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December 8, 2009

Mr. Richard Beck
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14725 Alton Parkway
Irvine, California 92618

VIA EMAIL AND MAIL
rbeck@rbf.com

Subject: Results of Special Status Plant Survey 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 results of special status plant surveys at the Buck Gully project site (hereafter referred to as the "survey area"). The purpose of the survey is to determine the presence or absence of special status plants in the survey area (listed in Table 1).

Introduction

The survey area is located in Corona Del Mar within the City of Newport Beach in Orange County, California (Exhibit 1). It is located on the U.S. Geological Survey (USGS) 7.5-minute Laguna Beach, Newport Beach, and Tustin topographic quadrangles; elevation in the survey area ranges between 100 feet above mean sea level and sea level (Exhibit 2). Buck Gully is a natural gully that occurs between Pacific Coast Highway and Little Corona Beach (Exhibit 3). The survey area 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. The surrounding land uses include residential, transportation (Pacific Coast Highway), and recreation (Little Corona Beach).

Survey Methodology

Prior to the field survey, a literature review was conducted to identify special status plants or vegetation types known from the survey area and vicinity. This included a review of the USGS 7.5-minute Laguna Beach, Newport Beach, and Tustin quadrangles in the California Natural Diversity Database (CNDDB) (CDFG 2009) and California Native Plant Society's (CNPS') Electronic Inventory of Rare and Endangered Vascular Plants of California (2009). Previous documentation reviewed also includes the *Biological Constraints Assessment for the Buck Gully Project Site in Corona Del Mar* (BonTerra Consulting 2008).

Prior to the 2009 survey, BonTerra Consulting Senior Botanist Sandra Leatherman visited known populations of aphanisma (*Aphanisma blitoides*), southern tarplant (*Centromadia parryi* ssp. *australis*), salt-marsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus),* San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina),* many-stemmed dudleya (*Dudleya multicaulis),* and estuary seablite (*Suaeda esteroa).* Ms. Leatherman observed these species blooming at known reference populations within a week of the project survey dates.

Ms. Leatherman and BonTerra Consulting Ecologist Jennifer Pareti conducted a survey for early blooming special status plant species on April 14, 2009. A survey for late-blooming special status plant species, focusing on the southern tarplant, was conducted by Ms. Leatherman and Ms. Pareti on July 16, 2009. The surveys were performed using meandering transects through suitable habitat. All plant species observed were recorded in field notes. Hand-held global positioning system (GPS) units were used to record locations of special status plants observed in the survey area. Plant species were identified in the field or collected for subsequent identification. Plants were identified using keys in Hickman (1993), Munz (1974), Abrams (1923, 1944, 1951), and Abrams and Ferris (1960). Taxonomy follows Hickman (1993) and current scientific data (e.g., scientific journals) for scientific and common names.

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).

Survey Results

Table 1 lists the special status plants with potential to occur in the vicinity of the survey area. The results column indicates whether the species was observed during the surveys. Three special status plant species were observed in the southern coastal bluff scrub in the survey area: Santa Catalina Island desert-thorn (*Lycium brevipes* var. *hassei*), California box-thorn (*Lycium californicum*), and woolly seablite (*Suaeda taxifolia*). More information on these species is included below. A list of all plants observed during the survey can be found in Appendix A.

TABLE 1
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
IN THE PROJECT VICINITY

Species	Status			Suitable Habitat/Results of Surveys
	USFWS	CDFG	CNPS	
Abronia villosa var. *aurita* chaparral sand-verbena	–	–	1B.1	No suitable habitat; not observed during focused surveys.
Aphanisma blitoides aphanisma	–	–	1B.2	Limited suitable habitat; not observed during focused surveys.
Astragalus pycnostachyus var. *lanosissimus* Ventura marsh milk-vetch	FE	SE	1B.1	No suitable habitat; not observed during focused surveys.
Atriplex coulteri Coulter's saltbush	–	–	1B.2	Suitable habitat; not observed during focused surveys.
Atriplex pacifica South Coast saltscale	–	–	1B.2	Suitable habitat; not observed during focused surveys.
Atriplex parishii Parish's brittlescale	–	–	1B.1	Suitable habitat; not observed during focused surveys.
Atriplex serenana var. *davidsonii* Davidson's saltscale	–	–	1B.2	Suitable habitat; not observed during focused surveys.
Calandrinia maritima seaside calandrinia	–	–	4.2	No suitable habitat; not observed during focused surveys.
Calochortus catalinae Catalina mariposa lily	–	–	4.2	No suitable habitat; not observed during focused surveys.
Calochortus weedii var. *intermedius* intermediate mariposa lily	–	–	1B.2	No suitable habitat; not observed during focused surveys.
Calystegia sepium ssp. *binghamiae* Santa Barbara morning-glory	–	–	1A	No suitable habitat; not observed during focused surveys.

TABLE 1 (Continued)
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
IN THE PROJECT VICINITY

Species	Status			Suitable Habitat/Results of Surveys
	USFWS	CDFG	CNPS	
Centromadia [*Hemizonia*] *parryi* ssp. *australis* southern tarplant	–	–	1B.1	Suitable habitat; not observed during focused surveys.
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	–	–	1B.1	No suitable habitat; not observed during focused surveys.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	FC	SE	1B.1	No suitable habitat; not observed during focused surveys.
Comarostaphylis diversifolia ssp. *diversifolia* summer holly	–	–	1B.2	No suitable habitat; not observed during focused surveys.
Cordylanthus maritimus ssp. *maritimus* salt marsh bird's-beak	FE	SE	1B.2	No suitable habitat; not observed during focused surveys
Dichondra occidentalis western dichondra	–	–	4.2	No suitable habitat; not observed during focused surveys
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	–	–	1B.1	No suitable habitat; not observed during focused surveys
Dudleya cymosa ssp. *ovatifolia* Santa Monica dudleya	FT	–	1B.2	No suitable habitat; not observed during focused surveys.
Dudleya multicaulis many-stemmed dudleya	–	–	1B.2	No suitable habitat; not observed during focused surveys.
Dudleya stolonifera Laguna Beach dudleya	FT	ST	1B.1	Limited suitable habitat; not observed during focused surveys.
Euphorbia misera cliff spurge	–	–	2.2	Limited suitable habitat; not observed during focused surveys.
Harpagonella palmeri Palmer's grapplinghook	–	–	4.2	No suitable habitat; not observed during focused surveys.
Helianthus nuttallii ssp. *parishii* Los Angeles sunflower	–	–	1A	Limited suitable habitat; not observed during focused surveys.
Hordeum intercedens vernal barley	–	–	3.2	No suitable habitat; not observed during focused surveys.
Horkelia cuneata ssp. *puberula* mesa horkelia	–	–	1B.1	No suitable habitat; not observed during focused surveys.
Isocoma menziesii var. *decumbens* decumbent goldenbush	–	–	1B.2	No suitable habitat; not observed during focused surveys.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	–	–	4.2	Suitable habitat; not observed during focused surveys.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	–	–	1B.1	No suitable habitat; not observed during focused surveys.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	–	–	1B.2	No suitable habitat; not observed during focused surveys.
Lycium brevipes var. *hassei* Santa Catalina Island desert-thorn	–	–	1B.1	**Observed during focused surveys.**
Lycium californicum California box-thorn	–	–	4.2	**Observed during focused surveys.**
Nama stenocarpum mud nama	–	–	2.2	No suitable habitat; not observed during focused surveys.
Nasturtium gambelii Gambel's water cress	FE	ST	1B.1	Limited suitable habitat; not observed during focused surveys.

TABLE 1 (Continued)
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
IN THE PROJECT VICINITY

Species	Status			Suitable Habitat/Results of Surveys
	USFWS	CDFG	CNPS	
Navarretia prostrata prostrate vernal pool navarretia	–	–	1B.1	No suitable habitat; not observed during focused surveys.
Nemacaulis denudata var. *denudata* coast woolly-heads	–	–	1B.2	No suitable habitat; not observed during focused surveys.
Pentachaeta aurea ssp. *allenii* Allen's pentachaeta	–	–	1B.1	No suitable habitat; not observed during focused surveys.
Perideridia gairdneri ssp. *gairdneri* Gairdner's yampah	–	–	4.2	No suitable habitat; not observed during focused surveys.
Quercus dumosa Nuttall's scrub oak	–	–	1B.1	No suitable habitat; not observed during focused surveys.
Sagittaria sanfordii Sanford's arrowhead	–	–	1B.2	Limited suitable habitat; not observed during focused surveys.
Senecio aphanactis chaparral ragwort	–	–	2.2	No suitable habitat; not observed during focused surveys.
Sidalcea neomexicana salt spring checkerbloom	–	–	2.2	No suitable habitat; not observed during focused surveys.
Suaeda esteroa estuary seablite	–	–	1B.2	Suitable habitat; not observed during focused surveys.
Suaeda taxifolia woolly seablite	–	–	4.2	**Observed during focused surveys.**
Symphyotrichum defoliatum San Bernardino aster	–	–	1B.2	No suitable habitat; not observed during focused surveys.
Verbesina dissita big-leaved crownbeard	FT	ST	1B.1	No suitable habitat; not observed during focused surveys.

LEGEND:

Federal (USFWS)
FE Endangered
FT Threatened
FC Federal Candidate

State (CDFG)
SE Endangered
ST Threatened

California Native Plant Society (CNPS) List Categories
List 1A Plants Presumed Extinct in California
List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
List 2 Plants Rare, Threatened, or Endangered in California But More Common Elsewhere
List 3 Plants About Which We Need More Information – A Review List
List 4 Plants of Limited Distribution – A Watch List

California Native Plant Society (CNPS) Threat Code Extensions
None Plants lacking any threat information
.1 Seriously Endangered in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2 Fairly Endangered in California (20–80% of occurrences threatened)

Santa Catalina Island Desert-thorn (*Lycium brevipes* var. *hassei*)

Santa Catalina Island desert-thorn is a CNPS List 1B.1 species. It typically blooms in June (CNPS 2009). This perennial shrub occurs on coastal bluffs and slopes on Santa Catalina and San Clemente Islands, and in Rancho Palos Verdes (Hickman 1993; Jepson Flora Project 2009). A specimen collected in the survey area was identified as the Santa Catalina Island desert-thorn. The clump of desert-thorn was observed in the southern coastal bluff scrub on the southeast edge of the survey area (Exhibit 5). This desert-thorn is in an area that has been revegetated; it is unknown whether this clump is naturally occurring or if it was planted for a

revegetation project. A specimen was deposited in Rancho Santa Ana Botanical Gardens Herbarium by Ms. Leatherman collection #2009-21.

California Box-thorn (*Lycium californicum*)

California box-thorn is a CNPS List 4.2 species. It typically blooms between March and August, though uncommonly it blooms as early as December (CNPS 2009). This perennial shrub occurs on coastal bluffs in coastal sage scrub (Hickman 1993). It is found in Santa Barbara, Los Angeles, Orange, San Bernardino, and San Diego Counties; on the Channel Islands south to Baja California; and in Mexico (CNPS 2009). A few California box-thorn individuals were observed in the southern portion of the survey area on the cliffs in the coastal bluff scrub during the 2009 surveys.

