

Transit Station Expansion Project

Draft
**Initial Study and
Mitigated
Negative
Declaration**

Prepared for:
City of Grover Beach

Prepared by:
Rincon Consultants, Inc.

June 2011



Transit Station Expansion Project

Draft
Initial Study – Mitigated Negative Declaration

Prepared for:

City of Grover Beach
154 South Eighth Street
Grover Beach, CA 93433
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June 2011

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INTRODUCTION

LEGAL AUTHORITY AND ENVIRONMENTAL DETERMINATION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with the *California Environmental Quality Act (CEQA) Guidelines*, County's Rules and Procedures for the Implementation of CEQA, and relevant provisions of CEQA, as amended.

Initial Study. Section 15063(c) of the *CEQA Guidelines* defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. The purposes of an Initial Study are:

- (1) To provide the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR), or a Negative Declaration, or a Mitigated Negative Declaration, or an Exemption;
- (2) To enable the Lead Agency to modify a project, mitigating adverse impacts, thus avoiding the need to prepare an EIR; and
- (3) To provide sufficient technical analysis of the environmental effects of a project to permit a judgment to be made by the Lead Agency, based on the record as a whole, that the environmental effects of a project have been adequately mitigated or require further in-depth study in an EIR.

Negative Declaration or Mitigated Negative Declaration. Section 15070 of the *CEQA Guidelines* states that a public agency shall prepare a negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment; or
- (b) The Initial Study identifies potentially significant effects but:
 1. Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and
 2. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

An IS/MND may be used to satisfy the requirements of CEQA when a proposed project would have no significant unmitigable effects on the environment. As discussed further in subsequent sections of this document, implementation of the proposed project would not result in any significant effects on the environment that cannot be reduced to below a level of significance with the mitigation measures included herein.



EVALUATION OF POSSIBLE ENVIRONMENTAL IMPACTS AND SIGNIFICANCE DETERMINATION

The following sections of this IS/MND provide discussions of the possible environmental effects of the proposed project for specific environmental issue areas that have been identified on the CEQA Initial Study Checklist. For each environmental issue area, potential effects are evaluated.

A “significant effect” is defined by Section 15382 of the *CEQA Guidelines* as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” According to the *CEQA Guidelines*, “an economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

USE OF PREVIOUS ENVIRONMENTAL DOCUMENTS IN THIS ANALYSIS

The proposed project is identified as a subsequent project in the City’s Land Use Element Update (February 2010) and Final Master EIR (MEIR) (November 2009). The MEIR analyzed the general environmental effects of the proposed Land Use Element Update as a whole, including the proposed project, and future development of this project was therefore analyzed at a program-level¹ in the MEIR.

¹ A program-level analysis provides a generalized evaluation of impacts based on area of impact and unit count assumptions, rather than a review of a specific development proposal. Program-level analyses are common when multiple sites are evaluated in a General Plan Update or Community Plan, and details of development of these sites have not yet been developed.



INITIAL STUDY

PROJECT TITLE

Transit Station Expansion Project

LEAD AGENCY NAME AND ADDRESS

City of Grover Beach
154 South Eighth Street
Grover Beach, CA 93433

CONTACT PERSON AND PHONE NUMBER

Bruce Buckingham, Community Development Director
City of Grover Beach
(805) 473-4520
bbuckingham@grover.org

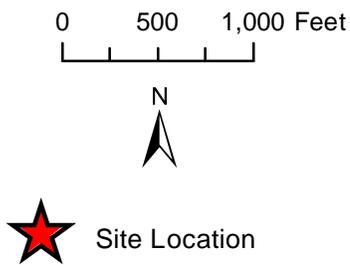
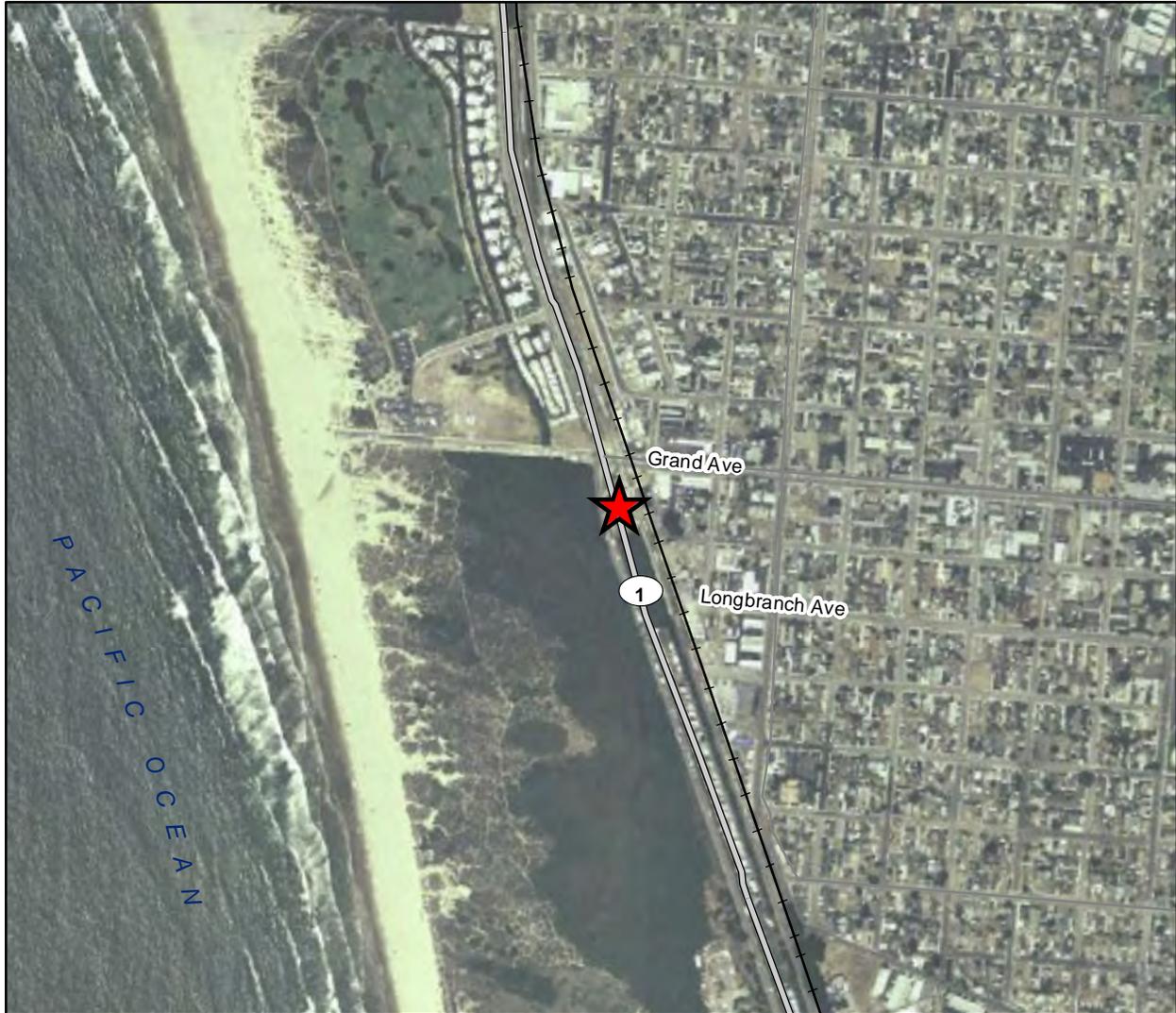
PROJECT APPLICANT

City of Grover Beach
154 South Eighth Street
Grover Beach, CA 93433

PROJECT LOCATION

The approximately 2.8-acre project site is located at 180 West Grand Avenue (APNs 060-206-024, 060-206-025, and a portion of 060-263-034), southeast of the intersection of Grand Avenue and Highway 1, within the City of Grover Beach (refer to Figure 1). The site is bordered by West Grand Avenue to the north, the Union Pacific Railroad to the east, Highway 1 to the west, and a recreational vehicle (RV) park to the south. The current General Plan Land Use designations for the project site are Public/Quasi Public (for APN 060-206-025) and Planned Commercial (Visitor-Serving Mixed Use has been adopted by the City but has not been approved by the Coastal Commission) (for APNs 060-206-025 and 060-263-034), and the corresponding Zoning designation is Coastal Planned Commercial (C-P-C) (Coastal Visitor Services has been adopted by the City but has not been approved by the Coastal Commission). Land uses surrounding the project site are designated Visitor Serving Mixed Use to the north, east and south, and Open Space/Resource Conservation to the west. Access to the site is via Highway 1. Figure 2 shows the project site in the context of the coastal zone and land uses.

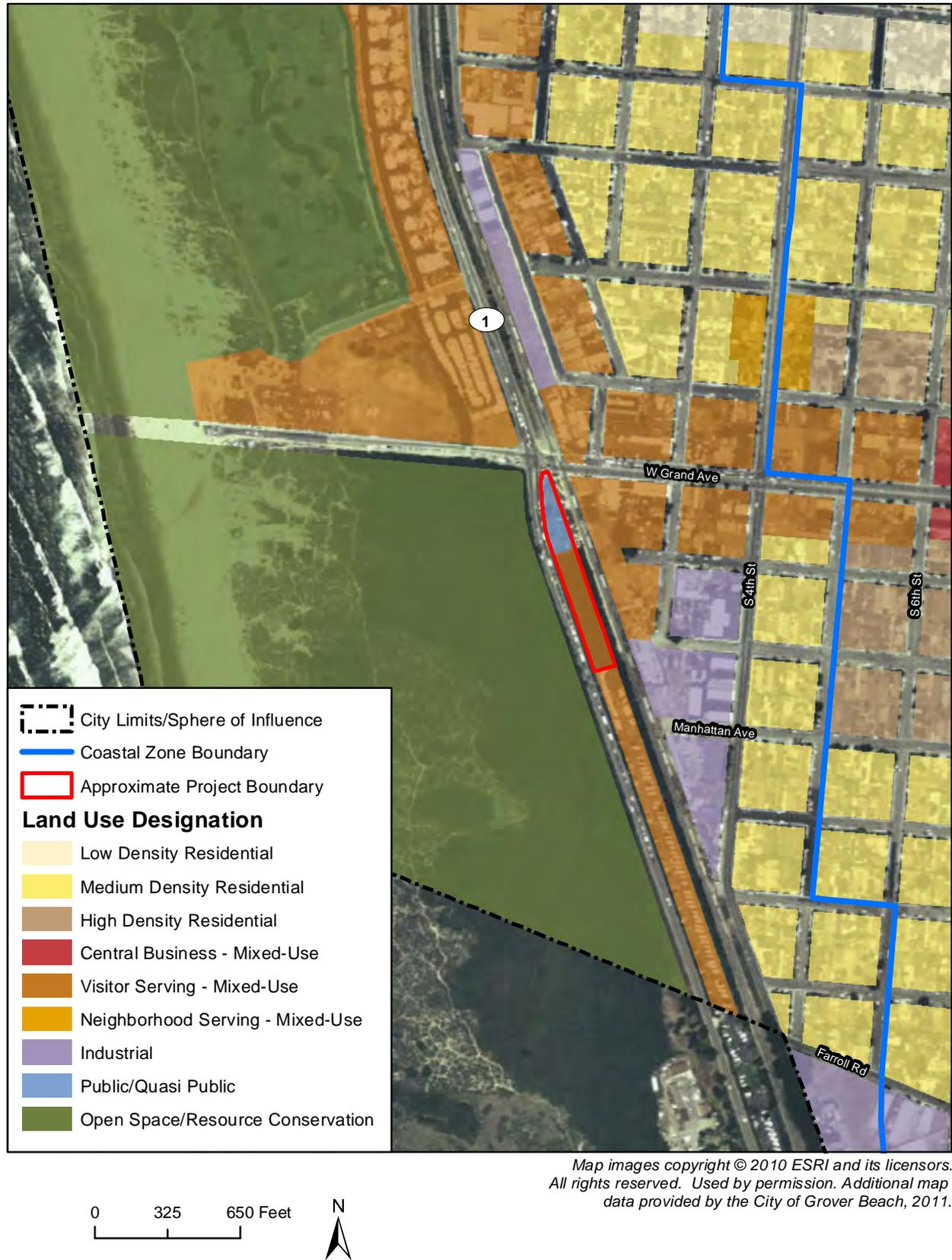




Base map source: U.S. Bureau of the Census Tiger 2000 data.
Map images copyright © 2010 ESRI and its licensors.
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Project Vicinity Map

Figure 1



Coastal Zone and Land Use in the Project Area

Figure 2

DESCRIPTION OF PROJECT

The project site, located at 180 West Grand Avenue in the City of Grover Beach, is currently developed with the Amtrak Grover Beach Station, Chamber of Commerce building, and 32 parking spaces, as well as associated landscaping and hardscaping. The southern portion (approximately 2.8 acres) of the site is undeveloped and contains riparian vegetation and an existing recreation vehicle storage area. The existing Amtrak Grover Beach Station is un-staffed and comprised of a train station depot and rail passenger platform. The existing Amtrak Grover Beach Station is un-staffed and comprised of a train station depot and rail passenger platform.

Amtrak currently provides rail service at the Grover Beach Station with two daily round trips of the "Pacific Surfliner" train and four daily round trips of connecting buses (motorcoach) to destinations in the Central Valley (e.g., Hanford) and cities located in Southern California. In 2009, Amtrak trains and buses averaged 46 daily trips² (boardings + alightings) for a total of approximately 16,700 trips into and out of the Grover Beach Station. Local transit bus service, South Coast Area Transit, passes by the station site, but does not currently stop.

The proposed project would be constructed in two phases. Phase 1 would be developed by the City of Grover Beach which is proposing to expand the existing Amtrak train station to incorporate bus passenger loading/unloading areas and provide pedestrian and bicycle connections, creating a multi-modal transit center. The project does not include new bus or transit trips. The project would be carried out in two phases (refer to Figure 3). Phase 1 of the project would occur on approximately 1.3 acres of land in the northern portion of the site. Phase 1 would include the construction of an approximately 400 square foot bus shelter and loading/unloading zone with platform access, additional parking (approximately 40 spaces), roundabout entry statement, and drought-tolerant landscaping. In addition, a pedestrian/bicycle path would be constructed that would connect to the existing 232-space Coastal Dunes RV Park to the intersection of Highway 1 and West Grand Avenue. Phase 2 of the project would be developed by San Luis Obispo County Parks and Recreation Department. The proposed project would provide an additional vehicle entrance to the Coastal Dunes Recreational Vehicle (RV) Park that is operated by San Luis Obispo County. Additional improvements would include a one-way driveway and a 400 square-foot entry kiosk and office. A future RV Park expansion area/campground could also be developed adjacent to the entry driveway.

PROJECT OBJECTIVES

The primary objectives of the proposed project are as follows:

- *To create a fully functional multi-modal transit center that would serve Amtrak train and bus with seamless connections for visitors and commuters via regional and local bus, vanpooling/carpooling and bicycle;*
- *To further encourage and enhance the use of alternative transportation modes to access the coast and other parts of the County and reduce vehicle trips;*

² Amtrak Fact Sheet, Fiscal Year 2009 Amtrak Service & Ridership



- *Provide ample parking for train and bus riders, vanpooling/carpooling and future trailhead;*
- *To combine the train and bus passenger loading areas to improve operations;*
- *To create a clear and direct pedestrian and visual linkage between the two loading areas, particularly for disabled passengers;*
- *To provide a safe pedestrian and bicycle connection from the existing recreational vehicle park to the beach via the Highway 1 and West Grand Avenue intersection which would increase coastal access consistent with the Coastal Act;*
- *To allow for convenient usage of the existing restrooms for bus passengers;*
- *To allow for a future connection with the regional South County Area Transit (SCAT) buses for seamless transfers; and*
- *To provide efficient site security for passengers.*

OTHER PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED

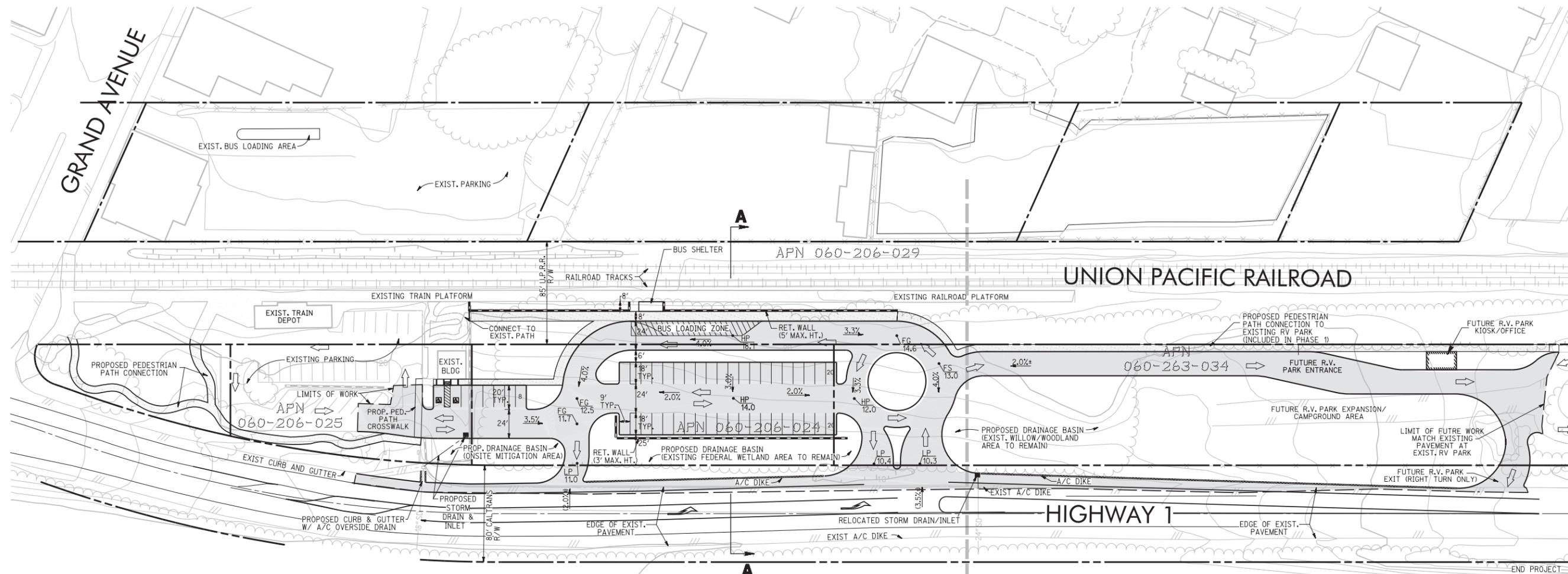
Approval of the proposed project is at the discretion of the City of Grover Beach, which is the lead agency. Other public agencies whose approval may be required include:

- Regional Water Quality Control Board (RWQCB) – Section 401 water quality certification
- U.S. Army Corps of Engineers (USACE) – Section 404 discharge permit
- California Department of Fish and Game (CDFG) – Streambed Alteration Agreement
- Caltrans – Encroachment Permit
- Union Pacific Railroad – Encroachment Permit



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PHASE 1- TRANSIT STATION EXPANSION PHASE 2- COASTAL RV PARK ACCESS

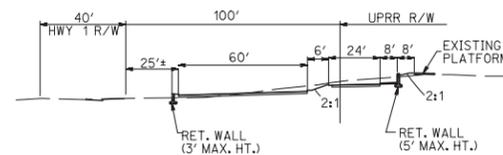
PROJECT DESCRIPTION	PHASE 1: EXPANSION OF THE EXISTING TRAIN STATION TO THE SOUTH ON APPROXIMATELY 56,000 S.F. TO PROVIDE NEW BUS LOADING/UNLOADING AREA AND PARKING. PROVIDE TRAIL CONNECTION TO EXISTING RV PARK.
SITE INFORMATION	PHASE 2: FUTURE ACCESS TO COASTAL DUNES RV PARK AND EXPANSION OF CAMPING FACILITIES FUNDED BY THE COUNTY. PHASE 1- 56,000+/-S.F. PHASE 2- 65,000+/-S.F. TOTAL PROJECT AREA = 121,000 S.F. +/- (2.8 ACRES+/-)
PROJECT AREA	GENERAL PLAN: PLANNED COMMERCIAL ZONING: COASTAL PLANNED COMMERCIAL (C-P-C) APNs: 060-206-024 AND A PORTION OF 060-263-034
LOT COVERAGE	50% BUILDINGS/PARKING/HARDSCAPE 50% LANDSCAPING/OPEN SPACE
BUILDING(S) AREA	400+/- S.F. (BUS SHELTERS)
PARKING	PROPOSED - 43 STANDARD STALLS EXISTING - 30 STANDARD STALLS , 2 ADA STALLS TOTAL - 73 STANDARD STALLS , 2 ADA STALLS
LANDSCAPING AREA	22,000+/- S.F.

LEGEND

- PROPOSED A/C PAVING
- PROPOSED HARDSCAPE
- EXISTING HARDSCAPE
- APPROXIMATE LOCATION OF 100-YEAR FLOODPLAIN (FIRM 06079C1582F)
- DIRECTION OF TRAVEL

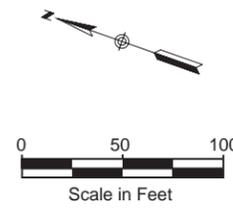
NOTES:

1. THIS SITE PLAN IS CONCEPTUAL IN NATURE AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION OR ESTIMATING PURPOSES.
2. ONSITE DRAINAGE HAS NOT BEEN EVALUATED FOR THE PURPOSES OF RETENTION/DETENTION BASIN DESIGN OR INFRASTRUCTURE DESIGN PURPOSES. STRUCTURAL BMP'S WILL NEED TO BE IMPLEMENTED WITH THIS PLAN TO COMPLY WITH LOW IMPACT DEVELOPMENT REQUIREMENTS AS WELL AS THE CURRENT CONSTRUCTION GENERAL PERMIT.
3. TOPOGRAPHY SHOWN IS A COMBINATION OF CITY OF GROVER BEACH 2002 AERIAL TOPOGRAPHY (ADJUSTED) AND SUPPLEMENTAL FIELD TOPOGRAPHY OBTAINED BY RICK ENGINEERING COMPANY IN JULY 2009.



SECTION A-A

N.T.S.



