Section 404 Wetland Delineation and Impacts Assessment for the Paraiso Springs Resort

MONTEREY COUNTY
CALIFORNIA

Prepared For:
Thompson Holdings, LLC
P.O. Box 2015
Horsham, PA 19044
Contact: John Thompson

Contact:
Geoff Smick
smick@wra-ca.com

Date:
February 2009
(Revised July 2016)

ENVIRONMENTAL CONSULTANTS

2169-G East Francisco Blvd., San Rafael, CA 94901 (415) 454-8868 tel (415) 454-0129 fax info@wra-ca.com www.wra-ca.com

This page intentionally blank.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ACRONYMS

CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
FAC	Facultative plant
FACU	Facultative upland plant
FACW	Facultative wetland plant
GPS	Global Positioning System
NGVD	National Geodetic Vertical Datum
NL	Not Listed
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
OBL	Obligate wetland plant
OHWM	Ordinary High Water Mark
PI	Prevalence Index
PRW	Relatively Permanent Water
RGL	Regulatory Guidance Letter
RWQCB	Regional Water Quality Control Board
SCS	Soil Conservation Service
SWANCC	Solid Waste Agency of Northern Cook County
SWRCB	State Water Resources Control Board
TNW	Traditional Navigable Waters
UPL	Upland plant
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WRA	WRA, Inc.

This page intentionally blank.

1.0 INTRODUCTION

The Paraiso Springs Resort (Study Area) is a hot spring resort located at 36.33° N and 121.37° W, approximately 30 miles south of Salinas, California and 5.5 miles west of Highway 101 (Figure 1). The Study Area is approximately 237 acres and is bounded by the Salinas Valley to the east and the Santa Lucia Mountains to the north, south and west. The owners propose to renovate the existing and antiquated resort in a modernization project.

In January 2009, WRA, Inc. (WRA) wetland biologists conducted a routine level wetland delineation within the Paraiso Springs Resort Study Area. The purpose of the wetland delineation was to describe the location and extent of waters, including wetlands, which may be considered jurisdictional waters of the U.S. by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act. The Corps verified the extent of jurisdictional waters during a site verification visit on April 7, 2009. This delineation report was updated in July of 2016 to reflect the jurisdictional determination made by the Corps. The updated report describes the extent of waters determined to be subject to Federal jurisdiction by the Corps under Section 404 of the Clean Water Act and potentially subject to State jurisdiction by the State Water Quality Resources Board (SWQRB) and Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act.

WRA also visited the Study Area on March 29, 2013 to assess potential impacts resulting from the proposed project. Potential impacts to jurisdictional wetlands, non-wetland waters and riparian trees are described, and proposed mitigation measures are provided to offset project-related impacts.

1.1 Summary

This report presents the results of a wetland delineation conducted by WRA at Paraiso Springs Resort in Monterey County, California. The purpose of the January 5-6, 2009 delineation was to assess the presence of wetlands and non-wetland waters subject to Federal and/or State jurisdiction under Section 404 of the Clean Water Act, Section 401 of the Clean Water Act and the Porter Cologne Act.

A total of 0.71 acre of wetlands and 8,771 linear feet of non-wetland waters that were determined to be jurisdictional under Section 404 of the Clean Water Act were delineated in the Study Area. These areas may also be considered State wetlands under Section 401 of the Clean Water Act and Porter Cologne Water Quality Act. The wetland areas were either riparian wetland, seasonal wetland, or freshwater marsh dominated by hydrophytic vegetation with FAC, FACW, and OBL classified plants. They also contained hydric soil indicators and wetland hydrology indicators. Additionally, some of the wetland areas are adjacent to tributaries of a navigable “waters of the U.S.” and therefore meet the definition of jurisdictional wetlands and non-wetland waters under Section 404 of the Clean Water Act.

2.0 REGULATORY BACKGROUND

2.1 Federal Jurisdiction

Section 404 of the Clean Water Act gives the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) regulatory and permitting authority regarding discharge of dredged or fill material into "navigable waters of the United States". Section 502(7) of the Clean Water Act defines waters as "waters of the United States, including territorial seas."

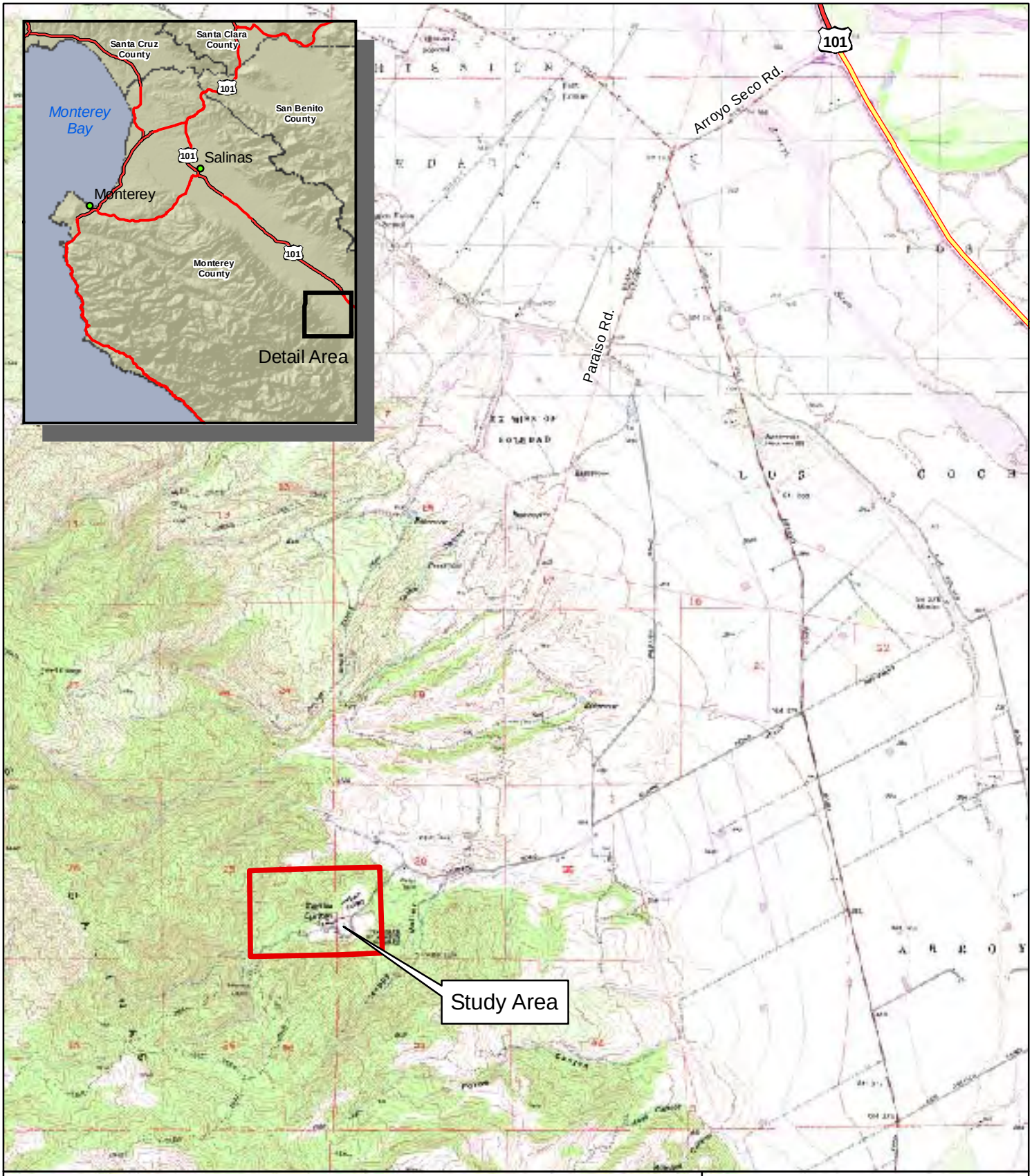


Figure 1. Study Area Location Map

Paraiso Springs Resort
Monterey County, California

ENVIRONMENTAL CONSULTANTS

Date: July 2008
Image Source: USGS Topo Quad
Map By: Derek Chan
Filepath: I:\ACAD2000\18107\GIS\ArcMap\Fig1_LocMap.mxd

Section 328 of Chapter 33 in the Code of Federal Regulations defines the term "waters of the U.S." as it applies to the jurisdictional limits of the authority of the Corps under the Clean Water Act. A summary of this definition of "waters of the U.S." in 33 CFG 328.3 includes (1) waters used for commerce; (2) interstate waters and wetlands; (3) "other waters" such as intrastate lakes, rivers, streams, and wetlands; (4) impoundments of waters; (5) tributaries to the above waters; (6) territorial seas; and (7) wetlands adjacent to waters. In the Corps Rivers and Harbors regulations (33 CFR Part 329.4), the term "navigable waters of the U.S." is defined to include all those waters that are subject to the ebb and flow of the tide, and/or presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

In 2006, the Supreme Court addressed the jurisdictional scope of Section 404 of the Clean Water Act in *Rapanos v. U.S.* and in *Carabell v. U.S*. The decision provides two analytical standards for determining whether water bodies that are not traditional navigable waters (TNWs), including wetlands adjacent to those non-TNWs, are subject to Clean Water Act jurisdiction: (1) if the water body is relatively permanent, or if the water body is a wetland that directly abuts (e.g., the wetland is not separated from the tributary by uplands, a berm, dike, or similar feature) a relatively permanent water (RPW), or (2) if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs.

When determining whether a water body qualifies as TNW, relevant considerations include:

- whether a Corps district has determined that the water body is a navigable waters of the U.S. pursuant to 33 CFR Section 329.14; or
- the water body qualifies as a navigable water of the U.S. under any of the tests set forth in 33 CFR Section 329; or
- a Federal court has determined that the water body is navigable-in-fact under Federal law for any purpose; or
- the water body is navigable-in-fact under the standards that have been used by the Federal courts.

As a result, the EPA and Corps will assert jurisdiction over the following categories of water bodies:

- TNWs;
- all wetlands adjacent to TNWs;
- non-navigable tributaries of TNWs that are relatively permanent (i.e, tributaries that typically flow year-round or have continuous flow at least seasonally); and
- wetlands that directly abut such tributaries.

In addition, the EPA and Corps will assert jurisdiction over every water body that is not an RPW if that water body is determined (on the basis of a fact-specific analysis) to a have a significant nexus with a TNW. The classes of water body that are subject to EPA and Corps jurisdiction only if such a significant nexus is demonstrated are:

- non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally;

- wetlands adjacent to such tributaries; and

- wetlands adjacent to but that do not directly abut a relatively permanent, non-navigable tributary.

