlife species use California [Coastal] Sage Scrub, particularly birds, reptiles, and small mammals, moving the structure inland to the proposed site will not affect the availability of food, shelter, or nesting, or movement between other habitats. A reduction of the ESHA buffer to accommodate the beach facilities is indeed warranted since the California [Coastal] Sage Scrub ESHA and its inhabitants will not be negatively affected by development or operation of the beach facilities.

CONCLUSION

Development of the Haskell's Beach House project will not impact Environmental Sensitive Habitat Areas (ESHA) located on the Ritz-Carlton Bacara property. The placement of the beach facility structures on disturbed land between the emergency access road and the East Terrace

avoids ESHA, but is within a 25-foot ESHA buffer comprised of the California [coastal] sage scrub vegetation alliance situated on the slopes of the East Terrace. The construction and operation of the beach facilities will not impact the functioning of ESHA on the Bacara property, specifically the coastal scrub on the west slope of the East Terrace. We, therefore, support a reduction of the ESHA buffer to accommodate the proposed beach facilities.

Should you have any questions regarding this letter, please feel free to contact me at 805.308.8524 (office), 805.252.7996 (cell), or jdavis@dudek.com.

Sincerely,

John Davis IV, MS, CE
Senior Coastal Ecologist

Att.: *Figure 1*
Figure 2

cc: *Paul Finstad, Watermark*
Anne Blemker, McCabe and Co
Ginger Anderson, Stantec

REFERENCES

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SOURCE: NAIP 2016

FIGURE 1

Project Location

DUDEK

0 500 1,000 Feet

Supplemental Biological Technical Report for the Ritz Carlton Bacara Beach House Demolition and Replacement Project

Survey Area

Project Componets

New Building

Proposed Restoration Grading Limits

Monterey Cypress

ESHA Boundary (Dudek)

City of Goleta ESHA

Beach and Shoreline

Riparian/Marsh/Vernal

Scrub

25-foot ESHA Buffer

Vegetation and Land Cover

B - Beach

CSS - Coastal Sage Scrub

D - Disturbed

D/L - Developed/Landscaped

MC - Monterey Cypress

MC(P) - Monterey Cypress (Planted)

SOURCE: CIRGIS 2010; Stantec 2018

DUDEK

0 20 40 Feet

FIGURE 2

Impact Analysis

ESHA Review for the Ritz-Carlton Bacara Beach House Demolition and Replacement Project and Emergency Permit (16-002 EMP)

APPENDIX F

Haskell's Beach House Demolition Restoration Plan

Haskell's Beach House Demolition

Conceptual Restoration Plan

Prepared for:

Watermark Capital Partners, LLC.
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Prepared by:

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MAY 2018

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APPENDICES

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FIGURES

1. INTRODUCTION

1.1 Background, Purpose, Participants and Responsibilities

1.1.1 Background

Haskell's beach house at The Ritz-Carlton Bacara (Bacara) is proposed to be demolished and relocated due to erosion damage, which has compromised the structural integrity of the current building. A new snack bar and bathrooms will be constructed in a location further inland and outside of the potential erosion zone. The portion of the project described herein involves the demolition of the current Haskell's beach house, complete removal of the building structure including the foundation, re-grading of the building pad, and the restoration of the project site with native species. Once restored, the restoration project site will be utilized as a recreation area for the general public.

In response to CDP application number 4-16-0479 regarding the demolition of the existing beach house at Haskell's Beach and construction of a new snack bar and bathrooms, the CCC issued an incomplete letter dated August 9, 2017, which requested the following:

> **Restoration Description and Plans.** In addition to the project description and plans for the demolition of the beach house and temporary protection device, please provide plans for the restoration of the demolition site. Please include cross-sections of the restored site, the proposed final contours, proposed grading, and the plant palette that will be needed to restore the site.

1.1.2 Purpose

The purpose of this Restoration Plan is to fulfill the requirements of the incomplete letter issued by the CCC, including the specifications for restoration project implementation. Prior to project implementation, landscape design plans will be developed based on the specification provided herein and following a meeting with CCC on May 23, 2018, which may include comments on the design and specifications. The landscape design plans are anticipated to provide sufficient detail on the project specifications, planting and irrigation system details for the contractor bidding process and final installation of the restoration project, pending approval of the CCC.