Site Plan

Figure 3

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- | | | |
|----------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> <i>Aesthetics</i> | <input type="checkbox"/> <i>Agriculture and Forest Resources</i> | <input type="checkbox"/> <i>Air Quality</i> |
| <input type="checkbox"/> <i>Biological Resources</i> | <input type="checkbox"/> <i>Cultural Resources</i> | <input type="checkbox"/> <i>Geology/Soils</i> |
| <input type="checkbox"/> <i>Greenhouse Gas Emissions</i> | <input type="checkbox"/> <i>Hazards/Hazardous Materials</i> | <input type="checkbox"/> <i>Hydrology/Water Quality</i> |
| <input type="checkbox"/> <i>Land Use/Planning</i> | <input type="checkbox"/> <i>Mineral Resources</i> | <input type="checkbox"/> <i>Noise</i> |
| <input type="checkbox"/> <i>Population/Housing</i> | <input type="checkbox"/> <i>Public Services</i> | <input type="checkbox"/> <i>Recreation</i> |
| <input type="checkbox"/> <i>Transportation/Traffic</i> | <input type="checkbox"/> <i>Utilities/Service Systems</i> | |



DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Paul Calderwood Senior Planner
Rincon Consultants, Inc.

June 23, 2011
Date



EVALUATION OF ENVIRONMENTAL IMPACTS

AESTHETICS - <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

a, c. Currently, the northern portion of the project site is developed with the Amtrak Grover Beach Station, a Chamber of Commerce Building, as well as informal landscaping and parking areas. The southern portion of the site is undeveloped and contains 1.7 acres of riparian vegetation. The proposed project includes improvements to the site including an approximately 400 square foot bus shelter and loading/unloading zone with platform access, approximately 40 additional parking spaces, roundabout entry statement, pedestrian and bicycle paths, and drought-tolerant landscaping. The proposed improvements would be consistent with the Coastal Planned Commercial zoning designation and Local Coastal Program, in regard to character and scale of the project. In addition, the proposed project would be generally similar in character and scale to the existing land uses on the northern portion site, as well as surrounding land uses, thereby resulting in minimal changes to the character of the area.

The coastal areas of the City have a naturally scenic quality and a unique visual character. Public views from Grand Avenue and Highway 1 through the project site are primarily of visitor-serving businesses, public streets, and sidewalks. However, development of the proposed project would not result in additional buildings or structures that would significantly block or otherwise adversely affect existing public views of this scenic resource.

In addition, the project site is zoned Coastal Planned Commercial and is located in the Coastal Zone. As such, development would be sited and designed consistent with the standards and regulations set forth in the City’s General Plan, Municipal Code and Local Coastal Program, which require the protection of existing view corridors.

Furthermore, the California Coastal Act mandates consideration of aesthetic impacts. The Coastal Act requires that development in the Coastal Zone, be located and designed to minimize the alteration of natural land forms and be visually compatible with the character of surrounding areas (Public Resources Code Section 30251). The Coastal Act also requires that “scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance” (Public Resources Code Section 30251). Additionally, “permitted development shall be sited and designed to protect views along the ocean, to minimize the alteration of land forms, [and] to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.”



Therefore, the proposed project would not have a substantial adverse effect on a scenic vista or substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be **less than significant**.

b. None of the roadways in the project vicinity are officially designated as state or local scenic highways or routes, but the project site would be visible from Highway 1, which is considered an “Eligible State Scenic Highway” in the project vicinity. The project site would not affect rock outcroppings or historic buildings, as no such resources are located on or near the project site. The Scenic Routes Element of the City’s General Plan identifies scenic routes within the City, two of which bound the project site to the north (Grand Avenue) and west (California State Highway 1). The proposed design of the project would be consistent with the Plan Policies to alleviate existing undesirable conditions east of Highway 1. As discussed above, the project would be compatible with existing and adjacent development and would not affect views of identified scenic resources. Therefore, implementation of the proposed project would have **no impact** on scenic resources within a designated state scenic highway.

d. Existing sources of light and glare in the project vicinity include lighting spillover from existing streetlights and vehicle headlights traveling along Highway 1 and Grand Avenue, as well as existing parking lot lighting, security and way-finding lighting, and glass building facades at nearby, existing non-residential uses. Existing sources of light and glare on the project site include security, parking lot, and station lighting.

The proposed project would introduce minimal additional parking lot, security and platform lighting; however, it would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. In addition, nighttime lighting would be shielded and downcast to reduce light and glare impacts. Therefore, impacts would be **less than significant**.

<i>AGRICULTURE AND FOREST RESOURCES</i> – <i>Would the project¹:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X



AGRICULTURE AND FOREST RESOURCES – <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

1. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

a-b, e. The project site is zoned Coastal Planned Commercial and is not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared by the Farmland Mapping and Monitoring Program (California Department of Conservation, 2008). The California Department of Conservation's Farmland Mapping and Monitoring Program classifies the project site as Urban and Built-Up Land. The project would not conflict with a Williamson Act contract. Therefore, the proposed project would not result in the conversion of farmland to non-agricultural use or conflict with an existing zoning for agricultural use or a Williamson Act contract. **No impact** would occur.

c-d. The project site is zoned Coastal Planned Commercial and is currently developed with the Amtrak Grover Beach Station, a Chamber of Commerce Building, as well as informal landscaping and parking areas. There is no forestland or timberland on the project site as designated by the United States Department of Agriculture Forest Service (2010). The project would not result in the loss of forestland or conversion of forestland to non-forest use, nor would it conflict with existing zoning for, or cause rezoning of, forestland, timberland, or timberland zoned Timberland Production. **No impact** would occur.

AIR QUALITY - Would the project¹:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any stationary source air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?			X	



AIR QUALITY - <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

¹. *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations*

The City of Grover Beach is located within the South Central Coast Air Basin (SCCAB). State air quality oversight for the basin is provided by the San Luis Obispo Air Pollution Control District (SLOAPCD). The air basin is in non-attainment for the 24-hour state standard for particulate matter (PM₁₀) and the eight hour state standard for ozone (O₃). The regional 2001 Clean Air Plan (CAP) prepared by the San Luis Obispo Air Pollution Control District (SLOAPCD) addresses the attainment and maintenance of state and federal ambient air quality standards within the South Central Coast Air Basin (SCCAB).

a. The 2001 Clean Air Plan (CAP) prepared by the San Luis Obispo Air Pollution Control District (SLOAPCD) addresses the attainment and maintenance of state and federal ambient air quality standards within the South Central Coast Air Basin (SCCAB). The consistency of a proposed project with the CAP is based on whether the proposed project is consistent with the land use assumptions and transportation control measures and strategies outlined in the 2001 CAP. If the project is consistent with these measures and strategies, the project is considered consistent with the 2001 CAP.

The proposed project would not increase the population of the area as the project does not propose and would not result in the need for new residential uses. In addition, the project does not include new bus or train trips. Further, the proposed transit station improvements would be expected to result in an overall decrease in vehicle trips and result in beneficial air quality impacts, consistent with the 2001 CAP (refer to discussion in checklist section XVI, *Transportation/Traffic*). Therefore, impacts would be **less than significant**.

b-c. The proposed project includes improvements to the existing transit station site and does not include new bus or train trips. Emissions generated by the proposed project would include temporary construction emissions. The proposed project would not be expected to generate operational or long-term emissions, as transit station improvements would result in an overall decrease in vehicle trips and beneficial air quality impacts. The temporary air quality emissions associated with the construction of the proposed project were estimated using the URBEMIS 2007 v.9.2.4 air quality model. Appendix A contains the air quality modeling assumptions and detailed results.

Construction activities associated with the proposed project would include construction of the bus shelter and loading/unloading zone, grading, and paving. These construction activities would result in temporary emissions of fugitive dust (measured as PM₁₀) that may further degrade air quality. In addition, exhaust emissions associated with heavy construction equipment would potentially degrade air quality.



The SLOAPCD’s approach to analysis of construction emissions is to require mitigation for any project with emissions in excess of 137 lbs/day or 2.5 tons/quarter of ozone precursors (ROG + NO_x), 7 lbs/day or 0.13 tons/quarter of diesel particulate matter (DPM), or 2.5 tons/quarter of particulate matter (PM₁₀) dust. Maximum daily and quarterly emissions are shown in Table 1 (see Appendix A for full URBEMIS results).

Table 1 Construction Emissions

	Ozone Precursors (ROG + NO_x)	DPM¹	PM₁₀ dust
Maximum running quarterly emissions	0.49 tons/quarter	0.02 tons/quarter	0.17 tons/quarter
<i>SLOAPCD running quarterly Threshold</i>	<i>2.5 tons/quarter</i>	<i>0.13 tons/quarter</i>	<i>2.5 tons/quarter</i>
Maximum daily emissions	46.69 lbs/day	2.48 lbs/day	10.02 lbs/day
<i>SLOAPCD daily threshold</i>	<i>137 lbs/day</i>	<i>7 lbs/day</i>	<i>n/a</i>

¹ PM₁₀ Exhaust from the URBEMIS 2007 model results.

Source: Unmitigated summer emissions generated from URBEMIS 2007 for Windows 9.2.4.

As shown in Table 1, construction emissions based on two acres of disturbed land, would be below both daily and quarterly thresholds set by SLOAPCD. Therefore, proposed project construction activities would have a **less than significant** impact to air quality.

d. According to *SLOAPCD CEQA Handbook* (2009), sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The nearest sensitive receptors include the RV Park adjacent to the southern border of the project site, multi-family residences approximately 300 feet to the north of the project site, and a single family residence approximately 300 feet east of the project site.

While the estimated construction emissions noted above are below the SLOAPCD thresholds, in accordance with the standards of the SLOPACD CEQA Handbook, standard mitigation measures are required because sensitive receptors are located within 1,000 feet of the project site. Accordingly, Mitigation Measures AQ-1 and AQ-2 would be required. Impacts would be **less than significant with mitigation**.

e. The proposed project includes improvements to the existing transit station site and does not include new bus or train trips. The project is not anticipated to generate any objectionable odors. **No impact** would result.

Mitigation Measures

AQ-1

Fugitive Dust Control Measures.

- a) Reduce the amount of the disturbed area where possible;
- b) Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;



- c) All dirt stock pile areas should be sprayed daily as needed;
- d) Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
- e) Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
- f) All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- g) All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible after grading unless seeding or soil binders are used;
- h) Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- i) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;
- j) Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;
- k) Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;
- l) All of these fugitive dust mitigation measures shall be shown on grading and building plans; and
- m) The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20 percent opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.

AQ-2

Construction Equipment.

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);



- Use diesel construction equipment meeting ARB’s Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation;
- Use on-road heavy-duty trucks that meet the ARB’s 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
- Diesel idling within 1,000 feet of sensitive receptors is not permitted;
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Electrify equipment when feasible;
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

BIOLOGICAL RESOURCES - <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		



BIOLOGICAL RESOURCES - <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

A Biological Report (BR) was prepared for the project site in September 2009 by Althouse and Meade, Inc. (refer to Appendix B). The report included a biological survey, wetland delineation, floristic inventory, and rare species analysis of the approximately two acres in the southern portion of the property (Study Area) that do not contain existing urban uses. The report did not survey the parcel with the existing Amtrak station, as the entire parcel is developed and no biological resources are present. Biological surveys occurred between May and August 2009. In addition, Althouse and Meade, Inc. prepared a biological report in 2005 for the Grover Beach Conference Center that included the Transit Center Expansion Project site. The 2005 report included a protocol survey for the California red-legged frog in Meadow Creek.

The Study Area is predominantly a patch of willow woodland habitat, surrounded on all sides by urban development, including Highway 1, Union Pacific Railroad, an Amtrak Station, and a RV park. It is inhabited by several transient people, as evidenced by the active dwellings and debris piles observed on-site in 2009. The Study Area includes 1.7 acres of willow woodland habitat that contains vegetation similar to the willow woodlands in Meadow Creek, west of Highway 1. The Study Area is not contiguous with Meadow Creek as it is separated by Highway 1. The source of moisture that supports the woodland is a shallow water table adjacent to the Caltrans right-of-way. According to the 2009 BR, habitat within the Study Area has low biological function compared with larger intact willow habitats in the Meadow Creek watershed. Low biological function is the result of fragmentation and degradation of habitats on site by surrounding development and transient encampments.

The Study Area supports 1.7 acres of arroyo willows, a facultative wetland species. The arroyo willows on-site are medium-sized with canopy height that varies from 25 to 35 feet. The tree canopy is relatively dense and shrubby. Beneath the tree canopy, understory vegetation is variable, with dense brambles on higher ground. The dominant understory shrubs that form bramble thickets are California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), and poison oak (*Toxicodendron diversilobum*). The willow woodland is hydrophytic vegetation, which classifies it as a wetland according to the California Coastal Commission (CCC) Procedural Guidance for the Review of Wetland Projects in the California Coastal Zone (1994).

The parcel slopes west from the top of a railroad embankment approximately 24 feet above mean sea level (msl), dropping to a low area within the Caltrans right-of-way at approximately 9 feet above msl. Several low concave areas near Highway 1 are approximately three feet below street elevation. The low areas support obligate wetland vegetation, or contain no vegetation due to occasional ponding during the rainy season.



Wetland conditions potentially under the USACE, RWQCB, CDFG, and CCC jurisdiction are present in approximately 0.2 acre of the project site, located within the 1.7 acre willow woodland. This 0.2 acre area contains hydric soils, wetland hydrology, and hydrophytic plants. Wetland plants in low areas of willow woodland understory include blue wild rye (*Elymus glaucus*), marsh baccharis (*Baccharis douglasii*), bulrush (*Scirpus americanus*), and common threesquare (*Scirpus pungens*). The BR distinguishes this wetland area from the 1.7 acres of willow woodland. A complete list of plant and animal species known to occur in the project vicinity can be found in Appendix B.

a. The 2009 BR determined that the project site contains appropriate habitat for three special status animals. In addition, biological surveys evaluated the potential for one special status plant species and two additional special status animals to occur on-site; however, the surveys determined that the project site does not provide suitable habitat conditions for these species, although one species, Allen’s Hummingbird, was observed on the project site in 2009 but was not nesting at that time. These species are described below.

Plants

La Graciosa Thistle (*Cirsium loncholepis*). La Graciosa Thistle is a federally listed endangered plant that occurs in dune wetlands in San Luis Obispo and Santa Barbara Counties. The U.S. Fish and Wildlife Service (USFWS) designated critical habitat for this species includes dune wetlands associated with Meadow Creek at Pismo State Beach west of Highway 1, adjacent to the project site. Habitat on the project site is poorly suited to supporting a population of La Graciosa thistle. In addition, seasonally timed botanical surveys in spring of 2009 determined this endangered species does not occur on-site.

Animals

Allen’s Hummingbird (*Selasphours sasin*). The Allen’s hummingbird is listed by the California Department of Fish and Game as a “Special Animal”, and can be found in lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Allen’s hummingbird was observed on-site in 2009, but was not nesting at that time.

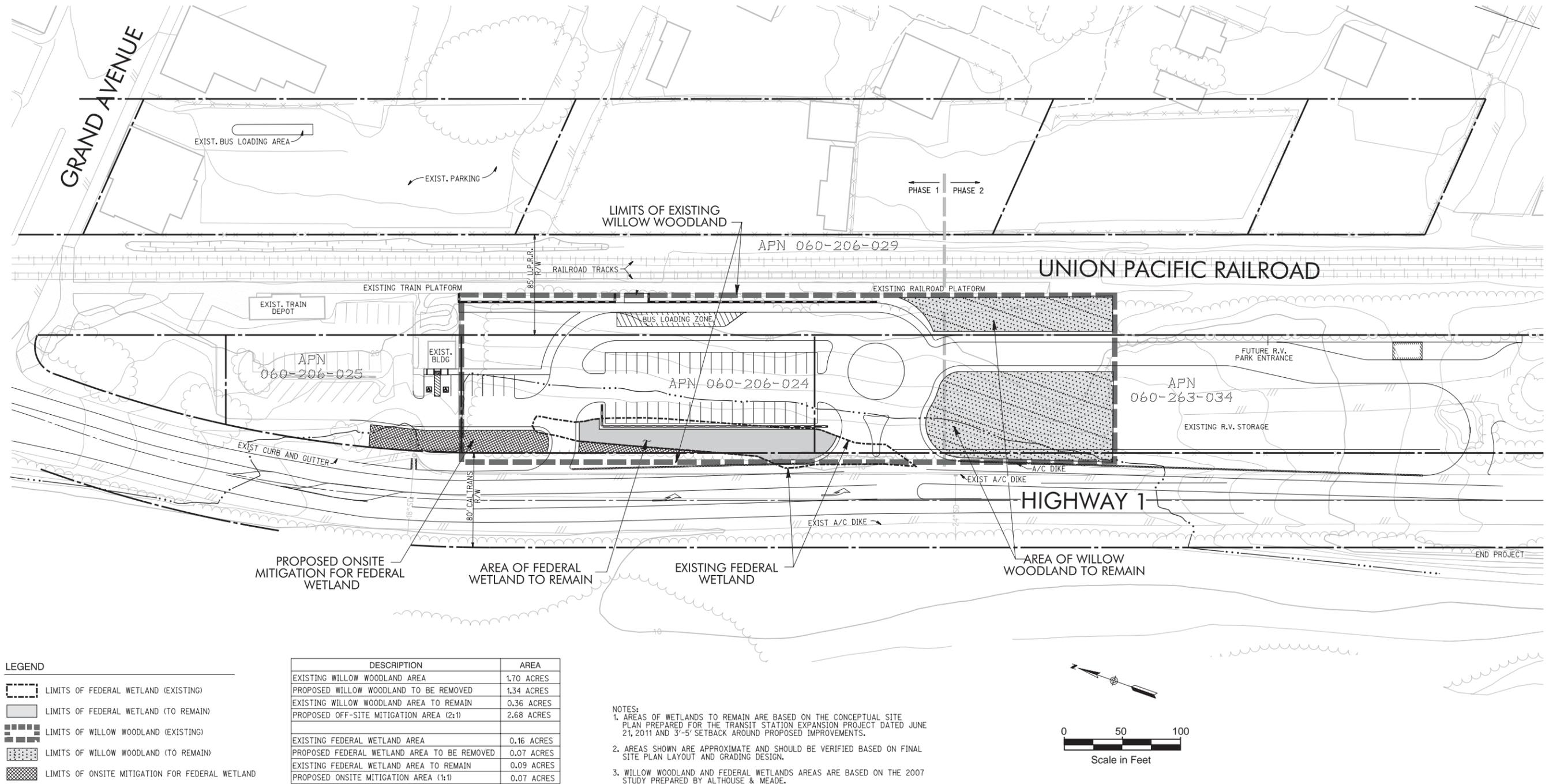
California red-legged frog (*Rana aurora draytonii*; CRLF; Federally Threatened and CDFG California Special Concern wildlife species). The CRLF is found in stagnant or slow moving water with depths greater than two feet and surrounded by dense shrubs, or emergent riparian vegetation, such as arroyo willow, cattails, and bulrushes. However, CRLF use a variety of habitat types, including various aquatic, riparian, and upland habitats. Additionally, at any time of the year, adult CRLF may move relatively long distances from breeding sites. The majority of extant localities are isolated, fragmented remnants of larger historical populations and occur along the coast from Mendocino County to Baja California and throughout the Central Valley and Sierra Nevada foothills. However, according to the 2005 report for the Grover Beach Conference Center, no red-legged frogs were observed during field surveys, and the site does not contain suitable breeding habitat.



Because no special status plant species occur on-site, the proposed project would have **no impact** on special status plants. However, in order to reduce the potential for disturbance of nests of Allen’s hummingbirds, which is protected by CDFG Code (Section 3503) and the federal Migratory Bird Treaty Act (MBTA), Mitigation Measure BIO-1 would be required. Therefore, impacts to special status animals would be **less than significant with mitigation incorporated**.

b, c. The proposed project would require the removal of the 1.26-acre willow woodland and wetland habitat and 0.06 acre of three parameter wetland within the willow woodland. Figure 4 illustrates the wetland habitat on-site. The 0.2 acre of three parameter wetland may be subject to the jurisdiction of USACE, RWQCB, and CDFG; therefore, the project would coordination with these agencies prior to impacting these resources. The fill of wetlands and waters of the U.S. is subject to a Section 404 permit under the Federal Clean Water Act. Discharges to wetlands and waters are also subject to a Clean Water Act Section 401 permit from the RWQCB, and the removal of riparian vegetation may require a Streambed Alteration Agreement through the CDFG. These agencies would be expected to impose specific permit requirements, such as the replacement of any lost wetland habitat. Mitigation Measure BIO-2 would be required to replace the willow woodland and wetland habitat at a minimum 1:1 ratio within the Meadow Creek watershed, . Therefore, impacts to habitat and wetlands would be **less than significant with mitigation incorporated**.

d. Currently, the project site is developed with the Amtrak Grover Beach Station, a Chamber of Commerce Building, informal landscaping and parking areas, as well as the willow woodland. The site is bordered by Highway 1, Grand Avenue, the Union Pacific Railroad, and a recreational vehicle park to the south, and it is unlikely that the proposed project would interfere substantially with the movement of any native resident or migratory wildlife species. However, implementation of the proposed project would result in the removal of woodland habitat, which could potentially affect any nesting birds that may be present onsite. California Fish and Game Code 3513 provides protection to nesting birds, including those listed under the Migratory Bird Treaty Act (MBTA), which includes several native bird species. Implementation of Mitigation Measure BIO-1 would result in impacts to nesting birds that would be a **less than significant with mitigation incorporated**.



Habitat Map

Figure 4

e. There are two tree species that exist on the project site (black cottonwood and arroyo willow), some of which may be removed as a result of the proposed project. Removal of on-site trees would be reviewed as part of project approval by City Council. As such, implementation of Mitigation Measure BIO-2 would result in impacts that would be **less than significant with mitigation incorporated**.

f. The project site is not located within an area subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the proposed project would have **no impact** on such plans.

Mitigation Measures

BIO-1 Nesting Birds. In order to avoid impacts to nesting birds, including birds protected under the Migratory Bird Treaty Act, all initial ground disturbing activities should be limited to the time period between February 1 and September 1 (i.e., outside the nesting season). If initial site disturbance, grading, and tree removal cannot be conducted during this time period, a pre-construction survey for active nests within the project site shall be conducted by a qualified biologist at the site no more than two weeks prior to any construction activities. If active nests are identified, then all construction work shall be conducted a minimum of 250 feet from the nests, until the adults and young are no longer reliant on the nest site, as determined by a City-approved biologist in coordination with the CDFG. The City-approved biologist shall determine the final buffer distance, to be dependent on the species potentially affected.

BIO-2 Wetland Mitigation. The applicant shall coordinate with the CDFG, USACE, and RWQCB to determine if permits are required from any of these agencies. The applicant shall submit proof of coordination with these agencies or copies of permits to the Community Development and Public Works Departments prior to the issuance of grading permits. Loss of 1.26 acres of willow woodland, and 0.06 acre of three parameter wetland within the willow woodland shall be mitigated at a ratio to be determined by the permitting agencies, but shall not be less than 2:1 (two acres of off-site habitat created to one acre of habitat lost) or 1:1 on-site to ensure the no net loss of functions and values of the wetland habitat on-site. Local native riparian and wetland species shall be used.