The limits of Corps jurisdiction under Section 404 as given in 33 CFR Section 328.4 are as follows: (a) Territorial seas: 3 nautical miles in a seaward direction from the baseline; (b) Tidal waters of the U.S.: high tide line or to the limit of adjacent non-tidal waters; (c) Non-tidal waters of the U.S.: ordinary high water mark or to the limit of adjacent wetlands; (d) Wetlands: to the limit of the wetland.

2.2 State Jurisdiction

The SWRCB and RWQCB regulate activities in waters of the State which includes waters of the U.S. In general, "waters of the State" means any surface water (including wetlands), groundwater, and saline waters within the boundaries of the State of California.

The SWRCB and RWQCB have not established a formal wetland definition nor have they developed a wetland delineation protocol; however, these agencies generally adhere to the same delineation protocol set forth by the Corps (Environmental Laboratory 1987). While the Corps administers permitting programs that authorize impacts to waters of the U.S., any Corps Permit authorized for a proposed project would be incomplete unless it has been certified by the SWRCB or the RWQCB has issued a project-specific certification or waiver of water quality. Under Section 401 of the Clean Water Act, certification of certain Corps Nationwide Permits and all Individual Permits require a finding by the SWRCB that the activities permitted by the Corps will not violate water quality standards individually or cumulatively over the term of the issued permit (the term is typically five years). Water quality certification must be consistent with the requirements of the Federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State known as the California Porter-Cologne Water Quality Control Act. Any Nationwide Permits that currently do not have water quality certification, and all Individual Corps permits, would require a project-specific RWQCB certification or waiver of water quality.

The SWRCB and the RWQCB regulate discharges of harmful substances to surface waters including wetlands under the Federal Clean Water Act and California Porter-Cologne Water Quality Control Act. Discharges to dry land are also regulated under Porter-Cologne. For discharges to most wetlands, the RWQCB has the lead permitting role and decides which regulatory instrument to use.

2.3 County Jurisdiction

The Monterey County Code, section 21, Zoning, defines areas such as wetland and riparian areas and sensitive habitats. These areas, defined in section 3.5, were surveyed for in the Study Area.

3.0 METHODS

The methods used in this study to delineate wetlands and non-wetland waters are based on the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Corps 2008). The routine method for wetland delineation described in the Corps Manual (1987) was used to identify areas subject to Corps Section 404 jurisdiction within the Paraiso Springs Resort.

Prior to conducting field studies, available reference materials were reviewed, including the Soil Survey of Monterey County, California (USDA 1978), the Paraiso Springs and Sycamore Flat USGS 7.5' quadrangles, and available aerial photographs of the site. A focused evaluation of indicators of wetlands and non-wetland waters was performed in the Paraiso Springs Resort during a routine level wetland delineation performed during the site visits in January 2009. A general description of the Paraiso Springs Resort, including plant communities present, topology and land use was also generated during the delineation visits. The methods for evaluating the presence of wetlands and non-wetland waters employed during each site visit are described in detail below.

3.1 Areas Meeting Wetlands Criteria

The Corps has defined the term "wetlands" as follows:

> *Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*
>
> (33 CFR 328.3)

The three parameters listed in the Corps Manual that are used to determine the presence of wetlands are: (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. According to the Corps Manual:

> *"....[E]vidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland delineation."*

Data on vegetation, hydrology, and soils collected at sample points during the delineation site visit are reported on Arid West Region Corps data forms included in Appendix A. Once an area was determined to be a jurisdictional wetland, its boundaries were delineated using sub-meter accuracy GPS equipment and mapped on a topographic map. The areas of jurisdictional wetlands were measured digitally using ArcGIS software. Indicators described in the Corps Manual that were used to make wetland determinations at each sample point in the Paraiso Springs Resort are summarized below.

Vegetation

Plant species identified at sample points within the Paraiso Springs Resort were assigned a wetland status according to the U.S. Fish and Wildlife Service list of plant species that occur in wetlands (Reed 1988). This wetland classification system is based on the expected frequency of occurrence in wetlands as follows:

OBL	Always found in wetlands	>99% frequency
FACW(±)	Usually found in wetlands	67-99%
FAC	Equal in wetland or non-wetlands	34-66%
FACU	Usually found in non-wetlands	1-33%
NL	Not listed (upland)	<1%

Plants with OBL, FACW, and FAC classifications are classified as hydrophytic vegetation in the *Corps Manual* (1987) methodology. When greater than 50 percent of the dominant plant species have an indicator status of OBL, FACW, and/or FAC, the hydrophytic vegetation criterion is met. Dominant herbaceous plant species are those having more than 20 percent relative areal cover.

Soils

The National Resource Conservation Service (NRCS) manual *Field Indicators of Hydric Soils in the United States* (USDA 2006) was used as a guide for determining hydric soils in the Paraiso Springs Resort. The NRCS defines a hydric soil as:

> *A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.*
>
> Federal Register July 13, 1994, US Department of Agriculture, Natural Resource Conservation Service.

Soils formed over long periods of time under wetland (anaerobic) conditions often possess characteristics that indicate they meet the definition of hydric soils. Hydric soils generally have a characteristic low chroma matrix color, designated 0, 1, or 2, used to identify them as hydric. Chroma designations are determined by comparing a soil sample with a standard Munsell soil color chart (GretagMacbeth 2000). Soils with a chroma of 0 or 1 are considered hydric; soils with a chroma of 2 must also have mottles to be considered hydric. Soil profiles at each sample point in the Paraiso Springs Resort were described to include horizon depths, color, redoximorphic features, and texture to determine if the soils satisfy the Corps criteria for hydric soils.

Hydrology

Wetland hydrology is a term which encompasses hydrologic characteristics of areas that are periodically inundated or saturated to the surface at some time during the growing season. Recorded data can be used when available to determine wetland hydrology. In areas of California with a 365 day growing season, recorded data which shows inundation or saturation to the surface for a minimum of 18 days is considered evidence of wetland hydrology.

When studies are conducted at a time of year when surface water, ground water, or saturated soils can not be observed, evidence of wetland hydrology is based on observation of the indirect hydrologic indicators described in the 1987 *Corps Manual* and *Arid West Regional Supplement*. Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, surface sediment deposits, oxidized rhizospheres and drift lines, or indirect indicators (secondary indicators), such as a positive fac-neutral test. If indirect or secondary indicators are used, at least two secondary indicators must be present to conclude that an area has wetland hydrology. Depressions and topographic low areas were examined for these hydrological indicators.

3.2 Areas Meeting Non-wetland Waters Criteria

The Paraiso Springs Resort was also evaluated for the presence of non-wetland waters of the U.S. Non-wetland waters subject to Corps jurisdiction include lakes, rivers, and streams. Corps jurisdiction of non-wetland waters in non-tidal areas extends to the ordinary high water mark (OHW), defined as:

> *The term "ordinary high water mark" means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the characteristics of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*
>
> Federal Register Vol. 51, No. 219, Part 328.3 (d). November 13, 1986.

Identification of the ordinary high water mark followed the Corps Regulatory Guidance Letter No. 05-05, Ordinary High Water Mark Identification (Corps 2005).

Non-wetland waters are identified in the field by the presence of a defined river or stream bed, a bank, and evidence of the flow of water, or by the absence of emergent vegetation in ponds or lakes. Unvegetated non-wetland waters of the U.S. that were found within the Paraiso Springs Resort were identified by the presence of an Ordinary High Water Mark and mapped in the field and using GIS. These features are described in the Results Section 5.1.2 of this report.

3.3 Areas Excluded from Federal Jurisdiction

Some areas that meet the technical criteria for wetlands or waters may not be jurisdictional under the Clean Water Act. Included in this category are some man-induced wetlands, which are areas that have developed at least some characteristics of naturally occurring wetlands due to either intentional or incidental human activities. Examples of man-induced wetlands include, but are not limited to, irrigated wetlands, impoundments, or drainage ditches excavated in uplands, wetlands resulting from filling of formerly deep water habitats, dredged material disposal areas, and wetlands resulting from stream channel realignment.

Section 328.3 of the Federal Code of Regulations defines "waters of the U.S." to exclude "[w]aste treatment systems, including treatment ponds or lagoons designed to meet the requirements of Clean Water Act." Section 402(p) of the Clean Water Act, as amended in 1987, stipulates that point source discharges of pollutants associated with industrial stormwater that may contact industrial materials and/or activities must be permitted, through National Pollution Discharge Elimination System (NPDES) permits, in order to meet the requirements of the Clean Water Act. Therefore, ditches, canals, or ponds that comprise a NPDES permitted industrial stormwater management system engineered to reduce the potential for discharges of pollutants to navigable waters are excluded from Corps jurisdiction.

In addition, some isolated wetlands and waters may also be considered outside of Corps jurisdiction as a result of the Supreme Court's decision in *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers* (531 U.S. 159 (2001)). Isolated wetlands and waters are those areas that do not have a surface or groundwater connection to, and are not adjacent to a waters of the U.S., and do not otherwise exhibit an interstate commerce connection.

3.4 State Jurisdiction

Unlike Federal regulations, dredging, filling, or excavation within "isolated" wetlands and non-wetland waters constitutes a discharge to waters of the State, and prospective dischargers are required to submit a report of waste discharge to the RWQCB to comply with the requirements of the California Porter-Cologne Water Quality Control Act (SWRCB 2004). The wetlands delineation method outlined by the Corps was utilized to map wetlands subject to State jurisdiction. Some areas that meet the technical criteria for wetlands may also be exempt from State jurisdiction due to the lack of normal circumstances (i.e., atypical situations). Included in this category are some man-induced wetlands created as a result of irrigation activities.

3.5 County Jurisdiction

The Monterey County Code defines various habitats in the Zoning section (Chapter 21) as follows:

21.06.440 Environmentally sensitive habitat. “Environmentally sensitive habitat” means an area known or believed, based on substantial evidence, to contain rare or endangered species.

21.06.970 Riparian habitat. “Riparian habitat” means a natural plant community dependent upon a water body or water course.

21.06.980 Riparian woodland. “Riparian woodland” means a plant community with lush growths of trees and shrubs, supported by wet conditions along seasonally and permanently flowing fresh water streams and rivers.

21.06.1350 Wetlands. “Wetlands” means the area and the plant communities that include fresh and salt water marshes, generally found in areas of shallow, standing or sluggishly moving water.

4.0 PARAISO SPRINGS RESORT DESCRIPTION AND BACKGROUND DATA

The Study Area is approximately 237 acres and is surrounded by undeveloped land. It is located in a valley bordered by steep slopes to the north, west and south. The following sections provide detailed descriptions of site conditions.