1.1.3 Participants and Responsibilities

Bacara is, and shall remain jointly and severally financially responsible for all negotiations and costs associated with the implementation of this Restoration Plan, and the monitoring and protection of the restored vegetation on the restoration project site.

Bacara will select a qualified Project Biologist(s) to implement the restoration monitoring and long-term maintenance monitoring of the mitigation areas. The Project Biologist, in coordination with Bacara, will review all aspects of pertinent contract documents, including, but not limited to, site protection, material submittals, formal site observation schedule, lines of communication, and persons with stop-work authority, prior to project implementation. The Project Biologist will oversee and coordinate implementation of this conceptual plan, including landscape design drawings (Appendix A) and interpretation of said drawings, and will conduct field monitoring of restoration project installation and monitoring during the 120-day initial maintenance period, and biological monitoring throughout the three (3)-year maintenance and monitoring period. The Project Biologist will possess specific knowledge and project-level experience with habitat restoration projects. The Project Biologist will possess at least 5 years of habitat restoration experience in Southern California.

Baraca will hire a project installation contractor and maintenance contractor (Restoration Contractor). Baraca may choose to hire a maintenance contractor separately from the installation contractor. The Restoration Contractor will be a qualified, licensed company, preferably one that has experience in habitat restoration and maintenance. During the implementation phase, the Restoration Contractor will be responsible for performing project installation, including irrigation, planting, any necessary grading, erosion control, and other tasks as directed by the Project Biologist and as described in this document and construction drawings. During the long-term monitoring phase, the Restoration Contractor will be responsible for maintenance and operation of the irrigation system, weed control, erosion control, trash removal, replanting, and other tasks as directed by the Project Biologist and as described in this document.

1.2 Site Location and Existing Conditions

1.2.1 Site Location

The Ritz-Carlton Bacara was constructed in 2000 and is located at 8301 Hollister Avenue, in the city of Goleta, in Santa Barbara County. The 73-acre property runs east and west for approximately 3,000 feet immediately inland of Haskell's beach, which constitutes the southern boundary, with US Highway 101 and the southern boundary of the Southern Pacific railroad right of way making up the northern boundary. The project site is located at Haskell's beach, immediately inland of the mean high tide line and is centered at approximately 34º 25' 52.93"N 119º 54' 59.40"W (Figures 1 and 2). The restoration project site is currently utilized as recreational land accessible to the general public.

1.2.2 Existing Conditions

The Biological Resources Assessment for the Bacara Beach House Relocation Project prepared by Kevin Merk Associates, LLC (KMA 2017) provides details on the existing conditions within the restoration project site as well as the overall demolition and relocation project site. This report includes an assessment of impacts associated with the overall project and includes recommended mitigation measures to avoid and minimize impacts to biological resources during demolition project implementation.

1.3 Goals of the Restoration Plan

The primary goal of this restoration plan is to successfully establish native vegetation within the Haskell's beach house demolition area that is consistent with the long-term use of the site as a recreational area for the general public. Integral to this goal is the establishment of native vegetation that is self-sustaining in the long-term. The restoration methodology and specifications provided in this Restoration Plan are targeted to achieve this goal while also providing the information required by the CCC in the incomplete letter noted above. Detailed landscape design plans and specifications will incorporate the overall methodology into construction documents to be utilized by the Restoration Contractor during site preparation and installation to ensure that the restoration project site is constructed in conformance with the intent of the Restoration Plan. Long-term maintenance and monitoring detailed herein will guide the Restoration Contractor and Project Biologist in the management of the restoration project site to achieve the primary goal.