A mitigation plan shall be prepared by a qualified biologist and shall at a minimum include the following components:

- a) Mitigation plantings for the loss of existing willow woodland shall provide a minimum 2:1 ratio of habitat



- values and functions to that impacted. However, agency permitting may require a higher ratio.
- b) Mitigation plantings for the loss of existing federal wetland shall provide a minimum 1:1 ratio of habitat values and functions to that impacted. However, agency permitting may require a higher ratio.
 - c) A mitigation phasing section to ensure that all restoration plantings are in place with sufficient irrigation prior to final inspection.
 - d) Restoration/revegetation activities shall use native wetland species from locally collected stock.
 - e) Prior to commencement of grading, the applicant shall file weed control/management provisions, irrigation methods and schedule.
 - f) Annual reporting requirements.

Since mitigation on-site is not feasible for willow woodland, mitigation off-site at a location approved by the permitting agencies shall occur. Alternatively, payment into an in-lieu fee program and/or purchase of credits at an approved mitigation bank may be allowed by the permitting agencies for impacts to wetlands.

<i>CULTURAL RESOURCES - Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

The following discussion is based on an Archival Records Search and Phase I Archaeological Surface Survey prepared for the project site in 2005 by Archaeologist Robert O. Gibson. The study covered an approximate two-acre Area of Potential Effect (APE), which does not include the northern portion of the proposed project with the existing Amtrak station and parking lot. Because the northern parcel is fully developed, no impacts to cultural resources would occur in that area.

- a. No historical resources were identified in the Archaeological Survey. Construction activities associated with the proposed project would not impact any known historical resources. **No impact** would result.



b-d. According to the Archaeological Study, no historic or prehistoric cultural resources were identified on the project site. The study also stated that given the flood potential and natural setting of the project site, no significant prehistoric or historic cultural resources are expected. Construction activities associated within the proposed project would not impact any known archaeological and paleontological resources or human remains. However, there remains the possibility of encountering undiscovered archaeological and paleontological resources and human remains during project construction activities. This is a potentially significant impact; however, with the measures listed below, impacts would be **less than significant with mitigation incorporated**.

Mitigation Measures

Implementation of mitigation measure CR-1 would reduce impacts to unknown archaeological and paleontological resources, and human remains to a less than significant level.

CR-1 Stop Work at Encounter. The City and/or their agents, representatives or contractors shall stop work immediately in the event that archaeological remains are encountered during grading, construction, landscaping or other construction-related activity. If previously undiscovered archaeological materials are encountered during construction, the City shall retain a qualified archaeologist and Native American representative to evaluate the significance of the find and prescribe appropriate mitigation (e.g., curation, preservation in place, etc.), if necessary. After the find has been appropriately mitigated, work in the area may resume. This condition shall be printed on all building and grading plans.

<i>GEOLOGY AND SOILS - Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii. Strong seismic ground shaking?			X	
iii. Seismic-related ground failure, including liquefaction?		X		
iv. Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	



GEOLOGY AND SOILS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

a(i). The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are located on or adjacent to the property, as identified by the U.S. Geologic Survey mapping system. Therefore, the potential for fault rupture within the project site is **less than significant**.

a(ii-iv). The City of Grover Beach, along with all of Southern California and the Central Coast, is within Seismic Zone 4 and subject to seismic groundshaking from faults in the region. Secondary seismic hazards result from the interaction of ground shaking with existing soil conditions, and include liquefaction, settlement, and landslides. Due to the relatively flat topography of the project site, impacts associated with landslides are not anticipated. According to the City’s General Plan Safety Element (2000), the project site is located in an area that would be subject to moderate liquefaction potential in the event of a major earthquake. The Safety Element indicates that the presence of a high water table and potential for granular sediments in the project vicinity could amplify ground shaking and result in liquefaction and settlement.

A seismic hazard cannot be completely avoided. However, its effect can be minimized by implementing seismic requirements specified by the California Building Code (incorporates the Uniform Building Code) and the California Division of Mines and Geology Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117 (revised 2008), which includes design and construction requirements related to fire and life safety and structural safety. In addition, the Safety Element includes the following standards:

Standard 4.4.1 The Building Division of the Community Development Department will enforce current building code requirements that require the potential for liquefaction to be addressed in the design of structures. The City will prohibit the construction of critical facilities in areas of potential liquefaction.

Standard 4.4.2 The Building Division of the Community Development Department will require geotechnical studies to be performed for habitable or important structures (as defined by the building code) sited in areas having a medium to high potential. The geotechnical study should evaluate the



potential for liquefaction and/or seismic related settlement to impact the development, and mitigation to reduce these potential impacts, if needed.

Implementation of Mitigation Measures GEO-1 would result in impacts related to seismic-related ground failure, including liquefaction that would be **less than significant with mitigation incorporated**.

b. The primary soil type found on-site is Oceano sand, 0 to 9 percent slopes. While the risk of water erosion for this soil is slight, the risk of wind erosion is high (Natural Resources Conservation Service, 2010). During construction, soil may erode due to wind entrainment and sediment may travel into storm drainage facilities. However, all proposed construction activities would be required to comply with California Building Code Chapter 70 standards, which are designed to ensure implementation of appropriate measures during grading and construction to control erosion and storm water pollution. In addition, the project site is designated Coastal Planned Commercial in the City Municipal Code, which requires preparation and approval of a grading and erosion control plan prior to construction, and site inspections to verify compliance.

In addition, grading during construction would disturb over one acre of land, and therefore, the project is required to complete a Stormwater Pollution Prevention Plan (SWPPP) pursuant to the National Pollution Discharge Elimination System (NPDES) requirements. The SWPPP would be designed to minimize water quality degradation through storm water monitoring, implement Best Management Practices, implement erosion control measures, and implement spill prevention and containment measures to assure that construction activities do not degrade surface water quality (see the *Hydrology and Water Quality* section). Preparation and implementation of the SWPPP would assure that potential soil loss or erosion impacts would be **less than significant**.

c. As discussed in section (a) above, according to the City's General Plan Safety Element, the proposed project is located in an area with moderate liquefaction and settlement potential. As previously mentioned, the Safety Element includes standards to minimize impacts due to liquefaction. The proposed project would be designed in accordance with these standards, as well as standards set forth in the California Building Code and the California Division of Mines and Geology Guidelines for Evaluating Mitigating Seismic Hazards in California. Further, implementation of Mitigation Measures GEO-1 would result in impacts related to seismic-related ground failure, including liquefaction that would be **less than significant with mitigation incorporated**.

d. According to the Natural Resources Conservation Service (NRCS, 2010), the shrink-swell potential for Oceano sand with 0-9 percent slopes is low. Therefore, the proposed project would not be located on expansive soil, and impacts would be **less than significant**.

e. The project will be connected to the City's sewer system, and will not require the use of septic tanks. Therefore, **no impacts** would result.

Mitigation Measure

GEO-1 Geotechnical Study. As required by the City, a geotechnical study shall be prepared for the site and submitted to the City. The geotechnical study shall include a liquefaction and settlement analysis. At a minimum, the study shall be in accordance with City and State building codes, and the California Division of Mines and Geology Guidelines for Evaluating and Mitigating Seismic Hazards in California (revised 2008). Such studies would typically include site-specific depth to groundwater and soil composition as they relate to seismically induced hazards. Any recommended measures to minimize potential risks due to liquefaction or settlement specified in the geotechnical study shall be fully implemented in accordance with Uniform Building Code (UBC) and California Building Code (CBC) requirements. Any recommended measures and project compliance with UBC and CBC requirements shall be incorporated into the project design and engineering and verified at the permit stage.

GREENHOUSE GAS EMISSIONS – <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

a-b. A climate change analysis was conducted for the Master EIR, which examined greenhouse gas (GHG) emissions from buildout pursuant to the Land Use Element Update. The buildout in the Master EIR included the proposed project. The project includes multi-modal transit station improvements that are consistent with GHG emissions reduction strategies designed to reduce vehicle miles traveled. Therefore, the project would be consistent with Assembly Bill 32 and would not result in significant global climate change impacts. Impacts would be **less than significant**.

HAZARDS AND HAZARDOUS MATERIALS - <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?				X



HAZARDS AND HAZARDOUS MATERIALS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

a-b. The proposed project use would not involve the transport, use or disposal of hazardous materials, other than minor amounts typically used for maintenance and cleaning activities. As such, the project would not create a significant hazard to the public or the environment. **No impacts** related to the use, storage, transportation, storage or emissions of hazardous materials would occur.

c. As described above, there would be no hazardous materials, substances, or waste associated with project development other than those typically used for routine maintenance and cleaning activities. No schools are located within ¼ mile of the site. Therefore, schools would not be exposed to hazardous materials, substances, or waste. **No impact** would result.

d. The project site does not appear on any hazardous material site list compiled pursuant to Government Code Section 65962.5. In January 2011, Rincon Consultants searched the following databases for known hazardous materials contamination at the project site:

- U.S. Environmental Protection Agency's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database for superfund sites;
- Department of Toxic Substances Control's Envirostor database for cleanup sites and hazardous waste permitted facilities;
- Department of Toxic Substances Control's Site Mitigation and Brownfields database
- Geotracker search for leaking underground fuel tanks; and
- Investigations- Cleanups (SLIC) and Landfill sites, Cortese list of Hazardous Waste and Substances Sites.



The project site does not appear on any of the above lists; therefore, **no impact** would occur with respect to this issue.

e-f. The project site is located approximately 1 mile north of the Oceano County Airport. The airport’s safety zones do not extend into the City of Grover Beach. Therefore, the proposed project would not result in a safety hazard for people visiting or working in the project area. The project site is not located near any private airstrips. **No impacts** would result.

g. According to the San Luis Obispo County Office of Emergency Services, the project site is located in a Tsunami hazard area that would be evacuated to higher ground via Grand Avenue, eastward towards Oak Park, in the event of an emergency. Construction of the proposed project will not interfere with the County’s adopted *Tsunami Emergency Response Plan*. The project has been designed to meet fire department and emergency vehicle access requirements. **Less than significant impacts** would result.

h. The project is located in an urbanized area and the project site is not within a high fire hazard zone according to CAL FIRE’s Draft Fire Hazard Severity Zone map for San Luis Obispo County. **No impacts** related to risk of wildland fires would result.

<i>HYDROLOGY AND WATER QUALITY - Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		X		
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	



<i>HYDROLOGY AND WATER QUALITY - Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	

a. The proposed project involves the expansion of the existing transit station. Implementation of the proposed project would create additional paved and impermeable surfaces, which could contribute to urban storm water runoff, including oil, fuels, and sediment. During storm events, these pollutants could be transported by runoff into storm drain systems and ultimately into receiving water bodies. The Meadow Creek channel is frequently partially full during the winter season resulting in high groundwater and frequent flooding of nearby and downstream properties including the State Highway, during both high intensity and long duration storms. As a result, the ability to retain or treat stormwater on site during significant storm events is limited. However, the project includes a stormwater retention basin and bioswales sized to contain and filter storm water runoff and protect water quality during normal storm events.

In addition, the project would disturb more than one acre of land; therefore, it would be subject to the regulations under the federal Clean Water Act for NPDES storm water permits. Per State regulations, the applicant would be required to file a Notice of Intent with the Regional Water Quality Control Board (RWQCB) and prepare a Storm Water Pollution Prevention Plan (SWPPP) for construction activities. The SWPPP would list a series of BMPs to be utilized during and after construction to prevent storm water runoff pollution. Potential water quality impacts associated with construction activities and facility operations of the proposed project would be reduced to a **less than significant** level upon compliance with these existing regulatory requirements.

b. The proposed project would require a minimal amount of water for restroom facilities and landscaping. Water would be provided by the City, which primarily obtains its water supply from groundwater sources, supplemented by surface water from Lopez Reservoir. The proposed project’s incremental demand for water would not substantially deplete groundwater supplies, require the construction of new groundwater wells, or increase groundwater pumping. Project development would increase the impermeable surface area onsite, but would not significantly affect groundwater recharge because the project includes a retention basin/mitigation area, curbs, gutters, and drainage facilities that would allow water to infiltrate into the ground. Impacts would be **less than significant**.

c-f. The proposed project would slightly alter the existing drainage pattern to direct drainage toward the proposed retention basin. However, no new major reconfiguration of the site would occur and all drainage would continue to be directed to onsite drainage facilities, as discussed above. The proposed project would also be subject to the City’s Municipal Code Article VIII Chapter 4, Grading Regulations, as well as policies regarding water resources in Chapter 2 of



the Local Coastal Plan (LCP). LCP actions and policies for Meadow Creek (Western Branch) include:

1. *Action: All present and proposed storm drain outfalls within the City's portion of the Coastal Zone and discharging into Meadow Creek shall be equipped with oil separators and devices designed to filter sediment from runoff (Section 30231).*
2. *Policy: Approval of developments in areas draining into Meadow Creek shall be conditioned upon provision of on-site ponding basins or other means of regulating runoff water. Retention facilities should be capable of retaining the first two hours of a fifty-year frequency storm. (Section 30231)*
4. *Policy: The existing sediment filtering capabilities of Meadow Creek as it passes through the Coastal Planned Commercial area shall be maintained and where feasible it shall be enhanced through the use of "stilling devices" to filter out additional oils and sediment.*

The potential for adverse erosion and sedimentation effects would be reduced with preparation and implementation of a SWPPP, as discussed above. Furthermore, the City's Municipal Code Zoning Regulations include Coastal Planned Commercial (C-P-C) district development standards to reduce runoff and prevent pollutants, such as:

- (F) *All roads, parking lots, and structures shall be sited and designed to prevent impacts which would significantly degrade the adjacent environmentally sensitive area.*
- (H) *That drainage systems be designed to ensure that all silts and oils are removed prior to the water entering a natural drainage channel.*
- (K) *The maximum allowable coverage for any project in this District shall be sixty (60) percent. The remaining forty (40) percent shall be in landscaped open areas.*

Compliance with existing regulations per the RWQCB, the City's Municipal Code, and the LCP would reduce drainage, runoff, and water quality impacts to **less than significant**.

g. The proposed project does not involve the construction of housing. **No impacts** would result with respect to placing housing within a 100-year flood hazard area.

h. Portions of the project site are located within Flood Hazard Zone AE, as mapped by the Federal Emergency Management Agency. However, the construction of the proposed project would be required to comply with California Building Code standards, as well as Chapter 3, Flood Damage Prevention Regulation, of the City Municipal Code. The provisions in this code, in part, require that structures within the Flood Hazard Zone be elevated at least one foot above the established floodplain elevation. In addition, upon completion of the structure, the elevation of the lowest floor, including basement, is required to be certified by registered civil engineer or license land surveyor, and verified by the Community Building Inspector to be properly elevated to assure that flooding impacts to not result. This would assure that proposed structures would not be inundated by flooding, or impede or redirect flood flows. Therefore, impacts would be **less than significant**.

i. The project site is located within the dam inundation area from Lopez Lake. Should the dam fail, development of the project site could expose people or structures to risks associated with the flooding that may occur. However, the San Luis Obispo County Office of Emergency Services has prepared a Dam and Levee Failure Evacuation Plan that relies on early warning



systems and interagency coordination to reduce potential impacts to the extent feasible. The project site is located over nine miles from the dam, which would allow sufficient time for evacuations to take place before the floodwaters reached the site. As a result, potential impacts to the proposed project would be **less than significant**.

j. The project site is located near the coastline of the Pacific Ocean and is subject to potential inundation by tsunamis. According to the San Luis Obispo County Office of Emergency Services, the project site is located in a tsunami hazard area that would be evacuated to higher ground towards Oak Park Boulevard, in the event of an emergency. The proposed project does not include the construction of any new housing or structures, and construction of the proposed project would not interfere with the County’s adopted *Tsunami Emergency Response Plan*. The project is not located in an area that would be subject to seiche or mudflow. Impacts would be **less than significant**.

LAND USE AND PLANNING – <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

a. The project site is bordered by West Grand Avenue to the north, the Union Pacific Railroad to the east, Highway 1 to the west, and a recreational vehicle park to the south. Currently, the project site is developed with the Amtrak Grover Beach Station, a Chamber of Commerce Building, as well as informal landscaping and parking areas. The proposed project includes improvements to the existing transit station site that would not physically divide an established community. **No impacts** would result.

b. General Plan Land Use designations for the project site are Visitor Serving Mixed Use and Public/Quasi-Public. The corresponding Zoning designation is Coastal Planned Commercial (C-P-C). The proposed project would be consistent with these land use and zoning designations. Many of the land uses in the project area are visitor and tourist-serving businesses and recreational opportunities that would be compatible with the proposed project. The project would be subject to existing zoning restrictions, and General Plan and Local Coastal Plan (LCP) policies and standards. Specific LCP actions and policies include:

Inland Resource Areas, Water Resources, General Recommendations

1. Policy: It is the general policy of the City to allow the State Coastal Conservancy to conduct restoration projects within the City subject to City approval and permit requirements.



3. Policy: All new development shall include all applicable Best Management Practices (BMPs) for control of polluted runoff, including, but not necessarily limited to, those identified in the California Storm Water Best Management Practice Handbooks (March 1993), in order to prevent polluted runoff from reaching Meadow Creek and the ocean.

Visual Resource Areas, Area 7 Recommendations

1. Policy: Future developments here shall be required to meet precise landscaping and design requirements.
2. Policy: Future developments shall not be permitted to further obstruct views of the dunes from adjacent inland areas.
3. Action: The recreational vehicle park area should be better screened, through the use of trees and shrubs, from view from Highway 1.

Coastal Air Quality and Vehicular Energy Consumption Recommendations

2. Cal Trans should develop and implement means of increasing use of mass transit by beach visitors from long distances as well as by those who are local residents. The success of such a program will depend on the following conditions:
 - Expansion of the existing local bus system to provide service on weekends with beach stops.

Public Access and Recreation Component, Private Visitor-Serving and Recreational Facilities Recommendations

- 2a. Actions: Land designated for coastal commercial uses shall be subject to special landscaping and design requirements which will provide and protect an attractive visual theme. Height limitations shall be more restrictive than in general commercial areas in order to avoid obstruction of or conflict with ocean views. Landscaping in coastal commercial areas shall occupy a larger portion of building sites than is required in other commercial districts. The use of building materials and architectural designs which are appropriate to highly visible tourist areas shall also be required here. Acceptable modes and materials for developments in coastal commercial areas shall be specified in the City's coastal zoning ordinance.

The proposed project has been sited and designed in compliance with identified zoning restrictions, and General Plan and Local Coastal Plan (LCP) policies and standards, and any potential impacts would be considered to be **less than significant**.

- c. The project site is not included in any adopted habitat conservation plans or natural community conservation plans. Therefore, the project would not conflict with any such plans and **no impacts** would result.



MINERAL RESOURCES – <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

a-b. The majority of the City of Grover Beach, including the project site, is classified as Mineral Resources Zone 3 by the California Department of Conservation. This classification includes areas containing mineral deposits, the significance of which cannot be evaluated from available data. However, no mineral resource extraction activities are currently taking place or planned to take place on the project site. Therefore, the proposed project is not anticipated to result in the loss of availability of any known mineral resource. Impacts would be **less than significant**.

NOISE – <i>Would the project result in:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

a, c. Development of the proposed project would not add new noise generating uses and is not anticipated to generate any new vehicular traffic once the project is constructed. There would be no permanent changes to baseline noise conditions; therefore, would result impacts would be **less than significant**.



b, d. Construction of the project may include the use of graders, compactors, and other road building equipment that would generate groundborne vibration or groundborne noise levels and cause a temporary increase in ambient noise levels in the project vicinity. Construction activities associated with the proposed project would generate a temporary increase in noise in the site vicinity. As shown in Table 2, maximum noise levels relating to construction range from 78-88 decibels (dB) at a distance of 50 feet (US EPA, 1971).

Table 2
Typical Noise Levels at Construction Sites

Construction Phase	Average Noise Level at 50 Feet	
	Minimum Required Equipment On-Site (dBA)	All Pertinent Equipment On-Site (dBA)
Clearing	84	84
Excavation	78	88
Foundation/Conditioning	88	88
Laying Subbase, Paving	78	79
Finishing and Cleanup	84	84

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, 1971.

According to the Municipal Code, receptors sensitive to noise include residential units, libraries, schools, hospitals, and nursing homes. The sensitive receptor closest to the project site includes a single family residence, approximately 300 feet east of the project site. Construction noise generally attenuates by about 6 dB per doubling of distance. Therefore, as shown in Table 3, the maximum noise level at the residence could reach up to 73 dBA during construction activities.

Table 3
Anticipated Noise Levels at Sensitive Receptor Location

Sensitive Receptor	Distance from Project Site	Anticipated Noise Level
Single Family Residence	300 feet east	73 dBA

According to Chapter 9.24 of the City’s Municipal Code, maximum noise levels for non-scheduled, intermittent, short-term operation of construction equipment may not exceed 75 dBA for single family residences daily, between the hours of 7:00 AM and 7:00 PM. As shown in Table 3 above, the 75 dBA threshold would not be exceeded. In addition, project construction would occur within the City’s designated construction time period, which is between 7:00 AM and 7:00 PM. Furthermore, consistent with Chapter 9.24 of the City’s Municipal Code, all mobile stationary internal combustion engine powered equipment or machinery would be



equipped with suitable exhaust and air-take silencers in proper working order. Impacts would be **less than significant**.

e-f. The project site is located approximately one mile north of the Oceano County Airport. The airport’s noise contours do not affect the project site. The project site is not located near any private airstrips. **No impacts** would result.

POPULATION AND HOUSING – <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

a. The proposed project consists of improvements to the existing transit station, including a separate bus loading/unloading platform. The project would not add new homes or business or extend existing roads or other infrastructure in a manner that promotes additional growth. The project is not anticipated to directly or indirectly induce population growth and **no impact** would result.

b-c. The proposed project site is currently developed with the Grover Beach Amtrak Station, a Chamber of Commerce Building, and associated landscaping and parking. The remainder of the site is undeveloped. The proposed project would not result in the displacement of housing or people, or cause replacement housing to be constructed elsewhere. **No impacts** would result.

