Final

Templeton-Atascadero Bikeway Connector Trail Constraints Report



submitted to:

County of San Luis Obispo

submitted by:

Rincon Consultants, Inc.



Final

Templeton-Atascadero Bikeway Connector Constraints Analysis

Prepared for:

County of San Luis Obispo Department of General Services 1087 Santa Rosa Street

1087 Santa Rosa Street San Luis Obispo, CA 93401

*Contact:*Jan DiLeo
(805) 781-4089

Prepared by:

Rincon Consultants, Inc. 1530 Monterey Street, Suite D San Luis Obispo, California 93401



Final Templeton-Atascadero Bikeway Connector Constraints Analysis

Table of Contents

| | | | Page | | |
|---------------|------------------------------------|--|-------|--|--|
| 10 Introduc | rtion | | 1_1 | | |
| 1.1 | | e of this Report | | | |
| 1.2 | 1 | | | | |
| 1.3 | Project Background and Description | | | | |
| 1.4 | Study Area and Description | | | | |
| 1.5 | | al Trail Segments and How to Use this Report | | | |
| 2.0 Constra | ints With | in the Study Area | 2-1 | | |
| | | tation and Utility Corridors | | | |
| | | gy and Creek Crossing Issues | | | |
| | | l Resources | | | |
| 2.4 | Agricultı | ural Resources | 2.4-1 | | |
| 2.5 | Cultural | Resources | 2.5-1 | | |
| 2.6 | Hazardo | us Materials | 2.6-1 | | |
| 2.7 | Parcel A | equisition and Connectivity | 2.7-1 | | |
| 3.0 Conclus | ions and | Recommendations | | | |
| A | Equestria | an Trail Use | 3-1 | | |
| В | Trail Seg | ments and their Associated Costs and Constraints | 3-2 | | |
| С | Recomm | ended Trail Alignments | 3-11 | | |
| 4.0 Reference | | | | | |
| 4.1 | | ces | | | |
| 4.2 | 0 | es and Individuals Contacted | | | |
| 4.3 | List of P | Preparers | 4-3 | | |
| Figures and | | | | | |
| _ | re 1-1 | Regional Vicinity | | | |
| 0 | re 1-2 | Proposed Trail Segments | | | |
| 0 | re 2.3-1 | Habitat Map | | | |
| U | re 2.4-1 | Prime and Statewide Importance Soils | | | |
| _ | re 2.5-1 | Cultural Resources Constraints Severity | | | |
| 0 | re 2.7-1 | Project Site Parcel Boundaries | | | |
| Figu | re 3-1 | Trail Segment Constraint Severity | 3-5 | | |
| Table | e 2.3 - 1 | Special Status Species Potentially Occurring in Project Vicinity | 2.3-7 | | |
| Table 2.4-1 | | On-Site Soil Characteristics | 2.4-2 | | |
| Appendices | | | | | |
| Appendix A | | Constraints Matrix | | | |
| Appendix B | | Trail Segment Constraints Matrix | | | |
| Appendix C | | Trail Segment Cost Analysis | | | |

i

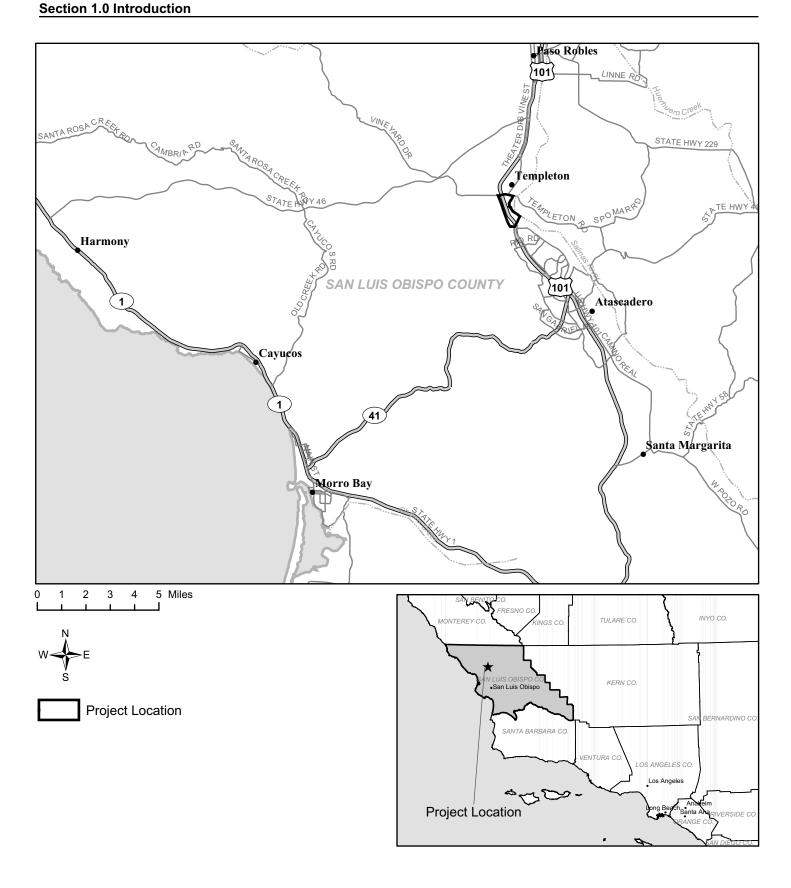
1.0 INTRODUCTION

This report is a constraints study to assist the County in locating a preferred alignment for a bicycle/pedestrian trail to link the communities of Templeton and Atascadero. It includes a discussion of the primary issues within the study area, an assessment of the severity of the constraints, and a description of potential routes. Finally, it identifies the routes considered to present the fewest constraints.

1.1 PURPOSE OF THIS REPORT

The purpose of this report is to provide a resource inventory for the study area and to identify both the constraints and opportunities for creating a bikeway connector trail between Templeton and Atascadero. In order to provide a comprehensive understanding of the project issues, several elements have been identified as primary constraints. The analysis of the following elements and their associated issues will make up the body of this report:

- *Transportation and Utility Corridors*. This includes issues related to the potential use of Caltrans, UPRR and Public Utility Commission rights-of-way and crossings.
- *Drainage Issues*. This section identifies constraints associated with significant and minor watercourses, storm drains and drainage structures. Provide a generalized flood analysis of the project site.
- *Biological Resources*. This section discusses on-site biological constraints including sensitive habitats, wetland/riparian areas, species of special concern, permitting requirements and a cost/timing analysis.
- *Agricultural Resources*. This section analyzes potential impacts to agriculture and agricultural soils.
- Cultural Resources. This section will incorporate a cultural resources report completed
 for the site with reference to existing prehistoric/historic sites and areas of potential
 cultural sensitivity.
- *Hazardous Materials*. This section includes a site history review, hazardous materials records review, site reconnaissance and a summary of the existing constraints associated with issues related to hazardous materials.
- Parcel Acquisition and Connectivity. This section provides a brief description of the
 project site in terms of parcel ownership. In addition, this section will provide a
 connectivity discussion concerning the proposed trail in relation to other public trails
 in the vicinity.



The general analysis will identify these constraints, including any actions needed to address these constraints through the planning process. A generalized estimate of the cost and timing will be made, and will be used to assess the severity of the constraint.

The second portion of this report will apply these general constraints to specific locations within the study area, and show where potential trail segments overlay these constraint areas. Based on the number and severity of the constraints associated with a particular segment, a determination of the suitability of that segment can be made. This analysis will then be used to determine the combination of trail segments with the fewest constraints, ultimately leading to a preferred trail alignment between Templeton and Atascadero.

With the presentation of on-site resources along with project constraints and opportunities, this report will help to provide decision makers with the information necessary for a complete vision of the Templeton-Atascadero Bikeway Connector Trail.

1.2 COMMUNITY BACKGROUND AND HISTORY

Templeton was founded in 1886 when C.H. Phillips of the West Coast Land Company sent R.R. Harris to survey 160 acres south of Paso Robles. This acreage was to be laid out in business and residential lots and 5-12 acre parcels for a town named "Crocker" after the famous San Francisco financier. When it was discovered that there was already a town by that name, this settlement became "Templeton", named after Crocker's son. Templeton is a pleasant rural community located midway between Atascadero and Paso Robles in San Luis Obispo County. Templeton has retained much of its historical character - many of the old buildings have been restored and are still in use today. New buildings are being built, but always with an eye to the past (Templeton Chamber of Commerce, 2003).

Atascadero, a Spanish name which, loosely translated means "a place of much water," was originally home to the Salinas Indians. The settling of Atascadero began with the Franciscan clergy who managed the 60,000-acre Rancho Asuncion until 1833, when the Mexican government secularized the mission lands. Governor Rio Pico then granted Pedro Estrada nearly 40,000 acres, part of which would eventually be a portion of the 23,000-acre Rancho Atascadero. Eventually, J.H. Henry became the owner of the Atascadero Rancho. Edward Gardner Lewis, a successful magazine publisher from the East, founded the community of Atascadero in 1913 as a utopian, planned colony. After purchasing the Atascadero Ranch in 1912, Lewis put together a group of investors from across the country, paid J.H. Henry \$37.50 an acre, and celebrated acquisition of the Rancho on July 4, 1913. Today, with nearly 29,000 residents, Atascadero is the second-largest city in San Luis Obispo County. Many of the principles that E.G. Lewis envisioned for his "utopian city" are ensured through the city's general plan, which includes preservation of open space, protection of trees and hillsides, the keeping of domestic animals, and large lot sizes (Atascadero Chamber of Commerce, 2003).

1.3 PROJECT BACKGROUND AND DESCRIPTION

Apart from Highway 101, there is no formal roadway or trail connection between Templeton and Atascadero. Cyclists and pedestrians informally use the railroad tracks or other routes to

make this connection. In recognition of this, the Templeton-Atascadero Bikeway Connector has been designated in the San Luis Obispo County Draft Parks and Recreation Plan, County Bikeway Plan and the San Luis Obispo Council of Governments (SLOCOG) Regional Transportation Plan.

As proposed, a Class I multi-use path would extend from the community of Templeton to the City of Atascadero in an area generally between Highway 101 and the Salinas River. Currently, there are disjointed pathways between the communities, but there are no cohesive links between the towns. This lack of connectivity forces cyclists to use existing roadways carrying significant traffic.

In 1997, the County identified possible alignments and constraints associated with these options, and concluded that a connector on the east side of the highway would be more feasible than one on the west side. Specifically, it called for a connector between the highway and the Union Pacific Railroad (UPRR) line. Generally speaking, the bulk of both communities lie in this general corridor, but in between the communities, there is relatively little room between the highway and the railroad tracks. The alignment, as then proposed, would have crossed two creeks (Graves and Paso Robles), to reach an existing dirt road near the Home Depot commercial development, in the northern portion of Atascadero.

According to the California Bicycle Transportation Act, Section 890.4, Class I Bikeways provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

1.4 STUDY AREA AND DESCRIPTION

The proposed Templeton-Atascadero Bikeway Connector study area is approximately 1.3 miles by 0.3 mile, rectangular in shape and located between Templeton and Atascadero, parallel to Highway 101, Union Pacific Railroad (UPRR), and the Salinas River (Figure 1-1). The project area varies only slightly in elevation, from approximately 750 to 800 feet above mean-sea-level. The greater vicinity of Templeton and Atascadero is generally characterized by an undulating landscape consisting of urban, agricultural, grassland, oak woodland, and oak savanna plant communities. A large portion of the project site is situated in and adjacent to three riparian corridors associated with the Salinas River, Graves Creek and Paso Robles Creek. Graves Creek and Paso Robles Creek, two tributaries to the Salinas River, traverse the southern end of the study area. Riparian and wetland habitats occur along these rivers, creeks, and in neighboring lowlands. Chaparral and coastal scrub habitats can be found on hillsides, mingling with these other communities.

On-site land uses include right-of-way easements for Caltrans, the UPRR and several public utilities (consisting of buried fiber optic and natural gas lines). In addition, a County wastewater treatment facility is located on-site, north of Paso Robles Creek and just west of the Salinas River. Urban and agricultural (primarily grazing) land uses, which are concentrated mainly along the west side and north end of the study area, have contributed to a relatively high level of disturbance.

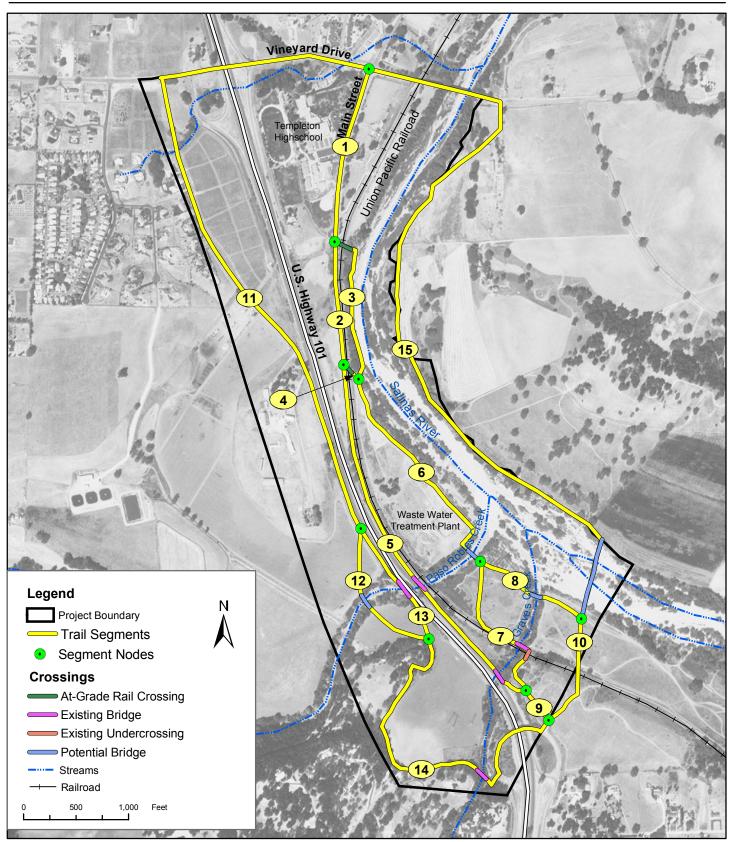
1.5 POTENTIAL TRAIL SEGMENTS and HOW TO USE THIS REPORT

Within the study area, several trail alignments are possible that would accomplish the basic goal of connecting Templeton to Atascadero. For the purpose of this study, Figure 1-2 shows various segments that could be combined to create trail alignments that accomplish this goal. No specific provisions for equestrian users are identified, but the constraints study identifies areas that may be appropriate for staging areas.

The constraints identified in Section 2.0 of this document would then be applied to the segments shown here to determine which constraints would apply to particular segments. Section 3.0 summarizes this information and recommends various trail segments based on the identified constraints.

Table A-1 (Appendix A) summarizes the nature of the constraints described in detail in Section 2.0 of this report. Table A-2 (Appendix B) summarizes the individual trail segments and their associated constraints. For the purpose of this report, constraints are a function of the cost and timing of the measures needed to address a particular issue. For example, if the implementation of a proposed trail segment results in high costs and complicated timing issues, it would represent a high level of constraint. Potential trail alignments can be chosen through the combination of different trail segments. In this fashion, decision makers have the opportunity to determine an alignment made up of any combination of trail segments based on their identified constraints. This would then allow for an informed determination to be made regarding which combination of segments would make for the most desirable trail alignment.

Page intentionally left blank



Source: Rincon Consultants, Inc., 2003.

2.0 CONSTRAINTS WITHIN THE STUDY AREA

This section identifies the constraints that are found within the study area, and to assess their relative severity as a function of the cost and timing of the measures needed to address these issues. Where possible, the specific locations of these constraints are shown on maps. This section does not apply these constraints to the specific trail segments within the study area. This is done in Section 3.0 of the report.

The following general constraints are identified and analyzed in Section 2.1-2.7 of this report:

- *Transportation and Utility Corridors*. This includes issues related to the potential use of Caltrans, UPRR and Public Utility Commission rights-of-way and crossings.
- *Drainage Issues*. This section identifies constraints associated with significant and minor watercourses, storm drains and drainage structures. Provide a generalized flood analysis of the project site.
- Biological Resources. This section discusses on-site biological constraints including sensitive habitats, wetland/riparian areas, species of special concern, permitting requirements and a cost/timing analysis.
- *Agricultural Resources*. This section analyzes potential impacts to agriculture and agricultural soils.
- *Cultural Resources*. This section will incorporate a cultural resources report completed for the site with reference to existing prehistoric/historic sites and areas of potential cultural sensitivity.
- *Hazardous Materials*. This section includes a site history review, hazardous materials records review, site reconnaissance and a summary of the existing constraints associated with issues related to hazardous materials.
- *Parcel Acquisition and Connectivity*. This section provides a brief description of the project site in terms of parcel ownership. In addition, this section will provide a connectivity discussion concerning the proposed trail in relation to other public trails in the vicinity.

Summary of Identified Constraints

Table A-1 in Appendix A summarizes the nature and severity of the constraints analyzed in Sections 2.1-2.7 of this report.

2.1 TRANSPORTATION AND UTILITY CORRIDORS

A. EXISTING CONDITIONS AND KEY ISSUES

Introduction

This section of the report provides a discussion of Union Pacific Railroad (UPRR), Caltrans and public utility issues researched by Engineering Development Associates, Inc. (EDA) for the purpose of identifying constraints associated with the implementation of the Templeton-Atascadero Bikeway Connector Trail. As seen in Figure 1-2, many of the proposed trail segments either follow or cross transportation and utility corridors. The following section will analyze the primary constraints related to crossing and/or encroaching onto transportation and utility corridors.

Transportation Corridors

Union Pacific Railroad

The Union Pacific Railroad (UPRR) right-of-way and tracks extend through the study area (Figure 1-2). The section discusses coordination and permitting processes within the regulatory agencies of the UPRR and the issues regarding potential rail crossings. The decisions made in regard to these issues will reflect the direction taken by the California Public Utilities Commission (CPUC). The CPUC is charged with safety oversight for all railroads and highway/rail crossings. When proposed projects specifically require railroad crossings, project approval from the CPUC is required. The Rail Safety and Crossings Branch of the CPUC is responsible for implementing the Commission's Highway-Rail Crossing Program overseeing safety of all public and private highway-rail crossings in California.

Historically, the UPRR and the CPUC have been advocates of closing railroad crossings as opposed to permitting new ones. The UPRR has little incentive to approve new crossings and/or right-of-way agreements due to liability issues. As such, the UPRR will apply significant constraints to the proposed project. Issues that will surface include public safety, design and construction costs, time and the potential for UPRR denial of a bike trail across its right-of-way.

Caltrans

U.S. Highway 101 transects the subject site parallel to the UPRR line. The highway presents some opportunities and constraints for the bikeway project. As shown in Figure 1-2, Trail Segments 5 and 13 would use of Caltrans facilities to cross Paso Robles and Graves Creeks. In addition, proposed Trail Segments 5, 11, 13 and 14 would encroach upon Caltrans rights-of-way. Although Caltrans has historically been more amenable to the use of its right-of-way easements and facilities for public applications, the agency permitting process will present a constraint to the proposed trail. There may be an opportunity to install a cantilevered pedestrian and bicycle facility to the existing U.S. 101 bridge structure. Integrating a bikeway into the existing bridge structure may eliminate the need for a northerly railroad crossing and

possibly minimize interaction with the UPRR and utility companies that may have facilities buried within the railroad right-of-way. Several projects with possible similar configurations have been reviewed by Caltrans. The following projects were noted by Brent Massey, Caltrans Special Funded Projects (May, 2003):

- A private developer (Matt Quaglino) in San Luis Obispo proposed an extension onto an
 existing Caltrans bridge for pedestrian purposes as a solution to meet a City of San Luis
 Obispo project condition (Broad Street, south of Tank Farm Rd). Caltrans provided
 conceptual approval of the extension pending actual design. The project however has not
 moved forward.
- The City of Lompoc has completed a bicycle-pedestrian crossing over the Santa Ynez River using a cantilevered attachment to the Caltrans bridge structure for State Highway 1. Approximate costs incurred by the City for this project was \$750,000 \$1,000,000. The bridge is 8 feet wide and designed for pedestrians or bicycles (no vehicles). The contact for this project is Larry Bean (Lompoc Public Works Director) (805) 875-8230.
- The County of Monterey is proposing a possible attachment to a Caltrans structure for pedestrian and/or bicycle purposes. Contact: Brent Massey, Caltrans Special Funded Projects, (916) 445-7200.

Utility Corridors

Public Utilities

Overhead and underground utilities exist within the project boundaries. Those facilities include existing telecommunications (fiber optics), high-power transmission lines and a high-pressure gas main. These facilities are located within easements commonly associated with the UPRR and Caltrans right-of-ways. However, the exact locations of the lines are not available unless specific projects have been submitted for agency review. The constraints associated with each utility are discussed in the following paragraphs.

B. DESCRIPTION AND ANALYSIS OF CONSTRAINTS

The purpose of this section is to analyze potential constraints associated with the proposed Bikeway Connector Trail. The issues identified as the primary constraints related the implementation of the proposed project within transportation and utility corridors are outlined in the following section.

Transportation Corridors

TUC-1. Public Safety.

Proposed Trail Segments 3, 4, 7 and 10 all include the crossing of the UPRR line in order to connect Templeton to Atascadero with a public trail (Figure 1-2). In addition, proposed Trail Segments 2 and 5 run directly parallel to the UPRR line. Pedestrian, bicycle and vehicular safety are compromised wherever a proposed public trail interacts with a railway.

These trail segments either cross the railroad tracks or run parallel to them, creating conditions that compromise public safety. There are several safety concerns with developing a bike trail close to an active railway. An increase in public access could lead to individuals trespassing onto the UPRR line, greatly increasing the risk of being hit by a train. Trail users might be hit by debris kicked up by a high-speed train, or knocked over by the windblast of a passing vehicle. The proposed development of a public trail within a railroad corridor will also increase the number of trail crossings of active rail lines as trail users get to and from their destinations.

Likewise, the introduction of recreational uses within the Highway 101 corridor (as proposed in conjunction with Trail Segments 5, 11, 13 and 14) would also create a public safety constraint. A public trail in close proximity to the highway would increase conflicts between vehicles and pedestrians. Without appropriate barriers, trail users will be able to gain illegal access onto the highway resulting in injury, death and litigation. Trail users would also be subject to excessive noise and air pollutants from vehicles.

TUC-2. Public Utility, Caltrans, UPRR and CPUC Permitting.

The CPUC is charged with safety oversight for all railroad and highway/rail crossings. When railroad crossings are specific to a proposed project, approvals from the CPUC are required. In addition, the CPUC must authorize construction of new grade crossings (such as the existing at-grade crossing depicted in Figure 1-2) and construction of over/underpasses. With 50 railroad corporations operating in California and approximately 11,000 public grade crossings, the Federal Railroad Administration (FRA) is recommending that the CPUC close over 1,000 of the existing grade crossings. According to Patrick Kerr, Manager of Industry and Public Projects for UPRR (May, 2003), the CPUC is treating the FRA direction as an order to decline new grade crossings while providing support or recommendations for underpasses or overheads.