Woolly Seablite (*Suaeda taxifolia*)

Woolly seablite is a CNPS List 4.2 species. It typically blooms between January and December (CNPS 2009). This evergreen shrub occurs on coastal bluffs and margins of salt marshes (Jepson Flora Project 2009). It is found along the southern coast from San Luis Obispo County south to Baja California, Mexico and on the Channel Islands (CNPS 2009; Jepson Flora Project 2009). A few woolly seablite individuals were observed in the southern portion of the survey area on the cliffs and slope in the coastal bluff scrub during the 2009 surveys.

Conclusion

The three plant species observed during the surveys, the Santa Catalina Island desert-thorn, California box-thorn and woolly seablite, all occur in the coastal bluff scrub in the survey area. The coastal bluff scrub will not be impacted by the currently proposed project; therefore, there will not be any impacts on these three species, and no mitigation would be required. If the project boundaries are modified and these species would be impacted, mitigation would be required for the Santa Catalina Island desert-thorn, and it would be necessary to determine if the plants are naturally occurring or planted for revegetation purposes.

BonTerra Consulting appreciates the opportunity to assist with this survey. Please contact Amber Oneal at (714) 444-9199 with any questions or comments regarding the survey results.

Sincerely,

BONTERRA CONSULTING

Amber S. Oneal
Senior Project Manager/Associate

for Sandra J. Leatherman
Senior Project Manager/Senior Botanist

Attachments: Exhibits 1, 2, 3, 4, and 5
Appendix A – Plant Compendium

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D:/Projects/RBF/J437/Ex_RL_011808.mxd

Regional Location

Exhibit 1

Buck Gully

N W E S

10 5 0 10 Miles

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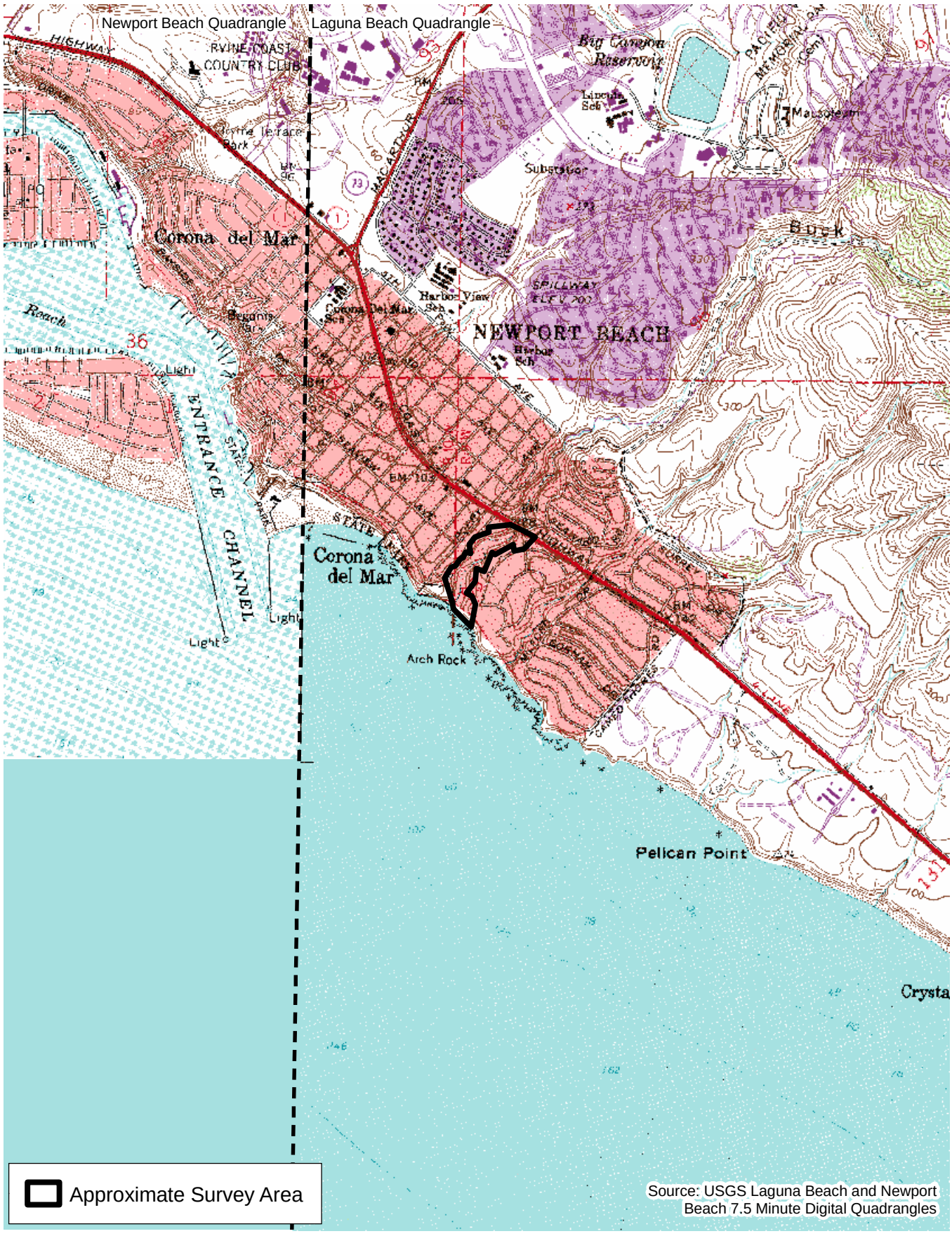
R:/Projects/RBF/J437/Graphics/EX1_RL_011808.pdf



D:/Projects/RBF/J437/Ex_LV_011808.mxd

Local Vicinity

Exhibit 2

Buck Gully

N
W E
S

2,000 1,000 0 2,000
Feet

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R:/Projects/RBF/J437/Graphics/Ex2_LV_012408.pdf

D:/Projects/RBF/J437/Ex_ProjSite_011808.mxd

Project Site

Exhibit 3

Buck Gully

N
W E
S

400 200 0 400

Feet

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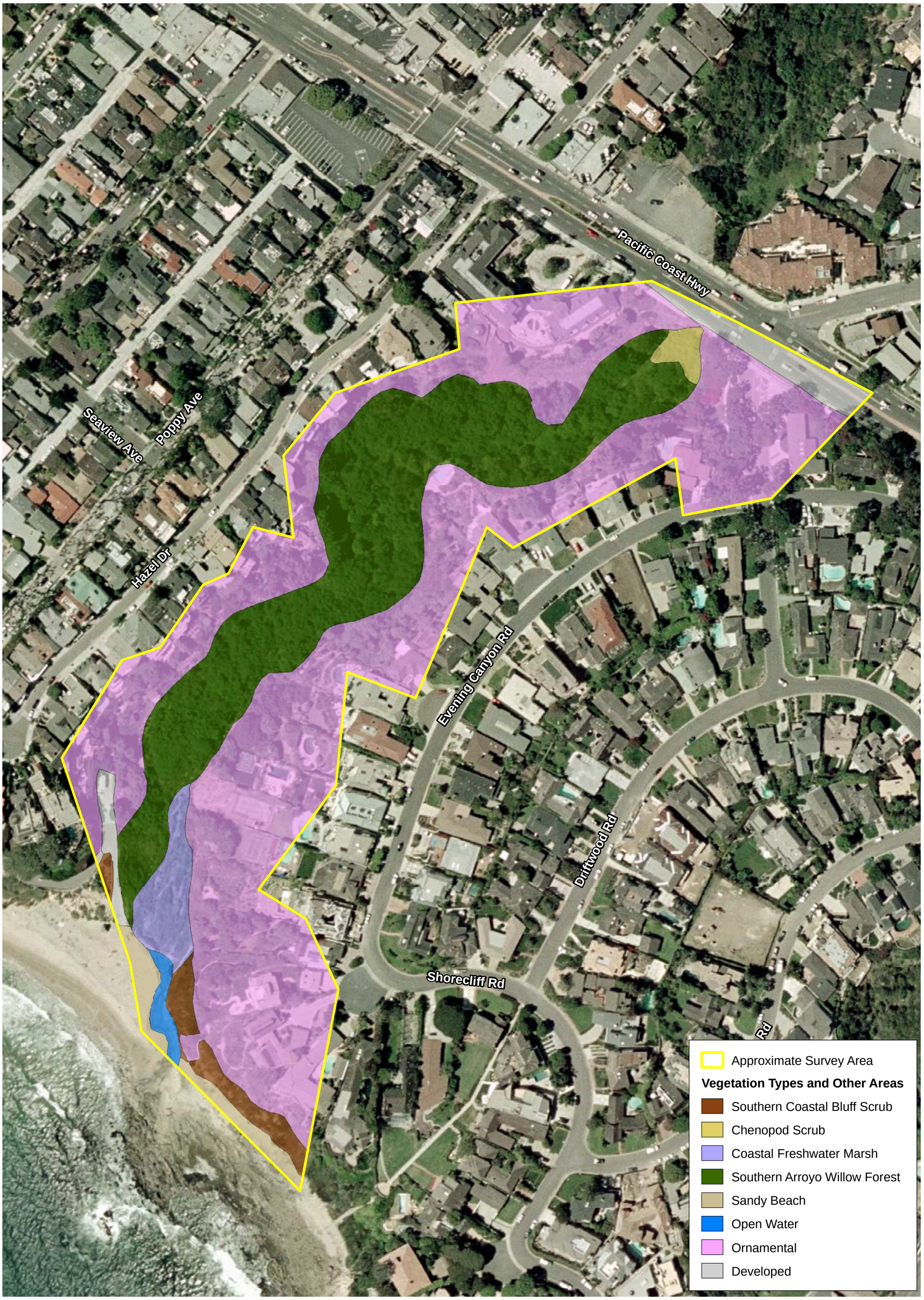
R:/Projects/RBF/J437/Graphics/Ex3_ProjSite_012408.pdf



D:/Projects/RBF/J437/ex_veg_012208.mxd

Vegetation Types and Other Areas

Exhibit 4

Buck Gully

N W E S

150 75 0 150 Feet

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R:/Projects/RBF/J437/Graphics/ex4_veg_012408.pdf

D:/Projects/RBF/J437/Ex_ProjSite_113009.mxd

Special Status Plant Location

Exhibit 5

Buck Gully

N
W E
S

400 200 0 400

Feet

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(REV: JFG 120709) R:/Projects/RBF/J437/Graphics/Ex6_DesertThorn.pdf

APPENDIX A

PLANT COMPENDIUM

PLANT SPECIES OBSERVED ON THE BUCK GULLY PROJECT SITE

Species
FLOWERING PLANTS
CLASS DICOTYLEDONES (DICOTS)
AIZOACEAE - FIG-MARIGOLD FAMILY
*Carpobrotus edulis** hottentot fig
*Mesembryanthemum crystallinum** crystalline iceplant
ANACARDIACEAE - SUMAC FAMILY
Rhus integrifolia lemonadeberry
Toxicodendron diversilobum western poison oak
APIACEAE (UMBELLIFERAE) - CARROT FAMILY
*Apium graveolens** common celery
*Foeniculum vulgare** sweet fennel
ARALIACEAE - GINSENG FAMILY
*Hedera helix** English ivy
ASTERACEAE (COMPOSITAE) - SUNFLOWER FAMILY
Amblyopappus pusillus coast weed
Artemisia californica California sagebrush
Baccharis pilularis coyote brush
*Centaurea melitensis** tocalote
*Chrysanthemum coronarium** garland daisy
*Cotula australis** Australian brass buttons
*Cynara cardunculus** cardoon/globe artichoke
Encelia californica bush sunflower
*Gazania linearis** gazania
Grindelia camporum var. *bracteosum* white-stem gum-plant
Isocoma menziesii goldenbush
Lasthenia californica California goldfields
*Pulicaria paludosa** Spanish sunflower
*Sonchus oleraceus** common sow-thistle
Xanthium strumarium cocklebur