4.1 Vegetation

The Paraiso Springs Resort is composed primarily of nine plant communities: (1) annual grassland, (2) sage scrub, (3) landscaped/developed (4) coyote brush scrub, (5) oak woodland, (6) riparian woodland, (7) willow stand, (8) bay forest and (9) wetland. Plant communities were classified based on existing descriptions developed by The Manual of California Vegetation (Sawyer and Keeler-Wolf 1995) and/or Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986). In some cases it was necessary to identify communities that did not match the existing community descriptions. All of the plant communities identified within the Paraiso Springs Resort are discussed below:

Annual Grassland

The annual grassland community is located in open areas on the valley floor of the Paraiso Springs Resort. It is dominated by non-native grasses such as ripgut brome (*Bromus diandrus* (NL)), Italian rye grass (*Lolium multiflorum* (FAC)), and barley (*Hordeum murinum* (NI)). This series is described by Sawyer and Keeler Wolf (1995) as the California annual grassland series.

Coyote Brush Scrub

The dominant plant in this shrubby community is coyote brush (*Baccharis pilularis*, (NL)) and the understory is dominated by non-native grasses and forbs. This community is described by Sawyer and Keeler-Wolf (1995) as the coyote brush series. This community is present in the far west and southeast portions of Paraiso Springs Resort.

Oak Woodland

The oak woodland community is present within the Paraiso Springs Resort. Three species of oak are found within the oak woodland community: blue oak (*Quercus douglasii* (NL)), California scrub oak (*Quercus berberidifolia* (NL)), and coast live oak (*Quercus agrifolia* (NL)). In many of the oak woodland areas, coast live oaks are dominant, which corresponds to the coast live oak series described by Sawyer and Keeler-Wolf (1995). In some of the more south facing and steeper oak woodlands blue oaks are dominant, this is described as the blue oak series.

Sage Scrub

The western and northern portion of the Study Area is dominated by sage scrub habitat. This community is dominated by California sage, black sage, and sticky monkeyflower. Associated understory plants include poison oak (*Toxicodendron diversilobum* (NL)), toyon (*Heteromeles arbutifolia* (NL)) and chamise (*Adenostoma fasciculatum* (NL)). Such a plant community is described by Sawyer and Keeler-Wolf (1995) as the California sagebrush-black sage series.

Willow Stands

Non-wetland and non-riparian isolated willow patches are found in the eastern portion of the Study Area. The woodland contains smaller patches of riparian vegetation dominated by arroyo

willow (*Salix lasiolepis*), California blackberry (*Rubus ursinus*) and poison oak. Sawyer and Keeler-Wolf (1995) describe this community as the mixed willow series.

Wetlands

The wetland plant communities observed within the Paraiso Springs Resort were divided into three subcategories: riparian wetland, seasonal wetland, and freshwater marsh.

Riparian Wetland

The riparian wetland within the Paraiso Springs Resort is located along a topographically defined linear depression. Dominant plant species observed in this perennial wetland plant community include arroyo willow (*Salix lasiolepis*, FACW), California blackberry (*Rubus ursinus*, FACW), California wild rose (*Rosa californica*, FAC), and Mexican fan palm (*Washingtonia robusta*, NL). The lower fringe of the wetland was dominated by herbaceous species including Bermuda grass (*Cynodon dactylon, FAC)* and spreading rush (*Juncus patens*, FAC). The boundary of this wetland community was determined by the extent of areas meeting the hydrology criteria of the Corps wetland definition.

Seasonal Wetland

The seasonal wetlands in the Study Area are concentrated in the central eastern portion of the Resort and seem to be correlated with a higher water table than in surrounding areas. They may be considered of low quality as they are dominated by the invasive Bermuda grass (FAC) and occur on the Resort's lawns which are regularly mowed.

Freshwater Marsh

The coastal and valley freshwater marshes within the Study Area are associated with perennial ponds or seeps scattered throughout the eastern portion of the Paraiso Springs Resort. These communities contain standing water or high water tables sufficient to support obligate wetland plants such as broad-leaved cattail (*Typha latifolia*, OBL) and California tule (*Scirpus californicus*, OBL). Other species observed included common rush (*Juncus effuses*, OBL) and mule fat (*Baccharis salicifolia*, FACW).

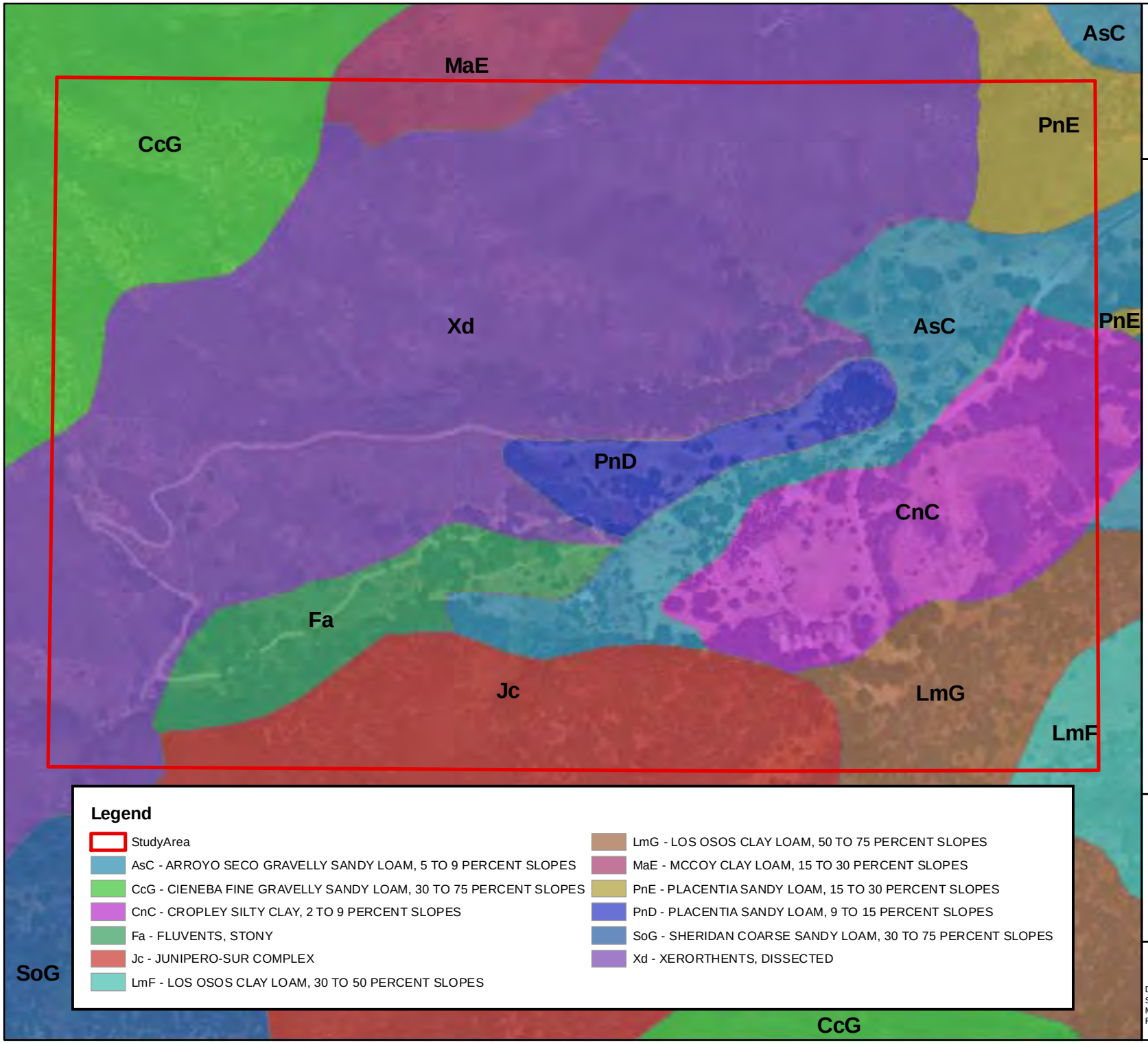
A complete list of plant species observed in and within the vicinity of the onsite wetlands is included as Appendix B.

4.2 Soils

The Soil Survey of Monterey County, California (USDA 1978) indicates that the Study Area has 11 native soil types (Figure 2). The hydric soil types within the Study Area include: Arroyo Seco gravelly sandy loam, 5-9 percent slopes; and Fluvents, stony. These soil types are further discussed below.

Arroyo Seco gravelly sandy loam, 5 to 9 percent slopes

The Arroyo Seco gravelly sandy loam series consists of deep well-drained alluvium derived from igneous rock. These soils lie on alluvial fans and have 5 to 9 percent slopes. Typical profile for this soil is grayish brown gravelly sandy loam from 0 to 29 inches, brown gravelly sandy loam from 29-42 inches, and yellowish brown very gravelly coarse sandy loam from 42-60 inches.



wra
ENVIRONMENTAL CONSULTANTS
2169-G East Francisco Blvd.
San Rafael, CA 94901
(415) 454-8868 Phone
(415) 454-0129 Fax

Paraiso Springs Resort

Monterey County, California

Figure 2

Study Area Soils Map

This map is representational only, and not meant for use in detailed design.

N
W E
S

0 250 500
Feet

Date: January 2009
Source: NAIP, 2005; SSURGO
Map By: Derek Chan
Filepath: L:\Acad 2000 Files\18000\18107\gis\ArcMap\Fig2_Soils_20090121.mxd

This soil typically harbors annual grasses and forbs with scattered oaks when uncultivated but is used for growing vegetables, field and forage crops, deciduous orchards, vineyards and pasture.

Cieneba fine gravelly sandy loam, 30-75 percent slopes

The Cieneba fine gravely sandy loam series is a somewhat excessively drained sandy and gravelly residuum derived from igneous and metamorphic rock. A representative profile for this series consists of pale brown gravelly loam from 0 to 10 inches, and a reddish yellow and brown weathered granitic material from 10 to 30 inches. This soil is used for wildlife, recreation and incidental grazing.

Cropley silty clay, 2-9 percent slopes

Cropley silty clay is deep, well drained soil on alluvial fans and terraces formed in alluvium derived from sedimentary rock. A representative profile for the series consists of very dark grey and black clay from 0 to 36 inches, and dark grayish brown clay 36-60 inches. This soil is used for irrigated row crops, apricots, prunes, and dry pasture.

Fluvents, stony

Fluvents soil consists of deep somewhat excessively drained. These soils lie in floodplains and consist of stratified cobbly sand to sandy loam.

Junipero-Sur Complex

The Junipero-Sur Complex is a well drained coarse-loamy residuum derived from metamorphic and igneous rock. A representative soil profile for this soil consists of dark grayish brown sandy loam from 0 to 15 inches, a layer of brown gravelly sandy loam from 15 to 30 inches, and yellowish brown quartzmica schist from 30 to 40 inches. This soil is used for recreation and as wildlife habitat.

