



December 7, 2007

Mr. Patrick Gillum  
Water Quality Certification  
Central Valley Regional Water Quality Control Board  
Sacramento Branch Office  
11020 Sun Center Drive, #200  
Rancho Cordova, CA 95670-6114

<b>DOCKET</b> <b>06-AFC-9</b>
<b>DATE</b> DEC 07 2007
<b>RECD.</b> DEC 10 2007

**Subject: Colusa Generating Station Project – Water Quality Certification Application**

Dear Mr. Gillum:

The attached Section 401 Water Quality Certification Application for the Colusa Generating Station (CGS) project is submitted by URS Corporation on behalf of our client, E&L Westcoast, LLC (E&L Westcoast). Along with the application form, you will find the following documents enclosed:

- Maps of the Project Location, Biological Resources Study Area, and Individual Project Components
- Dredge and Fill Fee Calculator Spreadsheet
- Check in the Amount of \$2994.00 for the Application Fee

Additional project documentation referenced in the application is enclosed on two CDs. The referenced documents include:

- **CD 1**
  - U.S. Army Corps of Engineers (ACOE) 404 Standard Permit Application (April 5, 2007)
  - Jurisdictional Delineation (JD) Report (April 5, 2007)
  - Supplemental Information for the JD (May 24, 2007)
  - ACOE letters initiating consultation with U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) (June 13, 2007)
  - California Energy Commission (CEC) Preliminary Staff Assessment (August 1, 2007)
  - NMFS Concurrence Letter (August 2, 2007)
  - ACOE letter verifying CGS JD (August 10, 2007)

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- Amendment to the Application for Certification (AFC) - Proposed Modifications to Glenn-Colusa Canal Bridge Design and Comments on the CEC Preliminary Staff Assessment (August 17, 2007)
- Supplement to Biological Assessment (August 24, 2007)
- Update to the 404 application (August 28, 2007)
- California Department of Fish and Game (CDFG) Notification of Lake and Streambed Alteration Agreement (NLSA) Permit Application (October 12, 2007)
- Revised Biological Assessment (October 19, 2007)
- Potential Mitigation Bank Service Area Maps
- Wild Goose Storage, Inc. Expansion Project Information
- **CD 2**
  - Application for Certification (November 2006)

E&L Westcoast proposes to construct and commission a nominal 660-megawatt combined-cycle power plant on 31 acres of a 100-acre site leased by E&L Westcoast in Colusa County, California (Figure 1).

The project would include a 22.5-acre power generation facility and stormwater detention basin, a new 8.2-acre switchyard, a 43-acre construction area (including laydown, parking, and office), a new 1,800-foot-long electrical interconnection to PG&E's 230 kV Cottonwood to Vaca-Dixon lines adjacent to the site, a new 1,500-foot-long natural gas pipeline connecting to PG&E's existing natural gas lines (Line 400 and 401), a new 2,700-foot-long water supply pipeline from the Tehama-Colusa Canal, and a 2,500-foot-long access road extending from the existing road leading to the PG&E Compressor Station (Figure 2). In addition, a permanent 12-foot-wide dirt road would be constructed along the pipeline conveying water from the Tehama-Colusa Canal to the power plant. The road would be used for maintenance and access to the water intake at the Tehama-Colusa Canal.

To allow for transportation of some of the heavier equipment components to the site, the following two bridges would be replaced: (1) A bridge on Dirks Road over the Glenn-Colusa Canal (Figure 3), and (2) A bridge on McDermott Road over Teresa Creek (Figure 4, View 1). In addition, the eastern side of the Delevan/McDermott intersection would be slightly widened (Figure 4, View 2). After construction is completed, local access roads would be repaved or resurfaced as necessary and appropriate.

The attached Section 401 Water Quality Certification Application describes the proposed work, impacts to waters of the U.S., potential water quality impacts, and project mitigation measures. Avoidance, minimization, restoration, and compensation measures would be implemented to reduce potential adverse effects to sensitive habitats and listed species.



Please contact Steve Leach at 510.874.3205 or Melissa Newman at 510.874.1747 if you have any questions regarding this submittal.

Sincerely,

**URS CORPORATION**

Steve Leach  
Senior Project Biologist

Enclosures

Application: Section 401 Water Quality Certification Application Form  
Figures 1-4  
Dredge and Fill Fee Calculator Spreadsheet  
Check in the amount of \$2,994.00 for the Application Fee  
Two CDs Containing Referenced Documents

cc: Andrew Welch, E&L Westcoast, with Section 401 Water Quality Certification Application Only  
Dale Shileikis, URS, with Section 401 Water Quality Certification Application Only  
Brian Vierra, ACOE, with Section 401 Water Quality Certification Application Only  
Michelle Tovar, USFWS, with Section 401 Water Quality Certification Application Only  
Amy Kennedy, CDFG, with Section 401 Water Quality Certification Application Only  
Jenny Marr, CDFG, with Section 401 Water Quality Certification Application Only  
Rick York, CEC, with Section 401 Water Quality Certification Application Only  
Misa Ward, CEC, with Section 401 Water Quality Certification Application Only  
Shaheerah Kelly, EPA, with Section 401 Water Quality Certification Application Only  
Kim McCormick, with Section 401 Water Quality Certification Application Only  
Andrea Grenier, with Section 401 Water Quality Certification Application Only

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

**SECTION 401 WATER QUALITY CERTIFICATION  
APPLICATION FORM**

A minimum of \$500.00 processing fee is required however additional fees in accordance with Title 23 CCR § 2200 (a)(2) may also be required. Please use the fee calculator at <http://www.waterboards.ca.gov/cwa401/docs/dredgefillfeecalculator.xls> to determine the total fee. Please include a check payable to the **State Water Resources Control Board**. Attach additional sheets as necessary. Submit the complete form to the appropriate Regional Board office.

**1. APPLICANT INFORMATION**

**2. AGENT INFORMATION\***

<b>Applicant:</b> E&L Westcoast, LLC.	<b>Agent*</b> URS Corporation
<b>Contact Name:</b> Andrew Welch	<b>Contact Name:</b> Steve Leach
<b>Address:</b> 8403 Colesville, Suite 915 Silver Springs, Maryland 20910	<b>Address:</b> 1333 Broadway, Suite 800 Oakland, CA 94612
<b>Phone No:</b> (240) 723-2304	<b>Phone No:</b> (510) 874-3205
<b>Fax No:</b> (240) 723-2339	<b>Fax No:</b> (510) 874-3268

\*Complete only if applicable

**3. PROJECT DESCRIPTION**

**a) Project Title:** Colusa Generating Station (CGS)

**b) Project Location:** Colusa County, CA  
 Street location: The proposed power plant site is located adjacent to Delevan Road in Colusa County, California, approximately 4 miles west of Interstate 5 (I-5), north of the town of Maxwell. Please refer to Figure 1.  
**County:** Colusa      **Section:** 35      **Township:** 18 North      **Range:** 4 West  
 Latitude: 39.3638224637      Longitude: -122.265883084  
 \*Attach site map with "waters" clearly indicated (e.g. USGS 7 ½ quadrangle map)

**c) Project Description (include purpose and final goal):**

E&L Westcoast proposes to construct and commission a nominal 660-megawatt (MW) combined cycle power plant on 31 acres of a 100-acre site leased by E&L Westcoast. Under a contract executed earlier this year, E&L Westcoast would then transfer ownership and operation of the power plant to Pacific Gas and Electric (PG&E) after completion of commissioning.