PUBLIC SERVICES – <i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

a. The project site is currently served by the Five Cities Fire Authority. The nearest fire station is located at 701 Rockaway Avenue, Grover Beach (corner of South 7th Street and Rockaway



Avenue). The site is approximately one half mile (driving distance) from the fire station. Proposed improvements would not result in significant additional demand for fire protection services as the project does not propose new residential or commercial uses. In addition, proposed improvements would be required to be designed and constructed according to Fire Department and California Building Code standards, and adequate emergency access would be required prior to approval of the proposed project. Compliance with these existing requirements would prevent fire hazards. As such, the proposed project would not result in the provision of or need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Impacts related to fire protection services would be **less than significant**.

b. The project site is currently served by the City of Grover Beach Police Department. The nearest police station is located at 711 Rockaway Avenue in Grover Beach. The project site is located approximately one half mile (driving distance) from the police station. Proposed improvements would not result in significant additional demand for police protection services as the project does not include new residential or commercial development. Site layout and security lighting would conform to the City’s development standards, which would reduce potential police protection impacts. As such, the proposed project would not result in the provision of or need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts. Impacts related to police protection services would be **less than significant**.

c-e. The proposed transit station expansion project would not increase the number of residents in the City, as the project does not include residential units. Because the demand for schools, parks, and other public facilities is driven by population, the proposed project would not increase demand for those services. As such, the proposed project would result in **no impacts** on these public services.

RECREATION –	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a-b. The proposed transit station expansion project would not generate population that would increase demand for parks or recreational facilities. Thus, the proposed project would not affect use of existing facilities, nor would it require the construction or expansion of existing recreational facilities. Therefore, the proposed project would have **no impact** on recreational facilities.



TRANSPORTATION/TRAFFIC – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

a-b. Currently, the project site is developed with the Amtrak Grover Beach Station, a Chamber of Commerce Building, landscaping and parking areas. The proposed project would remove the existing site entrance from Highway 1 and relocate the entry approximately 400 feet to the south. This provides increased stacking for northbound traffic at the intersection of West Grand Avenue and Highway 1. In addition, the southbound center left hand turn lane would be approximately 500 feet in length, providing adequate stacking for vehicles entering the site. Two additional right out driveways are proposed to provide better internal site circulation. The southern portion of the site contains undeveloped willow woodland. The proposed project, which is identified as a subsequent project in the City’s Land Use Element Update (February 2010), includes improvements to the project site including an approximately 400 square-foot bus shelter and loading/unloading zone with platform access, approximately 40 additional parking roundabout entry statement, pedestrian and bicycle paths, and drought-tolerant landscaping. Additionally the project would include a pedestrian path that would provide a connection between the existing RV park and West Grand Avenue, likely reducing trips between the RV park and the beach, creating better coastal access consistent with the Coastal Act. The proposed project would not add new bus or train route stops that would generate new vehicle trips. In addition, by encouraging diversion of existing vehicle trips to transit trips, and encouraging pedestrian and bicycle trips to and from the transit station, the proposed improvements would be expected to result in an overall decrease in vehicle trips that would reduce traffic volumes on surrounding roadways. As such, level of service standards would not be exceed and the project would not conflict with an applicable plan, ordinance or policy establishing measures of



effectiveness for the performance of the circulation system. Impacts would be **less than significant**.

c. Given the nature and scope of the proposed project, the project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in safety risks. **No impacts** would result.

d. The proposed project does not include any design features that would create a hazard, such as sharp turns in the access road. The proposed project would not contain any uses that would be incompatible with surrounding uses, so it would not create a substantial hazard. The proposed project has been designed to reduce hazards to transit passengers, pedestrians, buses and autos, and to improve pedestrian and passenger safety by co-location of the current bus and train facilities on the project site. In addition, the proposed project would not add new bus or train route stops that would generate new vehicle trips, and would improve site circulation, which would reduce stacking at the Highway 1 and Grand Avenue intersection and result in a beneficial impact. Therefore, impacts would be **less than significant**.

e. The proposed project would improve bus and vehicle access to, and circulation within, the project site. In addition, as a condition of project approval, the project would be required to provide adequate emergency access, based on City and Fire Department standards. **No impacts** would result.

f. The proposed project is identified as a subsequent project in the City’s Land Use Element Update (February 2010) and includes public transit, bicycle and pedestrian facility improvements. The proposed project has been designed to reduce hazards to transit passengers, pedestrians, buses and autos, and to improve pedestrian and passenger safety by co-location of the current bus and train facilities on the project site. Therefore, the proposed project is consistent with the policies, plans, and programs supporting alternative transportation, and there would be **no impact**.

UTILITIES AND SERVICE SYSTEMS – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	



UTILITIES AND SERVICE SYSTEMS – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

a-g. The proposed project would connect to the City's existing water and wastewater delivery systems. Project features, including the proposed restroom facility and drought-tolerant landscaping will place minimal demand on the City's available water supply. The recently adopted Master EIR for the Land Use Element Update, which included the Transit Station Expansion Project as a subsequent project, identified that the City has already initiated a series of on-going improvements and is investigating alternate water sources to meet the expected future water requirements. The Master EIR determined that there are adequate water resources to meet future growth needs, including the proposed project, as identified in the document. Wastewater generated by the proposed project will place minimal demand on the City's wastewater conveyance system and the South County Sanitation District's treatment facilities. The South County Sanitation District treatment facility has sufficient capacity (42% remaining) to serve the project (Land Use Element Update MEIR, 2010). Furthermore, the project would not exceed the wastewater treatment requirements of the applicable Regional Water Quality Control Board. Solid waste generated by the proposed project would be transported to the Cold Canyon Landfill located at 2268 Carpenter Canyon Road (Highway 227) in San Luis Obispo. The proposed project would be subject to federal, state, and local regulations related to solid waste, recycling, and water conservation. The Cold Canyon Landfill has sufficient capacity (25% remaining) to accommodate the additional solid waste that would be generated by the project (Land Use Element Update MEIR, 2010). Impacts related to these utilities and service systems would be **less than significant**.

MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		



MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

a. As discussed in Section IV, *Biological Resources*, mitigation measures BIO-1 and BIO-2 would be required to reduce impacts to biological resources to a less than significant level. As discussed in Section V, *Cultural Resources*, mitigation measure CR-1 would be required to reduce impacts to unknown cultural resources to a less than significant level. With implementation of the aforementioned mitigation measures, impacts to biological resources and cultural resources would be **less than significant with mitigation incorporated**.

b. The project would not prompt additional work or future projects, nor does it have any adverse impacts that would reasonably be expected to be cumulatively considerable when viewed in combination with other current projects or probable future projects. The intent of the project is to improve the existing transit station and facilitate multi-modal connections. The proposed project is consistent with the goals of the Local Coastal Plan and Grover Beach General Plan. The project is identified in the Land Use Element Update and was analyzed in the Master EIR. The proposed project is consistent with the assumptions for the site. Impacts would be **less than significant**.

c. Compliance with the City of Grover Beach Municipal Code, as well as all applicable federal and state regulations would reduce potential adverse effects to human beings to a less than significant level. As such, impacts to human beings would be **less than significant**.



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Appendix A
Air Quality Analysis



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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name:

Project Name: Grover Beach Transit Center Expansion

Project Location: San Luis Obispo County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2011 TOTALS (lbs/day unmitigated)	4.94	35.24	22.93	0.00	10.02	2.17	12.18	2.09	1.99	4.09	3,567.98
2012 TOTALS (lbs/day unmitigated)	5.72	40.97	26.73	0.00	10.02	2.48	12.50	2.09	2.28	4.38	4,468.67

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.18	0.83	2.23	0.00	0.01	0.01	969.25

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.01	0.01	0.12	0.00	0.02	0.00	9.25

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.19	0.84	2.35	0.00	0.03	0.01	978.50

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
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Time Slice 11/28/2011-12/23/2011 Active Days: 20	2.88	23.55	13.41	0.00	10.01	1.18	11.18	2.09	1.08	3.17	2,358.06
Fine Grading 11/28/2011-01/09/2012	2.88	23.55	13.41	0.00	10.01	1.18	11.18	2.09	1.08	3.17	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	10.00	0.00	10.00	2.09	0.00	2.09	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

Time Slice 12/26/2011-12/30/2011 Active Days: 5	<u>4.94</u>	<u>35.24</u>	<u>22.93</u>	<u>0.00</u>	<u>10.02</u>	<u>2.17</u>	<u>12.18</u>	<u>2.09</u>	<u>1.99</u>	<u>4.09</u>	<u>3,567.98</u>
Asphalt 12/26/2011-01/09/2012	2.06	11.69	9.52	0.00	0.01	0.99	1.00	0.00	0.91	0.91	1,209.92
Paving Off-Gas	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.26	6.91	0.00	0.00	0.98	0.98	0.00	0.90	0.90	979.23
Paving On Road Diesel	0.01	0.24	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	36.91
Paving Worker Trips	0.10	0.19	2.54	0.00	0.01	0.01	0.02	0.00	0.00	0.01	193.79
Fine Grading 11/28/2011-01/09/2012	2.88	23.55	13.41	0.00	10.01	1.18	11.18	2.09	1.08	3.17	2,358.06
Fine Grading Dust	0.00	0.00	0.00	0.00	10.00	0.00	10.00	2.09	0.00	2.09	0.00
Fine Grading Off Road Diesel	2.83	23.44	11.96	0.00	0.00	1.17	1.17	0.00	1.08	1.08	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.06	0.11	1.45	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.74

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Time Slice 1/2/2012-1/6/2012 Active Days: 5	4.68	33.07	22.11	0.00	10.02	2.00	12.02	2.09	1.84	3.93	3,567.92
Asphalt 12/26/2011-01/09/2012	1.94	11.03	9.25	0.00	0.01	0.92	0.93	0.00	0.85	0.85	1,209.89
Paving Off-Gas	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.72	10.64	6.84	0.00	0.00	0.91	0.91	0.00	0.84	0.84	979.23
Paving On Road Diesel	0.01	0.21	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	36.91
Paving Worker Trips	0.09	0.18	2.34	0.00	0.01	0.01	0.02	0.00	0.00	0.01	193.76
Fine Grading 11/28/2011-01/09/2012	2.74	22.05	12.85	0.00	10.01	1.08	11.08	2.09	0.99	3.08	2,358.04
Fine Grading Dust	0.00	0.00	0.00	0.00	10.00	0.00	10.00	2.09	0.00	2.09	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.05	0.10	1.34	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.72

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Time Slice 1/9/2012-1/9/2012 Active Days: 1	<u>5.72</u>	<u>40.97</u>	<u>26.73</u>	<u>0.00</u>	<u>10.02</u>	<u>2.48</u>	<u>12.50</u>	<u>2.09</u>	<u>2.28</u>	<u>4.38</u>	<u>4,468.67</u>
Asphalt 12/26/2011-01/09/2012	1.94	11.03	9.25	0.00	0.01	0.92	0.93	0.00	0.85	0.85	1,209.89
Paving Off-Gas	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.72	10.64	6.84	0.00	0.00	0.91	0.91	0.00	0.84	0.84	979.23
Paving On Road Diesel	0.01	0.21	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	36.91
Paving Worker Trips	0.09	0.18	2.34	0.00	0.01	0.01	0.02	0.00	0.00	0.01	193.76
Building 01/09/2012-02/13/2012	1.04	7.89	4.62	0.00	0.00	0.49	0.49	0.00	0.45	0.45	900.74
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.64
Building Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72
Fine Grading 11/28/2011-01/09/2012	2.74	22.05	12.85	0.00	10.01	1.08	11.08	2.09	0.99	3.08	2,358.04
Fine Grading Dust	0.00	0.00	0.00	0.00	10.00	0.00	10.00	2.09	0.00	2.09	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.05	0.10	1.34	0.00	0.01	0.00	0.01	0.00	0.00	0.00	110.72
Time Slice 1/10/2012-2/13/2012 Active Days: 25	1.04	7.89	4.62	0.00	0.00	0.49	0.49	0.00	0.45	0.45	900.74
Building 01/09/2012-02/13/2012	1.04	7.89	4.62	0.00	0.00	0.49	0.49	0.00	0.45	0.45	900.74
Building Off Road Diesel	1.03	7.87	4.56	0.00	0.00	0.49	0.49	0.00	0.45	0.45	893.39
Building Vendor Trips	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.64
Building Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72

Phase Assumptions

Phase: Fine Grading 11/28/2011 - 1/9/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 2

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Maximum Daily Acreage Disturbed: 0.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 12/26/2011 - 1/9/2012 - Default Paving Description

Acres to be Paved: 0.5

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/9/2012 - 2/13/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

2/8/2011 12:00:00 AM

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: Grover Beach Transit Station Expansion

Project Name: Grover Beach Transit Station Expansion

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	PM10 Total	PM Exhaust
Time Slice 11/28/2011-12/23/2011 Active Days: 20	2.88	23.55	10.19	1.18
Time Slice 12/26/2011-12/30/2011 Active Days: 5	4.94	35.24	12.19	2.17
Time Slice 1/2/2012-1/6/2012 Active Days: 5	4.68	33.07	12.02	2.00
Time Slice 1/9/2012-1/9/2012 Active Days: 1	5.72	40.97	12.50	2.48

Phase Assumptions

Phase: Fine Grading 11/28/2011 - 1/9/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 2

Maximum Daily Acreage Disturbed: 0.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 12/26/2011 - 1/09/2012 - Default Paving Description

Acres to be Paved: 0.5

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108) hp operating at a 0.55 load factor for 8 hours per day

Phase: Building Construction 1/9/2012 - 2/13/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

Page: 1

2/8/2011 12:00:00 AM

2 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Day	Daily (lbs/day)				Total Running (lbs/day)				Running Quarter Total (lbs/day)				Running Quarter (tons/qtr)			
	ROG	NOx	PM	PM Exhaust	ROG	NOx	PM	PM Exhaust	ROG	NOx	PM	PM Exhaust	ROG	NOx	PM	PM Exhaust
1	2.88	23.55	10.19	1.18	2.88	23.55	10.19	1.18	2.88	23.55	10.19	1.18	0.00	0.01	0.01	0.00
2	2.88	23.55	10.19	1.18	5.76	47.10	20.38	2.36	5.76	47.10	20.38	2.36	0.00	0.02	0.01	0.00
3	2.88	23.55	10.19	1.18	8.64	70.65	30.57	3.54	8.64	70.65	30.57	3.54	0.00	0.04	0.02	0.00
4	2.88	23.55	10.19	1.18	11.52	94.20	40.76	4.72	11.52	94.20	40.76	4.72	0.01	0.05	0.02	0.00
5	2.88	23.55	10.19	1.18	14.40	117.75	50.95	5.90	14.40	117.75	50.95	5.90	0.01	0.06	0.03	0.00
6	2.88	23.55	10.19	1.18	17.28	141.30	61.14	7.08	17.28	141.30	61.14	7.08	0.01	0.07	0.03	0.00
7	2.88	23.55	10.19	1.18	20.16	164.85	71.33	8.26	20.16	164.85	71.33	8.26	0.01	0.08	0.04	0.00
8	2.88	23.55	10.19	1.18	23.04	188.40	81.52	9.44	23.04	188.40	81.52	9.44	0.01	0.09	0.04	0.00
9	2.88	23.55	10.19	1.18	25.92	211.95	91.71	10.62	25.92	211.95	91.71	10.62	0.01	0.11	0.05	0.01
10	2.88	23.55	10.19	1.18	28.80	235.50	101.90	11.80	28.80	235.50	101.90	11.80	0.01	0.12	0.05	0.01
11	2.88	23.55	10.19	1.18	31.68	259.05	112.09	12.98	31.68	259.05	112.09	12.98	0.02	0.13	0.06	0.01
12	2.88	23.55	10.19	1.18	34.56	282.60	122.28	14.16	34.56	282.60	122.28	14.16	0.02	0.14	0.06	0.01
13	2.88	23.55	10.19	1.18	37.44	306.15	132.47	15.34	37.44	306.15	132.47	15.34	0.02	0.15	0.07	0.01
14	2.88	23.55	10.19	1.18	40.32	329.70	142.66	16.52	40.32	329.70	142.66	16.52	0.02	0.16	0.07	0.01
15	2.88	23.55	10.19	1.18	43.20	353.25	152.85	17.70	43.20	353.25	152.85	17.70	0.02	0.18	0.08	0.01
16	2.88	23.55	10.19	1.18	46.08	376.80	163.04	18.88	46.08	376.80	163.04	18.88	0.02	0.19	0.08	0.01
17	2.88	23.55	10.19	1.18	48.96	400.35	173.23	20.06	48.96	400.35	173.23	20.06	0.02	0.20	0.09	0.01
18	2.88	23.55	10.19	1.18	51.84	423.90	183.42	21.24	51.84	423.90	183.42	21.24	0.03	0.21	0.09	0.01
19	2.88	23.55	10.19	1.18	54.72	447.45	193.61	22.42	54.72	447.45	193.61	22.42	0.03	0.22	0.10	0.01
20	2.88	23.55	10.19	1.18	57.60	471.00	203.80	23.60	57.60	471.00	203.80	23.60	0.03	0.24	0.10	0.01
21	4.94	35.24	12.19	2.17	62.54	506.24	215.99	25.77	62.54	506.24	215.99	25.77	0.03	0.25	0.11	0.01
22	4.94	35.24	12.19	2.17	67.48	541.48	228.18	27.94	67.48	541.48	228.18	27.94	0.03	0.27	0.11	0.01
23	4.94	35.24	12.19	2.17	72.42	576.72	240.37	30.11	72.42	576.72	240.37	30.11	0.04	0.29	0.12	0.02
24	4.94	35.24	12.19	2.17	77.36	611.96	252.56	32.28	77.36	611.96	252.56	32.28	0.04	0.31	0.13	0.02
25	4.94	35.24	12.19	2.17	82.30	647.20	264.75	34.45	82.30	647.20	264.75	34.45	0.04	0.32	0.13	0.02
26	4.68	33.07	12.02	2.00	86.98	680.27	276.77	36.45	86.98	680.27	276.77	36.45	0.04	0.34	0.14	0.02
27	4.68	33.07	12.02	2.00	91.66	713.34	288.79	38.45	91.66	713.34	288.79	38.45	0.05	0.36	0.14	0.02
28	4.68	33.07	12.02	2.00	96.34	746.41	300.81	40.45	96.34	746.41	300.81	40.45	0.05	0.37	0.15	0.02
29	4.68	33.07	12.02	2.00	101.02	779.48	312.83	42.45	101.02	779.48	312.83	42.45	0.05	0.39	0.16	0.02
30	4.68	33.07	12.02	2.00	105.70	812.55	324.85	44.45	105.70	812.55	324.85	44.45	0.05	0.41	0.16	0.02
31	5.72	40.97	12.50	2.48	111.42	853.52	337.35	46.93	111.42	853.52	337.35	46.93	0.06	0.43	0.17	0.02
Maximum Running Quarterly Emissions													0.06	0.43	0.17	0.02

Appendix B

Biological Assessment



Biological Report
for the
City of Grover Beach Train Station Expansion Project
APN 060-020-024 and a Portion of 060-263-034

City of Grover Beach
San Luis Obispo County, California



Prepared for
City of Grover Beach
154 South 8th Street
Grover Beach, CA 93433

by
ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES
1875 Wellsona Road
Paso Robles, CA 93446
(805) 467-1041

September 4, 2009

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1.0 Introduction

Althouse and Meade, Inc. conducted biological surveys and a wetland delineation on an approximately two acre Study Area (APN 060-020-024 and portion of 060-263-034) located in the City of Grover Beach. The Study Area includes a Chamber of Commerce building, a railroad embankment, and portions of a Caltrans right-of-way. The City is proposing to expand the train station to include Amtrak bus service and local bus service to create a multi-modal transit center. The proposed project site (Project Site) would encompass approximately 1.9 acres of the two acre Study Area, including a portion of the Caltrans and railroad right-of-ways.

This report contains a floristic inventory, rare species analysis, habitat description, and a wetland delineation of the Study Area. Biological surveys occurred between May and August 2009.

A 1994 biological report by Oyler and Holland covered the Study Area and the Amtrak Station area. Biological surveys occurred in October and November 1994. At that time, the proposed project included complete removal of the willow woodland. However, the final project placed bus transit improvements on the opposite side of the railroad tracks, east of the Amtrak station, preserving a portion of the woodland.

Althouse and Meade, Inc. prepared a biological report in 2005 for the Grover Beach Conference Center that included the Train Station Expansion Project Site. Biological surveys were conducted between December 2004 and August 2005. The 2005 report included a protocol survey for California red-legged frogs in Meadow Creek by Sue Christopher. Red-legged frogs were not detected, and suitable breeding habitat was not identified within the area described in this document as the project Study Area.

1.1 Project Location

The Project Site is located in the City of Grover Beach, San Luis Obispo County, California (Figures 1, 10, and 11 in Section 8.0). It is situated on the east side of State Highway 1 south of the Grand Avenue intersection, between the City's Amtrak train depot and a County of San Luis Obispo RV campground, west of the railroad tracks (Figure 1). Approximate coordinates for the center of the Project Site are latitude 35.120305° N and longitude 120.628988° W (WGS 84). The Project Site is located within the Oceano United States Geological Survey (USGS) 7.5 minute quadrangle. Elevation varies from approximately 9 to 24 feet above mean sea level.

2.0 Methods

2.1 Biological Survey Methods

The Study Area was surveyed for biological resources on February 20, April 25, May 21, June 3, June 4, and June 29, 2009 by LynneDee Althouse and Jason Dart. The surveys focused on identifying resident and transient birds utilizing habitat at the parcel, compiling a list of all plants on the site, searching for special status species, and investigating wetland soils, hydrology, and vegetation.

All field work was conducted on foot, and photographs of current parcel conditions were taken. Identification of botanical resources included field observations and laboratory analysis of collected material. Botanical nomenclature used in Table 1 follows the Jepson Manual (Hickman 1993). Where more recent nomenclature is used, the Jepson Manual name is provided in brackets.

We conducted a search of the California Natural Diversity Database (CNDDDB July 4, 2009 data) and the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California for special status species known to occur in the three USGS quadrangles surrounding the Study Area: Pismo Beach, Oceano, and Arroyo Grande NE.

Additional special status species research consisted of reviewing previous biological reports for the area and searching on-line museum and herbarium specimen records for locality data within San Luis Obispo County. We reviewed online databases of specimen records maintained by the Museum of Vertebrate Zoology (MVZ) at the University of California, Berkeley, the California Academy of Sciences (CAS), and the Consortium of California Herbaria (CCH). Additional special status species with potential to occur on or near the Study Area were added to our special status species list (refer to Tables 3 and Table 4).

Special status species lists produced by database and literature searches were cross-referenced with the described habitat types on the Study Area to identify all potential special status species that could occur on or near the Study Area. Each special status species that could occur on or near the Study Area is individually discussed (refer to Sections 3.6.4 and 3.6.5).