Los Osos clay loam, 30 to 50 percent slopes

Los Osos clay loam is a well drained fine-loamy residuum weathered from metamorphic and sedimentary rock. A typical profile for this series consists of brown loam from 0 to 14 inches, yellowish brown clay from 14 to 24 inches, light yellowish brown clay loam from 24 to 32 inches, pale yellow sandy loam from 32 to 39 inches and yellowish brown sandstone from 39 to 43 inches. This soil is used mostly for range.

Los Osos clay loam, 50 to 75 percent slopes

This soil series description and profile is the same as for Los Osos clay loam, 30 to 50 percent slopes described above but is found on steeper slopes.

McCoy clay loam, 15 to 30 percent slopes

McCoy clay loam is a well drained fine-loamy residuum weathered from metamorphic and igneous rock. The typical McCoy series profile consists of dark brown loam from 0 to 2 inches underlain by dark brown clay loam from 2 to 4 inches, a dark brown clay loam layer from 4 to 22 inches, dark yellowish brown clay loam from 22 to 27 inches and weathered granodiorite from 27 to 37 inches. This soil is used mostly for range.

Placentia sandy loam, 9-15 percent slopes

The Placentia sandy loam series are deep well drained soils on stream terraces formed in alluvium derived from igneous and metamorphic rock. A representative profile for the series consists of brown sandy loam from 0 to 13 inches, dark reddish brown clay from 13 to 29 inches, reddish brown heavy clay loam from 29 to 36 inches, a strong brown sandy clay loam from 36 to 58 inches and a strong brown gravelly sandy loam from 58 to 60 inches. This soil is used for citrus, truck crops, small grain, hay and forage.

Placentia sandy loam, 15-30 percent slopes

This series description and profile is the same as Placentia sandy loam, 9-15 percent slopes but is located on steeper slopes.

Xerorthents, dissected

The Xerorthents series are well drained mixed unconsolidated alluvium on alluvial fans and terraces. The soil is typically consistent clay loam throughout its profile.

4.3 Hydrology

The Paraiso Springs 1984 and Sycamore Flat 1995 USGS 7.5 minute quadrangles indicate that there is one watercourse located within the Paraiso Springs Resort. The watercourse flows from west to east in the center of the valley and bisects the Paraiso Springs Resort.

The drainage originates west of the Paraiso Springs Resort and drains the slopes and valleys located above the resort. This drainage flows east through the valley into an agricultural drainage channel and then into a roadside ditch along Arroyo Seco Road. This roadside ditch crosses through several culverts and agricultural drainage channels to its confluence with the Arroyo Seco River approximately 6 miles northeast of the resort. In addition to this onsite drainage, several additional drainages were mapped north of the project area. They are smaller in size than the onsite drainage channel, and appear to join the onsite channel east of the project area.

The Paraiso Springs Resort contains a wetland complex comprised of freshwater marshes, riparian wetlands, and seasonal wetlands. The majority of these features are isolated features associated with a high water table. The freshwater marshes and riparian wetland appear to have perennial to semi-perennial hydrology due to a high water table.

5.0 RESULTS

Complete Arid West Region Corps data forms are provided in Appendix A. A composite list of plant species observed in the vicinity of the onsite wetlands is included as Appendix B and representative photographs of onsite aquatic habitat types are presented in Appendix C. The map depicting the jurisdictional wetlands and non-wetland waters within the Paraiso Springs Resort is depicted in Figure 3 and more precisely described in Table 1. Within the Study Area there were eight wetland areas verified by the Corps totaling 0.71 acre, as well as an additional 0.40 acre (8,771 linear feet) of jurisdictional drainages.

Table 1. Summary of Wetlands and Waters within the Study Area

Habitat Type	Size (Acres [Linear Feet])	"Potentially Isolated" Area (Acres)	Jurisdictional Area
			Waters of the U.S. (Acres [Linear Feet])
Wetlands (0.71 acre)			
Seasonal Wetlands	0.06 acre	0.0	0.06 acre
Riparian Wetlands	0.14 acre	0.0	0.14 acre
Freshwater Marsh	0.51 acre	0.0	0.51 acre
Non-wetland Waters (0.40 acre [8,771 linear feet])			
Non-wetland Waters	0.38 acre [8,542 linear feet]	0	0.38 acre [8,542 linear feet]
Non-wetland Waters (culverted)	0.02 acre [229 linear feet]	0	0.02 acre [229 linear feet]
TOTAL	**1.11 [8,771 linear feet]**	**0.0**	**1.11 [8,771 linear feet]**

Legend

- Study Area - 237 acres
- Section 404 & 401 Jurisdictional Wetlands - 0.71 acres
- Section 404 & 401 Jurisdictional Waters - 8,542 linear ft.
- Section 404 & 401 Jurisdictional Waters (culverted) - 229 linear ft.
- Sample Point
- Culvert

Section 404 & 401 Jurisdictional Wetlands

Wetland ID	Acres	Type
W1	0.02	Seasonal Wetland
W2	0.02	Freshwater Marsh
W3	0.04	Seasonal Wetland
W4	0.14	Riparian Wetland
W5	0.28	Freshwater Marsh
W6	0.08	Freshwater Marsh
W7	0.02	Freshwater Marsh
W8	0.10	Freshwater Marsh
Total	**0.71**	

Section 404 & 401 Jurisdictional Waters

Water ID	Linear ft.	Width (ft.)	Acres
T1	2372	3	0.16
T1 (culverted)	229	3	0.02
T2	1611	2	0.07
T3	245	2	0.01
T4	255	1	0.01
T5	1516	2	0.07
T6	1442	1	0.03
T7	1101	1	0.03
Total	**8771**		**0.4**

wra
ENVIRONMENTAL CONSULTANTS
2169-G East Francisco Blvd.
San Rafael, CA 94901
(415) 454-8868 Phone
(415) 454-0129 Fax

Paraiso Springs Resort

Monterey County, California

Figure 3

Wetland Delineation Map

This map is representational only, and not meant for use in detailed design.

Original size: 24" x 36"

N
W E
S

0 75 150 300 450 600
Feet

SCALE: 1:1800

Date: April 2009
Image Source: NAIP, 2005
Map By: Derek Chan
Filepath: L:\Acad 2000 Files\18000\18107\gis\ArcMap\Fig3_Delin_20090416.mxd

This page intentionally blank.

5.1 Wetlands and Waters

5.1.1 Wetlands

Most of the wetlands within the Paraiso Springs Resort are located on slight slopes where groundwater is seeping through to the surface. Other wetlands were located within ponds or depressions and vegetated by freshwater marsh species. The wetlands within the Paraiso Springs Resort were classified as seasonal wetlands, freshwater marshes, riparian wetlands and non-wetland waters. A routine level wetland delineation was conducted within the Paraiso Springs Resort on January 5-6, 2009. The results were recorded on Arid West data sheets which are presented in Appendix A. Wetland and non-wetland waters areas are described in the following sections and shown on Figure 3.

Riparian Wetlands

The wetland classified as riparian wetland was located in a linear depression and receives both groundwater inputs and surface water flows. This area contained primary hydrology indicators during the delineation site visit including saturated soils and surface inundation. Dominant plant species observed in the riparian wetland include arroyo willow (FACW), California blackberry (FACW), California wild rose (FAC), and Mexican fan palm (NL). The lower fringe of the wetland was dominated by herbaceous species including Bermuda grass (FAC) and spreading rush (FAC). The boundary of this wetland community was determined by the extent of wetland hydrology.

Seasonal Wetlands

Most of the seasonal wetlands in the Study Area were not saturated or ponded during the site visit but they were dominated by facultative wetland species such as Bermuda grass (FAC) with a lesser component of common spreading rush (FAC). Soils in areas determined to be seasonal wetlands were dark in color (10YR 3/2 or 2/1) with at least five percent mottles but sometimes ranging upwards of 20 percent. Oxidized rhizospheres were also present. The boundary of these features was based on the presence or absence of redoximorphic features in the soil.

Freshwater Marsh Wetlands

Freshwater marsh wetlands were identified as wetlands that have one or more dominant plant species that are emergent wetland species and exhibited primary hydrology indicators such as inundation/soil saturation in the upper 12 inches of the soil profile, or drainage patterns within the wetland. This indicates that these areas remain saturated for longer periods than the seasonal wetlands within the Study Area.

Representative dominant hydrophytic plant species (those with at least 20 percent cover) in the sampled freshwater marsh wetlands included wetland species such as common rush (*OBL*), bullrush (*OBL*), sedge *(FAC or greater*), and narrow leaved cattail *(OBL).*

Hydric soil indicators in the sampled wetland swales consisted of directly observed features. Soils in these areas were black and saturated or had redoximorphic features indicting their hydric nature.

5.1.2 Non-wetland Waters of the U.S.

The “blue line” drainage that flows through the Paraiso Springs Resort is characterized by a defined bed and bank with evidence of intermittent flows. The drainage is piped through culverts at several locations throughout its length. Other drainages in the Study Area are ephemeral. There are 8,542 linear feet of dayldaylighted drainage within the Study Area. Additionally, the main drainage which flows through the Paraiso Springs Resort flows through three culverts, the largest of which contains 229 total feet of culverted drainage that is considered a “waters of the U.S.”. The two smaller culverts are each approximately 23 linear feet in length and carry waters under access roads.

5.2 Areas Meeting County Zoning Definitions

Multiple habitats in the Study Area met the zoning definitions in the Monterey County Code, Section 21, including wetlands, riparian habitat, and riparian woodland.

The freshwater marsh wetlands described above met the definition of “wetlands” in the Monterey County Code. These include features W2, W5, W6, W7, and W8 in Figure 3, Wetland Delineation Map in this report.

Feature W4 meets the county’s definition of Riparian Habitat since it is a natural community dependent on the high water table in the vicinity.

The blue-line stream that flows through the Study Area supports lush growth of trees supported by wet conditions along the seasonal drainage in its lower half. Specifically this habitat was observed from where the drainage emerges from the large underground culvert to the eastern edge of the property. In this area, the riparian habitat is dominated by an overstory of willows with California blackberry, snowberry, and poison oak dominating the understory. Oak trees are the predominant tree above the top of bank in this area. Due to the steepness of the drainage, this habitat extends an average of 10 feet from either edge of the watercourse, and up to 100 feet in some areas. Upstream of the large culvert, the drainage is ephemeral with infrequent flow events, and it does not support riparian vegetation. Vegetation in this area is dominated by oak trees with poison oak and scrub habitat (dominated by California sage and black sage). These dry-habitat species even occur within the channel banks themselves, indicating that conditions in this area are not suitable to support riparian vegetation, and the vegetation community which occurs within the upper stream channel is not truly riparian.