PLANT SPECIES OBSERVED ON THE BUCK GULLY PROJECT SITE (Continued)

Species
BIGNONIACEAE - BIGNONIA FAMILY
cape honeysuckle desert willow
BORAGINACEAE - BORAGE FAMILY
Heliotropium curassavicum salt heliotrope/alkali heliotrope
BRASSICACEAE (CRUCIFERAE) - MUSTARD FAMILY
*Cakile maritima** sea-rocket
*Hirschfeldia incana** shortpod mustard
*Lobularia maritima** sweet alyssum
*Rorippa nasturtium-aquaticum** white water cress
CACTACEAE - CACTUS FAMILY
Opuntia littoralis coastal prickly pear
Opuntia prolifera proliferous prickly pear/coastal cholla
CHENOPODIACEAE - GOOSEFOOT FAMILY
Atriplex californica California saltbush
Atriplex lentiformis big saltbush
*Atriplex semibaccata** Australian saltbush
*Chenopodium album** lamb's quarters
Suaeda taxifolia **woolly seablite**
CONVOLVULACEAE - MORNING-GLORY FAMILY
Cressa truxillensis alkali weed
*Ipomoea purpurea** common morning-glory
EUPHORBIACEAE - SPURGE FAMILY
*Ricinus communis** castor bean
FABACEAE (LEGUMINOSAE) - LEGUME FAMILY
Acacia sp.* acacia
Acacia redolens prostrate acacia
*Melilotus alba** white sweet-clover
FRANKENIACEAE - ALKALI HEATH FAMILY
Frankenia salina alkali heath

PLANT SPECIES OBSERVED ON THE BUCK GULLY PROJECT SITE (Continued)

Species
MORACEAE - FIG FAMILY
*Ficus carica**   edible fig/common fig
MYOPORACEAE - MYOPORUM FAMILY
*Myoporum laetum**   myoporum
MYRTACEAE - MYRTLE FAMILY
Eucalyptus sp.*   gum
NYCTAGINACEAE - FOUR-O'CLOCK FAMILY
Mirabilis californica   wishbone bush/California wishbone bush
ONAGRACEAE - EVENING PRIMROSE FAMILY
Epilobium ciliatum ssp. *cilatum*   green willow-herb
Oenothera elata ssp. *hirsutissima*   great marsh evening primrose
OXALIDACEAE - WOOD-SORREL FAMILY
*Oxalis pes-caprae**   Bermuda buttercup/sour grass
PLANTAGINACEAE - PLANTAIN FAMILY
*Plantago major**   common plantain
PLUMBAGINACEAE - LEADWORT FAMILY
*Limonium perezii**   Perez's sea-lavender
*Plumbago auricalata**   cape plumbago
POLYGONACEAE - BUCKWHEAT FAMILY
Eriogonum fasciculatum var. *fasciculatum*   California buckwheat
*Rumex crispus**   curly dock
PRIMULACEAE - PRIMROSE FAMILY
*Anagallis arvensis**   scarlet pimpernel
ROSACEAE - ROSE FAMILY
Heteromeles arbutifolia   toyon/christmas berry
Rosa californica   California wild rose
Rubus ursinus   California blackberry
SALICACEAE - WILLOW FAMILY
Salix lasiolepis   arroyo willow
SAURURACEAE - LIZARD'S TAIL FAMILY
Anemopsis californica   yerba mansa

PLANT SPECIES OBSERVED ON THE BUCK GULLY PROJECT SITE (Continued)

Species
SOLANACEAE - NIGHTSHADE FAMILY
Lycium brevipes* var. *hassei **Santa Catalina Island desert-thorn**
Lycium californicum **California box thorn**
TROPAEOLACEAE - NASTURTIUM FAMILY
*Tropaeolum majus** garden nasturtium
URTICACEAE - NETTLE FAMILY
Urtica dioica ssp. *holosericea* hoary nettle
CLASS MONOCOTYLEDONES (MONOCOTS)
CYPERACEAE - SEDGE FAMILY
*Cyperus involucratus** African umbrella-sedge
Scirpus californicus California bulrush
JUNCACEAE - RUSH FAMILY
Juncus sp. rush
LILIACEAE - LILY FAMILY
*Agave americana** century plant
*Asparagus officinalis** garden asparagus
POACEAE [GRAMINEAE] - GRASS FAMILY
*Arundo donax** giant reed
*Bromus diandrus** ripgut grass
*Cortaderia selloana** Sellow's pampas grass
Distichlis spicata salt grass
*Gastridium ventricosum** nitgrass
Piptatherum miliaceum* smilo grass/millett ricegrass
*Polypogon monspeliensis** annual beard grass
TYPHACEAE - CATTAIL FAMILY
Typha angustifolia narrow-leaved cattail
Typha latifolia broad-leaved cattail
** introduced species*

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November 12, 2009

Mr. Richard Beck
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VIA EMAIL AND MAIL
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Subject: Results of Southwestern Pond Turtle Survey 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 results of focused surveys to determine the presence or absence of the southwestern pond turtle (*Actinemys marmorata pallida*) on the Buck Gully project site (hereafter referred to as the "project site"). A Biologist with the necessary experience and California Department of Fish and Game (CDFG) scientific collecting permit conducted the surveys.

Project Site

The project site is located in the Corona del Mar area within the City of Newport Beach (Exhibit 1). It is located on the U.S. Geological Survey's (USGS's) Newport 7.5-minute topographic quadrangle and ranges from sea level to 100 feet above mean sea level (msl) (Exhibit 2). Buck Gully is a natural gully that 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.

Vegetation types on the project site include southern coastal bluff scrub, chenopod scrub, coastal freshwater marsh, southern arroyo willow forest, sandy beach, open water, ornamental, and developed (Exhibit 4). A perennial stream flows through Buck Gully. Coastal freshwater marsh is dominated by cattail (*Typha* sp.) and the stream's open water; the density and height of the cattails increased over the duration of the surveys. 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*), California rose (*Rosa californica*), 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. Representative photos of riparian habitat are included in Appendix A.

Background

The southwestern pond turtle is considered a Species of Special Concern by the CDFG (2009). Habitat destruction for urban (primarily flood control) and agricultural development has resulted in population declines throughout its range (Spinks et al. 2003).

The southwestern pond turtle is a relatively flat, dark turtle of moderate size, with a carapace (shell) length that rarely exceeds ten inches (Spinks et al. 2003). The carapace is usually brown or blackish in color with a series of darker spots, lines, or dashes that radiate out from the center of each shield (Stebbins 2003).

The southwestern pond turtle is found in ponds, small lakes with abundant vegetation, marshes, reservoirs, seasonal standing or slow-moving streams, canals and sloughs, and occasionally in brackish water (Germano 2001). Sufficient cover (e.g., vegetation, undercut banks) and basking sites are important components of suitable habitat (Spinks et al. 2003). Adults are often observed basking on logs or other objects protruding out of the water or floating in the warmer surface water.

This species breeds from April to May (Jennings and Hayes 1994), but the timing is highly variable depending on location and seasonal conditions. Females move from the water to adjacent upland habitats to lay eggs, usually sometime in late May to early July, although it could occur as early as April or as late as August (Ernst et al. 1994). For nest sites, the southwestern pond turtle favors unshaded slopes that typically include a south-facing portion that is likely to ensure that substrate temperatures will be high enough to incubate eggs (Rathburn et al. 2002). Hatchlings over-winter in the nest. Adult turtles in Southern California may be active throughout the winter in warm years or seek out terrestrial refugia (i.e., shelter with appropriate temperature and moisture conditions) in adjacent upland areas during colder years (Jennings and Hayes 1994). Terrestrial refugia are typically covered with dense leaf litter produced by a thick overstory of woody vegetation, including dense riparian thickets of willows (*Salix* spp.) (Rathburn et al. 2002). Turtles may either choose sites where they can bask in direct sunlight or may bury themselves deep into leaf litter and duff (Rathburn et al. 2002).

Survey Methodology

The survey methodology was based on survey and census recommendations made by Holland (1991) and survey protocols developed by Reese (1988) and Goodman (1999). Surveys incorporated both visual encounter and live trapping. The surveys were conducted by BonTerra Consulting Ecologist Samuel Stewart (CDFG Scientific Collecting Permit SC-004421), a Biologist who is familiar with this species and has the appropriate CDFG authorization to trap and handle southwestern pond turtles.

The survey area included all aquatic habitat on the project site. Mr. Stewart conducted visual encounter surveys by walking along the banks of the creek and scanning pools for extended periods of time primarily in the morning hours in search of basking or foraging turtles. Mr. Stewart also conducted live trapping, which consisted of placing two nylon funnel traps in flowing or standing water in six locations for a period of up to six hours. He fitted the traps with floats to allow partial submergence, firmly secured traps to the banks, and baited the traps with fresh fish trimmings. Mr. Stewart conducted visual surveys throughout the survey area prior to

returning to check traps at survey completion. Mr. Stewart conducted the surveys in May 2009 during the breeding season for this species (April to August). He fitted the traps with tags listing the CDFG scientific collecting permit number under which live-trapping was authorized, and recorded and mapped species captured and any pond turtle sightings.

Survey Results

No southwestern pond turtles were observed in the survey area during the surveys. Therefore, this species is considered absent from the survey area at this time. One non-native amphibian species, African clawed frog (*Xenopus laevis*), was captured during live-trapping (Table 1). A complete list of wildlife species observed during the surveys is included in Appendix B.

TABLE 1
RESULTS OF TRAPPING EFFORT

Survey Date	Start		End		Species Trapped	Trap Locations
	Time	Temperature (°Celsius)	Time	Temperature (°Celsius)		
5/4/2009	0930	17.1	1530	17	*Xenopus laevis*	33.590778,-117.868503 33.590736,-117.868541
5/16/2009	1215	19	1730	18.2	—	33.592429,-117.866768 33.59223,-117.867411
5/18/2009	1000	17.6	1530	20	*Xenopus laevis*	33.590765,-117.868431 33.590733,-117.868471

BonTerra Consulting appreciates the opportunity to assist with this project. Please contact me at (714) 444-9199 if you have questions or comments.