2.2 Wetland Delineation Methods

Wetlands identification used methods defined in the U.S. Army Corps of Engineers (USACE) Arid West Supplement (2006) and the Wetland Delineation Manual (1987). The USACE identifies wetlands based on presence of three types of indicators: hydrophytic vegetation, hydric soil, and wetland hydrology. The 2006 Arid West Supplement provides region-specific standards for wetland indicators and delineations in the Arid West Region, which includes all of San Luis Obispo County, California. The USACE 1987 Manual uses the following broad definition of wetlands:

“Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

To be classified as a wetland under USACE jurisdiction, an area must be dominated by wetland plants (obligate or facultative wetland species), have hydrologic conditions that allow water to saturate the soil for several weeks per year, and contain hydric soils or soil characteristics associated with a moist, low-oxygen environment.

The 2006 Arid West Supplement does not change the definition of wetlands; rather, it clarifies the standards for measurements of the three parameters—hydric soils,

hydrophytic vegetation, and hydrology—under the specific conditions of arid portions of the western United States.

The State of California, including the California Coastal Commission, uses a broader definition of wetlands. In conjunction with adopting a wetlands policy on March 9, 1987 the California Fish and Game Commission assigned the Department of Fish and Game (DFG) the task of recommending a wetlands definition. The DFG found the U.S. Fish and Wildlife Service (USFWS) wetland definition and classification system based on the Cowardin definition to be the most biologically valid. DFG staff use this definition as a guide in identifying wetlands while conducting on-site inspections for the implementation of its Commission's wetlands policy. Like the Army Corps of Engineers definition, the USFWS definition (Cowardin et al. 1979) of a wetland incorporates the three key parameters of hydrophytic vegetation, hydric soils, and hydrology:

“Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For the purpose of this classification, wetlands must have one or more of the following attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; (3) the substrate is nonsoil and is saturated or covered with shallow water at some time during the growing season of each year.”

The key difference in the federal and state definitions is that for state wetlands, only one criterion, or factor, may be applied with sufficient evidence to determine a wetland condition.

Summary annual climate data are provided from the Natural Resources Conservation Service (NRCS) wetlands determination tables (WETS). The WETS analyses utilize 30-year data sets and provide probabilities regarding precipitation and temperature on a month-by-month basis. Pismo Beach WETS data are provided, along with climate data available for Arroyo Grande (World Climate 2009 and WRCC 2009) and City of Grover Beach (2007).

3.0 Results

3.1 Existing Conditions

The Study Area includes willow woodland habitat that contains vegetation similar to the willow woodlands in Meadow Creek west of Highway 1. The Study Area is not contiguous with Meadow Creek; it is separated by Caltrans Highway 1. The source of moisture that supports the woodland is a shallow water table adjacent to the Caltrans right-of-way. The parcel slopes west from the top of a railroad embankment approximately 24 feet above mean sea level, dropping to a low area within the Caltrans right-of-way at approximately 9 feet elevation (Garing and Taylor topographic data provided June 4, 2009) (Figure 2, Section 8.0). Several low concave areas near U.S. Highway 1 are approximately three feet below street elevation. The low areas support

obligate wetland vegetation, or contain no vegetation due to occasional ponding during the rainy season.

Numerous areas within the Study Area are inhabited by transients. Temporary camps contain remnants of tents, tarps, sleeping bags, backpacks, and a variety of trash including drug paraphernalia. Human waste, land disturbance, and trash is common within approximately half of the willow woodland.

3.2 Soils

Sandy soil occupies areas investigated (Figure 3, Section 8.0). In addition, evidence of spoils pile disposal, railroad embankment, and highway construction are also present in the Study Area. The USDA soils map indicates that the Study Area and most of the City of Grover Beach is on Oceano Sand, 0 to 9 percent slopes. This is a very deep, excessively drained, and nearly level to moderately sloping soil on old stabilized sand dunes. It formed in deposits of windblown sand. Typically, the surface layer is brown sand about 29 inches thick. The underlying material is stratified pale brown and pink sand to a depth of 60 inches or more. The profile is medium acid throughout. Permeability is rapid, and available water capacity is low. Surface runoff is slow or moderate, and the hazard of soil blowing is high. This Oceano sand map unit is in capability unit IVE-1 irrigated, and capability subclass VIe non-irrigated. Capability class IV soils have very severe limitations that reduce the choice of plants or that require very careful management, or both. Capability class VI soils have severe limitations that make them generally unsuitable for cultivation. Capability subclass e indicates that the main limitation is erosion unless close-growing plant cover is maintained. The numeral “1” indicates a problem or limitation caused by slope or potential erosion hazard. The USDA soils map is not sufficient to adequately describe soil conditions in the Study Area due to error related to scale of survey and local land use history.

3.3 Habitat Types

The Study Area consists of three habitat types: arroyo willow woodland, wetland, and anthropogenic (refer to Figure 2, Section 8.0). Arroyo willow woodland occupies 1.7 acres of the Study Area. Arroyo willows (*Salix lasiolepis*) in the Study Area are a medium sized tree with canopy height that varies from 25 to 35 feet. Tree canopy density is greater than 80 percent cover over the entire parcel. Beneath the tree canopy, understory vegetation is variable, with dense brambles on higher ground. The dominant understory shrubs that form bramble thickets are California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), and poison oak (*Toxicodendron diversilobum*). Wetland soils are not associated with the area mapped as willow woodland habitat.

Wetland conditions are present in approximately 0.2 acre of the Study Area (refer to Wetland Delineation in Section 4.0). Wetlands on site support herbaceous hydrophytic plants or are bare, and are shaded by adjacent willows. Bare ground occurs in lowest areas where ponded water is present for long periods during winter and spring. Standing water was not present during our May and June 2009 site visits. Wetland plants in low areas of willow woodland understory include blue wild rye (*Elymus glaucus*), marsh baccharis (*Baccharis douglasii*), bulrush (*Scirpus americanus*), and common threesquare (*Scirpus pungens*).

The approximately 0.1 acre of the Study Area that is occupied by the Chamber of Commerce building and parking area is described as anthropogenic habitat. Anthropogenic habitat in the Study Area contains no native habitat or vegetation.

3.4 Plant List

Floristic surveys conducted in the spring of 2009 identified 56 species of plants in the Study Area (Table 1). The list includes 18 native species and 38 introduced (naturalized) species. Special status plants do not occur in the Study Area.

TABLE 1. PLANT LIST. Listed are the 56 species of plants identified in the Study Area in 2009. Plants are listed alphabetically by scientific name, within general life form categories.

Scientific Name	Special Status	Origin	Common Name
Trees – 5 Species			
<i>Acacia</i> sp.	None	Introduced	Acacia
<i>Juniperus</i> sp.	None	Introduced	Juniper
<i>Nicotiana glauca</i>	None	Introduced	Tree tobacco
<i>Populus balsamifera</i>	None	Native	Black cottonwood
<i>Salix lasiolepis</i>	None	Native	Arroyo willow
Shrubs – 5 Species			
<i>Baccharis pilularis</i>	None	Native	Coyote brush
<i>Hedera helix</i>	None	Introduced	Ivy
<i>Rosa californica</i>	None	Native	California rose
<i>Rubus ursinus</i>	None	Native	California blackberry
<i>Toxicodendron diversilobum</i>	None	Native	Poison oak
Herbs – 31 Species			
<i>Ambrosia psilostachya</i>	None	Native	Western ragweed
<i>Anagallis arvensis</i>	None	Introduced	Scarlet pimpernel
<i>Anthriscus caucalis</i>	None	Introduced	Bur-chevil
<i>Baccharis douglasii</i>	None	Native	Marsh Baccharis
<i>Cakile maritime</i>	None	Introduced	European searocket
<i>Camissonia cheiranthifolia</i>	None	Native	Beach evening suncup
<i>Camissonia micrantha</i>	None	Native	Miniature suncup
<i>Carduus pycnocephalus</i>	None	Introduced	Italian thistle
<i>Carpobrotus edulis</i>	None	Introduced	Hottentot fig
<i>Chenopodium album</i>	None	Introduced	Lamb's-quarters
<i>Conium maculatum</i>	None	Introduced	Poison hemlock
<i>Conyza canadensis</i>	None	Native	Common horseweed
<i>Cyperus eragrostis</i>	None	Native	Umbrella sedge
<i>Erodium cicutarium</i>	None	Introduced	Redstem filaree

Scientific Name	Special Status	Origin	Common Name
<i>Geranium dissectum</i>	None	Introduced	Geranium
<i>Gnaphalium palustre</i>	None	Native	Marsh cudweed
<i>Hedypnois cretica</i>	None	Introduced	Crete weed
<i>Heliotropium curassavicum</i>	None	Introduced	Wild heliotrope
<i>Hirschfeldia incana</i>	None	Introduced	Mustard
<i>Juncus mexicanus</i>	None	Native	Mexican rush
<i>Lobularia maritime</i>	None	Introduced	Sweet alyssum
<i>Malva nicaeensis</i>	None	Introduced	Bull mallow
<i>Medicago polymorpha</i>	None	Introduced	California bur medic
<i>Picris echioides</i>	None	Introduced	Prickly ox-tongue
<i>Raphanus sativus</i>	None	Introduced	Wild radish
<i>Scirpus americanus</i>	None	Native	American tule
<i>Scirpus pungens</i>	None	Native	Common threesquare
<i>Sonchus asper</i>	None	Introduced	Sow thistle
<i>Taraxacum officinale</i>	None	Introduced	Dandelion
<i>Tropaeolum majus</i>	None	Introduced	Nasturtium
<i>Vicia villosa</i> ssp. <i>Varia</i>	None	Introduced	Vetch
Grasses – 15 Species			
<i>Avena barbata</i>	None	Introduced	Slender wild oat
<i>Bromus diandrus</i>	None	Introduced	Ripgut brome
<i>Bromus hordeaceus</i>	None	Introduced	Soft chess brome
<i>Cortaderia selloana</i>	None	Introduced	Pampas grass
<i>Cynodon dactylon</i>	None	Introduced	Bermuda grass
<i>Dactylis glomerata</i>	None	Introduced	Orchard grass
<i>Distichlis spicata</i>	None	Native	Salt grass
<i>Ehrharta calycina</i>	None	Introduced	Veldt grass
<i>Elymus glaucus</i>	None	Native	Blue wildrye
<i>Hordeum murinum</i>	None	Introduced	Foxtail barley
<i>Lolium perenne</i>	None	Introduced	Italian ryegrass
<i>Poa annua</i>	None	Introduced	Annual bluegrass
<i>Pennisetum clandestinum</i>	None	Introduced	Kikuyu grass
<i>Polypogon monspeliensis</i>	None	Introduced	Annual beardgrass
<i>Vulpia myuros</i>	None	Introduced	Annual fescue

3.5 Wildlife List

Breeding bird surveys conducted in the spring of 2009 identified 12 species of birds using habitats in the Study Area (Table 2). An additional 11 bird species were observed in the vicinity using similar habitat, and are included in the table for reference. The 12 bird species identified in the Study Area include year-round residents and migrant species that move through the site in the spring and fall. Two resident species, song sparrow and California towhee, nested in the Study Area. Several additional resident and migrant species could nest in the Study Area; however nesting was not confirmed during our 2009 surveys. One sensitive species observed, Allen’s hummingbird, is listed by the California Department of Fish and Game as a Special Animal (CDFG 2009). Allen’s hummingbirds are regular breeders in coastal areas of San Luis Obispo County.

Other wildlife species that could utilize habitats on the parcel include common mammals such as striped skunk (*Mephitis mephitis*), opossum (*Didelphis marsupialis*), raccoon (*Procyon lotor*), and various rodents, as well as common amphibians such as Pacific chorus frog (*Pseudacris regilla*).

TABLE 2. BIRD LIST. Twelve bird species were identified using habitat in the Study Area in the spring of 2009. An additional 11 species were observed using similar habitat in the vicinity.

Common Name	Scientific Name	Special Status	Nesting on Site?	General Habitat Preference
Birds on Site- 12 species				
Western Scrub Jay	<i>Aphelocoma californica</i>	None	Possible	Oak, riparian woodlands
Lesser Goldfinch	<i>Carduelis psaltria</i>	None	Possible	Riparian, oak woodlands
House Finch	<i>Carpodacus mexicanus</i>	None	Possible	Riparian, grasslands, chaparral, and woodlands
Rock Dove	<i>Columba livia</i>	None	No	Urban areas
Song Sparrow	<i>Melospiza melodia</i>	None	Yes	Oak, riparian woodland
House Sparrow	<i>Passer domesticus</i>	None	No	Urban
Downy Woodpecker	<i>Picoides pubescens</i>	None	Likely	Oak, riparian woodlands
California Towhee	<i>Pipilo crissalis</i>	None	Yes	Brushy habitats
Chestnut-backed Chickadee	<i>Poecile hudsonica</i>	None	Possible	Mixed woods
Allen's hummingbird	<i>Selasphorus sasin</i>	Special Animal (Nesting)	Possible	Riparian, chaparral and woodland
European Starling	<i>Sturnus vulgaris</i>	None	No	Agricultural, livestock areas
Wilson's warbler	<i>Wilsonia pusilla</i>	None	Likely	Oak, riparian woodlands
Birds adjacent to Site - 11 species				
Mallard	<i>Anas platyrhynchos</i>	None	No	Lakes, ponds, streams

Common Name	Scientific Name	Special Status	Nesting on Site?	General Habitat Preference
Green Heron	<i>Butorides virescens</i>	None	No	Marshes, riparian, ponds
Anna’s Hummingbird	<i>Calypte anna</i>	None	Possible	Many habitats
American Goldfinch	<i>Carduelis tristis</i>	None	Possible	Weedy fields, woodlands
American Crow	<i>Corvus brachyrhynchos</i>	None	Possible	Many habitats, esp. urban
Barn Swallow	<i>Hirundo rustica</i>	None	No	Riparian, grasslands, lakes
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	None	No	Urban; open areas near water
Spotted Towhee	<i>Pipilo erythrophthalmus</i>	None	Possible	Dense brushy areas
Bushtit	<i>Psaltriparus minimus</i>	None	Possible	Woodlands, chaparral
Bewick’s Wren	<i>Thryomanes bewickii</i>	None	Possible	Riparian woodland, scrub
Mourning Dove	<i>Zenaida macroura</i>	None	Possible	Open and semi-open habitats

3.6 Special Status Plants and Animals

Our research identified reports of 59 special status species from the designated search area (Tables 3 and 4). The search area included the following three USGS 7.5 minute quadrangles surrounding the Project Site: Pismo Beach, Oceano, and Arroyo Grande NE. Appropriate habitat and soil conditions are present for one special status plant and three special status animals. Figures 4, 5, and 6 in Section 8.0 depict the current GIS data for special status species mapped in the vicinity of the Study Area.

3.6.1 Introduction to CNPS Lists

Plant species are considered rare when their distribution is confined to localized areas, when there is a threat to their habitat, when they are declining in abundance, or are Threatened in a portion of their range. The listing categories range from species with a low threat (List 4) to species that are presumed extinct (List 1A). The 1090 plants of List 1B are rare throughout their range. All but a few species are endemic to California. All of them are judged to be vulnerable under present circumstances, or to have a high potential for becoming vulnerable. For an explanation of the CNPS listing scheme and CNDDDB status codes, refer to Appendix A.

3.6.2 Introduction to CNDDDB Definitions

"Special Plants" is a broad term used to refer to all the plant taxa inventoried by the CNDDDB, regardless of their legal or protection status (CDFG April 2009). Special plants include vascular plants and high priority bryophytes (mosses, liverworts, and hornworts).

"Special Animals" is a general term that refers to all of the animal taxa inventoried by the CNDDDB, regardless of their legal or protection status (CDFG March 2009). The Special Animals list is also referred to as the list of “species at risk” or special status species”.

These taxa may be listed or proposed for listing under the State and/or Federal Endangered Species Acts, but they may also be species deemed biologically rare, restricted in range, declining in abundance, or otherwise vulnerable.

Animals listed as California Species of Special Concern (SSC) are not listed under State or Federal Endangered Species Acts, but are considered rare or declining in abundance. The Special Concern designation is intended to provide the Department of Fish and Game, consulting biologists, land planners and managers with lists of species that require special consideration during the planning process in order to avert continued population declines and potential costly listing under Federal and State Endangered species laws. For many species of birds, the primary emphasis is on the breeding population in California. For some species which do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering.

Animals listed as Fully Protected are those species that are considered by CDFG as rare or faced with possible extinction. Most, but not all, have subsequently been listed under the California Endangered Species Act (CESA) or the Federal Endangered Species Act (FESA). Fully Protected species may not be taken or possessed at any time and no provision of the CDFG Code or any other law authorizes the issuance of permits or licenses to take any Fully Protected species. “Take” is defined in Fish and Game Code Section 86 as: hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill.

3.6.3 Special status species lists

Tables 3 and 4 list 59 special status species known from the region. Federal and State status, global and State rank, CNPS listing status (plants), and CDFG designation (animals) for each species are given. Typical blooming period, habitat preference, potential habitat on site, whether or not the species was observed on the Study Area, and the effect of the proposed activity are also provided.

TABLE 3. SPECIAL STATUS PLANT LIST. Our research identified 38 special status plants reported from the region. Special status plants do not occur in the Study Area..

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
Plants - 38 species							
1.	Hoover's Bent Grass <i>Agrostis hooveri</i>	None/none G3/S2.2 List 1B.2	April - July	Sandy soil in oak woodland habitat; <600 m. Endemic to SLO & SB Counties.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
2.	Santa Lucia Manzanita <i>Arctostaphylos luciana</i>	None/none G2/S2.2 List 1B.2	February - March	Shale outcrops, slopes, chaparral, 500-700 m. Cuesta Pass, SLO County.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
3.	Morro Manzanita <i>Arctostaphylos morroensis</i>	Threatened/none G2/S2.2 List 1B.1	December - March	Sand dunes; <200 m. s CCo (Morro Bay, SLO County)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
4.	Pecho Manzanita <i>Arctostaphylos pechoensis</i>	None/none G2/S2.2 List 1B.2	November - March	Shale outcrops, chaparral, coniferous forest; <850 m. s CCo (Pecho Hills, SLO)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
5.	Santa Margarita Manzanita <i>Arctostaphylos pilosula</i>	None/none G2/S2.2 List 1B.2	December - March	Shale outcrops, slopes, chaparral; 300-1100 m. s SCoRO Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
6.	Sand Mesa Manzanita <i>Arctostaphylos rudis</i>	None/none G2/S2.2 List 1B.2	November - February	Sandy soils, chaparral. <100m. s CCo (Nipomo, Burton Mesa, Pt. Sal, sw SLO, nw SB Counties)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
7.	Wells's Manzanita <i>Arctostaphylos wellsii</i>	None/none G2/S2.1? List 1B.1	December - May	Sandstone outcrops in chaparral, oak woodland. <400 m. s CCo (hills se of San Luis Obispo)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
8.	Marsh Sandwort <i>Arenaria paludicola</i>	Endangered/ Endangered G1/S1.1 List 1B.1	May - August	Boggy meadows, marshes; <300 m. s CCo (Nipomo Mesa, SLO County, Santa Ana River, SCo)	No. Suitable habitat is not present in the Survey Area.	No	No Effect

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
9.	San Luis Mariposa Lily <i>Calochortus obispoensis</i>	None/none G2/S2.1 List 1B.2	May - July	Chaparral, coastal scrub, valley and foothill grassland, often on serpentine but also sandstone; 100-500 m. SCoRO Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
10.	La Panza Mariposa Lily <i>Calochortus simulans</i>	None/none G2/S2.3 List 1B.3	April - May	Grassland, oak woodland & pine forest, on sand, granite, or serpentine; <1100 m. Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
11.	Cambria Morning Glory <i>Calystegia subacaulis</i> ssp. <i>episcopalis</i>	None/none G3T1/S1.2 List 1B.2	April - May	Dry, open scrub, woodland, or grassland; <500 m. c SCoRO Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
12.	San Luis Obispo Owl's-clover <i>Castilleja densiflora</i> ssp. <i>obispoensis</i>	None/none G5T2/S2.2 List 1B.2	April	Coastal grassland, <100 m. Endemic to SLO County.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
13.	Southern Tarplant <i>Centromadia parryi</i> ssp. <i>australis</i>	None/none G4T2/S2.1 List 1B.1	May - November	Often disturbed sites, near coast, along marsh edges. Also alkaline soils. <200 m. SCo	No. Suitable habitat is not present in the Survey Area.	No	No Effect
14.	Brewer's Spineflower <i>Chorizanthe breweri</i>	None/none G2/S2.2 List 1B.3	May - August	Chaparral, foothill woodland on serpentine; <800 m. Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
15.	Straight-awned Spineflower <i>Chorizanthe rectispina</i>	None/none G1/S1.2 List 1B.3	May - July	Chaparral, dry woodland in sandy soil; 200-600 m. SCoRO	No. Suitable habitat is not present in the Survey Area.	No	No Effect
16.	San Luis Obispo fountain thistle <i>Cirsium fontinale</i> var. <i>obispoense</i>	Endangered G2T1/S1.2 List 1B.2	February - July	Serpentine seeps and streams; <300 m. c SCoRO Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
17.	La Graciosa Thistle <i>Cirsium loncholepis</i>	Endangered/ Threatened G2/S2.2 List 1B.1	May - August	Wetlands in dunes; <50 m. s CCo (s SLO, n Santa Barbara Counties)	Yes. Moderately suitable habitat is present in the Survey Area.	No	No Effect

