

**Attachment 2
California Red-legged Frog
Assessment**

**California Red-legged Frog Site
Assessment Report for the
El Paso de Robles Wastewater Treatment
Plant Upgrade Project, Paso Robles,
San Luis Obispo County, California**

Prepared for:

Cornerstone Engineering

Prepared by:

SWCA Environmental Consultants®

September 2009

**CALIFORNIA RED-LEGGED FROG SITE ASSESSMENT REPORT
FOR THE
EL PASO DE ROBLES WASTEWATER TREATMENT PLANT
UPGRADE PROJECT**

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1. INTRODUCTION

This California Red-legged Frog Site Assessment Report has been prepared by SWCA Environmental Consultants (SWCA) at the request of Cornerstone Engineering for the proposed Paso Robles Wastewater Treatment Plant (WWTP) Upgrade Project (project), and it is intended for use by the City of Paso Robles (City) and affected regulatory agencies. This report was prepared in accordance with the *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005a). Data presented in this report are a compilation of information received from regulatory agencies, literature review, discussion with local qualified biologists, and an on-site investigation of the project site by SWCA personnel. The purpose of this report is to provide the U.S. Fish and Wildlife Service (USFWS) with sufficient information to evaluate potential habitat for the federally threatened California red-legged frog (*Rana aurora draytonii*) within the vicinity of the proposed activity and determine the appropriateness of protocol-level field surveys.

The USFWS listed the California red-legged frog as a threatened species on May 23, 1996. Critical habitat for the species was originally designated by the USFWS on March 13, 2001, but this was later rescinded by court order. A new critical habitat was published on April 13, 2004 and revised on November 23, 2005 (USFWS 2005b). On April 13, 2006, USFWS issued the final rule (71 FR 19243) designating critical habitat for the California red-legged frog. The final rule did not designate the general vicinity of the project area as occurring within a proposed critical habitat unit for California red-legged frog. It should be mentioned that the revised critical habitat (USFWS 2008) and revised designation of critical habitat (USFWS 2009) does not indicate the general vicinity of the project area as occurring within a proposed critical habitat unit for California red-legged frog. Therefore, discussion of critical habitat for this species is not included within this report.

1.1 SITE LOCATION AND DESCRIPTION

The proposed project is located at 3200 Sulfur Springs Road between Highway 101 and the Salinas River in the city of Paso Robles, California (refer to Figures 1 through 3). The entire WWTP property consists of four parcels (APN: 008-021-006; 008-051-002; -004; and, -026) totaling approximately 69 acres, whereas the project study area for the purposes of this report is 17 acres in size. This project study area was determined by overlaying the most current design plans with an aerial base map. The project study area boundary line incorporated permanent impact areas that would occur as a result of the proposed upgrade project and also included a setback which would reasonably accommodate any unforeseen temporary impacts; this area took into account equipment staging. This setback ranged from 50 to 100 feet wide around the permanent impact areas. The limits of the project study area as well as habitats present within the study area are shown in Figure 3.

In general, the proposed project would include improvements to Remediation Pond B, the WWTP facilities, and the existing outfall structure. In addition, the facility upgrades would include the construction of a new administrative building to be located near the entrance of the existing plant. A portion of the historical agricultural land to the south of the WWTP would also be impacted for staging and equipment storage purposes.

1.2 PROJECT BACKGROUND

The City currently owns and operates the WWTP under Waste Discharge Requirements Order No. R3-2004-0031 and National Pollution Discharge Elimination System (NPDES) No. CA0047953. The discharge permit is scheduled to be considered for renewal by the Regional Water Quality Control Board (RWQCB) in 2009. At that time, City staff expects that a new limit on nitrogen will be placed upon the river discharge. The treatment plant was not originally designed for nitrogen removal and is becoming

obsolete. The City has also had challenges meeting effluent limits for total dissolved solids (TDS), sodium, and sulfate. The purpose of the WWTP upgrade project is to bring the plant into compliance with current and anticipated discharge regulations. In addition to regulatory compliance, the WWTP upgrade project will support the City's Integrated Water Resources Plan (IWRP) and help achieve the City's adopted water resources goals. Furthermore, the high quality treated effluent to be produced by the WWTP upgrade, will likely be suitable for irrigation and other uses, and thus become an integral element in the City's future water supply. The upgrades will not increase the treatment capacity of the plant. The upgraded facility is anticipated to manage wastewater of the City's population through 2025.

