City of Trinidad

May 25, 2018

Via Electronic Mail

Mark Delaplaine, Manager
Energy, Ocean Resources and
Federal Consistency Division
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

RE: City of Trinidad, CA
ASBS Stormwater Improvement Project Phase 2

Dear Mr. Delaplaine:

The City of Trinidad intends to seek financial assistance from USDA, (Rural Utilities Service (RUS)) for improvements to the City's stormwater system. The proposed project is to decommission the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The intent of the design is to treat and dispose of stormwater closer to the areas of stormwater generation, which allows for a more distributed network of stormwater infrastructure that has been tailored to the anticipated runoff volumes generated in the contributing sub-watersheds. The project was designed based on a comprehensive geotechnical investigation and detailed groundwater modeling. The intent of the project is protect water quality in the Trinidad Head Area of Special Biological Significance from discharge of untreated stormwater. Phase 1 of the project, which included similar improvements in other areas northeast of the Phase 2 improvements, has already been permitted and mostly completed. Please see the attached site plan.

The proposed project is located within developed roadways and parking areas, including Underwood Drive, Ewing Street, Edwards Street, Lighthouse Road, and the gravel parking lot within the Harbor Area within the City limits of Trinidad, CA. Most of the project takes place within City street rights-of-way, but also includes portions of Assessor's Parcel Numbers (APNs) 042-021-001, 042-071-001, 042-071-008 and 042-071-009. The project site is located in S15 T8N R1W. Please see the attached vicinity map.

(707) 677-0223 • 409 Trinity Street • P.O. Box 390 • Trinidad, CA 95570 • Fax (707) 677-3759

The project site is located within the California Coastal Zone, and per the Coastal Zone Management Act section 307 of 16 U.S.C. § 1456, federal actions having a reasonable foreseeable effects to uses or resources of State coastal zones are to be consistent with the enforceable policies of the State's Federally-approved Comprehensive Management Program (CMP). The majority of the project is within the City's certified Local Coastal Program jurisdiction. However, one of the harbor parcels (042-071-008) is within an Area of Deferred Certification. The project will require approval of a Coastal Development Permit(s) prior to construction.

Please indicate below that the proposed project is in compliance or will be in compliance with the State's CMP prior to construction. Please sign and return this letter to tparker@shn-engr.com.

Thank you for your assistance and if you have any questions or need further information please do not hesitate to contact me at the email above, or 707-822-5785.

Sincerely,

Trevor Parker
City Planner

Enclosure:

The proposed project as explained above:

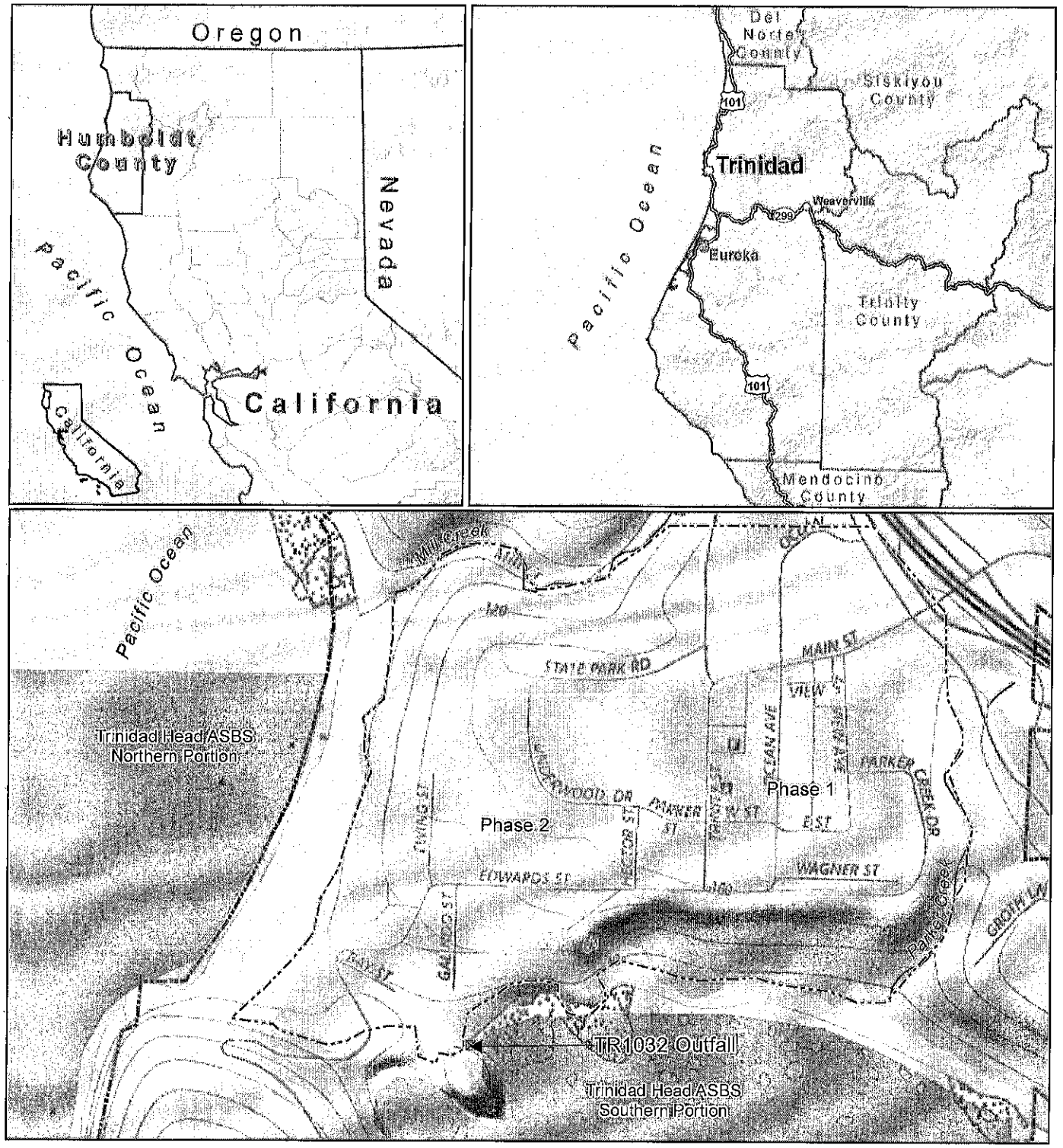
☐ Does not present any fundamental conflicts with Coastal Act policies at this time.

☒ There are regulatory processes in place that will enable ultimate determinations, prior to construction, that the project is consistent with the Coastal Act.

Signature

5/25/18
Date

Mark Delaplaine Coastal Program Manager
Printed Name and Title Energy/Federal Consistency Division



Phase 1

Phase 2

Area of Special Biological Significance (ASBS)

Project Area

Trinidad City Limits

Humboldt County

Counties

Paper Size ANSI A

0 200 400 600

Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

City of Trinidad
Trinidad ASBS Stormwater Project
USDA Preliminary Engineering Report

Job Number 01063-07-001
Revision 1
Date 07 Aug 2017

Vicinity Map

Figure 1

716 Third Street Eureka, CA 95501 USA T 707 443 8326 F 707 444 8330 E eureka@ghd.com W www.ghd.com

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Data source: StreetMapUSA, Roads, Boundaries, 2010. City of Trinidad, Area of Special Biological Significance, 2011. Humboldt County, Watersheds, 2011. USGS topo basemap, 2017. Created by:jdark2

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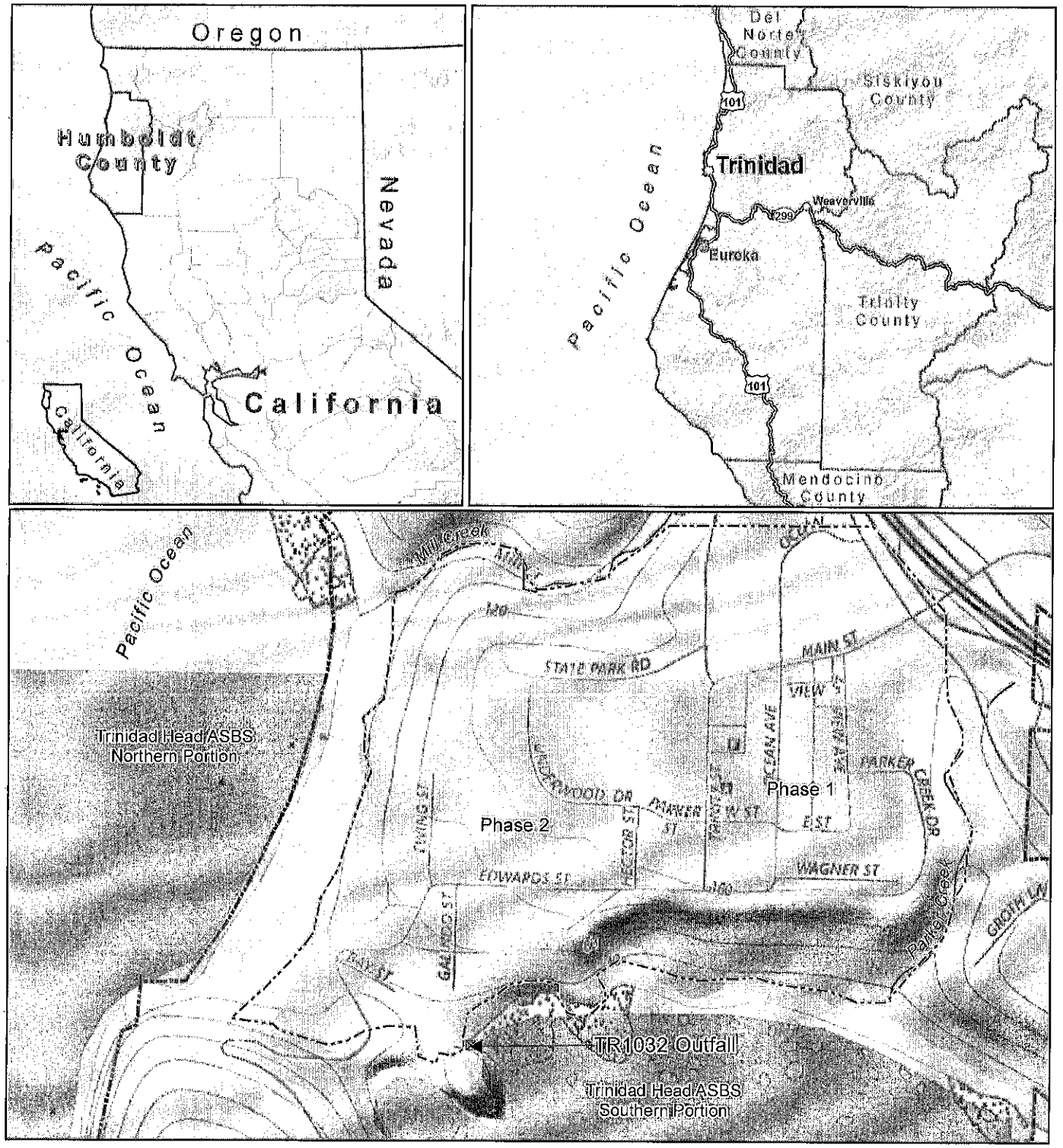

Phase 1

Phase 2

Area of Special Biological Significance (ASBS)

Project Area

Trinidad City Limits

Humboldt County

Counties

Paper Size ANSI A

0 200 400 600

Feet

Map Projection: Lambert Conformal Conic
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City of Trinidad
Trinidad ASBS Stormwater Project
USDA Preliminary Engineering Report

Job Number 01063-07-001
Revision 1
Date 07 Aug 2017

Vicinity Map

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716 Third Street Eureka, CA 95501 USA T 707 443 8326 F 707 444 8330 E eureka@ghd.com W www.ghd.com

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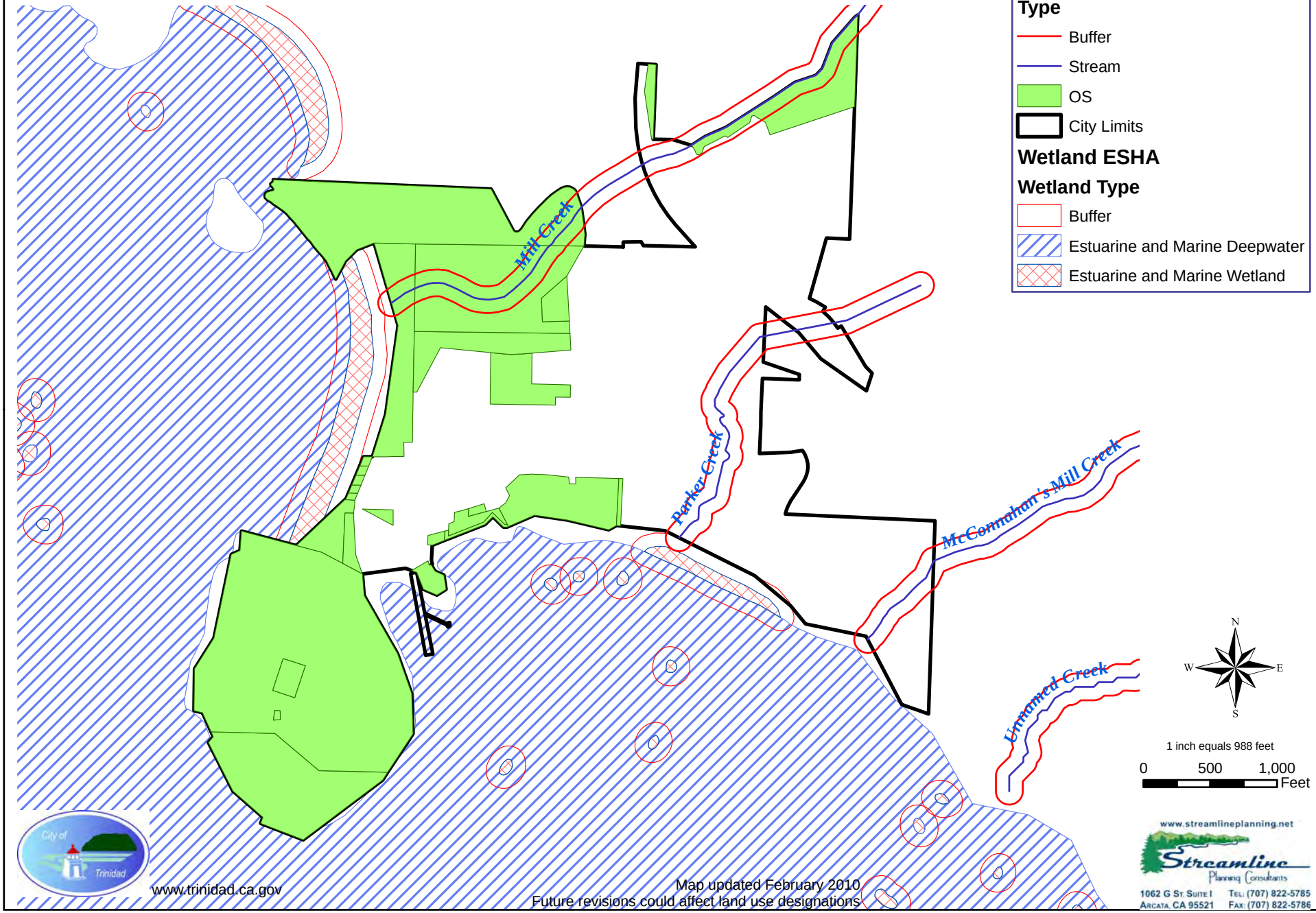
Data source: StreetMapUSA, Roads, Boundaries, 2010. City of Trinidad, Area of Special Biological Significance, 2011. Humboldt County, Watersheds, 2011. USGS topo basemap, 2017. Created by:jdark2

Trinidad General Plan

Figure 7a: ESHAs and Open Space Within City Limits



Biological Report

Area of Special Biological Significance Stormwater Improvement Project Trinidad, California

Prepared for:

City of Trinidad

July 2018
018073

Reference: 018073

Biological Report

Area of Special Significance
Stormwater Improvement Project
Trinidad, California

Prepared for:
City of Trinidad

Prepared by:

1062 G Street, Suite I
Arcata, CA 95521
707-822-5785

August 2018

QA/QC:TAP

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Abbreviations and Acronyms

C	Celsius
°F	degrees Fahrenheit
ft	feet
m	meters
mi	mile
ppt	parts per thousand
sqft	square feet
ACOE	Army Corps of Engineers
APN	Assessor's Parcel Number
BIOS	Biogeographical Information and Observation System
BMP	Best Management Practice
C	candidate species status
CCH	Consortium of California Herbaria
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CT	candidate threatened species status
D	delisted species status
DPS	Northern California distinct population segment/species status
E	endangered species status
ECOS	USFWS's Environmental Conservation Online System
EPA	Environmental Protection Agency
ESU	evolutionarily significant unit/species status
FESA	Federal Endangered Species Act
FP	fully protected species status
G1/S1	critically imperiled species heritage rank
G2/S2	imperiled species heritage rank
G3/S3	vulnerable species heritage rank
G4/S4	apparently secure species heritage rank
G5/S5	secure species heritage rank
HDPE	high-density polyethylene
IPaC	Information for Planning and Conservation
MBTA	Migratory Bird Treaty Act
NCDC	National Climatic Data Center
NOAA	National Oceanic and Atmospheric Administration
NWI	National Wetlands Inventory
OSD	Official Soil Series Descriptions
PT	proposed threatened species status
SSC	species of special concern
SWRCB	State Water Resources Control Board
T	threatened species status
U.S.	United States
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VegCAMP	Vegetation Classification and Mapping Program
WL	Watch list species status

1.0 Introduction

SHN has conducted literature reviews, site investigations, and a habitat assessment to determine biological resources present in relation to the City of Trinidad's (the City) Area of Special Significance Stormwater Improvement Project (the Project) (Figures 1-4). This Biological Report has been prepared to evaluate the potential for special status biological resources within the project area, including habitat for special status species and natural communities.

The proposed project includes decommissioning the existing stormwater outfall and replacing it with a system of localized stormwater treatment chambers and infiltration basins. The intent of the design is to treat and dispose of stormwater closer to the areas of stormwater generation, which allows for a more distributed network of stormwater infrastructure that can be tailored to the anticipated runoff volumes generated by the contributing sub-watersheds. In addition the proposed project includes infrastructure to provide pollutant removal and capture of stormwater runoff.

The base design of each stormwater treatment and infiltration system includes a local network of stormdrain inlets, conveyance pipes, stormwater treatment chambers, and infiltration pipes, in addition to some minor improvements including valley gutters, curbs, and stormdrain manholes. Drainage inlets capture the runoff from the existing curb, gutter, and roadway network, which act as the initial receiving body of stormwater generated in the City.

In total there are four primary stormwater systems that compose the proposed project, each of which is a combination of the improvements noted above. The systems are located along Ewing Street, Underwood Drive, Edwards Street, and Lighthouse Road (Figure 4), and are presented in further detail below. Pipe installation may be accomplished through trenching or horizontal drilling, and the maximum depth of excavation would be 8 to 12 feet.

Ewing Street: The improvements include approximately 90 feet of 72-inch diameter stormwater infiltration pipe and stormwater treatment chamber, five new drainage inlets, and approximately 135 feet of new curb and 330 feet of new 12-inch diameter HDPE stormdrain pipe.

Underwood Drive: The improvements include two new drainage inlets, two 72-inch diameter infiltration pipes (totaling 70 feet) with one treatment chamber, and approximately 150 feet of 12-inch high-density polyethylene (HDPE) stormwater pipe and 350 feet of concrete curb and valley gutters.

Edwards / Lower Van Wycke Street: The improvements include three stormwater treatment chambers, four 36-inch diameter infiltration pipes (totaling 125 feet), 16 drainage inlets, and approximately 1,100 feet of 8-inch diameter HDPE stormdrain pipe.

Harbor Parking Area: The improvements include one treatment unit, 1,500 feet of 54-inch diameter infiltration pipe, two drainage inlets, and approximately 100 feet of 24-inch diameter HDPE stormdrain pipe.

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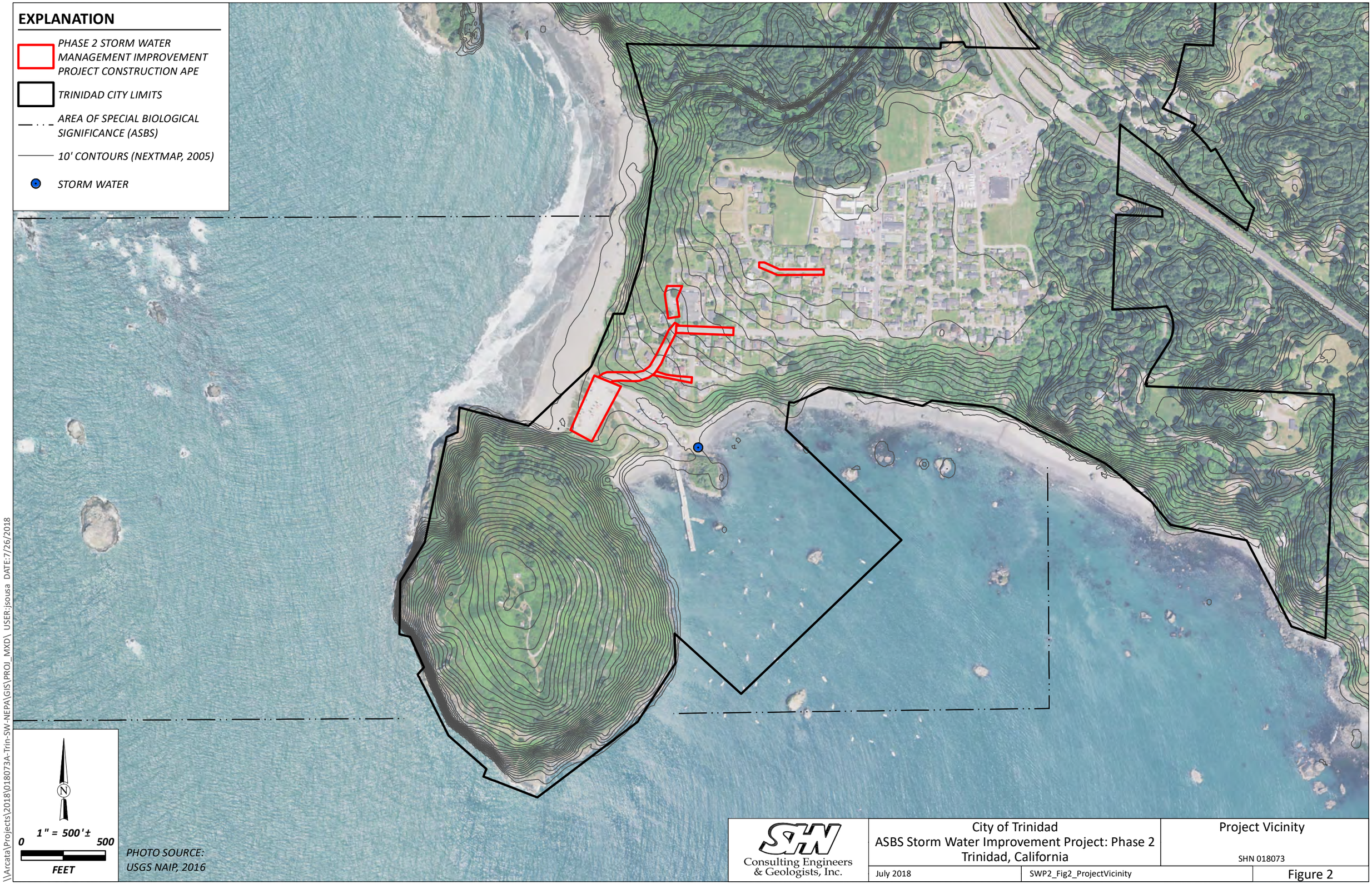
SHN Consulting Engineers & Geologists, Inc.

City of Trinidad
ASBS Storm Water Improvement Project: Phase 2
Trinidad, California

Project Location

SHN 018073

July 2018 | SWP2_Fig1_ProjectLocation | Figure 1



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SHN Consulting Engineers & Geologists, Inc.

City of Trinidad
ASBS Storm Water Improvement Project: Phase 2
Trinidad, California

Project Vicinity

SHN 018073

July 2018 | SWP2_Fig2_ProjectVicinity | Figure 2

EXPLANATION

PHASE 2 STORM WATER MANAGEMENT IMPROVEMENT PROJECT CONSTRUCTION APE

N

1" = 200'±

0 200

FEET

PHOTO SOURCE: USGS NAIP, 2016

SHN Consulting Engineers & Geologists, Inc.

City of Trinidad
ASBS Storm Water Improvement Project: Phase 2
Trinidad, California

Area of Potential Effect

SHN 018073

July 2018 | SWP2_Fig3_AreaOfPotentialEffect | Figure 3

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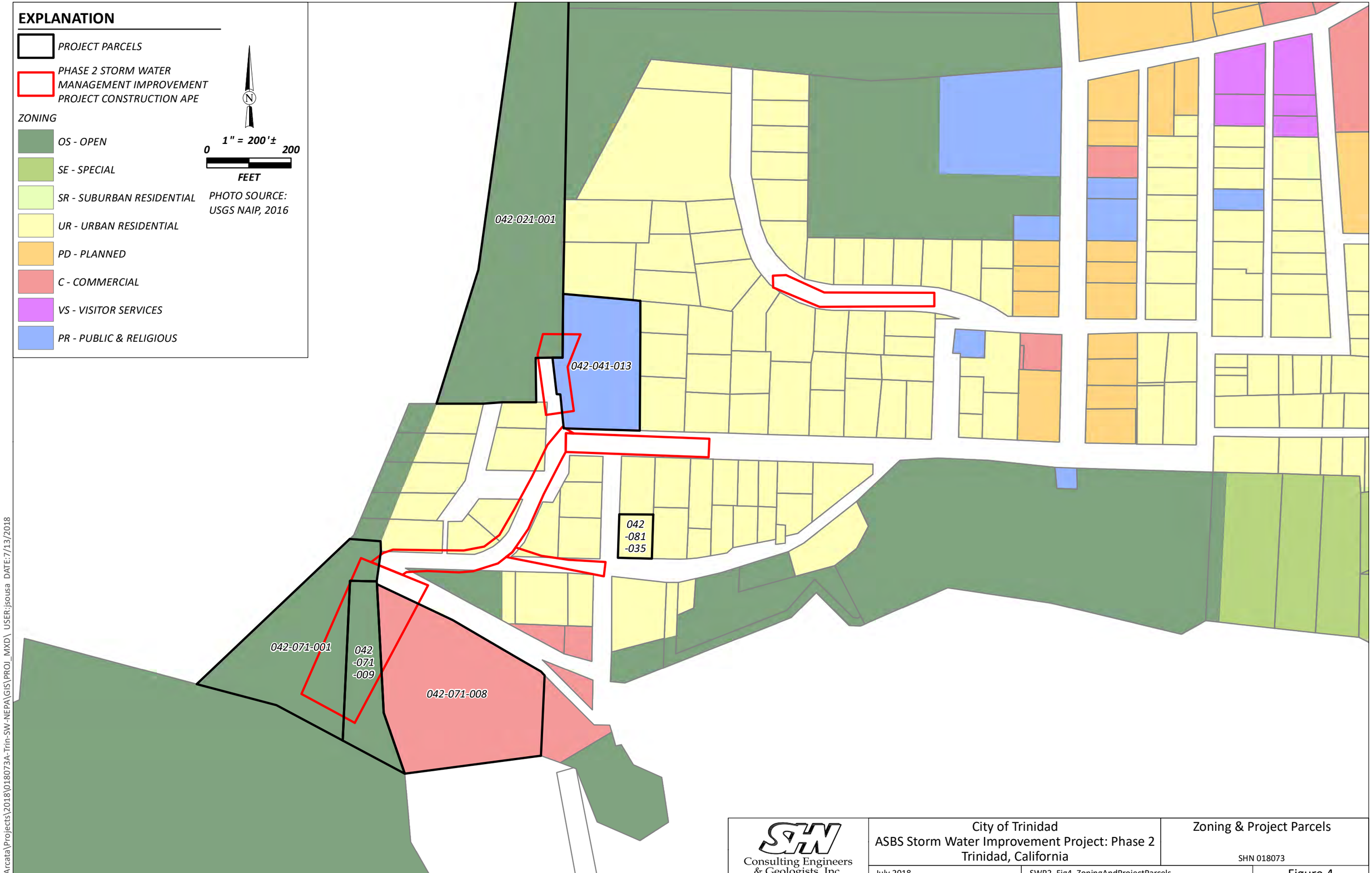

Consulting Engineers & Geologists, Inc.

City of Trinidad
ASBS Storm Water Improvement Project: Phase 2
Trinidad, California

Zoning & Project Parcels

SHN 018073

July 2018 | SWP2_Fig4_ZoningAndProjectParcels | Figure 4

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All construction will occur either beneath city streets or along the sides of city streets, within the public right-of-way or on City-owned property. The improvements within the Harbor parking area are located on property jointly owned by the City and the Cher-Ae Heights Indian Community of the Trinidad Rancheria (Trinidad Rancheria).

1.1 Project Location

The project is located within the City of Trinidad, California, an incorporated community within Humboldt County (Figure 1;United States Geological Survey [USGS] Trinidad 7.5-minute Quadrangle, Township 8 North, Range 1 West, Section 23, Humboldt Meridian). The project is located entirely within the right-of-way of Ewing Street, Underwood Drive, Edwards Street, and Van Wycke Street, as well as within the harbor parking area (Assessor's Parcel Number [APN] 042-071-009) and staging on parcel (APN 042-063-037)(Figure 4).Work will occur within the right of way of the aforementioned streets for an approximate distance of 1,525 linear feet, not including the infiltration gallery within the harbor parking area or the staging area. The infiltration gallery will cover an area of approximately 8,750 sqft. The staging area is located within a three-acre parcel; however, it is anticipated that only a fraction of the area will be used for staging. The project is located approximately 1,700 feet southwest of U.S. 101 at its nearest point, 500 feet north of Trinidad harbor at its nearest point, and 330 feet east of the Pacific Ocean at its nearest point (Figures 2 & 3).

1.2 Site Description

The project is located within the City of Trinidad, atop a bluff overlooking Trinidad harbor to the south and the Pacific Ocean to the west. The project will be constructed within the city street right-of-way, and as such will be constructed within areas already developed and paved. All streets slated for storm drain improvements are fully paved and are for the most part built out on either side of the street with residential housing, with the exception of Ewing Street and Lighthouse Road which have bluff habitat and non-native vegetation-dominated areas along portions of the street. The infiltration gallery will be installed within the harbor parking area, which is an unpaved gravel parking lot. The staging area will be situated within an undeveloped field dominated by non-native grasses. This field has been used for staging in the past.

2.0 Methodology

2.1 Literature Review

This Biological Report includes a review of pertinent literature on habitat characteristics of the site, and a review of information related to special status species of plants and animals that could potentially use the described habitats.

The findings for this report are a result of several sources, including a review of existing literature regarding sensitive resources that have the potential to occur within the site. Resources for this determination included:

- California Natural Diversity Database (CNDDB) query for the Trinidad and surrounding USGS 7.5-minute topographic quadrangles (Orick, Rodger's Peak, Crannell, Tyee City, and Arcata North) (California Department of Fish and Wildlife [CDFW], 2018a)
- Biogeographical Information and Observation System (BIOS; CDFW, 2018b)

- Electronic Inventory of Rare and Endangered Vascular Plants of California (California Native Plant Society [CNPS], 2018) queried for a list of all plant species reported for the Trinidad and surrounding USGS 7.5-minute topographic quadrangles
- Special Vascular Plants, Bryophytes, and Lichens of California List (CDFW, 2018c)
- Special Animals of California List (CDFW, 2018d)
- United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation(IPaC) was queried for threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of the proposed project and/or may be affected by the proposed project (USFWS, 2018a)

From the database queries, a list of potential target species for the study area was compiled. Tables 1 and 2 in Appendix 1 include species reported by the CNDDB and USFWS, and species listed in the CNPS inventory of rare plants.

Additionally, USFWS's Environmental Conservation Online System (ECOS) Critical Habitat Portal (USFWS, 2018b) was queried for habitat designated as critical for species listed under the Federal Endangered Species Act (FESA). The project area does not occur within critical habitats mapped by ECOS. The closest critical habitat to the project area is approximately 2.5 miles to the southeast at Moonstone Beach and within the Little River, and is designated for the western snowy plover (*Charadrius alexandrines nivosus*) and Chinook salmon (*Oncorhynchus tschawytscha*).

The CNDDB has five documented occurrences of special status species within the immediate vicinity of the project area. The North American porcupine (*Erethizon dorsatum*) is reported from 1988, the white footed vole (*Arborimus albipes*) is reported from 1926, the obscure bumblebee (*Bombus caliginosus*) is reported from 1984, the bristle stalked sedge (*Carex leptalea*) is reported from 1931, and the running pine (*Lycopodium clavatum*) is reported from 1959.

Prior to the field investigation, a review of plant species reported from the project area was performed by querying the "Consortium of California Herbaria" database records and "Calflora" observations (most recently accessed online in July 2018).

2.2 Field Observations and Studies

SHN's biologist conducted site visits on April 4, 2018 for biological surveys and habitat assessment. Surveys were conducted with an attempt to identify all species present within the project-related area of potential effects, including possible special status species. In addition to surveying for target species, a list of all botanical and animal species encountered was compiled (Tables 3 and 4 in Appendix 1). Plants were identified to the lowest taxonomic level possible to distinguish special status species from others. Nomenclature for special status animals conforms to California Department of Fish and Wildlife (CDFW, 2018b). Plant community names conform to *A Manual of California Vegetation, Second Edition* (Sawyer et al, 2009) and the VegCAMP (Vegetation Classification and Mapping Program) Natural Communities List (CDFW, 2010). Botanical nomenclature of species in this Report follows the *Jepson Manual (*Baldwin et al., 2012) and subsequent online revisions. Botanical surveys were conducted at seasonally-appropriate times for all of the listed species expected to potentially occur within the project area.