Sincerely,

BONTERRA CONSULTING

Amber S. Oneal
Senior Project Manager/Associate

Sam C. Stewart IV
Project Manager/Ecologist

Attachments: Exhibits 1, 2, and 3
Appendix A – Site Photos
Appendix B – Wildlife Compendium

cc: Iris Lee, City of Newport Beach, ILee@city.newport-beach.ca.us

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Regional Location

Exhibit 1

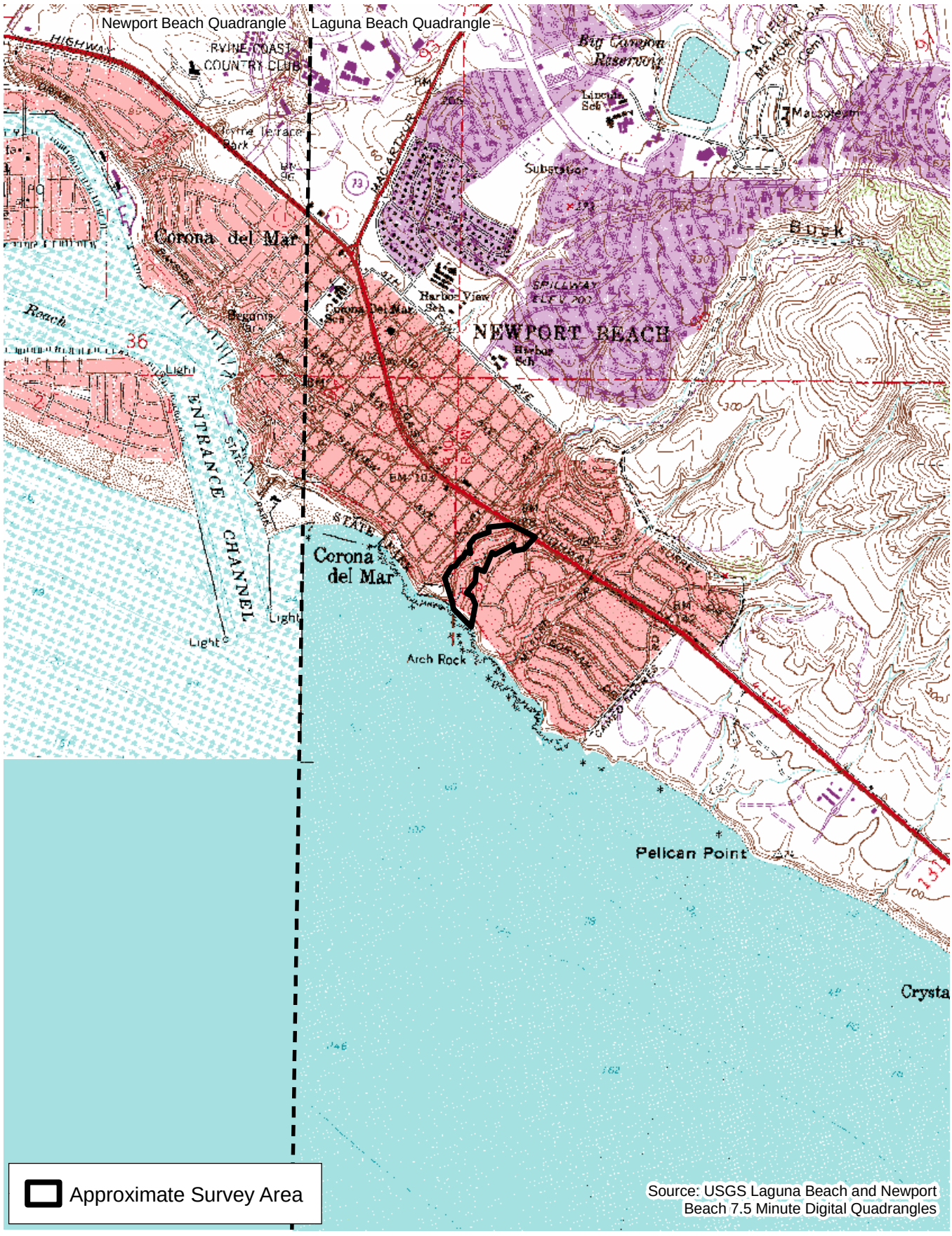
Buck Gully

N W E S

10 5 0 10 Miles

BonTerra CONSULTING

R:/Projects/RBF/J437/Graphics/EX1_RL_011808.pdf



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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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APPENDIX A

SITE PHOTOS

An overview of the coastal freshwater marsh and southern arroyo willow forest from the downstream end (southwest) of the survey area facing upstream (northeast).

Buck Gully is a perennial stream that meanders through the survey area. Water ranges in depth from a few inches to small ponded areas that are several feet deep.

Site Photographs

Exhibit A-1

Buck Gully

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APPENDIX B

WILDLIFE COMPENDIUM

WILDLIFE SPECIES OBSERVED DURING SOUTHWESTERN POND TURTLE SURVEYS IN BUCK GULLY

May 2009

Species
Fish
POECILIDAE – LIVE BEARERS
Gambusia affinis mosquitofish
Amphibians
HYLIDAE – TREEFROGS
Pseudacris regilla Pacific chorus frog
PELOBATIDAE – TONGUELESS FROGS
*Xenopus laevis** African clawed frog
Reptiles
PHRYNOSOMATIDAE – ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS
Sceloporus occidentalis western fence lizard
ANGUIDAE - ALLIGATOR LIZARDS
Elgaria multicarinata southern alligator lizard
Birds
COLUMBIDAE – PIGEONS AND DOVES
*Columba livia ** rock pigeon
Zenaida macroura mourning dove
TROCHILIDAE – HUMMINGBIRDS
Calypte anna Anna's hummingbird
Selasphorus sasin Allen's hummingbird
PICIDAE – WOODPECKERS
Picoides nuttallii Nuttall's woodpecker
Picoides pubescens downy woodpecker
TYRANNIDAE – TYRANT FLYCATCHERS
Empidonax difficilis Pacific-slope flycatcher
Sayornis nigricans black phoebe
Myiarchus cinerascens ash-throated flycatcher
CORVIDAE – JAYS AND CROWS
Corvus brachyrhynchos American crow

WILDLIFE SPECIES OBSERVED DURING SOUTHWESTERN POND TURTLE SURVEYS IN BUCK GULLY (Continued)

Species
Corvus corax common raven
HIRUNDINIDAE – SWALLOWS
Stelgidopteryx serripennis northern rough-winged swallow
Petrochelidon pyrrhonota cliff swallow
AEGITHALIDAE – BUSHTITS
Psaltriparus minimus bushtit
TROGLODYTIDAE – WRENS
Thryomanes bewickii Bewick's wren
Troglodytes aedon house wren
TIMALIIDAE – WRENTITS
Chamaea fasciata wrentit
MIMIDAE – THRASHERS
Mimus polyglottos northern mockingbird
STURNIDAE – STARLINGS
Sturnus vulgaris European starling*
PARULIDAE – WARBLERS
Dendroica petechia yellow warbler
Geothlypis trichas common yellowthroat
Wilsonia pusilla Wilson’s warbler
EMBERIZIDAE – SPARROWS AND JUNCOS
Pipilo maculatus spotted towhee
Pipilo crissalis California towhee
Melospiza melodia song sparrow
CARDINALIDAE – GROSBEAKS AND BUNTINGS
Pheuticus melanocephalus black-headed grosbeak
ICTERIDAE – BLACKBIRDS
Agelaius phoeniceus red-winged blackbird
Molothrus ater brown-headed cowbird
Icterus bullockii Bullock’s oriole

WILDLIFE SPECIES OBSERVED DURING SOUTHWESTERN POND TURTLE SURVEYS IN BUCK GULLY (Continued)

Species
FRINGILLIDAE – FINCHES
Carpodacus mexicanus house finch
Carduelis psaltria lesser goldfinch
DIDELPHIDAE - NEW WORLD OPOSSUMS
Didelphis virginiana * Virginia opossum
SCIURIDAE – SQUIRRELS
Spermophilus beecheyi California ground squirrel
PROCYONIDAE - RACCOONS
Procyon lotor common raccoon
* introduced species

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151 Kalmus Drive, Suite E-200
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September 10, 2009

Ms. Sandy Marquez
U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, California 92011

VIA EMAIL AND MAIL
sandy_marquez@fws.gov

Subject: Results of Least Bell's Vireo and Southwestern Willow Flycatcher Survey for the Buck Gully Project Site in Corona Del Mar, City of Newport Beach, Orange County, California

Dear Ms. Marquez:

This Letter Report presents the results of focused surveys to determine the presence or absence of the least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) for the Buck Gully project site (hereafter referred to as the "project site"). A Biologist with the necessary experience and the federal Endangered Species Act 10(a) survey permit conducted the surveys according to U.S. Fish and Wildlife Service (USFWS) protocol.

Project Site

The project site is located in the Corona del Mar area within the City of Newport Beach (Exhibit 1). It is located on the U.S. Geological Survey's (USGS's) Newport Beach 7.5-minute topographic quadrangle and ranges from sea level to 100 feet above mean sea level (msl) (Exhibit 2). Buck Gully is a natural gully that 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.

Vegetation types on the project site include southern coastal bluff scrub, chenopod scrub, coastal freshwater marsh, southern arroyo willow forest, sandy beach, open water, ornamental, and developed (Exhibit 4). A perennial stream flows through Buck Gully. Coastal freshwater marsh is dominated by cattail (*Typha* sp.) and the stream's open water; the density and height of the cattails increased over the duration of the surveys. 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*), California rose (*Rosa californica*), 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. Representative photos of riparian habitat are included in Appendix A.

Background

The southwestern willow flycatcher and least Bell's vireo were formerly more common and widespread, but are now rare, local summer residents of Southern California's lowland riparian woodlands (Grinnell and Miller 1944; Garrett and Dunn 1981). The substantial population declines of these two avian species over the latter half of the twentieth century is attributable to the loss and degradation of riparian habitats and brood parasitism by the brown-headed cowbird (*Molothrus ater*). As a result, the least Bell's vireo was listed by the California Department of Fish and Game (CDFG) as Endangered on October 2, 1980, and by the USFWS as Endangered on May 2, 1986. The CDFG listed all three subspecies of willow flycatcher that breed in California (*E. t. brewsteri*, *E. t. extimus*, and *E. t. adastus*) as Endangered on January 3, 1991. The USFWS listed the southwestern willow flycatcher as Endangered on February 7, 1995 (USFWS 1995).

Least Bell's Vireo

Bell's vireo is a Neotropical migrant that breeds in central and southwestern North America from northern Mexico to Southern California, Nevada, and Utah; east to Louisiana; and north to North Dakota, Wisconsin, and Indiana in the central United States (AOU 2006). Although not well known, the winter range of the Bell's vireo is believed to be the west coast of Central America from southern Sonora south to northwestern Nicaragua, including the cape region of Baja California, Mexico (Brown 1993). Of the four Bell's vireo subspecies, only two breed in California: the least Bell's vireo and the Arizona Bell's vireo (*V. b. arizonae*), which breeds in the Colorado River Valley (Garrett and Dunn 1981; Rosenberg et al. 1991). Though the least Bell's vireo was formerly considered a common breeder in riparian habitats throughout the Central Valley and other low elevation riverine systems in California and Baja California, Mexico (Franzreb 1989), presently, the least Bell's vireo has been eliminated from much of its historical range (Franzreb 1989; Brown 1993).