In addition to conflicts associated with permits for railroad crossings, several trail segments propose to introduce recreational uses onto UPRR and Caltrans easements. According to Patrick Kerr (May, 2003), the use of UPRR easements for a public trail would also require that the UPRR and CPUC approve any proposals for trail construction. Proposed Trail Segments 2 and 5 would parallel the UPRR and encroach onto its right-of-way easements. The implementation of trail segments that propose the use of UPRR easements would require coordination with the UPRR and the CPUC. Similarly, should the implementation of a public trail along the Highway 101 corridor be considered, Caltrans would assume a major role in the design, processing and construction of a portion of the project. The proposed trail would have to be designed in strict compliance with the State Highway Design Manual and approved by Caltrans Division of Structures. Located in Sacramento, this division of Caltrans oversees bridge design throughout the State.

Similar to the UPRR, CPUC and Caltrans, public utility corporations would also have a vested interest in the design and construction of a public trail facility that would either cross or encroach upon their easements. As previously discussed, PG&E facilities (high-power lines and gas main) are located within and easement across the southern half of the site. In addition, fiber optic lines are located along the UPRR corridor.

The PG&E easement is approximately 400 feet wide and cuts across the southern portion of the site, from east to west. According to PG&E representatives, the utility company typically approves improvements that do not compromise their access, maintenance and operations, or expose the company to liability.

Fiber optic lines are expected to be concentrated along the UPRR corridor, placing a constraint on the implementation of any trail segment within the railroad right-of-way. Telecommunications companies operate within the UPRR right-of-way under existing agreements or easements with UPRR. The railroad company will not disclose the existing telecommunications operators within their right-of-way until a formal proposal is received and evaluated. Should it be discovered as a part of the design submittal and permitting process that a proposed trail alignment would encounter telecommunication lines, decision makers would have to either realign the proposed trail or negotiate the removal or modification of the existing utilities.

TUC-3. UPRR Crossing Design.

All of the recommended trail alignments (refer to Section 3.0, *Conclusions and Recommendations*) will have to cross the UPRR right-of-way and tracks in order to accomplish the goal of connecting southern Templeton to northern Atascadero. This presents a constraint with respect to the provision of a facility to bring recreational trail users safely across the UPRR line. The design and construction costs of such a facility will vary depending on the type of crossing utilized and its location. Depending on the project budget and funding availability, construction costs may pose a constraint to the project.

C. ACTIONS REQUIRED IF CONSTRAINTS ARE ENCOUNTERED

This section describes the actions needed if the identified constraints are encountered as a result of trail implementation. This section also describes the cost and timing implications of these actions. From this information, it is possible to assess the relative severity of the constraints.

TUC-1. Public Safety

Cost Constraint: low
 Timing Constraint: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Safety Measures. The presence of the UPRR line and Highway 101 are characteristics of the study area. Introducing recreational trail users in proximity to these transportation corridors would pose a threat to the safety of these individuals. However, there are currently a number of rails-with-trails projects in the State, along with numerous public facilities near highways. This indicates that safety concerns can be overcome with planning, design and management. The following safety measures would help to ensure the safety of trail users:

- Locate the trail as far away from the active rail line and highway as possible;
- Separate the trail from the rail line and the highway with fencing or other effective barriers;
- Maintaining or creating a height differential so that the trail is higher than the rail line and highway;
- Design the trail to minimize contact with the rail line and the freeway (e.g. screening the transportation corridors with trees, shrubs and other landscaping);
- Post clear warnings and educational material to prevent trespassing;
- Clearly mark the trail to heighten the distinction between trails and railroad/highway maintenance corridors; and
- Grade separation of the trail in relation to the rail line and highway intersections.

<u>Timing</u>: All safety measures shall be implemented prior to the opening of the trail for public use. These, or any other such safety measures, do not represent significant time constraints.

<u>Estimated Cost</u>: The costs associated with the above recommended safety measures would be nominal.

TUC-2. Public Utility, Caltrans, UPRR and CPUC Permitting

Cost Constraint: moderate
 Timing Constraint: high
 Overall Severity of Constraint: high

Actions Needed to Address Constraint:

UPRR Permit Processing. The least expensive and most efficient option to bring recreational trail users from the southern terminus of Main Street in Templeton across the UPRR line (which is a component of all of the recommended trail alignments outlined in Section 3.0, *Conclusions and Recommendations*) would be to utilize the existing at-grade crossing. As previously discussed in Part B, UPRR has very little desire to add or increase pedestrian and bicycle conflicts to the railway system. There are public safety, insurance and financial incentives for UPRR to remove crossings and no incentive to increase people/train conflicts.

As such, any efforts to formalize the current at-grade crossing for recreational trail users would meet agency resistance and significant time delays. According to Patrick Kerr (May, 2003), if new grade crossing improvements (including signalization of the existing crossing) are to be approved, the project proposal will need to include alternatives for eliminating or combining other existing grade crossings. Should this option be deemed infeasible, it is recommended that a new under/overcrossing be built to ensure the safe crossing of the railway by trail users.

Timing: According to past experience with the UPRR, when processing plans and permits through the UPRR and the CPUC, expect and plan for significant time delays. Recently, the approval for a bicycle underpass through an existing culvert crossing in the City of San Luis Obispo (Tract 1750 in the Edna-Islay area) took approximately one year before an agreement could be reached between agencies. Similarly, the design, permitting approval, relocation of utilities and construction of the Jennifer Street Bridge in San Luis Obispo was a four year effort (even though the City owned the right-of-way across the tracks and maintained a prior right to the railroad). UPRR preliminary review is estimated to take approximately 6 months. It is unknown how long the CPUC permitting process would take.

<u>Estimated Cost</u>: The costs associated with the above mentioned permitting process would include the administrative costs connected to the process for an undetermined amount of time.

Caltrans Permit Processing. The implementation of proposed Trail Segments 5, 11, 13 and 14 would encroach upon Caltrans rights-of-way. The use of the State right-of-way would mean that Caltrans would assume a role in the design, processing and construction of a portion of the project. Should a Caltrans facility be used as a part of the proposed project, the project would have to be designed in strict compliance with the State Highway Design Manual and approved by Caltrans Division of Structures. Located in Sacramento, this division of Caltrans is responsible for overseeing bridge design throughout the State.

<u>Timing</u>: Time will be a significant constraint when dealing with agency permitting. Should a trail alignment be chosen that encroaches onto the Caltrans right-of-way, or should a Caltrans bridge be used, the timing associated with the permitting process would represent a high level of constraint.

<u>Estimated Cost</u>: Costs associated with the above mentioned permitting process would include the administrative costs connected to the process for an as-of-yet unspecified amount of time.

Public Utility Permit Processing. As previously discussed, PG&E facilities (high-power lines and gas main) are located within a 400 foot wide easement across the southern half of the site and telecommunication facilities (fiber optic lines) lie somewhere within the UPRR right-of-way.

Given the presence of PG&E facilities in the area, the proposed trail alignments will have to be reviewed and approved by the utility company. Grade changes over the high-pressure gas main will be evaluated for compliance with PG&E standards. Fencing within the easement will be examined for potential impacts to the PG&E facilities. Fencing design is typically reviewed to determine if it limits or restricts access or compromises underground facilities. However, many of these concerns can be addressed through project design and liability agreements.

In the case of telecommunications carriers, the County does not maintain a superior position of authority within the railroad right-of-way and the utility companies cannot be ordered to relocate their facilities. Modifications to fiber optics systems are very difficult, time-consuming and costly. As such, should a chosen alignment encroach onto the UPRR right-of-way and public utility easements, the County will have to enter into negotiations with the effected companies. The outcome of which would mean that either the alignment would have to be relocated, the utilities would have to be relocated or the property would have to be condemned.

<u>Timing</u>: Timing associated with permit processing and the possible negotiations required upon choosing an official alignment will vary depending on the actual presence and number of utilities. It is expected that negotiations would represent a timing constraint.

<u>Estimated Costs</u>: Costs associated with permitting and negotiations with utility companies would be primarily administrative. However, according to past projects that required the modification of public utilities, costs associated with utility relocation could potentially range from approximately \$50,000 to \$75,000.

TUC-3. UPRR Crossing Design

Cost Constraint: high
 Timing Constrain: high
 Overall Severity of Constraint: high

Actions Needed to Address Constraint:

Costs and Timing Associated with Crossing the UPRR Line. As previously noted, the recommended trail alignments would include the crossing of the UPRR line in order to bring trail users from the southern terminus of Main Street in Templeton to the Home Depot center in northern Atascadero. The most cost effective method of crossing the railroad would be to formalize the existing at-grade crossing near the southern end of Main Street. This would require the signalization of the crossing. As was discussed in Part A above, the UPRR and the CPUC are mandated to close grade crossings throughout the State. Patrick Kerr of the UPRR (May, 2003) has stated that the CPUC and UPRR would be amenable to permitting the formalization of the at-grade crossing as long as the County could ensure the closure of other crossings elsewhere.

The other options for crossing the railroad right-of-way would include the construction of an undercrossing (creating a culvert like tunnel under the tracks to permit the passing of pedestrians and bicyclists) or an overcrossing (a bridge over the tracks. These options are discussed below.

 Grade Crossing. Grade crossings are the least expensive to construct, but will require an Active Warning Device (signalized). Due to safety and liability issues, they are very likely to encounter significant permitting obstacles or denial by the UPRR and the CPUC.

- *Underpass*. An underpass improves trail safety by creating a grade separation between the trail and rail line intersection. This type of crossing utilizes a tunnel to cross underneath the tracks. In conversations with Ken Gault, UPRR Grade Separations Construction Engineer (May, 2003), it was determined that a pre-cast concrete structure (e.g., an ArchSpan or similar product) would be the most cost effective method for creating an underpass.
- Overpass. While an overhead bridge would be considered a safe means for crossing the railway, it would be considered an unlikely alternative. A bridge structure would require a 23-foot vertical clearance (similar to the Jennifer Street Bridge in San Luis Obispo). Existing fiber optic lines and the location of the highway would limit an overhead structure due to the amount of ramping required for a bridge structure.

<u>Timing</u>: According to similar projects in the region, the implementation of grade crossing modifications could possibly take up to 1 to 2 years. The design and approval of either an underpass or an overpass would take up to 2 years at a minimum. This represents a high timing constraint.

<u>Estimated Costs</u>: According to estimations completed by EDA for the probable costs associated with project-specific grade crossing modifications, an underpass and an overhead bridge are as follows:

• Grade Crossing-Signalization \$125,000 to \$200,000

Underpass \$2,000,000Overhead Bridge \$1,750,000

2.2 HYDROLOGY AND CREEK CROSSING ISSUES

A. EXISTING CONDITIONS AND KEY ISSUES

Introduction

This section will provide a discussion of hydrological and creek crossing constraints to the proposed Templeton-Atascadero Bikeway Connector Trail as researched by Engineering Development Associates, Inc. (EDA). Hydrologic constraints center on flooding concerns surrounding the construction of a trail and creek crossings in and around Paso Robles and Graves Creeks. The discussion of creek crossings will evaluate the different development options for the bridges needed to cross the on-site watercourses.

Flood Zone

The study area is strongly influenced by on-site watercourses. These include the Salinas River, Paso Robles and Graves Creeks. As such, the design and implementation of a recreational trail through the study area will have to consider flooding issues. The Federal Emergency Management Agency (FEMA) approximates the limits of the 100-year flood zone on the Flood Insurance Rate Map (FIRM). According to FEMA delineation, the 100-year storm event flood line for the study area includes the Salinas River corridor, all of the land east of the UPRR line and generally remains confined within the on-site portions of Paso Robles and Graves Creeks. However, where the FEMA 100-year flood zone exists within the study area, the base flood elevation (BFE) has not been determined or studied in detail.

Currently, FEMA regulations do not prohibit the location of a trail or an access road within the 100-year flood zone providing that the trail and/or road are designed so as not to impede storm flows, contribute to area flooding and can withstand a 100-year flood event.

Creek Crossings

Due to the location of Paso Robles and Graves Creeks, any of the proposed trail alignments (refer to Section 3.0, *Conclusions and Recommendations*) would require bridging the watercourses to provide a continuous route from Templeton to Atascadero. Bridging options would include either the construction of new facilities or the use of existing Caltrans facilities (this option includes a cantilevered bridge attached to the Caltrans structure). As seen in Figure 1-2, Trail Segment 15 proposes the bridging of the Salinas River in order to provide access to the southern terminus of the proposed trail (avoiding the need to cross the two Creeks). Pursuant to FEMA regulations, a new bridge can be erected within the 100-year flood zone pursuant to the above mentioned requirements.

B. DESCRIPTION AND ANALYSIS OF CONSTRAINTS

This section will provide an analysis of potential constraints associated with the proposed Bikeway Connector Trail. The topics within this section that are considered to be the primary constraints related to implementing the proposed project are flooding and creek crossings. These issues are outlined in the following discussion.

Flood Zone

HCC-1. 100-Year Flood Zones and Base Flood Elevations (BFE).

The study area is partially defined by its relationship to on-site watercourses. The Salinas River corridor is essentially considered to be the eastern boundary of the study area. In addition, the southern portion of the study area is bisected by both the Paso Robles and Graves Creeks. These two creeks flow from west to east and feed into the Salinas River. Historically, Paso Robles and Graves Creeks remain flowing throughout the year in times of normal rainfall (approximately 13 inches/year).

FIRM maps provide a delineation of flood zones for 100-year storm events within the study area. These on-site flood zones include the areas in and around all of the watercourses and include all of the study area east of the UPRR. Proposed Tail Segments 3, 4, 6, 7, 8, 10 and 15 occur within the 100-year flood zone. It should be noted that this does not preclude the development of recreational trail facilities. The design and construction of a proposed trail and/or access road would be required to conform to the mandates stated in Part A. However, should the construction of new bridges be an option, two designs could be used. A clear-span bridge would be less likely to interfere with flood waters when compared to a bridge requiring piers within the channel.

Although the FIRM maps show the approximate extent of the 100-year flood zone, the BFE for the study area is unknown. This represents a constraint to the implementation of a recreational trail. In order to ensure that any proposed structures are elevated out of the 100-year flood levels and in order to assess the potential flooding impacts to the trail, a hydrological study would have to be completed.

Creek Crossing

HCC-2. Creek Crossing Facilities.

Any proposed trail alignment (outside of Trail Segment 15), would have to cross over both Paso Robles and Graves Creeks in order to accomplish the stated goal of providing formal pedestrian and bicycle access between southern Templeton and northern Atascadero. The options analyzed in this report include providing new bridges for both creek crossings (refer to Trail Segments 6 and 8 as illustrated in Figure 1-2), using a cantilevered structure attached to the existing Caltrans facility (refer to Trail Segments 5 and 13 in Figure 1-2), or the use of a cantilevered structure attached to the existing UPRR facility over Graves Creek (refer to Trail Segment 7, Figure 1-2).

It should be noted that in conversations with UPRR (Patrick Kerr, May, 2003), the idea of attaching a structure to the existing railroad bridges would meet extreme resistance from both the UPRR and the CPUC permitting agencies. As such, it is recommended that the County peruse other creek crossing options.

Creek Crossing Opportunities

According to conversations with William Frace, Planning Director for the City of Atascadero (June, 2003), the southeastern portion of the subject property which consists of the northern extent of the City of Atascadero is proposed for residential development. The proposed development site, referred to as Tentative Tract 2498, is essentially split into two areas by Graves Creek and is bound by the Salinas River to the east and the UPRR to the west (refer to Section 2.7, *Parcel Acquisition and Connectivity*). The plans for Tentative Tract 2498 include a bridge over Graves Creek to provide access to both the northern and southern portions of the residential development. This bridge includes a recreational trail proponent, supporting both pedestrian and bicycle use. In addition, the plans for Tentative Tract 2498 include public trails along the Salinas River corridor which provide access to the proposed on-site horse arenas and the De Anza Trail corridor.

The coordination of planning efforts between the County and the City of Atascadero has the potential to yield cost sharing programs for creek crossing facilities. This represents an opportunity to reduce overall constraints for the proposed trail.

In addition, should an alignment be chosen west of Highway 101, there exists the opportunity to use an existing bridge over Graves Creek. Proposed Trail Segment 14 (refer to Figure 1-2) was chosen to take advantage of the existing structure. In this case, the County would be required to obtain a right-of-way agreement with the current owners. The current bridge would have to be upgraded to support safe pedestrian and bicycle use.

C. ACTIONS REQUIRED IF CONSTRAINTS ARE ENCOUNTERED

This section describes the actions needed if the identified constraints are encountered as a result of trail implementation. This section also describes the cost and timing implications of these actions. From this information, it is possible to assess the relative severity of the constraints.

HCC-1. 100-Year Flood Zones and Base Flood Elevations (BFE)

Cost Constraint: low
 Timing Constraint: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Hydrological Study. Without the benefit of a hydrological study, it is difficult to assess the potential flooding impacts to the project. Therefore, a hydrological study would need to be performed before trail and bridge designs are finalized. The hydrological study must determine the base flood elevation (BFE, elevation of a 100-yr storm event) and the design-storm for the channel. It should also analyze the potential impacts on adjacent properties during a 100-year storm event as a result of proposed improvements. The flood study data will define parameters guiding the design of any structure or potential obstruction within the flood zone. At a minimum, new bridges will be raised to an elevation that is at or above the design storm for the channel to be crossed. The

bridge design must consider impacts to the flood plane during a 100-year storm event and cannot cause a rise in the BFE of more than one foot at any given creek cross-section. A registered professional engineer must prepare the hydrology study and hydraulic calculations.

<u>Timing</u>: The hydrological study must be reviewed and approved by the County of San Luis Obispo, but is not required to be submitted to FEMA. Submittal to FEMA would be necessary if the County desires a Letter of Map Amendment (LOMA). In either case, the review and approval process is not expected to represent a timing constraint.

<u>Estimated</u> Costs: A hydrological study, as described above, should cost approximately \$5,000 - \$12,000.

HCC-2. Creek Crossing Facilities

Cost Constraint: high
 Timing Constraint: moderate
 Overall Severity of Constraint: high

Actions Needed to Address Constraint:

Bridging the Study Area Watercourses. The nature of the study area suggests that the crossing of Paso Robles and Graves Creeks would be unavoidable. The current options for crossing these water courses include the design and construction of new bridge structures, building cantilevered structures attached to the existing Caltrans or UPRR facilities, or choosing to implement proposed Trail Segment 15 which crosses the Salinas River and avoids the two creeks.

• New Creek Crossing Facilities. A new bridge structure can be either a clear span bridge or a bridge with sectional supports. Costs vary significantly depending upon the desired load range and type of construction. Use of a premanufactured bridge (e.g., Steadfast Bridge, Bailey Bridge) is a possible solution that should be investigated by decision makers. These bridges can span up to 250 feet and are significantly less expensive than a concrete structure. Depending on the particular application, these bridges can be designed and manufactured to support a wide range of requirements from pedestrians to vehicular loading. Bridge foundations and span supports are constructed while the bridge is built off-site. When ready, the pre-assembled structure is delivered to the site in sections where final assembly is completed. Encroachment into the creek channel should be minimal, limited to activities associated with construction of the foundations and embankments on each side of the channel and equipment access used in placement of the bridge.

Construction methods required to build a concrete bridge would require the most significant encroachment into the creek channel. This type of structure

requires equipment, personnel, forming and false-work to be placed in the creek channel during construction.

• Cantilevered Bridges. This option applies to proposed Trail Segments 5, 7 and 13. These segments propose the construction and attachment of cantilevered structures onto existing Caltrans and UPRR bridges in order to bring trail users across study area watercourses. Should this option be chosen, the County would be required to enter into negotiations with the respective agencies for the use of their facilities. However, according to conversations with both agencies (refer to Section 2.1, Transportation and Utility Corridors), it appears that Caltrans would be more amenable to the use of their facilities for recreational purposes.

Attachment of a cantilevered structure to a Caltrans bridge will require some encroachment into the creek for support material and false-work, but a significant amount of work may be able to be completed from the existing bridge deck. This will require the preparation of traffic plans and encroachment into Highway 101 travel lanes and possible lane closures for an unspecified amount of time.

Although Trail Segment 15 proposes the bridging of the Salinas River in order to avoid crossing the two creeks within the study area, the cost of such a facility precludes its choice as a preferred alternative. According to analysis by EDA, this segment is estimated to cost over 3.1 million dollars (refer to Appendix C for a full cost analysis). In addition, the opportunity for coordination between the County and the City of Atascadero would suggest that the sharing of creek crossing design and construction costs would be a preferred option.

In the event that proposed Trail Segment 14 is chosen for implementation, the County would be required to obtain right-of-way agreements or full title ownership of the existing bridge. An upgrade of the facility would likely be required in order to ensure the safety of trail users.

<u>Timing</u>: Time constraints for preliminary design, planning applications and approvals, preparation of construction documents and obtaining permits depends heavily upon agency work-loads (particularly the Army Corp of Engineers) and should be allocated at least one year. This represents a moderate constraint.

<u>Estimated Costs</u>: The costs associated with the construction of new creek crossing facilities represent a significant constraint. The cost estimates for the different options, provided by EDA, are as follows:

| Clear-Span Bridge – Pedestrian & Bike Loading | \$900/linear foot 12-foot wide wooden deck | \$135,000 |
|---|--|-------------------------|
| Clear-Span Bridge – Vehicle Loads | \$1,600/linear foot 12-foot wide concrete deck | \$240,000 |
| Foundations & Embankments | | \$95,000 |
| Total, Clear-Span Typ | \$230,000 - \$335,000 | |
| | · | |
| Concrete Bridge Structure | | \$600,000 - \$700,000 |
| | | |
| Bailey Bridge | Costs available upon submittal of specific bridge requirements | N/A |
| | · | |
| Cantilevered Attachment to Caltrans Bridge | | \$750,000 - \$1,000,000 |

2.3 BIOLOGICAL RESOURCES

A. EXISTING CONDITIONS AND KEY ISSUES

Introduction

The proposed Templeton-Atascadero Bikeway Connector study area is approximately 1.3 x 0.3 miles and is located between Templeton and Atascadero and parallel to Highway 101. A large portion of the study area is situated in and adjacent to three riparian corridors associated with the Salinas River, Graves Creek and Paso Robles Creek. The area consists of riparian, riverine, coastal scrub, non-native annual grassland, wetland, and anthropogenic habitat types, in addition to elements of oak woodland habitat types. The greater vicinity of Templeton and Atascadero is generally characterized by an undulating landscape consisting of urban, agricultural, grassland, oak woodland, and oak savanna plant communities. Riparian and wetland habitats occur along the rivers, creeks, and in neighboring lowlands. Chaparral and coastal scrub habitats can be found on hillsides integrating with these other communities.

The purpose of this section is to describe existing conditions of the biological resources found in the study area, and to understand the constraints and regulatory issues associated with those resources that need to be considered when selecting the best location and alignment for the bikeway connector.

Methodology

Prior to conducting the field surveys, Rincon Consultants reviewed the U.S.G.S. topographic map of the project vicinity, aerial photography of the study area and general vicinity, the Soil Survey of San Luis Obispo County, California, Paso Robles Area (Soil Conservation Service, 1977), and consulted the California Natural Diversity Data Base (CNDDB, 2003) for information on special-status species with historic and recent recorded occurrences in the area. A list of special-status species potentially occurring in the study area is provided in Table 2.3-1 of this report. To supplement the CNDDB review, Rincon Consultants also reviewed biological and environmental documents prepared for projects in the vicinity (Althouse and Meade, Inc., 2000; Douglas Wood and Associates, 2000; Rincon Consultants, 2000 & 2001; Tupen, 1998) and consulted with individuals knowledgeable of the Templeton and Atascadero areas (Dr. David Keil, 2003).