1.3 METHODS

The California red-legged frog site assessment was conducted by SWCA Biologist, Dan Cordova. Mr. Cordova is familiar with California red-legged frog habitat requirements and has conducted site assessments and protocol-level surveys for California red-legged frogs along the central coast of California over the past ten years. He has also attended California red-legged frog workshops. Mr. Cordova holds a Federal 10(a)(1)(A) Recovery Permit for California red-legged frogs and has also been authorized by the USFWS to relocate California red-legged frogs on a project-by-project basis.

As part of the site assessment, the California Natural Diversity Database (CNDDDB) (2009) was accessed to determine if there are any California red-legged frog occurrences within one mile (1.6 km) of the project study area (refer to Figure 4). To date, the California red-legged frog has not been identified within the study area.

Habitat within a one-mile radius of the project study area was characterized by walking and driving the surrounding areas, and with the use of aerial photos and maps (refer to Figure 5). The site assessment for California red-legged frog habitat was conducted following USFWS protocol (USFWS 2005) on July 17, 2009, between approximately 9:00 A.M. and 1:00 P.M. during sunny conditions. Photos of aquatic habitats within the site assessment study area are included in Attachment A. Site assessment data sheets are included in Attachment B.

Figure 1. Site Vicinity Map



Figure 2. Project Location Map

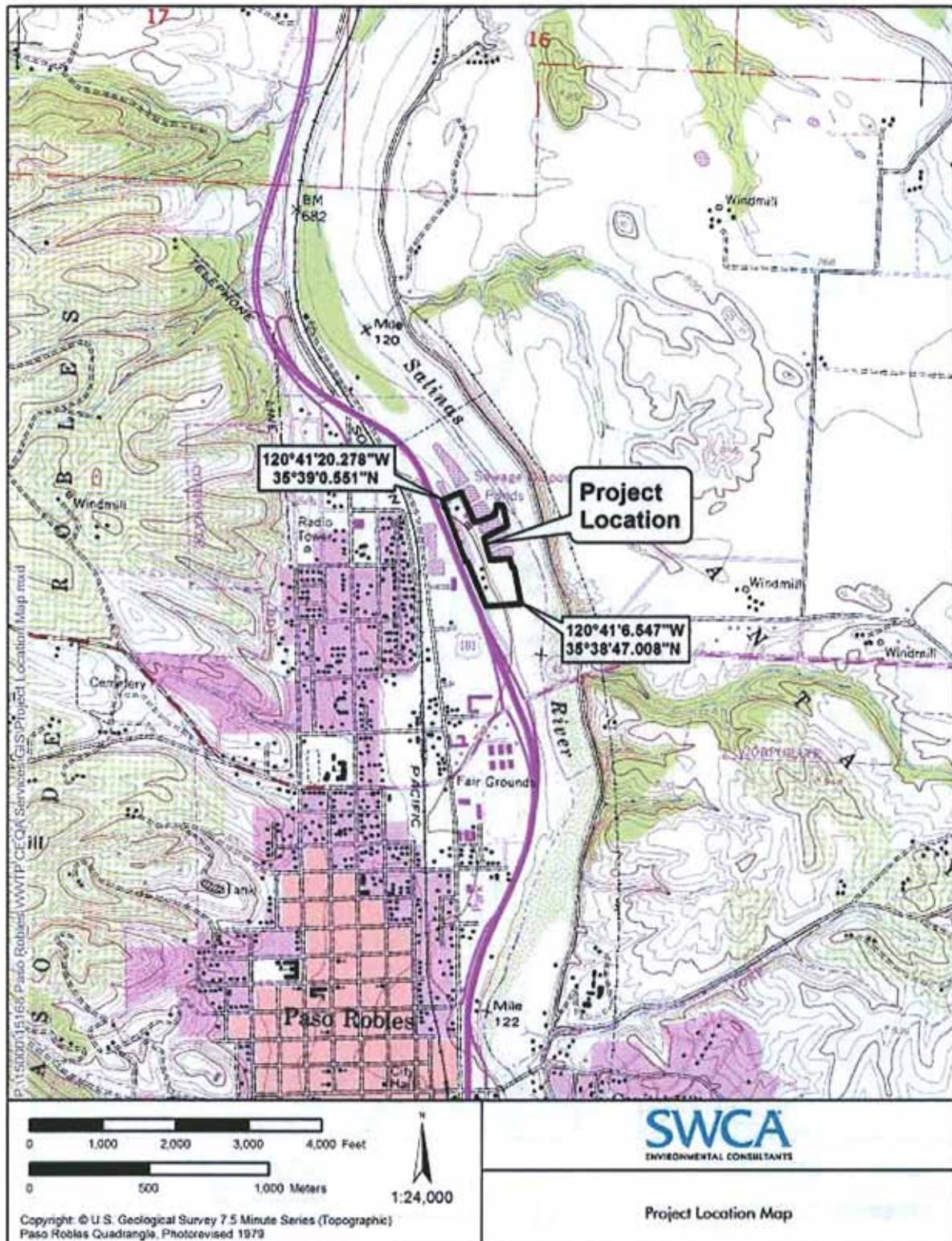
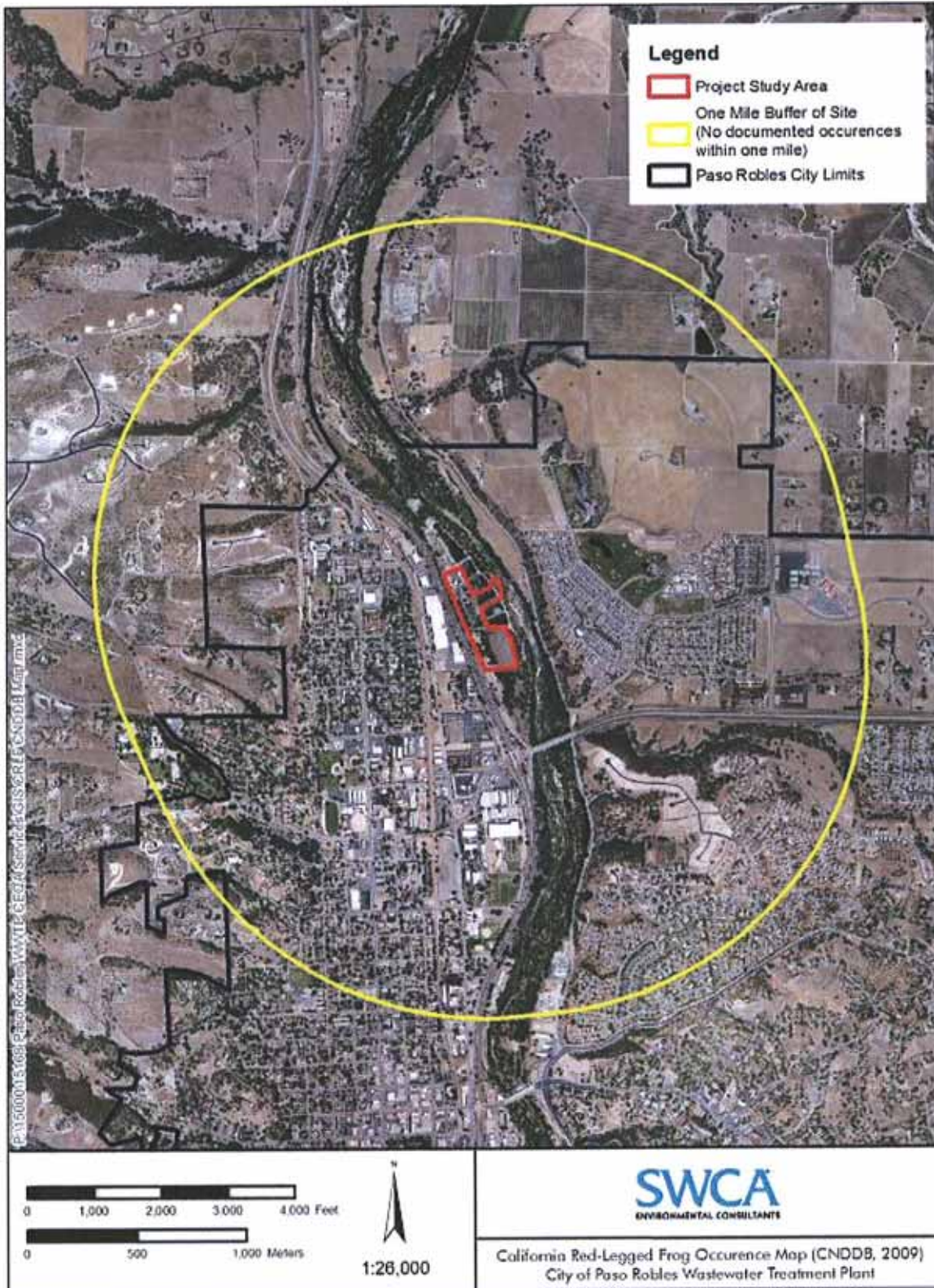