Site photographs from the site visits are included in Appendix 2.

3.0 Environmental Setting

The study area is situated between approximately 10 and 175 feet elevation above mean sea level, with the highest elevations represented within the City of Trinidad along Underwood Drive and Edwards Street, dropping to approximately 10 feet at the harbor parking area (Figures2, 3, and 4). Geology within the location is characterized as Franciscan complex overlain by uplifted marine deposits. The site is primarily located on an uplifted marine terrace gently sloping to the south and west with steep bluff faces to the west and south along Trinidad Bay beach. The area has been developed as a town site since the 1850's, and as such is characterized by paved areas, buildings, and non-native vegetation. The average precipitation in the City of Trinidad is approximately 50 inches, with the majority of precipitation occurring between November and March. Temperatures in Trinidad range from an average low of 39 degrees Fahrenheit (°F) in December to an average high of 65°F in September; extremes in temperatures are relatively uncommon due to the regional maritime influence.

3.1 Vegetation Communities

The study area is characterized by non-native vegetation typical of disturbed sites. This included sweet vernal grass (*Anthoxanthum odoratum*), hairy cat's-ear (*Hypochaeris radicata*), bird's foot trefoil (*Lotus corniculatus*), English ivy (*Hedera helix*), and English plantain (*Plantago lanceolata*), among others.

No natural vegetation community meeting the criteria of *A Manual of California Vegetation, Second Edition* (Sawyer et al, 2009) or the VegCAMP Natural Communities List (CDFW,2010) was identified within the study area.

Two vegetation communities were observed adjacent to the study area. Coyote brush scrub (*Baccharis pilularis* Shrubland Alliance) exists to the west of Ewing Street, and coastal brambles (*Rubusparviflorus, spectabilis, ursinus*) Shrubland Alliance exists to the north of the harbor parking area. Both of these vegetation communities are outside of the study area and are unlikely to be impacted by the project.

3.2 Wildlife Habitats

Common wildlife species expected on the site are those typically associated with urban landscapes, and marine shorelines of northwestern California. Wildlife species observed at the site included house sparrow (*Passer domesticus*), starling (*sturnis vulgaris*), and ground squirrel (*Otospermophilusbeecheyi*). Other wildlife species are likely to inhabit the surrounding area and it is expected that there are many other bird, mammal, and amphibian species that might use the project site, if only transitionally. However, human activities within the project area may limit the abundance of a variety of birds and animals.

3.3 Wildlife Movement Corridors

Wildlife movement includes migration (i.e., usually one-way per season), inter-population movement (i.e., long-term genetic flow), and small travel pathways (i.e., daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main corridor, permitting an increase in genetic flow among populations.

These linkages among habitat types can extend for miles from primary habitat areas and occur on a large scale throughout California. Habitat linkages facilitate movement between populations located in discrete areas and populations located within larger habitat areas. The mosaic of habitats found within a large-scale landscape results in wildlife populations that consist of discrete sub-populations constituting a large single population, which is often referred to as a meta-population. Even where patches of pristine habitat are fragmented, such as occurs with coastal scrub, the movement between wildlife populations is facilitated through habitat linkages, migration corridors, and movement corridors. Depending on the condition of the corridor, genetic flow between populations may be high in frequency, thus allowing high genetic diversity within the population, or may be low in frequency. Low-frequency genetic flow may potentially lead to complete isolation and, if pressures are strong, potential extinction (McCullough, 1996 and Whittaker, 1998).

The study area includes roads and residential development within the City of Trinidad. It is unlikely that wildlife would use the area for terrestrial wildlife movement corridors, although perennial drainages and forested areas surrounding the city of Trinidad could act as wildlife corridors. It is expected that many bird species will pass over the study area between marine and inland habitat areas. Species such as the osprey (*Pandion haliaetus*) and the marbled murrelet (*Brachyramphus marmoratus*) may fly over the study area between nesting and hunting areas, however it is not expected that the project will impact any flyway migration corridors.

3.4 Offsite Conditions

Land immediately surrounding the project area is composed of the City of Trinidad and is very similar to that which is found within the project area. To the south of the project area is a vegetated bluff face which ends at Trinidad Bay. To the west of the project area is a vegetated bluff face that ends at a beach fronting the Pacific Ocean. To the north of the project area is a forested area with rural residential development and Trinidad State Beach. To the east is a forested area with rural residential development and commercial timberland.

4.0 Special Status Biological Resources

An evaluation was conducted for the potential presence or absence of habitat for special status plant and animal species. CNDDB RareFind (CDFW, 2018a), BIOS (CDFW, 2018b), and CNPS (CNPS, 2018) searches were completed for the 7.5-minute USGS Trinidad quadrangle and all adjacent quadrangles. The aforementioned databases were queried for historical and existing occurrences of special status plants and animals. In addition, a list of all federally listed species that are known to occur or may occur in the vicinity was obtained from the USFWS Information for Planning and Conservation (IPaC) database (USFWS, 2018a).

Table 1 in Appendix 1 includes all special status plant species reported from the queries, their preferred habitat, and whether there is suitable habitat present within the study area for the species. Table 2in Appendix 1 includes all special status animal species reported from the queries, their preferred habitat, and whether there is suitable habitat present within the study area for the species. The potential for occurrence of those species included on the list were then evaluated based on the habitat requirements of each species relative to the conditions observed during the field surveys.

Each species was evaluated for its potential to occur in the study area according to the following criteria:

- **None**. Species listed as having “none” are those species for which:

- there is no suitable habitat present in the study area (that is, habitats in the study area are unsuitable for the species requirements [for example, elevation, hydrology, plant community, disturbance regime, etc.]).

- **Low**. Species listed as having a "low" potential to occur in the study area are those species for which:
  - there is no known record of occurrence in the vicinity, and
  - there is marginal or very limited suitable habitat present within the study area.
- **Moderate**. Species listed as having a "moderate" potential to occur in the study area are those species for which:
  - there are known records of occurrence in the vicinity, and
  - there is suitable habitat present in the study area.
- **High**. Species listed as having a "high" potential to occur in the study area are those species for which:
  - there are known records of occurrence in the vicinity (there are many records and/or records in close proximity), and
  - there is highly suitable habitat present in the study area.
- **Present**. Species listed as "present" in the study area are those species for which:
  - the species was observed in the study area.

4.1 Special Status Plant Species

Based on a review for special status plant species, 62 special status plant species have been reported from the region consisting of the Trinidad quadrangle and the surrounding quadrangles. Of the special status plant species reported for the region, 53 plant species are considered to have low or no potential to occur at the project site and 9 species have a moderate or high potential of occurring at the project site. Species with a moderate or high potential for occurrence within the study area are described below.

False grey horsehair lichen (*Bryoria pseudocapillaris*) is a lichen in the Parmeliaceae family. It is neither State nor federally listed, but has a CRPR of 3.2 and a heritage rank of G3/S2. Its elevation range is reported from 0 to 90 meters above sea level. This species is reported from coastal dunes and north coast coniferous forest along the immediate coast, where it is usually found on conifers. There is no Rarefind occurrence for this taxon within the nine-quad search. Although suitable habitat may exist within the study area for this species, it was not detected.

Oregon coast paintbrush (*Castilleja litoralis*) is a perennial herb in the Orobanchaceae family. It is neither State nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G3/S3. Its elevation range is reported from 5 to 255 meters above sea level. Within its range state-wide, its blooming period is reported as June. This species is reported from coastal sandy sites within coastal bluff scrub, coastal scrub, and coastal dune habitat. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest centered approximately 2,000 feet south of the project area at its nearest point with an observation date from 1964. Although suitable habitat may exist within the study area for this species, it was not detected.

Harlequin lotus (*Hosackia gracilis)* is a perennial herb in the Fabaceae family. It is neither State nor federally listed, but has a CRPR of 4.2 and a heritage rank of G4/S3. Its elevation range is reported from 0 to 700 meters above sea level. Within its range state-wide, its blooming period is reported as March through July. This species is reported from broadleaf upland forests, coastal bluff scrub, coastal prairie, coastal scrub, meadows, seeps, marshes and swamps, north coast coniferous forests, and valley and foothill grassland habitats. There is no Rarefind occurrence for this taxon within the nine-quad search. Although suitable habitat may exist within the study area for this species, it was not detected.

Howell's montia *(Montia howellii)* is an annual herb in the Montiaceae family. It is neither State nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G3G4/S2. Its elevation range is reported from 0 to 835 meters above sea level. Within its range state-wide, its blooming period is reported as March through May. This species is reported from vernally mesic meadows and seeps, north coast coniferous forests, and sometimes roadside habitats. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest approximately 9.5 miles to the southeast in Fieldbrook, with an observation date from 2014. Although suitable habitat may exist within the study area for this species, it was not detected.

Wolf's evening primrose (*Oenothera wolfii)* is a perennial herb in the Onagraceae family. It is neither State nor federally listed, but has a CRPR of 1B.1 and a heritage rank of G2/S1. Its elevation range is reported from 0 to 125 meters above sea level. Within its range state-wide, its blooming period is reported as May through October. This species is reported from coastal bluff scrub, coastal dunes, coastal prairie, and lower montane coniferous forest. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest approximately 1.7 miles to the southeast of the nearest point of the study area with an observation date in 2013. Although suitable habitat may exist within the study area for this species, it was not detected.

Seacoast ragwort (*Packera bolanderi* var. *bolanderi*) is a perennial herb in the Asteraceae family. It is neither State nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G4T4/S2S3. Its elevation range is reported from 30 to 915 meters above sea level. Within its range state-wide, its blooming period is reported as January through August. This species is reported from coastal scrub and north coast coniferous forest, often along roadsides. Within the nine-quad search, one Rarefind occurrence is reported approximately 6 miles southeast of the study area, with an observation date from 1911. Although suitable habitat may exist within the study area for this species, it was not detected.

Tracy's romanzoffia (*Romanzoffia tracyi*) is a perennial herb in the Boraginaceae family. It is neither State nor federally listed, but has a CRPR of 2B.3 and a heritage rank of G4/S2. Its elevation range is reported from 15 to 300 meters above sea level. Within its range state-wide, its blooming period is reported as March through May. This species is reported from coastal bluff scrub and coastal scrub from rocky sites. Within the nine-quad search, several Rarefind occurrences are reported with the nearest centered on Trinidad Head approximately 1,500 feet to the south of the study area, with an observation date from 1946. Although suitable habitat may exist within the study area for this species, it was not detected.

Maple-leaved checkerbloom (*Sidalcea malachroides*) is a perennial herb in the Malvaceae family. It is neither State nor federally listed, but has a CRPR of 4.2 and a heritage rank of G3/S3. Its elevation range is reported from 0 to 730 meters above sea level. Within its range state-wide, its blooming period is reported as March through August. This species is reported from broadleaf upland forest, coast prairie, coast scrub, north coast coniferous forest, and riparian habitats, primarily from woodlands and clearings near the coast;

often in disturbed areas. Within the nine-quad search, one Rarefind occurrence is reported approximately 11 miles to the southeast, with an observation date from 1934. Although suitable habitat may exist within the study area for this species, it was not detected.

Cylindrical trichodon (*Trichodon cylindricus*) is a moss in the Ditrichaceae family. It is neither State nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G4/S2. Its elevation range is reported from 30 to 1,500 meters above sea level. This species is reported from broadleaf upland forest and upper montane coniferous forest where it grows in openings on sandy or clay soils on roadsides, stream banks, trails or in fields. Within the nine-quad search, two Rarefind occurrences are reported, with the nearest centered approximately three miles to the north point of the project area, with an observation date from 1983. Although suitable habitat may exist within the study area for this species, it was not detected.

Surveys were conducted at a seasonally-appropriate time for all of the plant species expected to potentially occur within the project area, with the exception of the Oregon coast paintbrush that has a bloom period in the month of June. Although a site visit was not conducted in June, this species was specifically looked for during the early July survey and was not observed. Surveys of the study area failed to locate any sensitive botanical species at the project site. It is unlikely that any species were missed; however, the findings in this report represent a "snapshot in time" and it is possible that false negative surveys for rare plant species could occur. This report documents the 2018 field investigations, and the findings presented here are based on best professional judgment.

4.2 Special Status Animal Species

Based on a review of special status animal species, 56 special status animal species have been reported with the potential to occur in the project region, consisting of the Trinidad quadrangle and the surrounding quadrangles. Of the special status animal species potentially occurring in the region, 44 animal species are considered to have low or no potential of occurring at the project site and 12 species have a moderate to high potential. Species with a moderate or high potential for occurrence within the study area are described below.

4.2.1 Amphibians

The northern red-legged frog (*Rana aurora*) is a frog in the Ranidae family. It is not listed under either federal or California endangered species acts, but is considered a species of special concern by CDFW and has a heritage ranking of G4/S3. This species is reported from lowlands, foothills, humid forests, woodlands, grasslands, and within and adjacent to streamsides with plant cover. Breeding occurs in permanent water sources between December and April, with metamorphosis completed by late July. Red-legged frogs are known to occur hundreds of meters from water, especially in thick vegetation. However, they are most frequently found within five meters of water in densely vegetated areas (Thomson, 2016). Within the nine-quad search, numerous Rarefind occurrences are reported, with the nearest approximately 1.1 miles north of the study area. Although suitable habitat may exist within the study area for this species, it was not detected.

4.2.2 Birds

The Cooper's hawk (*Accipiter cooperi*) is a bird in the Accipitridae family. It is not listed under either federal or California endangered species acts, but is on the CDFW watch list and has a heritage ranking of G5/S4.

This species often occurs in open, marginal habitat woodlands. It nests in a variety of tree species in dense woods. There is no Rarefind occurrence for this taxon within the nine-quad search. Although suitable habitat may exist within the study area for this species, it was not detected.

The great blue heron (*Ardea herodias*) is a bird in the Ardeidae family. It is not listed under either federal or California endangered species acts, but is considered a sensitive species by CDFW and has a heritage ranking of G5/S4. This species occurs in shallow estuaries and emergent wetlands. It is less common along riverine, rocky marine shores, and pastures. The great blue heron searches for prey in shallow water and open fields. It nests in colonies in tops of secluded large snags/live trees. Within the nine-quad search, numerous Rarefind occurrences are reported, with the nearest south of the Mad River. Although suitable habitat may exist within the study area for this species, it was not detected.

The western snowy plover (*Charadrius alexandrinus nivosus*) is a bird in the Charadriidae family. It is listed as threatened under the federal endangered species act, but is not listed under the California endangered species acts. It is considered a species of special concern (SSC) by CDFW and has a heritage ranking of G3T3/S2S3. This species occurs on sandy beaches, salt pond levees, and shores of large alkaline lakes. It is known to nest above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at river mouths, and salt pans at lagoons and estuaries. Within the nine-quad search, several Rarefind occurrences are reported with the nearest located at Big Lagoon approximately 7.5 miles to the north of the study area. Although suitable habitat may exist within the study area for this species, it was not detected.

The white-tailed kite (*Elanus leucurus*) is a bird in the Accipitridae family. It is not listed under either federal or California endangered species acts, but is considered a fully protected species by CDFW and has a heritage ranking of G5/S3S4. This species occurs in rolling foothills and valley margins with scattered oaks and river bottomlands, or marshes next to deciduous woodland. They are most commonly found in open grasslands, meadows, or marshes for foraging and close to isolated, dense-topped trees for nesting and perching. There is no Rarefind occurrence for this taxon within the nine-quad search. Although suitable habitat may exist within the study area for this species, it was not detected.

The American peregrine falcon (*Falco peregrinus anatum*) is a bird in the Falconidae family. It has been delisted from both federal and California endangered species acts, but is considered a fully protected species by CDFW and has a heritage ranking of G4T4/S3S4.This species occurs within many open habitats; however, it is more likely along coastlines, lake edges, and mountain edges. It is most common near wetlands, lakes, rivers, or other water. It often nests on cliffs, banks, dunes, and mounds; also, human-made structures, with the nest consisting of a scrape, depression, or ledge in an open area. The American peregrine falcon hunts birds which it will surprise by diving out of the sky to capture or stun. There is no Rarefind occurrence for this taxon within the nine-quad search. Although suitable habitat may exist within the study area for this species, it was not detected.

The bald eagle (*Haliaeetus leucocephalus*) is a bird in the Accipitridae family. It is has been delisted under the federal endangered species act, but is still listed as Endangered under the California Endangered Species Act. It is considered a fully protected species by CDFW and has a heritage ranking of G5/S3. This species is typically found along ocean shores, lake margins, and rivers for both nesting and wintering. Most nests are constructed within one mile of open water within large, old-growth, or dominant live trees with open branches, especially ponderosa pine. There is no Rarefind occurrence for this taxon within the nine-quad search. Although suitable habitat may exist within the study area for this species, it was not detected.

The osprey (*Pandion haliaetus*) is a bird in the Pandionidae family. It is not listed under either federal or California endangered species acts, but is on the CDFW watch list and has a heritage ranking of G5/S4. This species occurs near rivers, lakes, and coast where large numbers of fish are present. Ospreys are most common around major coastal estuaries and salt marshes. Within the nine-quad search, numerous Rarefind occurrences are reported surrounding the City of Trinidad, with the nearest approximately 3.5 miles to the east of the study area. Although suitable habitat may exist within the study area for this species, it was not detected.

4.2.3 Insects

The obscure bumblebee (*Bombus caliginosus*) is a bumblebee in the Apidae family. It is not listed under either federal or California endangered species acts, but has a heritage ranking of G4/S1S2. This species is known from coastal areas from Santa Barbara County to north to Washington State, where it nests underground or above ground in abandoned bird nests. The primary food plant genera include *Baccharis*, *Cirsium*, *Lupinus*, *Lotus*, *Grindelia,* and *Phacelia*. Within the nine-quad search, numerous Rarefind occurrences are reported, with the nearest occurrence centered over the City of Trinidad within the study area, with an observation date from 1984. Although suitable habitat may exist within the study area for this species, it was not detected.

The western bumblebee (*Bombus occidentalis*) is a bumblebee in the Apidae family. It is not listed under either federal or California endangered species acts, but is a United States Forest Service (USFS) sensitive species and has a heritage ranking of G2G3/S1. This species pollinates a wide variety of flowers and is known to gnaw through flowers to obtain nectar their tongues are too short to reach. Colonies nest in cavities or abandoned burrows. It was once common and widespread; however, it has seriously declined, possibly due to disease. Within the nine-quad search, several Rarefind occurrences are reported surrounding the City of Trinidad, with the nearest approximately 4.4 miles to the south of the study area. Although suitable habitat may exist within the study area for this species, it was not detected.

4.2.4 Mammals

The long-eared myotis (*Myotis evotis*) is a bat in the Vespertilionidae family. It is not listed under either federal or California endangered species acts, but has a heritage ranking of G5/S3. This species feeds on a variety of arthropods including moths, flies, spiders, and especially beetles. The long-eared myotis roosts singly, or in small groups in buildings, crevices, spaces under bark, and snags. Caves are used primarily as night roosts. Within the nine-quad search several Rarefind occurrences are reported, with the nearest occurrence reported approximately 5.6 miles to the southeast of the study area. Although suitable habitat may exist within the study area for this species, it was not detected.

The silver-haired bat (*Lasionycteris noctivagans*) is a bat in the Vespertilionidae family. It is not listed under either federal or California endangered species acts, but has a heritage ranking of G5/S3S4. This species is primarily a coastal and montane forest dweller, feeding over streams, ponds and open brushy areas. The silver-haired bat roosts in hollow trees, beneath exfoliating bark, in abandoned woodpecker holes, and rarely under rocks. This species needs drinking water within the vicinity of its roost site. Within the nine-quad search several Rarefind occurrences are reported, with the nearest occurrence reported approximately 14.5 miles to the northeast of the study area. Although suitable habitat may exist within the study area for this species, it was not detected.

4.3 Special Status Natural Communities and Habitats

Sensitive natural communities are habitats that are generally defined by vegetation type and geographical location and are increasingly restricted in abundance and distribution. Recognition of natural communities is an ecosystem-based approach to maintaining biodiversity in California. Holland-type CNDDB natural communities are habitat for numerous special status plant and animal species. CDFW no longer updates their tracking of Holland-type CNDDB natural communities and has since standardized alliance and association-level vegetation nomenclature for California to comply with the National Vegetation Classification System.

4.3.1 Natural Communities

No special status natural community (defined as vegetation alliances) was identified within the study area. The project area consists of urban residential landscape containing disturbance-adapted non-native species. See Section 3.1Vegetation Communities for more details on natural communities/vegetation alliances observed within the project area.

4.3.2 Wetlands and Riparian Habitats

A wetland delineation was not conducted within the proposed project area (pavement and road-side areas on a slope). The National Wetlands Inventory (NWI) does not show any wetlands within the project area along the roads. There are areas of Estuarine and Marine Wetland habitat classified as M2US2N outside of the project area along the ocean shores.

5.0 Conclusions

The purpose of this report was to assess the biological resources and habitat available within the study area, and to evaluate project-related impacts. The habitat value and availability was assessed for special status species that could occur within the study area. Recommendations for avoiding and mitigating impacts are addressed in Section 6.0 Recommendations.

5.1 Special Plant Status Species

Based on a review for special status plant species, 62 special status plant species have been reported from the region consisting of the Trinidad quadrangle and the surrounding quadrangles. Of the special status plant species reported for the region, 53 plant species are considered to have low or no potential to occur at the project site and 9 species have a moderate or high potential of occurring at the project site. Surveys of the study area failed to locate any sensitive botanical species at the project site.

The project will have no effect on special status plant species or their designated critical habitat due to the lack of habitat within the project area and the developed nature of the project area.

5.2 Special Wildlife Status Species

Based on a review of special status animal species, 56 special status animal species have been reported with the potential to occur in the project region consisting of the Trinidad quadrangle and the surrounding quadrangles. Of the special status animal species potentially occurring in the region, 44 animal species are considered to have low or no potential of occurring at the project site and 12 species have a moderate to high potential.

Special status birds are not likely to be affected by the proposed project. Riparian and wooded areas will not be impacted by the project, as all work will remain within paved roads and existing parking areas for staging. No trees will be removed, and no significant vegetation clearing is proposed. There may be some noise-related disturbance associated with the construction of the project, but it will not have a significant impact on special status birds due to the proximity of the proposed project within the existing right of way of a well-traveled roadway. Nesting bird surveys will be required prior to construction should work begin during the nesting season (see Section 6 Recommendations).

Special status mammals are not likely to be affected by the proposed project. Riparian habitat will not be impacted by the project, and no significant vegetation clearing is proposed. Habitats that may be used by bats will not be impacted by the project.

Special status amphibians are not likely to be impacted by the project. Red-legged Frogs are occasionally found in road-side ditches that fill with water, although construction for the proposed project is planned for the dry season.

Special status fishes are not likely to be affected by the proposed project. Project activities will not occur within riparian habitat. No ground-disturbing work is proposed during the rainy season and it is not anticipated that the project will result in sediment discharge with the use of proper best management practices (BMPs).

Special status insects are not likely to be affected by the proposed project. Riparian habitat will not be impacted by the project, and no significant vegetation clearing is proposed.

Special status reptiles (western pond turtle) are not likely to be affected by the proposed project. Riparian and wooded areas will be avoided and no trees will be removed as a result of this project. There is no available habitat for the western pond turtle within the project area.

Surveys of the study area failed to locate any sensitive animal species at the project site. The project will have no effect on special status animal species or their designated critical habitat due to the lack of habitat within the project area and the developed nature of the project area. Implementation of the recommendations listed in the recommendations section (Section 6.0) of the report will reduce potential impacts to other non-special status animal species potentially occurring within the project area.

5.3 Sensitive Natural Communities

No natural community (defined as vegetation alliances) was identified within the study area. Therefore the project will have no effect on sensitive natural communities.

5.4 Nesting Birds

No vegetation is proposed for removal, but disturbance from construction activities will temporarily elevate noise levels. Nesting birds protected by the Migratory Bird Treaty Act (MBTA) are not likely to be affected by this project if construction is conducted outside of the nesting season (February 1 through August 15).

With the incorporation of Recommendation 3 (see Section 6.0 Recommendations), the project will not result in a significant effect on nesting birds.

5.5 Impacts on Wildlife Movement

Most of the wildlife movement corridors are expected to be concentrated along riparian corridors. The project will occur more than 50 feet from the edge of riparian vegetation; therefore the project will have no effect on a wildlife movement corridor.

5.6 Wetlands and Riparian Habitats

The riparian habitats to the north and to the east, and the Estuarine and Marine Wetlands situated along the coastal shores will not be directly impacted by the project (Appendix 3). The use of proper BMPs detailed within the project description provided by the construction manager will prevent erosion and stormwater runoff into wetland and riparian areas.

With the incorporation of Recommendations 1 through 3 (see Section 6.0 Recommendations), the project will have no effect on wetlands, including indirect effects.

6.0 Recommendations

SHN recommends that the following measures be implemented at the project site during construction to avoid and minimize the potential impacts:

1. Construction-related ground disturbance activities, such as grading and excavating, should include an erosion and sediment control plan that includes BMPs to avoid and minimize sediment transport.
2. Project-related noise levels should be minimized so that sound levels are below 50 decibels at a distance of 100 feet from the source.
3. To avoid potential impacts to nesting birds, one of the following should be implemented:
    a. Conduct vegetation removal and other ground disturbance activities associated with any construction activities between mid-August and mid-February, when birds are not typically nesting.
    b. If vegetation removal or ground-disturbing activity is to take place during the nesting season (February 15 to August 15 for most birds), a qualified biologist should conduct a pre-construction nesting bird survey. Pre-construction surveys for nesting pairs, nests, and eggs should occur within the construction limits and within 100 feet (200 feet for raptors) of the construction limits within 7 days of the commencement of construction. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW, and implemented to prevent abandonment of the active nest.
4. If work is to occur adjacent to standing water or riparian corridors, then northern red-legged frog and foothill yellow-legged frog surveys should be conducted, immediately prior to disturbance. If these species are found, a qualified biologist should relocate the individuals and install an exclusion fence around the construction area following the relocation to reduce the likelihood that the northern red-legged frog or foothill yellow-legged frog will return to the construction area.

5. If dewatering trenches is necessary, use a pump intake covered with 0.125-inch mesh to prevent entrapment of amphibians that may have moved into the trench.
6. Use native and locally-sourced plant material for revegetation post-construction.
7. All BMPs detailed within the project description should be adhered to in order to reduce impacts during construction.

7.0 References

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (eds). (2012). *The Jepson Manual: Vascular Plants of California, Second Edition*. Berkeley, CA:University of California Press, Berkeley.

Calflora. (NR). "Calflora" database. Berkeley, CA:Calflora. Accessed April 2018 at: http://calflora.org/.

Consortium of California Herbaria. (NR). "Consortium of California Herbaria" database. Berkeley, CA:CCH. Accessed March 2018 at: http://ucjeps.berkeley.edu/consortium/.

California Department of Fish and Wildlife. (1984). California Endangered Species Act. CFGC sections 2070, 2080. Sacramento, CA:CDFW.

---. (1994) "A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code". Sacramento, CA:CDFW.

---. Natural Community Conservation Planning Act. Fish and Game Code Section 2800. Sacramento, CA:CDFW.

---. (1998). Fish and Game Code. Sacramento, CA:CDFW.

---. (November 2009). "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities."Accessed May 2018 at: https://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols_for_Surveying_and_Evaluating_Impacts.pdf .

---. (2010). Vegetation Classification and Mapping Program (VegCAMP), "Natural Communities List."Sacramento, CA:CDFW. Accessed May 2018 at: http://www.dfg.ca.gov/biogeodata/vegcamp/natural_communities.asp.

---. (2018a). "California Natural Diversity Database (CNDDB)." Accessed April 2018 at: http://www.dfg.ca.gov/biogeodata/cnddb/. Sacramento, CA:CDFW.

---. (2018b). "Biogeographic Information and Observation System (BIOS), Version 5.65.02." Sacramento, CA:CDFW. Accessed April 2018 at: http://bios.dfg.ca.gov/.

---. (2018c). "Special Vascular Plants, Bryophytes, and Lichens List." Sacramento, CA:CDFW.

---. (2018d). "Special Animals List. "Sacramento, CA:CDFW.

California Native Plant Society. (2018). "CNPS Rare Plant Program, Inventory of Rare and Endangered Plants (online edition, v8-02)."Sacramento, CA:CNPS. Accessed April 2018 at: http://www.rareplants.cnps.org.

California Natural Resources Agency. (1970). California Environmental Quality Act. CCR: Title 14, Div. 6, Chap. 3, Appendix G; Sections 15125 (c) and 15380(d).

County of Humboldt. (1988). Humboldt County General Plan: Volume I Framework Plan (Amended 1998). Eureka, CA:County of Humboldt.

... (2005). "Streamside Management Area Ordinance". Title 3, Section 314-61.1 of the Humboldt County Code. Eureka, CA:County of Humboldt.

Environmental Protection Agency. (2002). Clean Water Act of 1972, 33 U.S.C. § 1251 et seq. Washington, D.C.

---. Section 401 of the Clean Water Act,33 USC § 1341.Washington, D.C.

McCullough, Dale R. (ed). (1996). *Metapopulations and Wildlife Conservation*. Washington,D.C.:Island Press.

McLaughlin, J. and F. Harradine. (1965). *Soils of Western Humboldt County California*. Davis, CA: Department of Soils and Plant Nutrition at UC Davis and Humboldt Co.

National Oceanic & Atmospheric Administration, National Climatic Data Center. (May 2018). NOAA/NCDC Database, California Redwood Coast – Humboldt County Airport, CA US. Accessed May 2018 at: https://www.ncdc.noaa.gov/cdo-web/datatools/normals.

Natural Resource Conservation Service (NRCS). (May 2018). NRCS Web Soil Survey. Accessed May 2018 at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

Sawyer, J.O., T. Keeler-Wolf, and J Evans. (2009). *A Manual of California Vegetation, Second Edition*. Sacramento, CA:CNPS Press.

SHN Engineers & Geologists. (August 2016). *Wastewater Facilities Plan, LCSD Wastewater Treatment Facility; NPDES Permit No. CA0023671; Order No. R1-2014-0013.* Eureka, CA:SHN.

---. (June 2018). *Wetland and Ordinary High Water Mark Delineation, Loleta Wastewater Treatment Facility, Loleta, California.*Eureka, CA:SHN.

State Water Resources Control Board. (1969.) Porter-Cologne Water Quality Control Act.CWC Section 7. Sacramento, CA.:SWRCB.

Thomson, R.C. (2016). *California Amphibian and Reptile Species of Special Concern.* Oakland, CA: University of California Press, copublished with California Department of Fish and Wildlife.

U. S. Army Corps of Engineers Environmental Laboratory. (January 1987). *Corps of Engineers Wetlands Delineation Manual: Wetlands Research Program Technical Report Y-87-1*. Vicksburg, MS:ACOE.

U.S. Army Corps of Engineers/Environmental Protection Agency. (2008). "Clean Water Act Jurisdiction." Washington, D.C.:ACOE/EPA.

U.S. Department of Agriculture, Natural Resources Conservation Service.(2015). "Official Soil Series Descriptions (OSDs)." Accessed May 2018 at: http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/soils/home/?cid=nrcs142p2_053587.

U.S. Fish and Wildlife Service.(1918). Migratory Bird Treaty Act. 50 CFR 21, 16 USC 703. Washington, D.C.:USFWS.

---. (1934). The Fish and Wildlife Coordination Act (16 USC Sections 661-667e, March 10, 1994, as amended 1946, 1958, 1978, and 1995). Washington, D.C.:USFWS.

---. (1973). Endangered Species Act. 16 USC 1532, 16 U.S.C. 1536, 50 CFR 17.3. Washington, D.C.:USFWS.

---. (2018a). Information, Planning and Conservation System (IPAC), Trust Resources List." Washington D.C.:USFWS. Accessed April2018 at: https://ecos.fws.gov/ipac/location/index.

---. (2018b). "Critical Habitat Portal". Washington D.C.:USFWS. Accessed April 2018 at:

http://ecos.fws.gov/crithab/.

---. (2018c). National Wetland Inventory. Washington D.C.:USFWS. Accessed May 2018 at:http://fws.gov/wetlands/data/mapper.html.

Whittaker, Doug and Richard L Knight (eds). (Summer 1998). *Understanding Wildlife Responses to Humans. Wildlife Society Bulletin, Vol. 26, No. 2*. pp. 312-317. Bethesda, MD:Wildlife Society.