Rincon Consultants' biologist Kim Sanders visited the site on February 12, 2003 to conduct a reconnaissance-level survey of the study area. The purpose of this survey was to characterize the existing biological resources and to identify those habitat types that could support special-status species or otherwise be of concern to the resource agencies. No specific surveys for special-status plant or wildlife species were conducted during this reconnaissance. The survey consisted of walking the majority of the study area to the west of the Salinas River in which alignments would be placed. The remaining areas were surveyed with binoculars from vantage points along the river bank and from berms throughout the study area. While in the field, habitat types were mapped onto an aerial photograph.

Habitat Types

Urban and agricultural land uses concentrated mainly along the west side and north end of the study area, have contributed to a high level of disturbance. Riparian, riverine, wetland, coastal scrub, non-native annual grassland, and elements of oak woodland comprise the remaining habitat types within the study area.

Elements of six habitat types typical of northern San Luis Obispo County are represented on the Templeton-Atascadero Bikeway Connector study area. Classification of these habitat types is based generally on Holland (1986), and Sawyer Keeler-Wolf (1995). The Wildlife Habitat Relationship System (Mayer and Laudenslayer, 1988) was also referenced to more accurately describe these habitat types, or vegetation communities. The following is a brief description of each habitat type.

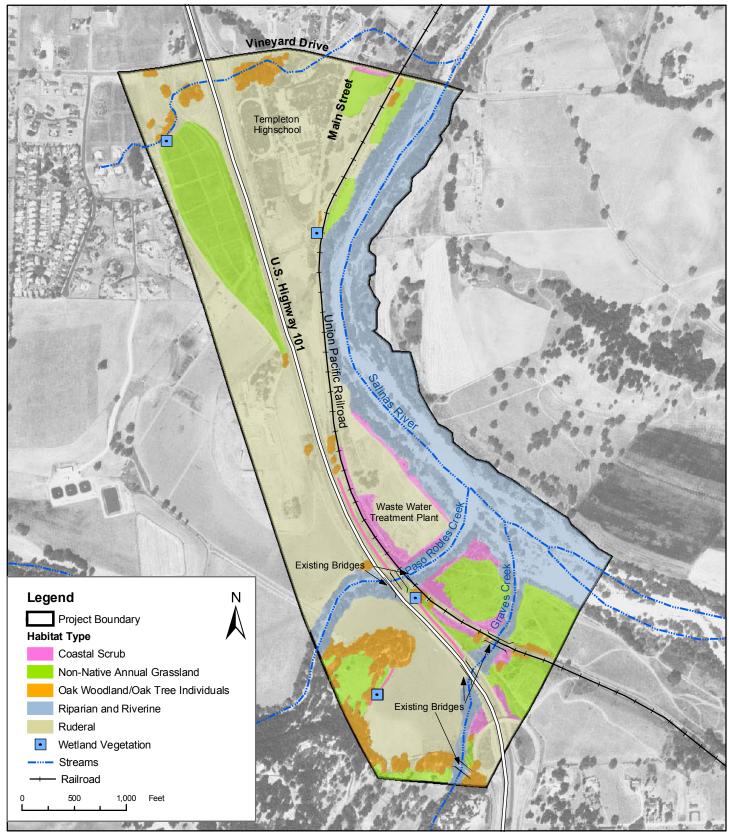
<u>Riparian and Riverine.</u> The riparian habitat types are the terrestrial component of the on-site riverine system that is the aquatic component of the three watercourses in the study area. Riparian habitat types in the study area correspond with Central Coast Cottonwood Sycamore Riparian Forest, Central Coast Arroyo Willow Riparian Forest, and Central Coast Riparian Scrub. The on-site representatives of riparian habitat also contained numerous valley oak (*Quercus lobata*) individuals. Vegetation with both open and closed canopies with dense under stories existed in sections of the riparian habitats that have not been disturbed by urban or agricultural activities. Riparian habitat types occur adjacent to the three major watercourses of the site: the Salinas River, Graves Creek, and Paso Robles Creek (Figure 2.3-1).

The riparian communities onsite provide valuable habitat for resident and migratory wildlife that use these communities for nesting, foraging, and as travel corridors. In addition, the riparian communities along the three watercourses help stabilize soils of the creek banks and maintain water quality through bio-filtration.

The total length of the eastern side of the site contains an expanse of the Salinas River corridor, a major river of regional importance. The Salinas River flows in a northern direction from the headwaters southeast of Santa Margarita to its confluence with the Pacific Ocean in Monterey Bay. Sandbars and mudflats separate active channels during the lowest flow periods of the summer months. During the site visit, water was meandering through several channels of varying widths. Along the banks of some areas water was moving very slowly or was ponded creating shallow pools.

Graves Creek is a tributary that connects with the Salinas River in the southern end of the study area. At the time of the site visit, the confluence with the Salinas River formed an approximate 9-foot wide channel. Graves Creek contained the lowest flow of water of the three major watercourses. The active channel varied from approximately 3 feet to 20 feet wide. The Creek has been heavily disturbed from the bridge that supports the UPRR and from vehicles and other debris that have been dumped along the banks.

Section 2.3 Biological Resources



Source: Rincon Consultants, Inc., 2003.

Approximately 0.25 mile north of Graves Creek is Paso Robles Creek which traverses the study area in a west to east direction to meet with the Salinas River. The confluence with the Salinas River created an approximately 60 foot wide channel at the time of the site visit and the active channel in Paso Robles Creek was an average of approximately 30 feet across. This creek is also disturbed due mainly to the UPRR bridge and transient human activity occurring under the Highway 101 bridge that crosses the creek.

Other watercourses in the study area include one unnamed tributary to the Salinas River that crosses under Highway 101 at the northern end of the site and a small culvert that crosses under the railroad tracks just south of Templeton High School. The creeks, rivers and the associated watercourses in the study area may be considered as waters of the U. S. that fall under the jurisdiction of the U. S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act (1972) described in the constraints section.

Wetland. Wetland habitat types in the study area correspond to the Coastal and Valley Freshwater Marsh and the Vernal Marsh described by Holland. Wetlands occur in nutrient rich mineral soils that are saturated through part or all of the year. These communities are best developed in locations with slow-moving or stagnant shallow water. Limited occurrences of seasonal and perennial wetland vegetation were observed within the Salinas tributary at the northern end the study area, within the culvert passing underneath the UPRR near the south end of Main Street, and in the swale adjacent to Highway 101 just South of Paso Robles Creek. Additional areas of standing water were observed in the study area, however, these areas were either completely devoid of vegetation or were only sparsely vegetated by non-native (weedy) species. The study area was not completely assessed for wetland habitat during this reconnaissance level survey, thus, wetland habitat types may also occur within riparian habitat and within low points or drainages in which water persists longer than in the surrounding areas. No long-lasting rain pools (e.g., vernal pools) were observed in the study area. Seasonally-ponded areas that may occur within wetland habitat types provide habitat for aquatic invertebrates and amphibians.

<u>Coastal Scrub</u>. The coastal scrub habitat type resembles Central (Lucian) Coastal Scrub as described by Holland, however, it consists almost exclusively of coyote brush (*Baccharis pilularis* var. *consanguinea*). Many sections of the study area containing coastal scrub elements occur within and adjacent to disturbed areas in the ruderal/anthropogenic habitat type described below. The under story vegetation of coastal scrub habitat was generally non-native annual grassland also described below. Coastal scrub habitat was observed occurring in clusters of varying densities throughout the study area but is most concentrated in the southeastern portion and along the outer limits of riparian habitat types.

Coastal scrub habitat types typically provide cover and nesting for a variety of mammals, birds, and reptiles common to the Central Coast. These habitat types are limited in size in the study area and likely contain wildlife typical of the surrounding grassland and riparian habitat types.

Non-native Annual Grassland. The non-native annual grassland habitat type resembles Non-Native Grassland as described by Holland. A mixture of introduced grasses and native and introduced herbaceous plant species including invasive weeds characterize this habitat. Nearly pure stands of two invasive weeds, milk thistle (*Silybum marianum*) and perennial



mustard (*Hirschfeldia incana*), are located in the grasslands occurring southwest of the Salinas River in the southern portion of the study area. The growth and dominance of invasive weeds have likely been brought on by past and present disturbance of the area. The grassland habitat type is located throughout the study area and is a prevalent component of the ruderal/anthropogenic habitat type.

Grasslands provide foraging habitat for small mammals, which in turn serve as a prey base for a variety of animals, including snakes, raptors and larger mammals, as well as habitat for invertebrates (such as insects) which provide a food source for larger animals. Wildlife species typical of the adjacent riparian and coastal scrub habitat may also disperse and forage in the grassland. However, due to the regular disturbance occurring on the site, it is unlikely that wildlife species would regularly use the grassland habitat.

<u>Oak Woodland.</u> Occurrences of oak trees onsite correspond to the Coast Live Oak Woodland and Valley Oak Woodland vegetation communities described by Holland. Clusters or individuals of valley oak (*Quercus lobata*) and coast live oak (*Quercus agrifolia*) trees occur sporadically in each section of the study area. Oak tree individuals and clusters are an occasional component of the riparian corridors and a few individuals occur sporadically throughout the remainder of the site. Oak trees not associated with riparian habitats are generally associated with coastal scrub and non-native grassland under stories.

Oak trees in general provide quality habitat for a variety of wildlife species. The oak trees occurring in the study area are expected to provide nesting sites and cover for birds and many mammals in addition to acorns which are a valuable food source for many animal species.

Ruderal/Anthropogenic. This habitat type includes a variety of disturbed areas that have been affected by past and present human activities, including but not limited to trails that traverse the area, construction and maintenance of the UPRR and bridges, Main Street, the Waste Water Treatment Plant, Templeton High School and several houses in addition to agricultural activities occurring inside the western boundary. Ruderal/anthropogenic habitat types may include ornamental landscaping, urban structures, pavement or bare soil and as such do not support much native habitat. This habitat type in the study area supports a mixture of ruderal (weedy) species and non-native annual grasses and forbs. The ruderal/anthropogenic habitat type is the most prevalent habitat type within the study area (Figure 2.3-1).

Generally, ruderal/anthropogenic communities provide marginal habitat value for wildlife, however, because of the close proximity of these habitats to the other native habitat types of the study area they are likely to support species typical of the other habitats.

Special-Status Species

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (ESA); those considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Game (CDFG) under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern" by the

CDFG; and plants occurring on Lists 1B, 2, and 4 of the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2001).

Rincon Consultants biologists developed a target list of special-status plant and wildlife species that could potentially occur on the study area based on our review of the CNDDB, previous studies from the region of the site, and other sources including our own knowledge of the area. Field reconnaissance to identify habitat types and an evaluation of the on-site soils helped refine the target list of species and focus our assessment of the actual or potential for occurrence of special-status species in the study area. Table 2.3-1 includes the special-status species that potentially occur on the project site, and lists the Federal, State, and CNPS status and habitat requirements for each special-status species.

Table 2.3-1 Special-Status Species Potentially Occurring in the Templeton-Atascadero Bikeway Connector Project Vicinity

| Status* | | | | | | |
|---|-------------|--|--|--|--|--|
| Species | Fed/CA/CNPS | Habitat Requirements | | | | |
| PLANTS | | | | | | |
| Douglas' spineflower Chorizanthe douglasii | /List 4 | Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest/sandy or gravelly. | | | | |
| Dwarf calycadenia Calycadenia villosa | //List 1B | Dry meadows, hillsides, and gravelly washes in chaparral, cismontane woodlands, valley and foothill grasslands of the inner slopes of the outer South Coast Range. | | | | |
| Hardham's evening- primrose Camissonia hardhamiae | //List 1B | Chaparral, cismontane woodland/sandy, decomposed carbonate, disturbed or burned areas. | | | | |
| Hoover's eriastrum Eriastrum hooveri | //List 4 | Chenopod scrub, pinyon and juniper woodland, valley and foothill grassland. | | | | |
| Oval-leaved snapdragon Antirrhinum ovatum | /List 4 | Woodland, chaparral, valley and foothill grasslands. | | | | |
| Rayless aphanactis Senecio aphanactis | //List 2 | Chaparral, cismontane woodland, coastal scrub / alkaline. | | | | |
| Round-leaved filaree Erodium macrophyllum | /List 2 | Valley grassland, foothill woodland. | | | | |
| San Luis Obispo sedge Carex obispoensis | /List 1B | Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland, usually in transition zone on sand, clay or serpentine in seeps. | | | | |
| Shining navarretia Navarretia nigeliformis ssp. radians | /List 1B | Valley and foothill grasslands typically associated with vernal pools and mesic areas below 1000 feet in the Great Central Valley and from San Luis Obispo to Contra Costa County. | | | | |
| Straight-awned spineflower Chorizanthe rectispina | /List 1B | Chaparral, cismontane woodlands, and coastal scrub communities from Monterey to San Luis Obispo Counties. | | | | |
| | | FISH | | | | |
| Steelhead – Central California ESU Oncorhynchus mykiss irideus | FT/CSC | Fresh water, fast flowing, highly oxygenated, clear, cool streams where riffles tend to predominate pools. Perennial pools for two year juvenile rearing cycle. | | | | |
| | AMP | HIBIANS/REPTILES | | | | |
| Arroyo toad Bufo microscaphus californicus | FE/CSC | Overflow pools adjacent to the inflow channel of third to greater order streams that are free of predatory fish in which to breed. Favors exposed pools that are shallow, sand or gravel-based and have a low current velocity. | | | | |
| California horned lizard Phrynosoma coronatum frontale | FSC/CSC | Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. | | | | |
| California red-legged frog Rana aurora draytonii | FT/CSC | Ponds and low gradient streams in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. | | | | |
| Two-striped garter snake Thamnophis hammondii | /CSC/ | Highly aquatic, in or near permanent fresh water. | | | | |

Table 2.3-1 Special-Status Species Potentially Occurring in the Templeton-Atascadero Bikeway Connector Project Vicinity

| Species | Status* Fed/CA/CNPS | Habitat Requirements | | | | |
|--|------------------------|---|--|--|--|--|
| Western spadefoot toad Scaphiopus hammondii | FSC/CSC | Grassland habitats, and vernal pools for breeding/egg-laying. | | | | |
| Western pond turtle Clemmys marmorata | FSC/CSC | Permanent water with basking sites such as partially submerged logs, vegetation mats, or open mud banks and uplands for breeding. | | | | |
| BIRDS | | | | | | |
| White-tailed kite (nesting) Elanus leucurus | /FP | Open country, grasslands and marshes; nest in trees. | | | | |
| Cooper's hawk (nesting) Accipiter cooperi | /CSC | Forages and nests in open woodlands and wood margins, riparian forests. | | | | |
| Sharp-shinned hawk (nesting) Accipiter striatus | /CSC | Forages and nests in open woodlands and wood margins, riparian forests. | | | | |
| Northern harrier Circus cyaneus | /CSC | Forages and nests in grasslands and marshes. | | | | |
| Prairie falcon (nesting) Falco mexicanus | /CSC | Open country habitats in grasslands; nest in cliffs overlooking large open areas. | | | | |
| Burrowing owl Athene cunicularia | FSC/CSC | Grasslands; nest in burrows of California ground squirrel. | | | | |
| California horned lark Eremophila alpestris actia | FSC/CSC | Sparse coastal sage scrub, grasslands. | | | | |
| Yellow warbler Dendroica petechia brewsteri | /CSC | Riparian habitats, prefers willows, cottonwoods, aspens, sycamores and alders for nesting and foraging. | | | | |
| Loggerhead shrike Lanius ludovicianus | /CSC | Coastal sage scrub, grasslands. | | | | |
| Least Bell's Vireo Vireo bellii pusillus (nesting) | FE/SE | Low riparian growth. | | | | |
| MAMMALS | | | | | | |
| American badger Taxidea taxus | FSC/CSC | Friable soils and open, uncultivated ground. Preys on burrowing rodents. | | | | |
| Monterey dusky-footed woodrat Neotoma fuscipes luciana | FSC/CSC | Forest habitats, some chaparral. | | | | |
| San Joaquin pocket mouse Perognathus inornatus | FSC/ | Dry, open grasslands or scrub areas. | | | | |

CSC = California Species of Special Concern; FSC = Federal Species of Concern; SE = State Endangered; ST = State Threatened; FE = Federally Endangered; FT = Federally Threatened; FP = California Fully Protected; SR = State Rare; CNPS List 4 = limited distribution; CNPS List 3 = review list; CNPS List 2 = rare or endangered in California; CNPS List 1B = rare or endangered in California and elsewhere; - - = no status

Special-Status Plants and Plant Communities of Special Concern. The CNDDB contains records of 21 special status plants and two plant communities of special concern that are known from relatively localized occurrences in the vicinity of the Templeton-Atascadero Bikeway study area. The majority of these species have highly specialized habitat requirements that do not occur in the study area (i.e.: sandy beaches, coastal dunes, coastal lagoons, vernal pools, chaparral, serpentine seeps, and rock outcrops). Six of these special-status species potentially occur in the study area and include: dwarf calycadenia (*Calycadenia villosa*), Hardham's evening-primrose (*Camissonia hardhamiae*), round-leaved filaree (*Erodium macrophyllum*), San Luis Obispo sedge (*Carex obispoensis*), shining navarretia (*Navarretia nigeliformis* ssp. *radians*), and straight-awned spineflower (*Chorizanthe rectispina*). Other sources indicate that four additional plant species known from the vicinity, Douglas' spineflower (*Chorizanthe douglasii*), Hoover's eriastrum (*Eriastrum hooveri*), oval-leaved snapdragon (*Antirrhinum ovatum*), and rayless aphanactis (*Senecio aphanactis*), have the potential to occur in the study area. Due to the high level of past and present disturbance of the study area, the presence of the majority of



these species is highly unlikely. However, they cannot be dismissed from occurring until seasonally timed surveys have been conducted.

Two rare habitat types listed by the CNDDB as plant communities of special concern occurring within the vicinity of the study area are Northern Interior Cypress Forest and Valley Oak Woodland. The Northern Interior Cypress Forest occurs in very specific locations on the Cuesta Ridge to the south of the study area on serpentine soils which are not present in the study area. The valley oak trees found on the site are generally mixed with riparian habitat or are too few in number to comprise valley oak woodland.

Special-Status Wildlife. Rincon Consultants conducted a literature review, consulted the CNDDB, contacted knowledgeable individuals, and used our own knowledge to identify 30 special-status wildlife species with suitable habitat in the greater Templeton and Atascadero region. Ten of these species have habitat requirements that do not occur on the bikeway study area such as coastal environments (i.e. sand dunes and coastal streams) and vernal pools. One of these species, the San Joaquin kit fox, which is known from northern San Luis Obispo County, is not known to travel this far south. Of the 30 species identified the 20 following special-status species potentially occur in the study area perennially, seasonally or occasionally: Steelhead - Central California ESU (Oncorhynchus mykiss irideus), California horned lizard (Phrynosoma coronatum frontale), California red-legged frog (Rana aurora draytonii), western spadefoot toad (Scaphiopus hammondii), western pond turtle (Clemmys marmorata), white-tailed kite (nesting) (Elanus leucurus), Cooper's hawk (nesting) (Accipiter cooperi), sharp-shinned hawk (nesting) (Accipiter striatus), northern harrier (Circus cyaneus), prairie falcon (nesting) (Falco mexicanus), burrowing owl (Athene cunicularia), California horned lark (Eremophila alpestris actia), yellow warbler (Dendroica petechia brewsteri), loggerhead shrike (Lanius ludovicianus), least Bell's vireo (nesting) (Vireo bellii pusillus), Monterey dusky-footed woodrat (Neotoma fuscipes luciana), and San Joaquin pocket mouse (Perognathus inornatus). Please see Table 2.3-1 for additional information.

B. DESCRIPTION AND ANALYSIS OF CONSTRAINTS

This section analyzes potential constraints that are found within the study area. The potential biological constraints identified for the entire study area are 1) riparian and riverine habitat/wetlands; 2) oak trees; 3) impacts to special-status species habitat; and 4) impacts to nesting birds. These are described in detail below.

B-1. Riparian and Riverine Habitat /Wetlands.

Riparian, riverine, and wetland habitat types are of special concern to the resource agencies due to the extensive loss of these habitat types in California and due to the high value for wildlife. Impacts to riparian and riverine habitat types and associated watercourses and wetlands should be avoided to the extent feasible. In order to meet the Corps criteria of a wetland, the area must contain wetland hydrology, hydric soils and a predominance of hydrophytic (wetland) vegetation.

B-2. Oak Trees.

Development within northern San Luis Obispo County has resulted in the removal of oak trees and loss of oak woodland habitat. Oak trees are also expected to decrease in numbers

because of the natural course of senescence and the current lack of regeneration due to a number of factors including grazing. If oak trees are removed as a result of bikeway construction, the County of San Luis Obispo would require standard mitigation and protection measures that include a 4:1 replacement ratio (trees replaced to trees lost) for oak trees greater than six inches diameter at four feet from the ground. Additionally, a 2:1 replacement ratio for oak trees impacted but not removed as a result of construction activities would also be required. A maintenance and monitoring program should be developed to ensure the trees become established within a specific time period.

B-3. Special-Status Species.

Special-Status Plants and Plant Communities of Special Concern

Ten special-status plant species are identified in Table 2.3-1 that have the potential to occur on the Templeton-Atascadero Bikeway study area. These species include:

- a. Douglas' spineflower (CNPS List 4);
- b. dwarf calycadenia (CNPS List 1B);
- c. Hardham's evening-primrose (CNPS List 1B);
- d. Hoover's eriastrum (CNPS List 4);
- e. oval-leaved snapdragon (CNPS List 4);
- f. rayless aphanactis (CNPS List 2);
- g. round-leaved filaree (CNPS List 2);
- h. San Luis Obispo sedge (CNPS List 1B);
- i. shining navarretia (CNPS List 1B); and
- j. straight-awned spineflower (CNPS List 1B).

While plants on this list are not formally listed as Federally or State threatened or endangered and do not receive legal protection as such, some are included on the CNPS List 1B and List 2. Impacts to a CNPS List 1B and List 2 species could be considered significant through the California Environmental Quality Act (CEQA) review process. Specifically, Section 15380 (b and d) of CEQA establishes criteria for endangered, rare or threatened species if that species is not presently listed or threatened with extinction, but is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environmental conditions worsen. Therefore, through Section 15065 (a) of CEQA, a mandatory finding of significance can be determined if "the project has the potential to substantially degrade the quality of the environment,...reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."

Special-Status Wildlife

Twenty special-status animal species were identified that are potentially in the vicinity of the Templeton-Atascadero bikeway study area. This area has received a substantial amount of disturbance and because that disturbance is ongoing, the chances of the following special-status species occurring in the study area decreases. However, the potential for these species to occur cannot be dismissed, especially in areas that do not receive regular disturbance such as within the Salinas River corridor and Graves and Paso Robles Creeks. No specific surveys for special-status wildlife were conducted

during the field visits. Surveys for special-status wildlife typically involve seasonally timed site visits on several separate occasions. The following species are listed as either Federally or State threatened or endangered and have the potential to occur on-site. These species are listed in the CNDDB search and other appropriate resource materials. The action required if the proposed project were to impact special-status wildlife species individuals or their habitat follows.