The breeding habitat of the least Bell's vireo is primarily riparian dominated by willows with dense understory vegetation; shrubs such as mule fat (*Baccharis salicifolia*) and California rose are often a component of the understory (Goldwasser 1981). The least Bell's vireo is often found in areas that include trees such as willow (*Salix* sp.), western sycamore (*Platanus racemosa*) or cottonwood (*Populus* sp.), particularly where the canopy is within or immediately adjacent to an understory layer of vegetation (Salata 1983). The least Bell's vireo generally nests in early successional stages of riparian habitats, with nest sites frequently located in willows that are between four and ten years of age (RECON 1988; Franzreb 1989). The most critical factor in habitat structure is the presence of a dense understory shrub layer from approximately two to ten feet above ground (Goldwasser 1981; Salata 1983; Franzreb 1989).

On February 2, 1994, the USFWS issued their final determination of critical habitat for the least Bell's vireo (USFWS 1994), identifying approximately 37,560 acres as critical habitat in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties. The survey area is not located in the designated critical habitat area for this species.

Least Bell's vireo are known from the project vicinity in areas including Muddy and El Moro canyons within Crystal Cove State Park, San Diego Creek and the San Joaquin Wildlife Sanctuary, Mason Regional Park, the Sand Canyon Reservoir, and the Bonita Canyon Reservoir (Harmsworth 1998, BonTerra Consulting 2008, CDFG 2009). However, during

focused surveys for the Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP), the least Bell's vireo was not observed in the upper portions of Buck Gully (north of Pacific Coast Highway) (Harmsworth 1998).

Southwestern Willow Flycatcher

The willow flycatcher is a Neotropical migrant that breeds in the west from northern Baja California, Mexico to central British Colombia, and generally east through the northern half of the United States to the Atlantic coast (AOU 2006). Depending on the authority, there are four or five recognized subspecies of willow flycatcher (Sedgwick 2000). The breeding range of southwestern willow flycatcher includes Southern California, Arizona, New Mexico, western Texas, and the extreme southern parts of Nevada and Utah (USFWS 1993). In California, the southwestern willow flycatcher breeds along the coast south of the San Fernando Valley and north in the interior to about Independence, Inyo County (Unitt 1987). The largest breeding populations of southwestern willow flycatcher in California are located at the South Fork of the Kern River in Kern County and on the Santa Margarita River in Camp Pendleton in San Diego County (Unitt 1987). The range-wide population of southwestern willow flycatcher is estimated at between 300 and 500 pairs (USFWS 1997). The population of southwestern willow flycatcher in California is estimated to be about 70 pairs (USFWS 1993). More recent estimates for California include a total of 200 territories in 2004 (Durst et al. 2005), which indicates that the California population may slowly be recovering.

The southwestern willow flycatcher breeds in willow-dominated riparian habitats that are similar to least Bell's vireo nesting habitats. The southwestern willow flycatcher differs from least Bell's vireo in that it shows a stronger dependency on willow thickets for all its requirements (Grinnell and Miller 1944). In addition, the southwestern willow flycatcher appears to have a preference for sites with surface water in the vicinity, such as along streams, on the margins of a pond or lake, and at wet mountain meadows (Grinnell and Miller 1944; Flett and Sanders 1987; Harris et al. 1987). In Arizona, the southwestern willow flycatcher invariably nests near surface water (Phillips et al. 1964). Recently, the southwestern willow flycatcher has adapted to introduced vegetation present in riparian communities, such as tamarisk (*Tamarix* sp.) and Russian olive (*Elaeagnus angustifolia*) (USFWS 1993).

The willow flycatcher is a common migrant in the interior of California and a rare-to-uncommon migrant along the coastal slope, with most birds moving through Southern California between May 15 and June 20 (Garrett and Dunn 1981; Unitt 1987). The spring southwestern willow flycatcher migration is earlier than that of the northern subspecies (Unitt 1984, USFWS 1993). As a result, the presence of more abundant subspecies that migrate through the range of the southwestern willow flycatcher during its breeding season complicates surveys for nesting southwestern willow flycatchers.

On October 19, 2005, the USFWS published a final rule designating critical habitat for the southwestern willow flycatcher (USFWS 2005). This final rule designated 120,824 acres in Arizona, California, Nevada, New Mexico, and Utah as critical habitat. Of that, 17,212 acres were designated in Kern, Santa Barbara, San Bernardino, and San Diego Counties, California. The survey area is not located in designated critical habitat for this species.

During focused surveys for the NCCP/HCP, no breeding or territorial southwestern willow flycatchers were observed anywhere in the Central/Coastal Subregion (Harmsworth 1998), and the southwestern willow flycatcher was considered extirpated as a breeding species from Orange County (Hamilton and WIllick 1996, Gallagher 1997). Since these surveys were conducted, one breeding location was reported from Canada Gobernadora on Rancho Mission Viejo in 2001 and 2003 (CDFG 2009), and one potential location was reported from Featherly

Regional Park along the Santa Ana River in 1999, but breeding was not confirmed (CDFG 2009).

Survey Methodology

The USFWS protocol for the least Bell's vireo requires that at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit. The USFWS protocol for the southwestern willow flycatcher requires a total of five surveys with the first survey conducted between May 15 and May 31; the second survey between June 1 and June 21; and the third through fifth surveys between June 22 and July 17. BonTerra Consulting Ecologist Amber Oneal (Permit# TE148554-1) conducted surveys on April 10, 20, and 30; May 11 and 21; June 1, 11, 22, and 29; and July 6, 2009.

Ms. Oneal systematically surveyed the riparian habitats by walking slowly using meandering transects through the riparian habitat in the survey area. Following the willow flycatcher protocol, recorded vocalizations were used to elicit a response from any potentially territorial southwestern willow flycatchers. If no southwestern willow flycatchers were detected after the initial tape playing, Ms. Oneal replayed the recording at least once, but often multiple times. As the least Bell's vireo survey protocol does not require the playback of least Bell's vireo vocalizations, recorded least Bell's vireo vocalizations were not used during the surveys. "Pishing" sounds were used to elicit responses from any southwestern willow flycatchers or least Bell's vireo present.

All surveys were conducted under optimal weather conditions (i.e., between 55 and 95 degrees Fahrenheit with wind speeds between 0 and 15 miles per hour) and during early morning hours when bird activity is at a peak. Ms. Oneal recorded all bird species detected during the survey (Appendix B).

Survey Results

No least Bell's vireo or willow flycatchers (of any subspecies) were observed in the survey area during the surveys. Therefore, these species are considered absent from the survey area at this time. A complete list of wildlife species observed during the surveys is included in Appendix B.

Yellow warbler, a CDFG Species of Special Concern, was observed in the southern arroyo willow forest in April and May 2009, but it was not observed during the June and July 2009 visits. A California Natural Diversity Database (CNDDB) form will not be submitted for this species because individuals observed did not breed in the survey area; they were assumed to be migrants.

A black-crowned night heron (*Nycticorax nycticorax*) roost was observed in a group of gum (*Eucalyptus* sp.) trees next to a large ponding area in the southeastern portion of the survey area on June 29, 2009. It is unknown whether the species bred in the survey area; however, the survey area provides suitable trees that could be used as a rookery. The CDFG considers the black-crowned night heron to be a Species of Special Concern when at rookery sites. Because breeding was not confirmed, a CNDDB form will not be submitted. However, if vegetation clearing would occur during the breeding season (March to June) for the heron, it is recommended that a pre-construction survey be conducted to avoid impacts on this species. If a rookery is observed, it should be protected until young have fledged from the nests. This pre-construction survey can likely be combined with the pre-construction survey for raptor nests.

Brown-headed cowbirds were present in the survey area throughout the duration of the surveys. An average of five cowbirds were observed during each survey. A high count of 16 cowbirds

was observed on July 6, 2009, and 9 cowbirds were observed on April 30, 2009. A lesser goldfinch (*Carduelis psaltria*) was observed feeding a juvenile brown-headed cowbird, and a juvenile brown-headed cowbird was observed flocking with juvenile house finches (*Carpodacus mexicanus*) on July 16, 2009, indicating that the brown-head cowbird likely parasitized nests in the survey area.

BonTerra Consulting has appreciated the opportunity to assist with this project. Please contact me at (714) 444-9199 if you have questions or comments.

Sincerely,

BONTERRA CONSULTING

Amber S. Oneal
Senior Project Manager/Ecologist

I certify that the information in this survey report and enclosed exhibits fully and accurately present my work.

Amber S. Oneal
Senior Project Manager/Ecologist
(TE-148554-1)

Attachments: Exhibits 1, 2, 3, and 4
Appendix A – Site Photographs
Appendix B – Wildlife Compendium

cc: Iris Lee, City of Newport Beach, ILee@city.newport-beach.ca.us
Richard Beck, RBF Consulting, RBECK@rbf.com

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Regional Location

Exhibit 1

Buck Gully

N W E S

10 5 0 10 Miles

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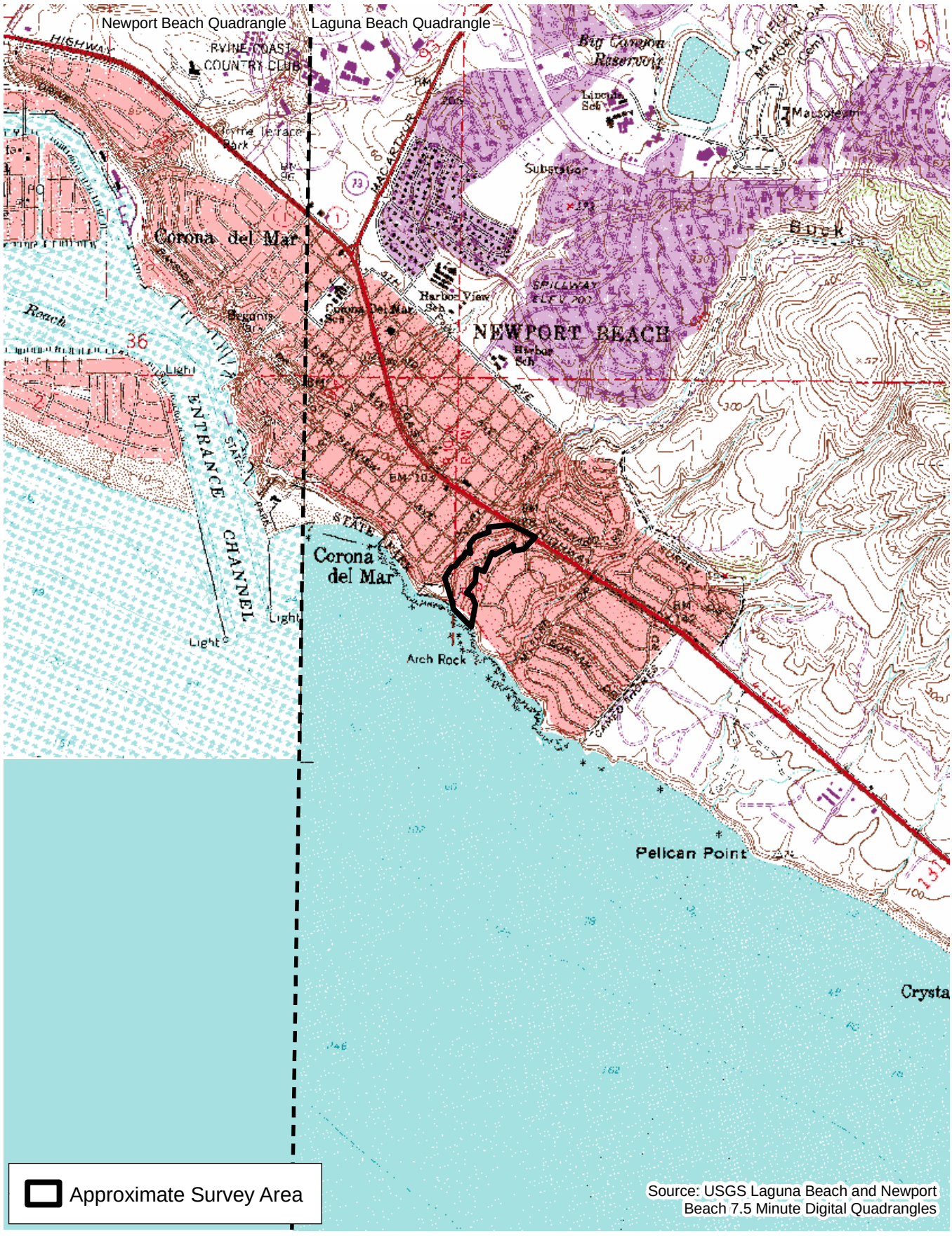

