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February 14, 2008

Mr. Richard Beck
RBF Consulting
14725 Alton Parkway
Irvine, California 92618

VIA EMAIL AND MAIL
rbeck@rbf.com

Subject: Biological Constraints Assessment for the Buck Gully Project Site in Corona Del Mar, City of Newport Beach, Orange County, California

Dear Mr. Beck:

This Letter Report presents the findings of a biological constraints assessment for the Buck Gully project site located in Corona Del Mar within the City of Newport Beach, Orange County, California (Exhibit 1). BonTerra Consulting Senior Biologist Sandra Leatherman and Ecologist Jennifer Pareti conducted a general plant and wildlife survey on January 15, 2008. The purpose of the survey was to document existing biological resources and conduct vegetation mapping of Buck Gully.

Prior to the survey, the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2008) and the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDB) (CDFG 2008a) were reviewed to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project site. Database searches included the U.S. Geological Survey (USGS) Laguna Beach, Newport Beach, and Tustin 7.5-minute quadrangles.

PROJECT LOCATION/EXISTING CONSERVATION PLANNING

Buck Gully is a natural gully that begins in the hills and continues to the coast in the Corona del Mar area within the City of Newport Beach (Exhibit 2). It is located on the USGS Newport 7.5-minute topographic quadrangle. The Buck Gully project site (hereafter referred to as "the project site") occurs between Pacific Coast Highway and Little Corona Beach (Exhibit 3). The project site also includes a portion of Little Corona Beach and the adjacent bluffs. Private residences line either side of the gully and some residential properties extend into the gully.

Topography on the project site is sloped down towards the bottom of the drainage and is located from 100 feet above mean sea level to sea level. Soils on the project site are composed of beaches, Myford sandy loam, and Marina loamy sand. The surrounding land uses include residential, transportation (Pacific Coast Highway), and recreational (Little Corona Beach).

Natural Communities Conservation Planning Program (NCCP)

The County of Orange, in conjunction with the State and federal resource agencies, local jurisdictions, utility companies, the Transportation Corridor Agencies and major private landowners, have prepared the Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for the Central-Coastal subregion (approved on July 10, 1996). This plan is intended to

ensure the long-term survival of the coastal California gnatcatcher (*Polioptila californica californica*) and other special status coastal sage scrub-dependent plant and wildlife species in accordance with State-sanctioned NCCP program guidelines. Buck Gully occurs within the NCCP/HCP Coastal subregion. Upper Buck Gully (upstream from the project site) is designated as a Special Linkage area of the NCCP/HCP and provides connectivity for wildlife movement; however, the project site is not within the area designated as a Special Linkage or Reserve (County of Orange 1996).

The project site is located within the City of Newport Beach. The City, through execution of the NCCP/HCP Implementation Agreement (IA) and the receipt of a 10(a) Permit, is a participating land use jurisdiction in the Central-Coastal Subregional NCCP/HCP program. As a participating land use jurisdiction, the City receives specific regulatory authorizations pursuant to the provisions of the IA and the 10(a) Permit including full regulatory coverage for 32 species and 3 habitat types, and conditional regulatory coverage for 7 species. A landowner within the city would therefore receive regulatory coverage in accordance with the provisions of the IA and 10(a) Permit. A description of the specific regulatory coverage is provided in the section of this report containing discussions of species.

SURVEY RESULTS

Vegetation Types

The vegetation types within the survey area include southern coastal bluff scrub, chenopod scrub, coastal freshwater marsh, southern arroyo willow forest, sandy beach, open water, ornamental, and developed (Exhibit 4). Representative site photos are included in Exhibit 5. The southern coastal bluff scrub occurs on the bluff adjacent to Little Corona Beach in the southern portion of the project site. Southern coastal bluff scrub is dominated by seablite (*Suaeda* sp.), box thorn (*Lycium* sp.), coastal cholla (*Opuntia prolifera*), California buckwheat (*Eriogonum fasciculatum*), and bush sunflower (*Encelia californica*), with California sagebrush (*Artemisia californica*), lemonadeberry (*Rhus integrifolia*), slender-leaved iceplant (*Mesembryanthemum nodiflorum*), and red hot poker (*Kniphofia uvaria*) occurring at lower densities. Southern coastal bluff scrub transitions to coastal sage scrub along the bluffs upstream and seablite and box thorn become less dense. Chenopod scrub is composed of big saltbush (*Atriplex lentiformis*) with a small amount of bush sunflower.