- o **Southern Steelhead** (*Onchorhynchus mykiss*). Potential habitat for steelhead comprised of clear water with riffles and pools exists in portions of the Salinas River that occur within the project area. At times when Graves and Paso Robles Creeks hydrologically connect to the Salinas River, these Creeks would also have the potential to contain steelhead. Thus, this species may exist at seasonally suitable times within the study area. The Salinas River is a known migration corridor for this species and has been designated as critical habitat by the NMFS.
- o California Red-Legged Frog (*Rana aurora draytonii*). The California red-legged frog (CRLF) may exist within riparian and wetland habitat in the planning area. This species would likely occur in slow moving or ponded areas deeper than two feet with emergent vegetation and cover within the Salinas River, Paso Robles Creek, and Graves Creek. This species may also use upland areas such as grasslands for migration. Recent studies have identified the occurrence of CRLF in Paso Robles and Graves Creeks (pers. comm. Mary Lea, 2002).
- Least Bells Vireo (Vireo bellii pusillus). Least Bell's vireo (LBV) is a bird that typically nests from early April through the end of July in southern and central California in low riparian vegetation in the vicinity of water or in dry river bottoms. Suitable habitat occurs within riparian habitat types associated with the Salinas River, Paso Robles and Graves Creeks in the study area. This species was observed nesting in the Salinas River twenty years prior in 1983. The nearest recent sighting on the central coast was along the Santa Maria River directly below the Twitchell Reservoir Dam in 1993. LBV is not expected to occur onsite because it is better known from the Santa Ynez River in Santa Barbara County, however, it cannot be dismissed as a seasonal inhabitant.
- o **Arroyo Toad** (*Bufo microscahpus californicus*). Typical habitat for arroyo toad consists of rivers that have shallow, gravelly pools adjacent to sandy terraces. Breeding habitat consists of large streams with persistent water from late March until mid-June. The northern extent of the historical distribution for this species occurs in the Salinas River corridor. At this time the arroyo toad cannot be ruled out from potentially occurring in the on-site watercourses.

Other special-status wildlife species not listed as Federally or State threatened or endangered but that occur on Table 2.3-1 have the potential to use the grassland, coastal scrub, riparian, and wetland habitats for foraging, nesting, or migration.

B-4. Nesting Birds.

Also of concern are potential impacts to nesting birds from construction related activities. Section 3503 of the California Fish and Game Code (CFGC) prohibits the take, possession, or needless destruction of birds, their nests, or eggs. CFGC Section 3503.5 prohibits the take, possession, or destruction of any birds-of-prey or their nests or eggs. Potential nesting sites for birds-of-prey and other migratory birds are also protected by the Migratory Bird Treaty Act (MBTA). Abiding by the CFGC code and the MBTA usually means to avoid removal of trees with active nests or disturbance of the nests until such time as the adults and young are no longer reliant on the nest site. Potential nesting sites exist in the riparian habitat, oak trees and ornamental trees in the study area.

Other Habitat Communities Not Considered to be Constraints

Several identified habitat communities are not considered to present significant constraints to trail development. Non-native annual grasslands are not typically considered plant communities of special concern and are not legally protected unless they contain a predominance of native perennial grasses or are known to support special-status species. The coastal scrub habitat types on-site are also not considered plant communities of special concern. Several forms of coastal scrub habitat types (e.g. Coyote Brush/Purple Needlegrass and Coyote Brush / Ocean Spray) are considered plant communities of special concern. These forms of coastal scrub habitat types were not observed in the study area. However, both the non-native annual grassland and the coastal scrub habitat types may support special-status species.

C. ACTIONS REQUIRED IF CONSTRAINTS ARE ENCOUNTERED

This section describes the actions needed if the identified constraints are encountered as a result of trail implementation. This section also describes the cost and timing implications of these actions. From this information, it is possible to assess the relative severity of the constraints.

In order to be more time efficient and cost effective, the recommended technical studies (wetland delineation, protocol species surveys) should be conducted concurrently, if required as a result of the placement of the trail alignment.

B-1. Riparian and Riverine Habitat/Wetlands

Cost Constraint: moderate
 Timing Constraint: moderate
 Overall Severity of Constraint: moderate

Actions Needed to Address Constraint:

Wetland Delineation and Corps Permitting. If a trail segment traverses indicated areas, a wetland delineation should be conducted to determine the location and extent of jurisdictional wetlands. Any activity that would remove or otherwise alter riparian, riverine, and wetland habitats in the study area would be closely scrutinized by the resource agencies through the California Environmental Quality Act (CEQA) review process and then later through the CDFG, Corps and the Regional Water Quality Control Board (RWQCB) agreement/ permitting/ certification processes. Impacts on

riparian habitat types would also require onsite compensatory mitigation to replace any habitat lost resulting from construction activities. Riparian, riverine, and wetland habitat should also be buffered from project activities by an average 50-foot setback with a minimum setback of 25 feet. Additionally, on-site riparian habitats contain known occurrences of listed and special-status species that would require evaluation during the permit process (see special-status species discussion below for additional information).

Any impacts to the Salinas River, Graves Creek, Paso Robles Creek, or associated watercourses, and the associated riparian and wetland habitat would also likely fall under the jurisdiction of the U.S. Army Corps of Engineers (Corps) as waters of the U.S. pursuant to Section 404 of the Clean Water Act (1972) and pursuant to Section 1600 et. seq. of California Fish and Game Code, and would require a permit/agreement from these two agencies. Pursuant to Section 401 of the Clean Water Act, any action that requires a Corps Section 404 permit also requires Water Quality Certification from the RWQCB to ensure the project would uphold state water quality standards. A free span style bridge may avoid impacting Corps jurisdictional areas, but would still require a CDFG Streambed Alteration Agreement (see below). Impacts due to bridges/crossings that involve construction activity within watercourses can be avoided by planning construction for the summer and fall months when watercourses are dry when there is little chance of rainfall.

Many projects within Corps jurisdiction are authorized by Nationwide Permits (NWPs) pursuant to the Clean Water Act Section 404 Nationwide Permit Program depending on the project purpose, level of disturbance, project duration, and other criteria set forth in the Nationwide Permit terms and conditions. NWPs involving discharges or fills into wetlands would require a wetland delineation using the accepted Corps methodology to determine the location and extent of wetlands impacted by the project. The Corps verifies the wetland delineations prepared by applicants. Projects with impacts to waters of the U. S. greater than 0.5 acre may require a Corps Individual Permit.

NWP 14 specifically authorizes activities required for the construction of linear transportation crossings including trails if the activity does not cause the loss of greater than 0.5 acre of waters of the U. S. A pre-construction notification would be required if discharge from the project causes the loss of greater than 0.1 acre of waters of the U. S. or if there is discharge in a special aquatic site including wetlands. These acreage thresholds will include aggregating all project elements as the Corps will view this as a single and complete project for NWP authorization. Where a road segment has multiple crossings of streams the Corps will consider whether it should use its discretionary authority to require an Individual Permit. The placement of pilings in waters of the U. S. may constitute a discharge of fill material and would require a Section 404 permit. However, placement of pilings for linear projects, such as bridges that generally do not have the effect of a discharge of fill material may be exempt from 404 regulations.

If an Individual Permit is required an alternatives analysis is necessary in compliance with the Environmental Protection Agency (EPA) 404(B)(1) guidelines to demonstrate that the permit is issued on the least damaging practicable alternative. The key factors to demonstrate the least damaging practicable alternative includes the effects on the

aquatic ecosystem, followed by cost and technical feasibility. Other issues such as upland habitats and local issues called out in the public review process also need to be considered.

The Corps also needs to conduct NEPA compliance on issuing an Individual Permit, which is typically an Environmental Assessment (EA). In order to expedite preparation of the EA, the applicant may be able to provide a draft EA to the Corps for their use. The basis for much of the EA would be the CEQA documents that would be prepared for the project.

The Corps will likely receive comments on the Public Notice required by the Individual Permit process that would need to be addressed in either plan revisions and/or a response to comments document. The Corps typically looks to the applicant to address comments raised by the public. The consulting firm that prepares the permit package should prepare responses to the public comments.

Timing: Preparing the NWP preconstruction notification submittal package to the Corps may take up to 15 days. An Individual Permit application and alternatives analysis would require 30 days. Wetland delineations may take up to 30 days to complete. The Corps wetland delineation verification process could take from 30-60 days. Project activities authorized by Nationwide Permits can proceed without notifying the Corps District Engineer unless preconstruction notification is necessary. If preconstruction notification is necessary the project can proceed approximately 60-90 days after the Corps receives the preconstruction notification unless the District Engineer notifies the permittee within that time that an Individual Permit is required, which then may take up to one year.

Estimated Costs: NWPs do not require a fee. NWP application preparation may cost \$2,500 and Individual Permit application preparation may cost from \$7,500 to \$25,000. A wetland delineation may cost between \$5,000 and \$10,000 and if there will be impacts to wetlands a mitigation plan is necessary. Preparation of a mitigation plan may cost \$7,500 and monitoring may cost \$5,000 per year not including operations and maintenance fees of the mitigation area (irrigation, weed abatement, etc.).

CDFG Permitting. In order to notify the CDFG of a proposed project that may impact a river, stream or lake as required by Fish and Game Code Section 1600 (1601 for public projects or 1603 for private projects), a Lake or Streambed Alteration Notification Form and a Project Questionnaire form along with the appropriate fees must be submitted to the CDFG. CEQA compliance or notice of exemption is also required.

<u>Timing</u>: A Lake or Streambed Alteration Notification Form and a Project Questionnaire require approximately 15 days to prepare and approximately 90 days to process.

<u>Estimated Costs</u>: The Streambed Alteration Agreement notification package preparation may cost approximately \$2,000. A non-refundable application fee of \$154 is required. Projects costing from \$25,000 to \$500,000 require an additional fee of \$618.75 for processing, and projects costing over \$500,000 require an additional fee of \$1,236.50.

RWQCB Permitting. Water Quality Certification requires a completed Section 401 Application Form, a completed copy of the federal application for the Corps Permit, and the appropriate fees, in addition to CEQA compliance.

<u>Timing</u>: The RWQCB certification application requires approximately 15 days to prepare. Certification requires approximately 30-60 days from submittal of the completed application which includes CEQA compliance.

<u>Estimated Costs</u>: A filing fee deposit of \$500 is required for initial review. Permit package preparation may cost approximately \$2,000. The cost to replace lost habitat is \$1,000 per acre of impact or part thereof.

Mitigation Requirements for Loss of Habitat. The Corps, CDFG, and RWQCB typically require compensatory mitigation to replace temporary and permanent loss of wetland and riparian habitat in ratios of 2:1, 3:1, and 5:1 (acres replaced to acres lost) respectively. The amount of habitat to be restored, a monitoring program, and an adaptive management plan to help ensure the success of the habitat restoration will be required by the agencies.

<u>Timing</u>: A mitigation and monitoring plan can usually be developed in about 30 days. The time required to monitor and maintain is generally five years to prove successful implementation of the mitigation program.

<u>Estimated Costs:</u> Preparation of a mitigation plan for the agencies may cost approximately \$7,500. Compensatory mitigation and construction generally ranges in cost from \$50,000 to \$75,000/acre and approximately \$5,000 to \$10,000 per year for monitoring and maintenance.

B-2. Oak Trees

Cost Constraint: moderate
 Timing Constraint: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Oak Tree Replacement. If oak trees are removed as a result of bikeway construction, the County of San Luis Obispo would require standard mitigation and protection measures that include a 4:1 replacement ratio (trees replaced to trees lost) for oak trees greater than six inches diameter at four feet from the ground. Additionally, a 2:1 replacement ratio for oak trees impacted but not removed as a result of construction

activities would also be required. A maintenance and monitoring program should be developed to ensure the trees become established within a specific time period.

<u>Timing</u>: An oak tree replacement maintenance and monitoring plan typically lasts about three years from the time of installation or until the trees have become successfully established.

<u>Estimated Costs:</u> The cost to replace oak trees is approximately \$50 per tree assuming that a 15-gallon tree is installed and that it is caged and staked. Maintenance and monitoring for three years may cost approximately \$2,000 to \$15,000 depending on the number of trees replaced and County requirements for maintenance and monitoring.

B-3. Special-Status Species

Cost Constraint: moderate
 Timing Constraint: high
 Overall Severity of Constraint: moderate

Actions Needed to Address Constraint:

Special-Status Plant Surveys. In order to avoid impacts to special-status plants, we recommend conducting seasonally-timed focused surveys for the plant species identified in Table 2.3-1. The location and extent of any rare plant occurrences observed on the site should be accurately mapped onto site-specific topographic maps so these areas may be avoided. If avoidance is not feasible, the CDFG should be notified and a mitigation and monitoring program should be developed and implemented to reduce potentially significant issues identified under CEQA to a level of insignificance. The rare plant mitigation program may include a salvage and relocation program of any rare plants found on-site, to preserved open space areas (with appropriate habitat) on or close to the site to ensure the long-term survivability of the species. Salvage and relocation activities may include: seed collection, germination of seed by a qualified horticulturist in a nursery setting and transplanting seedlings and hand broadcasting seed into the appropriate open space habitats. The mitigation and monitoring program should establish annual monitoring to ensure success of the mitigation effort.

<u>Timing</u>: Up to three separate survey visits conducted in the spring and summer to determine the presence or absence of the species may be required to capture the flowering period of the target species. Annual monitoring should last at least five years to ensure establishment and no-net-loss of the species.

<u>Estimated Costs:</u> Plant surveys, depending on bloom periods may cost approximately \$5,000. Mitigation plan preparation may also cost approximately \$5,000, and mitigation monitoring may cost an additional \$5,000 annually.

<u>Special-Status Wildlife Surveys</u>. If special-status species are found to occur within the project impact area the project should be designed to avoid the species and their habitat

wherever feasible. If impacts to special-status species cannot be avoided the following actions would be required.

Pursuant to the Federal Endangered Species Act (FESA), a permit from the USFWS is required for "take" of a Federally listed species through either Section 7 or Section 10 of the act. "Take", defined by the FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Species "take" can be authorized under Section 7 of the FESA if a Federal agency is involved in the project (e.g., Corps Section 404 permitting for impacts to waters of the U.S. and/or Federal funding) and agrees to be the lead agency requesting Section 7 consultation. This consultation process takes at least 135 days from the official request for consultation by the Federal lead agency, and includes a Biological Assessment of the predicted impacts of the project and the net effects on the species with measures to avoid, minimize, and mitigate for such impacts. The result is a Biological Opinion rendered by USFWS that includes a specified allowable incidental take as well as terms and conditions to minimize and offset such take. Take authorization may or may not be issued for the construction of a specific project.

The Section 10 process is used to authorize incidental take when no Federal agency is involved. This process typically takes several (at least two) years and includes development of a Habitat Conservation Plan (HCP) for protecting and enhancing the Federally listed species at a specific location in perpetuity. If no Federal nexus can be invoked through the Section 404 permitting process, the only option is to obtain a Section 10 permit for construction activities that would impact any of the Federally listed species. All work in the Salinas River, creeks, watercourses, and wetlands in the study area would likely require Corps involvement, and therefore, a Section 7 consultation between the USFWS and/or the NMFS could provide endangered species take coverage.

CEQA documentation may make a finding of significance for impacts to the special-status species from Table 2.3-1 not listed as Federally or State endangered. If avoidance of special-status species or their habitat is not feasible, and if they are locally rare or would be impacted to such an extent to cause local extirpation, a mitigation and monitoring program would likely be required to ensure the long-term survivability of the species and to reduce significant impacts under CEQA to a less than significant level. Annual monitoring would be required to ensure no-net-loss of the species.

<u>Timing:</u> If Section 7 consultation can be instated, authorization for the "take" of special-status wildlife may take at least 135 days. If no federal nexus is available for the project, the Section 10 process including the preparation of an HCP may require several years to complete.

<u>Estimated Costs</u>: Surveys to determine the presence or absence of CRLF or steelhead may cost approximately \$5,000 and \$10,000 respectively. Surveys for other special-status species may cost approximately \$5,000.

B-4. Nesting Birds

Cost Constraint: low
 Timing Constraint: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Nesting Bird Pre-Construction Surveys. Trail construction should not cause the abandonment of an active nest in the study area. Impacts may be avoided by conducting construction activities outside of the February 1 to August 31 nesting window. If construction is to occur during this time, pre-construction surveys should be conducted to determine the presence or absence of nesting birds.

<u>Timing</u>: Pre-construction surveys should be conducted 2 weeks prior to construction. In the event that nesting birds are located, construction should be delayed until adults and young are no longer reliant on the nest site. Depending on potential species and their nesting periods construction activities may not be delayed.

<u>Estimated Costs:</u> Surveys to determine the presence or absence of nesting birds may cost approximately \$2,500.

2.4 AGRICULTURAL RESOURCES

A. EXISTING CONDITIONS AND KEY ISSUES

Introduction

This section of the Constraints Analysis discusses the possible effects that the implementation of the proposed bikeway trail could have regarding on-site agricultural production and prime soils. The primary constraints to the proposed trail development with regard to on-site agricultural resources include the following:

- Land Use Compatibility. Conflicts may arise due to the conversion of agricultural land to recreational use and the existence of Williamson Act properties. Trail Segments 11-15 are proposed on sites that contain existing agricultural operations, which could result in conflicts between recreational and agricultural uses.
- *Soils Conversion.* Portions of the subject property contain soils classified as prime and have been designated Class I or II soils by the Natural Resource Conservation District. These soils are considered to have few to moderate amounts of soil related limitations with regards to agricultural productivity.
- *Agricultural Chemical Hazards*. Areas of the project site that currently or have historically been in agricultural use could contain hazardous quantities of residual agricultural chemicals that could result in hazards if improperly handled.

Project Site Agricultural Resources and Soil Characteristics

On-Site Agricultural Resources. Agricultural use on the project site has included cattle grazing and crop production as part of private farms. According to John Warrick of the San Luis Obispo County Agricultural Commissioners Office (May, 2003) existing agriculture within the study area includes approximately 45 acres of vineyards and over 21 acres of dryland grain farming and cattle grazing west of Highway 101. Existing on-site agricultural infrastructure includes farmhouses, barns, irrigation systems and other structures associated with the farm operations west of Highway 101. The portion of the study area east of the Salinas River is currently in agricultural production and consists primarily of cattle grazing and some dryland crops.

In addition, according to the County Planning and Building Department (Terry Wahler, May, 2003), certain parcels found within the subject site could be subject to Williamson Act contracts. The parcel identified as APN 034-131-028 (refer to Figure 2.7-1) contains the only agricultural preserve contract that could have a bearing on trail implementation with regards to Trail Segment 15. Agricultural preserve contracts are executed through procedures enabled by the California Land Conservation Act of 1965, also known as the Williamson Act. A contract may be entered into for property with agricultural, recreational and open space uses in return for decreased property taxes. The county Agricultural Preserve Rules of Procedure require certain

minimum parcel sizes and land use restrictions applicable to agricultural preserve lands under their respective contracts.

To be eligible for Williamson Act designation, a minimum 100 acres of non-prime land is typically required and that land must be used to produce an agricultural commodity that is plant or animal and is produced in California for commercial purposes. The inclusion of a parcel in a Williamson Act is entirely voluntary.

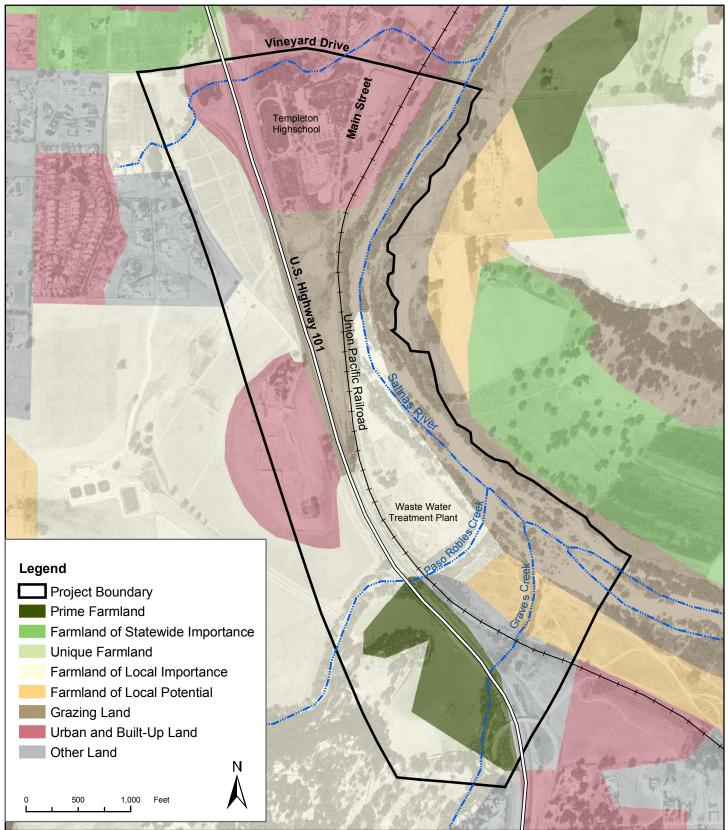
The presence of a Williamson Act contract would not preclude the development of a trail, provided that the amount of land specified within the contract for preservation remains after implementation of the trail. In the case of APN 034-131-028, the proposed Trail Segment 15 would only impact a relatively small portion of the parcel contained within the banks of the Salinas River. It is not anticipated that the presence of an agricultural preserve contract on this parcel will constitute a significant constraint.

On-Site Soil Characteristics. A total of nine soil types have been identified within the subject property. Some of these soils are considered prime (Class I or II) soils. These soils and their descriptions are shown in Table 2.4-1.

Table 2.4-1. On-Site Soil Characteristics

| Soils | Permeability | Surface Runoff | Erosion Hazard | Shrink- Swell Potential | Capability Class | |
|---|------------------------------------|-------------------|-------------------|-------------------------------|------------------|-------------------|
| | | | | | Irrigated | Non- Irrigated |
| Still Clay Loam (0 to 2 percent slopes) | Moderately Slow | Slow | Slight | Moderate | Class I | Class IV |
| Still Gravelly Loam (0 to 2 percent slopes) | Moderate | Slow | Slight | Moderate | Class II | Class IV |
| Xerofluvents-Riverwash Association | N/A | Medium | Very High | N/A | N/A | N/A |
| Arbuckle-San Ysidro Complex (2 to 9 percent slopes) | Moderately Slow to Very Slow | Medium | Moderate | Moderate to High | Class II | Class IV |
| Arbuckle-Positas Complex (15 to 30 percent slopes) | Moderately Slow to Very Slow | Rapid | High | High | Class IV | Class IV |
| Hanford and Greenfield Fine Sandy Loams (2 to 9 percent slopes) | Moderately Rapid | Medium | Moderate | N/A | Class II | Class IV |
| Gazos Shaly Clay Loam (9 to 30 percent slopes) | Moderately Slow | Rapid | High | N/A | Class IV | Class IV |
| Pico Fine Sandy Loam (2 to 9 percent slopes) | Moderately Rapid | Medium | Moderate | N/A | Class II | Class IV |
| Metz Loamy Sand (0 to 5 percent slopes) | Moderately Rapid | Slow | Slight | N/A | Class III | Class IV |

Source: Natural Resources Conservation Service, Soil Survey of San Luis Obispo County, California, Paso Robles Area.



Source: National Resource Conservation Service, Farmland Mapping and Monitoring Program, 2000.