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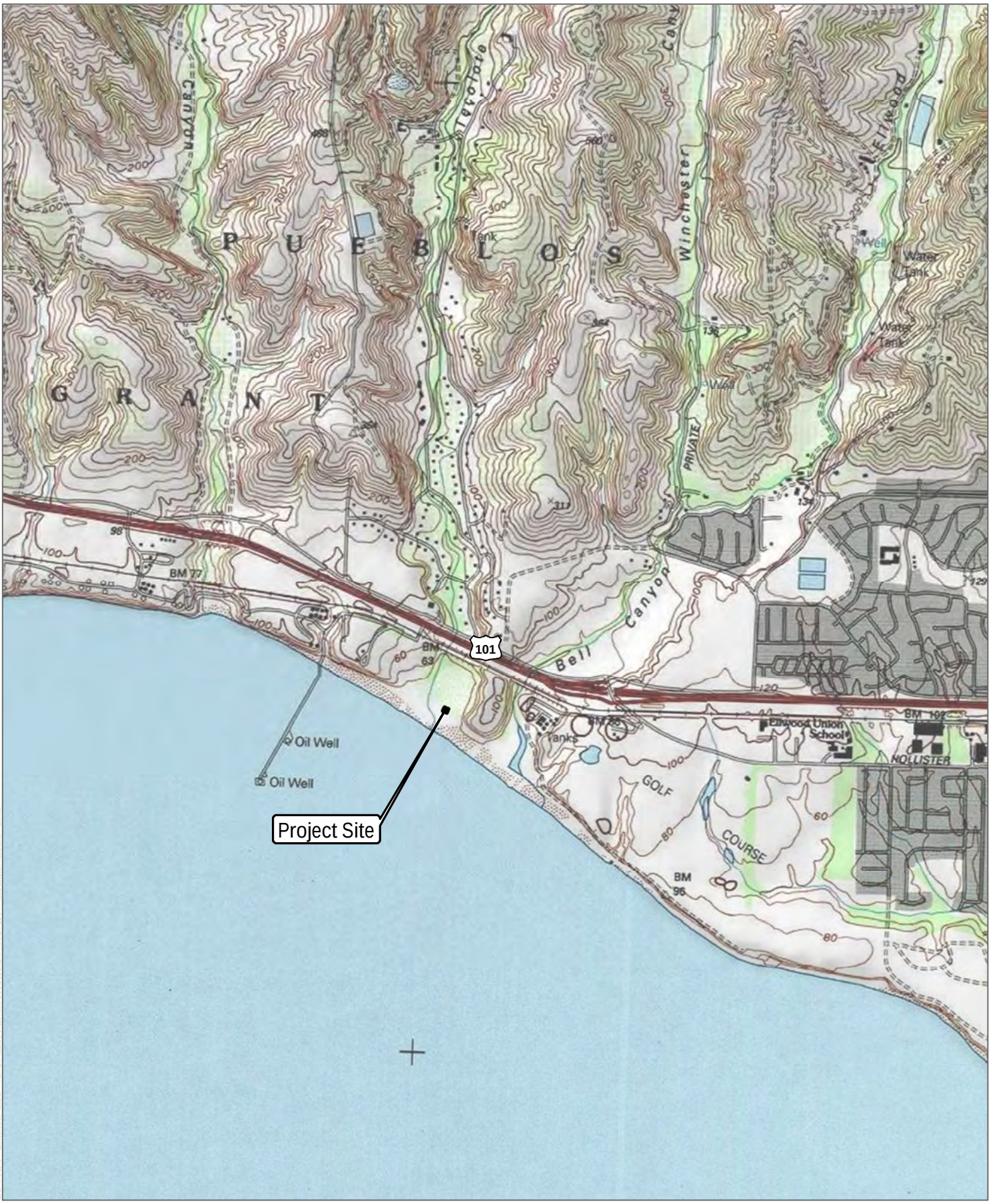

SOURCE: USGS 7.5-Minute Series Dos Pueblos Canyon Quadrangle

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Haskell's Beach House Demolition Restoration Plan

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SOURCE: USGS 7.5-Minute Series Dos Pueblos Canyon Quadrangle

DUDEK

0 12.5 25 Feet

FIGURE 2

Restoration Project Site

Haskell's Beach House Demolition Restoration Plan

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2. RESTORATION IMPLEMENTATION

The implementation of the restoration project will include three main components; (1) grading following demolition, (2) irrigation system installation, and (3) revegetation with native species. The sub-sections below provide details on implementation of each component of the restoration project.

2.1 Grading to Establish Restoration Plantings

Following removal of the existing structure and foundation, grading will be necessary to match the existing elevations adjacent to the restoration project site. Grading will involve the movement of native soil to the greatest extent possible; however, import of additional soil may be necessary based on the deficit created by the removal of the existing structure and foundation. The grading and restoration will take place within approximately 0.14 acre as shown on Figure 2. Grading activities will be completed in conformance with the following specification:

1. Grading will be completed with tracked equipment to minimize over compaction of the soil and will be deemed complete when the elevations match those on the landscape design plans.