A perennial stream flows through Buck Gully. Coastal freshwater marsh is dominated by cattail (*Typha* sp.) and the stream's open water. Coyote brush (*Baccharis pilularis*) and castor bean (*Ricinus communis*) occur along the edges of the coastal freshwater marsh with scattered garden nasturtium (*Tropaeolum majus*), common celery (*Apium graveolens*) and African umbrella-sedge (*Cyperus involucratus*). Southern arroyo willow forest occurs along the upper portion of the stream and is dominated by arroyo willow (*Salix lasiolepis*), which forms a dense canopy. The understory consists of western poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*), and yerba mansa (*Anemopsis californica*). Some ornamental species that have washed down from the residential properties along the slope of the gully are also present along the stream. These include garden nasturtium, sour grass (*Oxalis pes-caprae*), English ivy (*Hedera helix*), and greater periwinkle (*Vinca major*). White water cress (*Rorippa nasturtium-aquaticum*) and Spanish sunflower (*Pulicaria paludosa*) are also present in areas along the stream.

Sandy beach is composed of sand with no vegetation, but rocks that are covered in algae occur along the beach. Open water occurs on Little Corona Beach and is fed by the freshwater marsh from a spillway at the terminus of Buck Gully. The open water may receive some tidal influx and therefore may be brackish.

Ornamental vegetation occurs along the slopes of Buck Gully and is associated with residential development. Ornamental vegetation is composed of ash (*Fraxinus* sp.), myoporum (*Myoporum*

laetum), hottentot fig (*Carpobrotus edulis*), acacia (*Acacia* sp.), Norfolk Island pine (*Araucaria heterophylla*), gum (*Eucalyptus* sp.), bougainvillea (*Bougainvillea spectabilis*), garden nasturtium, Australian saltbush (*Atriplex semibaccata*), gazania (*Gazania linearis*), and Canary Island date palm (*Phoenix canariensis*). Developed areas are composed of concrete with no vegetation.

Wildlife Habitat

The project site is well vegetated, and would therefore have potential to support several native wildlife species. However, due to the close proximity of residential development, the project site is expected to primarily support urban-tolerant wildlife. The project site does provide connectivity between the coast and high quality habitat upstream of the project site in Buck Gully inland of Pacific Coast Highway.

The only amphibian species observed on the project site was the California tree frog (*Pseudacris [Hyla] cadaverina*). Reptile species expected to occur on the project site include western fence lizard (*Sceloporus occidentalis*) and side-blotch lizard (*Uta stansburiana*). Bird species observed or expected to occur on the project site include great egret (*Ardea alba*), snowy egret (*Egretta thula*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), and American goldfinch (*Carduelis tristis*).

Special Status Habitats

Jurisdictional Areas

Drainages, which may include "waters of the U.S.," are protected under Section 404 of the Clean Water Act and are under the jurisdiction of the U.S. Army Corps of Engineers (USACE). "Waters of the U.S." include navigable coastal and inland waters, lakes, rivers, streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce. In addition, if drainages on the project site meet the criteria established by Section 1600 of the *California Fish and Game Code*, the CDFG may require a Streambed Alteration Agreement prior to any modification of the bed, bank, or channel of streambeds on the project site.

Areas within the coastal zone are also regulated by the California Coastal Act. The policies of the Coastal Act are applied to planning and regulatory decisions made by the California Coastal Commission (CCC) and by local governments.

The stream that courses through the project site, as well as the vegetation associated with the stream, are within the jurisdiction of the USACE, the CDFG, and the CCC. RBF Consulting has prepared a Jurisdictional Delineation identifying the extent of each agency's jurisdiction (2008).

Special Status Plant and Wildlife Species

Plants or wildlife may be considered to have "special status" due to declining populations, vulnerability to habitat change, or restricted distributions. Certain special status species have been listed as Threatened or Endangered under the California and/or Federal Endangered Species Acts (CESA and/or FESA).