Figure 2.4-1 indicates the location of prime farmland within the study area as defined by the Natural Resources Conservation Service. Some of the land that contains otherwise high quality soils have not been identified as prime because they have been disturbed or developed, such as the land supporting the wastewater treatment plant.

Agricultural production is currently limited to the portions of the study area west of Highway 101 and east of the Salinas River. These areas also contain Class I and II soils. According to the Natural Resources Conservation Service, Class I and II soils are considered to have few to moderate amounts of limiting factors that would inhibit plant growth and overall production. These soils are considered to be the best soils for potential crop production. Five of the nine soils found on-site are considered to be Class I or II when irrigated (refer to Table 2.6-1).

B. DESCRIPTION AND ANALYSIS OF CONSTRAINTS

The purpose of this section is to provide an analysis of potential agricultural resource constraints associated with the proposed Bikeway Connector Trail. The issues identified as the primary agricultural resource constraints for the proposed project are 1) Land use compatibility associated with the conversion of agricultural land to recreations use; 2) Conversion of Class I and II soils to non-agricultural use; and 3) Current and past use of hazardous agricultural chemicals.

AG-1. Land Use Compatibility.

Trail development could permanently convert areas that previously supported or could support crop production. In addition, development of the proposed trail may result in land use conflicts between existing agricultural operations on-site as well as off-site on adjacent properties. Potential agriculturally-related land use conflicts are described below.

Impacts to Agricultural Uses. Recreational development adjacent to farmland can have several negative impacts on the continued on-site and adjacent agricultural production activities. Direct physical impacts resulting from trespassing may include vandalism to farm equipment and theft of crops. These can result in indirect economic impacts. A recent study showed that crop production in the first two rows adjacent to development is about 20% lower than the rows beyond (Ventura County Agricultural Land Trust, 1996).

Other indirect impacts to agriculture from nearby recreational uses can affect the long-term viability of such operations. Increased regulations and liability insurance to protect the farmer from adjacent recreational uses cost time and money. Some farmers sensitive to nearby public uses voluntarily limit their hours of operation and do not intensively use the portions of their property closest to such uses, in effect establishing informal buffer zones on their own property. This has the effect of lowering the crop yield, and therefore the long-term economic viability, of the agricultural operation. In the long run, this may provide an incentive for the property owners of adjacent lands under Williamson Act contract to file a notice of non-renewal. Proposed Trail Segments 11-15 would follow portions of existing service roads on the project site, some of which are used by agricultural vehicles. Some are adjacent to existing agricultural operations. Operation of the trail in these areas could impede the ability for agricultural vehicles to use existing access roads that serve adjacent

operations. In addition, where the trail would be adjacent to irrigated agricultural uses, conflicts between trail users and agricultural operations could occur.

Once the trail is completed, overall public access would increase. However, crop theft and vandalism could arguably decrease because of increased security measures inherent in the project, including fencing and increased public activity, discouraging those who otherwise might feel they could pilfer crops unimpeded. In addition, most trail users would be specifically using the trail for recreational purposes, rather than loitering, an activity that typically requires better pedestrian access to urban centers. The overall impact to farmland production, when one balances marginal impacts to operations against the benefits of increased security and fencing, cannot be accurately quantified.

The Agricultural Commissioner has determined that with the implementation of appropriate design-oriented measures to minimize user conflicts, including fencing, landscaping, signage, and periodic trail closures when spraying and related agricultural operations occur, the trail would be considered consistent with the County's agricultural policy (Warwick, San Luis Obispo County Agricultural Commissioner's Office, May 2003).

Impacts to Recreational Uses. Recreational enthusiasts adjacent to farmland commonly cite odor nuisance impacts, noise from farm equipment, dust, and pesticide spraying as typical land use conflicts. The County's right to farm ordinance would protect on-going agricultural operation from nuisance lawsuits. Pesticides may be used in restricted quantities on both the on-site and off-site agricultural lands.

The County Department of Agriculture/Measurement Standards maintains recommended standards for setbacks (buffers) and screening techniques between development and agricultural property. The Agricultural Commissioner has the authority to impose spray buffers and other restrictions to pest management practices due to development or other potential hazards near agricultural operations. The County Department of Agriculture determines appropriate agricultural buffer distances on a project-by-project basis, based on relevant site and project criteria, practical knowledge of agricultural practices, technical literature, and contact with other professionals.

Land Use Policy. The conflict between agricultural and recreational land uses has been addressed in both the County General Plan and the County Trails Plan. According to the County General Plan (Policy AGP31), recreational uses can be an important part of the rural setting and should be developed so they are compatible with agricultural and environmental resources. Concurrently, General Plan Policy AGP32 states that support should be given to the creation of trails in agricultural areas as long as the establishment of the trails do not adversely impact agricultural activities and are between willing buyers and sellers. The County Trails Plan also addresses this issue. According to the Trails Plan, the primary concerns regarding agricultural land use impacts are security, safety and liability. It is suggested that these issues be mitigated for in the planning and design of recreational trails that present possible impacts to agricultural land uses.

Development of trail segments 11-15 would occur in an area that could result in agriculturally-related land use conflicts. Each of these segments could traverse Williamson

Act contract lands. Trail development within these segments could preclude or interrupt large-scale crop production in these areas in the future, although the project would not preclude future farming activities on the remainder of the site. In addition, Trail Segments 12-14 would be located on soils classified as Prime Farmland (refer to Figure 2.4-1).

AG-2. Soils Conversion.

Trail Segments 11-15 traverse the following Class I or II soils that currently support agricultural production (refer to Table 2.6-1 for their full descriptions):

- Arbuckle-San Ysidro Complex (2 to 9 percent slopes)
- Still Clay Loam (0 to 2 percent slopes)
- Still Gravelly Loam (0 to 2 percent slopes)
- Pico Fine Sandy Loam (2 to 9 percent slopes)

Although the remaining proposed trail segments (Segments 1-10) also traverse Class I and II soils as well, they do not cross lands that support agricultural production. Segments 1-10 are primarily contained in the portion of the project site between Highway 101 and the Salinas River. These areas consist of developed, disturbed and functionally inaccessible lands that would preclude their use for agricultural production.

AG-3. Agricultural Chemical Hazards.

A variety of chemicals are used as pesticides, herbicides, and nutrients on agricultural crops in San Luis Obispo County. According to conversations with John Warrick of the San Luis Obispo County Agricultural Commissioners Office (May, 2003), the dryland farming of grains and vineyards include the use of a variety of chemical herbicides, pesticides and nutrients. The chemicals used for the on-site agricultural fields include the seasonal use of restricted material herbicides to control weeds prior to planting grain. These chemicals include 2, 4 D amine, Dicamba, and MCPA amine. Pesticides used could include seasonal use of restricted material herbicides to control weeds species. Chemicals such a Diuron are commonly used for this purpose. Pesticides used would include various rodents control agents used underground directly in burrows. Some restricted material herbicide use such as Paraquat is used to control weeds between the vineyard rows. Sulfur, a non-restricted chemical may also be use to control various species of mold or mildew. These are just examples of commonly used chemicals and not a comprehensive list of the chemicals that may be used in the project area.

The hazards associated with pesticide, herbicide and chemical nutrient application and residual quantities of such materials as well as current regulations regarding their use are discussed in detail in Section 2.6, *Hazardous Materials*, of this report.

C. ACTIONS REQUIRED IF CONSTRAINTS ARE ENCOUNTERED

The purpose of this section is to describe the actions that would need to take place in the event that the constraints identified in the above discussion are encountered upon implementation of the proposed trail. In addition to a discussion of actions likely to be required, this section will also provide an assessment of cost, timing and overall constraints.

As discussed in Parts A and B above, the primary constraints to the proposed project center around land use compatibility, soils conversion and the use of hazardous chemicals in association with agricultural production.

AG-1. Land Use Compatibility

Cost Constraint: low
 Timing Constrain: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Disclosure of Potential Nuisance. In accordance with the County Right to Farm Ordinance (No. 2050), upon the transfer of real property on the project site, the transferor shall deliver to the prospective transferee a written disclosure statement that shall make all prospective homeowners in the proposed project aware that although potential impacts or discomforts between agricultural and non-agricultural uses may be lessened by proper maintenance, some level of incompatibility between the two uses would remain. This notification shall include disclosure of potential nuisances associated with on-site agricultural uses, including the frequency, type, and technique for pesticide spraying, frequency of noise-making bird control devices, dust, and any other vineyard practices that may present potential health and safety effects. Should crop maintenance practices change substantially (e.g., through the use of new agricultural chemicals or application techniques), notification shall be provided to existing and prospective project residents.

Should Williamson Act lands be identified through a property acquisition process, all contracts shall be reviewed to ensure that all contract lands maintain the minimum acreage required to remain in agricultural use.

Agricultural Buffer. Subject to review by the County Department of Agriculture, a minimum buffer distance between recreational development and row crops may be recommended, since row crops may require aerial pesticide spraying (Warwick, San Luis Obispo County Agricultural Commissioner's Office, May 2003).

Trail Security Measures. In areas adjacent to cropland, the trail shall incorporate security measures to discourage trespassing onto adjacent agricultural lands. These could include, but not be limited to, fencing, signage, and landscaping. The portions of the trail adjacent to irrigated agriculture should include gates, such that it can be closed during times that spraying or other sensitive agricultural operations occur.

<u>Timing</u>: The property transferor shall provide disclosure to prospective homeowners upon the transfer of real property on the project site. Updated disclosure notifications shall be provided to existing and prospective homeowners on the project site as necessary if agricultural maintenance practices change.

Implementation of the agricultural buffer and the installation of trail security measures shall be completed prior to the opening of the trail for public use.

<u>Estimated Cost</u>: The costs associated with the above recommended actions would be nominal.

AG-2. Soils Conversion

Cost Constraint: low
 Timing Constrain: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Prime Soil Conversion Disclosure. According to State CEQA thresholds, the conversion of prime (Class I or II) soils from agricultural use would constitute a significant impact. According to the NRCS Soil Survey of the subject property, the majority of the proposed trail segments could potentially permanently convert prime soils to non-agricultural use. However, Trail Segments 1-10 are proposed for an area that does not currently support agricultural production nor could it support future agricultural uses because it is developed and disturbed. Trail Segments 11-15 are proposed for areas that contain prime soils, Prime Farmland and existing agricultural uses. As such, the development of these trail segments could either preclude and/or interrupt agricultural operations on prime soils.

Should Trail Segments 11-15 be chosen for development, prime soils that support current agricultural uses would be converted to non-agricultural use resulting in significant and unavoidable impacts. There is no feasible mitigation for this, but the overall level of impact with respect to regional agricultural soils would be relatively low.

AG-3. Agricultural Chemical Hazards

Cost Constraint: low
 Timing Constrain: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Refer to HAZ-2, Part C of Section 2.6 *Hazardous Materials*, for a detailed discussion of actions needed to address both the residual quantities and current application of hazardous chemicals for the purpose of agricultural production.

2.5 CULTURAL RESOURCES

A. EXISTING CONDITIONS AND KEY ISSUES

Introduction

The information contained in this section is based on a Cultural Resources Survey completed by Mary Maki of Conejo Archaeological Consultants dated April 3, 2003. The cultural resources survey consists of a historic and prehistoric record search, review of historic USGS topographic maps and aerial photography, and field reconnaissance. The survey identifies three prehistoric archaeological sites and five historic structures located within the study area boundaries. The archaeological sites are a result of Native American occupation and contain historic remains such as stone artifacts, shell fragments and fire-altered rock. Only two of the prehistoric sites have the potential to be considered significant. If impacts were to occur in these locations further investigation would be required to determine significance. However, both of these sites could easily be avoided in the planning stages of the bikeway alignment. The five historic structures that could potentially be impacted by the project consist of two Caltrans bridges, a bridge at Graves Creek, and two Union Pacific Railroad trestles. It is unknown at this time if the bridges or trestles are historically significant. If these structures are to be impacted as a result of project development, an evaluation for historic significance is recommended. The five historic sites may also be avoided when planning the bikeway alignment.

Portions of the site have not been subject to systematic archaeological reconnaissance, thus there is a possibility that undocumented prehistoric and historic sites occur within the project's potential impact area. Once a specific bikeway alignment is chosen, a focused archeological survey should be conducted of areas not previously surveyed that could be impacted.

Methodology

The following information is based on record searches conducted at the Central Coast Archaeological Information Center, a Native American Heritage Commission sacred lands file check, a review of historic USGS topographic quadrangles and aerial photographs housed at the UCSB Davidson Library's Map and Imagery Laboratory, as well as a field visit.

The record search at the Central Coast Information Center (CCIC), which is housed at the University of Santa Barbara, was conducted by Melissa Chatfield, Assistant Coordinator, on February 12, 2003, and by Mary Maki on April 1, 2003. The CCIC is the official repository for all San Luis Obispo County archaeological data. Rob Wood of the Native American Heritage Commission conducted the sacred lands file check on March 12, 2003. Ms. Maki conducted a review of historic topographic quadrangles and aerial photographs of the general project area on April 1, 2003.

The adequacy of the summary of known prehistoric and historic resources, which follows, is limited by the fact that only approximately 50 percent of the potential bikeway alignments have been subject to archaeological reconnaissance. Therefore, it is possible that additional archaeological resources occur within the area of interest that have yet to be identified.

Regional Setting

<u>Prehistory</u>. Templeton and Atascadero are in the vicinity of the historic territorial boundary between the Chumash and Salinan speaking peoples. This boundary between the Chumash and Salinan is not well defined and probably included some overlap of territory. Some researchers have concluded that the southern boundary of Salinan territory extended from Cayucos southeast to the Cuesta Grade, through the Pozo area to the eastern boundary at the Temblor Range. More recent research, based on Mission records, has placed the Chumash/Salinan border near San Miguel. The Native American Heritage Commission's Native American Contact List includes both Chumash and Salinan consultants for the area-extending north from the City of San Luis Obispo to the Monterey/San Luis Obispo County line.

The archaeological record indicates that sedentary populations occupied the coastal regions of California more than 9,000 years ago. Several chronological frameworks have been developed for the Chumash region including those by Rogers, Wallace, Harrison, and King. King postulates three major periods -- Early, Middle and Late. Based on artifact typologies from a great number of sites, he was able to discern numerous style changes within each of the major periods. The Early Period (8000 to 3350 Before Present [B.P.]) is characterized by a primarily seed processing subsistence economy. The Middle Period (3350 to 800 B.P.) is marked by a shift in the economic/subsistence focus from plant gathering and the use of hard seeds, to a more generalized hunting-maritime-gathering adaptation, with an increased focus on acorns. The full development of the Chumash culture, one of the most socially and economically complex hunting and gathering groups in North America, occurred during the Late Period (800 to 150 B.P.). The Obispeño were the northernmost Chumash group, occupying much of San Luis Obispo County. The name Obispeño is derived from the mission with local jurisdiction, San Luis Obispo de Tolosa. Based on Spanish Franciscan Mission documents from Missions San Luis Obispo and San Miguel, and Spanish Expedition Diaries, the project area is considered to be within the political/social district of the village of Sososquiquia, which was also called the village of Asumpcion and Santa Ysabel. The site of Sososquiquia, is located approximately 1.5 miles south of the southern end of the study area.

Linguistically the Salinan are subdivided into three major divisions, the Antoniaño, Migueleño, and the Playanos. The southernmost were the Migueleño, whose name is derived from the Mission San Miguel Arcangel. Currently there is a paucity of archaeological and ethnohistoric data on the Migueleño, especially as compared to information on the Chumash. According to the limited historical and archaeological evidence, the Salinan followed a hunting and gathering lifestyle based on the collection of plant foods, primarily acorns. Fishing and trade were also important components of Salinan society. The Tulare Yokuts were the Salinans main trading partners, while limited trade was conducted with the Chumash to the south (Hester 1978).

The Chumash and Salinan aboriginal way of life was forever altered with Spanish colonization. As neophytes brought into the mission system they were transformed from hunters and gatherers into agricultural laborers and exposed to diseases to which they had no resistance. By the end of the Mission Period in 1834, both the Chumash and Salinan populations had been reduced by disease and declining birthrates, and population loss continued into the next

century. Still today many people claim Chumash and Salinan ancestry and take an active interest in promoting their culture and protecting archaeological evidence of their ancestors.

<u>History.</u> The project area is located along the northwestern edge of the former Rancho Asuncion, which was the southernmost rancho of Mission San Miguel. The settling of the general project area began with the Franciscan clergy who managed the 60,000-acre rancho until 1833, when the Mexican government secularized the mission lands. Governor Pio Pico then granted Pedro Estrada nearly 40,000 acres of Rancho Asuncion, part of which would eventually be a portion of the 23,000-acre Rancho Atascadero.

Located at the northern end of the study area, Templeton was founded in 1886 when the West Coast Land Company surveyed 160 acres south of Paso Robles. This acreage was to be laid out in business and residential lots. Originally named "Crocker" after the famous San Francisco financier, the settlement was renamed Templeton prior to the selling of lots.

In its earliest years, and historic "heyday", Templeton was a railroad boomtown located at the southern end of the railroad line for passengers coming from the north. Passengers disembarked at Templeton and took a stagecoach south to San Luis Obispo. In 1891 the railroad continued south and the town was reduced to a flag stop and is now a bypass. In 1897 a fire burned much of the business district. Today, Templeton has a population estimate of approximately 5,100.

Located at the southern end of the study area, Atascadero was founded by Edward Gardner Lewis in 1913 as a utopian, planned colony. Lewis, a successful magazine publisher from the East, planed to create a utopian community that "would provide the best of both urban and rural life, based on the use of the automobile". Lewis employed the services of experts in agriculture, engineering and city planning to develop his dream colony for the anticipated 30,000 residents. In 1914, the land was surveyed and subdivided, a water system was installed and thousands of acres of orchards were planted. Agricultural and developmental growth in the Atascadero Colony took off, but a decade and half later the Colony was so severely impacted by the Great Depression that Lewis became an imprisoned debtor. Following World War II, the general project region economy picked up again with bean and grain crops as the primary sources of income in the 1940s. Today, agriculture continues to be one of the primary economic activities of the project region. The present-day City of Atascadero evolved from Lewis's colony and was incorporated in 1979. With a current population of nearly 29,000 residents, Atascadero is the second-largest city in San Luis Obispo County.

Site-Specific Setting

<u>Central Coast Information Center Findings.</u> The CCIC records identified 12 archaeological sites and 25 archaeological surveys within a 0.5-mile radius of the study area. No historic archaeological sites were identified through the CCIC database search.

Prehistoric Archaeological Sites. Twelve prehistoric sites have been recorded within a 0.5-mile radius of the study area. Of the 12 sites, seven of them are located outside of any potential project impact areas (four are located north of Vineyard Drive, one is located

southeast of the project area, and two are located west of the study area boundary). The five remaining sites are located within the study area and are described below:

• Site 1. This site was originally recorded as "a light scatter of stone artifacts among natural river gravels eroding from river terrace/knoll" by Gibson in 1981. In 1999 Applied Earthworks conducted Phase-2 testing and evaluation at Site 1 and describe the site as a low-density lithic scatter composed of Monterey and Franciscan chert debitage, cores, and bifaces. Applied Earthworks concludes that Site 1 appears to be a task site or temporary camp occupied at least during the Late Period by the Southern Salinan Nation or ancestors.

In regard to the site's significance, Applied Earthworks excavation report concludes: "The dearth of cultural remains, lack of datable material, and limited analytic value indicate that Site 1 is not an important historical resource as defined by CEQA Section 15064.5 and does not meet the definition of a unique archaeological site per Section 21083.2 of the Public Resources Code. Therefore, the proposed development will not cause significant impacts on cultural resources. Although all archaeological sites have some research potential, the excavation, documentation, and analysis performed to date are sufficient to recover those information values. Additional research or work at the site is not recommended".

- Site 2. This site consists of a recorded occurrence of a light scatter of stone artifacts near Graves Creek by Gibson in 1981. Artifacts noted by Gibson included stone flakes and burnt rock fragments. On the site record Gibson notes that the possibility of destruction of this site was great. Far Western's survey for a fiber optics project in 1998 was unable to relocate this site, but noted ground surface visibility was limited by vegetation. According to Nettles, Applied Earthworks was also unable to relocate this site during their field survey for an RV Park in 1999.
- Site 3. This site consists of a recorded occurrence of a light scatter of stone artifacts and a few shell fragments increasing in density from east to west by Gibson in 1981. Nettles and McIntosh re-recorded the site in 1999 and found eight chert flakes, three chert cores, one shell fragment, and fire-altered rock. Nettles and McIntosh interpret the site to be a lithic reduction area, but note that Gibson theorized that this was a house location based on the presence of mixed shell and flaked stone. Nettles notes that "Buried cultural material may be present because of the site's location on the Salinas River flood plain...The site has the potential to yield more data, and this should be addressed with further testing before a determination of significance is made."
- Site 4. This site was recorded by Von Werlhof in 1969 as a large occupation site on the east side of the Salinas River. Artifacts noted included a portable mortar, pestles, projectile point, manos, mortar fragments and hammerstones. Von Werlhof indicates that although the site has been impacted by plowing it is worthy of further study.

• Site 5. This site was initially recorded by Von Werlhof in 1969 as a temporary camp site near the west side of the Salinas River. This site includes a profuse scatter of fire-altered rock, one midsection of a Franciscan chert projectile point, Monterey and Franciscan chert flakes, chert cores, and pestle and mortar fragments. Applied EarthWorks re-recorded the site in 1999 during a survey for the Atascadero Recreational Vehicle Park and indicated it might represent a seasonal activity area for plant processing. Applied EarthWorks notes: "The site has the potential to yield more data, and this should be addressed with further testing before a determination of significance is made."

Other Database Search Results. In order to provide a complete inventory of historic resources, as well as the above-mentioned archaeological resources, other databases were searched. This search included a review of the National Register of Historic Places, the California State Historic Resources Inventory, the Office of Historic Preservation, the Native American Heritage Commission and the San Luis Obispo County Landmarks database. This search did not include any properties within or adjacent to the subject property that would qualify as historic resources.

However, potentially significant historical resources were identified through field visits. Specifically, five potentially historically significant structures occur within the study area boundaries. Two of the structures are Caltrans bridges that cross Highway 101 at Paso Robles and Graves Creeks. A third bridge occurs over Graves Creek at the southern boundary of the study area. Two train trestles also occur within the study area where the UPRR crosses Paso Robles and Graves Creeks. All five of these structures may be over 50 years of age.

UCSB Davidson Library Map and Imagery Laboratory Finding

USGS 7.5' Topographic Quadrangles

The 1948 15' USGS Templeton Quadrangle shows the railroad track and little other development in the project area. A quarry/mine site is located between the railroad tracks and Route 101 in the northern part of the project area. Paso Robles Creek appears to split into two forks immediately west of Route 101.

The 1948 7.5′ USGS Templeton Quadrangle shows the railroad track and five structures between the train tracks and Route 101. In the same location, the 1948 15′ Quadrangle shows a quarry/mine. Main Street is shown running south of present day Vineyard Drive to the quarry location as an unimproved road with no development alongside it. The community of Templeton is located north of Vineyard Drive.

The 1961 15' USGS Templeton Quadrangle shows the railroad tracks and an electric transmission line which runs northeast to southwest across the southern portion of the study area. The quarry site as shown on the 1948 15' Quadrangle is still present. There is a new road east of Route 101 that extends down to Graves Creek and the railroad tracks. Main Street within the study area is now a paved road. There is scattered development along the west side of Route 101 in close proximity to the unofficial western alignment route. Route 101 is marked as having four lanes.