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
18.	Surf Thistle <i>Cirsium rhothophilum</i>	None/Threatened G2/S2.2 List 1B.2	April - June	Dunes, bluffs; <20 m. s CCo (s SLO, n SB Counties)	Unlikely. Suitable dune habitat is not present in the Survey Area.	No	No Effect
19.	California saw-grass <i>Cladium californicum</i>	None/none G4/S2.2 List 2.2	June - September	Freshwater and alkali marshes and seeps; 60-600 m. s CCo, SCoRO, SCo, WTR, D.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
20.	Pismo Clarkia <i>Clarkia speciosa</i> ssp. <i>immaculata</i>	Endangered/Rare G4T1/S1.1 List 1B.1	May - July	Sandy hills near coast; <100 m. s CCo (±Pismo to Edna, SLO County)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
21.	Leafy Tarplant <i>Deinandra increscens</i> ssp. <i>foliosa</i>	None/none G4G5T2/S2.2 List 1B.2	June - September	Sandy soils in valley and foothill grassland; 300-500 m. s SCoR	No. Suitable habitat is not present in the Survey Area.	No	No Effect
22.	Dune Larkspur <i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	None/none G4T3/S2.2 List 1B.2	April - May	Coastal chaparral, sand. 0-200 m. s CCo	No. Suitable habitat is not present in the Survey Area.	No	No Effect
23.	Beach Spectaclepod <i>Dithyrea maritima</i>	None/Threatened G2/S2.1 List 1B.1	March - May	Sea shores, sandy soils on dunes near the shore; <50 m s CCo, SCo, Baja CA.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
24.	Mouse-Gray Dudleya <i>Dudleya abramsii</i> ssp. <i>murina</i>	None/none G3T2/S2.3 List 1B.3	May - June	Serpentine outcrops; 120-300 m. Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
25.	Blochman's Dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	None/none G2T2/S2.1 List 1B.1	April - June	Open, rocky slopes, often serpentine or clay soils; <450 m. s CCo, SCo	No. Suitable habitat is not present in the Survey Area.	No	No Effect
26.	Blochman's Leafy Daisy <i>Erigeron blochmaniae</i>	None/none G2/S2.2 List 1B.2	July - August	Sand dunes and hills; <30 m. s CCo	No. Suitable habitat is not present in the Survey Area.	No	No Effect
27.	Indian Knob Mountain Balm <i>Eriodictyon altissimum</i>	Endangered/ Endangered G2Q/S2.2 List 1B.1	March - June	Sandstone ridges, chaparral; 250± m. Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
28.	Hoover's Button-celery <i>Eryngium aristulatum</i> var. <i>hooveri</i>	None/none G5T2/S2.1 List 1B.1	July	Vernal pools, lagunas; 0-1000 m. s SnFrB, SCoR	No. Suitable habitat is not present in the Survey Area.	No	No Effect

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
29.	Mesa Horkelia <i>Horkelia cuneata</i> ssp. <i>puberula</i>	None/none G4T2/S2.1 List 1B.1	February – September	Dry, sandy coastal chaparral; gen 70-700 m. SCoRO, SCo.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
30.	Kellogg’s Horkelia <i>Horkelia cuneata</i> ssp. <i>sericea</i>	None/none G4T1/S1.1 List 1B.1	April – September	Old dunes, coastal sand hills; <200 m. CCo	No. Suitable habitat is not present in the Survey Area.	No	No Effect
31.	Jones’s Layia <i>Layia jonesii</i>	None/none G1/S1.1 List 1B.2	March – May	Open serpentine or clay slopes; <400 m. Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
32.	San Luis Obispo County Lupine <i>Lupinus ludovicianus</i>	None/none G2/S2.2 List 1B.2	April – July	Open, grassy limestone in oak woodland; 50-500 m. Endemic to SLO County	No. Suitable habitat is not present in the Survey Area.	No	No Effect
33.	Nipomo Mesa Lupine <i>Lupinus nipomensis</i>	None/none G2/S2.2 List 1B.2	March – May	Stabilized sand dunes; <25m. s CCo (Nipomo dunes, sw SLO County)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
34.	Crisp Monardella <i>Monardella crispera</i>	None/none G2/S2.2 List 1B.2	April – August	Unstable coastal dunes; <100 m. s CCo (SLO, Santa Barbara Counties)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
35.	San Luis Obispo Monardella <i>Monardella frutescens</i>	None/none G2/S2.2 List 1B.2	May – September	Stabilized dunes, sandy scrub; <200 m. s CCo (SLO, Santa Barbara Counties)	No. Suitable habitat is not present in the Survey Area.	No	No Effect
36.	Gambel's Water Cress <i>Nasturtium gambelii</i>	Endangered/ Threatened G1/S1.1 List 1B.1	April – September	Marshes, stream banks, lake margins; <1250 m. s CCo, SCo, to Mexico	No. Suitable habitat is not present in the Survey Area.	No	No Effect
37.	Black-flowered Figwort <i>Scrophularia atrata</i>	None/none G2/S2.2 List 1B.2	March – July	Closed-cone coniferous forest, riparian scrub, dune habitats; in sand, diatomaceous shales, calcareous and other soil types. 10-250 m. s SCoRO	No. Suitable habitat is not present in the Survey Area.	No	No Effect
38.	San Bernardino Aster <i>Symphotrichum defoliatum</i>	None/none G3/S3.2 List 1B.2	July – November	Vernally mesic grasslands near ditches, streams, springs, or disturbed areas; 2-2040 m.	No. Suitable habitat is not present in the Survey Area.	No	No Effect

TABLE 4. SPECIAL STATUS ANIMAL LIST. Our research identified 21 special status animals reported from the region. Habitat types in the Study Area are suitable for three special status animal species.

	Common and Scientific Names	Fed/State Status Global/State Rank DFG Rank	Nesting/Breeding Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
Animals – 21 species							
39.	Oso Flaco Robber Fly <i>Ablautus schlingeri</i>	None/none G1/S1 Special Animal	n/a	Sand dunes.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
40.	Sharp-shinned Hawk <i>Accipiter striatus</i>	None/none G5/S3 Special Animal (Nesting)	March 15 through August 15	Riparian, coniferous, and deciduous woodlands near water.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
41.	Southwestern Pond Turtle <i>Actinemys marmorata pallida</i>	None/none G3G4T2T3Q/S2 SSC	April – August	Permanent or semi-permanent streams, ponds, lakes.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
42.	Silvery Legless Lizard <i>Anniella pulchra pulchra</i>	None/none G3G4T3T4Q/S3 SSC	May – September	Sandy or loose loamy soils under coastal scrub or oak trees. Soil moisture essential.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
43.	Oso Flaco Flightless Moth <i>Areniscythis brachyptervis</i>	None/none G1/S1 Special Animal	n/a	Open, coastal sand dune slopes in San Luis Obispo County.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
44.	Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i>	Threatened/none G3/S2S3 Special Animal	Rainy Season	Clear water sandstone depression pools, grassed swale, earth slump, or basalt flow depression pools.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
45.	Western Snowy Plover <i>Charadrius alexandrinus nivosus</i>	Threatened/none G4T3/S2 SSC	March 15 through August 15	Sandy beaches, salt pond levees, & shorelines of large alkali lakes. Needs friable soils for nesting.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
46.	Oso Flaco Patch Butterfly <i>Chlosyne leanira elegans</i>	None/none G4G5T1T2/S1S2 Special Animal	n/a	Sand dune habitat around Oso Flaco Lake, SLO County. Larval food plant is <i>Castilleja affinis</i> .	No. Suitable habitat is not present in the Survey Area.	No	No Effect

	Common and Scientific Names	Fed/State Status Global/State Rank DFG Rank	Nesting/Breeding Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
47.	Monarch Butterfly <i>Danaus plexippus</i>	None/none G5/S3 Special Animal	September - March (aggregations)	Roosts located in wind-protected tree groves with nectar and water nearby.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
48.	Yellow Warbler* <i>Dendroica petechia brewsteri</i>	None/none G5T3?/S2 SSC	March 15 through August 15	Nests in riparian plant associations, including willows, cottonwoods, etc.	Yes. Appropriate nesting habitat is present in willow woodland habitat.	No	Potentially Adverse Effect Can Be Mitigated
49.	Tidewater Goby <i>Eucyclogobius newberryi</i>	Endangered/none G3/S2S3 SSC	n/a	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
50.	Yellow-breasted Chat* <i>Icteria virens</i>	None/none G5/S3 SSC (Nesting)	March 1 through August 31	Summer resident. Inhabits riparian thickets of willow and brush. Nests within 10 feet of ground.	Yes. Appropriate nesting habitat is present in willow woodland habitat.	No	Potentially Adverse Effect Can Be Mitigated
51.	California Black Rail <i>Laterallus jamaicensis coturniculus</i>	None/Threatened G4T1/S1 Special Animal	March 15 through August 15	Occurs in tidal salt marsh heavily grown to pickleweed, also in freshwater and brackish marshes near the coast.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
52.	White Sand Bear Scarab Beetle <i>Lichnanthe albipilosa</i>	None/none G1/S1 Special Animal	n/a	Found only in coastal sand dunes of SLO County, near Dune Lake, some distance from the surf.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
53.	Steelhead - South/Central California Coast ESU <i>Oncorhynchus mykiss irideus</i>	Threatened/none G5T2Q/S2 SSC	February – April	Fed listing refers to runs in coastal basins from Pajaro River south to, but not including, the Santa Maria River.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
54.	Coast Horned Lizard <i>Phrynosoma coronatum</i> (frontale population)	None/none G4G5/S3S4 SSC	May – September	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	No. Suitable habitat is not present in the Survey Area.	No	No Effect

	Common and Scientific Names	Fed/State Status Global/State Rank DFG Rank	Nesting/ Breeding Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
55.	Morro Bay Blue Butterfly <i>Plebejus icarioides moroensis</i>	None/none G5T1T3/S1S3 Special Animal	n/a	Inhabits stabilized dunes and surrounding areas in coastal SLO County (Morro Bay) and nw SB County.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
56.	California Red-legged Frog <i>Rana draytonii</i>	Threatened/none G4T2T3/S2S3 SSC	January – September	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks for larval development.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
57.	Allen’s Hummingbird* <i>Selasphorus sasin</i>	None/none G5/SNR Special Animal	March 15 through August 15	Nests in coastal lowlands in coastal sage scrub, soft chaparral, riparian, oak woodlands and other coastal forest habitats.	Yes. Suitable nesting habitat is present in willow woodland habitat.	No	Potentially Adverse Effect Can Be Mitigated
58.	California Least Tern <i>Sternula antillarum browni</i>	Endangered/ Endangered G4T2T3Q/ S2S3 Special Animal	March 15 through August 15	Nests on sand beaches, alkali flats, bare flat ground from San Francisco Bay to N. Baja California. Colonial breeder.	No. Suitable habitat is not present in the Survey Area.	No	No Effect
59.	American Badger <i>Taxidea taxus</i>	None/none G5/S4 SSC	February – May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	No. Suitable habitat is not present in the Survey Area.	No	No Effect

Habitat characteristics are from the Jepson Manual and the CDNNB.

*not listed in the CNDDDB or CNPS for the search area, but possible for the location.

Abbreviations:

CCo: Central Coast
SCo: South Coast
SCoR: South Coast Ranges
SCoRO: Outer South Coast Ranges
SCoRI: Inner South Coast Ranges

SnFrB: San Francisco Bay
TR: Transverse Ranges
WTR: Western Transverse Ranges
SnJV: San Joaquin Valley
ScV: Sacramento Valley

SLO: San Luis Obispo
SN: Sierra Nevada
SnJt: San Jacinto Mtns
SnBr: San Bernardino
Teh: Tehachapi Mtn Area

CW: Central West
SW: South West
DMoj: Mojave Desert
PR: Peninsular Ranges

3.6.4 *Special status plants discussion*

Habitat types in the Study Area are poorly suited for special status plants listed in the vicinity. West of the Study Area, coastal dunes provide appropriate habitat for special status plants that do not occur in willow woodland. The Study Area, surrounded by urban infrastructure, has a fringe of routinely disturbed habitat dominated by weedy species. Review of habitat requirements for special status species reported from the vicinity determined one special status plant species, La Graciosa thistle, could potentially occur based on habitat conditions in the Study Area. We discuss three special status species known from the vicinity and describe habitat suitability, range restrictions, known occurrences, and results of spring 2009 surveys. Special status plants do not occur in the Study Area.

- A. La Graciosa Thistle** (*Cirsium loncholepis*) is a federally listed endangered plant that occurs in dune wetlands in San Luis Obispo and Santa Barbara Counties. The U.S. Fish and Wildlife Service designated critical habitat for this species that includes dune wetlands associated with Meadow Creek at Pismo State Beach west of Highway 1, adjacent to the Project Site (refer to figures 6 and 7, Section 8.0). Surveys of this critical habitat area in 1990 found all formerly suitable habitat covered with ice plant, and La Graciosa thistle was not present (CNDDDB 2009). Habitat in the Study Area is poorly suited to supporting a population of La Graciosa thistle. Seasonally timed botanical surveys in spring 2009 determined this endangered species does not occur in the Study Area.
- B. Marsh Sandwort** (*Arenaria paludicola*) is a federally listed endangered plant that occurs in marshes and swamps. It is considered extirpated from most of its former habitat at Black Lake, Small Twin Lake, and portions of Oso Flaco Lake, but is presumed extant at the northwestern edge of Oso Flaco Lake (CNDDDB 2009). Suitable habitat is not present at the Study Area for marsh sandwort. Seasonally timed botanical surveys in spring 2009 determined this endangered species does not occur in the Study Area.
- C. Surf Thistle** (*Cirsium rhothophilum*) is a federally threatened species that occurs in dunes and dune scrub habitats. Historic records from the vicinity of the Study Area are presumed extirpated (CNDDDB 15). Suitable dune habitat is not present in the Study Area for surf thistle. Seasonally timed botanical surveys in spring 2009 determined this threatened species does not occur at the Study Area.

3.6.5 *Special status animals discussion*

Habitat types in the Study Area are suitable for three special status animal species. The three special status animals that could be present are birds that nest in willow woodland habitat (refer to subsection A, below). We discuss four additional special status species reported from the vicinity, and describe habitat suitability, range restrictions, known occurrences, and results of spring 2009 surveys. One special status animal was detected in the Study Area.

- A. Allen’s Hummingbird** (*Selasphorus sasin*), **Yellow Warbler** (*Dendroica petechia*), and **Yellow-breasted Chat** (*Icteria virens*) are CDFG special status bird species that are known to nest in willow habitats in San Luis Obispo County. Allen’s hummingbird was observed in the Study Area in 2009, but was not nesting. Yellow warbler and yellow-breasted chat could occur, but were not identified in 2009.
- B. Western Snowy Plover** (*Charadrius alexandrinus nivosus*) is a federally listed threatened species that nests on beaches in the vicinity of the Study Area. Snowy plovers do not inhabit willow woodland habitat, and do not nest or forage in the Study Area.
- C. California Red-legged Frog** (*Rana draytonii*) is a federally listed threatened species reported from Arroyo Grande Creek south of the Study Area. The Study Area contains no suitable aquatic habitat for the California red-legged frog. Suitable aquatic habitat is not present for breeding purposes, and Highway 1 presents a significant barrier for movement between the site and Meadow Creek. Appendix C of the 2005 Biological Assessment includes a full protocol survey report for red-legged frogs conducted by Susan Christopher, Ph.D. The Study Area is not suitable habitat for the California Red-legged frog. Red-legged frogs were not found on site during our surveys in 2009.
- D. Monarch Butterfly** (*Danaus plexippus*) is listed by the California Department of Fish and Game (CDFG) as a Special Animal. CDFG maintains data on wintering aggregation sites. Several aggregation sites are known along the south coast of San Luis Obispo County. All aggregation sites in the vicinity of the Study Area occur in groves of blue-gum eucalyptus (*Eucalyptus globulus*) trees. Suitable habitat is not present in the Study Area for wintering aggregations of monarch butterflies.
- E. Oso Flaco Robber Fly** (*Ablautus schlingeri*) is a CDFG listed Special Animal reported from sand dunes in the vicinity of Oso Flaco Lake and Oceano Dunes. Suitable habitat is not present in the Study Area for this species.

4.0 Wetland Delineation

Wetland conditions were detected in the Study Area on June 3, 2009 during a field analysis of vegetation and soils characteristics (Figure 2, Section 8.0). The wetland delineation study area covered approximately two acres. Arroyo willow, the dominant tree canopy on site, is a hydrophytic plant listed as a facultative wetland (FACW) species (USFWS 1988). Understory vegetation varies from native blackberry (FAC), poison oak (not an indicator), California rose (facultative with occasional association with wetland, FAC) to bulrush, an obligate wetland plant (OBL). Several very low areas contained no vegetation where standing water was observed on February 20, 2009 during an initial site visit. Field data sheets are included as Figure 12 in Section 8.0.

Two soil pits were investigated during our June 3 site visit. Two pits are required to describe federal wetland conditions. One pit was selected in an obvious moist soil environment. The second pit was chosen near the boundary between wetland and upland (non-wetland) conditions. We used vegetation and topography to estimate the limits of wetland soil conditions. Both the upland and wetland pits contained trash (e.g. plastic,

debris, and hypodermic needles) from adjacent transient camps. A total of 0.2 acre of wetlands were identified that would be regulated by the Clean Water Act and the Coastal Act due to the presence of hydric soils, wetland vegetation, and wetland hydrology/topography (Table 5).

All of the 0.2 acre wetland that occurs in the Study Area is anticipated to be within the Project Site. Willow woodland occupies approximately 1.7 acres of the Study Area, all of which is may be within the Project Site. Table 5 summarizes wetland data. Figure 2 in Section 8.0 illustrates jurisdictional areas within the Study Area.

TABLE 5. HABITAT TYPES. . Areas of willow woodland, wetland, and anthropogenic habitats are indicated for the Project Site and the Study Area.

Habitat Types	Project Site Estimated Area (acre)	Study Area Estimated Area (acre)
Willow Woodland	1.7	1.7
Wetland (three-factor: soil, vegetation, hydrology/topography)	0.2	0.2
Anthropogenic	Less than 0.1	0.1
Total Area	1.9	2.0

4.1 Soil Sample Sites

Soil Sample Pit 1. This wetland sample pit is located in an un-vegetated depression, approximately 16 feet in diameter, approximately 38 inches below road grade elevation. The pit location is 144 feet south of the retaining wall at the Amtrak Station and 25 feet east of Highway 1 asphalt curb. North and south of the sample pit are similar un-vegetated depressions. This pit location emphasizes long periods of saturation. Arroyo willow (FACW) tree canopy provides 95 percent absolute cover. There are no understory plants in the depression. Blackberry, a facultative plant (FAC) occupies soil above the depression. Ordinary high water marks included staining and leaf debris at about 18 inches above the bottom of the depression.

A sandy pit 18 inches deep contained no obvious redox features or soil structure. The soil color is 10YR 3/1, very dark grey sand with a 2-inch organic layer on top and large amounts of organic matter throughout the profile. Its hydric soil indicator is Sandy Mucky Mineral (S1), where the content of organic carbon is at least 5 percent and ranges to as high as 14 percent. Little clay is detectible in Pit 1.

The sample pit contained a high water table (A2), with standing water at 12 inches, and saturated soil below 10 inches (A3). Drift deposits (B3) included dead bulrush stems that floated into the depression from adjacent wetland habitat south of the pit location. Surface water flows down slope from the east, and from a low point near the driveway entrance to the Amtrak Station. No sheet flow enters the wetland from Highway 1, where curbs and drop inlets carry water in a culvert west toward Meadow Creek. **Soil Sample**

Pit 1 is within a Clean Water Act section 404 jurisdictional wetland, separated from a Water of the U.S. by Highway 1.

Soil Sample Pit 2. This sample pit is located in a vegetated low area, approximately 25 feet in diameter, at approximately the road grade elevation. The pit location is west of a transient encampment in a blackberry bramble, approximately 50 feet from the northern parcel boundary. Arroyo willow (FACW) tree canopy provides approximately 70 percent absolute cover. Blackberry (FAC) provides 60 percent shrub cover and California rose (FAC+) covers five percent. The remainder is leaf litter and dry branches; no herbaceous plant species are present.

A sandy pit 18 inches deep contained asphalt debris in the bottom of the pit with gravel of varied geology over two inches in diameter. Trash, including used needles and plastic, was observed in the upper 15 inches. Soil was dry at top, moist at the bottom. No soil structure was observed. The site is near the bottom of a west-facing slope, at about 9 feet elevation. The slope is an embankment that may have been constructed over an old dune terrace about 75 feet east.

Sample Pit 2 contains no hydric soil indicators. The top four inches contains abundant leaf litter and a soil matrix color of 10YR 4/2, dark grayish brown. The second layer, 4 to 15 inches, contains debris and trash plus gravel, and its color is 10YR 4/4, dark yellowish brown. The third layer, over 15 to over 18 inches contains coarse sand that is 10YR 4/3, brown, with asphalt debris and gravel. This sample location appears to be part of an historic fill location, and does not appear to pond water for long periods of time.

Soil Sample Pit 2 is NOT within a Clean Water Act section 404 jurisdictional wetland. However, Pit 2 contains facultative wetland plants and lacks soil and topographic wetland indicators.

4.2 Rainfall and WETS Data

The City of Grover Beach rainfall year begins July 1 and ends June 30. The City's Standards and Specifications rainfall intensity duration curve (2007) states that the average rainfall is 16 inches (City of Grover Beach 2007). Arroyo Grande, just up slope from Grover Beach receives 15.1 inches of precipitation (WRCC 2009).

Pismo Beach averages 18.2 inches rainfall per year with a 30 percent chance of less than 12.2 inches and more than 20.2 inches. Most precipitation falls between November and February. The growing season is 365 days per year at a 70 percent probability. Data are provided from WETS Station Pismo Beach, CA6943, for rainfall years between 1971 and 2000 and are included as Figure 10 in Section 8.0.

During rainfall year 2008 to 2009, The City of Grover Beach received a total of 6.45 inches of annual rainfall, almost 10 inches less than the yearly average. Between January and June 2009, Grover Beach received 4.29 inches of rain, with 0.5 inch of rain between June 4 and 6. Between July and December 2008, Grover Beach received 2.16 inches of rain. Our surveys were conducted during a drought year.

The previous rainfall year from July 1, 2007 to June 30, 2008 was also a drought year. Nearby Pismo Beach, the closest WETS station location, received 9.32 inches of

precipitation, about half of the average between 1971 and 2000. During rainfall year 2006 to 2007, Pismo Beach received 5.51 inches, less than one third the annual average of 18.17. This wetland delineation was conducted during a third consecutive year of below-average rainfall.

5.0 Discussion

The Study Area is predominantly a patch of willow woodland habitat that is fragmented from nearby willow habitat in Meadow Creek. It is surrounded on all sides by urban development, including a highway, railroad tracks, train station, and campground. The willow woodland in the Study Area is inhabited by a dozen or more transient people. Few people were observed during day-time site inspections, but numerous active dwellings and debris piles indicate that people sleep in the woodland on a regular basis. Gravel, cobble, asphaltum, and broken concrete pieces suggest that part or all of the Study Area was previously disturbed. We observed evidence of dirt that was removed from its original location and placed in the Study Area. Habitat within the Study Area has low biological function compared with larger intact willow habitats in the Meadow Creek watershed. Low biological function is the result of fragmentation and degradation of habitats on site by surrounding development and transient encampments.

The approximately two acre Study Area supports 1.7 acres of arroyo willows, a facultative wetland species. A wetland within the willow woodland that is approximately 0.2 acre in size contains hydric soils, wetland hydrology, and hydrophytic plants and would be regulated under Section 404 of the Clean Water Act and under the Clean Water Act.