Special Status Plants

Several special status plant species are known to occur or historically occurred in the project vicinity (CNPS 2008). Of these species, suitable habitat is present for seven CNPS List 1B species. These

species are aphanisma (*Aphanisma blitoides*), Coulter's saltbush (*Atriplex coulteri*), South Coast saltscale (*Atriplex pacifica*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), southern tarplant (*Centromadia parryi* ssp. *australis*), Laguna Beach dudleya (*Dudleya stolonifera*), and estuary seablite (*Suaeda esteroa*). Special status plant surveys would be recommended to determine presence or absence of these species on the project site.

Special Status Wildlife

Several special status wildlife species are known to occur in the project vicinity; however, only Threatened or Endangered species typically present constraints to development. Of these species, coastal California gnatcatcher and least Bell's vireo (*Vireo bellii pusillus*) have potential to occur on the project site. Southwestern pond turtle (*Actinemys marmorata pallida*) is a CDFG Species of Special Concern that has potential to occur on the project site. Surveys for coastal California gnatcatcher, least Bell's vireo, and southwestern pond turtle would be recommended to determine presence or absence of these species on the project site. These species are discussed in more detail below.

Coastal California Gnatcatcher

The coastal California gnatcatcher is listed as federally Threatened and is a California Species of Special Concern. The coastal sage scrub habitat on the project site has potential to support this species. The presence of this species on the project site would not present a project constraint due to the City's participation in the NCCP/HCP Program. Therefore, Program participation requires that focused coastal California gnatcatcher surveys be conducted by a federally permitted Biologist to determine the presence or absence of this species prior to development of the project site. Coastal California gnatcatcher surveys can be conducted year-round; however, the USFWS prefers that surveys be conducted during the breeding season (March 15 to June 30). Because the project site is located within an NCCP area, survey protocols require three site visits one week apart. If the gnatcatcher is determined to be present, the City would pay a per-acre in-lieu mitigation fee to the Nature Reserve of Orange County (NROC) for removal and/or disturbance of coastal sage scrub.

On December 19, 2007, the USFWS published a final critical habitat designation for the coastal California gnatcatcher, designating 197,303 acres of land in San Diego, Orange, Riverside, San Bernardino, Los Angeles, and Ventura counties as critical habitat for the coastal California gnatcatcher (USFWS 2007). The project site is not located within the designated critical habitat area for this species.

Least Bell's Vireo

The least Bell's vireo is listed as federally and State Endangered. The willow riparian area along the stream has potential to support this species. The presence of this species on or adjacent to the project site would present a project constraint. Therefore, a focused least Bell's vireo survey, conducted by a qualified Biologist, is recommended to determine the presence or absence of this species if any work is proposed within 500 feet of this willow riparian area. Because this species is a migrant, these surveys can only be conducted during the breeding season (April 10 to July 31 according to the USFWS protocol). This species is conditionally covered by the NCCP.

On February 2, 1994, the USFWS published the final critical habitat designation for the least Bell's vireo, designating approximately 37,560 acres of land in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego counties, California (USFWS 1994). The project site is not located within the designated critical habitat area for this species.

Southwestern Pond Turtle

Southwestern pond turtle is a California Species of Special Concern. Although this species is not formally listed by the resource agencies, it is considered a species of Local Concern and impacts on this species may be considered significant under the California Environmental Quality Act (CEQA, Section 15380). This species has potential to occur in native habitats on the project site, primarily along the stream; however, pond turtles have been documented as far as a mile away from open water. A focused trapping survey for pond turtles would be recommended to determine the presence or absence of this species on the project site.

Other Considerations

Trees

The City of Newport Beach has a tree ordinance that regulates the removal of trees within the City. The proposed project would not remove any of the trees listed as "special trees" (i.e., those with aesthetic or historical significance designated by the ordinance as "Landmark," "Dedicated," or "Neighborhood" trees); however, the City has a policy to retain all trees that are not "Problem" trees. To remove trees, an application must be submitted to the City and a Tree Inspection Report must be prepared by the City's Urban Forester (City of Newport Beach 1966, as amended). Replacement trees may be required.