No features in the Study Area could be classified as Environmentally Sensitive Habitats as defined in Section 21.06.440 as no evidence of rare or endangered species was observed during the site visits.

5.3 Significant Nexus Evaluation

Based on Corps regulatory guidance issued following the *Rapanos* decision, there are no drainages within the Study Area that meet the definition of a perennial Relatively Permanent Water (RPW). The blue line drainage that flows through the Study Area is tributary to the Arroyo Seco River, an RPW. The drainages flow through the Study Area into the Salinas Valley where flows are conveyed via agricultural drainage ditches and several culverts to the Arroyo Seco River (Appendix D-1). The Arroyo Seco River is located 6.15 river miles downstream (4.25 air miles northeast) of the Study Area. After this confluence, the Arroyo Seco River flows into the Salinas River, a Traditional Navigable Water (TNW), 8.82 river miles (5.74 air miles) from the Study Area. No significant barriers to flow are visible on aerial photographs along the

Arroyo Seco to its confluence with the Salinas River. Wetlands in the Study Area have either direct surface connections with the drainage or are connected to the drainage through overland or groundwater flows as they are situated within 150-250 feet of the drainage.

As part of a significant nexus determination, the Corps is required to provide technical information regarding the connectivity of on-site wetlands and waters to traditional navigable waters. To assist in this process, Table 2 below provides a summary of technical information to support a significant nexus determination for the Study Area.

The blue line drainage supports riparian vegetation within the lower half of, and downstream of the Study Area. The bottom substrates of this drainage are sand, cobble and bedrock. The drainage is not known to support Federal listed plants, fish, or wildlife species, however it may be important for transferring nutrients and sediments to downstream receiving waters.

Table 2. Significant Nexus Evaluation

	Study Area to Arroyo Seco River (RPW)	**Arroyo Seco River to Salinas River (TNW)**	**Study Area to Salinas River (TNW)**
Distance in River Miles	6.15 miles	2.67 miles	8.8 miles
Distance in Aerial Miles	4.25 miles	2.5 miles	5.74 miles

Watershed Areas	**Acreage**
Study Area Watershed	1,151
Tributary Watershed	10,645
Salinas River Drainage Area	2,257,246

6.0 IMPACTS AND MITIGATION ANALYSIS

The proposed project involves renovating the resort and improving onsite facilities. These improvements include re-routing the entrance road, replacing the dilapidated lodging structures with modern accommodations, and constructing improved hot spring facilities (note that the hot spring water is pumped from underground). The completed project footprint will cover approximately 23.19 acres. The project plans (Hill Glazier Architects 2012) and Stream Setback Plan (CH2MHill 2012) show three bridges proposed for construction as part of the project. The bridges include one near the eastern end of the Study Area (most downstream), one near the middle of the Study Area, and one near the western end of the Study Area (most upstream). The project also includes daylighting portions of the blue line stream currently contained within two culverts. The existing culverts comprise approximately 252.2 linear feet (757 square feet) and the day-lighted stream will comprise approximately 383.1 linear feet (1,150 square feet). The project also involves the creation of an in-stream pond comprising approximately 0.30 acre.

Most impacts will occur to communities that are not considered sensitive habitats under CEQA. While the project was designed to avoid impacting sensitive communities, minor impacts to

wetlands and riparian habitat are proposed under the current design. Potentially significant impacts as a result of the project and proposed mitigation measures are discussed below and shown on Figures 4 and 5. Table 3 provides a summary of impacts to features that are potentially subject to the jurisdiction of the Corps, RWQCB, and the California Department of Fish and Wildlife. As there are no isolated waters located within the Study Area, impacts to wetlands and non-wetland waters subject to Corps and RWQCB jurisdiction are the same within the Study Area.

Table 3. Impacts to Potentially Jurisdictional Features

Jurisdictional Feature [T=Temporary / P=Permanent]	**Project Impact (Acres [Linear Feet])**
Corps and RWQCB Impacts	
Seasonal wetlands [P]	0.04 acre
Non-wetland waters (culverted) [T]*	0.02 acre [229 linear feet]
California Department of Fish and Wildlife Impacts	
Non-wetland waters (culverted) [T]*	0.02 acre [229 linear feet]
Riparian trees [P]	Approximately 3 trees

*Impacts to non-wetland waters subject to Corps and RWQCB jurisdiction are based on the OHWM (3 feet across) while impacts to non-wetland waters subject to CDFW jurisdiction are based on the top of bank (4 feet across). The difference in area is negligible.

6.1 Wetlands and Waters

The project will permanently fill one approximately 0.04-acre seasonal wetland feature (W3). This wetland is a low-quality feature that occurs within a landscaped lawn area of the current resort. It is dominated by non-native invasive Bermuda grass and is regularly maintained via mowing. The remaining 0.67 acre of wetland onsite will be avoided by the proposed project. In the eastern portion of the Study Area, the project will be located in close proximity to seasonal wetland feature W2; however, the project will avoid this feature and any impacts to its hydrology. The preserved wetlands include the higher-quality riparian and freshwater marsh wetlands which have diverse assemblages of native herbs, shrubs and trees which provide habitat for a variety of wildlife species.

Portions of the proposed development will be located within the 50-foot stream setback. With implementation of appropriate best management practices and erosion control measures, work within the 50-foot setback will not affect the 100-year flow capacity of onsite drainages and is not likely to increase erosion and associated sedimentation. As such, impacts within the 50-foot setback will have negligible effects on onsite drainages.

The project proposes to reroute a currently culverted 229-foot-long (687-square-foot) drainage by daylighting approximately 359.9 linear feet (1,080 square feet) of stream. The 229-foot-long culvert was determined to be subject to Corps jurisdiction as a non-wetland water. An approximately 0.30-acre in-stream pond will be created adjacent to the dayldaylighted stream. This pond will be lined and filled using the overflow from the spring. As the pond fills and overflows, water will be directed into the downstream portion of the drainage. This is not significantly different from existing conditions at the site, where currently the downstream portion

of the drainage is fed by overflow from the spring. The inclusion of the pond will provide valuable wildlife habitat which currently does not exist at the site. A secondary culvert comprising approximately 23.2 linear feet (70 square feet) was determined to not be subject to Corps jurisdiction. This culvert will also be daylighted. Native riparian vegetation will be planted along both segments of daylighted stream (altogether comprising 383.1 linear feet).

Daylighting two culverted segments of the drainage will increase the total area of open stream channel present at the site by 383.1 linear feet (1,150 square feet) and provide significant benefits to the water quality and wildlife habitat values associated with the drainage. These improvements would outweigh any negative impacts to the drainage that may occur under the proposed project.

Potential Impact 1. The project will result in the permanent loss of 0.04 acre of low-quality seasonal wetlands, as shown on Figure 4. An approximately 229-foot-long culverted drainage subject to Corps jurisdiction as a non-wetland water will be removed when the stream is re-routed and restored in its natural channel (Figure 5).

Mitigation Measure 1. The daylighting of approximately 383.1 linear feet of drainage and the creation of an approximately 0.30-acre pond will substantially increase the total area of wetlands and non-wetland waters within the Study Area, as shown on Figure 5. These improvements will provide significant overall benefits to the water quality and wildlife habitat associated with aquatic features in the Study Area. Thus, potentially significant impacts to wetlands and waters resulting from the proposed project will be reduced to a **less-than-significant** level.

6.2 Riparian Habitat

Most trees planned for removal are located outside of the 50-foot setback and are not associated with the riparian canopy. Potential impacts to riparian habitat for each component of the project are discussed below.

This page intentionally blank.

ENVIRONMENTAL CONSULTANTS

Paraiso Springs
Resort
Soledad, California

Figure 4

Impacts to Wetlands

and Riparian Trees

Riparian Tree Removal Area

Wetland Impacts (0.04 acre)

Grading and Site Plan

N

W E

S

0 100 200

Feet

Map Prepared Date: 6/29/2016
Map Prepared By: mrochelle
Base Source: Esri Streaming - NAIP 2014
Data Source(s): WRA

Path: L:\Acad 2000 Files\18000\18107\gis\ArcMap\2016\Figure 1 Impacts to Wetlands and Riparian Trees.mxd

ENVIRONMENTAL CONSULTANTS

Paraiso Springs
Resort
Soledad, California

23.2 linear ft. & 70 sq.ft.

229.0 linear ft. & 687 sq.ft.

359.9 linear ft. & 1,080 sq.ft.

Culverts to Remove (252.2 linear feet & 757 sq.ft.)

Daylighted Stream (383.1 linear feet & 1,150 sq.ft.)

Mitigation Pond (0.30 acre)

Grading and Site Plan

Figure 5

Proposed Wetland

Mitigation Areas

N
W E
S

0 50 100

Feet

Map Prepared Date: 7/1/2016
Map Prepared By: mrochelle
Base Source: Esri Streaming - NAIP 2014
Data Source(s): WRA, CH2MHill

Path: L:\Acad 2000 Files\18000\18107\gis\ArcMap\2016\Figure 2 Areas for Mitigation.mxd

Lower Bridge

The lower bridge is farthest downstream in the Study Area and will be the main stream crossing on a new entrance road. The downstream portion of the creek is the wettest and supports the most well-defined riparian corridor. The riparian corridor is approximately 100 feet wide where the bridge is proposed (with slightly more of the habitat on the southern side of the creek which is situated lower that the northern bank). Assuming a 75-foot-wide bridge, the impact to riparian habitat in this area would be approximately 7,500 square feet (0.17 acre). It is anticipated that approximately three riparian willow trees will be removed.

Middle Bridge

The middle bridge is proposed in a portion of the stream channel which is currently culverted and is proposed for restoration as part of the reconstruction. The existing vegetation in this area would not be considered riparian.

Upper Bridge

The upper bridge is proposed in an area where the drainage is ephemeral with infrequent flow events and does not support riparian vegetation. Therefore no impacts to riparian vegetation will occur through the upper bridge installation.

Short Culvert Removal

Landscaped specimens occur in the vicinity of the approximately 23.2-foot-long culvert planned for removal. The upstream portion of the culvert is relatively open with one to two palm trees present. The downstream portion of the culvert is dominated by a thicket of many non-native palms. The project will involve removal of the culvert, daylighting the stream, and revegetating the area above the top of bank with native willows, California blackberry, and oaks. This will provide an overall benefit to riparian habitat along approximately 23.2 feet.

In-stream Pond and Long Culvert Removal

The project involves daylighting of the approximately 229.0-foot-long culvert by restoring approximately 359.9 feet of stream, creating an approximately 0.30 acre in-stream pond, and providing riparian habitat restoration along the 359.9-foot-long daylighted stream segment. These activities will provide enhanced aquatic functions and values to riparian habitat.