Imported fill material will adhere to the following specifications:

1. Any imported fill material will consist of Goleta loam or similar loam soil type sourced from the Santa Barbara region;

2. Shall be free of large organic debris (e.g. woody material) and have similar chemical composition and pH to the native soil present within the project site. Soil suitability analysis conducted by a qualified laboratory will be necessary to confirm the chemical composition of the native and imported soil material to ensure compliance with these specifications.

3. Any soil amendments added to the restoration area will consist of organic material for incorporation into soil including compost, humus (wood based), and rice hulls.

2.2 Irrigation System Installation

A temporary irrigation system will be constructed prior to the installation of native plantings. The irrigation system will consist of a below ground mainline and lateral lines with pop-up overhead spray heads for 100% head-to-head coverage. Prior to burial of the below ground portions of the irrigation system, the entire system will be pressure tested to ensure that all connections are stable.

To reduce the potential for unnecessary damage to the irrigation system, irrigation spray heads will be demarcated with highly visible flagging. Additionally, the irrigation system shall be frequently inspected by the Restoration Contractor for line breaks, leaks, and other incidents that could cause a release of water. The irrigation system will be temporary in nature and removed once the plantings are established, or after two (2) years of the long-term monitoring timeline.

2.3 Restoration Plantings

Following completion of grading and installation of the temporary irrigation system, the revegetation component of the restoration project will begin. As the restoration project site will have been recently graded, non-native species are not anticipated to be present; however, should a time lapse occur between grading and revegetation, and non-native species begin to recruit within the restoration project site, selective weed removal may be necessary. Any weeding will be accomplished primarily by hand pulling due to the small overall size of the restoration project site. Particularly problematic non-native species may be controlled via herbicide spot-spraying, if determined to be necessary by the Restoration Contractor in coordination with the Project Biologist.

The revegetation will consist of a limited plant palette based on the anticipated use of the restoration project site as a public recreation area. Low-growing, hardy native herbaceous species are included in the revegetation portion of the restoration project as they will be subject to human use including trampling and mowing activities. It is anticipated that the restoration project site will be restricted from human use until the point at which the native vegetation has sufficiently established, as determined by the Project Biologist. Depending on the timing of the revegetation installation, this establishment may take up to one year. These species are identified in Table 1. Planting will be accomplished via installation of liner grown individuals, as opposed to seed, and are anticipated to establish more readily and outcompete non-native recruits. Plantings will be installed by hand by the Restoration Contractor and under the supervision of the Project Biologist based on the specifications included below and in the landscape design drawings (Appendix A). Plant quantities will be determined during the development of the landscape design plans.

Table 1
Revegetation Plant Palette

Scientific Name	Common Name	Container Size	Average Spacing	Percent Composition
Distichlis spicata	saltgrass	liner or 2-inch pot	2 feet	80
Frankenia salina	alkali heath	liner or 2-inch pot	random	20

A contracting nursery will legally obtain plant materials (propagules and seed) from plant materials originating naturally within the Santa Barbara region for all plants used within the restoration project site. The genetic stock will be pure; no hybrids or nursery varieties will be accepted. The contracting nursery will propagate native plants under a contract-growing agreement per the plant palettes and source material specifications. The contracting nursery will be given prior notice so as to allow for sufficient lead time to provide for successful propagation and preparation of locally genetic stock plant materials for transport to the restoration project site for installation.

The Restoration Contractor will enter into the contract growing arrangement with an experienced, qualified, and licensed nursery immediately upon approval of this Restoration Plan by the CCC. The contracting nursery may also propagate from locally, legally collected seed and propagules (i.e. cuttings). All seed and propagules will be certified as originating from Santa Barbara County genetic stock.

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3. EROSION CONTROL

Soil disturbance will be kept to the minimum necessary during demolition of Haskell's beach house and grading of the restoration project site. It is anticipate that an erosion control plan or stormwater pollution prevention plan (SWPPP) will be prepared for the demolition and initial grading and revegetation portions of the project. Following revegetation installation, limited erosion control devices may be necessary to control minimize erosion and sediment transport. The primary erosion control device is anticipated to be straw wattles, which are anticipated to be necessary around the perimeter of the restoration project site. Once the native plantings have established and stabilized the restoration project site, the erosion control devices will no longer be necessary. The Restoration Contractor, in coordination with the Project Biologist, will be responsible for installing and maintaining erosion control devices throughout the duration of the installation and long-term monitoring period.