Species Lists 1

Table 1 Regionally Occurring Special Status Plant Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles											
Scientific Name	**Common Name**	**Family**	**FedList**	**CalList**	**GRank**	**SRank**	**RPlant Rank**	**Bloom Period**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
*Abronia umbellata*var. *breviflora*	pink sand-verbena	Nyctagin-aceae	None	None	G4G5-T2	S1	1B.1	June-Oct.	Coastal dunes and coastal strand.	Foredunes and interdunes with sparse cover. Usually the plant closest to the ocean. 0-10 m.	**None**
Angelica lucida	sea-watch	Apiaceae	None	None	G5	S3	4.2	May-Sept.	Coastal strand.	Coastal bluff scrub, coastal dunes, coastal scrub, coastal salt marshes. 0-150 m	**Low**
*Astragalus rattanii*var.*rattanii*	Rattan's milk-vetch	Fabaceae	None	None	G4T4	S4	4.3	April-July	Chaparral, cismontane woodland, lower montane conifer forest.	Open grassy hillsides, gravelly flats in valleys, and gravel bars of stream beds. 30-825 m.	**None**
Bryoriapseudocapillaris	false gray horsehair lichen	Parmeli-aceae	None	None	G3	S2	3.2	Lichen	Coastal dunes, N. Coast conifer forest (immediate coast).	Usually on conifers. 0-90 m.	**Moderate**
Bryoriaspiralifera	twisted horsehair lichen	Parmeli-aceae	None	None	G3	S1S2	1B.1	Lichen	North coast conifer forest.	Usually on conifers. 0-30 m.	**Low**
Calamagrostis bolanderi	Bolander's reed grass	Poaceae	None	None	G4	S4	4.2	May-August	Closed-cone coniferous forest, north coast coniferous forest, broadleaved upland forest, coastal scrub, marshes and swamps, meadows and seeps, bogs and fens.	Mesic sites. 0-455 m.	**None**
Calamagrostis crassiglumis	Thurber's reed grass	Poaceae	None	None	G3Q	S2	2B.1	May-July	Coastal scrub, marshes and swamps.	Usually in marshy swales surrounded by grassland or coastal scrub. 5-50 m.	**None**
Cardamineangulata	seaside bittercress	Brassic-aceae	None	None	G5	S1	2B.1	Jan.-July	Lower montane, conifer forest, N. coast conifer forest, wetland.	Wet areas, streambanks. 90-155 m.	**None**
Carexarcta	northern clustered sedge	Cyperaceae	None	None	G5	S1	2B.2	June–Sept.	Bogs and fens, North Coast coniferous forest.	Mesic sites. 0-3,200 m.	**None**

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Scientific Name	**Common Name**	**Family**	**FedList**	**CalList**	**GRank**	**SRank**	**RPlant Rank**	**Bloom Period**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
Carexbuxbaumii	Buxbaum's sedge	Cyperaceae	None	None	G5	S3	4.2	March-August	Bogs and fens, meadows and seeps, marshes and swamps.	Mesic sites. 3-3,300 m.	**None**
Carex lenticularis var. limnophila	lagoon sedge	Cyperaceae	None	None	G5T5	S1	2B.2	June-August	Bogs and fens, marshes and swamps, north coast coniferous forest.	Lakeshores, beaches. Often in gravelly substrates. 0-6 m.	**None**
Carexleptalea	bristle-stalked sedge	Cyperaceae	None	None	G5	S1	2B.2	March-July	Bogs and fens, meadows and seeps, marshes and swamps.	Mostly known from bogs and wet meadows. 3-1,395 m.	**None**
Carexlyngbyei	Lyngbye's sedge	Cyperaceae	None	None	G5	S3	2B.2	April-August	Marsh & swamp (brackish or freshwater).	0-200 m.	**None**
Carexpraticola	northern meadow sedge	Cyperaceae	None	None	G5	S2	2B.2	May-July	Meadows and seeps.	Mesic sites. 0-3,200 m.	**Low**
Carexsaliniformis	deceiving sedge	Cyperaceae	None	None	G2	S2	1B.2	June	Coastal prairie, coastal scrub, meadows and seeps, marshes and swamps (coastal salt).	Mesic sites. 2-230 m.	**Low**
Carexviridula ssp. viridula	green yellow sedge	Cyperaceae	None	None	G5T5	S2	2B.3	June-July	Bogs and fens, marshes and swamps (freshwater), north coast coniferous forest.	Mesic sites. 0-1,705 m.	**Low**
*Castilleja ambigua*var.*humboldtiensis*	Humboldt Bay owl's-clover	Orobanch-aceae	None	None	G4T2	S2	1B.2	April-August	Marshes and swamps.	Coastal saltmarsh with *Spartina, Distichlis, Salicornia, Jaumea*. 0-20 m.	**None**
Castilleja litoralis	Oregon coast paintbrush	Orobanch-aceae	None	None	G3	S3	2B.2	June	Coastal bluff scrub, coastal dunes, coastal scrub.	Sandy sites. 5-255 m.	**Moderate**
Castilleja mendocinensis	Mendocino Coast paintbrush	Orobanch-aceae	None	None	G2	S2	1B.2	April-August	Coastal bluff scrub, coastal scrub, coastal prairie, closed-cone coniferous forest, coastal dunes.	Often on sea bluffs or cliffs in coastal bluff scrub or prairie. 3-70 m.	**Low**
*Chloropyronmaritimum*ssp.*palustre*	Point Reyes salty bird's-beak	Orobanch-aceae	None	None	G4?T2	S2	1B.2	June-Oct.	Coastal salt marsh.	Usually in coastal salt marsh with *Salicornia, Distichlis, Jaumea, Spartina*, etc. 0-10 m.	**None**

Table 1 Regionally Occurring Special Status Plant Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles											
Scientific Name	**Common Name**	**Family**	**FedList**	**CalList**	**GRank**	**SRank**	**RPlant Rank**	**Bloom Period**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
Chrysosplenium glechomifolium	Pacific golden saxifrage	Saxifrag-aceae	None	None	G5	S3	4.3	Feb.-June	North Coast coniferous forest, riparian forest.	Streambanks, sometimes seeps, sometimes roadsides. 10-220 m.	**Low**
Darlingtonia californica	California pitcher plant	Serraceni-aceae	None	None	G4	S4	4.2	April-July	Bogs and fens, meadows and seeps.	On ultramafic soils.	**None**
Discelium nudum	naked flag moss	Disceliaceae	None	None	G4G5	S1	2B.2	Moss	Coastal bluff scrub.	Moist silty clay to fine sandy banks in somewhat shaded sites. 10-50 m.	**Low**
Eleocharis parvula	small spikerush	Cyperaceae	None	None	G5	S4	4.3	July-August	Marsh & swamp, salt marsh, wetland.	In coastal salt marshes. 1-3,020 m.	**None**
Empetrum nigrum	black crowberry	Ericaceae	None	None	G5	S1?	2B.2	July-August	Coastal bluff scrub, coastal prairie.	3-15 m.	**Low**
Erigeron bloomeri var. nudatus	Waldo daisy	Asteraceae	None	None	G5T4	S3	2B.3	June-July	Lower montane coniferous forest, upper montane coniferous forest.	In open areas on dry rocky outcrops on serpentine. 730-1,740 m.	**None**
Erysimummenzi esii	Menzies' wallflower	Brassic-aceae	E	E	G1	S1	1B.1	March-Sept.	Coastal dunes.	Localized on dunes and coastal strand. 0-35 m.	**None**
Fissidenspauper culus	minute pocket moss	Fissident-aceae	None	None	G3?	S2	1B.2	Lichen	North coast coniferous forest, Redwood.	Moss growing on damp soil along the coast. In dry streambeds and on stream banks. 10-1,024 m.	**Low**
*Gilia capitata*ssp.*paci fica*	Pacific gilia	Polemoni-aceae	None	None	G5T3	S2	1B.2	April-August	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland.	5-1,665 m.	**Low**
Gilia millefoliata	dark-eyed gilia	Polemoni-aceae	None	None	G2	S2	1B.2	April-July	Coastal dunes.	1-60 m.	**None**
Glehnialittoralis ssp. *leiocarpa*	American glehnia	Apiaceae	None	None	G5T5	S3	4.2	May-August	Coastal dunes.	0-20 m.	**None**
Hosackiagracilis	harlequin lotus	Fabaceae	None	None	G4	S3	4.2	March-July	Broadleaf upland forest, coast bluff scrub, coast prairie,	Wetlands and roadsides. 0-700 m.	**Moderate**

Table 1 Regionally Occurring Special Status Plant Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles											
Scientific Name	**Common Name**	**Family**	**FedList**	**CalList**	**GRank**	**SRank**	**RPlant Rank**	**Bloom Period**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
									coast scrub, meadow, seep, marsh & swamp, closed cone & N. coast conifer forests, valley & foothill grassland.		
Iliamna latibracteata	California globe mallow	Malvaceae	None	None	G2G3	S2	1B.2	June-August	Chaparral (montane), Lower montane coniferous forest, N. coast conifer forest (mesic), Riparian scrub (streambanks).	Often in burned areas. 60-2,000m.	**None**
Juncus nevadensis var. inventus	Sierra rush	Juncaceae	None	None	G5T3T4	S1	2B.2	July-Nov.	Bogs and fens.	0-10 m.	**None**
Lathyrusgladulosus	sticky pea	Fabaceae	None	None	G3	S3	4.3	April-June	Cismontane woodland.	Oak woodland upland from coastal redwood forests, and along roadsides. 300-800m.	**None**
Lathyrus japonicus	seaside pea	Fabaceae	None	None	G5	S2	2B.1	May-August	Coastal dunes.	3-65 m.	**None**
Lathyruspalustris	marsh pea	Fabaceae	None	None	G5	S2	2B.2	March-August	Bogs & fens, lower montane & N. coast conifer forests, marsh & swamp, coastal prairie, coastal scrub.	Moist coastal areas. 2-140 m.	**Low**
Layiacarnosa	beach layia	Asteraceae	E	E	G2	S2	1B.1	March-July	Coastal dunes, coastal scrub.	On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 0-30 m.	**None**
Leptosiphonacicularis	bristly leptosiphon	Polemoni-aceae	None	None	G4?	S4?	4.2	April-July	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland.	Grassy areas, woodland, chaparral. 55-1,500 m.	**Low**
Lilium occidentale	western lily	Liliaceae	E	E	G1	S1	1B.1	June-July	Coastal scrub, freshwater marsh, bogs & fens, coastal bluff scrub, coast prairie, N. coast conifer forest, marshes and swamps.	Well-drained, old beach washes overlain with wind-blown alluvium and organic topsoil; usually near margins of Sitka spruce. 3-110 m.	**None**
Listeracordata	heart-leaved twayblade	Orchid-aceae	None	None	G5	S4	4.2	Feb.-July	Lower montane conifer forest, north coast conifer	Bogs and fens, 5-1,370 m.	**None**

Table 1 Regionally Occurring Special Status Plant Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles											
Scientific Name	**Common Name**	**Family**	**FedList**	**CalList**	**GRank**	**SRank**	**RPlant Rank**	**Bloom Period**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
									forest.		
Lycopodiellainundata	inundated bog club-moss	Lycopodi-aceae	None	None	G5	S1?	2B.2	June-Sept.	Bogs and fens, lower montane conifer forest, marshes and swamps.	Peat bogs, muddy depressions, pond margins. 5-915 m.	**None**
Lycopodium clavatum	running-pine	Lycopodi-aceae	None	None	G5	S3	4.1	June-Sept.	Lower montane conifer forest, north coast conifer forest, marsh &swamp.	Forest understory, edges, openings, roadsides; mesic sites with partial shade and light. 45-1,225 m.	**Low**
Lycopusunifloru s	northern bugleweed	Lamiaceae	None	None	G5	S4	4.3	July-Sept.	Bogs, fens, marshes, swamps & wetlands.	Wet places. 5-2000 m.	**None**
Mitellastracaule scens	leafy-stemmed mitrewort	Saxifrag-aceae	None	None	G5	S4	4.2	March-Oct.	Broadleaf upland forest, lower montane conifer forest, meadow & seep, N. coast conifer forest.	Mesic sites. 5-1,700 m.	**None**
Monesesuniflora	woodnymph	Ericaceae	None	None	G5	S2	2B.2	May-July	Broadleaf upland forest, N. Coast conifer forest.	50-260 m.	**None**
Monotropaunifl ora	ghost-pipe	Ericaceae	None	None	G5	S2	2B.2	June-Sept.	Broadleaved upland forest, north coast conifer forest.	Often under redwoods or west hemlock. 15-855 m.	**None**
Montia howellii	Howell's montia	Montiaceae	None	None	G3G4	S2	1B.1	March-June	Meadows and seeps, North Coast coniferous forest, Vernal pools.	Vernally mesic sites, sometimes roadsides. 0-835 m.	**Moderate**
Oenothera wolfii	Wolf's evening-primrose	Onagraceae	None	None	G2	S1	1B.1	May-Oct.	Coastal bluff scrub, coastal dunes, coastal prairie, low montane conifer forest.	Sandy substrates; usually mesic sites. 3-800 m.	**Moderate**
Packera bolanderi var. bolanderi	seacoast ragwort	Asteraceae	None	None	G4T4	S2S3	2B.2	Jan.-August	Coastal scrub, north coast conifer forest.	Often along roadsides. 30-915 m.	**Moderate**
Piperia candida	white-flowered rein orchid	Orchidaceae	None	None	G3	S3	1B.2	May-Sept.	N. Coast and lower montane conifer forest, broadleaf upland forest.	Sometimes serpentine. Forest duff, mossy banks, rock outcrops, muskeg. 45-1,615 m.	**None**

Table 1 Regionally Occurring Special Status Plant Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles											
Scientific Name	**Common Name**	**Family**	**FedList**	**CalList**	**GRank**	**SRank**	**RPlant Rank**	**Bloom Period**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
Pityopuscalifornicus	California pinefoot	Ericaceae	None	None	G4G5	S4	4.2	March-August	Broadleaf upland forest, upper montane and, N. coast conifer forest, low montane conifer forest.	Deep shade with few understory species, often under layer of duff, in rocky to clay loam soil. 15-2,225 m.	**None**
Pleuropogonrefractus	nodding semaphore grass	Poaceae	None	None	G4	S4	4.2	March-August	Meadow & seep, low montane conifer forest, N. coast conifer forest, riparian forest.	Mesic sites along streams, grassy flats in shaded redwood groves. 0-1,600 m.	**Low**
Polemoniumcarneum	Oregon polemonium	Polemoni-aceae	None	None	G3G4	S2	2B.2	April-Sept.	Coastal prairie, coastal scrub, lower montane coniferous forest.	0-1,830 m.	**Low**
Ribeslaxiflorum	trailing black currant	Grossulari-aceae	None	None	G5	S4	4.3	March-July	North Coast coniferous forest.	Sometimes roadsides. 5-1,395 m.	**Low**
Romanzoffia tracyi	Tracy's romanzoffia	Boragin-aceae	None	None	G4	S2	2B.3	March-May	Coastal bluff scrub, coastal scrub.	Rocky sites. 15-300 m.	**Moderate**
Sidalceamalachroides	maple-leaved checkerbloom	Malvaceae	None	None	G3	S3	4.2	March-August	Broadleaf upland forest, coast prairie, coast scrub, N. coast conifer forest,riparian.	Woodlands and clearings near coast; often in disturbed areas. 0-730 m.	**Moderate**
Sidalceamalviflora ssp. patula	Siskiyou checkerbloom	Malvaceae	None	None	G5T2	S2	1B.2	March-August	Coastal bluff scrub, coastal prairie, north coast coniferous forest.	Open coastal forest; roadcuts. 5-1,255 m.	**Low**
Sidalcea oregana ssp. eximia	coast checkerbloom	Malvaceae	None	None	G5T1	S1	1B.2	June-August	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest.	5-1,340 m.	**Low**
Trichodoncylindricus	cylindrical trichodon	Ditrichaceae	None	None	G4	S2	2B.2	Moss	Broadleaved upland forest, upper montane coniferous forest.	Moss growing in openings on sandy or clay soils on roadsides, stream banks, trails or in fields. 50-1,500 m.	**Moderate**
Usnealongissima	Methuselah's beard lichen	Parmeli-aceae	None	None	G4	S4	4.2	lichen	North coast coniferous forest, broadleaved upland forest.	Grows in the "redwood zone" on tree branches of a variety of trees, including big	**None**

Table 1
Regionally Occurring Special Status Plant Species Scoping List CNDDB, CNPS, IPaC
Trinidad Stormwater Improvement Project
Trinidad and Surrounding 7.5-min Quadrangles

Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro-Habitat	Potential of Occurrence
										leaf maple, oaks, ash, Douglas-fir, and bay. 45-1,465 m.	
Viola palustris	alpine marsh violet	Violaceae	None	None	G5	S1S2	2B.2	March-August	Coastal scrub, bogs and fens.	Swampy, shrubby places in coastal scrub or coastal bogs. 0-150 m.	**None**

1. Species indicator status as assigned by Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and California Department of Fish and Wildlife (CDFW)
   - C: candidate
   - CT: candidate threatened
   - D: delisted
   - DPS: distinct population segment
   - E: endangered
   - ESU: evolutionarily significant unit
   - FP: fully protected
   - PT: proposed threatened
   - SSC: species of special concern
   - T: threatened
   - WL: watch list

2. Species Heritage rank as assigned by California Department of Fish and Wildlife (CDFW)
   - G1/S1: critically imperiled
   - G2/S2: imperiled
   - G3/S3: vulnerable
   - G4/S4: apparently secure
   - G5/S5: secure

Table 2 Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles									
Scientific Name	**Common Name**	**FedList**	**CalList**	**GRank**	**SRank**	**Habitats**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
Amphibians									
Ascaphustruei	Pacific tailed frog	None	None, SSC	G4	S3S4	Aquatic, Klamath/ N. coast flowing waters, lower montane conifer, N. coast conifer, Redwood, and Riparian forests	Occurs in montane hardwood-conifer, redwood, Douglasfir & ponderosa pine habitats.	Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.	**None**
Rana aurora	northern red-legged frog	None	None, SSC	G4	S3	Klamath/N. coast flowing waters, riparian forest, riparian woodland	Humid forests, woodlands, grasslands, & streamsides in NW California, usually near dense riparian cover.	Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	**Moderate**
Rana boylii	foothill yellow-legged frog	None	None, SSC	G3	S3	Aquatic, chaparral, cismontane woodland, coast scrub, Klamath/N. coast flowing waters, lower montane conifer forest, meadow & seep, riparian forest and woodland	Partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats.	Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	**Low**
Rhyacotriton variegatus	southern torrent salamander	None	None, SSC	G3G4	S2S3	Lower montane conifer forest, old-growth, redwood forest, riparian forest.	Coastal redwood, Douglasfir, mixed conifer, montane riparian & montane hardwood-conifer habitats. Old-growth.	Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rock within trickling water.	**None**
Birds									
Accipiter cooperii	Cooper's hawk	None	None	G5	WL	Cismontane woodland, riparian forest, riparian woodland, upper montane conifer forest.	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.	**Moderate**
Accipiter striatus	sharp-shinned hawk	None	None	G5	WL, S4	Cismontane woodland, lower montane conifer forest, riparian forest, riparian woodland	Ponderosa pine, black oak, riparian deciduous, mixed conifer & Jeffrey pine habitat. Prefers riparian.	North-facing slopes, with plucking perches are critical requirements. Nests usually within 275 ft of water.	**Low**
Ardeaherodias	great blue heron	None	None	G5	S4	Brackishmarsh, estuary, freshwater marsh, marsh & swamp, riparian forest,	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes.	Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers,	**Moderate**

Table 2 Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles									
Scientific Name	**Common Name**	**FedList**	**CalList**	**GRank**	**SRank**	**Habitats**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
						wetland.		streams, wet meadows.	
Asioflammeus	short-eared owl	None	None, SSC	G5	S3	Marsh & swamp, meadow & seep, valley & foothill grassland, wetland	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields	Tule patches/tall grass needed for nesting/daytime seclusion. Nests dry ground depression concealed in vegetation.	**Low**
Botaurus lentiginosus	American bittern	None	None	G4	S3S4	Brackish marsh, freshwater marsh, salt marsh	Freshwater and slightly brackish marshes. Also in coastal saltmarshes.	Dense reed beds.	**None**
Brachyramphusmarmoratus	marbled murrelet	T	E	G3G4	S1	Lower montane conifer forest, Old-growth Redwood	Feeds nearshore; nests inland along coast from Eureka to Oregon border.	Nests in old-growth redwood-dominated forests, up to 6 mi. inland, often in Douglasfir.	**Low**
Cerorhincamonocerata	rhinoceros auklet	None	None	G5	S3	Off-shore islands	Off-shore islands and rocks along the California coast	Nests in a burrow on undisturbed, forested and unforested islands, and probably in cliff caves on mainland.	**Low**
Charadriusalexandrinusnivosus	western snowy plover	T	None, SSC	G3T3	S2S3	Great Basin standing waters, Sand shore, Wetland	Sandy beaches, salt pond levees & shores of large alkali lakes.	Needs sandy, gravelly or friable soils for nesting.	**Moderate**
Charadriusmontanus	mountain plover	None	None, SSC	G3	S2S3	Chenopod scrub Valley & foothill grassland	Short grasslands, freshly plowed fields, newly sprouting grain fields, & sometimes sod farms.	Short vegetation, bare ground & flat topography. Prefers grazed areas & areas with burrowing rodents.	**None**
Coccyzusamericanus	yellow-billed cuckoo	T	E	G5T2T3	S1	Riparian forest.	Riparian forest nester, along the broad, lower floodbottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**None**
Contopuscooperi	olive-sided flycatcher	None	None, SSC	G4	S4	Lower montane conifer forest, redwood and upper montane conifer forests.	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglasfir, redwood, red fir & lodgepole pine.	Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes, or other open terrain.	**Low**
Egrettathula	snowy egret	None	None	G5	S4	Marsh & swamp, meadow & seep, riparian forest, riparian woodland, wetland	Colonial nester, with nest sites situated in protected beds of dense tules.	Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows,	**Low**

Table 2 Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles									
Scientific Name	**Common Name**	**FedList**	**CalList**	**GRank**	**SRank**	**Habitats**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
								lake borders.	
Elanusleucurus	white-tailed kite	None	None, FP	G5	S3S4	Cismontane woodland, marsh & swamp, riparian woodland, valley & foothill grassland, wetland	Rolling foothills and valley margins w/scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Moderate**
Falco peregrinus anatum	American peregrine falcon	D	D	G4T4	FP	Feed exclusively on smaller bird species. Wide variety of habitats across the globe.	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.	Nest consists of a scrape or a depression or ledge in an open site.	**Moderate**
Fraterculacirrhata	tufted puffin	None	None	G5	S1S2	Protected deepwater coastal communities	Open-ocean bird; nests along the coast on islands, islets, or (rarely) mainland cliffs.	Requires sod or earth into which the birds can burrow, on island cliffs or grassy island slopes.	**None**
Haliaeetus leucocephalus	Bald eagle	D	E	G5	S3	Lower montane coniferous forest Old-growth.	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	**Moderate**
Nycticoraxnycticorax	black-crowned night heron	None	None	G5	S4	Marsh & swamp, riparian forest, riparian woodland, wetland	Colonial nester, usually in trees, occasionally in tule patches.	Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	**Low**
Oceanodromafurcata	fork-tailed storm-petrel	None	None	G5	S1	Protected deepwater coastal communities	Colonial nester on small, offshore islets. Forages over the open ocean, usually well off-shore.	Birds choose offshore islets which provide nesting crannies beneath rocks or sod for burrowing.	**Low**
Pandion haliaetus	osprey	None	None, WL	G5	S4	Riparian forest	Ocean shore, bays, fresh-water lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	**High**
Pelecanusoccidentaliscaliforcnicus	California brown pelican	DL	DL, FP	G4T3	S3	Estuaries and coastal marine habitat.	Colonial nester on coastal islands just outside the surf line.	Nests on coastal islands of small to mod. size which afford immunity from attack by ground-dwelling predators. Roosts communally.	**Low**

Table 2 Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles									
Scientific Name	**Common Name**	**FedList**	**CalList**	**GRank**	**SRank**	**Habitats**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
Phalacrocoraxauritus	double-crested cormorant	None	None	G5	S4	Riparian forest, Riparian scrub, Riparian woodland	Colonial nester on coastal cliffs, offshore islands, & along lake margins in the interior of the state.	Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	**None**
Phoebastriaalbatrus	short-tailed albatross	E	None	G1	S1	Protected deepwater coastal communities	Open-ocean bird; nests in open, grassy areas.	Nests along tall clumps of *Miscanthus sinensis*.	**None**
Ptychoramphusaleuticus	Cassin's auklet	None	None	G4	S2S4	Offshore and along shorelines.	Offshore islands with enough soil for burrowing.	Will nest in rock crevices, under buildings & in debris.	**Low**
Ralluslongirostrisobsoletus	California clapper rail	E	E, FP	G5T1	S1	Brackish marsh, marsh & swamp, salt marsh, wetland	Salt-water & brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay.	Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	**None**
Ripariariparia	bank swallow	None	T	G5	S2	Riparian scrub, Riparian woodland	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**Low**
Strixnebulosa	great gray owl	None	E	G5	S1	Lower montane coniferous forest, Old-growth, Subalpine coniferous forest, Upper montane, coniferous forest	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows.	Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	**None**
Strixoccidentaliscaurina	northern spotted owl	T	SSC	G3T3	S2S3	North coast conifer forest, Old-growth Redwood	Old-growth forests or mixed stands of old-growth & mature trees. Occasional in younger forests w/ patches of big trees.	High, multistory canopy dominated by big trees, many trees w/cavities or broken tops, woody debris & space under canopy.	**None**
Fish									
Entosphenustridentatus	Pacific lamprey	None	None, SSC	G4	S4	Aquatic, Klamath/N. coast flowing waters, Sacramento/San Joaquin flowing waters, South coast flowing waters	Found in Pacific Coast streams north of San Luis Obispo Co., however regular runs in Santa Clara River. Size of runs is declining.	Swift-current gravel-bottomed areas for spawning with water temps between 12-18 C. Ammocoetes need soft sand or mud.	**None**
Eucyclogobiusnewberryi	tidewater goby	E	None	G3	S3	Aquatic, Klamath/North	Brackish water habitats	Found in shallow lagoons and	**None**

Table 2 Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles									
Scientific Name	**Common Name**	**FedList**	**CalList**	**GRank**	**SRank**	**Habitats**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
			, SSC			coast flowing waters, Sacramento/ San Joaquin flowing waters, South coast flowing waters	along CA coast from Agua Hedionda Lagoon, San Diego Co. to the mouth of the Smith River.	lower stream reaches, they need fairly still but not stagnant water & high oxygen levels.	
Oncorhynchus clarkiiclarkii	coast cutthroat trout	None	None	G4T4	S3	Aquatic, Klamath/North coast flowing waters	Small coastal streams from the Eel River to the Oregon border.	Small, low gradient coastal streams and estuaries. Needs shaded streams with water temperatures <18C, and small gravel for spawning.	**None**
Oncorhynchus gorbuscha	pink salmon	None	None	G5	S1	Aquatic	Most spawn in intertidal or lower reaches of streams and rivers in September and October. Move further upstream in Sacramento R.	Optimal temperature = 5.6 to 14.4 C. Embryos and alevins require fast-flowing, well-oxygenated water for development and survival.	**None**
Oncorhynchus kisutch pop. 2	coho salmon – So. Oregon / No. CA ESU	T	T	G4T2Q	S2?	Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters	Federal listing refers to populations between Cape Blanco, OR. and Punta Gorda, Humboldt County, CA.	State listing refers to populations between the Oregon border and Punta Gorda, California.	**None**
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	G5T3Q	S2	Aquatic, Klamath/North coast flowing waters	Streams between Elk River, Oregon and the Klamath & Trinity rivers in California, inclusive.	Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water & sufficient dissolved oxygen.	**None**
*Oncorhynchus mykiss irideus*pop. 16	steelhead – N. California DPS	T	None	G5T2-T3Q	S2S3	Aquatic Sacramento/San Joaquin flowing waters	Coastal basins from Redwood Creek south to the Gualala River, inclusive. Does not include summer-run steelhead.	Cool, swift, shallow water & clean loose gravel for spawning.	**None**
Oncorhynchus tshawytscha pop. 17	Chinook salmon (California coast ESU)	T	None	G5	S1	Aquatic Sacramento/San Joaquin flowing waters	Federal listing refers to wild spawned, coastal, spring & fall runs between Redwood Cr, Humboldt Co & Russian River, Sonoma Co.	Major limiting factor for juvenile chinook salmon is temperature, which strongly effects growth & survival.	**None**
Oncorhynchus tshawytscha	chinook salmon -	None	None	G5	S1S2	Aquatic, Klamath/North coast flowing waters	Spring-run chinook in the Trinity River and the	Major limiting factor for juvenile chinook salmon is	**None**

Table 2 Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles									
Scientific Name	**Common Name**	**FedList**	**CalList**	**GRank**	**SRank**	**Habitats**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
pop. 30	upper Klamath and Trinity Rivers ESU.						Klamath River upstream of the mouth of the Trinity River.	temperature, which strongly effects growth and survival.	
Spirinchusthaleichthys	longfin smelt	C	T, SSC	G5	S1	Aquatic | Estuary	Euryhaline, nektonic & anadromous. Open waters of estuaries, mostly mid to bottom of water column.	Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	**None**
Thaleichthyspacificus	Eulachon	T	None	G5	S3	Aquatic Klamath/North coast flowing waters	Found in Klamath River, Mad River, Redwood Creek & in small numbers in Smith River & Humboldt Bay tributaries.	Spawn in lower reaches of coastal rivers w/ moderate water velocities & bottom of pea-sized gravel, sand & woody debris.	**None**
Insects									
Bombus caliginosus	obscure bumble bee	None	None	G4?	S1S2	Nests underground or above ground in abandoned bird nests	Open grassy coastal plains and coast range meadows from Santa Barbara County to Washington state.	Food plant genera include *Baccharis, Cirsium, Lupinus, Lotus, Grindelia* and *Phacelia*.	**Moderate**
Bombus occidentalis	western bumble bee	None	None	G2G3	S1	Pollinates a wide variety of flowers. Will gnaw through flowers to obtain nectar their tongues are too short to reach.	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Nest in cavities or abandoned burrows.	**Moderate**
Speyeria zerenebehrensii	Behren'ssilvers pot butterfly	E	None	G5T1	S1	Coastal prairie	Restricted to the Pacific side of the Coast Ranges, from Point Arena to Cape Mendocino, Mendocino Co.	Inhabits coastal terrace prairie habitat. Foodplant is *Viola* spp.	**None**
Mammals									
Aplodontiarufahumboldtiana	Humboldt mountain beaver	None	None	G5TNR	SNR	Coastal scrub, Redwood, Riparian forest	Coast Range in southwestern Del Norte County and northwestern Humboldt County.	Variety of coastal habitats, including coastal scrub, riparian forests, typically with open canopy and thickly vegetated understory.	**Low**
Arborimusalbipes	white footed	None	None	G3G4	S2	North coast coniferous forest,	Mature coastal forests in Humboldt & Del Norte Cos.	Occupies the habitat from the ground surface to the canopy.	**None**

Table 2 Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC Trinidad Stormwater Improvement Project Trinidad and Surrounding 7.5-min Quadrangles									
Scientific Name	**Common Name**	**FedList**	**CalList**	**GRank**	**SRank**	**Habitats**	**General Habitat**	**Micro-Habitat**	**Potential of Occurrence**
	vole		, SSC			Redwood, Riparian forest	Prefers areas near small, clear streams w/ dense alder & shrubs.	Feeds in all layers & nests on the ground under logs or rocks.	
Arborimuspomo	Sonoma tree vole	None	None, SSC	G3	S3	North coast conifer forest, old-growth, redwood forest	N. coast fog belt from Oregon border to Sonoma Co. In Douglasfir, redwood & montane hardwood-conifer forests.	Feeds almost exclusively on Douglasfir needles. Will occasionally take needles of grand fir, hemlock, or spruce.	**None**
Erethizondorsatum	North American porcupine	None	None	G5	S3	Broadleaf upland forest, cismontane woodland, closed-cone conifer forest, lower & upper montane conifer forest N. coast conifer forest.	Forested habitat in the Sierra Nevada, Cascade, and Coast ranges, scattered observ. from forested areas in the Transverse Ranges.	Wide variety of coniferous and mixed woodland habitat.	**Low**
Lasionycterisnoctivagans	silver-haired bat	None	None	G5	S3S4	Lower montane conifer forest, Old-growth, riparian forest.	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas.	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	**Moderate**
Myotis evotis	long-eared myotis	None	None	G5	S3	Roosts in a wide range of substrate.	Found in all brush, woodland & forest habitats from sea level to about 9,000 ft., prefers conifer woodlands & forests.	Nursery colonies in buildings, crevices, spaces under bark, & snags. Caves used primarily as night roosts.	**Moderate**
Myotis yumanensis	Yuma myotis	None	None	G5	S4	Lower and upper montane conifer forests, Riparian forest, Riparian woodland.	Optimal habitats are open forests and woodlands w/ source of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	**Low**
Pekaniapennanti	fisher (west coast DPS)	PT	CT, SSC	G5T2-T3Q	S2S3	North coast conifer forest, old-growth, riparian forest	Intermediate to large-tree stages of conifer forests& deciduous-riparian areas w/ high % canopy closure.	Uses cavities, snags, logs & rocky areas for cover & denning. Needs large areas of mature, dense forest.	**None**
Reptiles									
Emys marmorata	western pond turtle	None	None, SSC	G3G4	S3	Aquatic, Artificial flowing waters, Klamath/North	A thoroughly aquatic turtle of ponds, marshes, rivers,	Need basking sites and suitable (sandy banks or grassy open	**None**

Table 2
Regionally Occurring Special Status Animal Species Scoping List CNDDB, CNPS, IPaC
Trinidad Stormwater Improvement Project
Trinidad and Surrounding 7.5-min Quadrangles

Scientific Name	Common Name	FedList	CalList	GRank	SRank	Habitats	General Habitat	Micro-Habitat	Potential of Occurrence
						coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Wetland	streams &irrigation ditches, usually w/ aquatic vegetation, below 6,000 ft elevation.	fields) upland habitat up to 0.5 km from water for egg-laying.	
Mollusks									
Juga orickensis	redwood Juga	None	None	G2	S1S2	Aquatic, Klamath/North coast, flowing waters	High to low elevation coastal streams in northwestern California & southern Oregon.	Small spring-fed permanent rivulets to creeks, often on gravel, always in unpolluted, clear, cold, running water.	**None**
Margaritifera falcata	western pearlshell	None	None	G4G5	S1S2	Aquatic	Aquatic	Prefers lower velocity waters.	**None**

1. Species indicator status as assigned by Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and California Department of Fish and Wildlife (CDFW)

C: candidate
CT: candidate threatened
D: delisted
DPS: distinct population segment
E: endangered
ESU: evolutionarily significant unit
FP: fully protected
PT: proposed threatened
SSC: species of special concern
T: threatened
WL: watch list
FP: fully protected

2. Species Heritage rank as assigned by California Department of Fish and Wildlife (CDFW)

G1/S1: critically imperiled
G2/S2: imperiled
G3/S3: vulnerable
G4/S4: apparently secure
G5/S5: secure