Figure 3. Site Assessment Locations



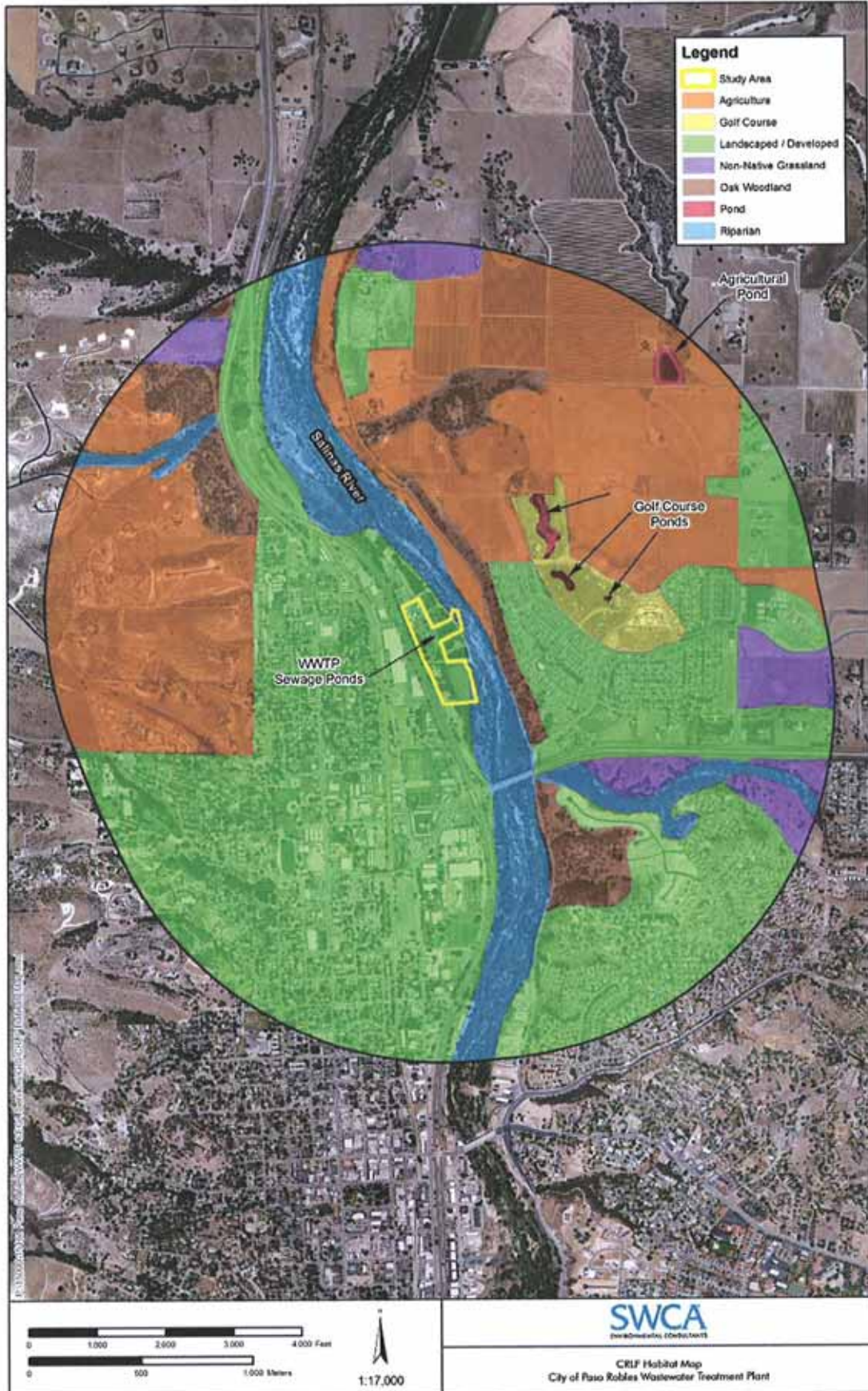
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Figure 4. CRLF Occurrence Map



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Figure 5. CRLF Habitat Map



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2. RESULTS

The USFWS site assessment protocol for California red-legged frog (USFWS 2005) consists of three elements to be considered in determining habitat suitability. These three elements are listed below, including a short discussion of the results for each element:

1. Element 1: Is the project site within the range of the California red-legged frog?

The range of the California red-legged frog occurs in the Coast Ranges from Point Reyes National Seashore to Ventura County (Storer 1925; Stebbins 1985), with almost all the Central Valley, Sierra Nevada foothill, and southern California populations now extirpated (Stebbins 1985). Based on relevant literature and personal observations, the proposed project site is known to be within the range of the California red-legged frog.