The CDFG Streambed Alteration Agreement may also include measures to quantify impacts on trees within the jurisdictional areas, and may require replacement at specified ratios based on tree species and size.

Wildlife Movement

Buck Gully provides habitat for wildlife movement in the area and provides coastal connectivity for wildlife. Buck Gully would be expected to be utilized for local wildlife movement.

Migratory Bird Treaty Act

The project site provides habitat that is expected to be used by nesting birds. The Migratory Bird Treaty Act (MBTA) prohibits activities that result in the direct take (defined as killing or possession) of a migratory bird. This includes the nests of all native bird species, including common species. In following construction minimization measures required by the NCCP, vegetation clearing activities would take place outside the gnatcatcher nesting season (February 15 through July 15), which would also avoid the peak bird nesting season.

Nesting Raptors

The project site provides suitable habitat for nesting raptors. Regulations prohibit activities that "take, possess or destroy" any raptor nest or egg (CDFG Code 3503, 3503.5, and 3513). Therefore, if construction is initiated during the raptor nesting season (February 1 to June 30), a pre-construction raptor survey is recommended.

RECOMMENDATIONS

The following measures are recommended to avoid or minimize impacts on biological resources:

- Permits from the USACE pursuant to Section 404 of the Clean Water Act (CWA); from the CDFG pursuant to Section 1600; and from the Regional Water Quality Control Board

pursuant to Section 401 of the CWA may be required if areas within these agencies' jurisdictions would be impacted. The proposed project may also require approval from the CCC.

- Surveys for special status plants are recommended during the appropriate blooming period for each special status species with potential to occur on the project site.

- Southern coastal bluff scrub occurs on the project site and could support coastal California gnatcatcher. Focused surveys to confirm presence/absence of the coastal California gnatcatcher are recommended. If observed, the NROC should be contacted (Lyn McAfee, Executive Director, 949-453-3324) to determine the mitigation fee required.

- Southern arroyo willow forest dominated by willows occurs on the project site and could support the least Bell's vireo. Focused surveys to confirm presence/absence of the least Bell's vireo are recommended. If observed, a mitigation plan should be prepared to demonstrate avoidance and minimization efforts to reduce impacts on this species.

- If the stream coursing through Buck Gully would be directly or indirectly impacted by the proposed project, focused trapping surveys for southwestern pond turtle are recommended in order to determine the presence or absence of this species within the proposed impact area.

- Removal of trees would require an evaluation by the City's Urban Forester.

- If construction activities are proposed during the raptor nesting season (February 1 to June 30), a pre-construction survey for active raptor nests would be required. Restrictions may be placed on construction activities in the vicinity of any active nest observed until the nest is no longer active, as determined by a qualified Biologist. Typically, a 300- to 500-foot buffer zone is designated around an active nest to allow construction to proceed while minimizing disturbance to the active nest. Once the nest is no longer active, as determined by a qualified Biologist, construction can proceed within the buffer zone.

- The Construction Minimization Measures required by participation in the NCCP will be followed. These measures require that vegetation clearing activities occur outside the gnatcatcher nesting season (February 15 to July 15) and that vegetation clearing is monitored by a qualified Biologist.

Thank you for the opportunity to prepare this letter report. If you have any questions or comments, please contact Amber Oneal at (714) 444-9199.

Sincerely,

BONTERRA CONSULTING

Ann M. Johnston
Principal, Biological Services

Amber S. Oneal
Senior Project Manager/Ecologist

Enclosures: Exhibits 1, 2, 3, 4, and 5

REFERENCES

Abrams, L. 1923–1951. *Illustrated Flora of the Pacific States* (Vols. I, II, and III). Stanford, CA: Stanford University Press.

Abrams, L. and R. Ferris. 1960. *Illustrated Flora of the Pacific States.* Vol. IV: Bignonias to Sunflowers (*Bignoniaceae* to *Compositae*). Stanford, CA: Stanford University Press.

American Ornithologists' Union (AOU). 2006. *Check-list of North American Birds* (7th ed., as revised through 47th Supplement). Washington, D.C.: AOU. http://www.aou.org/checklist/index.php3.