Table 3 Plant and Animal Species Observed 4/4/2018 (10:30-12:00), and 7/27/2018 (11:45-12:30) Trinidad Stormwater Improvement Biological Assessment			
Scientific Name	**Common Name**	**Family**	**Native?[1]**
Trees			
Hesperocyparis macrocarpa	Monterey cypress	Cupressaceae	N
Pinus contorta ssp. contorta	beach pine	Pinaceae	Y
Shrubs			
Baccharis pilularis ssp. *consanguinea*	coyote brush	Asteraceae	Y
Cotoneaster lacteus	milk-flower	Rosaceae	N
Cotoneaster panossus	woolly cotoneaster	Rosaceae	N
Erica lusitanica	Spanish heather	Ericaceae	N
Ribes sanguineum var. *glutinosum*	flowering currant	Grossulariaceae	Y
Rosa rubiginosa	sweetbriar	Rosaceae	N
Rubus armeniacus	Himalayan blackberry	Rosaceae	N
Rubus ursinus	California blackberry	Rosaceae	Y
Sambucus racemosa var. *racemosa*	red elderberry	Adoxaceae	Y
Ferns and Allies			
Polystichum munitum	sword fern	Dryopteridaceae	Y
Pteridium aquilinum var. *pubescens*	bracken fern	Dennstaedtiaceae	Y
Grasses			
Agrostis stolonifera	creeping bentgrass	Poaceae	N
Ammophilaarenaria	European beachgrass	Poaceae	N
Anthoxanthum odoratum	sweet vernal grass	Poaceae	N
Avenabarbata	wild oat	Poaceae	N
Briza maxima	large quaking grass	Poaceae	N
Bromuscatharticus	rescue grass	Poaceae	N
Bromusdiandrus	ripgut brome	Poaceae	N
Bromus hordeaceus	soft chess	Poaceae	N
Cortaderia jubata	jubata grass	Poaceae	N
Cynosurusechinatus	dogtail grass	Poaceae	N
Dactylis glomerata	orchard grass	Poaceae	N
Festuca rubra	red fescue	Poaceae	Y
Holcuslanatus	velvet grass	Poaceae	N
Hordeummurinum ssp. *murinum*	foxtail barley	Poaceae	N
Poaannua	annual grass	Poaceae	N
Herbs			
Abronia latifolia	yellow sand verbena	Nyctaginaceae	Y
Allium triquetrum	three cornered leek	Alliaceae	N
Bellis perenne	English daisy	Asteraceae	N
Cakilemaritima	sea rocket	Brassicaceae	N
Cardamine oligosperma	bittercress	Brassicaceae	Y
Carpobrotus edulis	iceplant	Aizoaceae	N
Cerastium glomeratum	mouse-ear chickweed	Caryophyllaceae	N

Table 3 Plant and Animal Species Observed 4/4/2018 (10:30-12:00), and 7/27/2018 (11:45-12:30) Trinidad Stormwater Improvement Biological Assessment			
Scientific Name	**Common Name**	**Family**	**Native?[1]**
Chamerion angustifolium	fireweed	Onagraceae	Y
Cirsium vulgare	bull thistle	Asteraceae	N
Convolvulus arvensis	field bindweed	Convolvulaceae	N
Crocosmia x crocosmiiflora	montebretia	Iridaceae	N
Daucus carota	Queen Anne's lace	Apiaceae	N
Erodium moschatum	white-stem filaree	Geraniaceae	N
Eschscholzia californica	California poppy	Eschscholziaceae	Y
Euphorbia peplus	petty spurge	Euphorbiaceae	N
Fragaria chiloensis	beach strawberry	Rosaceae	Y
Geranium dissectum	cutleaf geranium	Geraniaceae	N
Geranium molle	crane's bill geranium	Geraniaceae	N
Geranium robertianum	Robert's geranium	Geraniaceae	N
Heracleum maxima	cow parsley	Apiaceae	Y
Hypochaerisradicata	hairy cat's ear	Asteraceae	N
Lamium purpureum	henbit	Lamiaceae	N
Lathyruslatifolius	sweet pea	Fabaceae	N
Leucanthemum vulgare	oxeye daisy	Asteraceae	N
Lotus corniculatus	bird's-foot trefoil	Fabaceae	N
Lysimachia arvensis	scarlet pimpernel	Myrsinaceae	N
Matricariadiscoidea	pineappleweed	Asteraceae	Y
Medicago polymorpha	bur clover	Fabaceae	N
Oxalis pes-caprae	Bermuda buttercup	Oxalidaceae	N
Plantago lanceolata	English plantain	Plantaginaceae	N
Ranunculus repens	creeping buttercup	Ranunculaceae	N
Raphanus sativa	wild radish	Onagraceae	N
Rumexcrispus	curly dock	Polygonaceae	N
Scrophularia californica	bee plant	Scrophulariaceae	Y
Senecio vulgaris	common groundsel	Asteraceae	N
Sonchus asper	prickly sow thistle	Asteraceae	N
Stachys ajugoides	bugle hedgenettle	Lamiaceae	Y
Symphyotrichum chilense	pacific aster	Asteraceae	Y
Taraxacum officinale	dandelion	Asteraceae	N
Trifoliumdubium	shamrock clover	Fabaceae	N
Trifoliumhydridum	aslike clover	Fabaceae	N
Trifoliumpratense	red clover	Fabaceae	N
Trifolium subterraneum	subterranean clover	Fabaceae	N
Veronica persica	birdeye speedwell	Plantaginaceae	N
Vicia sativa	spring vetch	Fabaceae	N
Vinca major	vinca	Apocynaceae	N
Vines			
Hedera helix	English ivy		N
75 Species			**23% Native**

Table 3 Plant and Animal Species Observed 4/4/2018 (10:30-12:00), and 7/27/2018 (11:45-12:30) Trinidad Stormwater Improvement Biological Assessment			
Scientific Name	**Common Name**	**Family**	**Native?[1]**
Animal Species Observed			
Chamaeafasciata	wrentit	Paradoxornithidae	Y
Zonotrichialeucophrys	white-crowned sparrow	Passerellidae	Y
Hirundorustica	barn swallow	Hirundinidae	Y
Calypte anna	Anna's hummingbird	Trochilidae	Y
Psaltriparusminimus	bushtit	Aegithalidae	Y
Passer domesticus	house sparrow	Passeridae	N
Sturnis vulgaris	European starling	Sturnidae	N
Thamnophis elegans terrestris	coast garter snake	Colubridae	Y
Otospermophilusbeecheyi	ground squirrel	Sciuridae	Y

1. Y: Yes
   N: No

Site Photographs

2

Photo 1. Underwood Drive looking west. Note developed nature of surroundings and lack of habitat.

Photo taken July 27, 2018.

Photo 2. Underwood Drive looking east. Note surrounding development and lack of habitat.

Photo taken July 27, 2018.

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Photo 3. Edwards Street looking west. Note surrounding development and lack of habitat.

Photo taken July 27, 2018.

Photo 4. Looking east towards HSU Marine Lab on Ewing Street.

Photo taken July 27, 2018.

Photo 5. Ewing Street in front of the HSU Marine Lab looking south. Note developed nature of the area. Also note coastal scrub to the west of the street with a high percentage of non-native plants at this location.

Photo taken July 27, 2018.

Photo 7. Edwards Street looking east from the beach parking lot. Note coastal bluff scrub vegetation is not present along this portion of the bluff.

Photo taken July 27, 2018.

Photo 8. Base of Edwards Street near the beach parking lot looking west. Note coastal bluff scrub behind the sign.

Photo taken July 27, 2018.

Photo 9. Parking lot at Trinidad Beach looking south. Note heavy use of the area.

Photo taken July 27, 2018.

Photo 10. Invasive vegetation common within portions of the study area. English ivy pictured.

Photo taken July 27, 2018.

Photo 11. Edwards Street looking north. Note surrounding development.

Photo taken July 27, 2018.

Photo 12. VanWycke Street looking east. Note surrounding development and mowed vegetation.

Photo taken July 27, 2018.

National Wetlands Inventory

3

U.S. Fish and Wildlife Service
National Wetlands Inventory

Trinidad Stormwater Project area wetlands

July 24, 2018

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

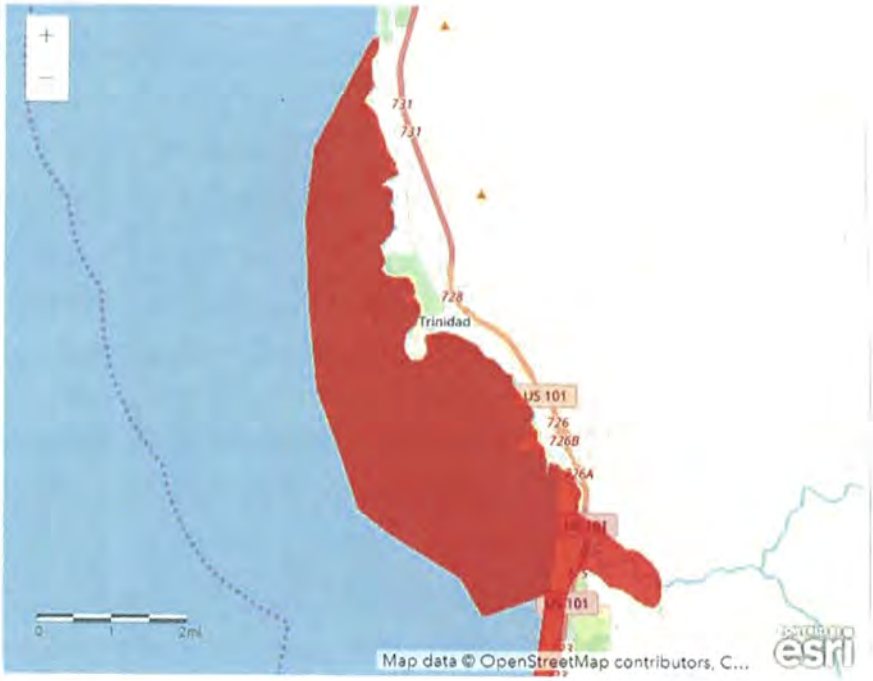
Eureka, CA | Arcata, CA | Redding, CA | Willits, CA | Coos Bay, OR | Klamath Falls, OR

www.shn-engr.com

Important Bird Areas

Trinidad Complex

California



The Trinidad Complex IBA occupies 4,758 hectares of land comprised of: bare rock/sand/clay. The IBA is located in the Oregon, Washington, Vancouver Coast and Shelf ecoregion. It is owned and managed as: state, and has the following primary uses: non-recreational fishing and military-other.

The Trinidad Complex IBA contains 11 seabird species and an estimated 76,088 birds. The colony is an IBA for the following species: Rhinoceros Auklet (17), Tufted Puffin (29), Brandt's cormorant (1,094), Leach's storm-petrel (8,188), Double-Crested Cormorant (542), Fork-Tailed Storm-Petrel (250), Common Murre (65,477), Western Gull (244), Cassin's auklet (84), Pelagic Cormorant (76), and Pigeon Guillemot (87). The following species are on the Audubon WatchList: Leach's Stormpetrel.
This IBA refers to several large offshore rocks between Elk Head and Little River State Beach, centered on the town of Trinidad. These include (north to south) White Rock, Green Rock, Flatiron Rock, the Trinidad Bay Rocks and Little River Rock (see Carter et al. 1992). Trinidad Rocks refers to a series of rocks located just off the coast of Trinidad,

California between Elk Head and Little River State Beach. The rocks consist of White Rock, Green Rock, Flatiron Rock, Trinidad Bay Rocks, and Little River Rock going from north to south (Cooper 2004). The rocks are all within 2 miles of the mainland coast, with Green Rock located the furthest, 2 miles away, and Little River Rock the closest at only 0.84 miles from shore (Humboldt County 2008).

Ornithological Summary

The Trinidad Complex IBA contains 11 seabird species and an estimated 76,088 birds. The colony is an IBA for the following species: Rhinoceros Auklet (17), Tufted Puffin (29), Brandt's cormorant (1,094), Leach's storm-petrel (8,188), Double-Crested Cormorant (542), Fork-Tailed Storm-Petrel (250), Common Murre (65,477), Western Gull (244), Cassin's auklet (84), Pelagic Cormorant (76), and Pigeon Guillemot (87). The following species are on the Audubon WatchList: Leach's Stormpetrel. These rocks support one of the most diverse seabird nesting colonies in California, including one of the few California colonies of Fork-tailed Storm-Petrel (200 birds on Little River Rock) and small numbers of Tufted Puffin (Green Rock, Puffin Rock), as well nearly 10,000 Leach's Storm-Petrel (2/3 of California's population) and over 30,000 Common Murre (Carter et al. 1992). Just ashore of these rocks, Little River State Beach has recently supported small numbers of breeding Snowy Plover (JS). Trinidad Rocks support on of the most diverse seabird colonies in California with 12 species and over 100,000 breeding individuals (Cooper 2004; Briggs 1987). Although most of the birds are Common Murres, about 30,000 breed here, Fork-tailed Storm-Petrels, Cassin?s Auklets, and Tufted Puffins also nest here. The rocks serve as one of the only coastal water locations where Fork-tailed Storm-Petrels nest regularly and the populations account for more than ten percent of California?s population (Briggs 1987, Cooper 2004). Trinidad Rock is also home to Tufted Puffins, which accounts for over ten percent of the California population and 10,000 Leach?s storm-petrels accounting for 2/3 of the California population (Cooper 2004). The two most important rocks for seabirds are Green Rock and Flatiron Rock that host 7 species of birds and 66,000 breeding individuals. These two rocks alone account for 25% of the most important seabird colonies along the California coast (California MLPA 2010).

Conservation Issues

Though the rocks are secure from human disturbance, Double-crested Cormorants, greatly increasing as breeders on the northwest coast, may pose a threat to nesting seabirds. As part of the California Coastal National Monument and uninhabited by humans, Trinidad Rocks have little treat from human disturbance. Being so close to the mainland however, Trinidad Rocks are at risk for pollution, including chemical

pollutants and light pollution. An increase of Double-crested Cormorants breeding populations along the coast also threatens the nesting seabird populations (Cooper 2004). Also as Tufted Puffin populations are declining it is especially important to protect their habitat (California Coastal National Monument).

Ownership

The Trinidad Complex IBA is owned and managed as: state. Trinidad Rocks are part of California Coastal National Monument, which encompasses 20,000 rocks along the California coastline (California Coastline National Monument). The Bureau of Land Management or BLM manages rocks (California MLPA 2010).

Habitat

The Trinidad Complex IBA is located in the Oregon, Washington, Vancouver Coast and Shelf ecoregion and contains the following habitat types: bare rock/sand/clay. The colony occupies a total land area of 4,758 hectares. This IBA refers to several large offshore rocks between Elk Head and Little River State Beach, centered on the town of Trinidad. These include (north to south) White Rock, Green Rock, Flatiron Rock, the Trinidad Bay Rocks and Little River Rock (see Carter et al. 1992).

Land Use

The Trinidad Complex IBA is used for: non-recreational fishing and military-other. All the Trinidad Rocks are free from human inhabitance and BLM can permanently close the rocks from public access if need be (California MLPA 2010). The waters surrounding the rocks are popular fishing areas (Humboldt County 2008).

Share this Important Bird Area

Birds in This Area

Pelagic Cormorant

Phalacrocorax pelagicus

Pigeon Guillemot
Cepphus columba

Rhinoceros Auklet

Tu. ed Pu in

Western Gull

Brandt's Cormorant

Cassin's Auklet

Common Murre

See all »

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An Archaeological Survey Report for Phase 2 of the Trinidad Stormwater Improvement Project Trinidad, Humboldt County, California

Prepared By:
William Rich M.A. RPA
William Rich and Associates
P.O. Box 184
Bayside, CA 95524

Prepared For:
Prepared for:
SHN Consulting Engineers and Geologists
1062 G Street, Suite I
Arcata, CA 95521

On Behalf Of:
City of Trinidad
409 Trinity Street
Trinidad, CA 95570

USGS 7.5' Topographic Quadrangle Map: Trinidad, CA
Acreage of Survey: 6 acres

August 2018

CONFIDENTIAL INFORMATION

Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure. Archaeological site locations and culturally sensitive information is considered confidential and public access to such information is restricted by state and federal law.

Information regarding the location, character or ownership of a historic resource is exempt from the Freedom of Information Act pursuant to 16 U.S.C. 470w-3; Section 304 of the National Historic Preservation Act, 36 CFR 800(6)(a)(5) and 36 CFR 800.11(c); Section 9(a) of the Archaeological Resources Protection Act; Executive Order 13007; Section 6254.10 of the California State Government Code: and the 2005 California Senate Bill 922.

SUMMARY OF FINDINGS

In 2018, William Rich and Associates-Cultural Resources Consultants (WRA) completed an archaeological survey for Phase 2 of the Stormwater Improvements Project in the City of Trinidad (City), Humboldt County, California. The proposed project is designed to reduce polluted surface runoff from the City into Trinidad Bay. This will be accomplished by eliminating the existing stormwater outfall and replacing it with a system of localized stormwater treatment chambers and infiltration basins. Phase 1 is of similar design and has been completed. The previous Phase 1 cultural resources investigation by Roscoe and Associates (2013) is referenced here and used for its development of an historical context and background research. WRA conducted the current investigation for Phase 2 under contract with the City who is seeking implementation funding under a Proposition 1 Stormwater Grant Program and the United States Department of Agriculture's Rural Development Program.

Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulation (36 Code of Federal Regulations Part 800) require that, prior to an undertaking, federal agencies or projects permitted by federal agencies must take into account the effects of the undertaking on historic properties within the project's Area of Potential Effect (APE) and afford the Advisory Council on Historic Preservation (ACHP) and other interested parties a reasonable opportunity to comment on how these effects have been considered. The California Environmental Quality Act (CEQA), as part of the environmental review process, requires that project proponents implement procedures to inventory cultural resources and to assess potential impacts on these resources located within the footprint of projects conducted, funded, or permitted by State Agencies.

The purpose of this investigation is to document whether historic properties / historical resources are present within the proposed project area. The methods detailed in the investigation include a review of the files at the Northwest Information Center (NWIC), a review of archaeological and historical literature pertinent to the project and surrounding area, correspondence with the Trinidad Rancheria, Tsurai Ancestral Society and the Yurok Tribe, and a field survey.

The NWIC resource and survey files indicate that the portions of the project area have been previously covered under five investigations, and an additional fifteen investigations have been conducted within ½ mile radius, but outlying the project area. Multiple cultural resources have been recorded as a result of the studies in the Trinidad area, however none are located within the specific project area. Resources that are in close proximity include [redacted]. The entire project area is, however, within a general location of cultural significance associated with the larger use areas of [redacted], and the historical townsite of Trinidad. It is expected that historic period and ancient Native American archaeological deposits are present.

The purpose of the ethnographic and historical research completed during this investigation was designed to identify the locations of known cultural resources in the proposed project area. This was an important part of the investigation because a majority of the project area contains disturbed, paved over, or built on surfaces. The historical section of this report provides an historic context, following the sequence of cultural settlement in Trinidad. This research indicates that the proposed project is situated in Yurok territory with Trinidad Rancheria, Tsurai Ancestral Society, and the Yurok Tribe having cultural affiliation and interest in the project location. The Town of Trinidad is listed as a California Historic Landmark #216 and is one of the oldest towns on California's north coast.

During the afternoon of April 5, 2018, Mr. Rich met and walked the proposed project area with Trinidad Rancheria's Tribal Historic Preservation Officer (THPO) Rachel Sundberg and on June 13, 2018, Mr.

Rich and Research Associate, Melinda Salisbury, B.A. were accompanied by Yurok THPO, Frankie Myers, Ms. Rosie Clayburn and Yurok Council Member Toby Vanlandingham, as well as, SHN Project Manager, Trever Parker and SHN Tribal Liaison Ethan Red Eagle. Tribal representatives presented questions and concerns to the City and SHN. Additionally, Mr. Rich and Trinidad City Manager, Dan Berman attended a Yurok Cultural Committee meeting on June 22, 2018, to present the project to the Tribal Council. The results of coordination with Native Americans are more fully documented in Section 4.2. Representatives from the Tsurai Ancestral Society were not available for a walking tour, but Mr. Rich did speak with Sarah Lindgren-Akana on May 15, 2018 to discuss this project.

The Trinidad Rancheria, Tsurai Ancestral Society and the Yurok Tribe have all shared a similar interest in the project, and have indicated that [redacted]. All three tribal groups have requested Native American monitoring during project implementation. Furthermore, the Yurok Tribe suggested that the project be designed in a way to limit unnecessary excavations and favored a reduction in the infiltration structures to a single system at the lowest point in the beach parking lot.

A pedestrian field survey of the project location was performed by Registered Professional Archaeologist, William Rich, M.A. and Research Associate Melinda Salisbury, B.A. on April 10 and June 8 and 19, 2018. During the field survey, conditions to identify archaeological site indicators were generally poor due to paved surfaces in the project footprint. Some adjacent areas, however, along Edwards Street, Lighthouse Road, and other roadway margins contain access to mineral sediment at cut bank exposures and in burrowing rodent tailings. Because the proposed project will not alter built environment resources, and because the completed work will have no residual visual effects to the project area, no historic period buildings and structures were evaluated as part of this investigation. [redacted].

The finding of this investigation, based on research and a surface survey is that, although much of the survey area is obscured by pavement, [redacted]. WRA believes that the survey is adequate to identify any potential surface archaeological resources within the APE that would qualify for the National Register of Historic Places (NRHP).

[redacted]. [redacted]. For these reasons, it is recommended that Yurok tribal monitor(s) from the Trinidad Rancheria, Tsurai Ancestral Society, or Yurok Tribe be present during any ground disturbing activities associated with this project. Tribal monitor(s) should have experience monitoring for Yurok tribal cultural resources during excavation projects and should be competent to identify significant resource types and have the ability to stop work when needed. Historic period archaeological sites associated with the early Trinidad townsite and the California Gold Rush are likely to also be present. It is additionally recommended that an archaeologist be retained to observe ground disturbing activities and monitor for historical archaeological deposits.

Including monitors to observe, identify and direct equipment from destroying unknown, but anticipated archaeological sites at the proposed project area will mitigate potential inadvertent damage. It is recommended that a monitoring plan with directives, in the event human remains are discovered, be developed and approved by the Trinidad Rancheria, Tsurai Ancestral Society, and Yurok Tribe prior to the beginning of work.

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1.0 INTRODUCTION AND PROJECT DESCRIPTION

In the spring of 2018, WRA completed an archaeological survey for Phase 2 of the Trinidad Stormwater Improvements project located in the city of Trinidad, Humboldt County, California. The proposed project will improve the existing stormwater system and reduce untreated runoff into Trinidad Bay. Specifically, the project area is in the western half of Sections 23 and 26, of Township 8 North, Range 1 West (HBM), and the location is shown on the 7.5' USGS Topographic Quadrangle Map, Trinidad, California (Figure 1).

Figure 1. Project location and survey coverage map.

1.1 PROJECT DESCRIPTION

The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The intent of the design is to treat and dispose of stormwater closer to the areas of stormwater generation, which allows for a more distributed network of stormwater infrastructure that can be tailored to the anticipated runoff volumes generated in the contributing sub-watersheds.

The base design of each stormwater treatment and infiltration system includes a local network of stormdrain inlets, conveyance pipes, stormwater treatment chambers, and infiltration pipes, in addition to some minor improvements including valley gutters, curbs, and stormdrain manholes. Drainage inlets capture the runoff from the existing curb, gutter and roadway network, which act as the initial receiving body of stormwater generated in the City. In some cases, inlets are located in the roadway or gutter area, and in others they are located within newly constructed grassed swales lined with permeable paver blocks. Where installed, these swales provide for additional infiltration area as well as some storage and treatment capacity, while preserving parking areas along the existing roadways. From the inlets, stormwater is conveyed through traditional high-density polyethylene (HDPE) stormwater pipes, which lead into stormwater treatment units. The treatment units are designed to remove oil, dirt, and trash from the stormwater, and are sized to allow the flow from the 50-year, 24-hour storm event through the unit. After leaving the treatment units, stormwater enters the infiltration pipes, which are large perforated HDPE pipes surrounded by drain rock, allowing the accumulated stormwater to slowly enter the subsurface water system. In this design the stormwater infiltration pipes act as the outfalls of the system, and are sized to accommodate the 50-year, 24-hour storm event.

In total, there are four primary stormwater systems in the proposed improvements, each of which is a combination of the improvements noted above. The systems are located along Ewing Street, Lower and Upper Underwood Drive, Edwards Street, and Lighthouse Road (Figure 2).

Ewing Street: The improvements here include approximately 90 feet of 72-inch diameter stormwater infiltration pipe and stormwater treatment chamber, five new drainage inlets, and approximately 135 feet of new curb and 330 feet of new 12-inch diameter HDPE stormdrain pipe.

Underwood Drive: The improvements here include two new drainage inlets, two 72-inch diameter infiltration pipes (totaling 70 feet) with one treatment chamber, and approximately 150 feet of 12-inch HDPE stormwater pipe and 350 feet of concrete curb and valley gutters.

Edwards Street: The improvements here include three stormwater treatment chambers, four 36-inch diameter infiltration pipes (totaling 125 feet), 12 drainage inlets, and approximately 235 feet of 8-inch diameter HDPE stormdrain pipe.

Lighthouse Road and Lower Parking Area: The improvements here include one treatment unit, 1,500 feet of 54-inch diameter infiltration pipe, six drainage inlets, and approximately 1,180 feet of 24-inch diameter HDPE stormdrain pipe.

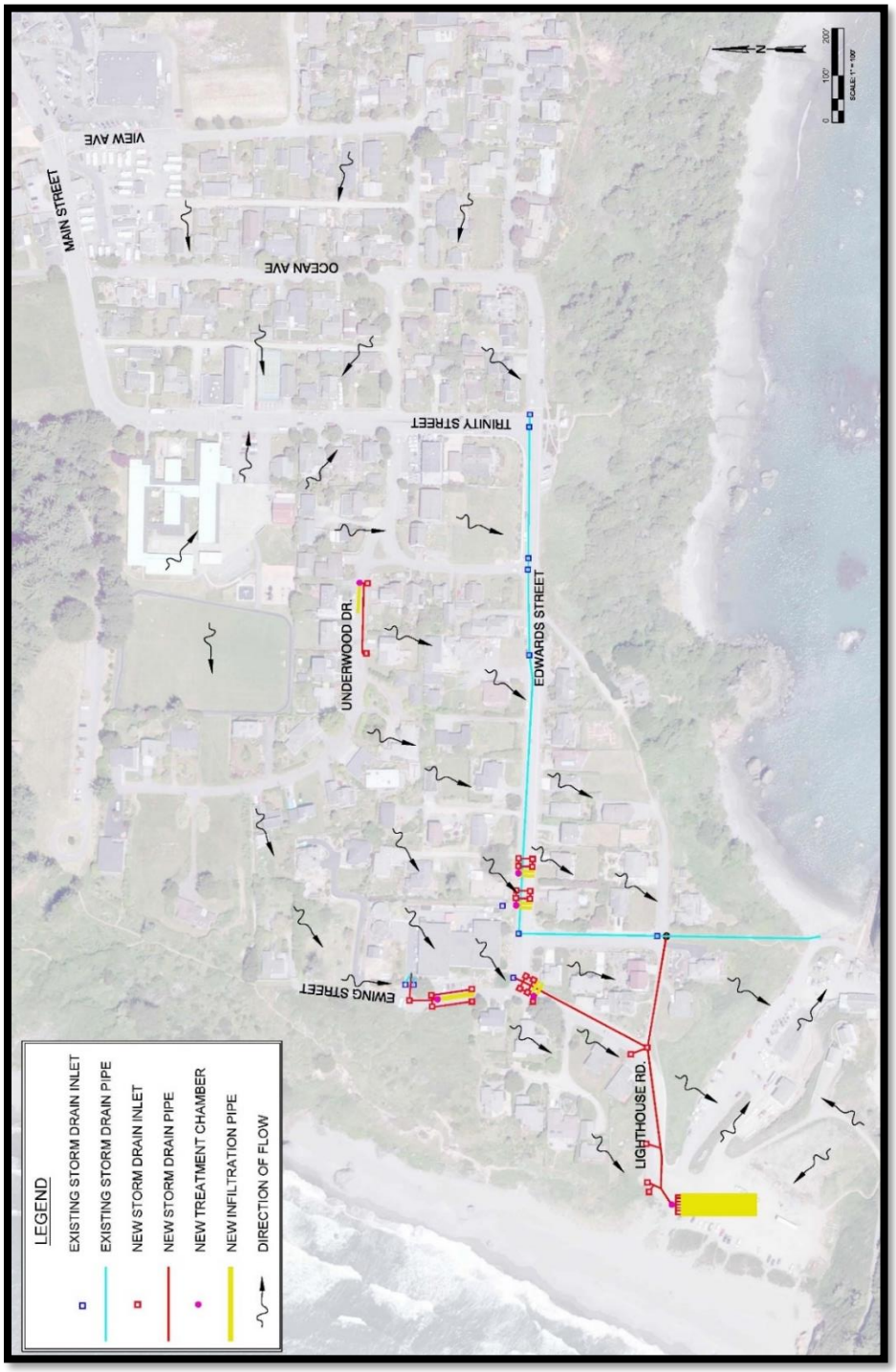


Figure 2. Proposed design map for the Phase 2 of the stormwater system (Provided by SHN Engineers and Consultants).

2.0 BACKGROUND – ENVIRONMENT, PREHISTORY AND HISTORY

Trinidad is at the southern end of the Cascadia subduction zone (CSZ), where the Gorda plate subducts eastwardly beneath the North America plate at about 36 mm/year (Chaytor et al., 2004; Nelson et al., 2006; McCaffrey et al., 2007). Plate convergence causes the region to lift upwards, forming the coastal terraces, and interior ranges. The CSZ fault slips during earthquakes that recur on average every 240 years in northern California (Goldfinger et al., 2012). These earthquakes generate strong ground shaking, trigger submarine and terrestrial landslides, elastically deform the Earth, and generate tsunami. There exists an extensive tribal oral history for earthquakes and tsunami along the CSZ megathrust (Carver, 1998).

Deformation above the CSZ fault results in a series of tectonic faults and folds. This CSZ fold and thrust belt comes onshore in northern California. Growth along these faults and folds also cause uplift of the region. Part of this fold and thrust belt, the Mad River fault zone, traverses the region. Faults include the Trinidad and Luffenholz faults that cross the shoreline in the Trinidad area.

Glacial cycles have caused changes in sea level since before the beginning of the Pleistocene (2.6 million years ago, Ma) and these fluctuations in sea level combine with the tectonic uplift to form the marine terraces that many of the coastal communities rely upon for residential development. During interglacial periods, sea level is higher. Currently the sea level is at high, relative to the last glacial maximum (approximately 22 thousand years ago). Since that time, global mean sea level has risen approximately 120 meters (Lambeck and Chappell, 2001; Muhs et al., 2004). Ocean wave erosion along shorelines forms flat bedrock surfaces called abrasion platforms, which are often buried in nearshore sediments. During glacial periods, between high stands, sea level is lower and tectonic uplift causes these abrasion platforms to be placed above sea level where they are preserved to some extent.

In the Trinidad area there is a flight of Pleistocene marine terraces, increasing in age with higher elevation. The marine terraces in this region have been assigned relative ages based upon global sea-level curve data, estimates of tectonic uplift rates, and numerical and relative age control methods. While eight terraces have previously been mapped (Carver and Burke, 1992), Padgett (2013) suggests that the four main marine terraces in the Trinidad area may be assigned ages of 80, 105, 125 and 200 thousand years ago (ka). The city of Trinidad sits atop a marine terrace formed approximately 105,000 years ago.

2.1 ENVIRONMENT

The City of Trinidad is situated on a generally flat marine terrace with a slight slope towards the west giving way to steep, unstable sand and sandstone bluffs and abrupt outcroppings, which mark the western margin of the Coast Range. The Coast Range is mapped as Mesozoic sedimentary and meta-sedimentary rocks primarily of the Franciscan Complex which dates to the Cretaceous and Jurassic periods, containing sandstone with smaller amounts of shale, chert, limestone, and conglomerate (Jennings 1977).

Flora and Fauna

The resource base is complex. It contains an ecological edge zone around the redwood forest belt. Inland are California mixed conifer and oak woodlands with terrestrial resources such as acorns and big game. Along the coast are shellfish, marine mammals, other fisheries and some terrestrial game. The rivers support seasonal salmon runs.

Vegetation Communities

The project area is suburban, but within and surrounding the project area are wet-soil tolerant species such as small-flowered bulrush (*Scirpus microcarpus*). Flat sedge (*Cyperus eragrostis*), water parsley

(*Oenanthe sarmentosa*), colts foot (*Petasites frigidus*), creeping buttercup (*Ranunculus repens*), watercress (*Rorippa nasturtium-aquaticum*), lady fern (*Athryium felix-femina*) and American speedwell (*Veronica americana*) are also present. Adjacent habitat includes young Monterey pine (*Pinus radiata*), grand fir (*Abies grandis*), red alder, Douglas-fir (*Pseudotsuga menziesii*), blue blossom (*Ceanothus thyrsiflorus*), bracken fern, Himalaya blackberry (*Rubus discolor*), red elderberry and cascara (Nesty 2007).

Below Trinidad on the coast and to the south are young red alder (*Alnus rubra*), Himalaya blackberry, red elderberry (*Sambucus racemosa*), cascara (*Rhamnus purshiana*), bracken fern (*Pteridium aquilinum*), sword fern (*Polysticum munitum*) and non-native weedy herbs such as orchard grass (*Dactylis glomerata*), white clover (*Trifolium repens*), sheep sorrel (*Rumex acetocella*) and sweet vernal grass (*Anthoxanthum oderatum*). Adjacent habitat is a mixed forest of young redwood (*Sequoia sempervirens*), Sitka spruce (*Picea sithcensis*) and red alder (Nesty 2007).