Potential Impact 2. Approximately three riparian willow trees will be removed at the lower bridge crossing, as shown on Figure 4. Tree removal will have minimal effects on the amount of direct solar radiation reaching the drainage and minimal effects to the amount of available habitat for birds and other common riparian-associated wildlife.

Mitigation Measure 2. With the implementation of appropriate erosion control measures during and after construction, riparian tree removal is not likely to result in increased erosion and associated sedimentation of waters conveyed by the drainage. The project will also involve restoration of riparian habitat along two dayldaylighted stream segments totaling approximately 383.1 linear feet (Figure 5). The restoration of riparian habitat along the dayldaylighted culverts will provide significant overall benefits to water quality and wildlife habitat associated with aquatic features in the Study Area. Thus, potentially significant impacts to riparian vegetation will be reduced to a **less-than-significant** level.

7.0 CONCLUSION

The Paraiso Springs Resort Study Area contains eight wetland features totaling 0.71 acre and 8,771 linear feet of non-wetland which are jurisdictional under Section 404 of the Clean Water Act. The wetland areas were seasonal wetland, riparian wetland, and freshwater marsh dominated by hydrophytic vegetation with FAC, FACW, or OBL classified plants. The wetland areas also contained hydric soil indicators and wetland hydrology indicators. These wetland areas are adjacent to a drainage that is tributary to a navigable "waters of the U.S." (Appendix D) and therefore meet the definition of jurisdictional wetlands and non-wetland waters under Section 404 of the Clean Water Act. These wetlands and waters also may be considered waters of the State under Section 401 of the Clean Water Act.

Approximately 0.04 acre of jurisdictional seasonal wetlands and approximately 3 riparian trees will be impacted by the proposed project. The proposed stream daylighting and riparian habitat restoration would result in a net increase in the area of wetlands and non-wetland waters within the Study Area, including the addition of approximately 383.1 linear feet of restored stream and riparian habitat, and the creation of approximately 0.30 acre of pond habitat. These activities would provide an overall benefit that would reduce potentially significant impacts from the proposed project to a less-than-significant level.

8.0 REFERENCES

CH2MHILL. 2012. Paraiso Springs Resort (PLN 040183) – Stream Setback Plan. Technical Memorandum. Prepared for Thompson Holdings, LLC. April 20.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.

Federal Register. November 13, 1986. Department of Defense, Corps of Engineers, Department of the Army, 33 CFR Parts 320 through 330, Regulatory Programs of the Corps of Engineers; Final Rule. Vol. 51, No. 219; page 41217.

Gretag MacBeth. 2000. Munsell Soil Color Charts, revised washable edition.

Hill Grazier Architects. 2012. Vesting Tentative Map. Paraiso Springs Resort, Soledad, California.

Reed, P. B., Jr. 1988. National list of plant species that occur in wetlands: California (Region 0). U.S. Fish and Wildlife Service Biological Report 88 (26.10).

U.S. Army Corps of Engineers (Corps). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0. September.

U.S. Army Corps of Engineers (Corps). 2005. Regulatory Guidance Letter No. 05-05. Ordinary High Water Mark Identification. December 7.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA). 2006. Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils, Version 6.0. In cooperation with the National Technical Committee for Hydric Soils, U.S. Army Corps of Engineers.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA). 2005. Official List of US Hydric Soils.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA) 1978. Soil Survey of Monterey County, California

U.S. Geological Survey (USGS). 1984. Paraiso Springs 7.5 minute topographic map.

U.S. Geological Survey (USGS). 1995. Sycamore Flat 7.5 minute topographic map.

This page intentionally blank.

Appendix A

Arid West Wetland Data Sheets

This page intentionally blank.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-1

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): convex | Slope(%): 25

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☒ **Yes** ☐ **No**

Remarks: This sample point is in a landscaped lawn area dominated primarily by Bermuda grass (FAC) that is regularly mowed. This sample point is located within a wetland.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:		**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:		**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	80	Y	FAC
2. *Juncus patens*	20	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	100	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 0 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-1

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-5	10YR3/2							
5-9	10YR3/2	85	2.5YR4/8	15	C	RC	Sandy Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: This data point contains hydric soil indicators based on distinct/prominent mottles with a dark matrix. These indicators begin 5" beneath the surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: Oxidized rhizospheres were observed indicating the sample point is subject to wetland hydrology.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-2

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): convex | Slope(%): 25

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is in a landscaped lawn area dominated primarily by Bermuda grass (FAC) that is regularly mowed and lacked hydric soil indicators. This area is considered upland.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:		**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:		**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	90	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	90	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 10 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 1 (A)

Total number of dominant species across all strata? 1 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☐ Yes ☒ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-2

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-6	10YR3/2							
6-12	10YR3/2	99	2.5YR4/8	1	C	RC	Sandy Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: Slight mottling was observed in this sample point at concentrations of 1%. This sample point does not meet any of the hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: While oxidized rhizospheres are present, no other signs of hydrology were observed in this area.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-3

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): convex | Slope(%): 25

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is in a landscaped lawn area dominated primarily by Bermuda grass (FAC) that is regularly mowed. Wetland edges were defined in this area based on higher cover of spreading rush and increased mottling in soils.

PER 2009 USACE FIELD VERIFICATION, SP-3 IS NOT LOCATED IN A WETLAND.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:		**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:		**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	70	Y	FAC
2. *Juncus patens*	25	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	95	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 5 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-3

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-6	10YR3/2						Sandy Clay	5% of soil consists of small rocks
6-12	10YR3/2	80	2.5YR4/8	20	C	RC	Sandy Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: This data point contains hydric soil indicators based on distinct/prominent mottles with a dark matrix. This area has a substantially higher concentration of mottles than surrounding areas.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: The increased oxidized rhizospheres in this area indicate these soils are more exposed to alternating wet/dry wetland hydrologic regimes than surrounding areas.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-4

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): convex | Slope(%): 25

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is in a landscaped lawn area dominated primarily by Bermuda grass (FAC) that is regularly mowed. This area is considered upland.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:		**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:		**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	90	Y	FAC
2. *Juncus patens*	1	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	91	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 9 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 1 (A)

Total number of dominant species across all strata? 1 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☐ Yes ☒ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-4

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/2	100					Sandy Clay	5% of soil consists of small rocks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: The soil in this area was uniform in color and texture and did not contain any hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: No wetland hydrology indicators were present in this area.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-5

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): convex | Slope(%): 25

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is in a landscaped lawn area dominated primarily by Bermuda grass (FAC) that is regularly mowed. Wetland edges were defined in this area based on higher cover of spreading rush and increased mottling in soils.

PER 2009 USACE FIELD VERIFICATION, SP-5 IS NOT LOCATED IN A WETLAND.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:		**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:		**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	60	Y	FAC
2. *Juncus patens*	40	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	100	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 0 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-5

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-3	10YR3/1	98	2.5YR4/8	2			Sandy Clay	
3-6	10YR3/2	85	2.5YR4/8	15			Sandy Clay	
6-9	10YR3/2	60	2.5YR4/8	20			Sandy Clay	
	Gley1 5/10Y	20	2.5YR4/8	20			Sandy	
9-12	Gley1 5-10Y	95	2.5YR4/8	5			Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☒ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: This data point contains hydric soil indicators based on distinct/prominent mottles with a dark matrix and a sandy gleyed matrix.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☒ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: The increased mottling and sulfuric odor in this area indicated these soils are more exposed to alternating wet/dry wetland hydrologic regimes than surrounding areas.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-6

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): depression | Local Relief (concave, convex, none): concave | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: Freshwater Forested/Shrub

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☒ **Yes** ☐ **No**

Remarks: This sample point is located within a linear depression with surface saturation and dominated by riparian vegetation.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis*	30	Y	FACW
2.			
3.			
4.			
Tree Stratum Total Cover:	**30**	**Plot Size:**	
Sapling/Shrub Stratum			
1. *Baccharis pilularis*	5	N	NL
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	**5**	**Plot Size:**	
Herb Stratum			
1. *Juncus effusus*	60	Y	OBL
2. *Baccharis salicifolia*	20	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	**80**	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 20 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 3 (A)

Total number of dominant species across all strata? 4 (B)

% of dominant species that are OBL, FACW, or FAC? 75 (A/B)

Prevalence Index Worksheet

Total % cover of:		Multiply by:	
OBL species		x1	
FACW species		x2	
FAC species		x3	
FACU species		x4	
UPL species		x5	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-6

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-3	10YR3/1	100					Loam	saturated
3-12	10YR3/2	100					Loam	saturated

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: The soil in this area was saturated throughout and standing water was observed nearby. Hydric soils assumed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☐ No Depth (inches):

Water table present? ☒ Yes ☐ No Depth (inches): 3

Saturation Present? (includes capillary fringe) ☒ Yes ☐ No Depth (inches): 0

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: This area was saturated to the surface and had free water in pit at 3 inches. Standing water was present at surface near sample pit. Wetland hydrology is present.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-7

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): edge of depression | Local Relief (concave, convex, none): flat | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: Freshwater Forested/Shrub

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is located on a flat area adjacent to a riparian wetland and is dominated by wetland vegetation, but lacks wetland soils and hydrology.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	70	Y	FAC
2. *Juncus effusus*	20	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	90	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 10 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is located in an area with wetland vegetation on the edge of a riparian wetland.

SOIL

Sampling Point SP-7

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-3	10YR3/1	100						
3-12	10YR3/2	99	2.5YR4/8	1	C	M	Clay Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: This data point contains mottles at less than 2% and therefore does not meet the Redox Dark Surface or any other hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: No wetland hydrology indicators were present in this area.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-8

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): edge of riparian wetland | Local Relief (concave, convex, none): flat | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: Freshwater Forested/Shrub

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is located on a flat area adjacent to a riparian wetland and is dominated by wetland vegetation, but lacks wetland soils and hydrology.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	50	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	50	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 50 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 1 (A)

Total number of dominant species across all strata? 1 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is located in an area with hydrophytic vegetation on the edge of a riparian wetland.

SOIL

Sampling Point SP-8

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/2	100	2.5YR4/8	1	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: This data point contains mottles at less than 2% and therefore does not meet the Redox Dark Surface or any other hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: No wetland hydrology indicators were present in this area.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-9

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): edge of riparian wetland | Local Relief (concave, convex, none): flat | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: Freshwater Emergent Wetland

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is located on a flat area adjacent to a riparian wetland and is dominated by wetland vegetation.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Juncus effusus*	60	Y	OBL
2. *Baccharis salicifolia*	20	Y	FACW
3. *Rubus ursinus*	5	N	NL
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	85	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 15 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:		Multiply by:	
OBL species		x1	
FACW species		x2	
FAC species		x3	
FACU species		x4	
UPL species		x5	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is located in an area with hydrophytic vegetation on the edge of a riparian wetland.