Baker, R.J., L.C. Bradley, R.D. Bradley, J.W. Dragoo, M.D. Engstrom, R.S. Hoffmann, C.A. Jones, F. Reid, D.W. Rice, C. Jones. 2003 (December). Revised Checklist of North American Mammals North of Mexico, 2003. *Occasional Papers (No. 229).* Waco, TX: Museum of Texas Tech University.

California Department of Fish and Game (CDFG). 2008a (January). California Natural Diversity (RareFind) Database. Records of Occurrence for the USGS Laguna Beach, Newport Beach, and Tustin 7.5-minute quadrangles. Sacramento, CA: California Department of Fish and Game, Natural Heritage Division.

———. 2008b (January). *List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base.* Sacramento, CA: CDFG, Natural Heritage Division.

———. 2008c. *Special Animals.* Sacramento, CA: CDFG, Natural Heritage Division.

———. 2008d. *Special Vascular Plants, Bryophytes, and Lichens List.* Sacramento, CA: CDFG, Natural Heritage Division.

California Native Plant Society (CNPS). January 2008. Electronic Inventory of Rare and Endangered Vascular Plants of California. Records of Occurrence for the USGS Laguna Beach, Newport Beach, and Tustin 7.5-minute quadrangles. Sacramento: CNPS. http://www.cnps.org/inventory.

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual* (Technical Report Y-87-1). Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.

Fisher, R.N. and T.J. Case. 1997. *A Field Guide to the Reptiles and Amphibians of Coastal Southern California.* San Mateo, CA: Lazer Touch.

Garrett, K. and J. Dunn. 1981. *Birds of Southern California: Status and Distribution.* Los Angeles, CA: Los Angeles Audubon Society.

Hamilton, R.A. and D.R. Willick. 1996. *The Birds of Orange County, California: Status and Distribution.* Irvine, CA: Sea and Sage Audubon Society.

Hickman, J.C. Ed. 1993. *The Jepson Manual Higher Plants of California.* Berkeley, CA: University of California Press.

Jennings, M.R. and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California* (Contract No. 8023). Sacramento, CA: CDFG, Inland Fisheries Division.

Munz, P.A. 1974. *A Flora of Southern California.* Berkeley: University of California Press.

Newport Beach, City of. 1966 (as amended through 2004). Newport Beach Tree Ordinance. Newport Beach, CA: the City. http://www.city.newport-beach.ca.us/Councilpolicies/ G-1.PDF.

Orange, County of. 1996 (July). *Natural Community Conservation Plan and Habitat Conservation Plan, County of Orange, Central and Coastal Subregion.* Santa Ana, CA: the County.

RBF Consulting. February 2008. *Buck Gully Canyon Restoration Project, City of Newport Beach, CA, Delineation of State and Federal Jurisdictional Waters* (Prepared for the City of Newport Beach). Irvine, CA: RBF Consulting.

U.S. Fish and Wildlife Service (USFWS). 2007 (December 19). Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*); Final Rule. *Federal Register* 72(243): 72009–72213.

———. 2000 (October 24). Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Coastal California Gnatcatcher – Final Rule. *Federal Register* 65(206): 63679–63743. Washington, D.C.: USFWS. http://policy.fws.gov/library/00fr63679.pdf.

———. 1994 (February 2). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Least Bell's Vireo. *Federal Register* 59(22): 4845–4867. Washington, D.C.: USFWS.

———. 1986 (May 2). Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Least Bell's Vireo. *Federal Register* 51(85):16474–16482. Washington, D.C.: USFWS.

U.S. Geological Survey, Biological Resources Discipline. 2007 (December 28, last modified). Biology Science Programs. Denver, CO: USGS, Center for Biological Informatics. http://biology.usgs.gov.

Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, M. White (Eds.). 1988. *California's Wildlife, Vol. 1: Amphibians and Reptiles.* Sacramento, CA: CDFG, The Resources Agency.