The power plant site is located in Colusa County, California (Figure 1). The site is situated approximately 4 miles west of Interstate 5 (I-5), 14 miles north of the farming community of Williams, and 72 miles north of Sacramento (Figure 1). The power plant site is within the Holthouse Ranch and is found within the eastern half of Section 35, Township 18 North, Range 4 West, Mount Diablo Base and Meridian. The power plant site consists of 100 acres of a 451-acre parcel (Assessor's Parcel Number (APN) 11-040-024, Colusa County).

The project would include a 22.5-acre power generation facility and stormwater detention basin, a 8.2-acre switchyard, a 43-acre construction area (including laydown, parking, and office), a 1,800-foot-long electrical interconnection to PG&E's existing transmission lines, a 1,500-foot-long natural gas pipeline connecting to PG&E's existing natural gas lines, a 2,700-foot-long water supply pipeline from the Tehama-Colusa Canal, and

a 2,500-foot-long access road extending from the existing road leading to the PG&E Compressor Station. In addition, a permanent 12-foot-wide dirt road would be constructed along the pipeline conveying water from the Tehama-Colusa Canal to the power plant (Figure 2). The road would be used for maintenance and access to the water intake at the Tehama-Colusa Canal.

To allow for transportation of some of the heavier equipment components to the site, the following two bridges would be replaced: (1) a bridge on Dirks Road over the Glenn-Colusa Canal (Glenn-Colusa Canal Bridge) (Figure 3), and (2) a bridge on McDermott Road over Teresa Creek (Figure 4, View 1). In addition, the eastern side of the Delevan/McDermott Road intersection would be slightly widened (Figure 4, View 2). After construction is completed, local access roads would be repaved or resurfaced as necessary and appropriate.

**Teresa Creek Bridge.** The existing Teresa Creek Bridge is an older structure with a wood deck. The new Teresa Creek Bridge would be approximately 75 feet in length with no piers or abutments in waters of the United States. To accommodate local traffic during construction of the new bridge, a temporary 14-foot-wide culvert crossing and detour road would be installed immediately downstream of the existing bridge prior to construction of the new bridge. Construction of the new Teresa Creek Bridge would be divided into three components, as generally described below.

1. **Temporary bypass.** Construction of the new bridge would occur during the dry season. Temporary culverts would be placed in the stream channel to convey the expected flows in Teresa Creek while the detour route is in place. At this time, the culvert is expected to be 16 feet wide and 11 feet high. This would be confirmed during final design. The applicant would coordinate construction activities with Colusa County and the Glenn-Colusa Irrigation District to determine the anticipated flow rate of discharges into Teresa Creek during the construction period. The pipe culverts would be laid on gravel placed on the creek bed, and overlain with gravel and backfill to form a roadway embankment placed over the culverts, and a road graded and possibly paved (depending on the average daily traffic count) for the passage of traffic.
2. **Bridge Removal.** Bridge demolition equipment would be needed to remove the existing structure. The timber superstructure would be removed with a small crane, tractor, and truck. Abutments would be demolished using concrete demolition equipment. The use of sheet piling or cofferdams could be considered during the final design process, to limit work within flowing water during bridge demolition. All existing bridge structure and materials would be removed from the site and disposed in an approved landfill. It is not known whether the existing bridge abutment is on piles. If piles are present, the top 2 feet would be removed in accordance with the Caltrans Standard Specifications.
3. **Permanent Structure.** The permanent replacement bridge would be constructed after the temporary bridge is installed and operational. The permanent structure would meet all applicable design standards for conveying expected flows to avoid changes in stream depth and flow rates in the project area. Culvert or abutment walls would use wood forms to accommodate cast-in-place construction. Wingwalls at the upstream and downstream sides of the structure would be constructed to prevent scouring of the bridge abutments.

After the permanent bridge has been constructed, the temporary stream crossing would be removed and all disturbed areas would be returned to pre-project conditions. During construction, adequate flows allowing for fish passage would be maintained at all times. The culverts installed for the temporary bridge would be large enough so as not to restrict peak expected flows. If dewatering of some areas is required during construction, a qualified biologist would be present during dewatering to ensure that fish are not injured. Fish that may be trapped behind the cofferdam would be netted and removed from the dewatering area. Additionally, a net or some other type of fish screen would be used on the end of

the dewatering pump, to prevent any fish from being sucked into the pumping mechanism, providing the biologist with adequate opportunity to remove the fish from the area. All disturbed areas would be revegetated, including disturbed areas adjacent to the active channel. All disturbed areas would be revegetated with native species.

**Glenn-Colusa Canal Bridge.** The existing Glenn-Colusa Canal Bridge located at the end of Dirks Road was built in 1965 to provide access to, and support the construction of, the PG&E Delevan Gas Compressor Station. This bridge is a four-span concrete-decked structure that is 74 feet long by 20 feet wide. The bridge provides weight-limited one-way truck traffic and speed-limited two-way automobile traffic (due to the reduced lane width of 8 feet) with 2-foot shoulders. The bridge was originally designed for a 40-ton load, but is currently rated H-20, a 20-ton load, by the American Association of State Highway and Transportation Officials (AASHTO). A new Glenn-Colusa Canal Bridge is necessary because the heaviest equipment for the plant would exceed the HS-20 rating of the existing bridge. The new bridge cannot be constructed in the same location because the existing bridge would be required for initial construction mobilization site access while the new bridge is being installed.

The new Glenn-Colusa Canal Bridge would be approximately 100 feet long by 30 feet wide and would be a three-span bridge (Figure 3). The east approach would be located approximately 75 feet south of the existing bridge, and the west approach would be located about 45 feet south. This would provide for two 12-foot lanes with 3-foot shoulders giving unimpeded two-way traffic flow. The bridge deck would be replaced in time to accommodate the heavy haul equipment entering the site. The bridge would be fitted with side guard rails and would be striped to permit safe passage of traffic.

The replacement design includes a 1.09-acre temporary construction staging and parking area on the east side of the Glenn-Colusa Canal as well as an approximately 135-foot construction right-of-way along the alignment (Figure 3). The access road on both sides of the bridge would be realigned to straighten and widen the approaches to allow for unimpeded two-way traffic, re-aligning with the current Dirks Road right-of-way as soon as practical. A retainer wall would be placed along the northern side of Dirks Road, on the east side of the replacement bridge, to enable the continued use of the current irrigation canal. Two rows of five driven piers would be constructed in the canal to support the bridge. A cofferdam of corrugated steel sheet piles would be installed so that the work area for each bridge abutment can be dewatered. The cofferdams would be placed as close as possible to the abutment construction area to minimize the impact to the flow of the canal (Figure 3). If need be only one cofferdam would be installed at a time. The inside of the cofferdam would be dewatered using pump(s) and the water would be released back into the canal downstream of the cofferdam. The bridge piers would be driven pre-cast concrete or drilled cast in place concrete, installed by equipment located on the canal embankment and can be installed even during high water levels without the use of cofferdams around the pier locations.

The removal of the existing bridge would occur after the new bridge is constructed. The concrete deck and the three sets of five piers associated with the existing bridge would be removed. The piers would be cut off at the mud line and removed during low or empty water conditions, which would allow the work to be done without placing heavy equipment into the canal. A temporary 2 to 4 foot high preformed plastic cofferdam placed around each set of 5 piers one set at a time (Figure 3), would be anchored to the canal bed using stakes or other temporary attachment methods with the necessary dewater being released back to the canal. Since this would be done during low or no water conditions there would be no impact to canal operations. Removal of the existing bridge piers would offset potential impacts of the new piers on the flow of water in the canal. The two bridge abutments supporting the existing bridge would be left in place to eliminate construction impacts to the canal embankments. This would not affect the operation of the canal. The original bridge approaches would be

final-graded to match the surrounding land contours and seeded with grass native to the region.