2. Element 2: What are the known localities of California red-legged frog within the project site and within one mile (1.6 kilometers) (km) of the project boundaries?

According to the CNDDDB, the California red-legged frog is not known to occur within one mile of the project site (CNDDDB 2007). SWCA biologists have previously conducted California red-legged frog surveys, both upstream and downstream of the project site, along the Salinas River for various projects with negative results. Both bull frog (*Rana catesbeiana*) and Pacific tree frog (*Pseudacris regilla*) were observed during these previous surveys.

3. Element 3: What are the habitats within the project site and within one mile (1.6 km) of the project boundaries?

Habitat within the project study area is composed of the WWTP sewage treatment ponds, central coast willow riparian scrub, arroyo willow riparian forest, coast live oak riparian forest, ruderal, windrow, seasonal wetland, and landscaped/developed. Habitats within one mile (1.6 km) of the project boundaries are illustrated in Figure 3. The habitats observed within this one mile radius include: riverine (Salinas River), open water (fresh), oak woodland, riparian, non-native grassland, ruderal, agricultural fields, and landscaped/developed areas associated with residential and/or other urban development. The majority of the one mile proximity was accessible by vehicle, and some areas were accessed by foot. Four major aquatic habitats were located within the one mile proximity: (1) Paso Robles WWTP; (2) Salinas River; (3) River Oaks Golf Course and Hot Springs ponds; and (4) agricultural ponds (refer to Figure 4). It should be noted that other small drainages, or other suitable aquatic habitats, may occur within one mile of the project boundaries, but were either: (1) not observable by examination of aerial maps or while driving the one-mile habitat characterization radius from the project site boundaries; (2) not accessible due to private land owner restrictions; and/or (3) they were either too small or obscured by other features.

2.1 PASO ROBLES WASTEWATER TREATMENT PLANT (SITE #1)

Of the four major aquatic habitats, the majority of the permanent aquatic habitat in the project study area is dominated by the sewage ponds of the WWTP. Additional aquatic habitats include the riparian/riverine area east of the sewage ponds. During the site assessment, no amphibians were identified within the study area of the WWTP.

2.2 SALINAS RIVER (SITE #2)

The Salinas River borders the east boundary of the WWTP. The predominant natural hydrologic feature within the study area is the Salinas River, which originates within the La Panza Range, and flows northerly where it discharges into the Pacific Ocean near Moss Landing, in Monterey County, California. Salinas River surface flow within the project study area is temporally and spatially intermittent. At the time of the field investigation, the flowing channel of the Salinas River was adjacent to the left downstream bank. It did not appear that the live channel had been near the eastern bank for several years, though evidence of standing water was present.

The two habitat types occurring within the Salinas River are riparian and riverine. The river is heavily vegetated with arroyo willow (*Salix lasiolepis*) and narrow-leaved willow (*Salix exigua*) near the project study area.

A southwestern pond turtle (*Actinemys marmorata pallida*) was identified within the river during the daytime survey.

2.3 RIVER OAKS GOLF COURSE AND RIVER OAKS HOT SPRINGS SPA PONDS (SITE #3)

The River Oaks Golf Course ponds are located less than 0.5 mile to the east of the proposed project site and have no surface hydraulic connectivity to the project site. The ponds are surrounded by mowed lawns and are separated from the project site by several agricultural fields, the Salinas River, two paved roads, and partially by residential neighborhoods. Aquatic vegetation along the shore of these ponds is almost non-existent. As these ponds are located on private property, no surveys were conducted.

2.4 AGRICULTURAL POND (SITE #4)

A large agricultural pond on private property is located just within the project one-mile radius. It has no surface hydraulic connectivity to the project site and is separated from the project site by several agricultural fields, the Salinas River, two paved roads, and partially by residential neighborhoods. This pond is on private land and was not accessed during the daytime survey.