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Local Vicinity

Exhibit 2

Buck Gully

N
W E
S

2,000 1,000 0 2,000
Feet

BonTerra CONSULTING

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Project Site

Exhibit 3

Buck Gully

N
W E
S

400 200 0 400

Feet

BonTerra CONSULTING

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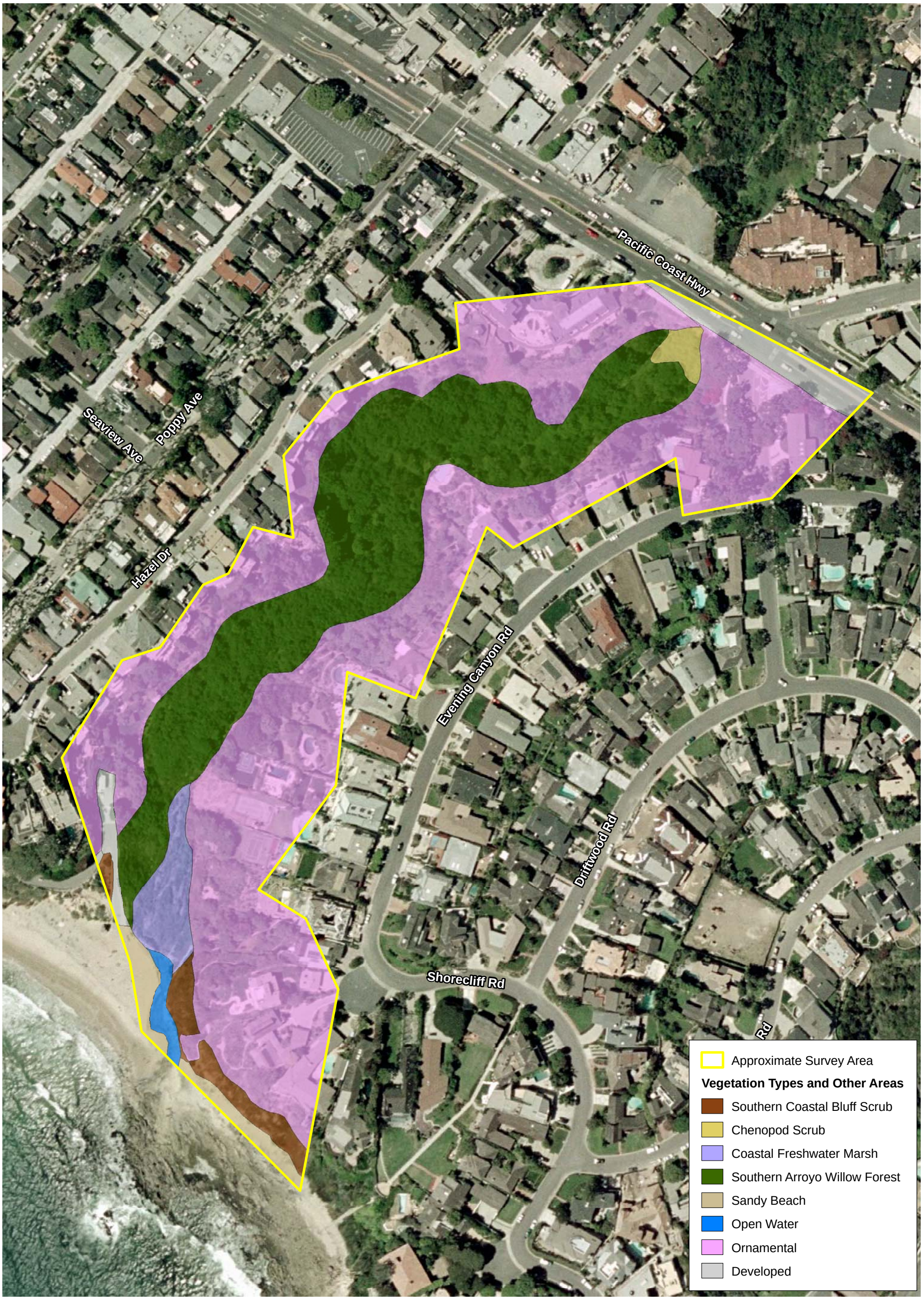

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Vegetation Types and Other Areas

Exhibit 4

Buck Gully

N W E S

150 75 0 150 Feet

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APPENDIX A

SITE PHOTOS

An overview of the southern arroyo willow forest from the upstream end (northwest portion) of the survey area facing downstream (south).

An overview of the coastal freshwater marsh and southern arroyo willow forest from the downstream end (southwest) of the survey area facing upstream (northeast).

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Site Photographs

Exhibit A-1

Buck Gully

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Representative view of the well-developed understory of the southern arroyo willow forest. Dominant understory species often included poison oak and California blackberry.

Another view of the well-developed understory dominated by poison oak and California blackberry.

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Site Photographs

Exhibit A-2

Buck Gully

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R:/Projects/RBF/J437/Graphics/LBV-WIFL/ExA2_sp2_090909.pdf

Buck Gully is a perennial stream that meanders through the survey area. Water ranges in depth from a few inches to small ponded areas that are several feet deep.

Adjacent private property extends into the gully along it's margins; ornamental species make up a component of the understory. In this photo, African daisy and artichoke thistle are visible in the foreground.

Site Photographs

Exhibit A-3

Buck Gully

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R:/Projects/RBF/J437/Graphics/LBV-WIFL/ExA3_sp3_090909.pdf

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APPENDIX B

WILDLIFE COMPENDIUM

WILDLIFE SPECIES OBSERVED DURING SPECIAL STATUS BIRD SPECIES SURVEYS IN BUCK GULLY APRIL–JULY 2009

Species
Amphibians
HYLIDAE - TREEFROGS
Pseudacris [Hyla] sp. treefrog
Reptiles
PHRYNOSOMATIDAE - ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS
Sceloporus occidentalis western fence lizard
Birds
ANATIDAE - WATERFOWL
Anas platyrhynchos mallard
PELECANIDAE - PELICANS
Pelecanus occidentalis brown pelican
PHALACROCORACIDAE - CORMORANTS
Phalacrocorax penicillatus Brandt's cormorant
Phalacrocorax auritus double-crested cormorant
ARDEIDAE - HERONS
Egretta thula snowy egret
Nycticorax nycticorax black-crowned night-heron
ACCIPITRIDAE - HAWKS
Pandion haliaetus osprey
HAEMATOPODIDAE - OYSTERCATCHERS
Haematopus bachmani black oystercatcher
SCOLOPACIDAE - SANDPIPERS & PHALAROPES
Tringa [*Catoptrophorus*] *semipalmata* willet
Numenius phaeopus whimbrel
Numenius americanus long-billed curlew
Arenaria interpres ruddy turnstone
Arenaria melanocephala black turnstone
Calidris mauri western sandpiper

WILDLIFE SPECIES OBSERVED DURING SPECIAL STATUS BIRD SPECIES SURVEYS IN BUCK GULLY APRIL–JULY 2009 (Continued)

Species
Birds (Cont.)
LARIDAE - GULLS & TERNS
Larus heermanni Heermann's gull
Larus delawarensis ring-billed gull
Larus occidentalis western gull
Hydroprogne caspia Caspian tern
Sterna forsteri Forster's tern
COLUMBIDAE - PIGEONS & DOVES
Zenaida macroura mourning dove
TROCHILIDAE - HUMMINGBIRDS
Calypte anna Anna's hummingbird
Selasphorus sasin Allen's hummingbird
PICIDAE - WOODPECKERS
Picoides nuttallii Nuttall's woodpecker
Picoides pubescens downy woodpecker
TYRANNIDAE - TYRANT FLYCATCHERS
Empidonax sp. Empid flycatcher
Empidonax difficilis Pacific-slope flycatcher
Sayornis nigricans black phoebe
Myiarchus cinerascens ash-throated flycatcher
VIREONIDAE - VIREOS
Vireo huttoni Hutton's vireo
Vireo gilvus warbling vireo
CORVIDAE - JAYS & CROWS
Corvus brachyrhynchos American crow
Corvus corax common raven
HIRUNDINIDAE - SWALLOWS
Stelgidopteryx serripennis northern rough-winged swallow

WILDLIFE SPECIES OBSERVED DURING SPECIAL STATUS BIRD SPECIES SURVEYS IN BUCK GULLY APRIL–JULY 2009 (Continued)

Species
Birds (Cont.)
Petrochelidon pyrrhonota cliff swallow
Hirundo rustica barn swallow
AEGITHALIDAE - BUSHTITS
Psaltriparus minimus bushtit
TROGLODYTIDAE - WRENS
Thryomanes bewickii Bewick's wren
Troglodytes aedon house wren
REGULIDAE - KINGLETS
Regulus calendula ruby-crowned kinglet
TURDIDAE - THRUSHES & ROBINS
Catharus ustulatus Swainson's thrush
TIMALIIDAE - WRENTITS
Chamaea fasciata wrentit
MIMIDAE - THRASHERS
Mimus polyglottos northern mockingbird
STURNIDAE - STARLINGS
Sturnus vulgaris European starling *
BOMBYCILLIDAE - WAXWINGS
Bombycilla cedrorum cedar waxwing
PARULIDAE - WARBLERS
Vermivora celata orange-crowned warbler
Vermivora ruficapilla Nashville warbler
Dendroica petechia yellow warbler
Dendroica coronata yellow-rumped warbler
Dendroica occidentalis hermit warbler
Geothlypis trichas common yellowthroat
Wilsonia pusilla Wilson's warbler

WILDLIFE SPECIES OBSERVED DURING SPECIAL STATUS BIRD SPECIES SURVEYS IN BUCK GULLY APRIL–JULY 2009 (Continued)

Species
Birds (Cont.)
THRAUPIDAE - TANAGERS
Piranga ludoviciana western tanager
EMBERIZIDAE - SPARROWS & JUNCOS
Pipilo maculatus spotted towhee
Pipilo crissalis California towhee
Melospiza melodia song sparrow
CARDINALIDAE - GROSBEAKS & BUNTINGS
Pheuticus melanocephalus black-headed grosbeak
ICTERIDAE - BLACKBIRDS
Agelaius phoeniceus red-winged blackbird
Molothrus ater brown-headed cowbird
Icterus cucullatus hooded oriole
Icterus bullockii Bullock's oriole
FRINGILLIDAE - FINCHES
Carpodacus mexicanus house finch
Carduelis psaltria lesser goldfinch
Carduelis tristis American goldfinch
Mammals
LEPORIDAE - HARES & RABBITS
Sylvilagus audubonii desert cottontail
SCIURIDAE - SQUIRRELS
Spermophilus beecheyi California ground squirrel
** introduced species*

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

June 11, 2009

Ms. Sandy Marquez
U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, California 92011

VIA EMAIL AND MAIL
sandy_marquez@fws.gov

Subject: Results of Coastal California Gnatcatcher Survey for the Buck Gully Project Site in Corona Del Mar, City of Newport Beach, Orange County, California

Dear Ms. Marquez:

This Letter Report presents the results of focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*) at the Buck Gully project site (hereafter referred to as the "project site"). The purpose of the surveys was to determine the presence or absence of the coastal California gnatcatcher on or immediately adjacent to the project site. Surveys were conducted by a Biologist holding the necessary Federal Endangered Species Act (ESA) survey permit, according to guidelines established by the U.S. Fish and Wildlife Service (USFWS).