Upon completion of the bridge replacement, the road approaches would be final-graded to match the surrounding land contours and seeded with grass native to the region. All disturbed areas would be returned to pre-project conditions after construction is complete.

**Delevan and McDermott Road Improvement.** To accommodate the wide-turning radius of some heavy-haul trucks, the northeastern and southeastern corners of the intersection of Delevan Road and McDermott Road would be widened by grading and placement of gravel around these corners. Grading would occur up to the area between the existing pavement and the concrete abutment to the irrigation canal. No modifications of the irrigation canal are proposed. Grading would require relocation of the stop sign and telephone conduit box at the northeastern corner of the intersection.

**d) Proposed Schedule: (start-up, duration, and completion dates):**

Construction of the project is scheduled to occur over 24 months, beginning in early 2008. The project, including offsite infrastructure as well as startup and commissioning, would be completed and begin commercial operation by the spring of 2010.

Construction activities would be scheduled to avoid or minimize disturbance to biological resources. Construction at the Teresa Creek Bridge, Glenn-Colusa Canal Bridge, and at the intersection of Delevan and McDermott Roads would occur during the giant garter snake active season, May 1 through October 1. Removal of the existing Teresa Creek Bridge and the existing deck of the Glenn-Colusa Canal Bridge would include measures to protect cliff swallows. The exact dates of bridge removal have not yet been determined. The nesting season for cliff swallows is from March 31 to August 31. If bridge removal occurs between May 1 and August 31, during the nesting season for cliff swallows, netting would be installed on the bridge before March 1, to prevent the occupation of existing nests or the construction of new nests. The netting would be maintained through the nesting season, or until the existing bridge has been demolished. If bridge removal occurs between September 1 and October 1, during the non-nesting period for cliff swallows (September 1 through March 31), no measures to protect cliff swallows are proposed. For a complete description of the timing of construction activities, please refer to the Biological Resources Section of the November 2006 AFC (CD 2) and the Revised Biological Assessment (CD 1).

**e) Total Project size: (clearing, grading, other construction activities)**

temporary disturbance = 95.82 acres; permanent disturbance = 35.1 acres

NA linear feet (if appropriate)

#### 4. IMPACTED WATER BODIES

**a) Name(s) of Receiving Water Body(ies):** Tributaries of the Sacramento River are located within the project site. Teresa Creek and associated channels and seasonal wetlands in the project site are tributaries to the southern fork of Hunters Creek. Hunters Creek is a tributary of the Sacramento River via the Colusa Drain.

**b) Anticipated potential stream flow during project activity:** Bridge construction may be conducted during the peak irrigation season to protect giant garter snake and meet construction needs. Potential stream flow during this time would be expected to be high. Culverts would be installed during construction of the Teresa Creek Bridge that would be sized to accommodate the expected flow.

**c) Describe potential impacts to water quality:** Implementation of the Best Management Practices (BMPs) described in the November 2006 Application for Certification would avoid or minimize potential impacts to water quality. Potential impacts could include temporary increases in turbidity during work within the active channel of the Glenn-Colusa Canal or Teresa Creek. These BMPs include:

- Proper implementation of BMPs during construction and throughout project operation (e.g., spill prevention and control, preventative maintenance, hazardous materials management), as well as adherence to all applicable codes and permits, would help minimize the potential for

contamination of groundwater. No significant impacts to groundwater are anticipated.

- Erosion would be controlled in accordance with an approved Erosion Control Plan as discussed in Section 8.9.2.2, Agriculture and Soils; Construction of the November 2006 Application for Certification. In addition, all construction activities would be performed in accordance with the California National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction Activities (SWRCB 1999), requiring the implementation of BMPs to control sediment and other pollutants mobilized from construction activities.
- A Construction Storm Water Pollution Prevention Plan (SWPPP) would be prepared before construction begins. With proper implementation of BMPs, no significant impacts to surface water quality are anticipated as a result of construction activities.
- In general, disturbance to existing grades and vegetation shall be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities shall avoid and limit disturbance to wetland habitat. Existing ingress or egress points shall be used. Parking of equipment, project access, supply logistics, equipment maintenance, and other project-related activities would occur at a designated staging area. Following completion of the work, the contours of the area shall be returned to preconstruction condition or better.
- Additional direct and indirect impacts to sensitive biological resources throughout the project site, including wetlands and jurisdictional waters, would be avoided or minimized by designating these features outside of the construction impact area as environmentally sensitive areas on project plans and in project specifications. Environmentally sensitive area information would be shown on contract plans and discussed in the Special Provisions. Environmentally sensitive area provisions may include, but are not limited to, the use of temporary orange fencing to delineate the proposed limit of work in areas adjacent sensitive resources, or to delineate and exclude sensitive resources from potential construction impacts. Contractor encroachment into environmentally sensitive area would be restricted (including the staging/operation of heavy equipment or casting of excavation materials). Environmentally sensitive area provisions shall be implemented as a first order of work, and remain in place until all construction activities are complete.
- Regional Water Quality Control Board (RWQCB)-approved physical barriers adequate to prevent the flow or discharge of sediment into the active channel of Teresa Creek shall be constructed and maintained between work areas and streams or wetlands.
- Erosion control and sediment detention devices (e.g., well-anchored sandbag cofferdams, straw bales, or silt fences) shall be incorporated into the project design and implemented at the time of construction. These devices shall be in place during construction activities, and after if necessary, for the purposes of minimizing sediment impact to the wetlands and input to waters of the United States. These devices would be placed at all locations where the likelihood of sediment input exists.
- A supply of erosion control materials would be kept on hand to cover small sites that may become bare and to respond to sediment emergencies.
- Temporary BMPs may include revegetation, slope stabilization, construction of berms and ditches, and sediment barriers such as straw bales or silt fences to prevent sediment discharges from the site.
- Oily or greasy substances originating from the contractor's operations would not be allowed to enter or be placed where they would later enter a live or dry stream, pond, or wetland. Asphalt or concrete shall not be allowed to enter a live or dry stream, pond, or wetland.
- Public roadways adjacent to the project site that are used by construction and worker vehicles would be swept at least twice a day.
- Windbreaks would be installed at the windward sides on construction areas prior to soil being disturbed. The windbreaks would remain in place until the soil is stabilized or permanently covered.

- Disturbed areas would be revegetated as quickly as possible.
- Tire washing and gravel ramps would be employed prior to entering a public roadway to limit accumulated mud and dirt deposited on public roadways.
- All trucks hauling dirt, sand, soil, or other loose materials would be covered and would maintain a minimum of 6 inches of freeboard between the top of the load and the top of the trailer.
- Covers or dust suppressants would be applied to soil storage piles and disturbed areas that remain inactive for more than two weeks and during the rainy season.
- Construction activities would be scheduled to minimize disturbed soil area during the rainy season to the extent practicable.
- Temporary soil stabilization and erosion control measures would be implemented throughout the defined rainy season (October 15 through April 15). BMPs would be implemented prior to the start of the rainy season and be inspected prior to forecasted storm events, during extended rain events and after storm events that cause runoff from the construction site.
- During the rainy season, temporary erosion controls would be implemented at the draining perimeter of the disturbed soils areas, at the toe of slopes, at storm drain inlets and at outfall areas at all times.
- Creeks and canals would be protected to prevent discharge of sediments, debris, and wastes associated with construction activities from entering the watercourses. BMPs could include directing water away from work areas, using covers or platforms to collect debris if working over water, and placing stockpiles away from watercourses.
- Non-stormwater discharges into drainage systems or waterways would be prohibited. Examples of prohibited discharges common to construction activities include:
  - Vehicle and equipment wash water, including concrete washout water
  - Slurries from concrete cutting, asphalt grinding, and paving operations
  - Slurries from concrete or mortar mixing operations
  - Runoff from dust control applications of water
  - Sanitary and septic wastes
  - Chemical leaks and/or spills of any kind including but not limited to petroleum, paints, cure compounds, etc.
- For temporary stream crossings (e.g., at the Teresa Creek Bridge) construction roadways, adjacent work areas, and stream bottom would be stabilized against erosion.

d) Indicate in ACRES and LINEAR FEET (*where appropriate*) the proposed **waters of the United States** to be impacted by any discharge other than dredging, and identify the impacts(s) as permanent and/or temporary for each water body type listed below:

The proposed project would require permanent and temporary placement of fill material in jurisdictional waters of the United States. Fill would be required to construct new bridges across the Glenn-Colusa Canal and Teresa Creek.