The 1979 7.5′ USGS Templeton Quadrangle shows the immediate project area as having changed little from the 1961 15′ Quadrangle with the exception of the new Highway 101 interchange at the southern end of the study area. In addition, Vineyard Drive has been extended east of Main Street.

Aerial Photographs

- 1937 Route 101 and railroad tracks present. East of railroad tracks, northern half of Paso Robles Creek flooded to the northwest to the Salinas River.
 Remainder of study area and surrounding areas appear to be in agricultural production.
- 1959 Route 101 and railroad tracks present. A large washout area shows at the mouth of Paso Robles Creek and Graves Creek. Most of the project area appears to be in agricultural production including much of the area that appeared flooded/washed out north of Paso Robles Creek in the 1937 aerial.
- 1985 Route 101 wider, new off-ramp at southern end of study area. Trailer located on the Site 1 area. Templeton High School present. Agriculture still occurs across most of the study area.
- 1992-93 Similar to 1985 aerial, except two areas of disturbance (flooding/grading?) present north of Paso Robles Creek and south of where railroad tracks and Salinas River are juxtaposed.

Regulatory Setting

Significance Criteria

Only state and federal regulations provide criteria for evaluating the importance of cultural resources. No local or county criteria exist beyond what is stated by state and federal regulations. CEQA requires that cultural resources be determined "important" or "not important".

If the lead agency determines that a project may affect an archaeological resource, the agency shall determine whether the effect may be a significant effect on the environment. If the project may cause damage to an important archaeological resource, the project may have a significant effect on the environment. For sites found to be important, mitigation of potential impacts is required.

State laws and regulations involving protection of archaeological resources within San Luis Obispo County include CEQA and code regulations.

California Environmental Quality Act (CEQA). The State of California has formulated laws for the protection and preservation of archaeological resources. Generally, a cultural resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

- a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- b. Is associated with the lives of persons important in our past;
- c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- d. Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

If the project may cause damage to a significant cultural resource, the project may have a significant effect on the environment. Section 15064.5 of CEQA pertains to the determination of the significance of impacts to archaeological and historic resources. CEQA provides guidelines to address archaeological resources that may be adversely affected by project development in Section 151226.4. Achieving CEQA compliance with regard to treatment of impacts to significant cultural resources requires that a mitigation plan be developed for the resource(s). Preservation in place is the preferred manner of mitigating impacts to cultural resources.

California Public Resources Code. Section 5097.9 of the California Public Resources Code stipulates that it is contrary to the free expression and exercise of Native American religion to interfere with or cause severe irreparable damage to any Native American cemetery, place of worship, religious or ceremonial site, or sacred shrine.

State Health and Safety Code § 7050.5 and Public Resources Code §§ 5097.94, 5097.98 and 5097.99. The purpose of the above codes is to provide protection to Native American human burials and skeletal remains from vandalism and destruction and to provide a regular means by which Native American descendents can make known their concerns regarding the need for sensitive treatment and disposition of Native American burials, skeletal remains and items associated with Native American burials.

B. DESCRIPTION AND ANALYSIS OF CONSTRAINTS

Cultural resources are places or objects that are important for scientific, historical, and religious reasons to cultures, communities, groups, or individuals. Cultural resources include archaeological sites, architectural remains, and other artifacts that provide evidence of past human activity. Cultural resources also include places of importance in the traditions of societies or religions. The types of activities conducted at sites and the distance of sites from villages or other types of settlements varied depending on changes in the sizes of territories the region was divided into; the degree to which populations were concentrated in a few or many

settlements; the exact locations of neighboring settlements; and the relative importance of particular resources. Sites may have been used in different ways during different time periods. This section identifies potential constraints with regard to cultural resources that are found within the study area. The potential constraints identified for the entire study area are of three types: archaeological resources, historical resources, and undocumented cultural resources.

B-1. Archaeological Resources.

Five prehistoric archaeological sites, Sites 1 through 5, have been identified within the study area. Based on a Phase-2 excavation, Applied Earthworks determined that Site 1 is not an important historical resource as defined by CEQA Section 15064.5 and does not meet the definition of a unique archaeological site per Section 21083.2 of the Public Resources Code. Therefore, construction of a bikeway near Site 1 (refer to Figure 2.5-1 for a general location of cultural resource constraints) is not expected to result in any significant impacts to a cultural resource. Site 2, which occurs between Paso Robles and Graves Creeks is probably not a significant site, but does require some investigation. Based on the fact that the site could not be relocated by the last two archaeologists who visited it combined with the extent of its disturbed context when recorded by Gibson in 1981, Site 2 is probably not eligible for listing on the NRHP. Sites 3, 4 and 5 all of which are located in the south and east portions of the study area, also require additional testing as all three have the potential to yield more data.

Most of the study area has been subject to varying degrees of ground disturbances which dependent upon the bikeway alignment may include one or more of the following: scouring and redeposition of soils from floods, agricultural activity, railroad construction, trenching for utilities, road construction, and possible quarrying. Regardless of disturbance type some degree of likelihood of finding additional archaeological resources remains. The likelihood that archaeological resources will be encountered in a particular section of the study area was diagrammed onto a constraints severity map (Figure 2.6-1). The four levels of likelihood are defined below:

High:

- General area around and including significant prehistoric cultural resources.
- Potentially significant historic cultural resources (including bridges and train trestles explained below).

High-Moderate:

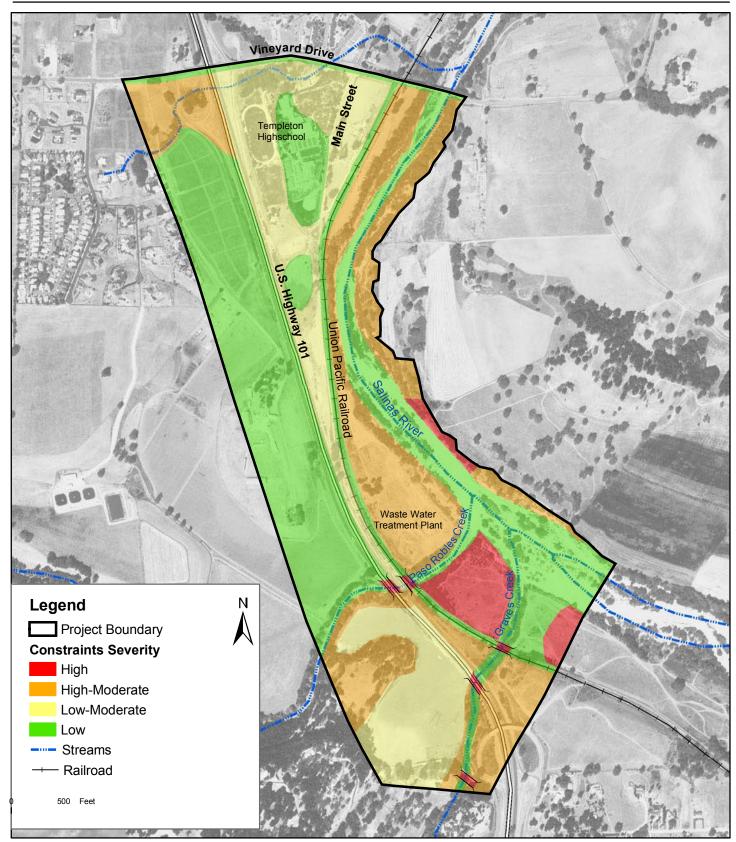
- Areas not previously subject to archaeological reconnaissance that are located near the river, creeks and drainages.
- Areas containing archaeological resource sites that were found to be ineligible for listing on the National Register.

Low-Moderate:

Disturbed areas not previously subject to archaeological reconnaissance.

Low:

- Areas currently or previously disturbed by human occupation.
- River and creek channels.
- Areas previously subject to archaeological reconnaissance.



Source: Conejo Archeological Consultants, Inc., 2003.

The most significant archaeological resources that are documented in this report, (significant prehistoric archaeological sites, potentially significant archaeological sites and potentially significant historic sites), occur largely within the south and east portions of the study area. These areas were diagrammed as having a "high" likelihood of containing cultural resources. The least desirable bikeway placement would be within these areas. Likewise the most favorable areas would be within the portions designated as having a "low" likelihood of finding cultural resources.

Trail alignments with the lowest likelihood of encountering archaeological resources and cultural resources in general would be within the UPRR right-of-way and atop the fiber optic cable route or other buried utilities/pipelines. There are two reasons for this: first, this alignment has already been surveyed; and second, the area has been previously disturbed by railroad construction and trenching for underground utilities/pipelines.

B-2. Historical Resources.

Historic sites are located within the southern end of the study area and consist of two Caltrans bridges, a bridge at Graves Creek along the southern study area boundary, and two UPRR trestles. At this time it is unknown whether or not these structures are significant resources. The Caltrans Highway 101 bridges that cross Paso Robles and Graves Creeks were evaluated in the 1980s as being ineligible for listing on the National Register, however Caltrans may require further testing. If any bridges or trestles requiring modifications are over 50 years of age, then they may require evaluation in order to determine if they meet CEQA's criteria of importance/significance. All of the known historic sites have been given a "high" level of constraints severity on Figure 2.6-1.

B-3. Undocumented Cultural Resources.

As approximately 50 percent of the potential trail alignments have not been subject to systematic archaeological reconnaissance there is a possibility that undocumented prehistoric and historic sites occur within the project's potential impact area. The number of recorded archaeological sites in the general project vicinity and the nearby presence of the Salinas River indicate that the study area is within an area that should be generally considered sensitive for cultural resources. The presence of the Salinas River along with other drainages such as Paso Robles Creek and Graves Creek are also indicative that buried cultural resources may occur within the general project area due to past flooding and the resultant deposition of alluvial soils. Much of the southern portions of the proposed alignments are within the Salinas River 100-year flood zone.

C. ACTIONS REQUIRED IF CONSTRAINTS ARE ENCOUNTERED

This section describes the necessary course of action to take in the event that known archaeological and historical resources are found to be significant, or if additional cultural resources are discovered.

C-1. Archaeological Resources

Cost Constraint: low Timing Constraint: low

Overall Severity of Constraint: low

Actions Needed to Address Constraint:

All areas designated as "high" on the constraints severity map should be avoided to the extent possible. If "high" areas containing known archaeological sites cannot be avoided, further testing would be required before determinations of significance of known archaeological sites can be made. Regardless of the constraints severity level, the following actions would be required of all areas:

Phase I Archaeological Investigation. A Phase I Archaeological Investigation shall be completed for the final chosen bikeway alignment. This investigation shall include a review of previous archaeological surveys and/or excavations within the alignment. This review will determine what portions of the final alignment require field survey. Previously surveyed areas may still warrant additional survey, if previous survey methodology is determined inadequate or ground surface visibility was poor. A Phase I Archaeological Investigation would include, but not necessarily be limited to, the following:

- One or more of the following experts, as applicable, shall conduct an inventory
 and evaluation of any potentially significant historic structures identified during
 the Phase I archaeological survey: Architectural Historian, Historian and/or
 Historic Archaeologist. Mitigation measures shall be developed for substantial
 adverse changes to historically significant structures.
- In particular, Site 2 warrants at least some limited field assessment prior to an evaluation of no significant impact being formerly made, as there is a possibility that buried cultural deposits may be associated with this site. Additionally, Sites 3, 4, and 5 would require further archaeological testing before a determination of significance could be made, as they may also yield more data.
- A qualified archaeologist and Native American representative shall monitor all earth moving activities within native soil.
- If an archaeological site is found to be significant/important, then mitigation measures to reduce the project's impacts should be implemented as follows:
 - a. Avoidance of impacts to the archaeological site is the favored form of mitigation for significant sites whenever feasible.
 - b. The applicant may choose to cap the resource area using culturally sterile and chemically neutral fill material and shall include open space accommodations and interpretive displays for the site to ensure its protection from development. An archaeologist and Chumash consultant shall be retained to monitor the placement of fill upon the site and to make open space and interpretive recommendations. If a significant site will not be capped, the results and recommendations of the Phase II study shall determine the need for a Phase III Data Recovery Excavation and or monitoring.

- c. Where avoidance is infeasible impacts may be mitigated, when necessary, through a Phase III data recovery program.
- If the site is determined insignificant, no capping and or further archaeological investigation should be required. The results and recommendations of the Phase II study shall determine the need for construction monitoring.

<u>Timing</u>: It is estimated that upon project approval, a Phase I Archaeological Investigation would take approximately one month at the most.

<u>Estimated Cost</u>: Phase I testing for cultural resources would cost an estimated \$3000.

C-2. Historical Resources.

Cost Constraint: low/moderate
 Timing Constraint: low/moderate
 Overall Severity of Constraint: low/moderate

Actions Needed to Address Constraint:

It is possible that Caltrans may require additional review of the two Caltrans bridges should they require modification as the previous evaluation was conducted over 15 years ago. The status (age) of the bridge located at Graves Creek along the study area southern boundary is unknown. If the chosen alignment should impact this bridge, and if this bridge is over 50 years of age, it would require an evaluation for historic significance or lack thereof. If the final chosen alignment requires modification of the two train trestles crossing Graves and Paso Robles Creeks they shall first require an evaluation of historic significance or lack thereof.

Phase II Subsurface Testing. If any of the five structures are found to be significant or important, a Phase II subsurface testing program shall be implemented to determine the location and nature of any buried historic features related to construction of the subject structure and use. A data recovery program designed to record and remove significant cultural materials that could otherwise be tampered with, shall follow this work. A Phase II Subsurface Testing program would include, but not be limited to, the following:

- a. Determination of the site's boundaries;
- b. Assessment of the site's integrity, (i.e., how intact the site is); and
- c. Evaluation of the site's significance through a study of its features and artifacts.

<u>Timing</u>: The timing of a Phase II Subsurface Investigation would depend on the extent of identified cultural resources. However, assuming that the Caltrans, UPRR bridges and the bridge over Graves Creek at the southwestern corner of the subject site constitute the extent of the sites requiring subsurface testing, the estimated time required to complete the Phase II tests would be approximately one month.

<u>Estimated Cost</u>: Given the extent of Phase II testing described above, the estimated costs of a Subsurface Investigation of the bridges and their vicinity would be approximately \$10,000.

C-3. Undocumented Cultural Resources.

Cost Constraint: low/moderate
 Timing Constraint: low/moderate
 Overall Severity of Constraint: low/moderate

Actions Needed to Address Constraint:

Resource Evaluation. In the event potentially significant archaeological resources are found to exist within the study area that could be potentially affected by the final bikeway alignment the following action should be implemented:

- All work in the vicinity of the find will be halted until such time as the find is
 evaluated by a qualified archaeologist and appropriate mitigation (e.g., curation,
 preservation in place, etc.), if necessary, is implemented.
- A determination shall be made as to whether the resource(s) meets CEQA's significance criteria (Guidelines sec. 15064.5(c)). In most cases this will require at minimum an Extended Phase I testing program or a more formal Phase II excavation. Goals of the Phase II subsurface testing program shall include:
- A Native American representative shall be retained to monitor any excavation on a Native American site.
- Native American Indian cultural resources shall be repatriated at the recommendation of a Native American representative.
- A sample of the cultural deposit will be excavated to characterize the nature of the buried portions of the site within the proposed impact area.
- The artifacts recovered from all test excavations must be properly processed, cataloged, analyzed, written up in a formal test excavation report meeting federal guidelines, and curated at a facility that meets State standards.
- In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps will be taken.

There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

 The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

- b. If the coroner determines the remains to be Native American:
 - The coroner has 24 hours to notify the Native American Heritage Commission.
 - The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American.
 - The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public resources Code Section 5097.98.

Where the following conditions occur, the landowner or his authorized representatives shall repatriate the Native American human remains and associated grave items with appropriate dignity on the property in a location not subject to further subsurface disturbance. However, any such activity will be pursuant to the discretion of a Chumash representative if a descendent is either not identified or fails to respond to notification.

- a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
- b. The descendent identified fails to make a recommendation; or
- c. The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.
- If human remains are exposed during construction, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then contact the most likely descendent of the deceased Native American, who will serve as a consultant on how to proceed with the remains.
- Off-road vehicle use, unauthorized collecting of artifacts, and other activities that
 could destroy or damage archaeological or cultural sites shall be prohibited. Signs
 shall be posted on the property to discourage these types of activities and warn of
 trespassing violations and imposed fines.

<u>Timing</u>: Should undocumented cultural resources be identified or discovered, timing would be assessed on a case-by-case basis depending on the extent of the resource.

<u>Estimated Cost</u>: Costs would be determined on a case-by-case basis. The extent of which would be dependent on the extent of the cultural resources found.

2.6 HAZARDOUS MATERIALS

A. EXISTING CONDITIONS AND KEY ISSUES

Introduction

This section describes potential constraints related to hazardous materials that could be found within the study area, and their effect on trails users and maintenance personnel. The following analysis is based on site visits as well as consultation with UPRR, Caltrans, the County of San Luis Obispo and senior staff at Rincon Consultants, Inc. specializing in soils remediation and hazardous materials analysis. In addition, a search of available environmental records was conducted meeting the government records search requirements of ASTM¹ Standard Practice for Environmental Site Assessments.

Within the study area, the following land uses have the potential for public exposure to hazardous materials:

- Agriculture. On-site agricultural uses, primarily concentrated on the portion of the site
 west of Highway 101, consist mainly of dryland grain farming, vineyards and livestock
 grazing.
- Wastewater Treatment Plant. On-site public facilities include the wastewater treatment plant located west of the Salinas River and just north of Paso Robles Creek.
- *Transportation Corridors*. State and privately owned transportation right-of-ways include both the UPRR and U.S. Highway 101 which run parallel to each other and bisect the site, effectively dividing the area into eastern and western halves.

The UPRR and Highway 101, along with agricultural uses west of the highway, provide the greatest project constraints with relation to hazardous materials. The primary hazard concerning the wastewater treatment plant would be unrestricted public access to the treatment ponds. However, the ponds are surrounded by a chain-link and barbed wire fence and are kept locked at all times. With the exclusion of public access, the wastewater treatment ponds would not represent a significant hazard. The use of toxic chemicals, including pesticides and herbicides, is a part of agricultural activities. The highway and railroad transport trucks and trains represent the transportation of thousand of tons of hazardous materials each year. Accidents on these facilities could result in spills of such materials.

B. DESCRIPTION AND ANALYSIS OF CONSTRAINTS

The purpose of this section is to provide an analysis of potential hazardous waste constraints associated with the proposed Bikeway Connector Trail. The issues identified as the primary impacts resulting from on-site hazardous waste constraints include 1) hazardous waste sites identified through a comprehensive database search; 2) hazardous chemical issues related to agricultural uses; 3) hazards related to trails in proximity to Highway 101; and 4) hazards related to possible trail proximity to the UPRR line.

¹ Formerly known as the American Society for Testing and Materials, ASTM International provides standards that are accepted and used in research and development, product testing, quality systems, and commercial transactions around the globe.



HAZ-1. Known Hazardous Materials (Database Search).

In order to assess the complete history of hazardous materials incidents both on-site and in the immediate vicinity, a search of available environmental records was conducted. The records search meets the government requirements of ASTM Standard Practice for Environmental Site Assessments.

The database search identified one hazardous material site within ¼ mile of the subject property. The hazardous materials site is listed as a "HIST UST" (Historic Underground Storage Tank) and is situated slightly upslope from the subject property. The HIST UST is located on Rossi Road and consists of an underground, unleaded gasoline tank servicing the Rossi Transport Service Company. However, the site is not considered to be a significant hazard and is not categorized as a Leaking Underground Storage Tank (LUST) site. As such, the HIST UST site would not require any adjustments to the proposed trail and does not pose a risk to the health of trail users or any construction/maintenance workers.

HAZ-2. Hazards Associated with Adjacent Agricultural Land Uses.

A variety of chemicals are used as pesticides, herbicides, and nutrients on agricultural crops in San Luis Obispo County. According to conversations with John Warrick of the San Luis Obispo County Agricultural Commissioners Office (May, 2003), the dryland farming of grains and vineyards include the use of a variety of chemical herbicides, pesticides and nutrients. The chemicals used for the on-site agricultural fields include the seasonal use of restricted material herbicides to control weeds prior to planting grain. These chemicals include 2, 4 D amine, Dicamba, and MCPA amine. Pesticides used could include seasonal use of restricted material herbicides to control weeds species. Chemicals such a Diuron are commonly used for this purpose. Approximately 41.5 acres of wine grapes (vineyard) are planted both on and adjacent to the subject property. Pesticides used would include various rodents control agents used underground directly in burrows. Some restricted material herbicide use such as Paraquat is used to control weeds between the vineyard rows. Sulfur, a non-restricted chemical may also be use to control various species of mold or mildew. These are just examples of commonly used chemicals and is not a comprehensive list of the chemicals that may be used in the project area.

Users of the proposed trail, as well as construction/maintenance workers, can be exposed to agricultural chemicals through ingestion, inhalation, and dermal contact. The most likely paths of exposure are ingestion and inhalation of the chemicals during and after they are applied to the crops, either by aircraft or by more conventional methods. Each of the chemicals applied to the crops has a certain "breakdown period" which is the time it takes for the chemical to dissipate entirely. Regulations for some chemicals do not permit any human contact with the area sprayed until the chemical has dissipated down to acceptable levels. The re-entry periods (i.e., the period of time after which an individual may re-enter the area in which the chemical was applied) following application of the chemical are specified on the chemical label and by regulation. Potential trail users and maintenance workers would only be exposed to agricultural chemicals during their application and when residual amounts are still present.

The California Environmental Protection Agency (Cal EPA), Department of Pesticide Regulations, establishes regulations regarding agricultural chemical use. These regulations

are designed to prevent pesticides from being used in such a way as to jeopardize or cause injury to the environment, people and wildlife. The San Luis Obispo County Agricultural Commissioner's Office regulates and enforces these regulations through site visits and the permitting process. Among these regulations are those from Section 6614 of Title 3 of the California Code of Regulations, which is included in part as follows:

Notwithstanding that substantial drift will be prevented, no pesticide application shall be made or continued when:

- There is a reasonable possibility of contamination of the bodies or clothing of persons not involved in the application process;
- There is a reasonable possibility of damage to non-target crops, animals, or other public or private property;
- There is a reasonable possibility of contamination of non-target public or private property, including the creation of a health hazard, preventing normal use of such property.

These regulations are used generally to prevent "pesticide drift". Pesticide drift occurs when the pesticide moves off, or away from, the application target. Certain pesticides drift because of volatilization (changing from liquid to gas form), which is an inherent characteristic of some pesticides and cannot be controlled. Instruction labels and permits outline measures to prevent pesticide drift. If these measures are not followed, then the user is subject to citation by the Cal EPA Department of Pesticide Regulation.

HAZ-3. Hazards Associated With Highway 101.

Highway 101 bisects the study area; as such, trail alignments have the potential to bring recreational users and construction or maintenance workers in proximity to a potential health hazard. There is a possibility that hazardous chemicals transported along Highway 101 may be released as a result of a vehicular accident. The release of toxic chemicals could pose a serious risk to trail users as well as construction/maintenance workers. A spill of toxic chemicals along this section of highway could cause a serious health risk to trail users adjacent to the highway.