Faunal Resources in the Northern California Coast

The variety of fauna is dependent upon the vegetation communities present. Large and small mammals often found along the coast include: mule deer, black-tailed deer, black bear, mountain lion, coyote, bobcat, ground squirrels, cottontails, jack rabbits, and kangaroo rats. Birds include turkey vultures, eagles, hawks, owls, herons, quail, morning dove, mockingbird, scrub jay, western meadowlark, finches, and sparrows. Before the early1900s, grizzly bear and wolf were present along the margins of the coastal foothills (Nesty 2007).

Along shore and offshore were Steller sea lion (*Eumetopias*), California sea lion (*Zaloprus*), and Northern fur seal (*Callorhirus*). Northern fur seal are found only along the continental shelf 30 or more kilometers off shore. Pelagic birds, shellfish and many species of fish are found along shore.

Paleoenvironment

Reconstructing the past environment has been an important methodology in California Holocene studies; however, climatic and vegetation studies deal in very large timescales, and it is difficult to achieve resolution for shorter time spans. Smaller cycles such as the Medieval Warming Anomaly and El Nino may have had an influence. What the area was like in the archaeological past, the paleoenvironmental sequence, has not yet been developed for north coast California. Alt and Hyndman suggest that the lagoons and associated sloughs did not exist at end of the last ice age (2000:106). They would have developed sometime after the eustatic sea-level rise on California's north coast. The sea is estimated to have risen four meters per millennium, but has been counteracted by sudden tectonic uplifts making a line of regression for sea levels difficult to establish. Salmon runs would have reached full biological productivity much earlier, probably by 5000 B.P when the sea level stabilized (Fladmark 1982, 1983 cf Lyman 1991: 68). Stumps from a former redwood forest have been observed at low tide on State Beach, the beach adjacent to and north of Trinidad Head.

2.2 ETHNOGRAPHY

The following is adapted from the Tsurai Management Plan, prepared by Sloan and Rocha (2007).

Tsurai is the principal Trinidad Bay Yurok village located [redacted]. The cultural boundaries of the village are a small stream four miles north of Trinidad Head (Tsurewa), Beach Creek (O prmrg wroi) and the village located at the Little River (Me'tsko or Srepor), which acted as both the southern boundary of Tsurai, as well as the southern boundary between the Yurok and the neighboring Wiyot Tribe (Lindgren 1991).

The nucleus of Tsurai was one-half mile east of Trinidad Head, on a steep hillside between two spring-fed streams. This permanent village site [redacted] (Lindgren 1991). Tsurai is a unique Yurok village because the people here speak the most linguistically divergent Yurok dialect. Moreover, Tsurai, meaning "mountain," because of its association with Trinidad Head, is the only Yurok village that is in [redacted] as it sits tucked between the windy bluff above and the beach below (Waterman 1920:270-271).

The Yurok, like many cultures around the world, have stories that relate the beginning of their existence, as well as the formation of the land around them. Lame Billy of We'itspus, at the confluence of the Trinity and Klamath Rivers, related the story of the creation of Trinidad Head (Tsurewa) to Anthropologist Albert Kroeber of the University of California, Berkeley between 1901 and 1902. The story begins that a young man who grew up at Tsurai had a sister who he told one morning, "I should like to see a pretty hill be" (Kroeber 1976:18). When she asked him what the purpose of this hill would be, the young man replied, I always hear laughing when the wind blows from there. I almost hear someone laughing. That is why I want to make a good hill here. I want to sit on it that I may look about. There may be people somewhere. Perhaps they will see me when they come by (Kroeber 1976:18).

The young Tsurai man then proceeded to go down to the beach, gather a pile of sand in his hands, make the pile round, and set it down again. Thus, Tsurewa was created. After the young man had created Tsurewa, he sat upon it and said, "I wish you would be higher," and the sand grew higher. After some time had passed, the young man again said, "I wish you would be a little higher," and the sand grew even higher. Satisfied, he looked around and said, "That is all," and ran down the hill to his home (Kroeber 1976:19). When he got home he grabbed a stool and returned to the top of Tsurewa and placed it securely. "Downstream from it he set a white rock, across a black rock, above a red rock. Upstream was the side to which he looked (Kroeber 1976:19). The young man sat on his stool and began to wonder what his stool should become. He then thought, it will be best if I make a hole here with a spring in it. I shall come here sometimes if I want woodpecker crests. I think that is how I shall make my stool. On the side here next to it I shall make a small hole. I shall come there if I want persons' money (dentalium shells). I shall come and wash my hands in that. (Kroeber 1976:19).

So the young man made two water holes up on the top of Tsurewa and sat on his stool. This story continues as the young man of Tsurai travels within Yurok Ancestral territory and visits many villages to instruct other Yurok on how to properly conduct ceremonies (Kroeber 1976:19-28). What is important is that this story relates the creation of Tsurewa and establishes that the village of Tsurai predates the rock promontory known as Trinidad Head in regards to Yurok oral tradition. Great heroes are also an important element in Yurok oral tradition. One story about Wohpekumeu, a culture-hero, relates the way people got fire, as well as the reason why there were no oaks or string iris on the immediate coast around Tsurai. Wohpekumeu came to Tsurai from the north. He was going to make acorns grow there, and iris for string; but he wanted girls in payment. Then, when they were not given him, he became angry, and tore up what he was making and threw it away. (Hence no oaks or string iris on the immediate coast.) He went off southward. He did not go very far when he was carried across the ocean. He left the fire drill of willow root, and that is how people have fire (Kroeber 1976:476).

Trails and other Cultural Places at Trinidad

The stretch of coast by Trinidad was traversed by early trails. T. T. Waterman (1920: Rectangle K), shows a Yurok Trail that may have traversed the Trinidad. Waterman also indicates a [redacted], but the imprecision of Waterman's map makes location difficult. The location is called o-*tswogem*, translated by Waterman as "where you talk," and described

as, “A group of flat rocks. If a person tells the spirit in here his troubles the spirit will give him help” (Waterman 1920: 269). Gates (1995), and Axel Lindgren III (2007) also describe Yurok trails through this area. The Union-Trinidad to Gold Bluff or Orleans pack trail probably ran along Trinity Street (Simmons 1991; Rowley 2000). Scenic Drive later became a wagon road and eventually U.S. Highway 1.

Other Yurok cultural places include [redacted]

Cultural Landscape

The Yurok Tribe has ancestral rights and responsibilities over Yurok ancestral lands, as defined in the Yurok Constitution, which was passed in 1993. Yurok ancestral lands include the Lower Klamath River and the California coast from Little River (south of Trinidad) running north to Damnation Creek (south of Crescent City).

The ancestral village of Tsurai is situated within Yurok ancestral territory, as well as within the larger cultural landscape of the Yurok people. The surrounding landscape, particularly Trinidad Head, is central to Yurok creation stories and oral tradition (Sloan and Rocha 2007:4).

Yurok oral history identifies [redacted] as areas of profound spiritual significance to Yurok culture. Yurok creation stories recorded by Kroeber recount the story of Tsurewa Man and his role in the creation of the Yurok world. The Yurok Tribe considers [redacted] to be sacred sites, as well as, areas of archaeological and cultural significance. Under national guidelines for identifying historic properties/resources, both the [redacted] would be considered Traditional Cultural Properties for purposes of the National Register and as Tribal Cultural Resources for the purposes of CEQA.

[redacted] within the Trinidad viewshed are components of the Yurok cultural landscape embedded with deep cultural, historical, and spiritual significance to Yurok people. This relationship and significance is well documented in both Yurok oral history and early ethnographic research conducted by Kroeber and Waterman. The Trinidad area continues to be of important cultural and spiritual significance to contemporary Yurok people.

2.3 HISTORY

The following is directly adapted from the Cultural Resources Report for Phase 1 of the Trinidad Stormwater Project prepared by Roscoe and Associates (2013).

The accepted date for contact in California is 1769, the date of establishment of the San Diego Mission by the Spanish. The 1849 date for the Northern California Gold Rush is also used as a marker, and it is at this time that a massive influx of American and European Whites, African Americans, Hispanics, and Chinese began. Along the coast of Yurok lands, there may have been quite early contacts. Cape Mendocino was observed by Juan Cabrillo in 1542. The annual sailing of the Spanish Galleons from Manila began in 1565, and Cape Mendocino was often made first landfall. Some early charts locate Cape Mendocino at Patricks Point (Wagner 1937). Sir Francis Drake sailed along and made a landing

somewhere on the north coast of California in 1579. In November 1595, Cermeno sailed close to and records a Rocky Point (Patricks Point) but does not land. Ceremo's approach to the shore in November would have been after the seasonal round to salmon bearing rivers when many people might be away. Rather it was made during the beginning of the winter Northern Fur Seal (*Callorhinus ursinus*) and California Sea Lion (*Zalophus californianus*) hunting season. The coastal villages would be closely observing the ocean and preparing to launch watercraft borne hunting parties. The chances are good that Cermeno's sailing ship was observed. Also, Ceremo reports observing smoke from camp fires on shore.

During the spring of 1603 while exploring along the coast of Northern California, Sebastian Vizcaino's two ships were separated by a late spring storm. One of the ships, the frigate Tres Reyes, had been driven to the vicinity of Cape Blanco in Oregon. The frigate returned south along the coast occupied by the Yuroks and "inn (sic) latitude 41" entered "a very large bay, into which entered a full flowing river which came in from the north" (Coy 1929). The Native Americans that they encountered were probably Yurok and Wiyot.

In 1775, Heceta and Bodega anchored in Trinidad Bay for nine days, traded with the Yuroks, reconnoitered the area, and set a cross on Trinidad Head, claiming the port for Spain. Heceta observed that the Yurok had iron knives. Bodega cited by Gould (1968: 20) reports:

> The savages observing my movements, and perhaps realizing the few persons who remained with me, and being moreover encouraged by the smallness of the sloop, embarked in about 10 canoes with 28 or 30 Indians in each, and approached my vessel with the object of impeding my departure...

Bodega's report suggests that the people of Tsurai had large canoes capable of carrying 30 people. Heizer and Mills (1952: 21-28) use a different translation of Bodega: one which does not suggest the size of the canoes.

Father Junipero Serra, leader of the missionaries in Spanish California had planned to build a mission at Trinidad, but the project was never begun (Coy 1929: 24-25). In 1792, the English explorer, Captain George Vancouver, sailed along the Yurok coastal territory, and in 1793 he spent three days in the port of Trinidad. In May of 1804, an American vessel, the Lelia Byrd, under the command of William Shaler, anchored in Trinidad harbor for about a week, obtained provisions of water, fuel, and timber for a mast and spars, made repairs, and traded with the Indians, who "appeared to be very civil" at first, but "as their numbers were augmented by reinforcements from neighboring tribes, conditions became so critical that all work on shore had to be done under the protection of the guns" (Coy 1929). After 1800, incursions by Euro-Americans into Yurok territory increased. In addition to the Lelia Byrd, another American vessel, the O'Cain, appeared along the coast in 1803. Soon after in 1805, Captain Jonathan Winship, then commander of the O'Cain, in cooperation with the Russian-American Company, engaged in an intensive fur-trade along the Yurok coast. Winship and an exploring party went ashore at Big Lagoon where they found its shore to be 'thickly populated with natives, while [sea] otter and seals were plentiful.' Russian affiliated fur traders would have brought with them Aleuts, using skin-covered kayaks to hunt marine mammals. The next day Winship followed down the coast and anchored in Trinidad Bay. The natives were found to be numerous and soon an extensive trade was carried on, the Indians having a large supply of furs" (Coy 1929). The following year, 1806, Winship and the O'Cain returned again. On this trip he discovered and charted Humboldt Bay. The fur trade brought the O'Cain to the North Coast again in 1809, 1810, and 1811. At least nine other Russian, American, Spanish and English ships visited Trinidad Bay before 1849.

Commercial pinniped hunting by Russians and Americans after 1800 impacted the coastal food resource (Beaverton 1985). By 1850, coastal Yurok villages had probably declined, while river villages continued to thrive. There is ethnographic evidence of what is thought to have been a cholera epidemic at Point St. George around 1800 (Gould 1966: 96-97). Coastal villages were more accessible and more susceptible to disease imported from Europe, and it is possible that disease affected the villages around Big Lagoon.

Incursions on foot into Yurok territory from the interior by Euro-Americans appears to have begun with Jedediah Smith on the last leg of his trip down Little River in 1828 (Bledsoe 1885). He was followed by McCloud in 1828 and perhaps by Ogden in 1829, and others of the Hudson Bay Company, and by American trappers, such as Michel LaFrambois in 1832 and Ewing Young in 1833. First contact between Europeans and Yurok people on the upper Klamath River was documented to have occurred in 1827 when traders for the Hudson's Bay Company traveled downriver in search of furs and trade (Bearss 1969). During February 1827, men from Peter Skene Odgen's party encountered Yurok in the Martins Ferry area. While these are the first documented encounters by non-Indians within the upriver areas of Yurok territory, the Hudson's Bay Company party documented the presence of European trade goods being used and sought by Yurok people, indicating prior interaction through trade or travel by Yurok people (Bearss 1969; Pilling 1978:140).

Trinidad harbor was the staging area for two of California's major Gold Rushes: the Trinity River Strike 1850, and the Gold Bluff Strike in 1851. Trinidad became a boom town, port of entry for supply ships, and distribution point for mule trains to the gold fields (Coy 1929). The Trinidad Trail, opened in 1850, provided the main communication route between Trinidad, the first capital of Klamath County, and Crescent City the new 1854 capital of Klamath County. One branch ran north to Gold Bluff. A second branch led to the Bald Hills and the placer miners along the Salmon and Trinity Rivers. Trinidad was then a center for the packing trade, with many Mexican packers, who helped open a network of trails into the gold bearing rivers and mountains. White settlement soon followed along the trails. The influx of miners and settlers that followed led to conflicts and many vicious depredations against the native Yuroks.

Westernization of the Trinidad area was rapid. Charles von Luffenholtz established the first lumber mill in the area on his preemption in 1851. Redwood sawmills were established at Trinidad by Deming and Marsh in 1852 and Smith and Dougherty in 1869. These mills were then consolidated and improved by the Hooper Brothers Trinidad Mill Company 1875 (Coy 1982: 259; Simmons 1991, cf Eidsness 2001:6). Trinidad, an open roadstead, port had a dock and facilities to load lumber on schooners. Schooners were part of the port life. Trinidad was incorporated as a city on November 7, 1870. By 1875, the Northern Pacific Telegraph Company had a line in between Trinidad and Petaluma. Telephone service between Trinidad and Eureka was established in November 1883.

During the late 19th and early 20th century, lumber companies consolidated the majority of the land and accelerated redwood extraction with the introduction of innovations such as the steam donkey in 1884. Many settlers and some Native Americans found employment in the timber industry. A mill was located at the mouth of Mill Creek, later McConnahas Mill Creek, as early as 1875. South of Luffenholtz Beach, the Houda brothers operated a mill and had a dog hole for schooners to tie up to the rocks and where lumber could be loaded with a cable system. Trinidad harbor in turn supported timber export, whaling, and finally commercial and sport fisheries.

The last Yurok brush dance at Trinidad was held in 1908 or 1909. In 1916, Native American residents were forced out of Tsurai (Childs 2007). The Trinidad Rancheria was established in 1917 by the Secretary of the Interior, with funding authorizing the purchase of lands under acts of congress June 6, 1906. The tribal affiliation of the approximately 80 enrollees of the Trinidad Rancheria's Cher-Ae Heights Indian Community is listed as Yurok, Miwok and Tolowa (Eidsness 2001:6).

Trinidad has no official heritage designation with the exception of the 1870 Catholic Church which is on the National Register and the Tsurai Village, a State Historic Landmark.

City of Trinidad History

The Trinidad ASBS Stormwater Project Phase 2 is located at the old Gold-Rush town of Trinidad. Gold Rush Trinidad was mostly within a preemption claimed Robert A. Parker, Master of the ship *James R. Whiting*. In 1850, Parker was involved in the laying out the town of Trinidad into lots, and he built Trinidad's first European-style house. The old town of Trinidad was built in the neighborhood of Van Wycke and Galindo, just above the harbor (Figure 3). Here once stood the Occidental Hotel and the brick storehouse. The frames of twenty houses had been brought in by the schooner *John Story* in 1850 and were quickly sold. By June of the same year, Trinidad had 100 houses and tents (about half of each) and 300 non-Native American residents (Elliott 1881:101 cited by Manning 1957: 24-28). Sidney Myers prepared a survey of Trinidad in April 1850, but the map could not be found in the Records of Trinidad, Book A. of Deeds, 4, County Recorder, Humboldt County.

Figure 3. 1870s Old Town Trinidad showing the Occidental Hotel, the brick storehouse and a telegraph pole at the intersection of Galindo and Van Wycke looking south (Trinidad Bay Net 2008).

Figure 4, taken in 1900 shows shanties extending down to what is now the harbor parking lot. It appears that the shanties may have been mostly close to the port. The former livery stables, serving the town, is where the Main Street trailer park is now. Livery activities at this location may be quite early and would have logically been located at the edge of town. With a population of 3000 hopeful miners, it is possible

that some of the houses, tent shanties, and camps were located away from the windy coast and that their remnants are in the center or eastern parts of the present City of Trinidad.

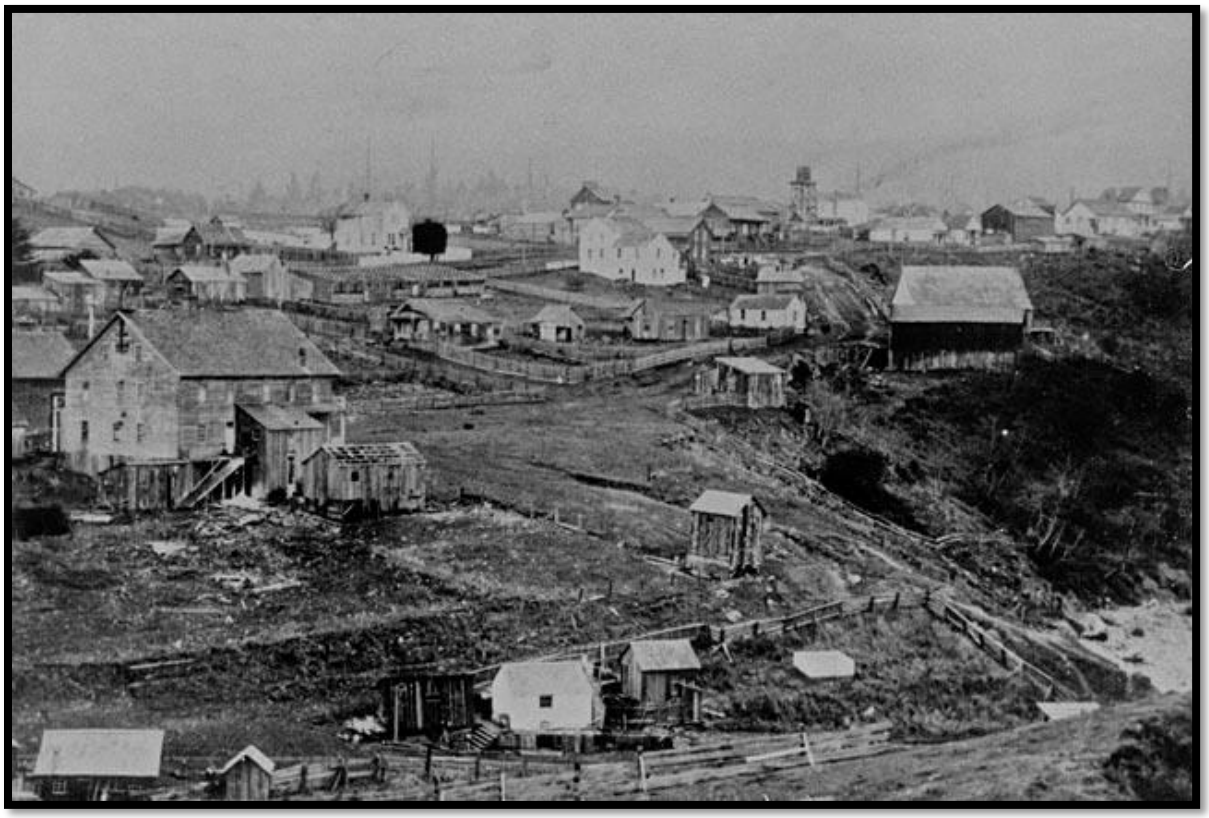


Figure 4. Trinidad in 1900 looking northeasterly over the present-day harbor parking lot. Note the shanties built almost to the tidal zone (Trinidad Museum Society).

Well into the 1900s, the downtown hotels and saloons continued to hug the coastal flat above the Yurok Village, but the concentration of commerce had now moved to Edwards Street, along the stage coach route. From east to west on Edwards Street stood the Trinidad Hotel where the old stage coach road is now a trail south of Wagner Street. On today's Edwards Street were Saunders Mercantile and residence (originally owned by C.J. McConnaha), the Pinkham Hotel, and Pink's Saloon. When John Muir traveled by stagecoach through Trinidad, he would have entered the town along this route, traveling from the south along Scenic Drive, but in those days the stage coach road cut toward the coast almost to Indian Beach, and entered Trinidad on the trail south of Wagner Street, where it continued along Edwards Street and Trinity Street to Stagecoach Road.

In the 20th century a number of forces moved the economic center of Trinidad to the intersection of Main Street and Scenic Drive-Patricks Point Drive. Among these were the new roads and highways, the advent of the automobile, establishment of railroad service to San Francisco from a depot reached by going east on Main Street, the various McConnahas Brothers business activities along Main Street, and the deterioration and sporadic fires that gradually destroyed the Old Town Trinidad and Edwards Street neighborhoods.

A Crescent City-Trinidad Road had already been constructed in 1887, which later became part of the Redwood Highway. Bonds were issued in 1909 for the Redwood Highway and construction began in 1917. By 1924, the Redwood Highway was open from the Oregon Border to Sausalito, California. U.S. Highway 101 was later commissioned in 1926.

In 1903, Burr McConnaha began a stage and mail line to Requa City. A few years later he purchased the Flaherty's Stables (presently the trailer park) and soon operated a fleet of Pierce-Arrow auto-coaches on routes to Crescent City and Orleans Bar (Griffin 1956 pers. Comm. cited by Manning 1957:69). These top-of-the line vehicles were headquartered and maintained in the "barns." McConnahas sold their auto-stage line to the Pickwick Co. in 1924, which was later acquired by Greyhound.

In 1907 or 1908 the Trinidad Railroad Depot was built near Potato Rock just east along Main Street and Westhaven Drive, on the spur road now called Quarry Road. Passenger service was initially available to Alton and points in between, and by 1914 passenger service was available to Sausalito, California and to San Francisco by ferry.

In 1909, The McConnahas Brothers had established a mill on McConnahas Mill Creek just south of Main Street on Scenic Drive. McConnahas Mill and Timber was sold to Hammond Lumber in 1931. Burr McConnaha built a family residence on a knoll above where Main Street transitions into Westhaven Drive. When the U.S. Highway 101 overpass was built in the 1970s, the McConnahas house was moved to the end of Berry Road.

Whaling

In 1920 the California Sea Products Company opened a whaling station in Trinidad. It leased 400 feet of waterfront property from the Hammond Lumber Company and had Mercer-Fraser Company construct a plant that included an office building, blacksmith shop, processing building, and a large ramp used for dragging whales up from the bay (Michael 1990:7-8). Photos show more complexity to the operation, including at least one tank and several attached or detached structures (Armand 2010:73). At least 483 whales were processed before the station closed in 1927. In 1934 most of the station was dismantled (Humboldt Times 1934), although the burner smokestack remained until 1949 and the office building lasted until 1961 (Korkan 1961; Michael 1990:13). When the station was operating, it was claimed that "one could smell the stench as far south as Eureka" (Michael 1990:13), a condition that may explain the lack of building development in the Trinidad area until less noisome breezes began to blow.

> Stench was followed by smoke. In 1926 a house and an apartment house burned near the whaling station (Humboldt Standard 1926) [Rohde in Verwayen et al. 2011]

In 1928, fire on Edwards Street destroyed the Saunders Mercantile, the Saunders' residence, the old Pinkham Hotel and Pink's Saloon (by this time converted to a soft drink parlor). Saunders rebuilt his store on Patricks Point Drive at the intersection of Main Street, the present location of the Park and Ride. The Cash Grocery Store and the Modern Garage gas station and bait shop were already in business at the intersection. The economic prospects of Main Street and the Redwood Highway were attractive enough for Tommy Tighe to move the old *Good Templars* lodge hall from where it had stood next to the Roman Catholic Church on Hector Street to Scenic Drive at the intersection of Main Street. The old lodge hall became the popular Italian restaurant the *Big Four* (Figures 4-8). In 1949, the school on Trinity Street burned, and was replaced by a seven-room school built in 1950. The Humboldt State University Marine Lab named after Fred Telonicher for his long service at the university was extablished in 1965.

3.0 METHODS

3.1 BACKGROUND RESEARCH

3.1.1 Northwest Information Center Records Search

Background research for this investigation included a records search at the Northwest Information Center (NWIC) and a background literature review. The literature review for this project included an examination of historical maps, records and published documents at the Humboldt County Historical Society, Humboldt State University Library, and the Humboldt County Library.

WRA Research Associate Melinda Salisbury B.A. conducted a records search at the NWIC located in Rohnert Park, California on March 8, 2018 (IC File #17-2206-Appendix B). The objectives of the record search were to: 1) review cultural resource survey reports that either included the proposed project area or were conducted within ½ mile; and 2) determine if cultural or historical resources have been recorded within the project area or within ½ mile buffer.

3.1.2 Background Archival Research

Background archival research was aimed at obtaining information pertinent to the prehistoric and historical uses of the survey area. It was also hoped that this would generate specific geographic information about archaeological and historic-era sites in the survey area and its vicinity. Background research also provided an understanding of the types of cultural resources that were likely to be encountered. Ethnohistoric research included an examination of historical maps, records and published and unpublished ethnographic documents at the Humboldt County Historical Society, Humboldt State University Library, as well as, the author's personal libraries.

3.2 CORRESPONDENCE WITH NATIVE AMERICAN TRIBAL REPRESENTATIVES

Tribal outreach was initiated on March 10, 2018 with a request to the Native American Heritage Commission for a Sacred Lands Search and a list of tribes with interest in the project area (Appendix A). As of the writing of this report, no response has been received. Based on previous work in the Trinidad area, WRA contacted the Trinidad Rancheria, Tsurai Ancestral Society and the Yurok Tribe.

On March 12, 2018 a letter with a project map and description was sent to Tribal Historic Preservation Officer (THPO) Rachel Sundberg and Chairman Garth Sundberg of the Trinidad Rancheria; Sarah Lindgren-Akana, of the Tsurai Ancestral Society and THPO, Frankie Myers and Chairman Thomas O'Rourke of the Yurok Tribe (Appendix A).

Ms. Sundberg responded on March 12, 2018 and requested a meeting, and a walk of the proposed project area to discuss concerns. Mr. Rich met with Ms. Sundberg on April 5, 2018.

Ms. Lindgren-Akana also responded indicating the Tsurai Ancestral Society would provide written comment, however none was received. A follow-up phone call was made to Ms. Lindgren-Akana on May 15, 2018 and a discussion of the tribal importance of Tsurai and the surrounding vicinity was shared. It was Ms. Lindgren-Akana's recommendation that tribal monitoring be conducted for the project, and that monitors be specifically familiar with Tsurai cultural history.

Mr. Myers responded on April 4, 2018 and indicated that the Yurok would like to schedule a meeting to discuss the project. A meeting date was set for May 21, 2018 in Klamath with Chairman O'Rourke, Mr. Myers, Ms. Rosie Clayburn and Council Member Toby Vandlandingham. As a follow-up with the meeting and discussions held, a walk of the project area was planned for May 13, 2018 and WRA was informed that the Yurok would like to discuss the project at the Yurok Culture Committee Meeting on June 22, 2018. Mr. Rich and Trinidad City Manager, Dan Berman attended this meeting.

3.3 Survey Methods

3.3.1 Survey Expectations

Historical research indicated that the project area has a high potential for Native American archaeological sites, as it occurs on a steep hill slope. Historic period cultural resources associated with Gold Rush-era Trinidad could be located in the project vicinity. Pre-contact era archaeological site indicators would predominantly include stone tools of chert and obsidian, stone tool debitage, ground stone implements, milling stone features, locally darkened midden soils, possibly shell and/or bone debris, pit features and rock alignments. Site types associated with Native American religious activity could include cupule boulders, rock rings and prominent outcrops, as well as human burials. Expected historic period cultural resource indicators include ceramic, glass or metal artifacts; structures; trails; tailings and pits.

3.3.2 Field Investigation

Registered Professional Archaeologist, William Rich, M.A. and Research Associate, Melinda Salisbury, B.A. conducted a pedestrian reconnaissance survey of the proposed project area on April 10 and June 8 and 19, 2018 (Figure 5). The project area has been subject to previous road construction, stormwater drainage systems, undergrounded electric lines and other ongoing on-going maintenance projects and development of adjacent private lands. Project area soils consisted of clays, silts, gravels, rounded and subangular pebbles, and showed signs of disturbance and fill in some areas.

All exposures of mineral soils were closely examined. Special attention was given to cut-banks, rodent tailings, and other areas where archaeological materials could be encountered.

4.0 FINDINGS

4.1 Results of Northwest Information Center Records Search

The Northwest Information Center has [redacted] records of cultural resources within the proposed project area. [redacted] archaeological sites are, however, located within the ½ mile buffer and include [redacted] which was recorded in 1948-1949 by R.F. Heizer and listed as a California State Historical Landmark #838. Verwayen et al. (2011) recorded [redacted] (Table 1). Table 1 also indicates the other cultural resources that have been documented with the NWIC in the Trinidad area.

The search of records revealed five previously conducted cultural resources studies within the project area assessing archaeological resources on and near Trinidad Head (Roberts 1976, King-Smith 1982) and for the Phase 1 stormwater project (Roscoe and Associates 2013), reconstruction of the Trinidad Pier (Verwayen 2011) and a fee to trust land transfer for the Trinidad Rancheria (Verwayen and Rohde 2011). An additional fifteen studies have been carried out within ½ mile of the project area (Table 2).

Table 1. Previously recorded cultural sites within ½ mile of the project area.

Site #:	Description of Site:	Recorder/Date:	Distance from project area
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Site #:	Description of Site:	Recorder/Date:	Distance from Project Area
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Table 2. Previous studies within a ½ mile radius of investigation area.

Survey Number	Title	Author/ Date	Results
S-75	An Archaeological Survey of Assessor's Parcel No 42-102-42, Humboldt County, California	Hampson 1974	[redacted]
S-000263*	An Archaeological Survey of Trinidad Head, Humboldt County, California.	Roberts 1976	[redacted]

Survey Number	Title	Author/ Date	Results
S-000662	An Archaeological Survey of the Trinidad Rancheria in Humboldt County, California	Benson 1977	[redacted]
S-000668	N.I.C.P.A. Field Inspection Reports	Arnold and Benson 1977	[redacted]
S-001348	Cultural Resources Field Report, Application 25746, Mill Creek, Rudnicki Property (Midway Trailer Park), Trinidad CA.	Sheeders, 1978	[redacted]
S-002807	Archaeological Survey Report for a Park and Ride Facility in Trinidad, Humboldt County, 01-HUM-101 P.M. 100.7	Douglas, 1981	[redacted]
S-002975	Tsurai (CA-HUM-169) Bluff Erosion (letter report)	Eidsness 1982	[redacted]
S-005639*	Preliminary Report on California Indian Cultural Resources for Trinidad Head, Humboldt County, California	King-Smith 1982	[redacted]
S-006049	Archaeological Survey Report, Trinidad State Beach, Humboldt County Road and Parking Improvements and Sanitary Facilities	Roscoe 1983	[redacted]
S-040083	Report Concerning Tsurai Site Boundaries During the National Register Process	Pratte 1977	[redacted]
S-041256	PCR 5024 Project Evaluation, Elk's Head Removal of Heather and Conifers, Project No. 635-01-026, North Coast Redwoods, Trinidad State Beach	Anderson 2001	[redacted]
S-041258	Cultural Resources Survey of the Lindgren Property (APN 515-311-020) in	Eidsness and McConnell 2001	[redacted]
S-041259	PRC 5024 Project Evaluation, Horse Trail Foot/Equestrian Bridge Replacement, Project No: 99-635A-025, North Coast Redwoods District, Trinidad State Beach	Anderson, 2001	[redacted]
S-042510	A Cultural Resources Investigation of the Proposes NOAA Trinidad Trailer Installation & Wind Tower	Roscoe 2003	[redacted]

Survey Number	Title	Author/ Date	Results
	Replacement Project, Humboldt County, California		
S-042515	A Cultural Resources Investigation of the Scenic Drive Rehabilitation & Realignment, Post Mile 2.3, Trinidad, California	Verwayen 2007	[redacted]
S-043219	An Archaeological Survey Report for the Parker Timber Harvesting Plan, Humboldt County, California	Launi 2006	[redacted]
S-043838*	An Archaeological Survey Report for the Trinidad (ASBS) Stormwater Improvement Project Phase I, City of Trinidad, Humboldt County, California	Roscoe and Associates 2013	[redacted]
S-044592*	A Cultural Resources Study of Trinidad Rancheria Fee and Trust Lands, Humboldt County, California	Verwayen and Rohde 2011	[redacted]
S-044593*	A Cultural Resources Investigation of the Trinidad Pier Reconstruction Project, Humboldt County, California APN 042-071-014,-001,-008,-009	Verwayen 2011	[redacted]
S-044796	A Cultural Resources Investigation of the Proposed Water Main Improvement along Scenic Drive for the Cher-ae Heights Indian Community, Humboldt County, California Projects CA 07-L96	Roscoe and Verwayen 2011	[redacted]
NWIC # not assigned	An Archaeological Resources Report for the Removal of Existing Concrete Footings at the Former Trinidad Memorial Lighthouse, City of Trinidad, Humboldt County, CA	Rich 2018	[redacted]

* Denotes surveys within the project area.