<b>Habitat Impacted</b>	<b>Area of Impact</b>	
	<b>Permanent</b>	<b>Temporary</b>
<b>Jurisdictional Wetlands</b>		
Freshwater Marsh	0.279	0.120
Seasonal Wetland	0.018	0.075
Cultivated Rice Field	0.362	1.401 <sup>1</sup>
<b>TOTAL</b>	<b>0.659</b>	<b>0.195<sup>1</sup></b>
<b>Jurisdictional Non-Wetland Waters of the United States</b>		
Glenn-Colusa Canal	0.029	0.006
Irrigation Ditch	0	0.214
Perennial Stream (Teresa Creek)	0.014	0.040
<b>TOTAL</b>	<b>0.043</b>	<b>0.260</b>

<sup>1</sup>Temporary impacts to cultivated rice field are not included in the calculation of total temporary impacts to wetlands. Per a previous conversation with the U.S. Army Corps of Engineers (ACOE) temporary impacts to cultivated rice fields are not considered impacts to jurisdictional waters of the U.S.

The proposed project would require permanent and temporary placement of fill material in jurisdictional waters of the United States. Fill would be required to construct new bridges across the Glenn-Colusa Canal and Teresa Creek. Fill material would be placed in the following types of potentially jurisdictional waters of the United States:

**Wetland Waters of the United States**

- Seasonal wetlands
- Freshwater marsh wetlands (associated with the margins of rice fields)
- Cultivated rice fields

**Non-Wetland Waters of the United States**

- Perennial stream (Teresa Creek)
- Drainage and irrigation channels that discharge into Teresa Creek and Hunters Creek
- Glenn-Colusa Canal

**Wetland Waters of the United States**

**Seasonal Wetlands**

Replacement of the Teresa Creek Bridge, which would consist of a temporary bridge bypass and associated detour crossing, would temporarily affect seasonal wetlands adjacent to Teresa Creek (Figure 4, View 1). Teresa Creek is bordered on both sides by a narrow band of seasonal wetlands, approximately 5 feet wide. Approximately 1,000 square feet (0.023 acre) of seasonal wetland vegetation east of the existing bridge would be temporarily disturbed during construction of the new bridge and the temporary road crossing.

Replacement of the Teresa Creek Bridge would result in no permanent loss of seasonal wetland habitat, and could potentially result in a small increase in the amount of jurisdictional wetlands in the area where the abutments are currently located. The existing Teresa Creek Bridge is approximately 31 feet long, while the new bridge would be 38 feet long. The longer bridge would widen the channel by an additional 3 feet. Therefore, replacement of the Teresa Creek Bridge would result in no permanent loss of seasonal wetland habitat, and could result in a small increase in the size of the stream channel.

The Glenn-Colusa Canal Bridge replacement would permanently impact the northern margins of two seasonal wetlands (direct impact = 0.018 acre), located on the southwest side of the Glenn-Colusa Canal, directly south of the existing PG&E access road (Figure 3). Construction activities by the replacement would also temporarily impact 0.052 acres of these two seasonal wetlands (Figure 3).

***Freshwater Marsh Wetlands***

Freshwater marsh wetlands are located in irrigation and drainage channels east and west of the Glenn-Colusa Canal and freshwater marsh is also located on the margins of rice fields east and west of the Glenn-Colusa Canal (Figure 3). The proposed road alignment and Glenn-Colusa Canal Bridge construction would permanently fill 0.279 acre of freshwater marsh and require temporary fill in 0.120 acre of freshwater marsh. During construction of the new Glenn-Colusa Canal Bridge, impacts to adjacent freshwater marsh wetlands would be minimized.

***Cultivated Rice Fields***

Rice fields are located northeast, southeast, and northwest of the Glenn-Colusa Canal and north and south of Teresa Creek (Figure 3; Figure 4, View 1). The proposed road alignment and Glenn-Colusa Canal Bridge construction would permanently impact 0.362 acre of cultivated rice fields and would temporarily impact 1.287 acre of cultivated rice fields. The temporary detour that would be constructed east of the existing Teresa Creek Bridge would temporarily impact 0.114 acre of cultivated rice fields. The affected rice fields are located north and south of the temporary crossing and all fill material would be removed and the rice fields would be returned to cultivation upon completion of the new bridge.

***Non-Wetland Waters of the United States***

Teresa Creek is the southernmost tributary of Hunters Creek. The active channel of this stream is a potential jurisdictional water of the United States. During the bridge replacement, a wingwall on the northwest side of the bridge abutment would be constructed to prevent erosion of the bank where two drainage culverts discharge into Teresa Creek (Figure 4, View 1). Water draining from the culverts has eroded a wide section of bank below the outfall. The culverts would extend through the wingwall and the stream bank behind the wall, which has been eroded, would be back-filled. The area where this wall would be constructed is primarily unvegetated but the site is located below the ordinary high water elevation of the stream. The retaining wall, construction, and backfill would result in the permanent fill of approximately 600 square feet (0.014 acre) of non-wetland waters of the United States (Figure 4, View 1).

Temporary fill in waters of the United States would be required to construct a temporary crossing while the Teresa Creek Bridge is under construction. This fill would impact approximately 0.040 acre of non-wetland waters in the channel of Teresa Creek.

Construction of the new Glenn-Colusa Canal Bridge would require placement of fill in potential non-wetland waters of the United States (Figure 3). The proposed road alignment would permanently fill 0.029 acre and temporarily impact a 0.006 acre of the Glenn-Colusa Canal. The bridge replacement would also temporarily impact 0.214 acre of drainage channels and irrigation channels that are jurisdictional non-wetland waters of the United States.

c) Indicate the volume of the dredged material (cubic yards) to be discharged to waters of the United States: None

d) Indicate type(s) of material proposed to be discharged to waters of the United States: None

**5. COMPENSATORY MITIGATION**

a) Indicate in ACRES and LINEAR FEET (*where appropriate*) the total quantity of waters of the United States proposed to be Created, Restored and/or Enhanced for purposes of providing Compensatory Mitigation:

<b>Table 2</b>				
<b>Impacts to Jurisdictional Waters of the U.S. and Proposed Mitigation for the Colusa Generating Station Project</b>				
Habitat Impacted	Area of Impact (acres)	Proposed Mitigation Ratio	Proposed Mitigation Acreage	Type of Mitigation
<b>Jurisdictional Wetlands</b>				
<b>Permanent Impacts</b>				
freshwater marsh	0.279	3:1	0.837	Off-site compensatory mitigation. <sup>1</sup>
seasonal wetland	0.018	3:1	0.054	Off-site compensatory mitigation. <sup>2</sup>
cultivated rice field	0.362	1:1	0.362	Off-site compensatory mitigation. <sup>1,3</sup>
<b>Temporary Impacts</b>				
freshwater marsh	0.120	1:1	0.120	On-site restoration of affected area. <sup>4</sup>
seasonal wetland	0.075	1:1	0.075	On-site restoration of affected area.
cultivated rice field <sup>6</sup>	1.401	1:1	1.401	On-site restoration of affected area. <sup>4</sup>
<b>Jurisdictional Non-Wetland Waters of the United States</b>				
<b>Permanent Impacts</b>				
Glenn-Colusa Canal	0.029	--	--	Removal of existing bridge and piers. <sup>1,4</sup>
irrigation ditch	0	1:1	0	No mitigation necessary. <sup>1,4</sup>
perennial stream (Teresa Creek)	0.014	--	--	On-site. <sup>1,4,6</sup>
<b>Temporary Impacts</b>				
Glenn-Colusa Canal	0.006	1:1	0.006	On-site restoration of affected area. <sup>4</sup>
irrigation ditch	0.214	1:1	0.214	On-site restoration of affected area. <sup>4</sup>
perennial stream (Teresa Creek)	0.040	1:1	0.040	On-site restoration of affected area. <sup>4</sup>

<sup>1</sup>Resulting mitigation would be the greater amount for either impacts to giant garter snake habitat or jurisdictional wetlands, but not both. If no mitigation bank is available that is approved by both the U.S. Fish and Wildlife (USFWS) to sell giant garter snake habitats credits and by the ACOE to sell wetland credits, additional compensatory mitigation would be required.

<sup>2</sup>Compensation for impacts to seasonal wetlands would be consistent with the USFWS 1996 programmatic formal consultation agreement for listed branchiopods. This compensation may be greater than the compensation indicated in this table. The USFWS 1996 programmatic agreement requires a 2:1 preservation ratio and a 1:1 conservation ratio. Under the USFWS 1996 programmatic agreement if any part of a pool that could potentially support listed branchiopods is destroyed the entire pool is directly affected. The total area of the two seasonal wetlands that would be impacted is 0.154 acres. Therefore, at least 0.308 preservation credits and 0.154 conservation credits are proposed to be purchased at a USFWS and ACOE approved mitigation bank.

<sup>3</sup>Permanent impacts to these features would require additional offsite compensation consistent with the USFWS Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California. November 13, 1997.

<sup>4</sup>Mitigation would be provided that is consistent with the USFWS 1997 programmatic consultation for giant garter snake.

<sup>5</sup>Temporary impacts to cultivated rice field are not included in calculation of total temporary impacts to wetlands. Per a previous conversation with the ACOE temporary impacts to cultivated rice fields are not considered impacts to jurisdictional waters of the U.S.

<sup>6</sup>On-site mitigation consists of removing the existing Teresa Creek Bridge abutments. Removal of the abutments would increase the width of Teresa Creek by at least 0.014 acre.

**b) If contributing to a Mitigation or Conservation Bank, indicate the agency, dollar amount, acreage, and water body type (if applicable):**

The total amount is to be determined in consultation with the U.S. Army Corps of Engineers.

\$ Unknown for 1.661 acres of wetland credits (*water body type*). Please see Table 3 below.

Table 3 Compensatory Mitigation Planned to be Purchased Regarding Impacts to Jurisdictional Waters of the United States				
Jurisdictional Waters of the United States Being Mitigated For	Habitat at Bank	Proposed Compensatory Mitigation	Potential Banks	Approved/Authorized to Sell Credits?
seasonal wetlands	vernal pools	Creation: 0.154 acre <sup>1</sup> Preservation: 0.308 acre <sup>1</sup>	Elsie Gridley Multi-Species Conservation Bank	Yes; USFWS and ACOE.
			OR North Suisun Conservation Bank	Yes; USFWS and ACOE.
freshwater marsh	perennial wetlands	Creation: 0.558 acre <sup>2</sup> Preservation: 0.279 acre <sup>2</sup>	Elsie Gridley Multi-Species Conservation Bank	Yes; USFWS and ACOE.
cultivated rice field	wetlands	0.362 acre <sup>2</sup>	Elsie Gridley Multi-Species Conservation Bank	Yes; USFWS and ACOE.

<sup>1</sup>Compensation for impacts to seasonal wetlands would be consistent with the USFWS programmatic formal consultation agreement for listed branchiopods. This compensation is greater than the compensation indicated in Table 2. The USFWS 1996 programmatic agreement requires a 2:1 preservation ratio and a 1:1 conservation ratio. Under the USFWS 1996 programmatic agreement if any part of a pool that could potentially support listed branchiopods is destroyed the entire pool is directly affected. The total area of the two seasonal wetlands that would be impacted is 0.154 acres. Therefore, at least 0.308 preservation credits and 0.154 conservation credits are proposed to be purchased at a USFWS and ACOE-approved mitigation bank.

<sup>2</sup>If no mitigation bank is available that is approved by both the U.S. Fish and Wildlife (USFWS) to sell giant garter snake habitats credits and by the ACOE to sell wetland credits, additional compensatory mitigation would be required for impacts to giant garter snake habitat. Mitigation would be provided that is consistent with the USFWS 1997 programmatic consultation for giant garter snake. The programmatic consultation agreement requires replacement of giant garter snake aquatic habitat at a 3:1 ratio. The total area of freshwater marsh habitat that would be permanently impacted is 0.279 acre, while the total area of cultivated rice field habitat that would be permanently impacted is 0.362 acre. Using a 3:1 ratio an additional 1.923 acres, at minimum, of giant garter snake habitat credits would be purchased at a USFWS/CDFG-approved giant garter snake mitigation bank.

**How many acres of this mitigation area qualify as waters of the United States? All.**

c) Other Mitigation (omit if not applicable):

**How many acres of this mitigation area qualify as waters of the United States?**

d) **Location of Compensatory Mitigation Site(s) (attach map of suitable quality and detail):**

Mitigation bank opportunities are currently being investigated. The final mitigation bank chosen is subject to ACOE and USFWS approval. Mitigation credits for impacts to jurisdictional waters of the U.S. cannot be purchased until consultation with the resource agencies has been completed. Potential mitigation banks which may be used to purchase wetland mitigation credits for impacts to jurisdictional waters of the U.S. include the Elsie Gridley Multi-Species Conservation Bank and the North Suisun Conservation Bank.

Elsie Gridley Multi-Species Conservation Bank

**City of Area** Approximately 13 miles northeast of **County** Solano County, CA  
the city of Fairfield.

**Longitude/Latitude** Approximate: **Township/Range** T5N R1E, Mount Diablo  
Latitude: 38°17'15.15"N  
Longitude: 121°48'31.35"W

Please see the Elsie Gridley Multi-Species Service Area Map enclosed in Attachment A and included on CD 1. This map was provided by the Conservation Bank. (The "project site" referred to in these maps is the Conservation Bank itself and not the proposed CGS project. The location of the proposed CGS project is presented in Figure 1).

The Elsie Gridley Multi-Species Conservation Bank may be used to purchase wetland credits. Wetland types at the bank include vernal pools, riparian wetlands, mesic grasslands/seasonal wetlands, alkali playa pools, swales, and vernal marsh. This bank is approved by both the ACOE to sell wetland credits for 404 impacts and USFWS to sell wetland vernal pool creation credits for vernal pool species.

North Suisun Conservation Bank

**City of Area** Approximately 7 miles east of the **County** Solano County, CA  
city of Fairfield.

**Longitude/Latitude** Approximate: **Township/Range** T5N R1E, Mount Diablo  
Latitude: 38°14'20.56"N  
Longitude: 121°54'45.08"W

Please see the North Suisun Service Area Map enclosed in Attachment A and included on CD 1. This map was provided by the Conservation Bank. The North Suisun Conservation Bank may be used to purchase vernal pool preservation and creation credits. The North Suisun Mitigation Bank is approved is approved by both the USFWS and ACOE to sell vernal pool creation and preservation credits for vernal pool species and 404 impacts.