Project Site

The project site is located in the Corona del Mar area within the City of Newport Beach (Exhibit 1). It is located on the U.S. Geological Survey's (USGS's) Newport 7.5-minute topographic quadrangle and ranges from sea level to 100 feet above mean sea level (msl) (Exhibit 2). Buck Gully is a natural gully that 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.

Vegetation types on the project site include southern coastal bluff scrub, chenopod scrub, coastal freshwater marsh, southern arroyo willow forest, sandy beach, open water, ornamental, and developed (Exhibit 4). Vegetation types surveyed for coastal California gnatcatcher included southern coastal bluff scrub, chenopod scrub, and portions of the riparian habitat types that included coyote brush (*Baccharis pilularis*) and California sagebrush (*Artemisia californica*) along their margins (i.e., coastal freshwater marsh, southern arroyo willow forest).

The southern coastal bluff scrub vegetation type occurs on the bluff adjacent to Little Corona Beach in the southern portion of the project site. Southern coastal bluff scrub is composed of a mix of seablite (*Suaeda* sp.), box thorn (*Lycium* sp.), coastal cholla (*Opuntia prolifera*), California buckwheat (*Eriogonum fasciculatum*), and bush sunflower (*Encelia californica*), with California sagebrush, 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 in this area. Chenopod scrub is composed of big saltbush (*Atriplex lentiformis*). Site photos are included in Appendix A.

Background

Recent taxonomic studies indicate that the California gnatcatcher consists of four subspecies, which extend from southwestern California to southern Baja California, Mexico (Atwood and Lerman 2006; Mellink and Rea 1994). The coastal California gnatcatcher, the northernmost gnatcatcher subspecies, is restricted to lowland areas from central Ventura County through Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties to the Baja California, Mexico border (Atwood and Lerman 2006; Mellink and Rea 1994). Formerly, the coastal California gnatcatcher was common from the San Fernando Valley, east along the base of the San Gabriel Mountains to Claremont (Atwood 1990). The coastal California gnatcatcher is now rare in the northern part of its range with a few sightings from Santa Clarita to Tujunga Wash, though a small population persists near Moorpark in Ventura County. The coastal California gnatcatcher has been recorded from sea level to approximately 3,000 feet above msl (USFWS 2003); however, greater than 90 percent of gnatcatcher records are from elevations below 820 feet msl along the coast (Atwood and Bolsinger 1992; MBA 1991) and below 1,800 feet above msl inland. The USFWS has recently estimated the population size of the coastal California gnatcatcher in Southern California to be about 3,000 pairs (Atwood and Bontrager 2001).

The coastal California gnatcatcher typically occurs within coastal and inland sage scrub vegetation types, which often occur in a patchy distribution pattern throughout the gnatcatcher's range. Coastal California gnatcatchers also use chaparral, grassland, and riparian habitats that are in proximity to sage scrub for dispersal and foraging (Atwood et al. 1998; Campbell et al. 1998; USFWS 2003). Availability of these non-sage scrub areas is essential during certain times of the year, particularly during drought conditions, or for dispersal, foraging, or nesting (USFWS 2003).

On March 25, 1993, the USFWS designated the coastal California gnatcatcher a Threatened species. A Special Rule was issued that would allow incidental take of the coastal California gnatcatcher under Section 9 of the FESA if the take is a result of activities conducted in accordance with the State's Natural Community Conservation Plan (NCCP) Act (USFWS 1993). The City of Newport Beach is a participant in the Central-Coastal Subregional NCCP/Habitat Conservation Plan (HCP); therefore if present, take of the coastal California gnatcatcher is covered in accordance with the NCCP/HCP Implementation Agreement with payment of a mitigation fee.

On December 19, 2007, the USFWS published a Final Rule that revises critical habitat and designates 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.

Coastal California gnatcatchers are known from several locations within the project vicinity including upper portions of Buck Gully (north of Pacific Coast Highway) and Crystal Cove State Park (Orange County 1996), San Diego Creek (BonTerra Consulting 2007), and Bonita Canyon Reservoir (CDFG 2009).

Survey Methodology

The USFWS's survey protocol for the coastal California gnatcatcher recommends three visits to all potentially occupied habitat areas within participating NCCP jurisdictions (USFWS 1997a, 1997b). Although surveys may be conducted year-round, the USFWS recommends conducting surveys in the gnatcatcher breeding season, which extends from March 15 to June 30. All visits must take place during the morning hours, and no more than 100 acres of suitable habitat may be surveyed per visit. Following the USFWS protocol for the species, BonTerra Consulting Senior Ecologist Amber Oneal (USFWS Permit #TE148554-1) conducted three surveys for the gnatcatcher on April 10, 20, and 30, 2009. Ms. Oneal also surveyed the project site for least Bell's vireo (*Vireo bellii pusillus*) on May 11, 21, and June 1 and 11, 2009, and would have noted any gnatcatchers if incidentally observed.

Ms. Oneal avoided weather conditions that were too cold (below 55 degrees Fahrenheit [°F]), too hot (above 95°F), or too windy (wind speed greater than 15 miles per hour) in order to meet the weather conditions under the USFWS survey protocol requirements for optimal gnatcatcher detection. Ms. Oneal conducted the surveys by slowly walking through all appropriate habitats while listening and watching for gnatcatcher activity, and by using a combination of taped recordings of gnatcatcher vocalizations and "pishing" sounds to elicit responses from any gnatcatchers present. The frequency of vocalization playback and "pishing" varied depending on conditions such as habitat patch size, topography in each area, and ambient noise conditions. All bird species detected during the survey were recorded, including notable observations of special status species or other birds (Appendix B).

Survey Results

No coastal California gnatcatchers were observed during the surveys. During the surveys, Ms. Oneal noted that much of the southern coastal bluff scrub is watered with overhead irrigation regularly, which may deter birds from nesting within the irrigated area. A complete list of wildlife species observed during the surveys is included in Appendix B.

Yellow warbler, a California Department of Fish and Game (CDFG) Species of Special Concern, was observed in the southern arroyo willow forest in April and May 2009, but it was not observed during the two June 2009 visits to date. A California Natural Diversity Database (CNDDB) form will not be submitted for this species unless the species is observed on one of the remaining least Bell's vireo/southwestern willow flycatcher survey visits and breeding is confirmed in the survey area. Otherwise, the individuals observed will be assumed to be migrants.

BonTerra Consulting has appreciated the opportunity to assist with this project. Please contact me at (714) 444-9199 if you have questions or comments.

Sincerely,

BONTERRA CONSULTING

Amber S. Oneal
Senior Project Manager/Ecologist

I certify that the information in this survey report and enclosed exhibits fully and accurately present my work.

Amber S Oneal

Amber S. Oneal
Senior Project Manager/Ecologist
(TE-148554-1)

Attachments: Exhibits 1, 2, 3, and 4
Appendix A – Site Photographs
Appendix B – Wildlife Compendium

cc: Iris Lee, City of Newport Beach, ILee@city.newport-beach.ca.us
Richard Beck, RBF Consulting, RBECK@rbf.com

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Regional Location

Exhibit 1

Buck Gully

N W E S

10 5 0 10 Miles

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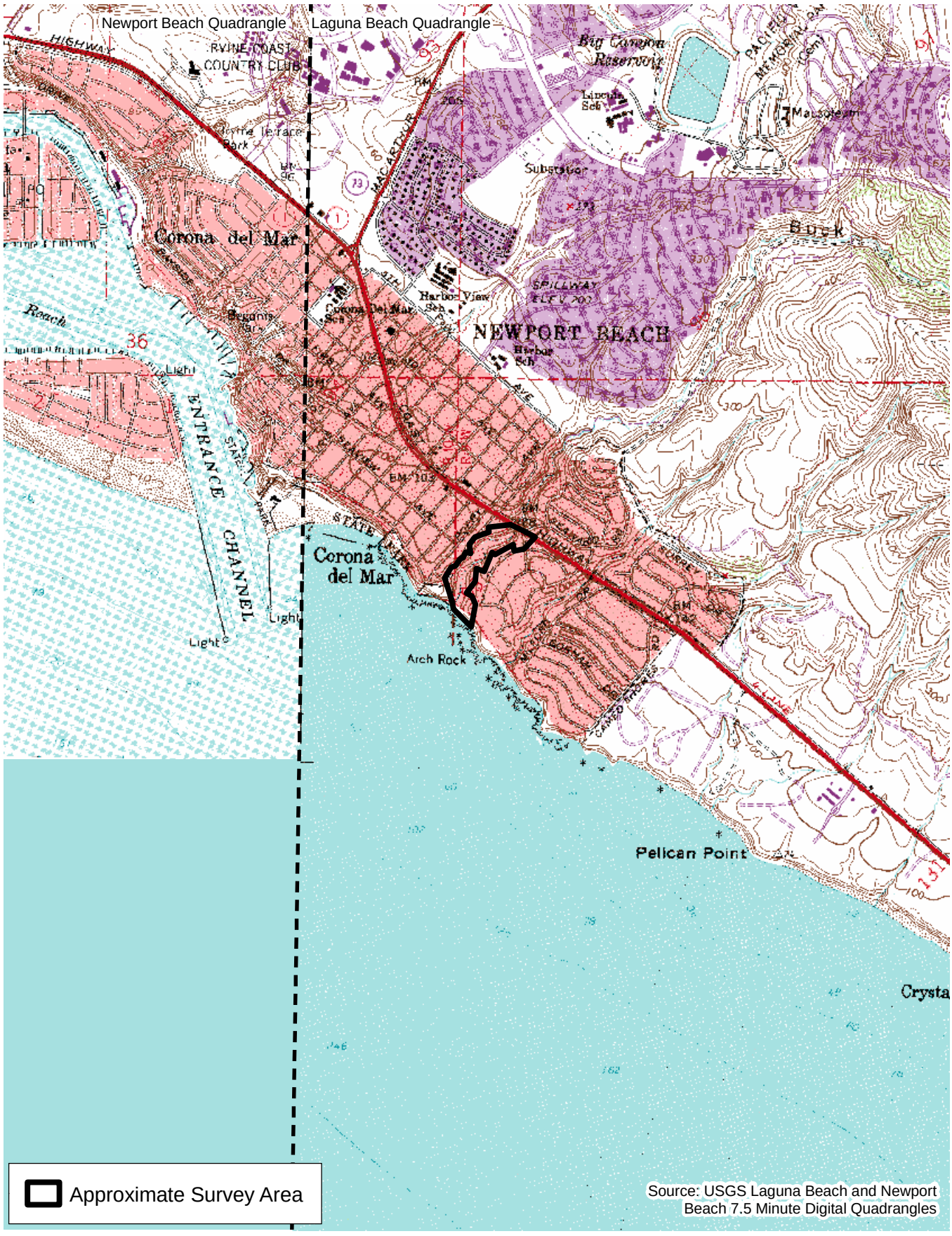