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Regional Location

Exhibit 1

Buck Gully

N
W E
S

10 5 0 10 Miles

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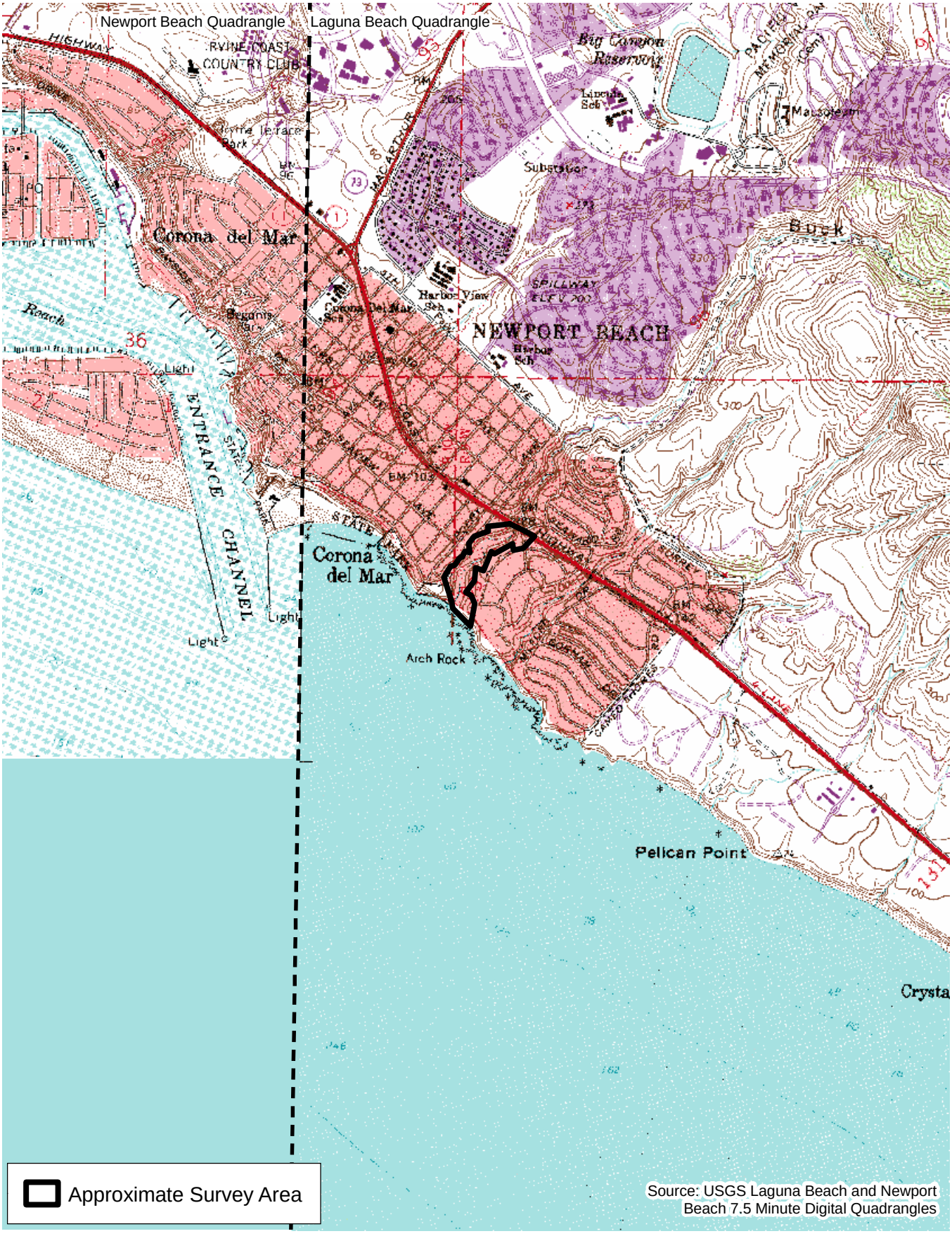