**6. OTHER ACTIONS/BEST MANAGEMENT PRACTICES (BMPs)**

**Briefly describe other actions/BMPs to be implemented to Avoid and/or Minimize impacts to waters of the United States, including preservations of habitats, erosion control measures, project scheduling, flow diversions, etc.**

Please refer to Section 4c of this application for BMPs that would be implemented to avoid and minimize impacts to waters of the U.S. For a list of specific measures that would be implemented to avoid potential adverse effects to vernal pools please refer to Section 4.3.2 of the October 19, 2007 Final Biological Assessment, which is included on CD 1. For a discussion of post construction revegetation measures please refer to Section 4.3.5 of the October 19, 2007 Final Biological Assessment, which is included on CD 1.

**7. OTHER PERMITS/AGREEMENTS/ETC**

**a) U.S. Army Corps of Engineers Permit**

**Indicate the type of ACOE permit (check one)  
Nationwide Permit No(s)**

**Individual Permit No(s):**  X  **Regional Permit No(s):** \_\_\_\_\_

**Have you notified ACOE of project?** Yes, Project Identification Number SPK-200600897-SA

**Have you reviewed the General Conditions for your ACOE permit?** Yes.

**Have you attached a copy of the application/notification to ACOE?** Yes, please refer to the 404 Permit Application included on CD 1.

**b) California Department of Fish and Game Lake or Streambed Alteration Agreement**

**Date of Application:** Submitted October 12, 2007

**Have you attached a copy of the application?** Yes, please refer to the 1600 Agreement Application included on CD 1.

**Has the Agreement been issued?** Pending review. if so, list Agreement number: \_\_\_\_\_

**8. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

**a) Indicate the type of CEQA Document required for project and Lead Agency:**

**Categorical Exemption** \_\_\_\_\_

**Negative Declaration** \_\_\_\_\_

**Environmental Impact Report**  X

The California Energy Commission is the lead agency for the CEQA-equivalent process.

**Has the document been certified/ approved, or has a Notice of Exemption been filed?** CEC approval expected January 2008.

**If yes date of approval/filing** \_\_\_\_\_ **If no, expected approval/filing date:** \_\_\_\_\_

**Lead Agency:** California Energy Commission

**Submit final or draft copy if available\*** Application for Certification is provided on CDs 1 and 2. The CEC Final Staff Assessment is planned to be published on November 30. A copy of the report will be transmitted to the RWQCB.

**b) Threatened or Endangered Species impacted by this project (list potential):**

The proposed CGS project may affect several species listed as rare, threatened, or endangered species under the federal and/or state endangered species acts, and/or as species of special concern by the California Department of Fish and Game (CDFG), and/or by the California Native Plant Society (CNPS). Special-status species with potential to occur in the CGS project site were determined based on the proximity of known occurrences, the historic range of these species, agency consultations, and habitat evaluations, jurisdictional delineations, and wildlife and plant field surveys conducted in 2001, 2006, and 2007. These species include:

- *Branchinecta lynchi*, vernal pool fairy shrimp (Federal Threatened)
- *Lepidurus packardii*, vernal pool tadpole shrimp (Federal Endangered)
- *Thamnophis gigas*, giant garter snake (Federal and State Threatened)
- *Ambystoma californiense*, California tiger salamander (dispersal/aestivation only) (Federal Threatened and State Species of Special Concern)
- *Buteo swainsoni*, Swainson's hawk (forage only) (State Threatened)
- *Hirundo pyrrhonota*, cliff swallow (Migratory Bird Treaty Act)
- *Agelaius tricolor*, tricolored blackbird (State Species of Special Concern, Migratory Bird Treaty Act)
- *Plegadis chihi*, white-faced ibis (State Species of Special Concern, Migratory Bird Treaty Act)
- *Elanus leucurus*, white-tailed kite (winter/forage only) (State Fully Protected, Migratory Bird Treaty Act)
- *Haliaeetus leucocephalus*, bald eagle (winter/forage only) (Federal Delisted, State Endangered, State Fully Protected, Migratory Bird Treaty Act)
- *Aquila chrysaetos*, golden eagle (winter/forage only) (State Species of Special Concern, Migratory Bird Treaty Act)
- *Antrozous pallidus*, pallid bat (State Species of Special Concern)
- *Corynorhinus townsendii*, Townsend's western big-eared bat (State Species of Special Concern)
- *Corynorhinus townsendii pallescens*, pale big-eared bat (State Species of Special Concern)
- *Circus cyaneus*, northern harrier (winter/forage only) (State Species of Special Concern, Migratory Bird Treaty Act)
- *Buteo regalis*, ferruginous hawk (winter/forage only) (State Species of Special Concern, Migratory Bird Treaty Act)
- *Eremophila alpestris*, California horned lark (winter/forage only) (State Species of Special Concern, Migratory Bird Treaty Act)
- *Athene cunicularia hypugea*, western burrowing owl (State Species of Special Concern, Migratory Bird Treaty Act)

The following special-status species have the potential to occur adjacent to the limits of the CGS project site:

- *Branchinecta conservatio*, conservancy fairy shrimp (Federal Endangered)
- *Atriplex depressa*, brittlescale (CNPS List 1B.2)

Listed salmonids species including Central Valley spring Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley fall/late-fall run Chinook salmon (*Oncorhynchus tshawytscha*), Sacramento Valley winter run Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley steelhead (*Oncorhynchus mykiss*), and green sturgeon (*Acipenser medirostris*) are not expected to be impacted by the proposed project. In a letter to the ACOE, dated August 2, 2007, NMFS determined that listed salmonids and their designated critical habitat are not present in the CGS project's action area ((please see the NMFS concurrence letter on the enclosed CD 1).

For a complete discussion of special-status species that may be affected by the CGS Project please refer to the following reports: November 2006 Application for Certification (AFC) Section 8.2, Biological Resources (included on CD 2), the October 2007 Revised Biological Assessment (included on CD 1).

After implementation of the proposed avoidance, minimization, and compensation measures in the November 2006 AFC and the October 2007 BA, the proposed CGS project is not likely to significantly impact special-status species.

**9. PAST/FUTURE PROPOSALS BY THE APPLICANT**

**Briefly list/describe any projects carried out in the last 5 years or planned for implementation in the next 5 years that are in any way related to the proposed activity or may impact the same receiving body of water. Include the estimated adverse impacts from the past or future projects.**

Previous Projects in Last Five Years

The far western end of the 2002 Wild Goose Storage, Inc. Expansion (WGS) project area overlaps a portion of the proposed CGS project site, near the PG&E Delevan Compressor Station (Figure 3.4-1 in MHA Environmental Consulting, 2002). As part of the WGS project, a 25.6-mile pipeline was constructed from the WGS Remote Facility Site in Butte County, to the existing PG&E line 400/401 adjacent to the Compressor Station. As part of the CGS project, a 1,500-foot-long natural gas line would be constructed between the proposed plant site and the existing PG&E gas backbone system, lines 400 and 401 (Figure 2). For more detailed information on the WGS project, please refer to the WGS project description summary, prepared by the State of California Public Utilities Commission, and the Biological Resources Section of the WGS project EIR, prepared by MHA Inc., included on CD 1.

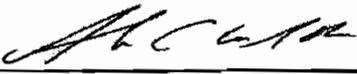
Future Projects Planned for Implementation

Several potential development proposals have been brought to the attention of the Colusa County Planning Department, but no formal applications have been submitted. An 18 unit subdivision is proposed to be developed on the west of the City of near Maxwell, approximately 5 miles southeast of the project site. No further information is available on the potential projects, nor is there any available information on their schedules or likelihood of submitting an application. Thus, based on information that no development applications have been submitted, potential cumulative impacts to biological resources would be less than significant.