Erosion control materials will be bio-degradable. Erosion and sediment control devices will be checked and maintained prior to, during, and after all rainfall events. Temporary erosion control measures will be the minimum necessary to control erosion and will not bury or otherwise destroy native plant species or their habitats.

3.1 Best Management Practices

The following BMPs will be implemented during all revegetation efforts:

- The hours of operation of equipment and contractors will be limited to 8:00 am to 6:00 pm, Monday to Saturday.
- All ingress and egress routes for the equipment and contractors will be limited to previously disturbed areas.
- During removal efforts, no heavy equipment will be parked or serviced within 20 feet of native habitats or sensitive biological resources to avoid the accidental spilling or leaking of hazardous materials (e.g., oil, fuel, hydraulic fluid, etc.) into these areas.
- All equipment will be removed from the sites at the end of each day and/or stored in the designated staging areas at a minimum of 20 feet away from native vegetation or sensitive biological resources. All equipment to be temporarily stored on the sites will be placed inside gated and locked fences. Equipment left overnight will have standard BMPs in place (i.e. drip trays, spill kits, etc.).

- All non-native plant materials or debris will be removed from the sites at the end of each week. All materials will be disposed of in areas officially designated and properly equipped for the processing of such organic materials.

- The ultimate disposal of landscaped components will be a recycling facility located outside of the Coastal Zone; the County of Santa Barbara South Coast Recycling and Transfer Station located at 4430 Calle Real in Santa Barbara, California.

4. AVOIDANCE OF SENSITIVE BIOLOGICAL RESOURCES

4.1 Adjacent Native Habitat

In accordance with the mitigation measures included in the Biological Resources Assessment for the Bacara Beach House Relocation Project prepared by Kevin Merk Associates, LLC (KMA 2017), prior to construction, the Project Biologist working with the project construction team shall delineate the limits of construction and restoration. Orange protective fencing or similar equivalent shall be installed along the perimeter of the native habitat areas to be preserved and protected.

4.2 Nesting Birds

Nesting birds are protected by the Federal Migratory Bird Treaty Act and Sections 3503, 3503.5, and 3513 of the Fish and Game Code. Although project restoration/construction activities, including but not limited to initial ground disturbance, are not anticipated to occur within the bird breeding season (February 1 through September 1), should project activities commence during the breeding season, the following standard measure will be implemented to minimize impacts to nesting birds:

- In accordance with the mitigation measures included in the Biological Resources Assessment for the Bacara Beach House Relocation Project prepared by Kevin Merk Associates, LLC (KMA 2017), no more than two weeks prior to initiation of ground disturbance and vegetation removal, a nesting bird pre-construction survey will be conducted by a Project Biologist within the disturbance footprint and a 200-foot buffer. If nests are found, a buffer ranging in size from 50 to 250 feet, depending upon the species and the proposed work activity will be determined and demarcated by the Project Biologist with bright orange construction fencing. No ground disturbing activities will occur within this buffer until the Project Biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting birds surveys are not required for construction activities occurring between September 2 and January 31.

4.3 Additional Restrictions During Revegetation Implementation

During revegetation, the following activities will be prohibited:

- Pets or domesticated animals are not allowed on the restoration project site.
- No machinery fluids will be added or changed on the revegetation site; refueling of machinery will occur within designated areas, and only over areas with a non-permeable membrane installed.

- Only machinery necessary to perform the removal of non-native species and the installation of native species will be allowed on-site, and each machine will be removed immediately after its task is complete.
- Preparation of the Restoration Area will be limited to areas designated by the Project Biologist as containing weedy, non-native, or invasive plants, which will be removed.
- All onsite features to be preserved (including adjacent native habitat areas) will be protected and avoided at all times.

5. MONITORING DURING GRADING AND REVEGETATION

5.1 Restoration Area Installation Inspections by Project Biologist

The Project Biologist will make regular site observations of revegetation activities throughout the duration of revegetation installation. The Project Biologist will visit the restoration project site not less than once per week during grading and plant installation activities and will review all such activities for conformance to this Restoration Plan and the requirements of landscape design drawings (Appendix A). Each site visit will be documented in an observation report. Photo-documentation of site conditions will be conducted on not less than a quarterly basis.