Authorization to fill wetlands may be obtained from the U.S. Army Corps of Engineers under a Nationwide Permit for Commercial and Institutional Development (Clean Water Act section 404), and requires a water quality certification from the Regional Water Quality Control Board (Clean Water Act section 401). A permit may be required from the California Department of Fish and Game under their streambed alteration program (CDFG code 1602), although they may determine that the subject wetland no longer directly affects Meadow Creek's aquatic habitat.

Where removal of woodland vegetation is proposed, development plans should include removal of vegetation during the late fall, after breeding bird season, and before winter rains. It is unlikely that woodland vegetation could be removed between March 15 and August 15 without impact to nesting birds. Nesting birds are protected under the Migratory Bird Treaty Act.

6.0 Potential Impacts

The City of Grover Beach multi-modal transportation center expansion project is in an early planning phase and no site plans have yet been prepared. Our impact analysis presumes loss of willow riparian habitat and replacement of on-site wetland (three-factor wetland) plus some on-site willow riparian habitat.

6.1 Habitat Impacts

6.1.1 Arroyo willow woodland

Approximately 1.7 acres of willow woodland habitat occurs at the Project Site. The proposed project would permanently affect willow woodland habitat. The amount of willow woodland habitat that would be affected by the proposed project will be determined upon completion of a site plan.

6.1.2 Wetland

Approximately 0.2 acre of three-factor wetland habitat occurs at the Project Site. The proposed project could result in adverse effects to three-factor wetland habitat. Wetlands would be replaced in-kind, within the Project Site.

6.2 Common Wildlife Impacts

6.2.1 Nesting habitat

Impacts to or take of nesting birds could occur if grading or vegetation removal is conducted during nesting season (March 15 through August 15). Take of common nesting birds is prohibited by Federal and State code. Impacts to or take of common nesting birds can be avoided (refer to Section 7.2.1).

6.3 Special Status Plant Impacts

Special status plants do not occur at the Project Site. The proposed project would not affect special status plants.

6.4 Special Status Animal Impacts

One special status animal, Allen's hummingbird, could be present at the Project Site. The proposed project could result in adverse effects to special status animals if appropriate mitigation and avoidance measures are not implemented. Potential adverse effects can be off-set by avoiding sensitive resources.

6.4.1 Allen's hummingbird

Allen's hummingbird is the only special status animal with a potential to occur in the Project Site. Implementation of appropriate pre-construction surveys and construction timing can reduce potential impacts to a less than significant level (refer to Section 7.3.2).

7.0 Recommendations and Mitigations

Sensitive biological resources are present at the Project Site. Where a potential exists for adverse effects to biological resources from development, we provide recommendations and biological resource (BR) mitigation measures designed to reduce the effect of the impact.

7.1 Habitat Mitigations

7.1.1 Arroyo willow woodland

Where removal of willow woodland vegetation is proposed, development plans should include removal of vegetation during the fall, after breeding bird season, and before winter rains. It is unlikely that woodland vegetation could be removed between March 15 and August 15 without impact to nesting birds. Nesting birds are protected under the Migratory Bird Treaty Act (refer to Section 7.2).

Mitigation for removal of willow woodland vegetation should include replacement and enhancement of willow woodland vegetation, preferably within the Meadow Creek watershed at a ratio of two to one (2:1).

7.1.2 Wetland

We recommend that any plan to remove wetland vegetation should incorporate wetland mitigation within the Meadow Creek watershed. A minimum three to one (3:1) ratio to create three-factor wetland should be incorporated into the plans.

Alternatively, 0.2 acre of three-factor wetland may be re-created on site, as part of the project design. Willows, cottonwoods, and blackberries could be used as a riparian buffer adjacent to the wetland, and may provide on site protection and habitat functions compatible with the proposed project. Where willow woodland and wetland would be recreated on site, the replacement ratio would be one to one (1:1).

7.2 Common Wildlife Mitigations

7.2.1 Nesting habitat

Migratory non-game native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory non-game birds (as listed under the Federal MBTA).

BR-1. Within one week of ground disturbance activities, if work occurs between March 15 and August 15, nesting bird surveys shall be conducted. To avoid impacts to nesting birds, grading and construction activities shall not be conducted during the breeding season from March 15 to August 15. If construction activities must be conducted during this period, nesting bird surveys shall take place within one week of habitat disturbance. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests

until chicks are fledged. A pre-construction survey report shall be submitted to the lead agency immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the project site and nest locations shall be included with the report. The biologist shall have the authority to reduce or increase the recommended buffer depending upon site conditions.

7.3 Mitigations for Special Status Species

7.3.1 Special status plants

Special status plants do not occur in the Project Site; therefore no mitigation is required.

7.3.2 Special status animals

In order to reduce the potential for disturbance of nests of Allen’s hummingbird, yellow warbler, or yellow-breasted chat, the applicant shall implement BR-1 one week prior to ground-breaking activities. If nests of special status species are identified in the work area, the following additional mitigation measures shall be implemented:

BR-2. Occupied nests of special status bird species shall be mapped using GPS or survey equipment. The mapped locations shall be placed on all engineering drawings and plan sets with a 100-foot buffer indicated. Work shall not be allowed within the 100 foot buffer while the nest is in use. The buffer zone shall be delineated on the ground with orange construction fencing where it overlaps work areas

BR-3. Occupied nests of special status bird species that are within 100 feet of project work areas shall be monitored at least every two weeks through the nesting season to document nest success and check for project compliance with buffer zones. Once nests are deemed inactive and/or chicks have fledged and are no longer dependant on the nest, work may commence.

8.0 Maps

Figure 1. Aerial Photograph

Figure 2. Aerial Photograph and Soil Pit Locations

Figure 3. USDA Soils Map

Figure 4. Rare Animals Map

Figure 5. Rare Dune Plants Map

Figure 6. Rare Non-Dune Plants Map

Figure 7. Sensitive Natural Communities Map

Figure 8. USGS Topographic Map

Figure 9. Pismo Beach WETS Data

Figure 10. APN Map 060-206-024

Figure 11. APN Map 060-263-034

Figure 12. Wetland Determination Data Forms

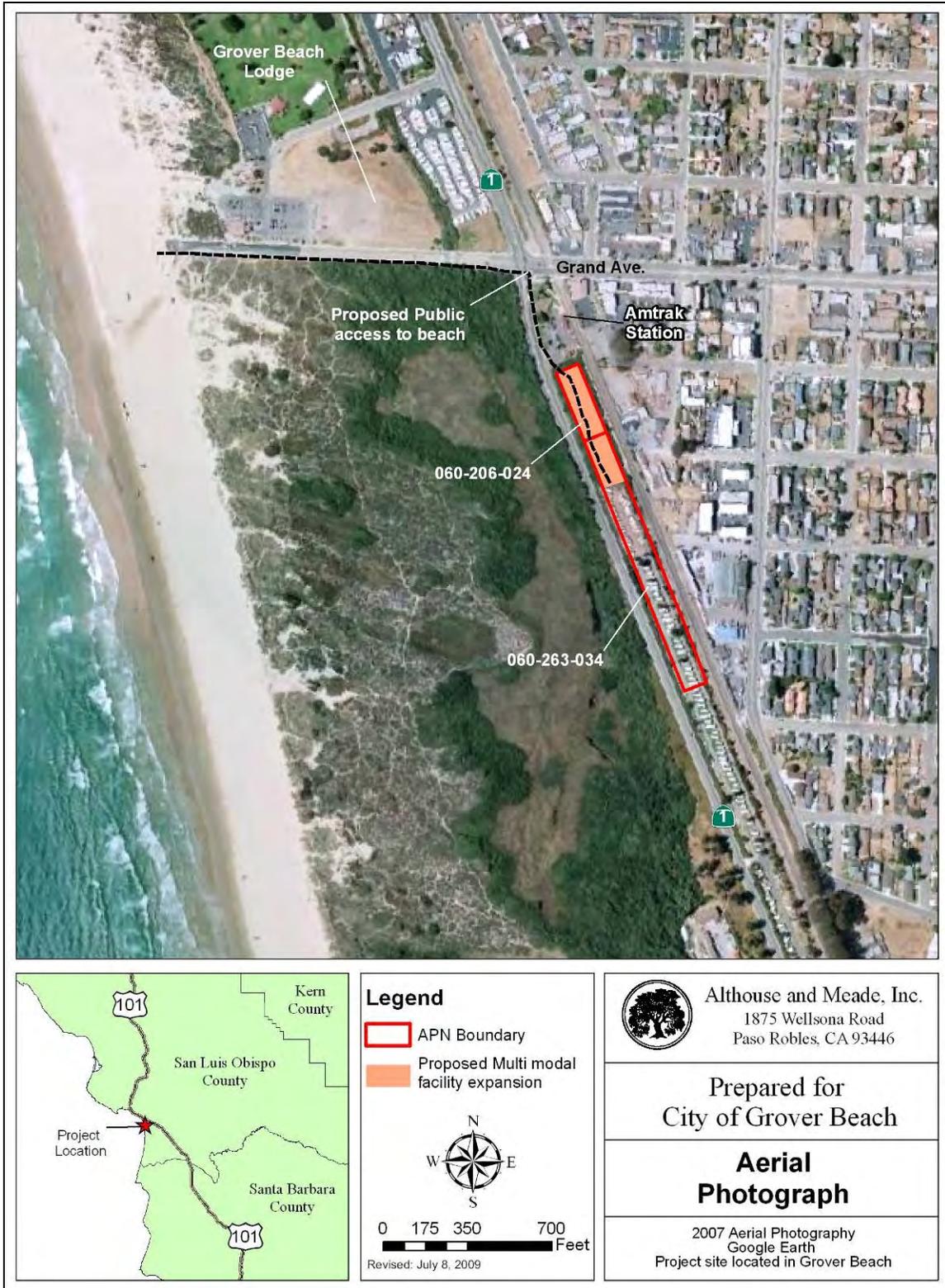


FIGURE 1. AERIAL PHOTOGRAPH. The Project Site, indicated by pink shading, is composed of one whole parcel (APN 060-206-024) and a portion of a second parcel (060-263-034).



FIGURE 2. AERIAL PHOTOGRAPH AND SOIL PIT LOCATIONS. Locations of two soil pits investigated in June 2009 are indicated on a 2007 aerial photograph with a topographic overlay provided by Garing and Taylor. Three-factor wetland is indicated by the light blue shaded area, and willow woodlands is indicated by the dark blue dashed perimeter line. Wetland areas are approximate.

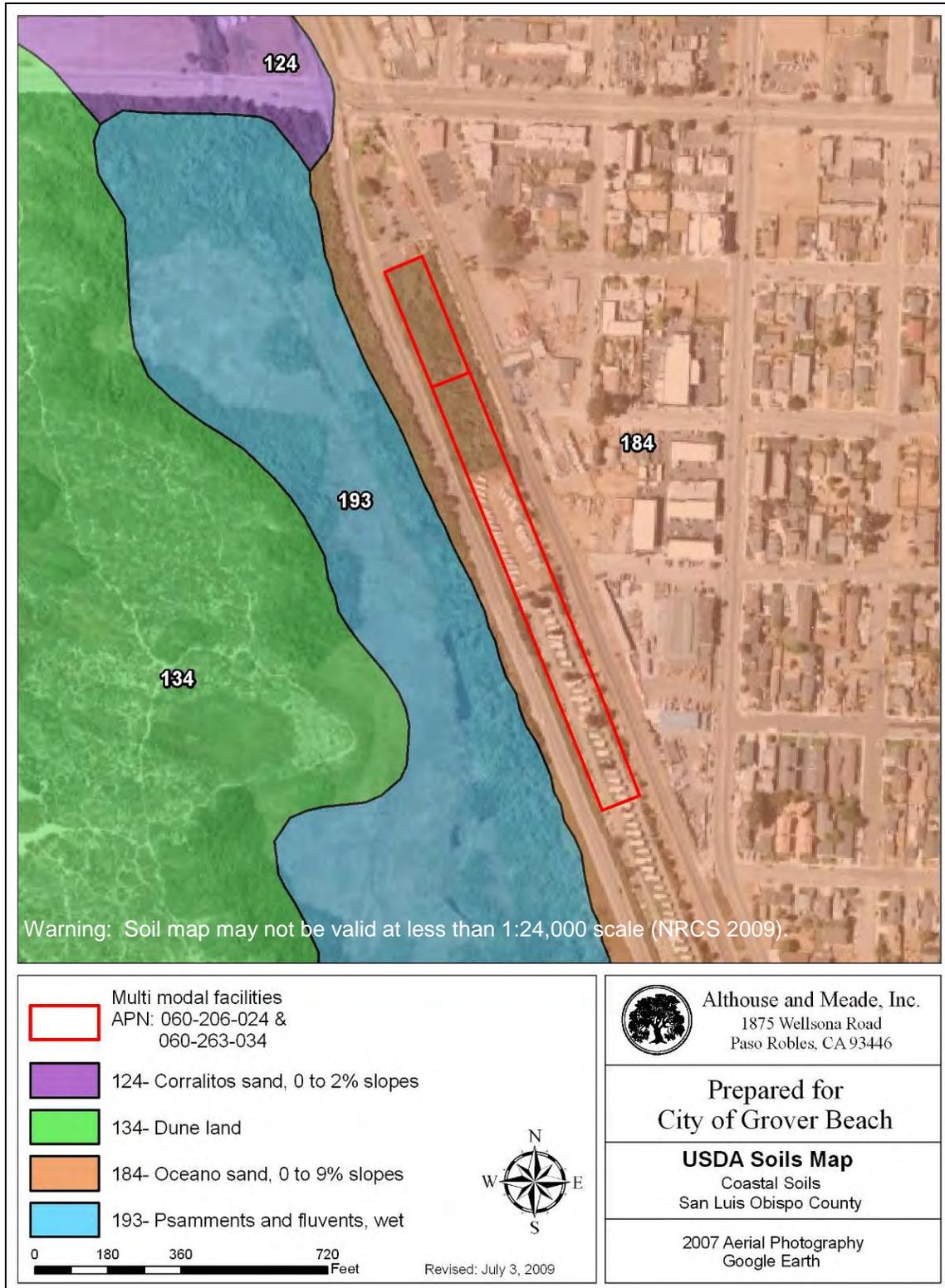


FIGURE 3. USDA SOILS MAP. Soil map units from the United States Department of Agriculture are indicated on a 2007 aerial photograph of the area. The Study Area is entirely within the Oceanic Sand, 0 to 9% slopes map unit.

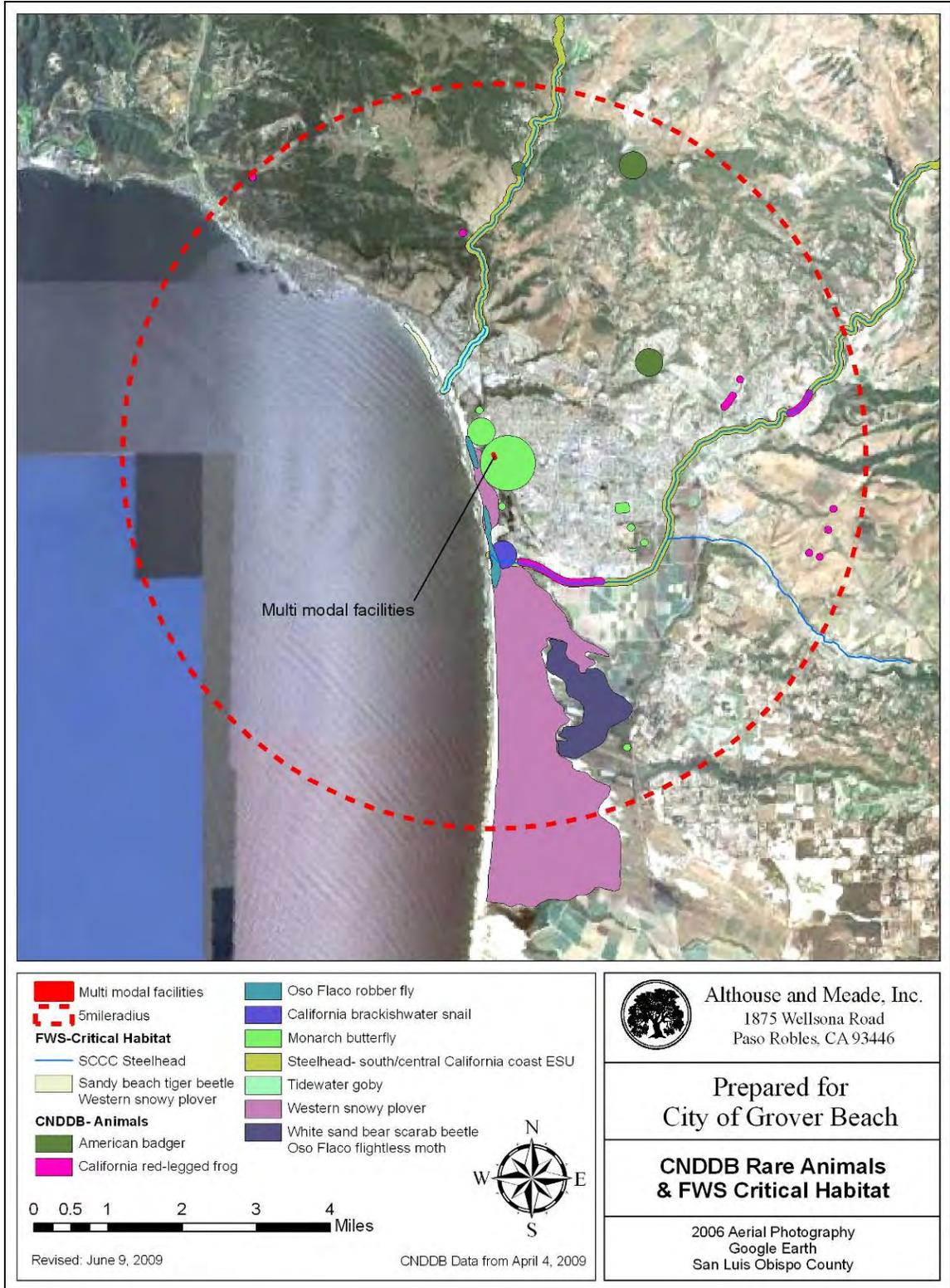


FIGURE 4. RARE ANIMALS MAP. GIS data from the California Natural Diversity Database and U.S. Fish and Wildlife Service are overlaid on a 2006 aerial photograph of the area. Monarch butterfly data (green circle) overlaps the subject parcel, however no monarch overwintering habitat occurs on the parcel itself.

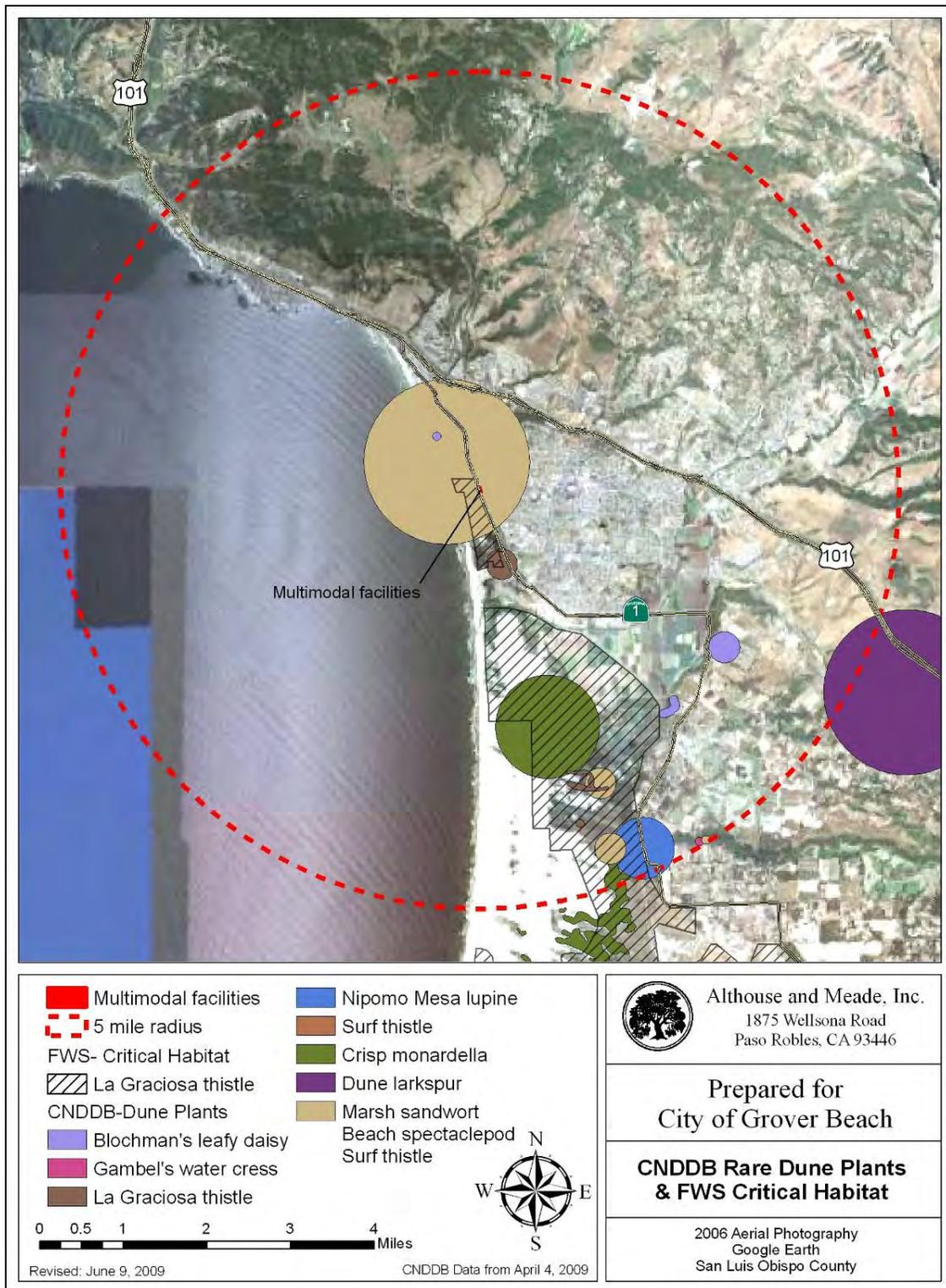


FIGURE 5. RARE DUNE PLANTS MAP. GIS data from the California Natural Diversity Database and U.S. Fish and Wildlife Service are overlaid on a 2006 aerial photograph of the area. Only plants that occur in dune habitats are shown on this map.