Table 1. Potential California Red-legged Frog Habitat within One Mile of the Project Area

Site ID #	Habitat Description	Distance and Direction from Project Area
#1	<p><u>Paso Robles WWTP</u>. Consists largely of sewage treatment ponds and treatment facilities. The WWTP is connected to the Salinas River via an outflow culvert. Habitat within the WWTP is considered landscaped/developed, windrow, and ruderal. A narrow band of ruderal vegetation exists along the borders of several sewage treatment ponds. Other vegetation within the WWTP consists of landscaped lawns, trees, and shrubs. Proposed construction activities would occur within the developed areas of the WWTP. Remediation Pond B, within central coast arroyo willow riparian forest, and in ruderal vegetation south of the WWTP sewage ponds. No amphibians were identified during a daytime survey of this site. Proposed construction activities would require minimal ruderal vegetation removal at the west edge of the pond immediately south of Reclamation Pond B. Refer to photo documentation in Attachment A and data sheet in Attachment B for detailed information. Refer to Figure 3 for Site ID location.</p>	<p>Within project boundaries</p>
#2	<p><u>Salinas River</u>. The predominant natural hydrologic feature within the study area is the Salinas River, which originates within the La Panza Range, and flows northerly where it discharges into the Pacific Ocean near Moss Landing, in Monterey County, California. Salinas River surface flow within the project study area is temporally and spatially intermittent. At the time of the field investigation, the flowing channel of the Salinas was adjacent to the left downstream bank of the river. It did not appear that the live channel had been near the eastern bank for several years, though evidence of standing water was present. The three habitat types occurring in the Salinas River are arroyo willow riparian forest, riparian scrub, and riverine. The river is heavily vegetated near the project area with the dominant tree species being arroyo willow. A southwestern pond turtle was observed during a daytime survey. Numerous surveys of the Salinas River have been conducted throughout the years in this area and no California red-legged frog occurrence has been reported. Refer to photo documentation in Attachment A and data sheet in Attachment B for detailed information. Refer to Figure 3 for Site ID location.</p>	<p>Adjacent to project site</p>
#3	<p><u>River Oaks Golf Course and River Oaks Hot Springs Spa Ponds</u>. These large ponds are located on private land and appear to be man-made. The areas around them are intensely groomed and consist of lawn and landscape plantings. Vegetation along the shore and emergent is almost non-existent. These ponds have no surface hydraulic connectivity to the Salinas River and are approximately 0.5 mile east of the project area. They are separated from the project site by several agricultural fields and roads, the Salinas River, two paved roads, and partially by residential neighborhoods. Refer to Figure 3 for Site ID location.</p>	<p>0.5 mile east of project site</p>
#4	<p><u>Agricultural Pond</u>. This pond is located approximately 0.75 mile east of the proposed project and is separated from the project site by several agricultural fields, the Salinas River, two paved roads, and residential neighborhoods. The pond is on private property and was not surveyed.</p>	<p>0.75 mile east of project site</p>

3. DISCUSSION

Upon initial examination, the Paso Robles WWTP appears to contain the physical conditions that offer good quality foraging and breeding habitat for California red-legged frog, with a combination of either slow flowing or still, moderately deep water, but lacking emergent vegetative and/or overhanging riparian cover. Upon closer analysis, the Salinas River supports a considerable resident bullfrog population, with several adults observed and heard during previous studies in the area. This non-native introduced species is known to predate, or otherwise out-compete with, one or more life stages of the California red-legged frog (Hayes and Jennings 1986; USFWS 2002). Lastly, the processes used to treat the waste water may make the ponds unsuitable or less desirable to the California red-legged frog. This and the presence of bullfrogs in the vicinity of the project study area make the occurrence of California red-legged frogs unlikely at the project site. It is important to note that no records of California red-legged frog occur within the project study area (CNDDDB 2009).

Due to the potential for California-red-legged frog to occur within the project site, albeit low, the City should assume presence of California red-legged frog during all project activities within proximity to suitable habitat. The following mitigation measures are recommended to avoid potential impacts to California red-legged frog.