SOIL

Sampling Point SP-9

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/2	100	2.5YR4/8	1	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: This data point contains mottles at less than 2% and therefore does not meet the Redox Dark Surface or any other hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: No wetland hydrology indicators were present in this area.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-10

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): flat area | Local Relief (concave, convex, none): flat | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: Freshwater Emergent Wetland

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☒ **Yes** ☐ **No**

Remarks: This sample point is located on a flat area with surface saturation and emergent obligate plant species. This point is located within a wetland.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Typha angustifolia*	50	Y	OBL
2. *Baccharis salicifolia*	25	Y	FACW
3. *Scirpus californicus*	5	N	OBL
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	80	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 20 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:		Multiply by:	
OBL species		x1	
FACW species		x2	
FAC species		x3	
FACU species		x4	
UPL species		x5	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-10

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
								surface ponding

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: Soils in this area are assumed hydric due to surface inundation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☒ Yes ☐ No Depth (inches): 0

Water table present? ☒ Yes ☐ No Depth (inches): 0

Saturation Present? (includes capillary fringe) ☒ Yes ☐ No Depth (inches): 0

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: This area was inundated at the surface. Wetland hydrology is present.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-11

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): flat area | Local Relief (concave, convex, none): flat | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: Freshwater Emergent Wetland

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☒ **Yes** ☐ **No**

Remarks: This sample point is located on a flat area with surface saturation and emergent obligate plant species. This point is located within a wetland.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Juncus effusus*	75	Y	OBL
2. *Cynodon dactylon*	20	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	95	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 5 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:		Multiply by:	
OBL species		x1	
FACW species		x2	
FAC species		x3	
FACU species		x4	
UPL species		x5	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-11

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/1	100						surface saturation

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: Soils in this area are assumed hydric due to surface saturation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☒ Yes ☐ No Depth (inches): 6

Saturation Present? (includes capillary fringe) ☒ Yes ☐ No Depth (inches): 0

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: This area was saturated at the surface and had free water in pit at 6 inches. Wetland hydrology is present.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-12

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): flat area | Local Relief (concave, convex, none): flat | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: Freshwater Emergent Wetland

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This point is located in uplands.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Juncus effusus*	45	Y	OBL
2. *Cynodon dactylon*	50	Y	FAC
3. *Avena sp.*	1	N	NL
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	96	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 4 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 2 (A)

Total number of dominant species across all strata? 2 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:		Multiply by:	
OBL species		x1	
FACW species		x2	
FAC species		x3	
FACU species		x4	
UPL species		x5	
Column Totals	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-12

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/1	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: Soils in this area area did not exhibit any hydric indicators nor saturation to 12 inches and therefore are not hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: This area showed no signs of wetland hydrology.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-13

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): convex | Slope(%): 25

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This point is located in uplands.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:		**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:		**Plot Size:**	
Herb Stratum			
1. *Erodium botrys*	70	Y	NL
2. *Cynodon dactylon*	10	N	FAC
3. *unknown grass*	10	N	
4. *Stellaria media*	10	N	NL
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	100	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 0 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 0 (A)

Total number of dominant species across all strata? 0 (B)

% of dominant species that are OBL, FACW, or FAC? 0 (A/B)

Prevalence Index Worksheet

Total % cover of:		Multiply by:	
OBL species		x1	
FACW species		x2	
FAC species	10	x3	30
FACU species		x4	
UPL species	90	x5	450
Column Totals	100 (A)		480 (B)

Prevalence Index = B/A = 4.8

Hydrophytic Vegetation Indicators

☐ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☐ Yes ☒ No

Remarks: This area is not dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-13

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR4/3	100					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: The soil in this area was uniform in color and texture and did not contain any hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: No wetland hydrology indicators were present in this area.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-14

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): spring and slight slope | Local Relief (concave, convex, none): flat | Slope(%): 5

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: None

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is located on a flat area where a spring box is overflowing and feeding this small isolated wetland.

PER 2009 USACE FIELD VERIFICATION, SP-14 IS NOT LOCATED IN A WETLAND.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Cynodon dactylon*	100	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	100	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 0 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 1 (A)

Total number of dominant species across all strata? 1 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is located in an area with Facultative vegetation below an overflowing springbox.

SOIL

Sampling Point SP-14

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/1	40						
	10YR3/2	60	2.5YR 4/8	20	C	RC/M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: This data point contains hydric soil indicators based on distinct/prominent mottles with a dark matrix and surface inundation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	☒ Yes ☐ No	Depth (inches):	+1-3
Water table present?	☒ Yes ☐ No	Depth (inches):	0
Saturation Present? (includes capillary fringe)	☒ Yes ☐ No	Depth (inches):	0

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: This area was inundated at the surface. Wetland hydrology is present.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-15

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): depression | Local Relief (concave, convex, none): concave | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample point is located near the edge of a man made emergent wetland that is seasonally ponded. It was historically used to catch overflow from pools which is now diverted creek. This sample point is in an upland area with dead vegetation and no signs of current hydrology (salt crust or sediment deposits).

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:		**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 100 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 0 (A)

Total number of dominant species across all strata? 0 (B)

% of dominant species that are OBL, FACW, or FAC? 0 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:
OBL species	x1
FACW species	x2
FAC species	x3
FACU species	x4
UPL species	x5
Column Totals (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☐ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☐ Yes ☒ No

Remarks: This sample point is covered in dead typha and organic matter.

SOIL

Sampling Point SP-15

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
+12-0	OM							
0-12	10YR3/1	95	5YR4/8	5	C	RC	Sandy Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: Soils in this area appear to exhibit relict hydric indicators as no current signs of hydrology or wetland vegetation are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: The oxidized rhizosheres in this sample point were along dead roots. There were no living roots in the substrate. This appears to be evident of relict hydrology.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-16

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): depression | Local Relief (concave, convex, none): concave | Slope(%): 0

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☒ **Yes** ☐ **No**

Remarks: This sample point is located in a man made emergent wetland that is seasonally ponded. It was historically used to catch overflow from pools which is now diverted creek. This boundaries of this feature were defined by the presence of last seasons vegetation and salt crust deposits.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Typha angustifolia*	100	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	100	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 1 (A)

Total number of dominant species across all strata? 1 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-16

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
+12-0	OM							
0-12	10YR3/1	95	5YR4/8	5	C	RC	Sandy Clay	relict

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: Soils in this area appear to be exhibit hydric indicators consisting of redox and low chroma matrices

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☒ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☒ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: Clear signs of hydrology including sediment deposits, oxidized rhizospheres and salt crusts were present at this sample point.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-17

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): swale | Local Relief (concave, convex, none): concave | Slope(%): flat

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: None

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☐ Yes ☒ No

Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: This sample is located in a historic swale that was used to drain the nearby pond. Hydrophytic plant species became established in this area presumably when the swale was still being utilized. No signs of hydric soils or wetland hydrology are present. This point is in an upland.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Cyperus sp.*	60	Y	FAC or >
2. *Brassica sp.*	5	N	?
3. *Aster sp.*	5	N	?
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	70	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 30 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 1 (A)

Total number of dominant species across all strata? 1 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: The Cyperus sp. was not positively identified it assumed to be hydrophytic. Thirty percent of the Cyperus was dead. This point appears to harbor relict wetland vegetation.

SOIL

Sampling Point SP-17

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/2	60					Sandy Loam	
	7.5YR5/8	40					Sandy Loam	Reddish color not in concentrations.
								due to parent material

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☒ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: Soils in this area area did not exhibit any hydric indicators nor saturation to 12 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☐ Yes ☒ No Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: No wetland hydrology indicators were present in this area.

Wetland Determination Data Form - Arid West Region

Project/Site: Paraiso SpringsResort | City: Soledad | County: Monterey | Sampling Date: 1/6/2009

Applicant/Owner: Thompson Holdings, LLC | State: CA | Sampling Point: SP-18

Investigator(s): WRA, Inc.: Geoff Smick and Nathan Bello | Section,Township,Range: Section 30, T18S, R6E

Landform (hillslope, terrace, etc.): hill slope | Local Relief (concave, convex, none): flat | Slope(%): 15

Subregion(LRR): LRR C (Medit. CA) | Lat: 36 19' 49"N | Long: 121 22" 02" W | Datum: WGS 84

Soil Map Unit Name: Cropley silty clay, 2-9 % slopes | NWI classification: none

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soil Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is the Sampled Area within a Wetland? ☒ **Yes** ☐ **No**

Remarks: This sample point is located in an isolated wetland seep with emergent wetland vegetation and clear signs of hydrology.

VEGETATION

Tree stratum (use scientific names)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Tree Stratum Total Cover:	0	**Plot Size:**	
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:	0	**Plot Size:**	
Herb Stratum			
1. *Carex sp.*	40	Y	OBL
2. *Scirpus californicus*	20	Y	OBL
3. *Rosa californica*	20	Y	FAC+
4. *Juncus effusus*	10	N	OBL
5. *Typha angustifolia*	5	N	FACW
6. *Toxicodendron diversilobum*	5	N	NL
7.			
8.			
Herb Stratum Total Cover:	100	**Plot Size:**	
Woody Vine Stratum			
1.			
2.			
Woody Vine Stratum Total Cover:		**Plot Size:**	

% Bare ground in herb stratum: 0 | % cover of biotic crust:

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 3 (A)

Total number of dominant species across all strata? 3 (B)

% of dominant species that are OBL, FACW, or FAC? 100 (A/B)

Prevalence Index Worksheet

Total % cover of:	Multiply by:	
OBL species	x1	
FACW species	x2	
FAC species	x3	
FACU species	x4	
UPL species	x5	
Column Totals (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☒ Dominance Test is >50%

☐ Prevalence Index is </= 3.0[1]

☐ Morphological adaptations (provide supporting data in remarks)

☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: This sample point is dominated by hydrophytic vegetation.

SOIL

Sampling Point SP-18

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[1]	Texture	Remarks
0-12	10YR3/2	60	5YR4/8	5	C	PL		
	10YR2/1	35	5YR4/8	5	C	PL	Sandy Clay	
	Gley	5						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☒ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: Soils in this area exhibited a sulfidic odor and were saturated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☒ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☒ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present? ☐ Yes ☒ No Depth (inches): _____

Water table present? ☐ Yes ☒ No Depth (inches): _____

Saturation Present? (includes capillary fringe) ☒ Yes ☐ No Depth (inches): 0

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: Clear signs of hydrology including oxidized rhizospheres and salt crusts were present at this sample point. The feature also exhibited scattered saturation and moss growth.

Appendix B

Plant Species Observed in the Study Area

This page intentionally blank.