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Local Vicinity

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

BonTerra CONSULTING

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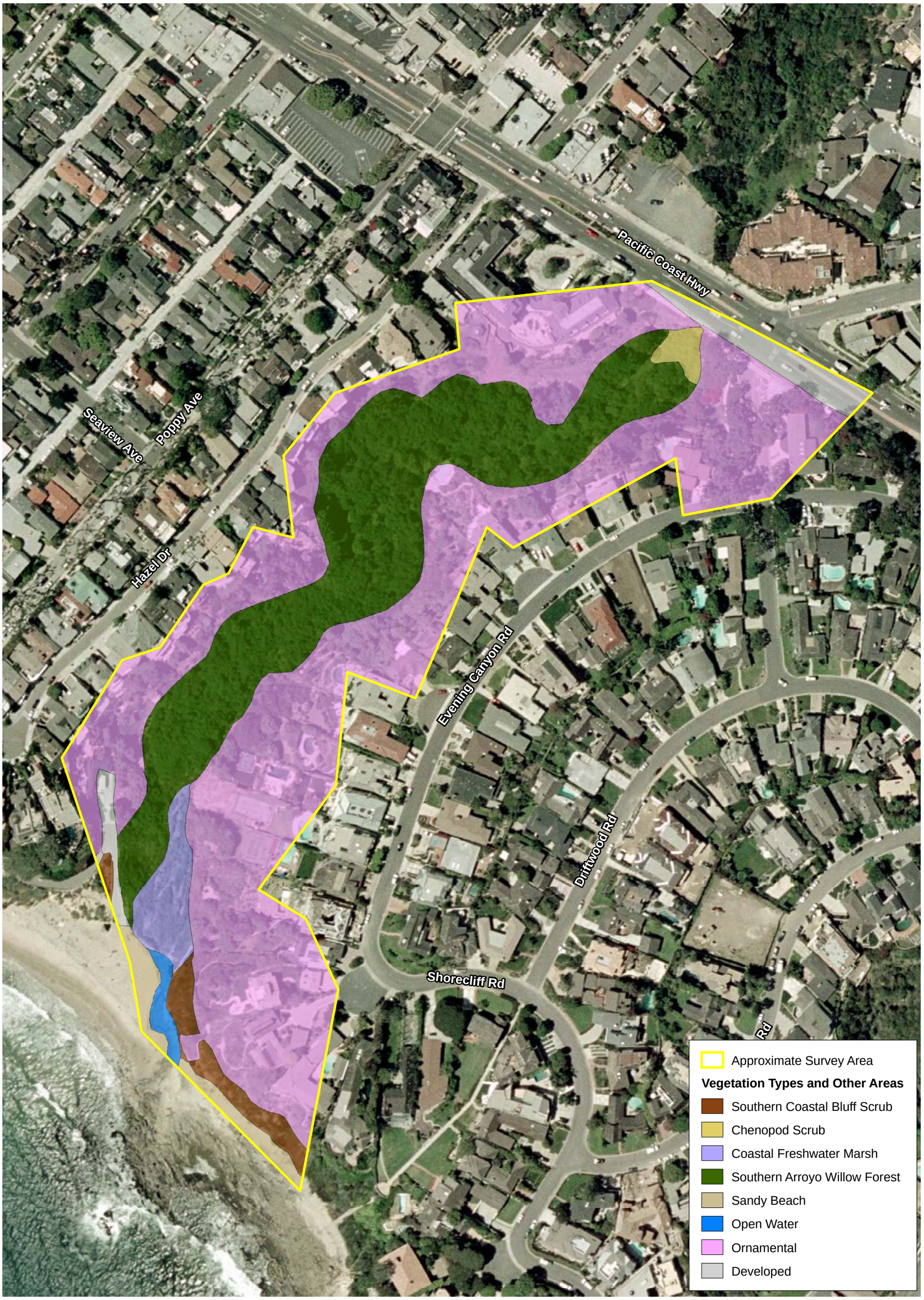

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Vegetation Types and Other Areas

Exhibit 4

Buck Gully

N W E S

150 75 0 150 Feet

BonTerra CONSULTING

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APPENDIX A

SITE PHOTOS

Overview of the southern coastal bluff scrub at the southern (coastal) end of the survey area.

Closer view of the southern coastal bluff scrub.

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Site Photographs

Exhibit A-1

Buck Gully

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R:/Projects/RBF/J437/Graphics/CAGN/ExA1_sp_060909.pdf

View of the irrigation of the southern coastal bluff scrub.

View of the chenopod scrub adjacent to Pacific Coast Highway at the northern end of the survey area.

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Site Photographs

Exhibit A-2

Buck Gully

BonTerra CONSULTING

R:/Projects/RBF/J437/Graphics/CAGN/ExA2_sp2_060909.pdf

View from the beach at the southern end of the survey area looking upstream (north) toward the gully. Coastal sage scrub species (e.g., coyote brush and California sagebrush) occur along the fringes of the freshwater marsh.

View from within the freshwater marsh looking west towards the walkway down to the beach showing small patch of coastal sage scrub species.

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Site Photographs — Exhibit A-3

Buck Gully

BonTerra CONSULTING

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APPENDIX B

WILDLIFE COMPENDIUM

WILDLIFE COMPENDIUM

Wildlife Species Observed During Special Status Bird Species Surveys in Buck Gully
April–June 2009[1]
Amphibians
HYLIDAE – TREEFROGS
Pseudacris [Hyla] sp. treefrog
Reptiles
PHRYNOSOMATIDAE – ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS
Sceloporus occidentalis western fence lizard
Birds
ANATIDAE – WATERFOWL
Anas platyrhynchos mallard
PELECANIDAE – PELICANS
Pelecanus occidentalis brown pelican
PHALACROCORACIDAE – CORMORANTS
Phalacrocorax penicillatus Brandt's cormorant
Phalacrocorax auritus double-crested cormorant
ARDEIDAE – HERONS
Egretta thula snowy egret
Nycticorax nycticorax black-crowned night-heron
ACCIPITRIDAE – HAWKS
Pandion haliaetus osprey
HAEMATOPODIDAE – OYSTERCATCHERS
Haematopus bachmani black oystercatcher
SCOLOPACIDAE – SANDPIPERS AND PHALAROPES
Tringa [*Catoptrophorus*] *semipalmata* willet
Numenius phaeopus whimbrel
Numenius americanus long-billed curlew
Arenaria interpres ruddy turnstone
Arenaria melanocephala black turnstone
Calidris mauri western sandpiper
LARIDAE – GULLS AND TERNS
Larus delawarensis ring-billed gull
Larus occidentalis western gull
Hydroprogne caspia Caspian tern
Sterna forsteri Forster's tern

WILDLIFE COMPENDIUM
(Continued)

Wildlife Species Observed During Special Status Bird Species Surveys in Buck Gully
COLUMBIDAE – PIGEONS AND DOVES
Zenaida macroura mourning dove
TROCHILIDAE – HUMMINGBIRDS
Calypte anna Anna's hummingbird
Selasphorus sasin Allen's hummingbird
PICIDAE – WOODPECKERS
Picoides nuttallii Nuttall's woodpecker
Picoides pubescens downy woodpecker
TYRANNIDAE – TYRANT FLYCATCHERS
Empidonax sp. Empid flycatcher
Empidonax difficilis Pacific-slope flycatcher
Sayornis nigricans black phoebe
Myiarchus cinerascens ash-throated flycatcher
VIREONIDAE – VIREOS
Vireo huttoni Hutton's vireo
Vireo gilvus warbling vireo
CORVIDAE – JAYS AND CROWS
Corvus brachyrhynchos American crow
Corvus corax common raven
HIRUNDINIDAE – SWALLOWS
Stelgidopteryx serripennis northern rough-winged swallow
Petrochelidon pyrrhonota cliff swallow
Hirundo rustica barn swallow
AEGITHALIDAE – BUSHTITS
Psaltriparus minimus bushtit
TROGLODYTIDAE – WRENS
Thryomanes bewickii Bewick's wren
Troglodytes aedon house wren
REGULIDAE – KINGLETS
Regulus calendula ruby-crowned kinglet
TURDIDAE – THRUSHES AND ROBINS
Catharus ustulatus Swainson's thrush
TIMALIIDAE – WRENTITS
Chamaea fasciata wrentit

WILDLIFE COMPENDIUM
(Continued)

Wildlife Species Observed During Special Status Bird Species Surveys in Buck Gully
MIMIDAE – THRASHERS
Mimus polyglottos northern mockingbird
STURNIDAE – STARLINGS
Sturnus vulgaris European starling*
BOMBYCILLIDAE – WAXWINGS
Bombycilla cedrorum cedar waxwing
PARULIDAE – WARBLERS
Vermivora celata orange-crowned warbler
Vermivora ruficapilla Nashville warbler
Dendroica petechia yellow warbler
Dendroica coronata yellow-rumped warbler
Dendroica occidentalis hermit warbler
Geothlypis trichas common yellowthroat
Wilsonia pusilla Wilson's warbler
THRAUPIDAE – TANAGERS
Piranga ludoviciana western tanager
EMBERIZIDAE – SPARROWS AND JUNCOS
Pipilo maculatus spotted towhee
Pipilo crissalis California towhee
Melospiza melodia song sparrow
CARDINALIDAE – GROSBEAKS AND BUNTINGS
Pheuticus melanocephalus black-headed grosbeak
ICTERIDAE – BLACKBIRDS
Agelaius phoeniceus red-winged blackbird
Molothrus ater brown-headed cowbird
Icterus cucullatus hooded oriole
Icterus bullockii Bullock's oriole
FRINGILLIDAE – FINCHES
Carpodacus mexicanus house finch
Carduelis psaltria lesser goldfinch
Carduelis tristis American goldfinch

WILDLIFE COMPENDIUM
(Continued)

Wildlife Species Observed During Special Status Bird Species Surveys in Buck Gully
SCIURIDAE – SQUIRRELS
Spermophilus beecheyi California ground squirrel
* introduced species [1] Includes all species observed to date (least Bell's vireo and southwestern willow flycatcher surveys are in progress)