In addition, trail users in proximity to the highway would potentially be subject to environmental hazards related to soils contaminated through aerially deposited lead. Until the mid-1980s, gasoline and other fuels contained lead, a toxic metal. As each car or truck traveled highways, such as Highway 101, tiny particles of lead were released in the exhaust and settled on the soils next to the road. Most of the time, lead tends not to move very far or fast in the environment.

The California Department of Transportation (Caltrans) has sampled sediment adjacent to traffic lanes in major metropolitan areas and determined that lead from leaded gasoline emissions is present. Elevated lead levels have been found to be highest at the surface (zero to six inches) and decreases with depth. Levels are highest immediately adjacent to the traveled way and decreases with distance from the road. Total lead levels on average are not greater that the Total Threshold Limit Concentration (TTLC) but will often exceed the

Soluble Threshold Limit Concentration (STLC) found in Title 22, California Code of Regulations (CCR). The construction process of excavation, stockpiling, transporting, and disposing of material (i.e., soils), which exceeds the STLC for lead, makes the material a hazardous waste. If the material exceeds the Threshold Concentration Leaching Potential (TCLP) test limits for lead, it is considered a Federal hazardous waste. However, tests conducted by Caltrans has concluded that materials excavated adjacent to freeways rarely exceed the TCLP threshold.

According to telephone conversations with John Wood of the Caltrans Planning Department (May 7, 2003), the areas primarily affected by aerially deposited lead consist of the Highway shoulder (four to eight feet from the Highway). Hazardous waste testing done throughout District 5 (which includes the subject property) has not identified toxic quantities of lead along the Highway shoulder. Project constraints related to hazardous quantities of aerially deposited lead would not be considered significant.

Caltrans has also confirmed that chemicals used for weed abatement along the Highway have not been applied to the subject property vicinity for the past four years and will not occur in the future due to internal policy changes (John Wood, May 7, 2003). Constraints related to hazards originating from chemical weed abatement along the Highway would not be considered significant.

HAZ-4. Hazards Associated with the Union Pacific Railroad.

As is previously mentioned, the UPRR line bisects the study area, running the length of the site. Two primary hazardous waste constraints can be contributed to the UPRR line and the proposed introduction of recreational trail users and construction/maintenance workers in proximity to the tracks. The issues outlined in this report include the possibility of accidents involving the spilling and/or leaking of hazardous materials and the use of hazardous materials in the operation and maintenance of the UPRR line.

Maintenance of the railroad tracks is likely to have included use of assorted chemicals for dust suppression and weed control, in addition to the exposure of oil, solvents, and fuels associated with train operation and maintenance.

C. ACTIONS REQUIRED IF CONSTRAINTS ARE ENCOUNTERED

The purpose of this section is to describe the actions that would need to take place in the event that the constraints identified in the above discussion are encountered upon implementation of the proposed trail. In addition to a discussion of actions likely to be required, this section will also provide an assessment of cost, timing and overall constraints.

As is discussed throughout this section, hazardous waste constraints for the proposed project center around possible contamination related to the UPRR line, Highway 101 and agricultural land uses. As such, it has been determined by senior staff that a Phase II soil sampling assessment be initiated for any proposed trail alignment. This would include doing sampling and analysis for hydrocarbons, solvents, metals, pesticides, herbicides and PCBs.

HAZ-1. Known Hazardous Materials (Database Search)

Cost Constraint: low
 Timing Constrain: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Database Search. The results of the comprehensive database search (completed in accordance with ASTM standards) identified one Historic Underground Storage Tank (HIST UST) occurrence within ¼ mile of the subject site. The HIST UST is an underground gas tank servicing Rossi Transportation Service Company and is not classified as currently leaking. This would not constitute a significant constraint. However, in the event of a property exchange and/or the approval of a trail alignment west of Highway 101, the County could choose to initiate a Phase II Soil Sampling survey (refer to HAZ-2).

HAZ-2. Hazards Associated with Adjacent Agricultural Land Uses.

Cost Constraint: low
 Timing Constraint: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

At locations adjacent to agricultural uses, the following actions would help to reduce human health impacts during the construction, use, and maintenance of the proposed trail:

Phase II Soil Sampling. Soil samples shall be taken within the project site by a qualified hazardous materials specialist to determine the presence or absence of banned pesticides. If soil sampling indicates the presence of any contaminant in hazardous quantities, the RWQCB and DTSC will be contacted to determine the level of any necessary remediation efforts, and these soils shall be remediated in compliance with applicable laws. The project applicant would be required to comply with applicable local, state, and federal requirements regarding site assessment, soils evaluation, and remediation in areas where soil contamination is known or suspected to occur. Site assessments that result in the need for soil excavation would be required to include: an assessment of air impacts and health impacts associated with excavation activities; identification of any applicable local standards that may be exceeded by the excavation activities, including dust levels and noise; transportation impacts from the removal or remedial activities; and risk of upset practices should an accident occur at the site.

<u>Timing</u>: The timing associated with soils testing depends on the amount of samples needed. As testing proceeds, it is possible that the results may require new tests in different locations. However, given the proposed project and subject

site, senior staff at Rincon Consultants, Inc. estimates a three to four week time frame for Phase II soils testing.

<u>Estimated Costs</u>: Costs would be determined as trail alignments are chosen. In addition, the history of past hazardous material spills would also greatly affect both cost and timing variables. According to senior staff at Rincon Consultants, Inc. it is recommended that soils sampling include testing for hydrocarbons, solvents, metals, pesticides, herbicides and PCBs. True costs depend on the extent of sampling; however, estimated costs are \$5,000 to \$10,000.

Disclosure of Potential Hazards. All pertinent information collected by the above mentioned study shall be conveyed to the trail users via signage. Informational kiosks will display warnings informing the public as to the chemicals used and frequency used along each segment of the trail. This information will be updated when necessary.

<u>Timing</u>: The purpose of the disclosure of soil sampling results, chemicals used and frequency of use is to ensure that recreational trail users and construction/maintenance workers are not unknowingly exposed to harmful chemicals associated with agricultural production. As such, it would be crucial to provide full disclosure in a timely fashion. It is recommended that the posting of warnings should be done two weeks in advance of the date of the application of hazardous chemicals and the posting of the results of the required soil testing should be done immediately following the testing.

<u>Estimated Cost</u>: The cost of disclosure would include the production of signage and the time required by County employees to install any signage (including posts, kiosks, posters, etc.). Costs would therefore be nominal.

Notice of Intent to Spray. A communication system shall be established to convey any notices of intent to spray chemicals in a timely manner. The trail operators can then take appropriate action, whether it be closing certain trail segments or posting additional warning signs.

<u>Timing</u>: The intent of this action is to ensure that the County is informed prior to the application of hazardous chemicals on adjacent agricultural lands. It is necessary that the County be informed no less than two weeks prior to application in order to provide enough time to post disclosure information along the proposed trail.

<u>Estimated Cost</u>: The cost of notifying County officials prior to the application of hazardous chemicals to adjacent agricultural lands would be nominal.

Agricultural Buffer. In accordance with the County Office of the Agricultural Commissioner (John Warrick, 2003) the applicant shall maintain a buffer between a western trail alignment and agricultural operations, the size of which is yet to be determined.

<u>Timing</u>: The implementation of a buffer, for the purpose of ensuring that the application of hazardous chemicals does not directly abut the proposed trail, should occur prior to any construction activities and should be maintained throughout the life of the trail.

<u>Estimated Cost</u>: The County would be required to purchase the land to be used as an agricultural buffer. However, this cost would be included in the costs of purchasing the trail easement from private property owners and would not represent a significant constraint in relation to the overall cost of rights-of-way.

Security Measures. In areas adjacent to irrigated cropland, the trail shall incorporate security measures to discourage trespassing onto adjacent agricultural lands. These could include, but not be limited to, fencing, signage, and landscaping. The portions of the trail adjacent to irrigated agriculture should include gates, such that it can be closed during times that spraying or other sensitive agricultural operations occur.

<u>Timing</u>: In order to ensure that trail users do not trespass onto adjacent agricultural lands (thereby avoiding indirect impacts to agricultural production), the security measures mentioned above should be implemented prior to the opening of the trail to the public.

<u>Estimated Cost</u>: The costs associated with signage, landscaping, trail closure and proper fencing would not be significant.

In addition to the above actions, as is the same with any project requiring discretionary approval, CEQA compliance would be required. Any activity that would remove agricultural land from active production, or otherwise alter the subject site, would be closely scrutinized by the applicable resource agencies through the CEQA review process.

HAZ-3. Hazards Associated With Proximity to Highway 101.

Cost Constraint: low
 Timing Constrain: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Response to Highway Accidents. The risk of exposing the public to the chance of highway accidents and the spilling of hazardous materials should be taken into account when designing a trail alignment. However, it is beyond the scope of the proposed project to prevent accents from happening. As such, the County should be responsible to include trail closure and appropriate signage warning the public of potential health risks as a first response measure.

<u>Timing</u>: In the event of an accident involving the spilling of hazardous materials along Highway 101, adjacent to the subject property, trail closure and

appropriate public warning should be done immediately in order to avoid dangerous public exposure.

<u>Estimated Cost</u>: Trail closure and the posting of public notices would constitute nominal costs.

Phase II Soil Sampling. As previously mentioned, until the mid-1980s, gasoline and other fuels contained lead, a toxic metal. As each car or truck traveled highways, such as Highway 101, tiny particles of lead were released in the exhaust and settled on the soils next to the road. However, tests conducted by Caltrans have concluded that materials excavated adjacent to freeways rarely exceed the Total Threshold Limit Concentration (TCLP) threshold. According to conversations with John Wood of Caltrans District 5 (May 7, 2003), the area representing the largest risk to soil contaminants would be a four to eight foot shoulder abutting the Highway. Wood confirms that lead contamination is rarely an issue in these areas.

Although aerially deposited lead contamination is confined to a relatively narrow strip along the shoulder of the Highway and rarely exceeds established thresholds, it is recommended that a Phase II soil sampling be completed to confirm the existence or absence of lead contamination. This would be done in conjunction with the Phase II soil sampling recommended for the hazards associated with agricultural uses (HAZ-2, Part C).

<u>Timing</u>: The timing associated with soils testing depends on the amount of samples needed. As testing proceeds, it is possible that the results may require new tests in different locations. However, given the proposed project and subject site, it is estimated that there would be a three to four week time frame for Phase II soils testing.

<u>Estimated Cost</u>: True costs depend on the extent of sampling; however, estimated costs are \$5,000 to \$10,000 in conjunction with other soil sampling done for the site.

HAZ-4. Hazards Associated with the Union Pacific Railroad.

Cost Constraint: low
 Timing Constrain: low
 Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Response to Rail Accidents. Actions needed to address this potential spillage of hazardous materials associated with rail accidents would involve the public disclosure of the possibility of such accidents as well as the immediate closure of the trail and public notification of the nature of the accident (i.e., time, date and location of the accident as well as the exact materials spilled and their toxic nature in addition to a time frame for clean up activities).

<u>Timing</u>: In the event of an accident involving the spillage of hazardous materials, trail closure and public notification should be immediate in order to avoid any public exposure to toxic materials.

<u>Estimated Cost</u>: Costs associated with trail closure and public notification of toxic spills would be nominal.

UPRR Operation and Maintenance. Due to the potential existence of hazardous materials along and in proximity to the UPRR line, it would be recommended that any trail alignment east of Highway 101 (refer to Figure 2-1) include a Phase II soils assessment as described in HAZ-2, Part C of this section.

<u>Timing</u>: The timing associated with soils testing depends on the amount of samples needed. As testing proceeds, it is possible that the results may require new tests in different locations. However, given the proposed project and subject site, it is estimated that there would be a three to four week time frame for Phase II soils testing.

<u>Estimated Cost</u>: True costs depend on the extent of sampling; however, estimated costs are \$5,000 to \$10,000 in conjunction with other soil sampling done for the site.

2.7 PARCEL ACQUISITION AND CONNECTIVITY

A. EXISTING CONDITIONS AND KEY ISSUES

Introduction

The purpose of this section is to provide a discussion of project constraints with regards to property ownership and overall connectivity to neighboring communities.

As seen in Figure 2.7-1, the study area consists of multiple publicly and privately owned parcels. Property ownership characteristics present a potential constraint to trail development with respect to obtaining easements, right-of-way agreements or full title ownership rights.

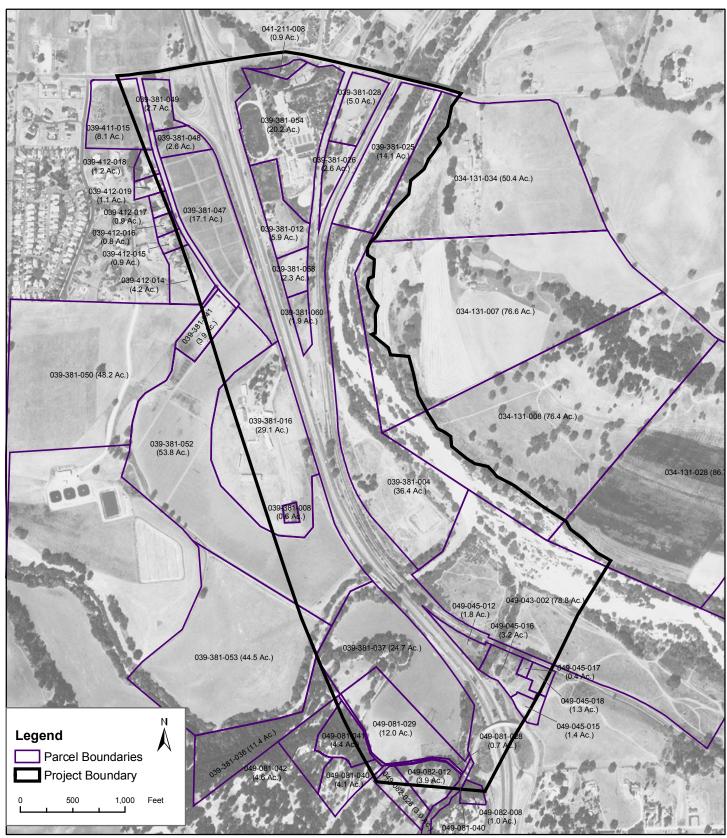
In addition to parcel acquisition issues, the implementation of the proposed project presents an opportunity to address connectivity and the relationship between the Templeton-Atascadero Bikeway Connector Trail and other trails in the vicinity. With this project, decision makers have the opportunity to ensure that the proposed trail is designed to complement other public trails and open space in the vicinity. In relation to overall connectivity, the proposed trail presents an opportunity to access the De Anza Trail corridor and to Tentative Tract 2498, a residential development proposed within the City of Atascadero.

Juan Bautista de Anza, a third-generation frontier soldier of New Spain, shepherded 198 emigrants and their escorts and 1,000 head of livestock on the first overland colonizing expedition from Sonora, Mexico into Alta, or Upper, California. Anza's expedition and the route it established are commemorated by the Juan Bautista de Anza National Historic Trail. In 1990, Congress acknowledged the significance of the Anza expeditions by establishing the Juan Bautista de Anza National Historic Trail, which stretches from Arizona through California (www.therapure.com/anza-trail/anzamen.htm). A portion of the De Anza Trail corridor can be found along the Salinas River, adjacent to the study area. Although this portion of the historic De Anza Trail lacks any formal development, there exists the opportunity to acknowledge it through the implementation of the proposed project.

Along with addressing the De Anza Trail corridor, decision makers have an opportunity to coordinate plans for the proposed trail with the City of Atascadero and the development proposed for the portion of the City east of the UPRR, west of the Salinas River, between Paso Robles and Graves Creeks and just south of Graves Creek. This proposed development is referred to as Tentative Tract 2498 and it represents an opportunity to reduce project constraints for a portion of the planned trail.

Brief Description of Tentative Tract 2498 Proposed Development

This proposed development is planned for the southeastern portion of the subject property which consists of the northern extent of the City of Atascadero. The proposed development site is essentially split into two areas by Graves Creek and is bound by the Salinas River to the east and the UPRR to the west (refer to APN 049-043-002 in Figure 2.7-1). Tentative Tract 2498 was originally planned as an element of the Home Depot development and has since been revised.



Source: San Luis Obispo County, 2003, Barclay Maps, 2003, Rincon Consultants, Inc., 2003.

Currently, the proposed development consists of 26 single-family lots and six senior housing lots (which would consist of a total of 60 units).

The single-family lots would occupy the portion of the development site south of Graves Creek. This area consists of 26 units located on lots averaging approximately 0.5 acres in size. This portion of the planned development would be accessed by an extension of El Camino Real. This extension would include the construction of a new bridge over the UPRR line.

The senior housing lots would occupy the remaining portion of the site north of Graves Creek and just south of Paso Robles Creek. The six senior housing lots would consist of 60 units, averaging 9.6 units per acre. This piece of the site would be accessed from the south by an on-site bridge that would span Graves Creek, connecting the two developments.

Tentative Tract 2498 would also include amenities for recreational users. The proposed development incorporates a public trail that follows the main on-site access road which traverses the site from the northwest to the southeast. The Graves Creek bridge would bring the public trail to both portions of the development, north and south of the Creek. The public trail would also provide recreational access to the De Anza Trail corridor (consisting, essentially, of the Salinas River corridor) and the Home Depot center via the existing UPRR underpass (which consists of the southern extent of the proposed Trail Segment 7).

In addition to the public trail, the proposed Tentative Tract 2498 includes plans for equestrian use. Preliminary development plans include two horse arenas. The equestrian use areas would be located at the southern end of the development, near the De Anza corridor access trail and adjacent to the Salinas River.

B. DESCRIPTION AND ANALYSIS OF CONSTRAINTS AND OPPORTUNITIES

The purpose of this section is to provide an analysis of potential parcel acquisition constraints associated with the proposed Bikeway Connector Trail and to provide a description of opportunities to reduce potential constraints for certain trail segments. The issue identified as the primary constraint in section is parcel acquisition. In addition to project constraints, this section also identifies potential opportunities to reduce the overall constraint severity of the proposed trail and to address connectivity to regional public trails and open space.

Constraints:

PAC-1. Parcel Acquisition.

As seen in Figure 2.7-1, the project site consists of various public and privately owned parcels. The recreational use of private property presents constraints in the form of obtaining easements, right-of-way agreements or full title ownership rights to the parcels that would be affected. Individual private property owners could present a more significant constraint with respect to obtaining these agreements when compared to public agencies. Such agencies are often mandated to cooperate with municipal projects and would be more likely to accommodate such agreements as would be required upon implementation of the proposed trail.

However, the majority of the proposed trail segments (Figure 1-2) are located between Highway 101 and the Salinas River. This area contains the only public or quasi-public property found on-site. This parcel is referred to as APN 039-381-004 (Figure 2.7-1), and is currently owned by the Templeton Community Services District. This parcel contains the Templeton Wastewater Treatment Facility and represents an opportunity to avoid the parcel acquisition constraints found with Segments 11-15 through agency coordination.

Opportunities:

PAC-2. Connectivity.

Tentative Tract 2498, the residential development proposed for APN 049-043-002 in the City of Atascadero, represents a unique opportunity to address some of the constraints that face the implementation of the Templeton-Atascadero Bikeway Connector Trail. Plans for Tentative Tract 2498, located along the northern and southern banks of Graves Creek near its confluence with the Salinas River, include recreational trails that would provide public access to the De Anza Trail corridor and on-site equestrian arenas.

As discussed throughout this report, a major constraint to project implementation would be bridging the two on-site watercourses to provide access from Templeton to Atascadero. Tentative Tract 2498 includes plans to build a bridge over Graves Creek in order to provide access to residential units on either side. This bridge is planned to support vehicular use as well as recreational use. If this bridge is constructed as part of development in the City, the constraint level for Segment 8 would be reduced (refer to Figure 3-1) from High to Moderate.

Altogether, Tentative Tract 2498 would provide recreational trails that bridge Graves Creek, provide access to the De Anza Trail and Salinas River corridors and serve equestrian users through the construction of horse arenas and an El Camino Real overpass which would provide vehicular access to staging areas. Through the coordination between the County and the City of Atascadero, the constraint severity level for proposed Segment 8 could be substantially reduced.

C. ACTIONS REQUIRED IF CONSTRAINTS ARE ENCOUNTERED

The purpose of this section is to describe the actions that would need to take place in the event that the constraints identified in the above discussion are encountered upon implementation of the proposed trail. In addition to a discussion of actions likely to be required, this section will also provide an assessment of cost, timing and overall constraints.

As discussed in Parts A and B above, the primary constraints to the proposed project discussed in this section center around parcel acquisition, while project opportunities center around project coordination with the City of Atascadero.

PAC-1. Parcel Acquisition

Cost Constraint: low Timing Constrain: low

• Overall Severity of Constraint: low

Actions Needed to Address Constraint:

Easements. Trail Segments 11-15 are the most constrained with respect to parcel rights acquisition, because they cross the greatest number of privately held parcels. Should decision makers select these segments for the development of the proposed trail, the County would have to acquire parcel ownership, easements, or right-of-way agreements from the current owners of each property.

However, Trail Segments 3 and 6 cross through the only public or quasi-public property found on-site. This property is owned and maintained by the Templeton Community Services District and represents an opportunity for coordination with the County regarding right-of-way agreements.

<u>Timing</u>: Prior to deciding on a trail alignment, the County will be required to investigate the issues surrounding property transfer, easement rights and right-of-way agreements for all of the individual parcels traversed by the proposed alignment.

Estimated Cost:

The costs associated with gaining easement rights and/or right-of-way agreements would not be project limiting factors. However, should parcel acquisition and full title ownership be required, costs could accelerate, requiring further analysis.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Section A below describes identified issues related to equestrian use of the potential trail segments.

Section B below overlays the general constraints identified in Section 2.1-2.7 (and shown in Table 2-1) on the proposed trail segments identified in Section 1.0 (Figure 1-2). In this way, it is possible to determine which constraints apply to a particular trail segment. Table 3-1 summarizes this information, while Figure 3-1 takes this information to illustrate the level of constraint associated with each trail segment.

Section C draws conclusions regarding a preferred trail alignment based on this information.

A. EQUESTRIAN TRAIL USE

The purpose of this section is to briefly evaluate potential constraints related to equestrian use of the potential trail segments. As described in Section 1.0, *Introduction*, provisions for equestrian users are not specifically included as part of the project. However, the project site is currently used by recreational equestrians. In addition to this informal use, Section 2.7, *Parcel Acquisition and Connectivity*, discusses the recreational equestrian opportunities that could occur as a part of the proposed residential development, Tentative Tract 2498. This proposed residential development would include horse arenas at its southern boundary near planned trails that would access the De Anza Trail corridor (this is, essentially, the Salinas River bed). This project would also include an extension of El Camino Real over the UPRR line, allowing vehicular access to the proposed development and to on-site staging areas.

Currently, land between Templeton and Atascadero, east of Highway 101, and especially within and along the Salinas River, provides equestrians with open space for riding. Traditionally, equestrian users gain access to the Salinas River from off-site staging areas that provide large parking lots and unrestricted access. For example, popular access points include the parking lot behind Hoovers Restaurant in Templeton, under the Highway 41 Bridge in Atascadero and various privately owned access points. While equestrian users and trail riders have also accessed the on-site portions of the Salinas River from informal staging areas along Paso Robles Creek (when waters are relatively low), these access points cross private property. Once equestrian users gain access to the River, they are able to use the open space for recreational riding; however riders encroach within private property along the river. It should be noted that equestrians generally use the study area as a portion of longer rides within the Salinas River, rather than as a short trail between Templeton and Atascadero. As a result, the provision of equestrian use improvements within the study area, but outside the River corridor, may not substantially affect equestrian activity in the area.