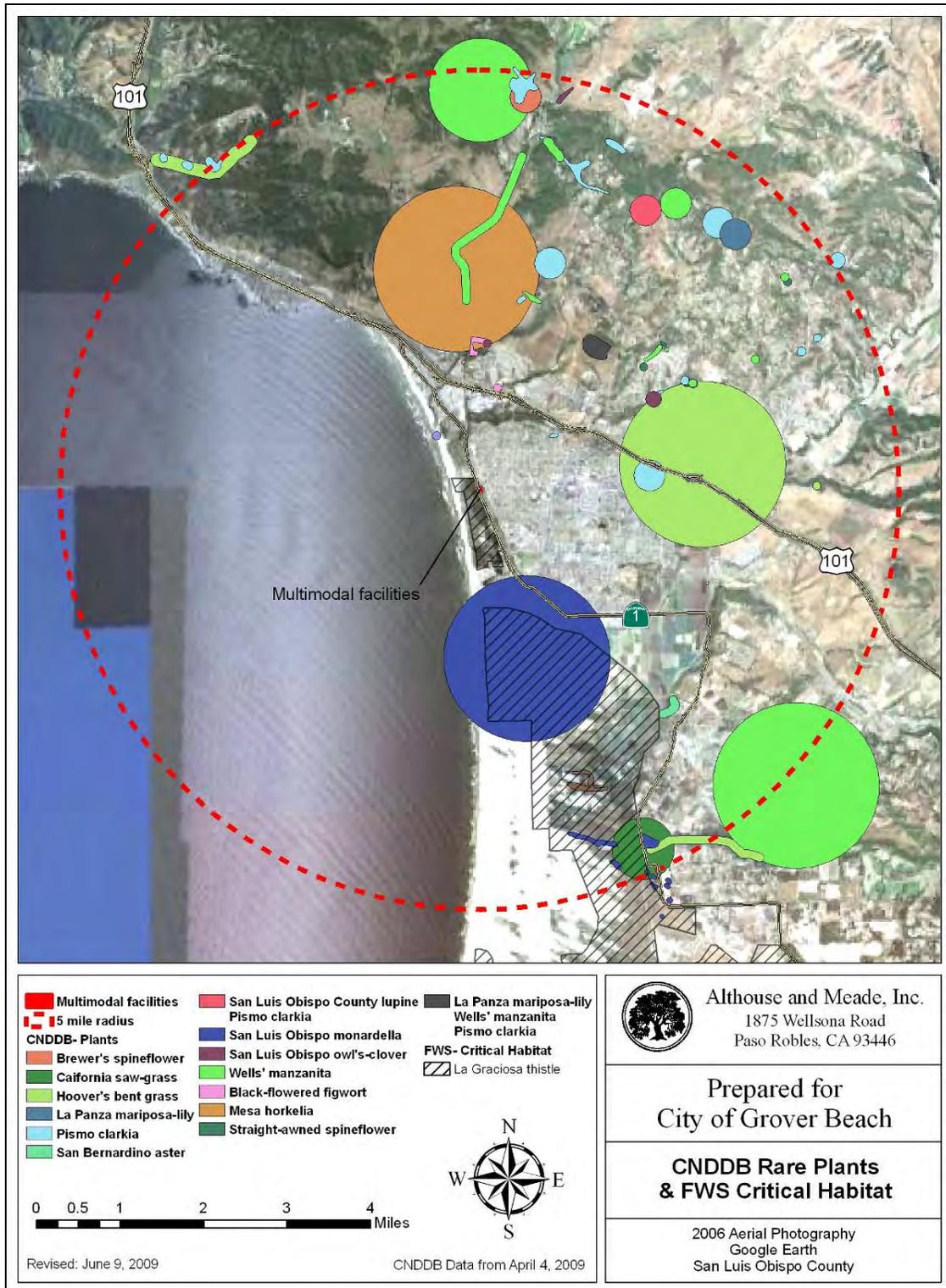


FIGURE 6. RARE NON-DUNE PLANTS MAP. GIS data from the California Natural Diversity Database and U.S. Fish and Wildlife Service are overlaid on a 2006 aerial photograph of the area. Figure shows all rare plants reported from the area except dune species (refer to Figure 5).

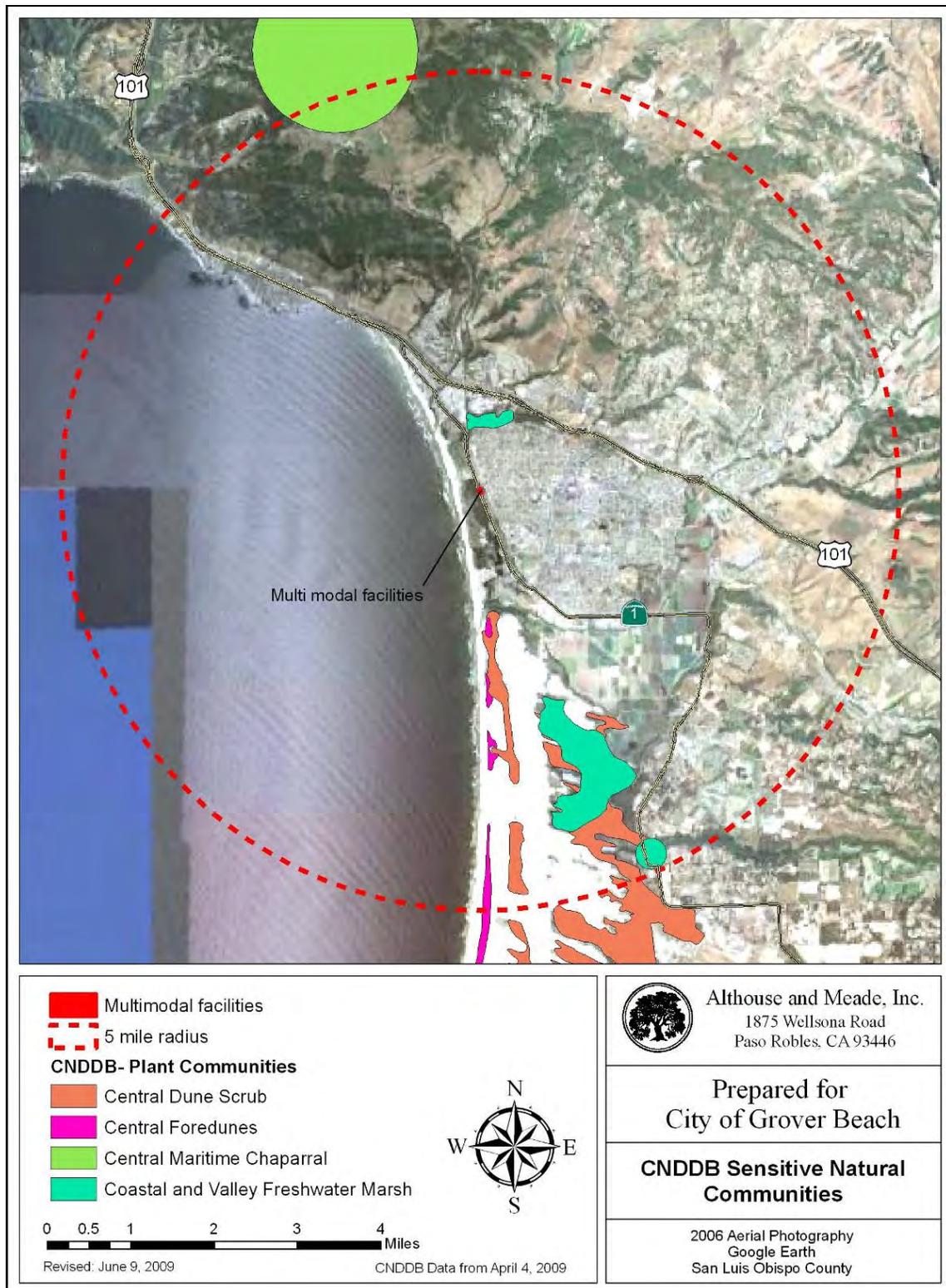


FIGURE 7. SENSITIVE NATURAL COMMUNITIES MAP. GIS data from the California Natural Diversity Database is overlaid on a 2006 aerial photograph of the area.



FIGURE 8. USGS TOPOGRAPHIC MAP. The project parcels, indicated by the red solid line, are located in Township 32 South, Range 13 East, at approximate coordinates of latitude 35.120 degrees north and longitude 120.629 degrees west.

WETS Station : PISMO BEACH, CA6943					Creation Date: 08/29/2002				
Latitude: 3508		Longitude: 12038		Elevation: 00080					
State FIPS/County(FIPS): 06079			County Name: San Luis Obispo						
Start yr. - 1971		End yr. - 2000							
Month	Temperature (Degrees F.)				Precipitation (Inches)				
	avg daily max	avg daily min	avg	avg	30% chance will have		avg	avg	
					less than	more than	# of days w/.1 or more	total snow fall	
January	64.6	42.3	53.4	3.71	1.64	4.59	6	0.0	
February	66.0	43.8	54.9	4.00	1.48	4.90	6	0.0	
March	66.8	44.5	55.6	3.57	1.31	4.37	5	0.0	
April	69.6	45.6	57.6	1.14	0.24	1.37	2	0.0	
May	69.9	47.5	58.7	0.41	0.00	0.36	0	0.0	
June	71.3	50.4	60.8	0.07	0.00	0.00	0	0.0	
July	71.6	52.6	62.1	0.03	0.00	0.00	0	0.0	
August	72.5	53.3	62.9	0.03	0.00	0.00	0	0.0	
September	73.1	52.8	62.9	0.33	0.00	0.25	0	0.0	
October	72.6	50.1	61.4	0.79	0.15	0.95	1	0.0	
November	69.3	45.8	57.6	1.63	0.66	2.05	3	0.0	
December	65.4	42.1	53.8	2.47	0.78	3.09	3	0.0	
Annual					12.25	20.23	--	--	
Average	69.4	47.6	58.5				--	--	
Total				18.17			26	0.0	

GROWING SEASON DATES			
Probability	Temperature		
	24 F or higher	28 F or higher	32 F or higher
	Beginning and Ending Dates Growing Season Length		
50 percent *	> 365 days	> 365 days	> 365 days
70 percent *	> 365 days	> 365 days	> 365 days

* Percent chance of the growing season occurring between the Beginning and Ending dates.

FIGURE 9. PISMO BEACH WETS DATA. Temperature and precipitation data between 1971 and 2000 are summarized for the WETS station located closest to the City of Grover Beach. The annual precipitation average is 18.17 with a probability of 30 percent that rainfall will be less than 12.25 inches or more than 20.23 inches. In an average year, 26 days will receive over 0.1 inch of rain. The growing season is 365 days a year.

FIGURE 12. WETLAND DETERMINATION DATA FORMS.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Grover Beach, Math model City/County: San Luis Obispo Sampling Date: 6/3/09
 Applicant/Owner: City of Grover Beach State: CA Sampling Point: 1
 Investigator(s): Althouse & Meade Section, Township, Range: T 32S R 13E
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): _____ Slope (%): 0
 Subregion (LRR): C Lat: 35.120558 Long: -120.629069 Datum: WGS84
 Soil Map Unit Name: 184 Oceanic Sands 0-9% slopes NWI classification: P F 0 7
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------

Remarks: Third year of drought. Highway 1 created a berm that cut off natural connection to Meadow Ck. Wetland total area estimated by visual inspection through very thick vegetation.

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix lasiolepis</u>	<u>95</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____				
3. _____				
4. _____				
Total Cover: <u>95</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum				
1. <u>No shrubs in wet area</u>				
2. _____				
3. _____				
4. _____				
5. _____				
Total Cover: _____				
Herb Stratum				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Total Cover: _____				
Woody Vine Stratum				
1. _____				
2. _____				
Total Cover: _____				
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust _____		
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				
Remarks: <u>Leaf litter covers bare ground</u>				

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Mult. modal City/County: Grover Beach Sampling Date: 6/3/09
 Applicant/Owner: Grover Beach County State: CA Sampling Point: #2 - upland
 Investigator(s): Dart + Althouse Section, Township, Range: T33S R13E
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0.1%
 Subregion (LRR): C Lat: 35.120258 Long: -120.629009 Datum: NAD83
 Soil Map Unit Name: 184 Ocean Sands 0-9% Slopes NWI classification: PFO7

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------

Remarks: Third year of drought. Site appears to contain fill from various sources that include asphalt and gravel.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	<u>70</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Total Cover: _____				
Sapling/Shrub Stratum				
1. <u>Rubus Ursinus</u>	<u>60</u>	_____	<u>NO</u>	
2. <u>Rosa Californica</u>	<u>5</u>	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Total Cover: _____				
Herb Stratum				
1. <u>None</u>	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Total Cover: _____				
Woody Vine Stratum				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: _____				
% Bare Ground in Herb Stratum <u>< 10</u> % Cover of Biotic Crust _____		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Remarks: Thick blackberry and roses dominant undisturbed shrub stratum under willow tree canopy. Area east of sample pits, ~ 3500 sq. ft. Used as transient encampment. Vegetation very thick and impenetrable in many spots of pencil.

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9.0 Photographs



Photo 1. View south along the border of the Study Area and U.S. Highway 1.

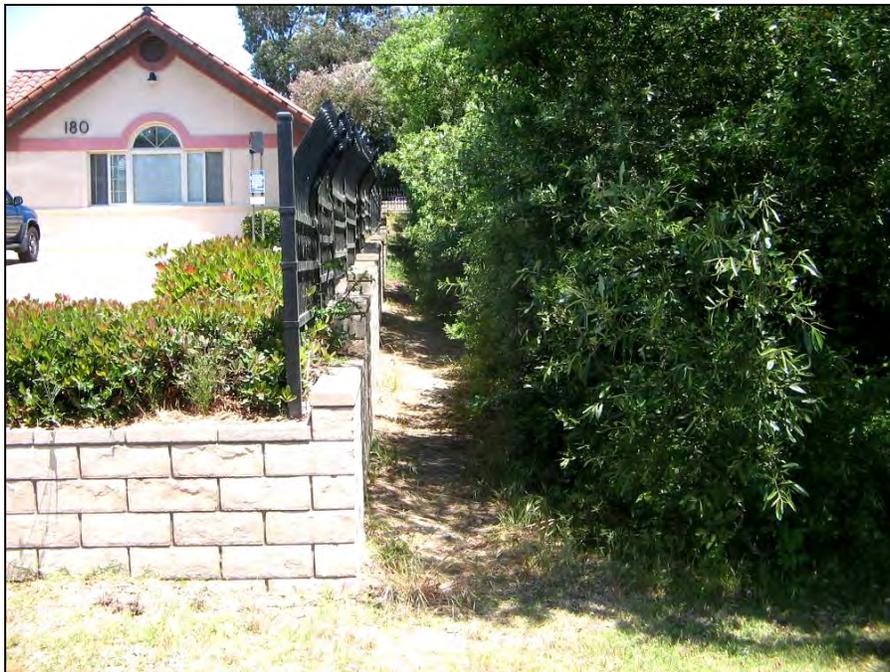


Photo 2. View east toward Chamber of Commerce building along the north boundary of the Study Area. Amtrak Station is left (north) of Chamber building, out of view.



Photo 3. Soil Pit 1 location. Low elevation areas along the western edge of the Study Area showed evidence of ponded water. Note dense shade. Photograph taken June 4, 2009.



Photo 4. Soil Pit 2 location. Dominated by hydrophytic vegetation but not containing hydric soils, this area near the Chamber of Commerce building may qualify as a State wetland. Photograph taken June 4, 2009.

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Appendix A – Status Codes

- **CNDDDB Conservation Status Ranks** (CDFG Special Animals List, March 2009)
- **CNDDDB Element Ranking for Plants** (CDFG Special Vascular Plants, Bryophytes, and Lichens List, April 2009)
- **CNPS Lists** (CDFG Special Vascular Plants, Bryophytes, and Lichens List, April 2009)

CNDDDB CONSERVATION STATUS RANKS:

The CNDDDB ranking codes are part of the “Heritage Methodology”. It is a shorthand formula that provides information about the status of a taxon, both throughout its entire range and within California. We use the best information available to assign these ranks and they are changed and refined as new information becomes available. More detailed information about the conservation status ranking system can be found at:

<http://www.natureserve.org/explorer/ranking.htm>

CALIFORNIA ENDANGERED SPECIES ACT (CESA) LISTING CODES: The listing status of each species is current as of the date of this list. The most current changes in listing status will be found in the list of “Endangered and Threatened Animals of California”, which the CNDDDB updates and issues quarterly (January, April, July, & October).

- SE State-listed as Endangered
- ST State-listed as Threatened
- SCE State candidate for listing as Endangered
- SCT State candidate for listing as Threatened
- SCD State candidate for delisting

ENDANGERED SPECIES ACT (ESA) LISTING CODES: The listing status is current as of the date of this list. The most current changes in listing status will be found in the list of “Endangered and Threatened Animals of California”, which the CNDDDB updates and issues quarterly (January, April, July, & October). Federal listing actions are also available at:

<http://www.epa.gov/fedrgstr/EPA-SPECIES/index.html>.

After careful consideration we have removed the USFWS Federal Species of Concern (FSC) designation from this list. The Federal Species of Concern list was not maintained on a statewide basis. The Sacramento field office, with jurisdiction over the central portion of California, maintained a list, but the Ventura, Carlsbad and Arcata offices did not. Therefore, species in the northern and southern parts of the state were not considered. Information on the list maintained by the Sacramento field office is available at:

http://sacramento.fws.gov/es/spp_concern.htm

- FE Federally listed as Endangered
- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FPD Federally proposed for delisting
- FC Federal candidate species (former Category 1 candidates)
- SC Species of Concern – list established by National Marine Fisheries Service (NMFS) effective 15 April 2004

ELEMENT RANKING

GLOBAL RANKING

The *global rank* (G-rank) is a reflection of the overall condition of an element throughout its global range.

SPECIES OR NATURAL COMMUNITY LEVEL

- G1** = Less than 6 viable element occurrences (Eos) OR less than 1,000 individuals OR less than 2,000 acres.
- G2** = 6-20 Eos OR 1,000-3,000 individuals OR 2,000-10,000 acres.
- G3** = 21-80 Eos OR 3,000-10,000 individuals OR 10,000-50,000 acres.
- G4** = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.
- G5** = Population or stand demonstrably secure to ineradicable due to being commonly found in the world.

SUBSPECIES LEVEL

Subspecies receive a **T-rank** attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire *species*, whereas the T-rank reflects the global situation of just the *subspecies* or *variety*. For example: *Chorizanthe robusta* var. *hartwegii*. This plant is ranked G2T1. The G-rank refers to the whole species range i.e., *Chorizanthe robusta*. The T-rank refers only to the global condition of var. *hartwegii*.

STATE RANKING

The *state rank* (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank.

- S1** = Less than 6 Eos OR less than 1,000 individuals OR less than 2,000 acres
 - S1.1 = very threatened
 - S1.2 = threatened
 - S1.3 = no current threats known
- S2** = 6-20 Eos OR 1,000-3,000 individuals OR 2,000-10,000 acres
 - S2.1 = very threatened
 - S2.2 = threatened
 - S2.3 = no current threats known
- S3** = 21-80 Eos or 3,000-10,000 individuals OR 10,000-50,000 acres
 - S3.1 = very threatened
 - S3.2 = threatened
 - S3.3 = no current threats known
- S4** = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. **NO THREAT RANK.**
- S5** = Demonstrably secure to ineradicable in California. **NO THREAT RANK.**

Notes:

1.	Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take a bird's eye or aerial view when ranking sensitive elements rather than simply counting element occurrences.		3.	Other symbols: GH All sites are historical ; the element has not been seen for at least 20 years, but suitable habitat still exists (SH = All California sites are historical). GX All sites are extirpated ; this element is extinct in the wild (SX = All California sites are extirpated). GXC Extinct in the wild; exists in cultivation. G1Q The element is very rare, but there are taxonomic questions associated with it. T Rank applies to a subspecies or variety.
2.	Uncertainty about the rank of an element is expressed in two major ways: By expressing the ranks as a range of values: e.g., S2S3 means the rank is somewhere between S2 and S3. By adding a ? to the rank. e.g., S2? This represents more certainty than S2S3, but less certainty than S2.			

The California Native Plant Society's (CNPS) Lists

- 1A. Presumed extinct in California
- 1B. Rare or Endangered in California and elsewhere
- 2. Rare or Endangered in California, more common elsewhere
- 3. Plants for which we need more information - Review list
- 4. Plants of limited distribution - Watch list

List 1A: Plants Presumed Extinct in California

The plants of List 1A are presumed extinct because they have not been seen or collected in the wild in California for many years. Although most of them are restricted to California, a few are found in other states as well. In many cases, repeated attempts have been made to rediscover these plants by visiting known historical locations. Even after such diligent searching, we are constrained against saying that they are extinct, since for most of them rediscovery remains a distinct possibility. Note that care should be taken to distinguish between "extinct" and "extirpated." A plant is extirpated if it has been locally eliminated, but it may be doing well elsewhere in its range.

List 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere.

The plants of List 1B are rare throughout their range. All but a few are endemic to California. All of them are judged to be vulnerable under present circumstances or to have a high potential for becoming so because of their limited or vulnerable habitat, their low numbers of individuals per population (even though they may be wide ranging), or their limited number of populations. Most of the plants of List 1B have declined significantly over the last century.

List 2: Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere

Except for being common beyond the boundaries of California, the plants of List 2 would have appeared on List 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the Endangered Species Act. Until 1979, a similar policy was followed in California. However, after the passage of the Native Plant Protection Act, plants were considered for protection without regard to their distribution outside the state.

List 3: Plants About Which We Need More Information - A Review list

The plants that comprise List 3 are united by one common theme--we lack the necessary information to assign them to one of the other lists or to reject them. Nearly all of the plants remaining on List 3 are taxonomically problematic.

List 4: Plants of Limited Distribution - A Watch list

The plants in this category are of limited distribution or infrequent throughout a broader area in California, and their vulnerability or susceptibility to threat appears low at this time. While we cannot call these plants "rare" from a statewide perspective, they are uncommon enough that their status should be monitored regularly. Should the degree of endangerment or rarity of a List 4 plant change, we will transfer it to a more appropriate list or deleted from consideration.

Threat ranks:

Recently, CNPS added a decimal threat rank to the List ranks to parallel that used by the CNDDDB. This extension replaces the E (Endangerment) value from the R-E-D Code. CNPS ranks therefore read like this: 1B.1, 1B.2, etc.

New Threat Code extensions and their meanings:

- .1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 - Fairly endangered in California (20-80% occurrences threatened)
- .3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

Note that all List 1A (presumed extinct in California) and some List 3 (need more information-a review list) plants lacking any threat information receive no threat code extension. Also, these Threat Code guidelines represent a starting point in the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in setting the Threat Code.