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Local Vicinity

Exhibit 2

Buck Gully

N
W E
S

2,000 1,000 0 2,000
Feet

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Project Site

Exhibit 3

Buck Gully

N
W E
S

400 200 0 400

Feet

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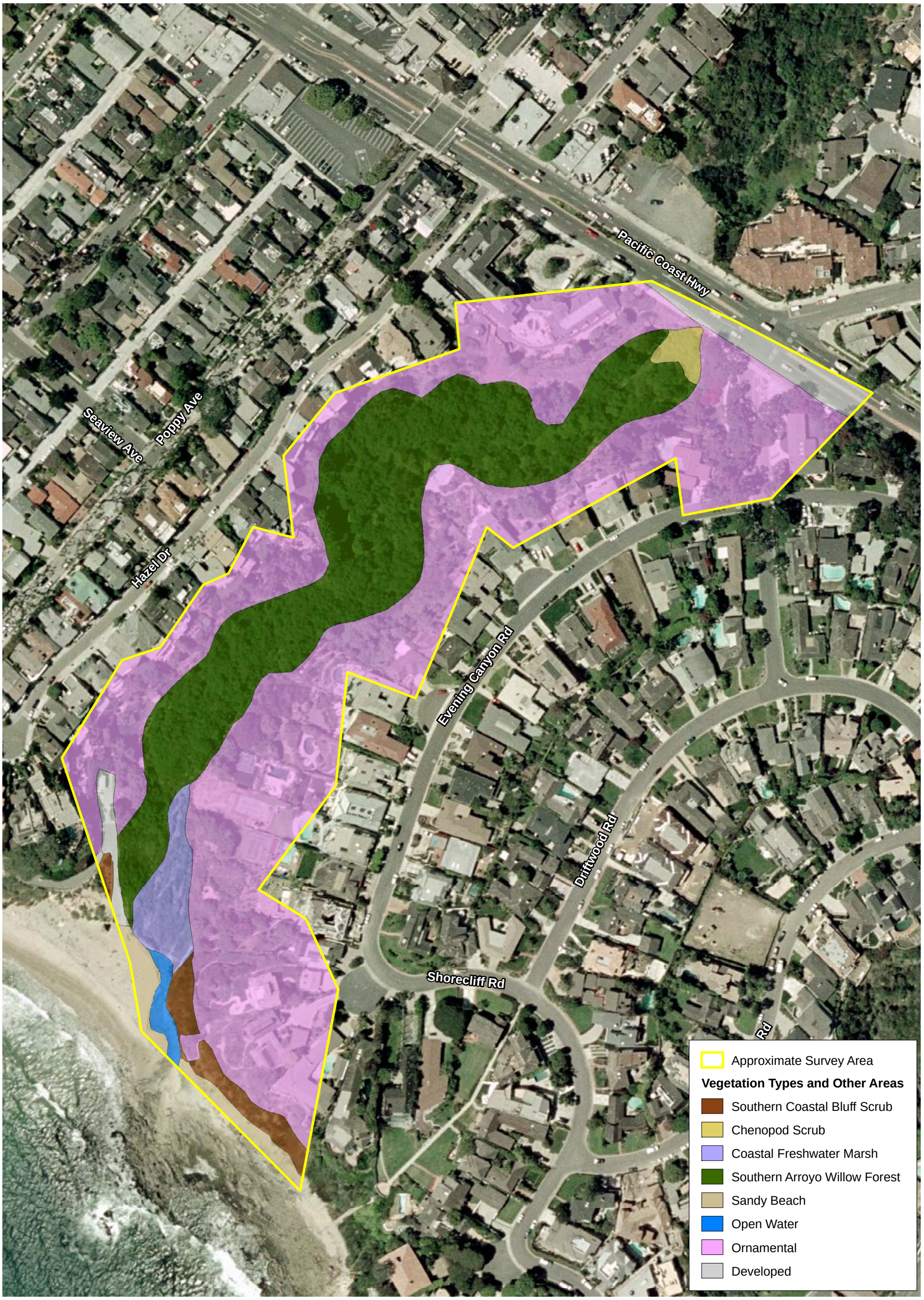

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Vegetation Types and Other Areas

Exhibit 4

Buck Gully

N W E S

150 75 0 150 Feet

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Buck Gully facing downstream from Pacific Coast Highway.

Buck Gully facing upstream from Little Corona Beach.

Stream within Buck Gully.

Waterfall and open water pool within Buck Gully.

Open water pool on Little Corona Beach.

Southern Coastal Bluff scrub adjacent to Little Corona Beach.

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Site Photographs

Exhibit 5

Buck Gully

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