4.2 Native American Coordination

During the afternoon of April 5, 2018, Mr. Rich met and walked the proposed project area with Trinidad Rancheria's Tribal Historic Preservation Officer (THPO) Rachel Sundberg. Ms. Sundberg indicated that all ground disturbance should be monitored, and acknowledged that [redacted]

In speaking with Ms. Lindgren-Akana of the Tsurai Ancestral Society, she indicated that all ground disturbing work should be closely monitored by tribal members with Tsurai ancestry.

On June 13, 2018, Mr. Rich and WRA Research Associate, Melinda Salisbury were accompanied by Yurok THPO, Frankie Myers, Ms. Rosie Clayburn and Yurok Council Member Toby Vanlandingham, as well as, City Manager Dan Berman and Trever Parker, SHN/City Planning Office and Ethan Red Eagle, SHN Tribal Liaison. Tribal representatives presented questions and concerns to the City and SHN, which are presented below.

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted]

- [redacted]

- [redacted]

- [redacted]

[redacted]

4.3 Field Survey Results

All visible ground surfaces within the project area were inspected for prehistoric and historic archaeological site indicators (See Figure 1). Much of the project area was paved street and/or disturbed by historic development, and has been subject to previous road construction, stormwater drainage systems, undergrounded electric lines and on-going maintenance. Nevertheless, all open areas within the right-of-way, with good visibility of mineral soil, were surveyed for archaeological indicators that might suggest the presence of significant cultural resources. [redacted]

5.0 CONCLUSIONS AND RECOMMENDATIONS

The finding of this investigation, based on research and a surface survey is that, although much of the survey area is obscured by pavement, no historic properties will be affected within the proposed project area. WRA believes that the survey is adequate to identify any potential surface archaeological resources within the project area that would qualify for the NRHP.

The southern portion of the proposed project area, however, lies close [redacted]

The project is also near the old Gold Rush town center and the project area runs through one of the oldest cities in California raising the possibility of encountering Euroamerican historic resources. Because of the sensitivity of the entire Trinidad area there is a risk of encountering Native American and/or Euroamerican historical resources. Therefore, the following recommendations have been designed in accordance with the expressed concerns of the Trinidad area tribes:

1. A Monitoring Plan/ NAGPRA Plan of Action be put in place prior to permit approval, thereby setting up a formal agreement between the stakeholders regarding the plan for items discovered and excavated dirt removed during project implementation.

2. It is recommended that any grading or earthwork activities within the project area be monitored by tribally appointed monitors.

3. Cultural resource monitors must be empowered to halt heavy equipment operations in the event that significant cultural features or human remains are uncovered. Construction activities in the immediate vicinity would be delayed until an archaeologist, qualified to the Secretary of Interior Standards, has assessed the significance of the find.

4. The cultural resource monitor (s) must be kept informed by the contractor and understand the ground disturbance schedule. Field notes should be kept by the monitor (s) and a brief letter report of the monitoring effort filed with the Northwest Information Center.

[redacted] In the event cultural remains are encountered during project implementation, the following protocol for discovery of cultural resources be followed. This protocol was provided to this author by the Yurok Tribe in 2017 for use in these reports, however the Trinidad Rancheria and Tsurai Ancestral Society may provide input on these procedures. It is recommended that the City of Trinidad continue consultation and seek approval of this inadvertent discovery plan before final permit approval.

Yurok Tribe Policy and Procedures for Inadvertent Discovery of Yurok Cultural Items

Traditional Yurok Law requires reburial of cultural items, and known funerary items as soon as possible. The Yurok Tribal Government shall make every attempt to immediately rebury these items upon notification. In instances where it is believed that a violation of tribal law, federal/state law have been committed, the tribal government or another law enforcement agency shall investigate and

determine if prosecution is warranted, and seek retribution for the crime(s) committed against Yurok ancestors and sacred sites.

Procedures for notifying the Yurok Tribe of an inadvertent discovery of human remains, associated and/or unassociated funerary items, and cultural items.

Step 1. Upon discovery of human remains, associated and/or unassociated funerary items the individual or representative of an organization, governmental agency shall immediately stop ground-disturbing activities in the immediate area of the discovery.

Step 2. Must establish a reasonable protective barrier (marked by flagging tape) around the cultural site, within which, ground-disturbing activities are temporarily suspended. You shall also take steps to protect the discovered item(s) in a respectful and dignified manner. Removal of the unearthed item is not recommended unless it is it is directly threatened by a destructive force (i.e. heavy equipment).

Step 3. Immediately report the discovery to the Yurok Tribal Heritage Preservation Officer (THPO), Trinidad Rancheria THPO and the Tsurai Ancestral Society. You must also follow all applicable state and federal laws in the event that human remains are discovered (i.e. County Coroner)

Tribal Contacts

Trinidad Rancheria
(707) 677-0211

Rachel Sundberg, Tribal Historic Preservation Officer
rsundberg@trinidadrancheria.com

Jacque Hostler, CEO
jhostler@trinidadrancheria.com

Garth Sundberg, Chairman

Tsurai Ancestral Society

Sarah Lindgren-Akana
mlindgren79@gmail.com

Yurok Tribe

Frankie Myers, THPO
(530) 625-4130 x1629
(707) 498-2536 (cell)
fmyers@yuroktribe.nsn.us

Thomas O'Rourke, Chairperson
torourke@yuroktribe.nsn.us
(707) 482-1350

6.0 PROFESSIONAL QUALIFICATIONS

WRA meets the Secretary of Interior's Professional Qualifications Standards for Archaeology (Title 36 Code of Federal Regulations Part 61, and 48 Federal Regulation 44716). Principal Investigator and Registered Professional Archaeologist (RPA) William Rich, M.A., oversaw the entire investigation. Research Associate, Melinda Salisbury B.A. assisted with the investigation.

7.0 REFERENCES CITED

Alt, David and Donald W. Hyndman
2000 Roadside Geology of Northern and Central California. Missoula, MT: Mountain Press Publishing Company.

Bearss, Edwin C.
1982 History Basic Data: Redwood National Park. U. S. Department of the Interior, National Park Service.

Beverton, R. J.
1985 Analysis of Marine Mammal-Fisheries Interaction. In *Marine Mammals and Fisheries*, edited by J. R. Beddington, R. J. Beverton, and D. M. Lavigne, pp. 3-33, Boston: Allen and Unwin.

Bledsoe, A. J.
1885 Indian Wars of the Northwest. San Francisco: Bacon & Co.

Carver, G. A. and Burke R. M.
1992 Late Cenozoic Deformation on the Cascadia Subduction Zone in the Region of the Mendocino Triple Junction, in Carver, G.A., and Burke, R.M., eds., Pacific Cell, Friends of the Pleistocene Guidebook for the Field Trip to Northern Coastal California: Arcata, CA, p. 31-63.

Carver, D.
1998 Native Stories of Earthquake and Tsunamis Redwood National Park, California, National Park Service, Redwood National and State Parks, Crescent City, California, Contract # 1443PX848098092, 64 pp.

Chaytor, J. D., Goldfinger, C., Dziak, R. P., and Fox, C. G.
2004 Active deformation of the Gorda plate: Constraining deformation models with new geophysical data: Geology, v. 32, no. 4, p. 353-356.

Childs, Kenny
2007 Personal Communication.

Coy, Owen C.
1929 *The Humboldt Bay Region 1850-1875*. The California State Historical Association. Los Angeles, Reprinted by the Humboldt County Historical Society 1982. Eureka, California

Eidsness, Janet P.
2001 *Cultural Resources Survey of the Lindgren Property in Trinidad, Humboldt County, California*. Filed in the North Coastal Information Center, Klamath, California

Elliott, Wallace A.
1881 *History of Humboldt County, California with Illustrations.* Wallace A. Elliott and Co., San Francisco

Fladmark, K. R.
1982 An introduction to the prehistory of British Columbia. *Canadian Journal of Archaeology* 6:95-106.

Fladmark, K. R.
1983 A comparison of sea-levels and prehistoric cultural developments on the east and west coasts of Canada. In R. J. Nash (ed.) *The evolution of maritime cultures on the northeast and the northwest coasts of America,* pp. 65-75. Simon Fraser University Department of Archaeology Publication No. 11.

Gates, Thomas
1995 *Along the Ridgelines: A History of the Yurok Trail System*s. Ph.D. Dissertation, Department of Anthropology, University of North Carolina at Chapel Hill.

Goldfinger, C., Nelson, C.H., Morey, A.E., Johnson, J.E., Patton, J.R., Karabanov, E., Gutiérrez-Pastor,J., Eriksson, A.T., Gràcia, E., Dunhill, G., Enkin, R.J., Dallimore, A., and Vallier, T.
2012 Turbidite event history—Methods and implications for Holocene paleoseismicity of the Cascadia subduction zone: U.S. Geological Survey Professional Paper 1661–F, 170 p. (Available at https://pubs.usgs.gov/pp/pp1661f/).

Griffin, Everett
1956 Mr. Griffin was a long-time Trinidad resident and Trinidad librarian.

Gould, R. A.
1966 Archaeology of the Point St. George site and Tolowa Prehistory. *UCPAAE 4.* Berkeley.
1968 Seagoing canoes among the Indians of northwestern California. Ethnohistory 15:11-42.

Heizer, R.F., and J.E. Mills
1952 The Four Ages of Tsurai. Berkeley and Los Angeles: University of California Press; London: Cambridge University Press
1991 The Four Ages of Tsurai (With new introductory material by Trinidad Museum Society and Axel Lindgren). Trinidad Museum Society, Trinidad, California.

Jennings, C.W.
1977 *Geologic Map of California*. California Geologic Data Map Series. Sacramento, CA

Jones, T. L., and W. R. Hildebrandt
1995 Reasserting a prehistoric tragedy of the commons: Reply to Lyman. Journal of Anthropological Archaeology 14:78-98.

King-Smith, Ann
1982 Preliminary Report on California Indian Cultural Resources for Trinidad Head, Humboldt County, California. On file at the Northwest Information Center (S-005639).

Kroeber, A.L.
1976 Yurok Myths. University of California Press, Berkeley, CA.

Lambeck, K., and Chappell, J.
2001 Sea Level Change Through the Last Glacial Cycle, in Science, v. 292, p. 679-686, DOI: 10.1126/science.1059549

Lindgren III, Axel
2007 Personal Communication with Donald Verwayen.

Lyman, R. L.
1991 *Prehistory of the Oregon Coast.* Academic Press, New York.

Manning, Dwight
1957 The History of Trinidad. Unpublished senior thesis, Humboldt State University.

McCaffrey, R., Qamar, A., King, R. W., Wells, R. W., Khazaradze, G., Williams, C., Stevens, C. Vollick, J. J., and Zwick, P. C.
2007 Fault locking, block rotation and crustal deformation in the Pacific Northwest: Geophysical Journal International.

Muhs, D.R., Wehmiller, J.F., Simmons, K.R., and York, L.L.
2004. Quaternary sea-level history of the United States in Developments in Quaternary Science, vol. I, DOI:10.1016/S1571-0866(03)01008-X

Nelson, A. R., Kelsey, H. M., and Witter, R. C.
2006, Great earthquakes of variable magnitude at the Cascadia subduction zone: Quaternary Research, v. 65, p. 354-365.

Nesty, Greg
2007 Personal Communication. Employee of the Trinidad Rancheria who supplied draft material on the project and area description.

Padgett, J.,
2013 Upper-Plate Deformation of Late Pleistocene Marine Terraces in the Trinidad, California Coastal Area, Southern Cascadia Subduction Zone, MS Thesis submitted to Humboldt State University, Digital Commons

Pilling, Arnold R.
1978 Chapter on the Yurok *Handbook of North American Indians* – Volume 8, California. Robert F. Heizer, ed., Smithsonian Institution, Washington D.C.

Roberts, Harry K.
2011 *Walking in Beauty, Growing up with the Yurok Indians*. The Press at Trinidad Art, Trinidad.

Roberts, Pamela R.
1976 An Archaeological Survey of Trinidad Head, Humboldt County, California. On file at the Northwest Information Center (S-000263).

Roscoe and Associates
2013 An Archaeological Survey Report for the Trinidad (ASBS) Stormwater Improvement Project Phase 1, City of Trinidad, Humboldt County, California. On file at the Northwest Information Center (S-043838).

Rowley, Maxwell
2000 Personal Communication with Donald Verwayen, HSU-CRF Research Associate.

Simmons
1991 Personal Communication with Donald Verwayen, HSU-CRF Research Associate.

Sloan, Kathleen and Megan Rocha
2007 Tsurai Management Plan. Prepared for the Tsurai Management Team, California Coastal Conservancy, City of Trinidad, Tsurai Ancestral Society and the Yurok Tribe.

Trinidad Bay Net
2008 *A Photographic History of Trinidad, California*. Compiled by Scott Shannon. http://tridiaybay.net/ryder (October 23, 2008).

Verwayen, Donald
2011 A Cultural Resources Investigation of the Trinidad Pier Reconstruction Project, Humboldt County, California; Assessor's Parcel Numbers: 042-071-014 (pier) & 042-071-001, -008, -009 (staging area). On file at the Northwest Information Center (S-044593).

Verwayen, Donald and Jerry Rohde
2011 A Cultural Resources Study of Trinidad Rancheria Fee and Trust Lands, Humboldt County, California. On file at the Northwest information center (S-044592).

Wagner H.
1937 *Cartography of the Northwest Coast of America to the Year 1800*. Berkeley: University of California Press.

Waterman, T. T.
1920 Yurok geography. *University of California Publications in American Archaeology and Ethnology* 16(5):177-314.

Appendix A
Native American Correspondence

FAX COVER SHEET

DATE: March 10, 2018

TO: Native American Heritage Commission

FAX: 916-373-5471

FROM: William Rich, M.A., RPA

SUBJECT: Sacred Lands Database Search: **Trinidad ASBS Stormwater Project - Phase 2, Trinidad, Humboldt County, CA**

PAGES: 2 (cover and 1 map)

Dear NAHC,

William Rich and Associates have been retained to conduct a cultural resources investigation for a stormwater improvement project in Trinidad, Humboldt County, California. Specifically, the project is located in Sections 23 and 26, T8N, R1W, as shown on the USGS 7.5' Trinidad, CA Topographic Quadrangle. The project area is indicated on the accompanying map.

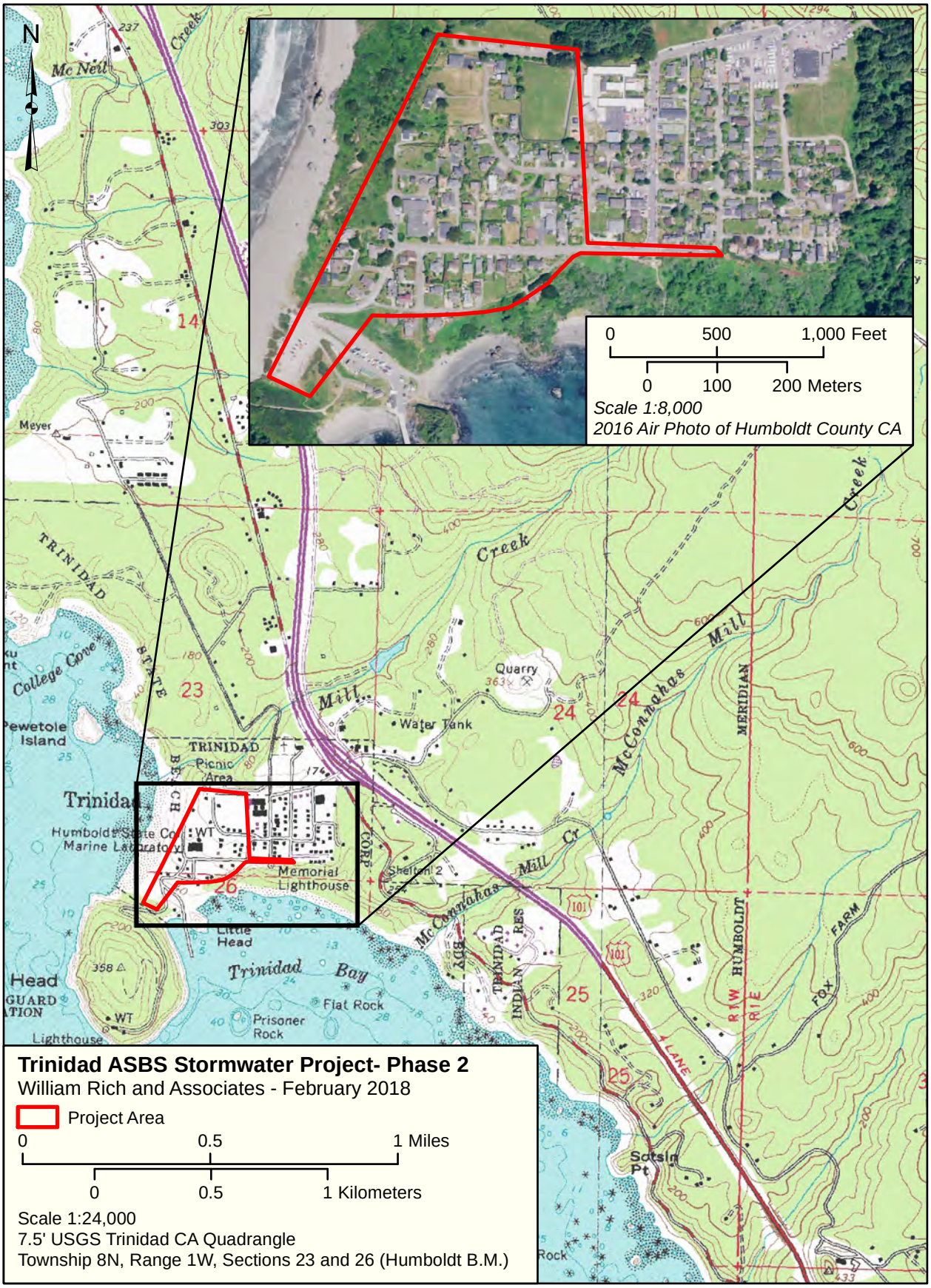
I would greatly appreciate a list of Native American contacts and the results of a search of the sacred lands database for previously identified sites of concern within the project area or a one-half mile radius.

Many thanks in advance for your assistance.

Sincerely,

William C. Rich

William Rich, M.A., RPA
Principal Investigator
William Rich and Associates
P.O. Box 184
Bayside, CA 95524
(707) 834-5347
wcr@williamrichandassociates.com


N
0
500
1,000 Feet
0
100
200 Meters
Scale 1:8,000
2016 Air Photo of Humboldt County CA
Trinidad ASBS Stormwater Project- Phase 2
William Rich and Associates - February 2018
Project Area
0
0.5
1 Miles
0
0.5
1 Kilometers
Scale 1:24,000
7.5' USGS Trinidad CA Quadrangle
Township 8N, Range 1W, Sections 23 and 26 (Humboldt B.M.)
Mc Neil
Creek
Meyer
TRINIDAD
STATE
College Cove
Pewetole Island
Trinidad
Humboldt State Co
Marine Laboratory
WT
Picnic Area
Memorial Lighthouse
Little Head
Head
Lighthouse
Trinidad Bay
Flat Rock
Prisoner Rock
Quarry
Water Tank
Mill
McConnahas
Shelton 2
TRINIDAD INDIAN RES
MERIDIAN
HUMBOLDT
FOX FARM
LANE
Sotsin Pt
14
23
24
25
26

William Rich <wcr@williamrichandassociates.com>

Information Request-Trinidad Stormwater

1 me age

William Rich <wcr@williamrichandassociates.com> Sat, Mar 10, 2018 at 10:21 AM
To: NAHC NAHC <nahc@nahc.ca.gov>

Hello NAHC,

A request for information is attached below.

Thank you!
Bill

William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

NAHC_FAX_Trinidad Stormwater_2018.pdf
636K

William Rich <wcr@williamrichandassociates.com>

Cultural Resource Investigations-Trinidad

9 messages

William Rich <wcr@williamrichandassociates.com> Mon, Mar 12, 2018 at 11:05 PM
To: rsundberg@trinidadrancheria.com

Hello Rachel,

We are working with the City of Trinidad to complete a cultural resources investigation for the [redacted] and the Trinidad ASBS Stormwater - Phase 2 project. Please see attached letter and maps.

We would really appreciate hearing from the Trinidad Rancheria and would like to schedule a meeting soon to discuss the project.

Thank you!

Bill

--
William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

TrinidadVanWyke_ASBSStormwater_TR_WRALetter_3_12_2018.pdf
1456K

Rachel Sundberg <rsundberg@trinidadrancheria.com> Tue, Mar 27, 2018 at 12:03 PM
To: William Rich <wcr@williamrichandassociates.com>

Hi Bill,

I am available any day next week to meet. Let me know what works for you.

Rachel Sundberg

Tribal Programs Director/THPO

Trinidad Rancheria

PO Box 630

Trinidad, CA 95570

707-677-0211 x 2726

707-834-1169 - cell

rsundberg@trinidadrancheria.com

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From: William Rich [mailto:wcr@williamrichandassociates.com]
Sent: Monday, March 12, 2018 11:05 PM
To: Rachel Sundberg
Subject: Cultural Resource Investigations-Trinidad

[Quoted text hidden]

--
This message has been scanned for viruses and dangerous content by the
Trinidad Rancheria E.F.A. E-Mail Protection Service, and is believed to be clean.
Click here to report this message as spam.

William Rich <wcr@williamrichandassociates.com> Wed, Mar 28, 2018 at 10:14 PM
To: Rachel Sundberg <rsundberg@trinidadrancheria.com>

Hi Rachel,

Yes, next week is good. How about Monday afternoon or Tuesday am.

Bill
[Quoted text hidden]

Rachel Sundberg <rsundberg@trinidadrancheria.com> Thu, Mar 29, 2018 at 10:36 AM
To: William Rich <wcr@williamrichandassociates.com>

Tuesday morning is good for me. I'm available after 10.

Rachel Sundberg

Tribal Programs Director/THPO

Trinidad Rancheria

PO Box 630

Trinidad, CA 95570

707-677-0211 x 2726

707-834-1169 - cell

rsundberg@trinidadrancheria.com

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From: William Rich [mailto:wcr@williamrichandassociates.com]
Sent: Wednesday, March 28, 2018 10:15 PM
To: Rachel Sundberg
Subject: Re: Cultural Resource Investigations-Trinidad

[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Fri, Mar 30, 2018 at 6:39 AM
To: Rachel Sundberg <rsundberg@trinidadrancheria.com>

Ok Great! How about 1030 at your office.

Bill

On Tue, Mar 27, 2018 at 12:03 PM, Rachel Sundberg <rsundberg@trinidadrancheria.com> wrote:
[Quoted text hidden]
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Tue, Apr 3, 2018 at 1:31 AM
To: Rachel Sundberg <rsundberg@trinidadrancheria.com>

Hi Rachel,

I'm going to have to cancel. Can we reschedule for Thursday?

Bill
[Quoted text hidden]

Rachel Sundberg <rsundberg@trinidadrancheria.com> Tue, Apr 3, 2018 at 9:43 AM
To: William Rich <wcr@williamrichandassociates.com>

Sure. Same time?

Rachel Sundberg

Tribal Programs Director/THPO

Trinidad Rancheria

PO Box 630

Trinidad, CA 95570

707-677-0211 x 2726

707-834-1169 - cell

rsundberg@trinidadrancheria.com

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From: William Rich [mailto:wcr@williamrichandassociates.com]
Sent: Tuesday, April 03, 2018 1:31 AM

[Quoted text hidden]

[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Tue, Apr 3, 2018 at 9:46 AM
To: Rachel Sundberg <rsundberg@trinidadrancheria.com>

Yes, thanks.

Bill
[Quoted text hidden]

Rachel Sundberg <rsundberg@trinidadrancheria.com> Tue, Apr 3, 2018 at 9:50 AM

To: William Rich <wcr@williamrichandassociates.com>

Ok, see you then!

Rachel Sundberg

Tribal Programs Director/THPO

Trinidad Rancheria

PO Box 630

Trinidad, CA 95570

707-677-0211 x 2726

707-834-1169 - cell

rsundberg@trinidadrancheria.com

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From: William Rich [mailto:wcr@williamrichandassociates.com]
Sent: Tuesday, April 03, 2018 9:46 AM

[Quoted text hidden]

[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

Cultural Resource Investigations -Trinidad

4 messages

William Rich <wcr@williamrichandassociates.com> Mon, Mar 12, 2018 at 10:57 PM
To: mzlindgren79@gmail.com

Hello Ms. Lindgren-Akana,

We are working with the City of Trinidad to complete a cultural resources investigation for the Van Wycke Bicycle and Pedestrian Connectivity project and the Trinidad ASBS Stormwater - Phase 2 project. Please see attached letter and maps.

We would really appreciate hearing from the Tsurai Ancestral Society and would like to schedule a meeting soon to discuss the project.

Thank you!

Bill

--
William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

TrinidadVanWyke_ASBSStormwater_Tsurai_WRALetter_3_12_2018.pdf
866K

Sarah Lindgren-Akana <mzlindgren79@gmail.com> Thu, Mar 15, 2018 at 9:52 AM
To: William Rich <wcr@williamrichandassociates.com>
Cc: Kelly Lindgren <klindgren69@gmail.com>

Hello William,

We are discussing this matter and will respond early next week.

Thank you for sending us the info, and we look forward to speaking with you more next week.

Sincerely,

Sarah Lindgren-Akana

Sent from my iPhone
[Quoted text hidden]

<TrinidadVanWyke_ASBSStormwater_Tsurai_WRALetter_3_12_2018.pdf>

William Rich <wcr@williamrichandassociates.com> Fri, Mar 16, 2018 at 12:10 PM
To: Sarah Lindgren-Akana <mzlindgren79@gmail.com>
Cc: Kelly Lindgren <klindgren69@gmail.com>

Hello Sarah,

Great! I appreciate the response.

Talk with you soon.

Bill
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Thu, Mar 22, 2018 at 5:10 PM
To: Sarah Lindgren-Akana <mzlindgren79@gmail.com>
Cc: Kelly Lindgren <klindgren69@gmail.com>

Hello Sarah,

Haven't heard from you. Just wanted to reach out again about the projects in Trinidad. I have a new project for Moonstone Grill that I will send you maps for soon.

Look forward to meeting you and talking about these projects.

Feel free to call anytime!

Bill

On Thu, Mar 15, 2018 at 9:52 AM, Sarah Lindgren-Akana <mzlindgren79@gmail.com> wrote:
[Quoted text hidden]
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

William Rich and Associates work in Trinidad

William Rich <wcr@williamrichandassociates.com> Fri, May 11, 2018 at 1:26 PM
To: Sarah Lindgren-Akana <mzlindgren79@gmail.com>

Hello Sarah,

Do you have time to meet about a few of the cultural resources projects in the Trinidad area. I am running in to a few deadlines and want to make sure your perspectives are accounted for in my reports.

I will be available at your convenience.

Thanks,

Bill

--
William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

William Rich <wcr@williamrichandassociates.com>

Meeting Confirmation -Trinidad Projects

2 messages

William Rich <wcr@williamrichandassociates.com> Thu, May 17, 2018 at 10:10 AM
To: Sarah Lindgren-Akana <mzlindgren79@gmail.com>

Hi Sarah,

It was nice speaking with you earlier this week. We had discussed meeting on Monday, the 21st in Trinidad, and I am still available that day. Is this still convenient for you? 2:30pm? I can meet you wherever you would like.

Thank you!

Bill

--
William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

William Rich <wcr@williamrichandassociates.com> Sun, May 20, 2018 at 8:50 PM
To: Sarah Lindgren-Akana <mzlindgren79@gmail.com>

Hi Sarah,

I will call you in the morning about a meeting place and time. If tomorrow is not convenient for you, can we reschedule soon.

Thanks,

Bill
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

Trinidad Area Projects

3 messages

Sarah Lindgren-Akana <mzlindgren79@gmail.com> Tue, May 22, 2018 at 8:58 AM
To: William Rich <wcr@williamrichandassociates.com>

Hi Bill,

I was out Friday, so did not receive you email until Monday. Unfortunately, my schedule fills up fast, and I was not able to connect with you yesterday.

I do have an initial response letter for the Moonstone project, and am happy to send that over.

I would also like to get the info for additional projects you mentioned in our phone call. Do you have the proposed project documents available to send? I can review them and get back to you as soon as possible.

Thanks for your help, hope you are well.

Sarah Lindgren-Akana
Tsurai Ancestral Society Secretary

William Rich <wcr@williamrichandassociates.com> Tue, May 22, 2018 at 9:29 AM
To: Sarah Lindgren-Akana <mzlindgren79@gmail.com>

Hi Sarah,

Yes, please send any thoughts you or the Society have on the cultural resources survey at Moonstone Grill project.

In the next email I will send you the project descriptions for:

-[redacted]
-Trinidad Stormwater Phase II- You will see that they are proposing rather large excavations under some streets.
-[redacted]

Thanks for your response. I feel that it is important to include any comments the Society has on these projects for the lead agency to consider. Generally the lead is the city, except for the Moonstone project, which is the Coastal Commission.

Bill

[Quoted text hidden]

--

William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

William Rich <wcr@williamrichandassociates.com> Wed, May 23, 2018 at 2:49 PM
To: Sarah Lindgren-Akana <mzlindgren79@gmail.com>

Hello Sarah,

Attached are work descriptions and maps for the three other Trinidad projects. Feel free to contact me at anytime with questions or concerns.

I look forward to hearing from you!

Bill
[Quoted text hidden]

---

3 attachments

[redacted]
464K

Trinidad_Stormwater.zip
3509K

[redacted]
774K

William Rich <wcr@williamrichandassociates.com>

Cultural Resources Investigation

Frankie Myers <fmyers@yuroktribe.nsn.us> Wed, Apr 4, 2018 at 3:15 PM
To: William Rich <wcr@williamrichandassociates.com>, "Thomas P. O'Rourke" <torourke@yuroktribe.nsn.us>

Bill,

I think we should schedule a sit down early next week to go over all of the various projects you are working on in Yurok Territory. It has been awhile since we sat down and talked and it is about time. Are you available on Monday at 10am in klamath.

Sent from my U.S. Cellular® Smartphone
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

Cultural Resources Investigation

William Rich <wcr@williamrichandassociates.com> Wed, Apr 4, 2018 at 10:17 PM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>
Cc: "Thomas P. O'Rourke" <torourke@yuroktribe.nsn.us>

Hello Frankie,

Thanks for emailing and I agree completely. There is much for me to learn from you about these projects, however Monday at that time is not good for my schedule. I could do earlier, but would have to be at HSU by 1pm. Tuesday is open. The rest of the week is not so good.

Can we adjust to earlier on Monday or any time on Tuesday?

Looking forward to meeting with you again.

Bill
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

Cultural Resources Investigation

William Rich <wcr@williamrichandassociates.com> Fri, Apr 27, 2018 at 11:48 AM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>
Cc: "Thomas P. O'Rourke" <torourke@yuroktribe.nsn.us>

Hello Chairman O'Rourke and Frankie,

I hope you are both doing well. I am following up on a meeting time and place to discuss multiple cultural resources projects in Trinidad and near [redacted]. I am available next week on Tuesday, Thursday and possibly Friday. I'm hoping we could meet in Trinidad, but I can meet you in Klamath, as well.

I will be sending you another letter shortly regarding a project at the [redacted]. Their septic system has failed and they are getting the appropriate permit to fix it.

Thank you!
Bill
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

William Rich and Associates projects

7 me age

William Rich <wcr@williamrichandassociates.com> Fri, May 11, 2018 at 1:27 PM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>

Hello Frankie,

Do you have time to meet about a few of the projects on my plate. I am running to a few deadlines and want to make sure your perspectives are accounted for in my reports.

I will be available at your convenience.

Thanks,

Bill

--
William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

Frankie Myers <fmyers@yuroktribe.nsn.us> Fri, May 11, 2018 at 1:29 PM
To: William Rich <wcr@williamrichandassociates.com>

Yeah I got another meeting in klamath in Monday so I could meet in the afternoon if that works for you.

Sent from my U.S. Cellular® Smartphone
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Fri, May 11, 2018 at 1:33 PM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>

Hi Frankie,

Do you have any other availability, besides Monday? I forgot I had another obligation that day.

Bill
[Quoted text hidden]

Frankie Myers <fmyers@yuroktribe.nsn.us> Tue, May 15, 2018 at 9:26 AM
To: William Rich <wcr@williamrichandassociates.com>

We need to meet and are open at 10am on Monday the 21st here at the Klamath Office. I have arranged to have Chairman O'Rourke, Council Memeber Vandlandingham and Myself

Sent from my U.S. Cellular® Smartphone

-------- Original message --------
From: William Rich <wcr@williamrichandassociates.com>
Date: 5/11/18 1:33 PM (GMT-08:00)
To: Frankie Myers <fmyers@yuroktribe.nsn.us>
Subject: Re: William Rich and Associates projects

Hi Frankie,

Do you have any other availability, besides Monday? I forgot I had another obligation that day.

Bill

On Fri, May 11, 2018 at 1:29 PM, Frankie Myers <fmyers@yuroktribe.nsn.us<mailto:fmyers@yuroktribe.nsn.us>> wrote:
Yeah I got another meeting in klamath in Monday so I could meet in the afternoon if that works for you.

Sent from my U.S. Cellular® Smartphone

-------- Original message --------
From: William Rich <wcr@williamrichandassociates.com<mailto:wcr@williamrichandassociates.com>>
Date: 5/11/18 1:27 PM (GMT-08:00)
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Tue, May 15, 2018 at 9:30 AM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>

Hi Frankie,

Great! I will see you in Klamath at 10am on Monday, the 21st. Hoping to discuss the following projects:

1. [redacted]
2. Trinidad Stormwater Phase II
3. [redacted]
4. [redacted]
5. [redacted]

Thank you,

Bill

[Quoted text hidden]

Frankie Myers <fmyers@yuroktribe.nsn.us> Tue, May 15, 2018 at 9:34 AM
To: William Rich <wcr@williamrichandassociates.com>

Also, the Van Wycke Trail.