**10. CERTIFICATION**

**"I certify under penalty of law that this document, including all attachments and supplemental information, were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."**

**Print Name: Andrew Welch Title: Project Manager, Competitive Power Ventures, Inc.**

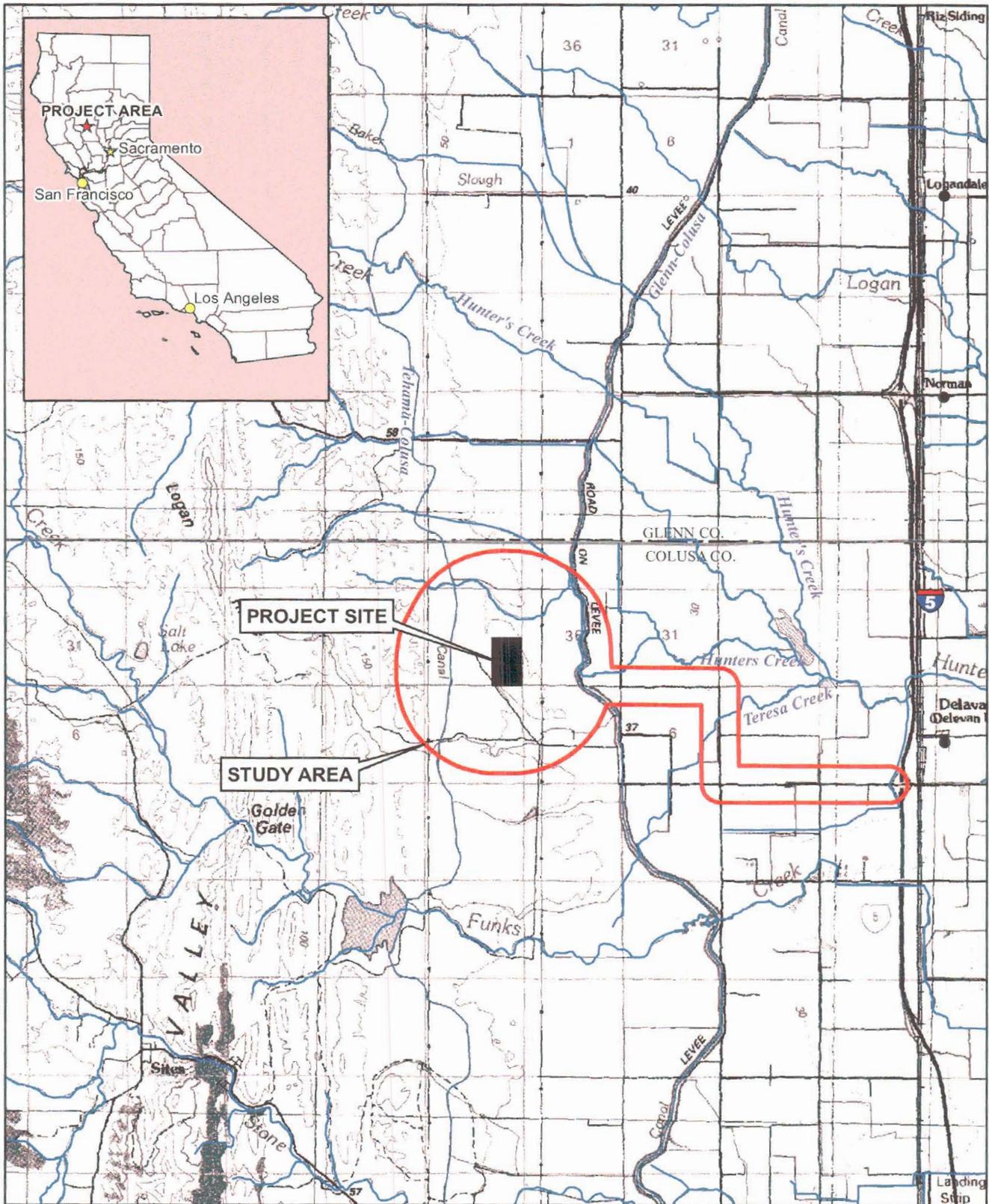
**Signature: **

**Date: December 7, 2007**

**References**

MHA Environmental Consulting. 2002. Final Environmental Impact Report for the Wild Goose Storage Expansion Project. Prepared for the Public Utilities Commission Energy Division. Application #01-06-029.

SWRCB (State Water Resources Control Board). 1999. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) Water Quality Order 99-08-DWQ.*



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**PROJECT VICINITY MAP**

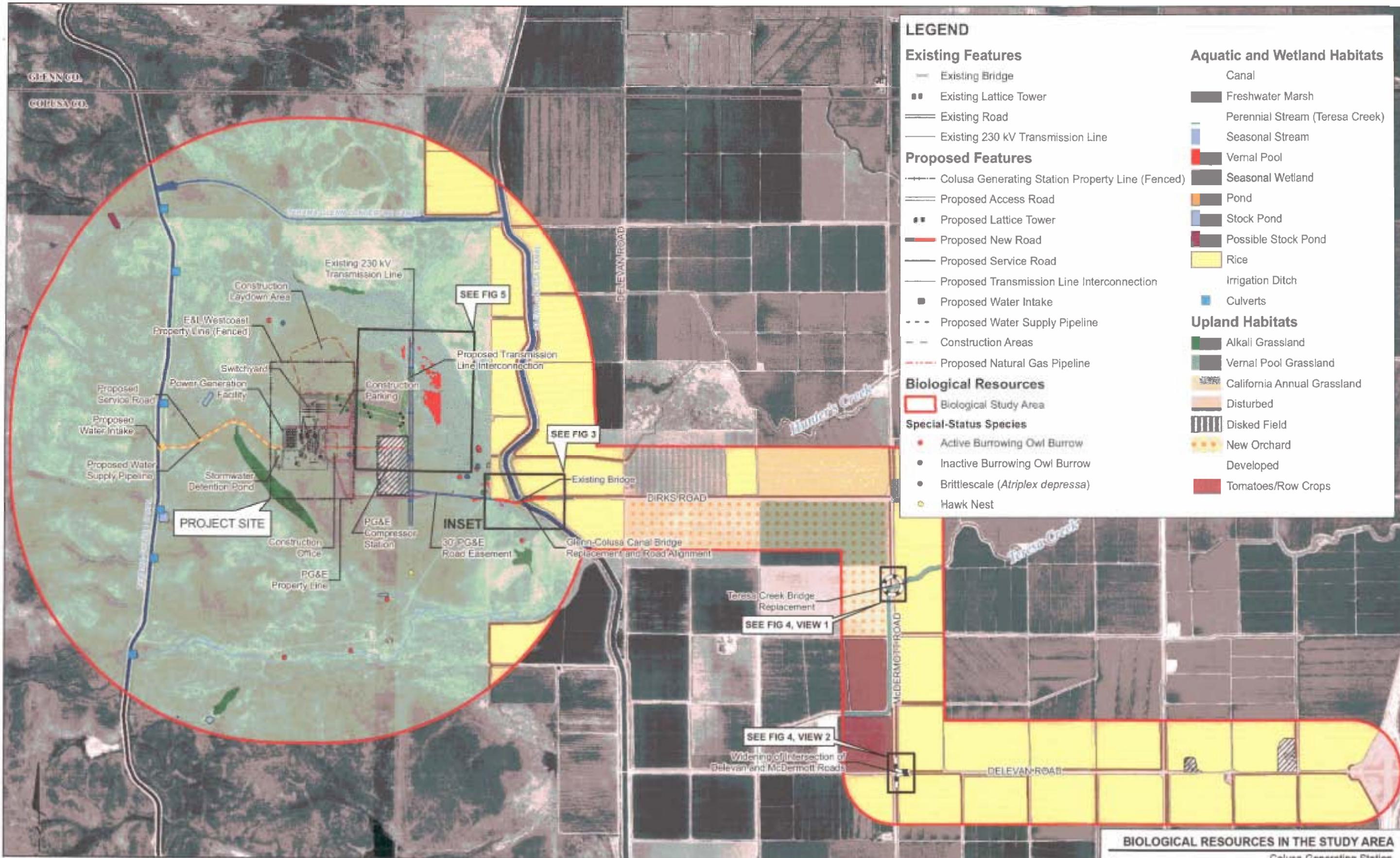
Colusa Generating Station  
 28067004  
 E&L Westcoast, LLC  
 November 2007  
 Colusa County, California