- 1) Prior to construction, the City shall obtain all necessary permits, approvals, and authorizations from jurisdictional agencies. These may include, but may not be limited to: (1) USACE, Section 404 Nationwide Permit 12; (2) RWQCB, Section 401 Water Quality Certification; and (3) California Department of Fish and Game (CDFG), Section 1602 Streambed Alteration Agreement for activities within the tops of banks or outer edges of riparian canopies (whichever extends furthest from the streambeds) of drainages. The City shall adhere to all conditions included within these permits, approvals, and authorizations.
- 2) Prior to construction, all riparian and wetland areas shall be shown on all construction plans. All riparian vegetation planned for removal shall also be specified and shown on the construction plans.
- 3) Prior to construction, the perimeter of the construction impact area shall be delineated (construction fencing, flagging, rope, etc.) to avoid inadvertent impacts to sensitive habitats and/or sensitive species. The fencing shall remain in place throughout construction and shall be maintained by the contractor.
- 4) Prior to site disturbance, the City shall print Best Management Practices (BMPs) on all applicable construction plans. BMPs shall be implemented prior to, during, and following construction activities. Measures shall include, but not be limited to the following:
 - a. Silt fencing shall be placed along the down-slope side of the construction zone.
 - b. A spill and clean-up kit shall be stored onsite at all times.
 - c. Temporary and permanent erosion and sedimentation measures shall be implemented (e.g., silt fencing, hay bales, straw wattles, etc.).
- 5) Prior to and during construction, an approved biologist shall permanently remove, from the project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible. The City shall have the responsibility to ensure that their activities are in compliance with the California Fish and Game Code.

- 6) During construction, all fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any riparian habitat or water body. The City shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the City shall ensure that the contractor has prepared a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measure to take should a spill occur.
- 7) During construction, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
- 8) To the extent practicable, construction activities within or adjacent to Salinas River shall be conducted during the dry season (May 1 through November 1). This will reduce potential impacts to California red-legged frogs, and aquatic and semi-aquatic species that might be using the Salinas River and associated riparian vegetation as a movement/dispersal corridor.
- 9) At least 30 days prior to the onset of activities, the City shall submit the name(s) and credentials of biologists to the USFWS who would conduct activities in support of the proposed project. No project activities shall begin until the City has received written approval from the USFWS that the biologist(s) is qualified to conduct the work.
- 10) At least seven days prior to onset of activities, an approved biologist shall survey the work site for the presence of California red-legged frog. If California red-legged frogs (including mature individuals, tadpoles, or eggs) are found, the approved biologist shall contact the USFWS and/or CDFG to determine if moving any of these life-stages is appropriate. In making this determination, the USFWS or CDFG shall consider if an appropriate relocation site exists. If the USFWS or CDFG approves moving animals, the approved biologist shall be allowed sufficient time to move red-legged frogs from the work site before work activities begin. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and monitoring of red-legged frogs.
- 11) During construction, an approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the City shall designate a person to monitor on-site compliance with all minimization measures. The approved biologist shall ensure that this individual receives training in the identification of California red-legged frogs. The monitor and the approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by USACE, USFWS, and CDFG during review of the proposed action. If work is stopped, USACE, USFWS, and CDFG shall be notified immediately by the USFWS-approved biologist or on-site biological monitor. The biological monitor shall also submit a report to the City documenting the implementation of mitigation measures.
- 12) During construction, if the work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than five millimeters to prevent California red-legged frogs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

- 13) During construction, in order to reduce the potential for amphibious species and other wildlife species entering the construction area, standing water shall not be created as a result of construction activities.

At this time, SWCA does not recommend that further protocol-level surveys be conducted because construction activities would have minimal to no likelihood to result in the "take" of California red-legged frog with the implementation of recommended avoidance measures. Furthermore, the likelihood for California red-legged frog to occur is low, based on negative survey results from previous surveys conducted within the area by SWCA and other biologists.

Riverine habitat is a sensitive plant communities located adjacent to the project study area. It is unknown if, or to what extent, this habitat will be impacted during construction activities. If impacts are proposed, then a Revegetation and Mitigation Plan shall be prepared to compensate for and reduce the chance for any permanent or temporary impacts resulting from the proposed project.

It is anticipated that central coast arroyo willow riparian forest will be impacted during the improvements associated with Remediation Pond B and the existing outfall structure. A Revegetation and Mitigation plan shall be prepared to compensate for any permanent or temporary impacts resulting from the proposed project (if any).

4. REFERENCES

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**ATTACHMENT A:
Photo Documentation**

**ATTACHMENT B:
Data Sheets**