5.2 Quality Control Procedures

The Restoration Contractor will be responsible for conformance with this Restoration Plan. The contract documents include detailed graphical construction plans and written specifications that are in substantial conformance with the information and direction contained herein. The contractor's responsibility will continue through the post-installation, 120-day plant establishment period, as well as the maintenance and warranty period. Final acceptance of the work of the Restoration Contractor will not be granted by the Owners/Respondents until written notification is received from the Project Biologist, certifying satisfactory completion of all required installation and establishment tasks as prescribed in Section 2 and defined in the Revegetation Contract documents.

Actual on-the-ground soil placement, planting, irrigation, and weeding activities may be performed by non-licensed persons. However, a person holding a valid California landscape contractor's license will be present to oversee all restoration work other than routine hand watering and general observation of plant status.

After initial installation and completion of the 120-day plant establishment period, the Revegetation Contractor will, upon the request of the Owners, enter into a Landscape Maintenance Agreement for a period of up to three (3) years, under which the Restoration Contractor will provide landscape maintenance services as directed by the Project Biologist. Upon approval by the CCC Executive Director, the Owners may choose to hire a maintenance contractor that is separate from the Restoration Contractor.

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6. SUCCESS CRITERIA AND PERFORMANCE STANDARDS

The Restoration Site vegetation will be evaluated in relation to performance standards established and listed below in Table 2. Due to the goal of the Restoration Plan to establish native vegetation consistent with recreational use by the general public, the success criteria are limited to native and non-native species cover targets. The annual performance standards will be utilized to assess the year-over-year progress and development of the restoration project, and are regarded as interim project objectives designed to achieve the final goals. Fulfillment of these criteria will indicate that the habitat restoration efforts are progressing toward the values that constitute the long-term goals of the Restoration Plan. If restoration efforts fail to meet the performance standards in any one year, the Project Biologist will recommend remedial actions, including additional plantings, as needed, to be implemented during the following fall/winter that will improve the vegetation coverage to a level in conformance with the ultimate success criteria.

Table 2
Restoration Project Performance Standards and Success Criteria

Year	Percent Native Cover	Percent Non-Native Cover
1	30%	10%
2	50%	10%
3	70%	10%

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7. MONITORING PLAN

The purpose of the Monitoring Plan is to provide guidelines for maintenance and biological monitoring of the restoration project site. Maintenance activities will be completed by the Restoration Contractor. Because a goal of the Restoration Plan is to establish a natural system that can support itself with little or no maintenance, the primary effort of the Restoration Plan is concentrated in the first two seasons of plant growth following the revegetation effort, when weeds (non-native invasive plant species) can easily out-compete native plants. The intensity of maintenance activity is expected to subside each year as the native plant materials become more established and local competition from non-native plants for resources on the site is minimized through direct removal of non-natives from the site. However, maintenance will include periodic weeding as outlined herein. The risk of large-scale invasion of weedy non-native plants onto the site can be adequately minimized during the first two to three years (approximate) by adhering to the specific maintenance and management guidelines that are presented below.

7.1 Habitat Monitoring

All native vegetation planted in the restoration project site will be subject to the requirements of this Restoration Plan. The Project Biologist will conduct the monitoring and direct the maintenance activities required by this Plan for three (3) years following the initial planting of the native species, or until the CCC acknowledges the successful completion of the Restoration Plan.

Monitoring will consist of quarterly qualitative field monitoring visits conducted by the Project Biologist to determine percent cover of native container plant species as well as non-native recruits. Evaluation will be based on quarterly qualitative visual assessments for years one (1) through three (3). Annual point-line transect analysis will be used for the quantitative sampling in years two (2) and three (3). Quarterly qualitative monitoring will occur in January, April, July, and October; annual quantitative monitoring (i.e., point intercept transects) will occur in April. Monitoring during year two (2) will be expected to indicate a recommendation to discontinue irrigation. As with qualitative field sampling, transects will be used to determine compliance and achievement of the restoration performance and success criteria (percent cover). Remedial measures will be recommended if vegetation cover do not achieve the established performance standards in any year of the long-term monitoring period. However, the Project Biologist may also recommend remedial measures if it is determined that the restoration project is not on track to achieve the final success criteria. Permanent photo-documentation stations will be established to record the progress and plant establishment over the three-year monitoring period.

The Project Biologist will also note biotic or abiotic factors that may affect the restoration project site's performance, positively or negatively. For container plants, the presence/absence of new

shoots and floral inflorescences will be recorded, especially during spring monitoring. Visual evidence of use of the site by wildlife species will also be recorded. As the restoration site is ultimately anticipated to be utilized as a recreation area by the general public, the Project Biologist will take note of human disturbances to the restoration plantings. Any damage or deficiencies (e.g. decline in cover of native species) will be noted in site observation reports and appropriate remediation will be implemented.