Appendix B. List of plant species observed within and in vicinity of wetland habitats within Paraiso Springs Resort

Scientific Name	Common Name	Indicator Status
Achillea millefolium	yarrow	FACU
Adenostoma fasciculatum	chamise	NL
Aesculus californica	California Buckeye	NL
Agave americana var. marginata	variegated giant agave	NL
Agave americana	giant agave	NL
Anagallis arvensis	scarlet pimpernel	FAC
Anaphalis margaritacea	pearly everlasting	NL
Artemisia douglasiana	mugwort	FACW
Arundo donax	giant reed	FACW
Baccharis pilularis	coyote brush	NL
Baccharis salicifolia	mule fat	FACW
Brassica rapa	field mustard	NL
Bromus diandrus	ripgut brome	NL
Bromus hordeaceus	soft chess	FACU-
Bromus madritensis ssp. *rubens*	brome	NI
Carex sp.	Sedge	
Centaurea solstitialis	yellow star thistle	NL
Claytonia perfoliata	miner's lettuce	FAC
Cortaderia jubata	Jubata grass	NL
Cupressus macrocarpa	Monterey cypress	NL
Cynodon dactylon	bermuda grass	FAC
Cynosurus echinatus	dog-tail grass	NL
Cyperus sp.	flatsedge	
Dimorphotheca aurantiaca	African daisy	NL
Elymus glaucus	blue wildrye	FACU

Scientific Name	Common Name	Indicator Status
Epilobium ciliatum ssp. Watsonii	willow-herb	FACW
Eremocarpus setigerus	turkey mullein	NL
Erodium botrys	long-beaked filaree	NL
Eschscholzia californica	California poppy	NL
Eucalyptus camalsulensis	red gum	NL
Eucalyptus globulus	blue gum	NL
Galium aparine	common bedstraw	FACU
Geranium molle	dove's-foot geranium	NL
Hedera helix	English ivy	NL
Heteromeles arbutifolia	toyon	NL
Hordeum murinum ssp. *leporinum*	foxtail barley	NL
Hypochaeris radicata	rough cat's ear	NL
Juncus effusus	soft rush	OBL
Juncus patens	spreading rush	FAC
Juniperus sp.	Juniper	
Lactuca serriola	prickly lettuce	FAC
Lemna sp.	duckweed	OBL
Leymus triticoides	creeping wild-rye	FAC+
Lolium multiflorum	Italian ryegrass	FAC
Lonicera interupta	pink honeysuckle	NL
Lotus scoparius	deerweed	NL
Marah fabaceus	wild-cucumber	NL
Marrubium vulgare	horehound	FAC
Medicago polymorpha	bur clover	NL
Melica imperfecta	coast-range melica	NL
Mimulus aurantiacus	sticky monkeyflower	NL
Nassella pulchra	purple needlegrass	NL

Scientific Name	Common Name	Indicator Status
Nerium oleander	oleander	NL
Nicotoma glauca	tree tobacco	NL
Olea europaea	European olive	NL
Opuntia ficus-indica	mission cactus	NL
Osteospermum fruiticosum	African daisy	NL
Oxalis pes-carpe	Bermuda buttercup	NL
Pelargonium domesticum	regal geranium	NL
Pellaea andromedifolia	coffee fern	NL
Pentagramma triangularis	goldback fern	NL
Pinus radiata	Monterey pine	NL
Plantago coronopus	buckhorn plantain	FAC
Plantago lanceolata	English plantain	FAC-
Polygonum arenastrum	common knotweed	FAC
Prunus cerasifera	purple cherry plum	NL
Prunus ilicifolia	holly-leaved cherry	NL
Pteridium aquilinum	bracken fern	FACU
Quercus agrifolia	coast live oak	NL
Quewrcus berberidifolia	California scrub oak	NL
Quercus douglasii	blue oak	NL
Quercus kelloggii	black oak	NL
Quercus lobata	valley oak	FAC*
Ranunculus aquatilus	whitewater crowfoot	OBL
Raphanus sativus	wild radish	NL
Ribes californicum	hillside gooseberry	NL
Ricinus communis	castor bean	FACU
Robina pseudoacaci	black locust tree	NL
Rosa californica	California wild rose	FAC+

Scientific Name	Common Name	Indicator Status
Rubus ursinus	California blackberry	NL
Rumex crispus	curly dock	FACW-
Salix lasiolepis	arroyo willow	FACW
Salvia mellifera	black sage	NL
Salvia spathacea	hummingbird sage	NL
Schinus molle	pepper tree	NL
Scirpus californicus	California bulrush	OBL
Sequoia sempervirens	coast redwood	NL
Sonchus asper	prickly sow thistle	FAC
Sonchus oleraceus	common sow thistle	NI*
Spartium junceum	Spanish broom	NL
Stellaria media	common chickweed	NL
Stachys bullata	wood mint	NL
Symphoricarpus mollis	creeping snowberry	NL
Toxicodendron diversilobum	poison oak	NL
Typha latifolia	broadleaf cattail	OBL
Typha angustifolia	cattail	OBL
Umbellularia californica	California bay	FAC
Urtica dioica ssp. *holosericea*	stinging nettle	FACW
Vulpia bromoides	brome fescue	FACW
Vulpia myuros	foxtail fescue	FACU*
Washingtonia robusta	Mexican fan palm	NL
Zantedeschia aethiopica	calla lily	OBL

Appendix C

Representative Photographs of the Study Area

This page intentionally blank.

Above: Photograph of seasonal wetland (W-3) in landscaped lawn area.

Below: Photograph of upland sample pits at SP-3.

Photographs taken January 6, 2009.

wra
ENVIRONMENTAL CONSULTANTS

Photographs of the blue line drainage that flows through the Paraiso Springs Resort.

Photographs taken January 6, 2009.

wra
ENVIRONMENTAL CONSULTANTS

Above: Photograph of riparian vegetation at W-4.

Below: Photograph of emergent marsh W-5.

Photographs taken January 6, 2009.

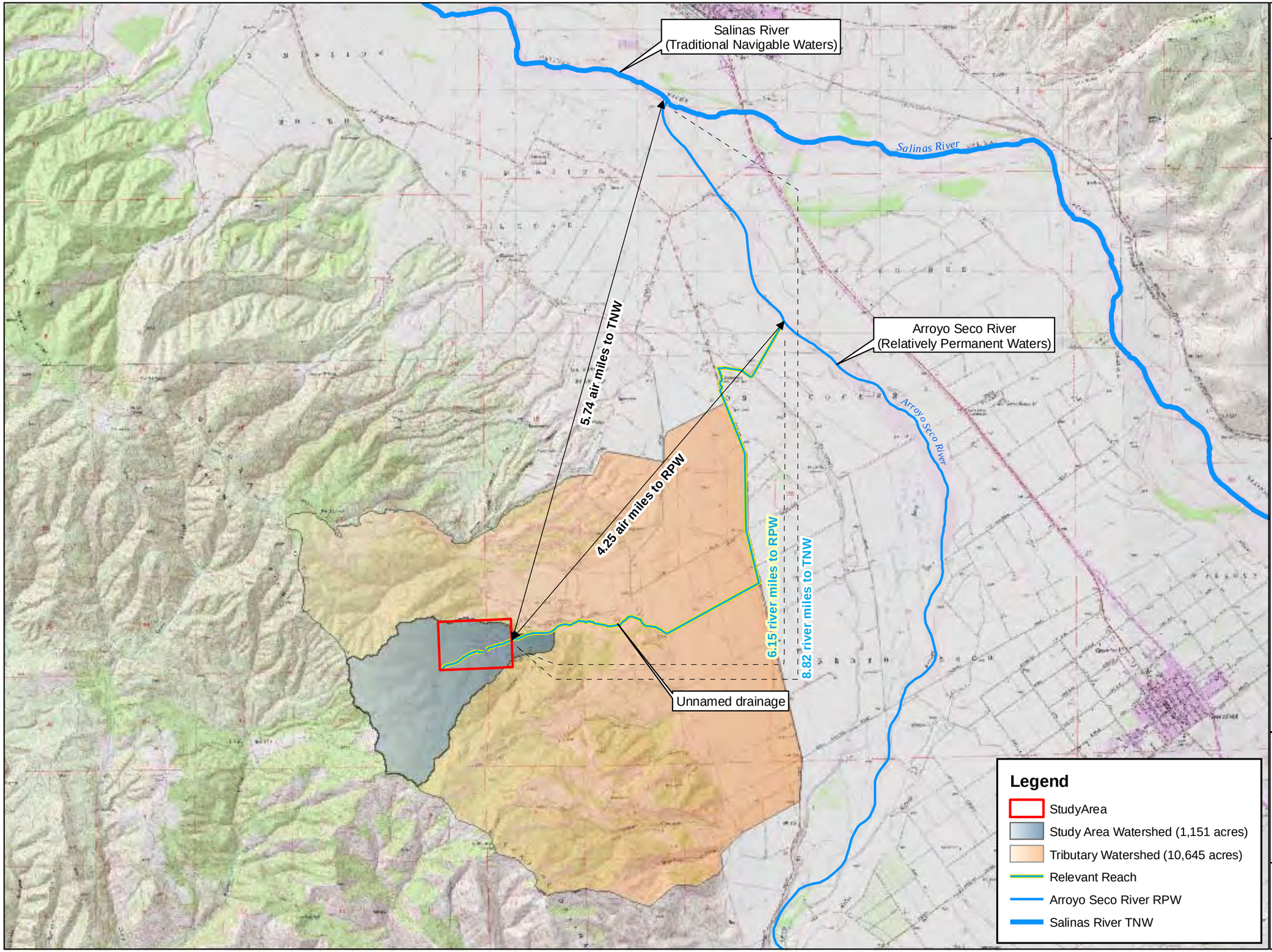
wra
ENVIRONMENTAL CONSULTANTS

This page intentionally blank.

Appendix D

Significant Nexus Evaluation

This page intentionally blank.



wra
ENVIRONMENTAL CONSULTANTS
2169-G East Francisco Blvd.
San Rafael, CA 94901
(415) 454-8868 Phone
(415) 454-0129 Fax

Paraiso Springs Resort

Monterey County, California

Appendix D-1

Detail of Relevant Reach

This map is representational only, and not meant for use in detailed design.

N
W E
S

0 5,000 10,000
Feet

Date: January 2009
Image Source: USGS Topo Quad
Map By: Derek Chan
Filepath: L:\Acad 2000 Files\18000\18107\gis\ArcMap\
RelevantReach_Watershed_20090120.mxd

Appendix D-2. Salinas River (TNW) Watershed

N
W E
S

ENVIRONMENTAL CONSULTANTS

Paraiso Springs Resort
Monterey County, California

0 5 10 20 Miles

Date: January 2009
Image Source: ESRI
Map By: Derek Chan
Filepath: L:\Acad 2000 Files\18000\18107\gis\ArcMap\SalinasRiver_Watershed_20090120.mxd