Sent from my U.S. Cellular® Smartphone

-------- Original message --------
From: William Rich <wcr@williamrichandassociates.com>
Date: 5/15/18 9:30 AM (GMT-08:00)
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Subject: Re: William Rich and Associates projects

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1. [redacted]
2. Trinidad Stormwater Phase II
3. [redacted]
4. [redacted]
5. [redacted]

Thank you,

Bill

On Tue, May 15, 2018 at 9:26 AM, Frankie Myers <fmyers@yuroktribe.nsn.us<mailto:fmyers@yuroktribe.nsn.us>> wrote:
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Sent from my U.S. Cellular® Smartphone

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From: William Rich <wcr@williamrichandassociates.com<mailto:wcr@williamrichandassociates.com>>
Date: 5/11/18 1:33 PM (GMT-08:00)
To: Frankie Myers <fmyers@yuroktribe.nsn.us<mailto:fmyers@yuroktribe.nsn.us>>
Subject: Re: William Rich and Associates projects

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Bill

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Yeah I got another meeting in klamath in Monday so I could meet in the afternoon if that works for you.

Sent from my U.S. Cellular® Smartphone

-------- Original message --------
From: William Rich <wcr@williamrichandassociates.com<mailto:wcr@williamrichandassociates.com><mailto:wcr@williamrichandassociates.com<mailto:wcr@williamrichandassociates.com>>>
Date: 5/11/18 1:27 PM (GMT-08:00)
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Tue, May 15, 2018 at 9:35 AM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>

Hi Frankie,

Sorry, yes that is the "Trinidad Sidewalks" project.

Thank you!
Bill
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

Trinidad Project Descriptions and Maps (from: William Rich)

1 me age

Kimberly Rich <ksr@williamrichandassociates.com> Wed, May 23, 2018 at 2:41 PM
To: fmyers@yuroktribe.nsn.us, rclayburn@yuroktribe.nsn.us
Cc William Rich wcr@williamrichanda ociate com

Hello Frankie and Rosie,

Bill asked me to send you a package of work descriptions and maps for the projects you talked about in your meeting on Monday Jamie' Pha e I Trinidad Stormwater project report i al o included, a well a , our original notification letter

As you review everything, please don't hesitate to contact Bill with any questions or concerns.

Thank you!

Kim

--
Kimberly Rich, M S
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524

WRA_Project Descriptions_Yurok.zip
17494K

William Rich <wcr@williamrichandassociates.com>

Trinidad Walk-June 13

3 me age

William Rich <wcr@williamrichandassociates.com> Thu, Jun 7, 2018 at 10:33 PM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>, rclayburn@yuroktribe.nsn.us

Hello Frankie and Rosie,

Are you still available to meet on the 13th in Trinidad? Let me know where you would like to meet.

Thank you!

Bill

--
William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

Frankie Myers <fmyers@yuroktribe.nsn.us> Fri, Jun 8, 2018 at 9:43 AM
To: William Rich <wcr@williamrichandassociates.com>, Rosie Clayburn <rclayburn@yuroktribe.nsn.us>

Bill,

I still have it on my schedule to meet with you on the 13th.

Wok-hlew',

Frankie Joe Myers

Yurok Tribe
Office of Tribal Heritage Preservation

HC 67 Box 196

23001 State Hwy 96

Weitchpec CA, 95546

Office # 1-530-625-4130 ex.1629

Cell # 1-707-498-2536

From: William Rich [mailto:wcr@williamrichandassociates.com]
Sent: Thursday, June 07, 2018 10:33 PM
To: Frankie Myers; Rosie Clayburn
Subject: Trinidad Walk-June 13

[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com> Fri, Jun 8, 2018 at 11:22 AM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>
Cc: Rosie Clayburn <rclayburn@yuroktribe.nsn.us>

Great! At your convenience, let me know what time and where.

Thank you,

Bill
[Quoted text hidden]

William Rich <wcr@williamrichandassociates.com>

Trinidad site visit

2 me age

Frankie Myers <fmyers@yuroktribe.nsn.us> Tue, Jun 12, 2018 at 4:15 PM
To: William Rich <wcr@williamrichandassociates.com>

Following up on our cheduled meeting with you to do a ite vi it in Trinidad tomorrow We will be meeting at the ga station at 10am. Please let me know if this doesn't work as we have scheduled council members o attend as well.

Get Outlook for Android<https://aka.ms/ghei36>

William Rich <wcr@williamrichandassociates.com> Tue, Jun 12, 2018 at 4:24 PM
To: Frankie Myers <fmyers@yuroktribe.nsn.us>

Confirmed. See you tomorrow.
Thanks!

Bill
[Quoted text hidden]
--
William C. Rich, M.A., RPA
Principal Investigator
William Rich and Associates
Cultural Resource Consultants
P.O. Box 184
Bayside, CA 95524
(707) 834-5347

USDA

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Santa Rosa Office

777 Sonoma Ave
E Street Annex
Santa Rosa, CA
95404

Voice 707.536.0248
Fax 707.526.8942
TDD: 530.792.5848

August 24, 2018

Virgil Moorehead
Big Lagoon Rancheria
P.O. Box 3060
Trinidad, CA 95570

Subject: USDA Loan Application – The City of Trinidad

Dear Virgil Moorehead:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5(b)(2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS, has issued a blanket delegation to its applicants to initiate and proceed through Section 106 review. In accordance with this blanket delegation, the City of Trinidad is initiating Section 106 review on behalf of RUS.

Should the tribe elect to participate in Section 106 review of the referenced project, please notify me in writing via letter or email as soon as possible at the following address:

USDA Rural Development
777 Sonoma Ave
Santa Rosa, CA 95404
quinn.donovan@ca.usda.gov

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If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. The City of Trinidad and USDA will respect the confidentiality of the information which you provide.

Please submit your response by September 24, 2018. RUS will proceed to the next step in Section 106 review if we do not receive a response. Should you have any questions or require additional information you may contact me at the mailing address and email provided above.

Please feel free to contact me a 707-536-0248 or quinn.donovan@ca.usda.gov if you have any questions.

Sincerely,

Quinn Donovan
Area Specialist

Attachment: APE Map

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95404

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Fax 707.526.8942
TDD: 530.792.5848

August 24, 2018

Claudia Brundin
Blue lake Rancheria
P.O. Box 428
Blue Lake, CA 95525

Subject: USDA Loan Application – The City of Trinidad

Dear Claudia Brundin:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5(b)(2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS, has issued a blanket delegation to its applicants to initiate and proceed through Section 106 review. In accordance with this blanket delegation, the City of Trinidad is initiating Section 106 review on behalf of RUS.

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Please submit your response by September 24, 2018. RUS will proceed to the next step in Section 106 review if we do not receive a response. Should you have any questions or require additional information you may contact me at the mailing address and email provided above.

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Sincerely,

Quinn Donovan
Area Specialist

Attachment: APE Map

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Santa Rosa, CA
95404

Voice 707.536.0248
Fax 707.526.8942
TDD: 530.792.5848

August 24, 2018

Ryan P. Jackson
Hoopa Valley Tribe
P.O. Box 1348
Hoopa, CA 95546

Subject: USDA Loan Application – The City of Trinidad

Dear Ryan P. Jackson:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5(b)(2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS, has issued a blanket delegation to its applicants to initiate and proceed through Section 106 review. In accordance with this blanket delegation, the City of Trinidad is initiating Section 106 review on behalf of RUS.

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Please submit your response by September 24, 2018. RUS will proceed to the next step in Section 106 review if we do not receive a response. Should you have any questions or require additional information you may contact me at the mailing address and email provided above.

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Sincerely,

Quinn Donovan
Area Specialist

Attachment: APE Map

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TDD: 530.792.5848

August 24, 2018

Russell Atteberry
Karuk Tribe
P.O. Box 1016
Happy Camp, CA 96039

Subject: USDA Loan Application – The City of Trinidad

Dear Russell Atteberry:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

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Sincerely,

Quinn Donovan
Area Specialist

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Santa Rosa, CA
95404

Voice 707.536.0248
Fax 707.526.8942
TDD: 530.792.5848

August 24, 2018

Berry Brenard
Bear River Band of Rohnerville Rancheria
266 Keisner Road
Loleta, CA 95551

Subject: USDA Loan Application – The City of Trinidad

Dear Berry Brenard:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5(b)(2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS, has issued a blanket delegation to its applicants to initiate and proceed through Section 106 review. In accordance with this blanket delegation, the City of Trinidad is initiating Section 106 review on behalf of RUS.

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Please submit your response by September 24, 2018. RUS will proceed to the next step in Section 106 review if we do not receive a response. Should you have any questions or require additional information you may contact me at the mailing address and email provided above.

Please feel free to contact me a 707-536-0248 or quinn.donovan@ca.usda.gov if you have any questions.

Sincerely,

Quinn Donovan
Area Specialist

Attachment: APE Map

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95404

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Fax 707.526.8942
TDD: 530.792.5848

August 24, 2018

James Russ
Round Valley Indian Tribes of the Round Valley Reservation
77826 Covelo Road
Covelo, CA 95428

Subject: USDA Loan Application – The City of Trinidad

Dear James Russ:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

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Please submit your response by September 24, 2018. RUS will proceed to the next step in Section 106 review if we do not receive a response. Should you have any questions or require additional information you may contact me at the mailing address and email provided above.

Please feel free to contact me a 707-536-0248 or quinn.donovan@ca.usda.gov if you have any questions.

Sincerely,

Quinn Donovan
Area Specialist

Attachment: APE Map

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E Street Annex
Santa Rosa, CA
95404

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Fax 707.526.8942
TDD: 530.792.5848

August 24, 2018

Ted Hernandez
WiyotTribe
1000 Wiyot Drive
Loleta, CA 95551

Subject: USDA Loan Application – The City of Trinidad

Dear Ted Hernandez:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

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quinn.donovan@ca.usda.gov

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Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. The City of Trinidad and USDA will respect the confidentiality of the information which you provide.

Please submit your response by September 24, 2018. RUS will proceed to the next step in Section 106 review if we do not receive a response. Should you have any questions or require additional information you may contact me at the mailing address and email provided above.

Please feel free to contact me a 707-536-0248 or quinn.donovan@ca.usda.gov if you have any questions.

Sincerely,

Quinn Donovan
Area Specialist

Attachment: APE Map

USDA

United States Department of Agriculture

USDA
Rural Development

Santa Rosa Office

777 Sonoma Ave
E Street Annex
Santa Rosa, CA
95404

Voice 707.536.0248
Fax 707.526.8942
TDD: 530.792.5848

August 24, 2018

Paul Ammon
Tsnungwe Council
P.O. Box 373
Salver, CA 95563

Subject: USDA Loan Application – The City of Trinidad

Dear Paul Ammon:

The City of Trinidad plans to seek financial assistance from the USDA Rural Utilities Service (RUS), to make improvements to its storm water drainage system. The proposed project, is designed to eliminate the existing stormwater outfall and replace it with a system of localized stormwater treatment chambers and infiltration basins. The area of potential effects (APE) for the referenced project is identified on the attached map.

RUS is notifying you about the referenced project because the Native American Heritage Commission identified your tribe as an organization of possible interest. We ask that you review the attached map and let RUS know if you are aware of any sensitive cultural or sacred resources in the APE.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5(b)(2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS, has issued a blanket delegation to its applicants to initiate and proceed through Section 106 review. In accordance with this blanket delegation, the City of Trinidad is initiating Section 106 review on behalf of RUS.

Should the tribe elect to participate in Section 106 review of the referenced project, please notify me in writing via letter or email as soon as possible at the following address:

USDA Rural Development
777 Sonoma Ave
Santa Rosa, CA 95404
quinn.donovan@ca.usda.gov

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Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. The City of Trinidad and USDA will respect the confidentiality of the information which you provide.

Please submit your response by September 24, 2018. RUS will proceed to the next step in Section 106 review if we do not receive a response. Should you have any questions or require additional information you may contact me at the mailing address and email provided above.

Please feel free to contact me a 707-536-0248 or quinn.donovan@ca.usda.gov if you have any questions.

Sincerely,

Quinn Donovan
Area Specialist

Attachment: APE Map

From:	Janet Eidsness
To:	Donovan, Quinn - RD, Santa Rosa, CA
Cc:	erikacooper@brb-nsn.gov; Ted Hernandez
Subject:	Blue Lake THPO comment on Sec. 106 USDA Rural Utilities Service storm water drainage improvements, City of Trinidad
Date:	Tuesday, September 4, 2018 3:01:56 PM

Dear Quinn:

I received your letter of 8/24/18 notifying the Blue Lake Rancheria about the subject undertaking by the USDA RUS.

The project is located in the City of Trinidad and outside this Tribe's mapped area of concern for tribal cultural resources. Trinidad is within the ancestral Yurok homeland.

We decline the invitation to consult under Section 106 for this undertaking.

Regards,

Janet P. Eidsness, THPO Blue Lake Rancheria
P.O. Box 428 (428 Chartin Road), Blue Lake, CA 95525
Office (707) 668-5101 ext. 1037
jeidsness@bluelakerancheria-nsn.gov
cell (530) 623-0663 jpeidsness@yahoo.com

Jacob Pounds, Assistant THPO
jpounds@bluelakerancheria-nsn.gov
Office (707) 668-5101 ext. 1038

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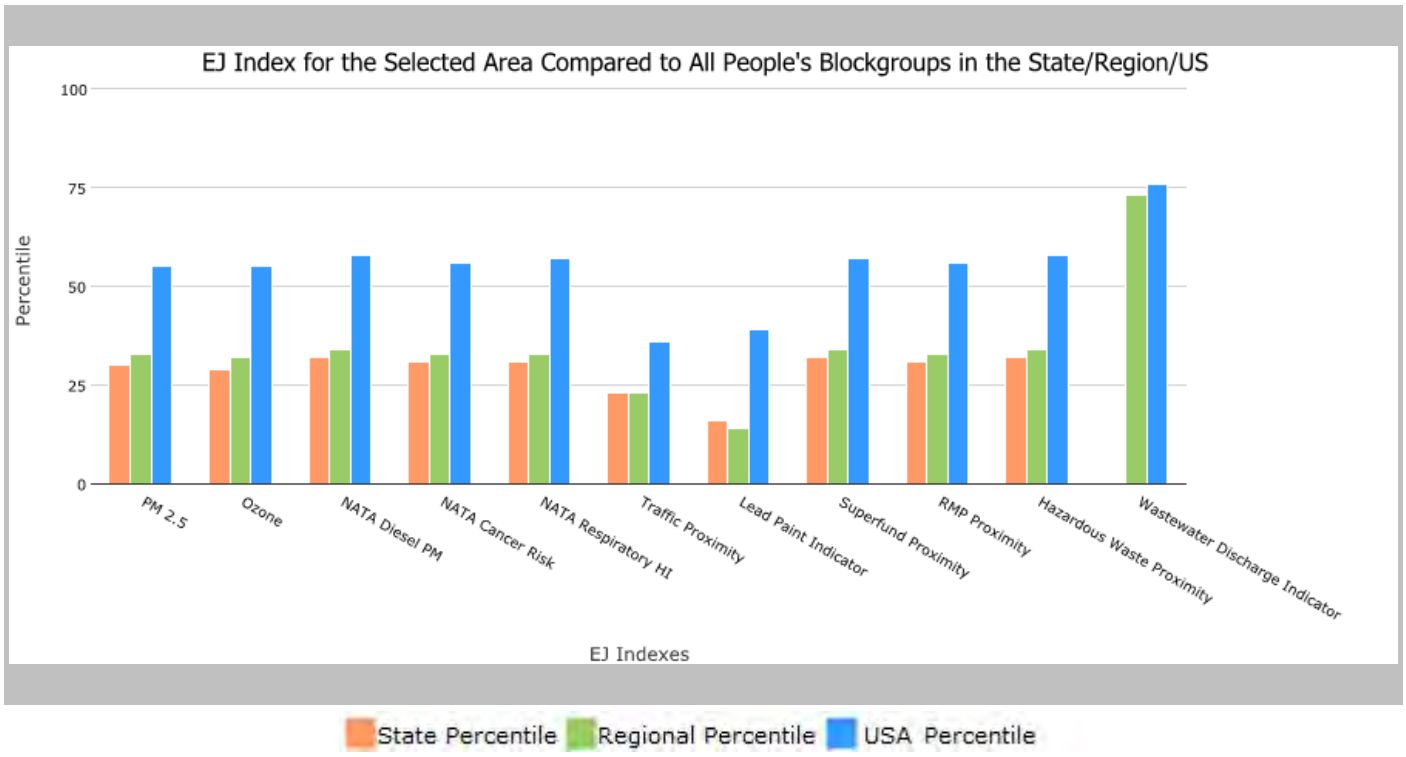
EJSCREEN Report (Version 2017)

Blockgroup: 060230102002, CALIFORNIA, EPA Region 9

Approximate Population: 625

Input Area (sq. miles): 4.57

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	30	33	55
EJ Index for Ozone	29	32	55
EJ Index for NATA* Diesel PM	32	34	58
EJ Index for NATA* Air Toxics Cancer Risk	31	33	56
EJ Index for NATA* Respiratory Hazard Index	31	33	57
EJ Index for Traffic Proximity and Volume	23	23	36
EJ Index for Lead Paint Indicator	16	14	39
EJ Index for Superfund Proximity	32	34	57
EJ Index for RMP Proximity	31	33	56
EJ Index for Hazardous Waste Proximity	32	34	58
EJ Index for Wastewater Discharge Indicator	N/A	73	76



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJSCREEN Report (Version 2017)

Blockgroup: 060230102002, CALIFORNIA, EPA Region 9

Approximate Population: 625

Input Area (sq. miles): 4.57

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2017)

Blockgroup: 060230102002, CALIFORNIA, EPA Region 9

Approximate Population: 625

Input Area (sq. miles): 4.57

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m^3)	6.1	10.6	0	9.9	4	9.14	4
Ozone (ppb)	31.4	40.8	6	41.8	4	38.4	2
NATA* Diesel PM (µg/m^3)	0.0469	0.973	0	0.978	<50th	0.938	<50th
NATA* Cancer Risk (lifetime risk per million)	18	44	0	43	<50th	40	<50th
NATA* Respiratory Hazard Index	0.51	2.1	0	2	<50th	1.8	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	120	1200	32	1100	38	590	53
Lead Paint Indicator (% Pre-1960 Housing)	0.3	0.29	57	0.24	64	0.29	61
Superfund Proximity (site count/km distance)	0.0076	0.17	0	0.15	6	0.13	2
RMP Proximity (facility count/km distance)	0.076	1.1	3	0.98	6	0.73	10
Hazardous Waste Proximity (facility count/km distance)	0.0028	0.13	0	0.12	0	0.093	0
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	16	N/A	13	59	30	40
Demographic Indicators							
Demographic Index	28%	49%	21	47%	23	36%	47
Minority Population	25%	61%	12	59%	14	38%	45
Low Income Population	32%	36%	48	36%	48	34%	50
Linguistically Isolated Population	0%	10%	15	9%	19	5%	44
Population With Less Than High School Education	6%	18%	27	17%	28	13%	32
Population Under 5 years of age	3%	7%	15	7%	16	6%	17
Population over 64 years of age	28%	12%	95	13%	94	14%	93

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

EJSCREEN ACS Summary Report

Location: Blockgroup: 060230102002
Ring (buffer): 0-mile radius
Description:

Summary of ACS Estimates	2011 - 2015
Population	625
Population Density (per sq. mile)	137
Minority Population	156
% Minority	25%
Households	298
Housing Units	474
Housing Units Built Before 1950	67
Per Capita Income	28,935
Land Area (sq. miles) (Source: SF1)	4.57
% Land Area	100%
Water Area (sq. miles) (Source: SF1)	0.00
% Water Area	0%

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	625	100%	116
Population Reporting One Race	601	96%	186
White	482	77%	97
Black	0	0%	12
American Indian	105	17%	47
Asian	8	1%	8
Pacific Islander	0	0%	12
Some Other Race	6	1%	10
Population Reporting Two or More Races	24	4%	20
Total Hispanic Population	21	3%	21
Total Non-Hispanic Population	604		
White Alone	469	75%	90
Black Alone	0	0%	12
American Indian Alone	103	16%	46
Non-Hispanic Asian Alone	8	1%	8
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	12
Two or More Races Alone	24	4%	20
Population by Sex			
Male	306	49%	68
Female	319	51%	68
Population by Age			
Age 0-4	17	3%	12
Age 0-17	53	8%	23
Age 18+	572	92%	86
Age 65+	175	28%	43

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.
Source: U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

EJSCREEN ACS Summary Report

Location: Blockgroup: 060230102002
Ring (buffer): 0-mile radius
Description:

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	525	100%	86
Less than 9th Grade	5	1%	14
9th - 12th Grade, No Diploma	27	5%	20
High School Graduate	68	13%	28
Some College, No Degree	202	38%	61
Associate Degree	91	17%	49
Bachelor's Degree or more	223	42%	48
Population Age 5+ Years by Ability to Speak English			
Total	608	100%	112
Speak only English	566	93%	94
Non-English at Home[1+2+3+4]	42	7%	27
[1]Speak English "very well"	39	6%	26
[2]Speak English "well"	3	0%	13
[3]Speak English "not well"	0	0%	12
[4]Speak English "not at all"	0	0%	12
[3+4]Speak English "less than well"	0	0%	12
[2+3+4]Speak English "less than very well"	3	0%	13
Linguistically Isolated Households*			
Total	0	0%	12
Speak Spanish	0	0%	12
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	0	0%	12
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	298	100%	46
< $15,000	41	14%	24
$15,000 - $25,000	42	14%	22
$25,000 - $50,000	65	22%	25
$50,000 - $75,000	63	21%	24
$75,000 +	87	29%	30
Occupied Housing Units by Tenure			
Total	298	100%	46
Owner Occupied	218	73%	40
Renter Occupied	80	27%	23
Employed Population Age 16+ Years			
Total	579	100%	100
In Labor Force	288	50%	61
Civilian Unemployed in Labor Force	16	3%	12
Not In Labor Force	291	50%	75

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Households in which no one 14 and over speaks English "very well" or speaks English only.

EJSCREEN ACS Summary Report

Location: Blockgroup: 060230102002
Ring (buffer): 0-mile radius
Description:

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	608	100%	112
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/A
French	N/A	N/A	N/A
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	N/A	N/A	N/A
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	N/A	N/A	N/A
Chinese	N/A	N/A	N/A
Japanese	N/A	N/A	N/A
Korean	N/A	N/A	N/A
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	N/A	N/A	N/A
Other Asian	N/A	N/A	N/A
Tagalog	N/A	N/A	N/A
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	N/A	N/A	N/A
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	N/A	N/A	N/A
Total Non-English	N/A	N/A	N/A

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.
*Population by Language Spoken at Home is available at the census tract summary level and up.

Profile of General Population and Housing Characteristics: 2010
2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Trinidad city, California ▼

Subject	Number	Percent
SEX AND AGE		
Total population	367	100.0
Under 5 years	13	3.5
5 to 9 years	19	5.2
10 to 14 years	18	4.9
15 to 19 years	19	5.2
20 to 24 years	16	4.4
25 to 29 years	20	5.4
30 to 34 years	28	7.6
35 to 39 years	24	6.5
40 to 44 years	19	5.2
45 to 49 years	24	6.5
50 to 54 years	25	6.8
55 to 59 years	29	7.9
60 to 64 years	42	11.4
65 to 69 years	30	8.2
70 to 74 years	20	5.4
75 to 79 years	9	2.5
80 to 84 years	6	1.6
85 years and over	6	1.6
Median age (years)	45.9	(X)
16 years and over	311	84.7
18 years and over	307	83.7
21 years and over	296	80.7
62 years and over	92	25.1
65 years and over	71	19.3
Male population	182	49.6
Under 5 years	8	2.2
5 to 9 years	9	2.5
10 to 14 years	8	2.2
15 to 19 years	8	2.2
20 to 24 years	8	2.2
25 to 29 years	8	2.2
30 to 34 years	14	3.8
35 to 39 years	12	3.3
40 to 44 years	10	2.7
45 to 49 years	10	2.7
50 to 54 years	12	3.3
55 to 59 years	14	3.8
60 to 64 years	21	5.7
65 to 69 years	18	4.9
70 to 74 years	12	3.3
75 to 79 years	3	0.8
80 to 84 years	3	0.8
85 years and over	4	1.1
Median age (years)	48.3	(X)

Subject	Number	Percent
16 years and over	154	42.0
18 years and over	152	41.4
21 years and over	148	40.3
62 years and over	52	14.2
65 years and over	40	10.9
Female population	185	50.4
Under 5 years	5	1.4
5 to 9 years	10	2.7
10 to 14 years	10	2.7
15 to 19 years	11	3.0
20 to 24 years	8	2.2
25 to 29 years	12	3.3
30 to 34 years	14	3.8
35 to 39 years	12	3.3
40 to 44 years	9	2.5
45 to 49 years	14	3.8
50 to 54 years	13	3.5
55 to 59 years	15	4.1
60 to 64 years	21	5.7
65 to 69 years	12	3.3
70 to 74 years	8	2.2
75 to 79 years	6	1.6
80 to 84 years	3	0.8
85 years and over	2	0.5
Median age (years)	45.3	(X)
16 years and over	157	42.8
18 years and over	155	42.2
21 years and over	148	40.3
62 years and over	40	10.9
65 years and over	31	8.4
RACE		
Total population	367	100.0
One Race	352	95.9
White	331	90.2
Black or African American	2	0.5
American Indian and Alaska Native	15	4.1
Asian	2	0.5
Asian Indian	0	0.0
Chinese	1	0.3
Filipino	0	0.0
Japanese	0	0.0
Korean	1	0.3
Vietnamese	0	0.0
Other Asian [1]	0	0.0
Native Hawaiian and Other Pacific Islander	1	0.3
Native Hawaiian	0	0.0
Guamanian or Chamorro	1	0.3
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	1	0.3
Two or More Races	15	4.1
White; American Indian and Alaska Native [3]	13	3.5
White; Asian [3]	0	0.0
White; Black or African American [3]	0	0.0
White; Some Other Race [3]	0	0.0

Subject	Number	Percent
Race alone or in combination with one or more other races: [4]		
White	345	94.0
Black or African American	3	0.8
American Indian and Alaska Native	29	7.9
Asian	3	0.8
Native Hawaiian and Other Pacific Islander	1	0.3
Some Other Race	2	0.5
HISPANIC OR LATINO		
Total population	367	100.0
Hispanic or Latino (of any race)	11	3.0
Mexican	9	2.5
Puerto Rican	1	0.3
Cuban	0	0.0
Other Hispanic or Latino [5]	1	0.3
Not Hispanic or Latino	356	97.0
HISPANIC OR LATINO AND RACE		
Total population	367	100.0
Hispanic or Latino	11	3.0
White alone	7	1.9
Black or African American alone	0	0.0
American Indian and Alaska Native alone	1	0.3
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	1	0.3
Two or More Races	2	0.5
Not Hispanic or Latino	356	97.0
White alone	324	88.3
Black or African American alone	2	0.5
American Indian and Alaska Native alone	14	3.8
Asian alone	2	0.5
Native Hawaiian and Other Pacific Islander alone	1	0.3
Some Other Race alone	0	0.0
Two or More Races	13	3.5
RELATIONSHIP		
Total population	367	100.0
In households	366	99.7
Householder	187	51.0
Spouse [6]	64	17.4
Child	71	19.3
Own child under 18 years	55	15.0
Other relatives	9	2.5
Under 18 years	4	1.1
65 years and over	1	0.3
Nonrelatives	35	9.5
Under 18 years	0	0.0
65 years and over	2	0.5
Unmarried partner	23	6.3
In group quarters	1	0.3
Institutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
Noninstitutionalized population	1	0.3
Male	1	0.3
Female	0	0.0

Subject	Number	Percent
HOUSEHOLDS BY TYPE		
Total households	187	100.0
Family households (families) [7]	88	47.1
With own children under 18 years	33	17.6
Husband-wife family	64	34.2
With own children under 18 years	16	8.6
Male householder, no wife present	3	1.6
With own children under 18 years	3	1.6
Female householder, no husband present	21	11.2
With own children under 18 years	14	7.5
Nonfamily households [7]	99	52.9
Householder living alone	73	39.0
Male	43	23.0
65 years and over	16	8.6
Female	30	16.0
65 years and over	12	6.4
Households with individuals under 18 years	35	18.7
Households with individuals 65 years and over	57	30.5
Average household size	1.96	(X)
Average family size [7]	2.64	(X)
HOUSING OCCUPANCY		
Total housing units	252	100.0
Occupied housing units	187	74.2
Vacant housing units	65	25.8
For rent	11	4.4
Rented, not occupied	0	0.0
For sale only	5	2.0
Sold, not occupied	1	0.4
For seasonal, recreational, or occasional use	38	15.1
All other vacants	10	4.0
Homeowner vacancy rate (percent) [8]	4.2	(X)
Rental vacancy rate (percent) [9]	12.9	(X)
HOUSING TENURE		
Occupied housing units	187	100.0
Owner-occupied housing units	113	60.4
Population in owner-occupied housing units	212	(X)
Average household size of owner-occupied units	1.88	(X)
Renter-occupied housing units	74	39.6
Population in renter-occupied housing units	154	(X)
Average household size of renter-occupied units	2.08	(X)

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.

[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

Source: U.S. Census Bureau, 2010 Census.