Quantitative field monitoring consists of collecting plant occurrence data (plant species present) along point-intercept transects to be established at representative locations within the restoration project site. The number and length of transects will be based on the overall restoration site size to achieve representative sampling.

Transect locations (start and end points) and orientation (i.e., direction) will be determined through randomly (non-biased) selection using GIS tools (adjusted, as necessary, in the field). Transects will also be positioned in non-random locations and orientations, selected by the Project Biologist in the field, that best captures site conditions and revegetation. The goal is to ensure the data collected is indicative or truly represents the status of revegetation; it is also that transects are placed in appropriate locations that will capture the progression of plant cover over three years to demonstrate, without doubt, that the performance standards and success criteria have been met. Transect lengths will run the length and of the restoration project site.

All qualitative and quantitative analyses will be included in annual monitoring reports, discussed in section 7.4, below.

7.1.1 Replacement Actions

If container stock experiences greater than 20 percent mortality, the Project Biologist may recommend, and the Owners may require, additional container stock plantings, so as to achieve the relevant success criteria as specified below.

7.2 Habitat Maintenance Activities

The following maintenance activities will be conducted during implementation and monitoring of the restoration project site:

- Following initial container plant establishment, irrigation from June to November shall be minimized to allow plants to experience normal drought cycles and to promote appropriate root growth. Irrigation may be used in winter months to simulate a normal or above normal rain season if natural precipitation is lacking. Irrigation volume will be gradually reduced over time to acclimate plants to a non-irrigated condition prior to complete cessation of

irrigation. Irrigation shall last for a maximum of two years and be phased out per the direction of the Project Biologist.

- Natural recruitment of native species and installed native plants will not be cleared in the restoration project site during weeding activities.
- Trash and inorganic debris blown onto the site will be removed during regular maintenance visits.
- The site will not be fertilized during the maintenance period.
- Weedy non-native species may invade the restoration project site and become a problem before or during the establishment of native plants. Weedy non-native species will be hand removed as soon as they begin to invade and before they become too dense for hand extraction. Herbicide treatments may be necessary if the total removal of some plants is not possible, and shall only be performed with approval from the Project Biologist and any and all herbicides shall be applied by a licensed person in accordance with the manufacturer's instructions.
- No service vehicles will be allowed in the restoration project site at any time.
- Remedial container planting may be necessary following each monitoring stage, as directed by the Project Biologist.

7.3 Habitat Maintenance Guidelines

7.3.1 Dead Plant Replacement

Dead container plant materials will be replaced, as needed, with the same species and in the same size containers as originally specified in fall/winter each year. Replacement plantings will be installed at the recommendation of the Project Biologist and based on an assessment of the restoration project site in comparison to the native cover performance standards as detailed in Section 6.

7.3.2 Weed Control

The initial clearing and grading work will effectively remove invasive non-native plant species and is expected to dilute the existing weed seed bank to a level that will temporarily minimize weed species. Ongoing weed control activities will occur during the 120-day establishment period, and the three (3)-year maintenance period. Weed eradication will consist of the removal of selected non-native invasive plant species (i.e., seed heads, stems, roots), and all debris and slash generated

from weed removal activities will be securely transported and disposed of offsite as described in Section 3.1.

Weed control measures will include the following: (1) hand removal and (2) herbicide application. Hand removal of weeds is the most desirable method of control and will be used around individual plant installations. Hand removal shall occur every other week during the 120 day plant establishment period. Weed plants shall be pulled when plants are less than 12 inches tall and/or prior to the formation of seed heads. Weeding shall be done once per month during the growing season and every three months outside of the growing season during years one through three. More frequent weeding may be conducted as directed by the Project Biologist to keep any weeds establishing on the site at manageable levels.

Chemical herbicide application can be used for invasive perennial species that are difficult to control by hand pulling. The Restoration Contractor will coordinate with the Project Biologist to identify specific sites where the systemic herbicide may be used. Any herbicide treatment must be applied by a licensed pest control applicator and in accordance with the manufacturer's instructions.