Formalization of equestrian use as a part of the proposed connector trail would require provision of equestrian access to the Salinas River. A staging area for vehicles and trailers would be needed to facilitate this access. On-site possibilities for staging areas could include, for example, the southern end of Main Street in Templeton. However, a permitting agreement with the UPRR would have to be gained in order to ensure safe crossing of the railroad. Off-site

options for staging formal recreational equestrian use would include cooperation with the City of Atascadero and the proposed development of Tentative Tract 2498.

B. TRAIL SEGMENTS AND THEIR ASSOCIATED COSTS AND CONSTRAINTS

Based on the site constraints identified in Section 2.0, this section discusses each trail segment individually to determine the nature of the constraints that apply. This information is summarized in Table A-2 (in Appendix B). Figure 3-1 uses this information to conclude which trail segments are the most and least heavily constrained.

Trail segment costs are provided by EDA. The complete cost estimates for each trail segment can be found in Appendix C. The following estimates assume the trail to be 12 feet wide, with 2-foot A/C and 6-inch base over an additional 6-inch of over excavation, placement and recompaction of existing material. Demolition of fencing, relocation of utility poles, joint utility trench, utility relocations, path lighting, etc are variables that are unknown but have been assigned a line item in the estimate as a place-holder and for planning purposes only. The cost estimates are prepared as a guideline and do not represent bids.

The following is a summary of the information provided in Table A-2 and Figure 3-1:

Trail Segment 1: Travels the southern extent of Main Street in Templeton, from Vineyard Drive until its southernmost terminus.

Constraints:

- Nesting Birds
- Toxic Hazards Associated with the UPRR line

Overall Segment Constraint Level: Low

Estimated Segment Cost: \$111,665

Trail Segment 2: Parallels the western side of the UPRR line from the terminus of Main Street to the existing at-grade crossing of the railroad.

Constraints:

- Undocumented Cultural Resources
- Nesting Birds
- Toxic Hazards Associated with the UPRR line

Overall Segment Constraint Level: Low

Estimated Segment Cost: \$154,039

Trail Segment 3: Begins at the southern end of Main Street, continues south crossing either under the UPRR line via an expansion of an existing culvert, then parallels the UPRR line along the Salinas River, terminating near the existing at-grade crossing. Substantial coordination with UPRR would be required to expand the existing culvert, which is about 4 to 5 feet high, and



similarly wide. Substantial engineering would be required to construct a trail within the riverbank, which traverses much of the length of this segment.

Constraints:

- UPRR Bridge (new under/overcrossing)
- UPRR Right-of-Way Encroachment
- Riparian and Riverine Habitat/Wetlands
- Oak Trees
- Historic Resources
- Undocumented Cultural Resources
- Drainage and Hydrology
- Nesting Birds

Overall Segment Constraint Level: **High**

Estimated Segment Cost: \$404,590

Trail Segment 4: A short segment that consists of the existing at-grade crossing on the UPRR. Its purpose would be to connect potential tail segments west of the railroad to those east of the railroad. Based on discussions with UPRR, it appears that an overcrossing or undercrossing structure would likely be required to be consistent with the continued use of the rail line by UPRR.

Constraints:

- UPRR Bridge (new under/overcrossing)
- UPRR Right-of-Way Encroachment
- Historic Resources
- Undocumented Cultural Resources
- Nesting Birds
- Toxic Hazards Associated with the UPRR line

Overall Segment Constraint Level: Moderate to High

Estimated Segment Cost: \$236,837

Trail Segment 5: Originates at the existing at-grade crossing and moves south, between the UPRR line and Highway 101, crosses both Paso Robles and Graves Creeks, terminating at the Home Depot site in Atascadero. It would likely make use of either the Caltrans or UPRR rights-of-way, or both. This segment would not require the construction of new bridges but would anticipate a modification of the existing UPRR bridges to cross the two creeks. This would likely include a cantilevered structure attached to the existing UPRR facility.

- UPRR Right-of-Way Encroachment
- Riparian and Riverine Habitat/Wetlands
- Archaeological Resources
- Historic Resources

- Undocumented Cultural Resources
- Drainage and Hydrology
- Oak Trees
- Nesting Birds
- Toxic Hazards Associated with Proximity to Highway 101
- Toxic Hazards Associated with the UPRR line

Overall Segment Constraint Level: **High**

Estimated Segment Cost: \$2,355,115

Trail Segment 6: Begins at the terminus of Segment 4, travels south parallel to the Salinas River, crosses Paso Robles Creek and ends on the southern bank of Paso Robles Creek. The segment follows an existing path between the Salinas River riparian corridor to the east, and the County wastewater treatment facility to the west and south. This segment would require construction of a bridge crossing Paso Robles Creek.

Constraints:

- Creek Crossings (new bridge required)
- Riparian and Riverine Habitat/Wetlands
- Oak Trees
- Undocumented Cultural Resources
- Drainage and Hydrology
- Nesting Birds

Overall Segment Constraint Level: Moderate to High

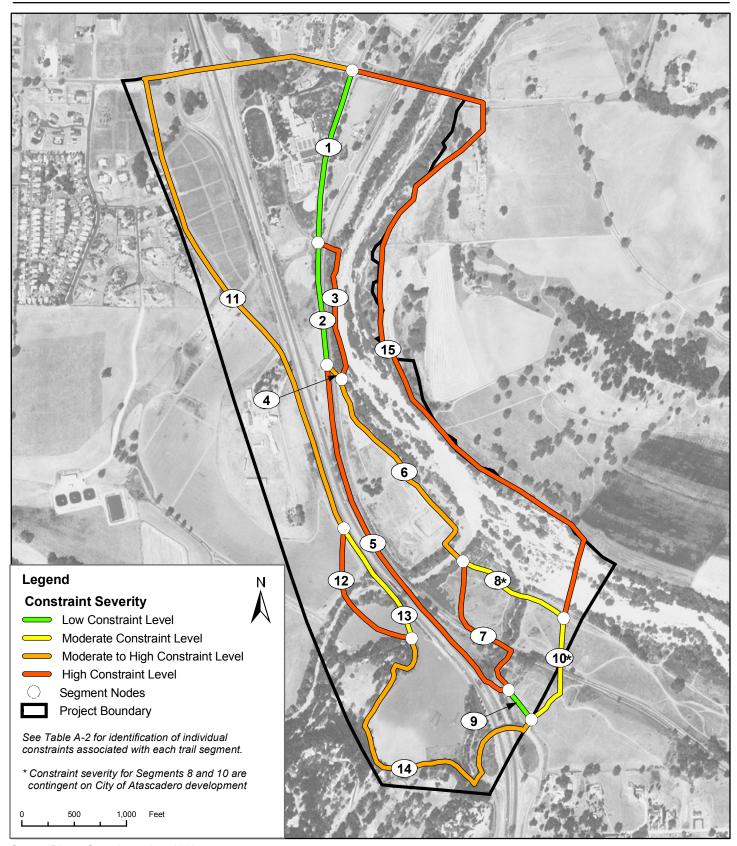
Estimated Segment Cost: \$767,508

Trail Segment 7: Starts just south of Paso Robles Creek, moves south across an open field, crossing the existing UPRR bridge over Graves Creek. This segment then makes use of the existing, informal trail under the train trestle and makes its way towards the Home Depot store.

Constraints:

- UPRR Right-of-Way Encroachment
- Riparian and Riverine Habitat/Wetlands
- Oak Trees
- Special-Status Species
- Archaeological Resources
- Historic Resources
- Undocumented Cultural Resources
- Drainage and Hydrology
- Nesting Birds
- Toxic Hazards Associated with the UPRR line

Overall Segment Constraint Level: High



Source: Rincon Consultants, Inc., 2003.

Estimated Segment Cost: \$621,082

Trail Segment 8: Begins just south of the Paso Robles Creek, continues southeast following the contour of Salinas River, crossing Graves Creek, and terminating at trail segment 10. A bridge would be required for the Graves Creek crossing. As analyzed in Section 2.7, *Parcel Acquisition and Connectivity*, there is an opportunity for the County to coordinate planning efforts with the City of Atascadero and the residential development, Tentative Tract 2498, proposed for the area on either side of Graves Creek. Tentative Tract 2498 would include a bridge over Graves Creek along with recreational trails, horse arenas and public access to the Salinas River bed and the De Anza Trail corridor.

Constraints:

- Creek Crossings (new bridge required)
- Riparian and Riverine Habitat/Wetlands
- Oak Trees
- Special-Status Species
- Undocumented Cultural Resources
- Drainage and Hydrology
- Nesting Birds

Overall Segment Constraint Level: **Moderate. However, this constraint level is contingent on coordination between the County and the City of Atascadero for potential development within the City of Atascadero.**

Estimated Segment Cost: \$620,482

Trail Segment 9: A short segment starting at the terminus point of segment 7 and ending at the terminus point of segment 10, moving north to south across an open field toward the Home Depot property.

Constraints:

- Undocumented Cultural Resources
- Nesting Birds

Overall Segment Constraint Level: Low

Estimated Segment Cost: \$105,766

Trail Segment 10: Starts at the southern end of the potential future Salinas River bridge identified in the Atascadero General Plan and continues south crossing the UPPR line and terminating just before the Highway 101 northbound on-ramp.

- *UPRR Bridge (new under/overcrossing)
- Special-Status Species
- Undocumented Cultural Resources

- Nesting Birds
- Toxic Hazards Associated with the UPRR line

Overall Segment Constraint Level: Moderate (or Low; see below)

Estimated Segment Cost: \$397,882

*It should be noted that the Moderate constraint level is contingent on the plans outlined in Tentative Tract 2498 to extend El Camino Real over the UPRR line to provide access to potential developments east of the railroad. Should the extension be constructed, the overall segment constraint level would be considered Low.

Trail Segment 11: One of the longest trail segments travels east to west along the edge of the northern portion of the site between Main Street and Rossi Road along Vineyard Drive, then cuts southeast along Rossi Road and agricultural properties. The Vineyard Drive overpass is currently planned for replacement by the County. According to conversations with the County Department of General Services, the current plans to replace the Vineyard Drive bridge over Highway 101 will include six-foot wide, asphalt bike lanes along both sides of the bridge. As currently planned, the overpass would be wide enough to support recreational use.

Should pedestrian and bicycle use be included in the plans to replace the Vineyard Drive overpass, the segment would then continue along the west side of Highway 101 and end before reaching Paso Robles Creek.

Constraints:

- Caltrans Permitting
- Oak Trees
- Nesting Birds
- Agricultural Land Use Compatibility
- Agricultural Chemical Hazards
- Known Hazardous Materials (Database Search)
- Hazards Associate with Adjacent Agricultural Uses
- Toxic Hazards Associated with Proximity to Highway 101
- Parcel Acquisition
- Connectivity

Overall Segment Constraint Level: Moderate to High

Estimated Segment Cost: \$779,649

Trail Segment 12: Begins at the terminus point of trail segment 11 and continues south through agricultural lands to segment 14 as part of the potential Paso Robles Creek bridge crossing.

- Creek Crossings (new bridge required)
- Riparian and Riverine Habitat/Wetlands
- Undocumented Cultural Resources

- Drainage and Hydrology
- Oak Trees
- Nesting Birds
- Agricultural Land Use Compatibility
- Soils Conversion
- Agricultural Chemical Hazards
- Hazards Associate with Adjacent Agricultural Uses
- Parcel Acquisition
- Connectivity

Overall Segment Constraint Level: High

Estimated Segment Cost: \$599,397

Trail Segment 13: Starts at the same node and generally parallels trial segment 12, but along a more easterly alignment adjacent to the west side of Highway 101. This segment crosses Paso Robles Creek on an existing Caltrans bridge and terminates at the same point as trail segment 12.

Constraints:

- Riparian and Riverine Habitat/Wetlands
- Historic Resources
- Undocumented Cultural Resources
- Caltrans Permitting
- Drainage and Hydrology
- Oak Trees
- Nesting Birds
- Agricultural Land Use Compatibility
- Soils Conversion
- Agricultural Chemical Hazards
- Hazards Associate with Adjacent Agricultural Uses
- Toxic Hazards Associated with Proximity to Highway 101
- Parcel Acquisition
- Connectivity

Overall Segment Constraint Level: Moderate

Estimated Segment Cost: \$1,048,317

Trail Segment 14: Starts at the terminus point of both trail segments 12 and 13, follows the tree line at the southern portion of the site, crosses an existing bridge over Graves Creek, and continues over or under Highway 101.

- *Creek Crossings (new bridge required)
- Riparian and Riverine Habitat/Wetlands

- Historic Resources
- Undocumented Cultural Resources
- Caltrans Permitting
- Drainage and Hydrology
- Oak Trees
- Nesting Birds
- Agricultural Land Use Compatibility
- Soils Conversion
- Agricultural Chemical Hazards
- Hazards Associate with Adjacent Agricultural Uses
- Toxic Hazards Associated with Proximity to Highway 101
- Parcel Acquisition
- Connectivity

Overall Segment Constraint Level: Moderate to High

Estimated Segment Cost: \$461,165

*This trail segment would potentially utilize an existing creek crossing (refer to Figure 1-2). However, a new or refurbished bridge may be required if the existing bridge is unfit to accommodate the proposed Class I trail.

Trail Segment 15: This segment starts at the northern edge of the site, travels east along Templeton Road over the Salinas River and UPRR corridor, before cutting south along the eastern edge of the site, along the eastern edge of the Salinas River riparian corridor tree line. This segment then crosses a potential bridge over the Salinas River to the west, and finally terminates at segment 10 before reaching the UPPR line. It should be noted here that a bridge constructed to span the width of the Salinas River would be grand in scope when compared to the other bridges mentioned throughout this report.

Constraints:

- Creek Crossings (new bridge required)
- Riparian and Riverine Habitat/Wetlands
- Oak Trees
- Special-Status Species
- Archaeological Resources
- Undocumented Cultural Resources
- Drainage and Hydrology
- Nesting Birds
- Agricultural Land Use Compatibility
- Agricultural Chemical Hazards
- Hazards Associate with Adjacent Agricultural Uses
- Parcel Acquisition
- Connectivity

Overall Segment Constraint Level: High

Estimated Segment Cost: \$3,144,346

C. RECOMMENDED TRAIL ALIGNMENTS

The purpose of this section is to provide decision makers with recommendations for trail alignments. The level of severity for each constraint (Figure 3-1, Table A-1, Appendix A) provided the tool used to determine the level of severity for each proposed trail segment.

Once trail segments were recognized and assigned an overall constraint level, potential trail alignment preferences were identified. Trail alignments are composed of a collection of segments that represent different constraints and opportunities. As seen in Figure 3-1, no single collection of segments will completely avoid all of the identified constraints. As such, three alignments have been identified that would minimize constraints to the extent possible. Based on this evaluation, Trail Alignment A would be the preferred alignment from an environmental constraints perspective. Trail Alignment A would be preferable to Trail Alignment B, which would in turn be preferable to Trail Alignment C. The following is a description of these three alternatives for trail alignments:

Trail Alignment A: This trail alignment consists of segments 1, 2, 4, 6, 8 and 10. The preference of this alignment is contingent on coordinating with the City of Atascadero for potential development in the vicinity of segments 8 and 10. Currently, there is a residential development proposed for the area that segments 8 and 10 traverse. Should this development be approved in its current form, El Camino Real would be extended across the UPRR line in order to provide access to the development.

In addition, the proposed residential development would also include a bridge across Graves Creek in order to provide access to the developments on both sides of the Creek. In this case, Trail Alignment 1 could use the planned El Camino Real and Graves Creek bridges, saving the County time and money. This alignment includes the at-grade rail crossing and would therefore require coordination with UPRR regarding access across the rail corridor. The alignment generally follows the Salinas River riparian corridor, west of the tree line. However, the alignment would cross the riparian corridors associated with Paso Robles Creek and Graves Creek.

An additional advantage to this potential alignment is that it would not expose trail users to substantial noise and potential safety hazards associated with Highway 101. In addition, since this alignment follows segments 1 and 2, it would use the existing Main Street roadway for a portion of the trail, and would therefore minimize ground disturbance and associated impacts on biological and cultural resources in this area.

Estimated Cost of Alignment: \$2,288,449

This estimate does not include the cost saving factors associated with coordination between the County and the City of Atascadero.

Trail Alignment B: This trail alignment consists of segments 1, 2, 4, 6, 7 and 9. This alignment is similar to Alignment 1 with regard to its use of segments 1, 2, 4 and 6. However, should the City of Atascadero opt to disregard the extension of El Camino Real over the UPRR line, the use



of segments 7 and 9 may be preferred. Segment 7 poses a significant constraint in that this segment would use the existing UPRR trestle to cross Graves Creek. In the event that the UPRR fails to grant an agreement to use the trestle for these purposes, segment 7 would require a new bridge to bring trail users across Graves Creek to the existing (informal) undercrossing beneath the UPRR trestle. This would significantly increase costs.

Estimated Cost of Alignment: \$1,996,933

Trail Alignment C: This trail alignment consists of segments 11, 13 and 14. This alignment was chosen since it has a relatively small amount of severe constraints. Primarily, this alignment would not result in UPRR right-of-way encroachments and would not require the construction of expensive UPRR under/overcrossings. This alignment would avoid biological resources constraints associated with the Salinas River, but would result in similar biological resources constraints as the other alignments with regard to crossings of Paso Robles Creek and Graves Creek. It should be noted that segment 11 would potentially utilize Vineyard Drive to bring trail users west of Highway 101. Vineyard Drive, as it exists today, is not designed to support such recreational use, outside of the planned bike lanes. Improvements would be required to ensure the safety of trail users along Vineyard Drive. Additionally, an alignment west of Highway 101 would not accomplish the goal of connecting the two communities as well as an alignment east of the highway. The portion of the site west of Highway 101 is also characterized by a complex parcel ownership pattern (see Figure 2.7-1) which would have the potential to complicate the acquisition of easements and right-of-way agreements. Additionally, this alignment would result in conflicts with existing agricultural uses, including land use conflicts, prime soils conversion, and potential toxic hazards associated with agricultural chemicals, that trail Alignments A and B would not.

Estimated Cost of Alignment: \$2,289,131

4.0 REFERENCES AND PREPARERS

4.1 REFERENCES

- Althouse and Meade, Inc. Rancho Santa Ysabel San Luis Obispo County, California Draft Biological Resources Study. April 10, 2001.
- Conejo Archaeological Consultants. *Cultural Resources Constraints Analysis for the Templeton-Atascadero Bikeway Project, San Luis Obispo County, California*. April 3, 2003.
- California Department of Fish and Game, California Natural Diversity Data Base (Rarefind).

 Computer listing and map locations of historic and current recorded occurrences of special-status species and natural communities of special concern for the Cambria USGS 7.5 minute quadrangle map.
- California Department of Fish and Game. *Endangered and Threatened Animals of California*. 12 pgs. Natural Heritage Division, Natural Diversity Data Base.
- California Department of Fish and Game. *Endangered, Threatened, and Rare Plants of California*. 16 pgs. Natural Heritage Division, Plant Conservation Program. .
- California Department of Fish and Game. *Special Animals*. 42 pgs. Natural Heritage Division, Natural Diversity Data Base.
- California Department of Fish and Game. *Special Plants List*. 119 pgs. Natural Heritage Division, Natural Diversity Data Base.
- California Department of Fish and Game. *Fish and Game Code of California*, the California Endangered Species Act. Gould Publications, Altamonte Springs, FL. 1999.
- California Department of Fish and Game. Fish and Game Code of California, Section 3503.5. Birds of prey and their eggs. It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Gould Publications, Altamonte Springs, FL. 2001.
- California Native Plant Society. California Native Plant Society's Inventory of Rare and Endangered Plants of California. 2001.
- Douglas Wood & Associates, Inc. *Chandler Ranch Master Plan Draft Environmental Impact Report.*June 2000.
- Hickman, James C., Ed. *The Jepson Manual, Higher Plants of California*. University of California Press. 1993.

- Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, Sacramento.
- Hoover, Robert F. 1970. *The Vascular Plants of San Luis Obispo County, California*. University of California Press, Berkeley.
- Keil, David. Professor of Biology (Plant Sciences), California Polytechnic State University, San Luis Obispo. Personal communication January 4, 2002.
- Mayer, Kenneth and Laudenslayer, William Jr., Editors. 1988. *A Guide to Wildlife Habitats of California*. California Department of Forestry and Fire Protection
- Munz, P.A. and D. Keck. 1968. *A California Flora with Supplement*. University of California Press, Berkeley.
- Peterson, Roger Tory. 1990. A Field Guide to Western Birds, Houghton Mifflin Company.
- Prunuske Chatham, Inc. (1993). San Luis Obispo County North Coast Area Update. East West Ranch, Cambria. *Santa Rosa Creek Enhancement Plan*. Response to Coastal Commission Staff Recommendation Vol. I- Statement of Position of East West Ranch
- Reed, P.B., Jr. *National List of Plant Species That Occur in Wetlands, California (Region)*. U.S. Fish and Wildlife Service Biological Report 88(26.10). 1988. 135pp.
- Sawyer, J.O. and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento.
- Stebbins, Robert C. 1985. *A Field Guide to Western Reptiles and Amphibians*. Houghton Mifflin Company.
- Tupen, Gaylene. Preliminary Biological Resources Assessment for the Black Ranch Property San Luis Obispo County, California. June 1998.
- United States Department of Agriculture, Natural Resources Conservation Service. *Soil Survey of San Luis Obispo County, California, Paso Robles Area.*
- United States Fish and Wildlife Service. 1973. The Endangered Species Act of 1973, as amended (16 U.S.C 1531 *et seq.*)

4.2 AGENCIES/INDIVIDUALS CONTACTED

- Lea, Mary. Biologist, U.S. Fish and Wildlife Service Ventura Fish and Wildlife Office, 2002.
- Wahler, Terry. County of San Luis Obispo Department of Planning and Building. May, 2003.
- Warwick, John. San Luis Obispo County Agricultural Commissioner's Office. May 2003.

Frace, Warren. Planning Director, City of Atascadero. June 2003.

San Luis Obispo County Assessors Office. June, 2003.

Kerr, Patrick. Manager of Industry and Public Projects, Union Pacific Railroad. May, 2003.

Gault, Ken. Grade Separations Construction, Union Pacific Railroad. May, 2003.

Boles, Kevin. Rail Crossing Engineer (San Luis Obispo County), FHWA. May, 2003.

Wood, John. Planning Department. Caltrans, District 5. May, 2003.

4.3 LIST OF PREPARERS

This Report was prepared by Rincon Consultants, Inc. under contract to the County of San Luis Obispo. Persons involved in data gathering analysis, project management, and quality control included:

Rincon Consultants, Inc.

John Rickenbach, AICP, Project Manager
Jeff Oliveira, Assistant Project Manager
Richard Daulton, Senior Planner
David Wolff, Manager, Biological Resources Group
Kevin Merk, Senior Plant Ecologist/Restoration Specialist
Kim Sanders, Associate Biologist/Botanist
Joanne Dramko, Associate Planner/Graphic Designer
Jason Kirschenstein, Biologist/GIS Specialist

Engineering Development Associates, Inc.

Mike Bertaccini, Senior Engineer