DP05

ACS DEMOGRAPHIC AND HOUSING ESTIMATES
2012-2016 American Community Survey 5-Year Estimates

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Versions of this table are available for the following years:

2016
2015
2014
2013
2012
2011
2010

Subject	Trinidad city, California			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SEX AND AGE				
Total population	209	+/-58	209	(X)
Male	110	+/-39	52.6%	+/-7.9
Female	99	+/-28	47.4%	+/-7.9
Under 5 years	5	+/-7	2.4%	+/-3.0
5 to 9 years	5	+/-7	2.4%	+/-3.3
10 to 14 years	6	+/-6	2.9%	+/-2.6
15 to 19 years	0	+/-12	0.0%	+/-14.4
20 to 24 years	8	+/-11	3.8%	+/-4.7
25 to 34 years	24	+/-14	11.5%	+/-5.9
35 to 44 years	21	+/-15	10.0%	+/-6.4
45 to 54 years	8	+/-6	3.8%	+/-2.9
55 to 59 years	26	+/-16	12.4%	+/-7.0
60 to 64 years	31	+/-17	14.8%	+/-7.2
65 to 74 years	49	+/-21	23.4%	+/-8.6
75 to 84 years	25	+/-20	12.0%	+/-8.5
85 years and over	1	+/-3	0.5%	+/-1.3
Median age (years)	60.8	+/-6.4	(X)	(X)
18 years and over	193	+/-53	92.3%	+/-6.4
21 years and over	193	+/-53	92.3%	+/-6.4
62 years and over	98	+/-35	46.9%	+/-12.4
65 years and over	75	+/-30	35.9%	+/-10.9
18 years and over	193	+/-53	193	(X)
Male	97	+/-34	50.3%	+/-8.0
Female	96	+/-27	49.7%	+/-8.0
65 years and over	75	+/-30	75	(X)
Male	39	+/-19	52.0%	+/-14.1
Female	36	+/-17	48.0%	+/-14.1
RACE				
Total population	209	+/-58	209	(X)
One race	196	+/-58	93.8%	+/-4.7
Two or more races	13	+/-10	6.2%	+/-4.7
One race	196	+/-58	93.8%	+/-4.7

Subject	Trinidad city, California			
	Estimate	Margin of Error	Percent	Percent Margin of Error
White	185	+/-55	88.5%	+/-5.8
Black or African American	0	+/-12	0.0%	+/-14.4
American Indian and Alaska Native	0	+/-12	0.0%	+/-14.4
Cherokee tribal grouping	0	+/-12	0.0%	+/-14.4
Chippewa tribal grouping	0	+/-12	0.0%	+/-14.4
Navajo tribal grouping	0	+/-12	0.0%	+/-14.4
Sioux tribal grouping	0	+/-12	0.0%	+/-14.4
Asian	6	+/-7	2.9%	+/-3.2
Asian Indian	0	+/-12	0.0%	+/-14.4
Chinese	5	+/-7	2.4%	+/-3.4
Filipino	0	+/-12	0.0%	+/-14.4
Japanese	0	+/-12	0.0%	+/-14.4
Korean	0	+/-12	0.0%	+/-14.4
Vietnamese	0	+/-12	0.0%	+/-14.4
Other Asian	1	+/-2	0.5%	+/-0.9
Native Hawaiian and Other Pacific Islander	0	+/-12	0.0%	+/-14.4
Native Hawaiian	0	+/-12	0.0%	+/-14.4
Guamanian or Chamorro	0	+/-12	0.0%	+/-14.4
Samoan	0	+/-12	0.0%	+/-14.4
Other Pacific Islander	0	+/-12	0.0%	+/-14.4
Some other race	5	+/-7	2.4%	+/-3.2
Two or more races	13	+/-10	6.2%	+/-4.7
White and Black or African American	0	+/-12	0.0%	+/-14.4
White and American Indian and Alaska Native	6	+/-8	2.9%	+/-3.5
White and Asian	2	+/-4	1.0%	+/-1.7
Black or African American and American Indian and Alaska Native	0	+/-12	0.0%	+/-14.4
Race alone or in combination with one or more other races				
Total population	209	+/-58	209	(X)
White	195	+/-56	93.3%	+/-4.4
Black or African American	3	+/-4	1.4%	+/-2.0
American Indian and Alaska Native	6	+/-8	2.9%	+/-3.5
Asian	11	+/-8	5.3%	+/-4.0
Native Hawaiian and Other Pacific Islander	0	+/-12	0.0%	+/-14.4
Some other race	7	+/-8	3.3%	+/-3.8
HISPANIC OR LATINO AND RACE				
Total population	209	+/-58	209	(X)
Hispanic or Latino (of any race)	8	+/-9	3.8%	+/-4.1
Mexican	8	+/-9	3.8%	+/-4.1
Puerto Rican	0	+/-12	0.0%	+/-14.4
Cuban	0	+/-12	0.0%	+/-14.4
Other Hispanic or Latino	0	+/-12	0.0%	+/-14.4
Not Hispanic or Latino	201	+/-57	96.2%	+/-4.1
White alone	183	+/-55	87.6%	+/-6.0
Black or African American alone	0	+/-12	0.0%	+/-14.4
American Indian and Alaska Native alone	0	+/-12	0.0%	+/-14.4
Asian alone	6	+/-7	2.9%	+/-3.2
Native Hawaiian and Other Pacific Islander alone	0	+/-12	0.0%	+/-14.4
Some other race alone	0	+/-12	0.0%	+/-14.4
Two or more races	12	+/-10	5.7%	+/-4.6
Two races including Some other race	1	+/-3	0.5%	+/-1.5

Subject	Trinidad city, California			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Two races excluding Some other race, and Three or more races	11	+/-10	5.3%	+/-4.7
Total housing units	204	+/-41	(X)	(X)
CITIZEN, VOTING AGE POPULATION				
Citizen, 18 and over population	186	+/-52	186	(X)
Male	97	+/-34	52.2%	+/-8.0
Female	89	+/-26	47.8%	+/-8.0

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Explanation of Symbols:
An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
An '(X)' means that the estimate is not applicable or not available.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

For more information on understanding race and Hispanic origin data, please see the Census 2010 Brief entitled, Overview of Race and Hispanic Origin: 2010, issued March 2011. (pdf format)

While the 2012-2016 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

DP03

SELECTED ECONOMIC CHARACTERISTICS
2012-2016 American Community Survey 5-Year Estimates

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

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Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Versions of this table are available for the following years:

2016
2015
2014
2013
2012
2011
2010

Subject	Trinidad city, California			
	Estimate	Margin of Error	Percent	Percent Margin of Error
EMPLOYMENT STATUS				
Population 16 years and over	193	+/-53	193	(X)
In labor force	116	+/-34	60.1%	+/-9.4
Civilian labor force	116	+/-34	60.1%	+/-9.4
Employed	114	+/-34	59.1%	+/-9.4
Unemployed	2	+/-3	1.0%	+/-1.6
Armed Forces	0	+/-12	0.0%	+/-15.4
Not in labor force	77	+/-30	39.9%	+/-9.4
Civilian labor force	116	+/-34	116	(X)
Unemployment Rate	(X)	(X)	1.7%	+/-2.6
Females 16 years and over	96	+/-27	96	(X)
In labor force	63	+/-25	65.6%	+/-18.5
Civilian labor force	63	+/-25	65.6%	+/-18.5
Employed	61	+/-24	63.5%	+/-18.1
Own children of the householder under 6 years	5	+/-7	5	(X)
All parents in family in labor force	5	+/-7	100.0%	+/-100.0
Own children of the householder 6 to 17 years	11	+/-9	11	(X)
All parents in family in labor force	11	+/-9	100.0%	+/-89.4
COMMUTING TO WORK				
Workers 16 years and over	105	+/-33	105	(X)
Car, truck, or van -- drove alone	68	+/-30	64.8%	+/-16.6
Car, truck, or van -- carpooled	4	+/-5	3.8%	+/-5.0
Public transportation (excluding taxicab)	0	+/-12	0.0%	+/-26.1
Walked	0	+/-12	0.0%	+/-26.1
Other means	0	+/-12	0.0%	+/-26.1
Worked at home	33	+/-17	31.4%	+/-15.9
Mean travel time to work (minutes)	22.9	+/-3.3	(X)	(X)
OCCUPATION				
Civilian employed population 16 years and over	114	+/-34	114	(X)
Management, business, science, and arts occupations	80	+/-31	70.2%	+/-13.8

Subject	Trinidad city, California			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Service occupations	20	+/-13	17.5%	+/-10.5
Sales and office occupations	9	+/-10	7.9%	+/-9.1
Natural resources, construction, and maintenance occupations	3	+/-3	2.6%	+/-2.7
Production, transportation, and material moving occupations	2	+/-3	1.8%	+/-2.5
INDUSTRY				
Civilian employed population 16 years and over	114	+/-34	114	(X)
Agriculture, forestry, fishing and hunting, and mining	6	+/-6	5.3%	+/-5.1
Construction	1	+/-2	0.9%	+/-1.9
Manufacturing	0	+/-12	0.0%	+/-24.4
Wholesale trade	0	+/-12	0.0%	+/-24.4
Retail trade	5	+/-7	4.4%	+/-6.2
Transportation and warehousing, and utilities	1	+/-3	0.9%	+/-2.7
Information	0	+/-12	0.0%	+/-24.4
Finance and insurance, and real estate and rental and leasing	2	+/-3	1.8%	+/-2.7
Professional, scientific, and management, and administrative and waste management services	13	+/-11	11.4%	+/-9.1
Educational services, and health care and social assistance	51	+/-28	44.7%	+/-18.5
Arts, entertainment, and recreation, and accommodation and food services	14	+/-12	12.3%	+/-10.4
Other services, except public administration	6	+/-7	5.3%	+/-6.4
Public administration	15	+/-12	13.2%	+/-10.4
CLASS OF WORKER				
Civilian employed population 16 years and over	114	+/-34	114	(X)
Private wage and salary workers	48	+/-23	42.1%	+/-15.3
Government workers	28	+/-18	24.6%	+/-12.9
Self-employed in own not incorporated business workers	33	+/-18	28.9%	+/-14.9
Unpaid family workers	5	+/-7	4.4%	+/-5.9
INCOME AND BENEFITS (IN 2016 INFLATION-ADJUSTED DOLLARS)				
Total households	115	+/-36	115	(X)
Less than $10,000	4	+/-7	3.5%	+/-5.4
$10,000 to $14,999	7	+/-8	6.1%	+/-6.9
$15,000 to $24,999	23	+/-17	20.0%	+/-10.9
$25,000 to $34,999	1	+/-2	0.9%	+/-1.7
$35,000 to $49,999	25	+/-14	21.7%	+/-12.8
$50,000 to $74,999	18	+/-14	15.7%	+/-11.2
$75,000 to $99,999	13	+/-14	11.3%	+/-10.3
$100,000 to $149,999	9	+/-12	7.8%	+/-8.8
$150,000 to $199,999	3	+/-3	2.6%	+/-2.8
$200,000 or more	12	+/-12	10.4%	+/-9.3
Median household income (dollars)	47,031	+/-15,226	(X)	(X)
Mean household income (dollars)	76,234	+/-27,918	(X)	(X)
With earnings	79	+/-28	68.7%	+/-12.9
Mean earnings (dollars)	70,396	+/-30,146	(X)	(X)
With Social Security	51	+/-22	44.3%	+/-12.5

Subject	Trinidad city, California			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Mean Social Security income (dollars)	19,820	+/-4,164	(X)	(X)
With retirement income	36	+/-18	31.3%	+/-13.9
Mean retirement income (dollars)	44,108	+/-30,178	(X)	(X)
With Supplemental Security Income	2	+/-3	1.7%	+/-2.9
Mean Supplemental Security Income (dollars)	N	N	N	N
With cash public assistance income	0	+/-12	0.0%	+/-24.3
Mean cash public assistance income (dollars)	-	**	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	5	+/-8	4.3%	+/-6.5
Families	51	+/-26	51	(X)
Less than $10,000	0	+/-12	0.0%	+/-41.5
$10,000 to $14,999	0	+/-12	0.0%	+/-41.5
$15,000 to $24,999	0	+/-12	0.0%	+/-41.5
$25,000 to $34,999	0	+/-12	0.0%	+/-41.5
$35,000 to $49,999	9	+/-9	17.6%	+/-16.3
$50,000 to $74,999	8	+/-8	15.7%	+/-14.3
$75,000 to $99,999	11	+/-13	21.6%	+/-17.7
$100,000 to $149,999	8	+/-10	15.7%	+/-15.9
$150,000 to $199,999	3	+/-3	5.9%	+/-6.5
$200,000 or more	12	+/-12	23.5%	+/-17.5
Median family income (dollars)	89,688	+/-39,544	(X)	(X)
Mean family income (dollars)	131,806	+/-43,452	(X)	(X)
Per capita income (dollars)	45,244	+/-10,175	(X)	(X)
Nonfamily households	64	+/-25	64	(X)
Median nonfamily income (dollars)	24,000	+/-15,619	(X)	(X)
Mean nonfamily income (dollars)	31,661	+/-8,887	(X)	(X)
Median earnings for workers (dollars)	36,250	+/-28,394	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	-	**	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	60,750	+/-14,902	(X)	(X)
HEALTH INSURANCE COVERAGE				
Civilian noninstitutionalized population	209	+/-58	209	(X)
With health insurance coverage	189	+/-58	90.4%	+/-6.9
With private health insurance	146	+/-54	69.9%	+/-13.0
With public coverage	90	+/-32	43.1%	+/-11.7
No health insurance coverage	20	+/-14	9.6%	+/-6.9
Civilian noninstitutionalized population under 18 years	16	+/-15	16	(X)
No health insurance coverage	0	+/-12	0.0%	+/-74.1
Civilian noninstitutionalized population 18 to 64 years	118	+/-39	118	(X)
In labor force:	91	+/-30	91	(X)
Employed:	89	+/-30	89	(X)
With health insurance coverage	79	+/-31	88.8%	+/-10.9
With private health insurance	71	+/-30	79.8%	+/-13.9
With public coverage	9	+/-7	10.1%	+/-8.3
No health insurance coverage	10	+/-9	11.2%	+/-10.9

Subject	Trinidad city, California			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Unemployed:	2	+/-3	2	(X)
With health insurance coverage	0	+/-12	0.0%	+/-100.0
With private health insurance	0	+/-12	0.0%	+/-100.0
With public coverage	0	+/-12	0.0%	+/-100.0
No health insurance coverage	2	+/-3	100.0%	+/-100.0
Not in labor force:	27	+/-17	27	(X)
With health insurance coverage	24	+/-16	88.9%	+/-15.1
With private health insurance	9	+/-10	33.3%	+/-32.4
With public coverage	15	+/-13	55.6%	+/-32.3
No health insurance coverage	3	+/-4	11.1%	+/-15.1
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL				
All families	(X)	(X)	0.0%	+/-41.5
With related children of the householder under 18 years	(X)	(X)	0.0%	+/-100.0
With related children of the householder under 5 years only	(X)	(X)	-	**
Married couple families	(X)	(X)	0.0%	+/-43.3
With related children of the householder under 18 years	(X)	(X)	0.0%	+/-100.0
With related children of the householder under 5 years only	(X)	(X)	-	**
Families with female householder, no husband present	(X)	(X)	0.0%	+/-100.0
With related children of the householder under 18 years	(X)	(X)	0.0%	+/-100.0
With related children of the householder under 5 years only	(X)	(X)	-	**
All people	(X)	(X)	6.2%	+/-5.0
Under 18 years	(X)	(X)	0.0%	+/-74.1
Related children of the householder under 18 years	(X)	(X)	0.0%	+/-74.1
Related children of the householder under 5 years	(X)	(X)	0.0%	+/-100.0
Related children of the householder 5 to 17 years	(X)	(X)	0.0%	+/-89.4
18 years and over	(X)	(X)	6.7%	+/-5.5
18 to 64 years	(X)	(X)	6.8%	+/-7.2
65 years and over	(X)	(X)	6.7%	+/-10.1
People in families	(X)	(X)	0.0%	+/-21.1
Unrelated individuals 15 years and over	(X)	(X)	17.8%	+/-13.4

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

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Employment and unemployment estimates may vary from the official labor force data released by the Bureau of Labor Statistics because of differences in survey design and data collection. For guidance on differences in employment and unemployment estimates from different sources go to Labor Force Guidance.

Workers include members of the Armed Forces and civilians who were at work last week.

Occupation codes are 4-digit codes and are based on Standard Occupational Classification 2010.

Industry codes are 4-digit codes and are based on the North American Industry Classification System (NAICS). The Census industry codes for 2013 and later years are based on the 2012 revision of the NAICS. To allow for the creation of 2012-2016 tables, industry data in the multiyear files (2012-2016) were recoded to 2013 Census industry codes. We recommend using caution when comparing data coded using 2013 Census industry codes with data coded using Census industry codes prior to 2013. For more information on the Census industry code changes, please visit our website at https://www.census.gov/people/io/methodology/.

Logical coverage edits applying a rules-based assignment of Medicaid, Medicare and military health coverage were added as of 2009 -- please see https://www.census.gov/library/working-papers/2010/demo/coverage_edits_final.html for more details. The 2008 data table in American FactFinder does not incorporate these edits. Therefore, the estimates that appear in these tables are not comparable to the estimates in the 2009 and later tables. Select geographies of 2008 data comparable to the 2009 and later tables are available at https://www.census.gov/data/tables/time-series/acs/1-year-re-run-health-insurance.html. The health insurance coverage category names were modified in 2010. See https://www.census.gov/topics/health/health-insurance/about/glossary.html#par_textimage_18 for a list of the insurance type definitions.

While the 2012-2016 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

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Form RD 2006-38
(Rev. 07-07)

Rural Development
Environmental Justice (EJ) and Civil Rights Impact Analysis (CRIA)
Certification

1 . Applicant's name and proposed project description: City of Trinidad
Stormwater system repairs

2. Rural Development's loan/grant program/guarantee or other Agency action: _____
WEP USDA Water and Waste Disposal Loan and Grant Program

3. ☑ Attach a map of the proposal's area of effect identifying location or EJ populations, location of the proposal, area of impact or

☑ Attach results of EJ analysis from the Environmental Protection Agency's (EPAs) EnviroMapper with proposed project location and impact footprint delineated.

4. Does the applicant's proposal or Agency action directly, indirectly or cumulatively affect the quality and/or level of services provided to the community?
☐ Yes ☑ No ☐ N/A

5. Is the applicant's proposal or Agency action likely to result in a change in the current land use patterns (types of land use, development densities, etc)?
☐ Yes ☑ No ☐ N/A

6. Does a demographic analysis indicate the applicant's proposal or Agency's action may disproportionately affect a significant minority and/or low-income populations?
☐ Yes ☑ No ☐ N/A

If answer is no, skip to item 12. If answer is yes, continue with items 7 through 12.

7. Identify, describe, and provide location of EJ population _____

8. If a disproportionate adverse affect is expected to impact an EJ population, identify type/level of public outreach implemented. _____

9. Identify disproportionately high and adverse impacts on EJ populations. _____

10. Are adverse impacts appreciably more severe or greater in magnitude than the adverse impacts expected on non-minority/low-income populations?
☐ Yes ☐ No ☐ N/A

11. Are alternatives and/or mitigation required to avoid impacts to EJ populations?
☐ Yes ☐ No ☐ N/A

If yes, describe _____

12. I certify that I have reviewed the appropriate documentation and have determined that:
☑ No major EJ or civil rights impact is likely to result if the proposal is implemented.
☐ A major EJ or civil rights impact is likely to result if the proposal is implemented.

Quinn Donovan
Name and Title of Certifying Official

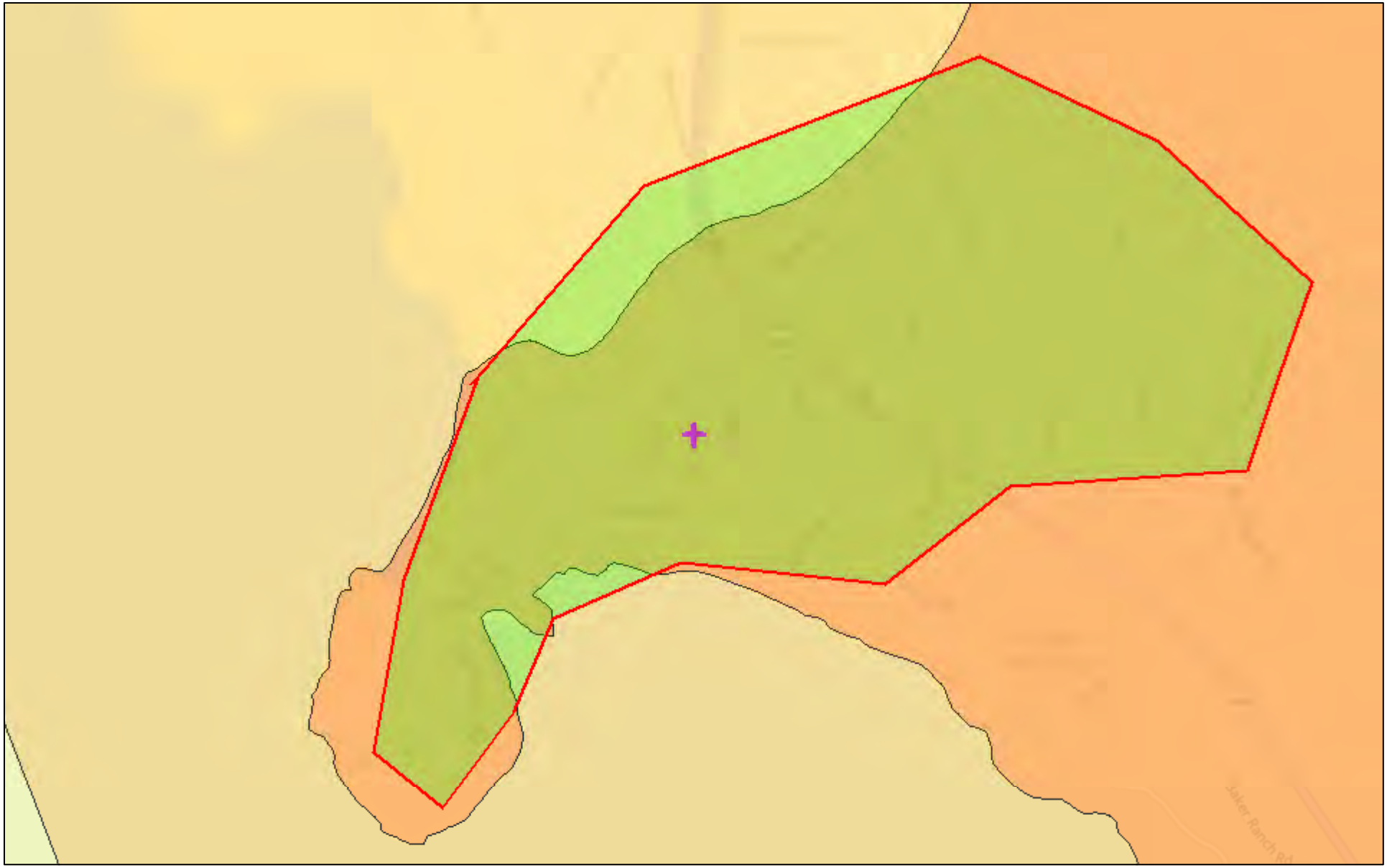
08-17-2018
Date

Submitted:

Name:

Conf Nbr:

Pct. Minority



August 17, 2018

Project 1

Search Result (point)

by Block Group

0.00 - 8.86

8.86 - 20.39

20.39 - 39.79

39.79 - 73.67

73.67 - 100.00

1:18,056

0 0.15 0.3 0.6 mi

0 0.25 0.5 1 km

EPA OEI, OEJ

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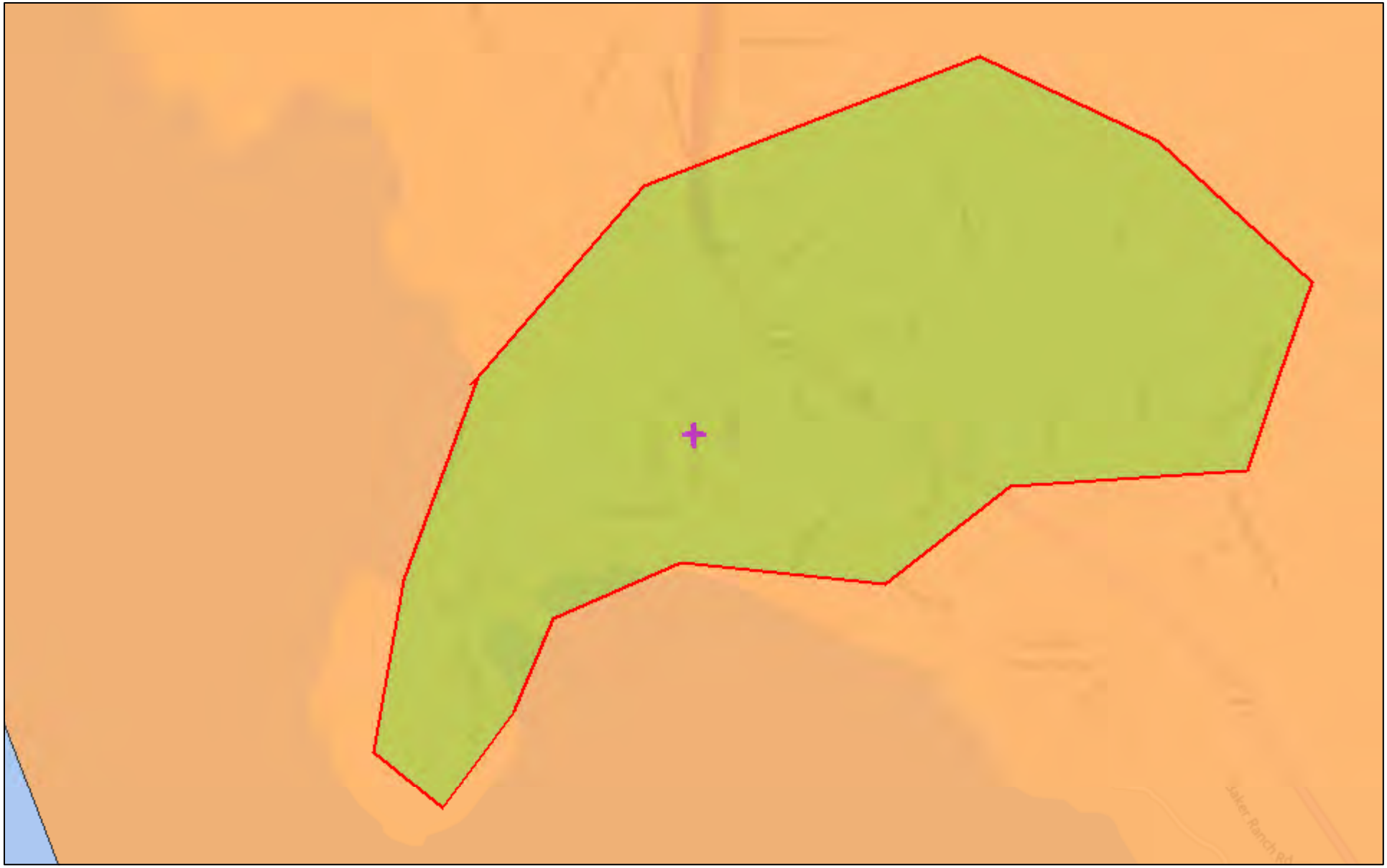
Pct. Poverty



August 17, 2018

Project 1

Search Result (point)

by Tract

0.00 - 6.09

6.09 - 10.72

10.72 - 16.55

16.55 - 26.24

26.24 - 100.00

1:18,056

0 0.15 0.3 0.6 mi

0 0.25 0.5 1 km

EPA

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ENVIROSTOR

Trinidad, ca

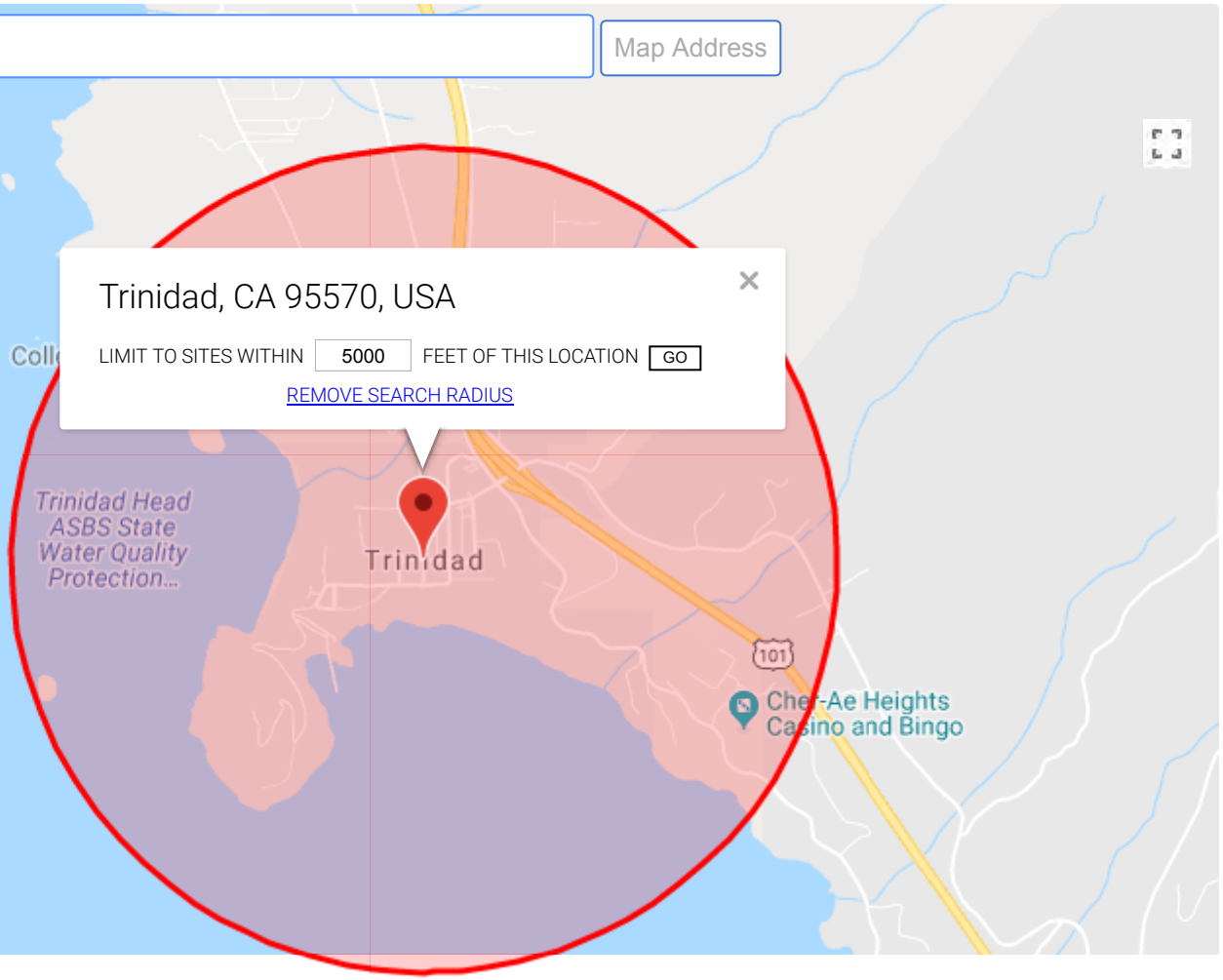
Map Address

- Sites and Facilities
  - Cleanup Sites
    - Federal Superfund
    - State Response
    - Voluntary Cleanup
    - School Cleanup
    - Evaluation
    - School Investigation
    - Military Evaluation
    - Tiered Permit
    - Corrective Action

    STATUS

    All Statuses
  - Permitted Sites
    - Operating
    - Post-Closure
    - Non-Operating
  - Other Sites
  - GIS Layers
- Tools

TAKE A TOUR | SHARE THIS MAP



Google

500 m

Map data ©2024 Google

Report a map error

SITES FOUND IN SEARCH RADIUS

0 SITES LISTED

EXPORT THIS LIST TO EXCEL

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY

Secure | https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Trinidad%2C+ca

Apps | SHNnet - SHN's Intr | Imported | Login | ParcelQuest | IceWarp WebClient | City of Trinidad | ArcGIS Web Applica | Microsoft Office Ho | Other b

GEOTRACKER

Sites and Facilities - INFO

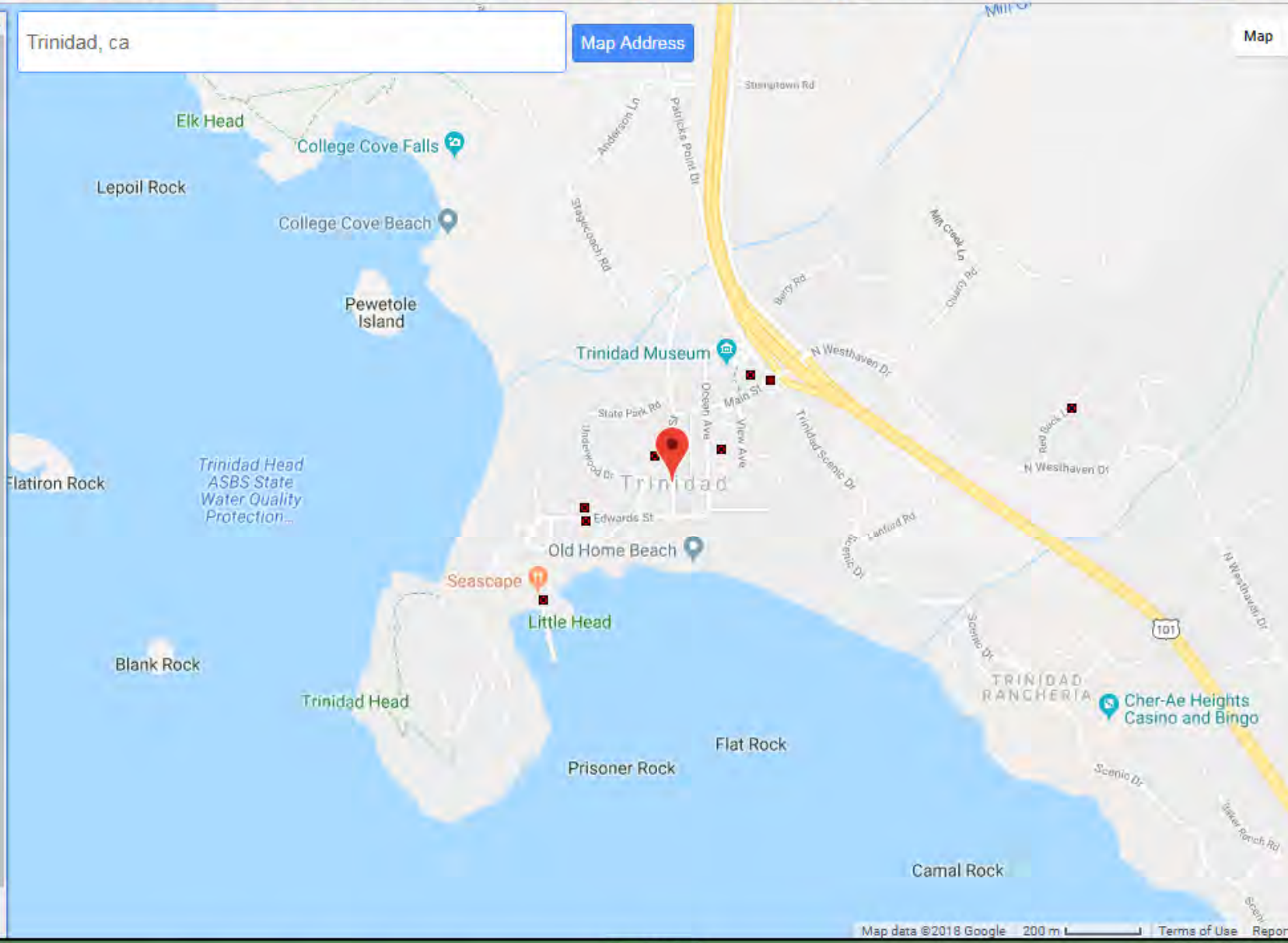
Cleanup Sites

- LUST Cleanup Sites
- Cleanup Program Sites
- Military Cleanup Sites
- DTSC Cleanup Sites

Permitted Facilities

- Waste Discharge Requirements (WDR) Sites
- Permitted USTs - INFO
- DTSC Hazardous Waste Sites
- Land Disposal Sites
  - Burn Dump
  - Compost Facility
  - Illegal Disposal Site
  - Other
  - Pre-Title 27 - CAI
  - Title 27 - Land Treatment Unit
  - Title 27 - Mining Unit
  - Title 27 - Municipal Solid Waste Landfill
  - Title 27 - Non-Municipal Solid Waste Landfill
  - Title 27 - Surface Impoundment
  - Title 27 - Waste Pile
  - Unknown
- Irrigated Lands Regulatory Program Sites
- Oil / Gas Sites
  - Other Oil and Gas Projects
  - Produced Water Ponds
  - Underground Injection Control (UIC)
  - Well Stimulation Project -

Trinidad, ca | Map Address | Map



SITES CURRENTLY VISIBLE ON MAP — 8 SITES LISTED — EXPORT THIS LIST

SITE NAME	GLOBAL ID	FAC ID	STATUS	ADDRESS	CITY
BOB'S BOAT BASIN	T0602300440		COMPLETED - CASE CLOSED	1 BAY STREET	TRINIDAD
HUMBOLDT STATE UNIVERSITY - MARINE LAB	T0602300374		COMPLETED - CASE CLOSED	EDWARDS STREET	TRINIDAD
PACIFIC BELL TE-034	T0602300296		COMPLETED - CASE CLOSED	OCEAN AVENUE	TRINIDAD
PRIVATE RESIDENCE	T0602331889		COMPLETED - CASE CLOSED	PRIVATE RESIDENCE	TRINIDAD
REDWOOD OIL CO - TRINIDAD CHEVRON GASOLINE STATION		12000000710		101 MAIN ST	TRINIDAD
TOOBY RESIDENCE	T0602300406		COMPLETED - CASE CLOSED	806 EDWARDS STREET	TRINIDAD
TRINIDAD CHEVRON #9-1728	T0602300236		COMPLETED - CASE CLOSED	101 MAIN STREET	TRINIDAD
TRINIDAD UNION ELEMENTARY SCHOOL	T0602300240		COMPLETED - CASE CLOSED	300 TRINITY STREET	TRINIDAD