7.3.3 Clearing and Trash Removal

Cutting or clearing of any native vegetation will not be allowed within the restoration project site, except as directed by the Project Biologist. As the site will ultimately be used as recreation area for the general public, deadwood and leaf litter will be removed, as needed, to allow for human use of the site following initial native vegetation establishment. Trash will be removed from the restoration project site by hand on a regular basis, meaning no less than one-month intervals for the first year and quarterly thereafter. Trash consists of all man-made materials, equipment, or debris dumped, thrown, washed, blown, and left within the restoration project site.

7.3.4 Schedule of Maintenance Inspections

Maintenance activities will begin upon the installation of the container plant materials and will continue throughout the entire three (3)-year monitoring period, concluding after three years or when the Owners and CCC agree that the implementation of the Restoration Plan has been completed.

After the first summer following installation, all plants on the restoration project site will be checked for viability. If more than 20 percent of the container stock has not survived, the dead plant material will be removed and replaced with the same size material as was planted originally, based on the recommendation of the Project Biologist. Replacement planting will be implemented to expedite native plant establishment on the restoration project site. The Project Biologist will

conduct inspections on a quarterly basis for the duration of the three (3)-year monitoring period. Recommendations for maintenance needs will be based upon site observations and will include items such as irrigation, weed control, and trash and debris removal.

7.4 Annual Reports

Monitoring reports will be submitted annually to the CCC, during the same one-month period of each year, for the three (3)-year monitoring phase. The annual monitoring reports will describe the existing conditions of the restoration project site, identify all issues observed as they apply to site conditions and the performance standards, and recommend remedial measures necessary for the successful completion and compliance of the Restoration Plan. Annual reports will be submitted on the anniversary of installation for the three (3)-year maintenance and monitoring period, currently estimated to be no later than December 31 of each year commencing in 2018 and ending by 2021 in accordance with the anticipated implementation schedule. Each yearly report will provide a summary of the accumulated data. Annual reports also will include the following:

- A list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities;
- A copy of the Restoration Plan and any subsequent modifications approved by the CCC;
- A description of the monitoring and maintenance methodology, including sampling procedures and frequency;
- Contingency plans to address potential problems with any of the Restoration Sites;
- Prints of biological monitoring photographs taken annually; and
- Maps identifying monitoring areas and weed removal areas as appropriate.

All annual reports will be sent to the following addresses and contacts:

California Coastal Commission
Attn: Michelle Kubran
Coastal Program Analyst
89 S. California Street, Suite 200
Ventura, CA 93001

7.5 Contingency Measures

If an annual performance standard is not met for the restoration project in any year, or if the final success criteria are not met, the Project Biologist will prepare an analysis of cause(s) of failure and will submit a Supplemental Restoration Plan for review and approval by the CCC. The Supplemental Restoration Plan will identify remedial contingency measures required to correct those portions of the restoration that have failed or are not in conformance with the original, approved Restoration Plan. The contingency measures may include financial assurances to provide a cushion to account for unforeseen costs of management activities to be carried out in the event that a fire, landslide, extreme weather conditions, or other natural disaster should have a negative impact on the restored habitat during the monitoring period. Remedial actions will be carried out during the monitoring period if habitat quality is reduced due to the occurrence of fire and/or other natural disasters. Actions for habitat remediation may consist of minor restoration of habitat from the effects of erosion, replacement of mitigation planting mortality, unauthorized access, and/or removal of invasive plants; it is not considered ecological habitat restoration or creation. This task may include additional native planting soil preparation, BMPs, and/or weed removal, depending on the condition of remaining and adjacent habitats.

Following approval of the Supplemental Restoration Plan by the CCC, the identified remedial contingency measures will be implemented until the goals of the original, approved Restoration Plan have been met to the satisfaction of the CCC. If the site has not met the final success criteria, the Owner's maintenance and monitoring obligations will continue for at least a period of time equal to that during which the project remained out of compliance, or alternative contingency measures implemented until the CCC gives final project compliance/approval. At the end of the three (3)-year monitoring period, a final detailed report prepared by the Project Biologist will be submitted to the CCC for final review and approval.

8. DOCUMENT PREPARERS

Dudek

John Davis, IV, MS, CE. Project Manager / Senior Coastal Ecologist.

Randall McInvale, Restoration Ecologist

John Minchin, RLA. Landscape and Irrigation Construction Documents.

Kirsten Zecher. Cartography and Data Management.

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APPENDIX A

Landscape Design Drawings

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