**FIGURE 1**

0 0.5 1 2  
 Scale in Miles





### LEGEND

**Existing Features**

- Existing Bridge
- Existing Lattice Tower
- Existing Road
- Existing 230 kV Transmission Line

**Proposed Features**

- Colusa Generating Station Property Line (Fenced)
- Proposed Access Road
- Proposed Lattice Tower
- Proposed New Road
- Proposed Service Road
- Proposed Transmission Line Interconnection
- Proposed Water Intake
- Proposed Water Supply Pipeline
- Construction Areas
- Proposed Natural Gas Pipeline

**Biological Resources**

- Biological Study Area

**Special-Status Species**

- Active Burrowing Owl Burrow
- Inactive Burrowing Owl Burrow
- Brittlescale (*Atriplex depressa*)
- Hawk Nest

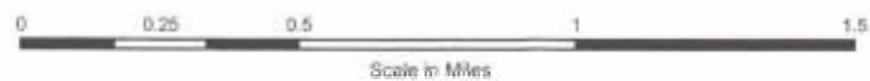
**Aquatic and Wetland Habitats**

- Canal
- Freshwater Marsh
- Perennial Stream (Teresa Creek)
- Seasonal Stream
- Vernal Pool
- Seasonal Wetland
- Pond
- Stock Pond
- Possible Stock Pond
- Rice
- Irrigation Ditch
- Culverts

**Upland Habitats**

- Alkali Grassland
- Vernal Pool Grassland
- California Annual Grassland
- Disturbed
- Disked Field
- New Orchard
- Developed
- Tomatoes/Row Crops

Source: USGS Seamless Dataset, B/W DOQQ Photo, Aug. 25, 98; Sept. 13, 98; July 29, 99



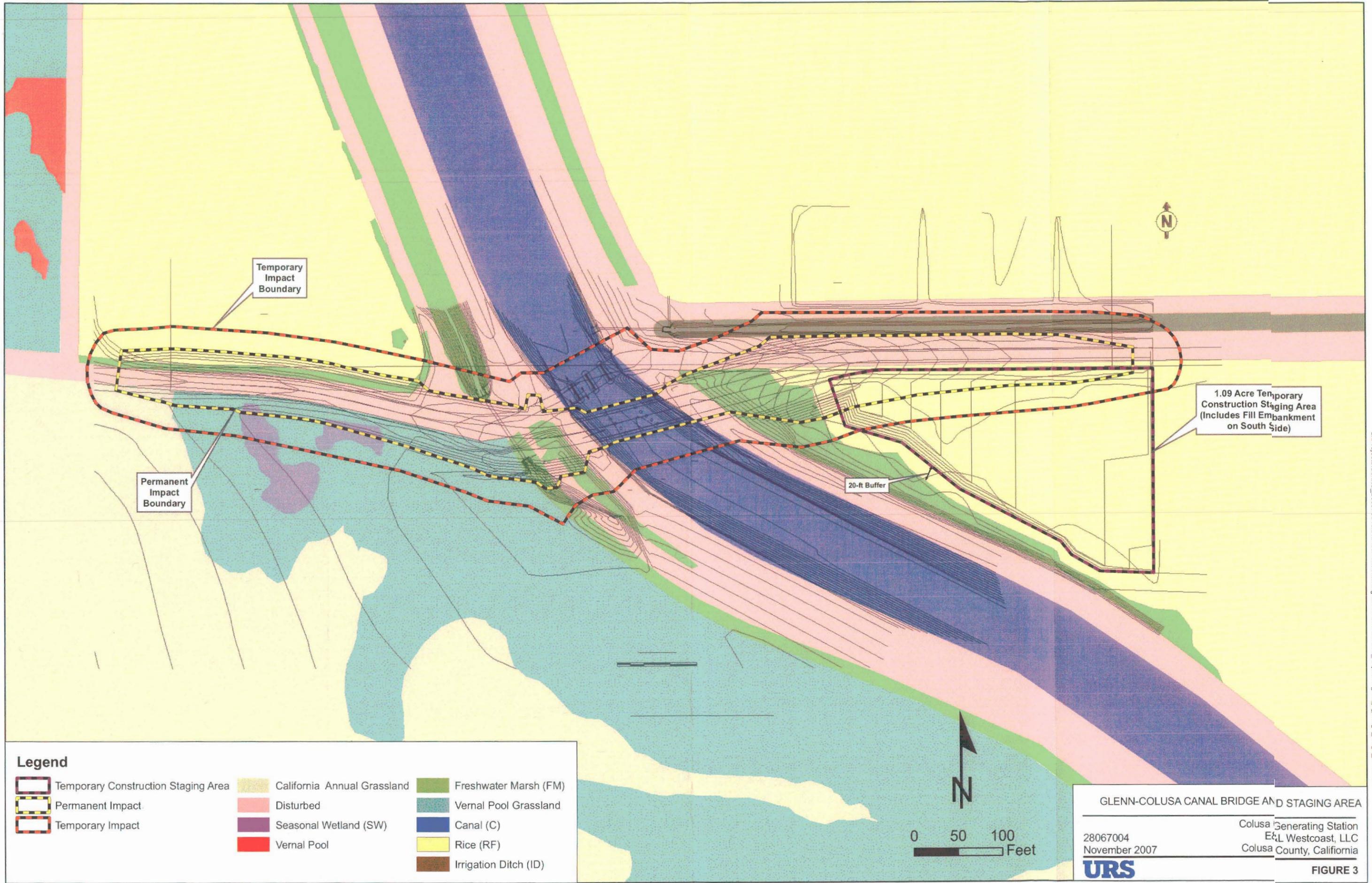
**BIOLOGICAL RESOURCES IN THE STUDY AREA**  
 Colusa Generating Station  
 E&L Westcoast, LLC  
 Colusa County, California

28067004  
 November 2007

**URS**

**FIGURE 2**

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Temporary Impact Boundary

Permanent Impact Boundary

1.09 Acre Temporary Construction Staging Area (Includes Fill Embankment on South Side)

20-ft Buffer

**Legend**

- |  |                                     |  |                             |  |                       |
|--|-------------------------------------|--|-----------------------------|--|-----------------------|
|  | Temporary Construction Staging Area |  | California Annual Grassland |  | Freshwater Marsh (FM) |
|  | Permanent Impact                    |  | Disturbed                   |  | Vernal Pool Grassland |
|  | Temporary Impact                    |  | Seasonal Wetland (SW)       |  | Canal (C)             |
|  |                                     |  | Vernal Pool                 |  | Rice (RF)             |
|  |                                     |  | Irrigation Ditch (ID)       |  |                       |

0 50 100 Feet

GLENN-COLUSA CANAL BRIDGE AND STAGING AREA

28067004  
November 2007

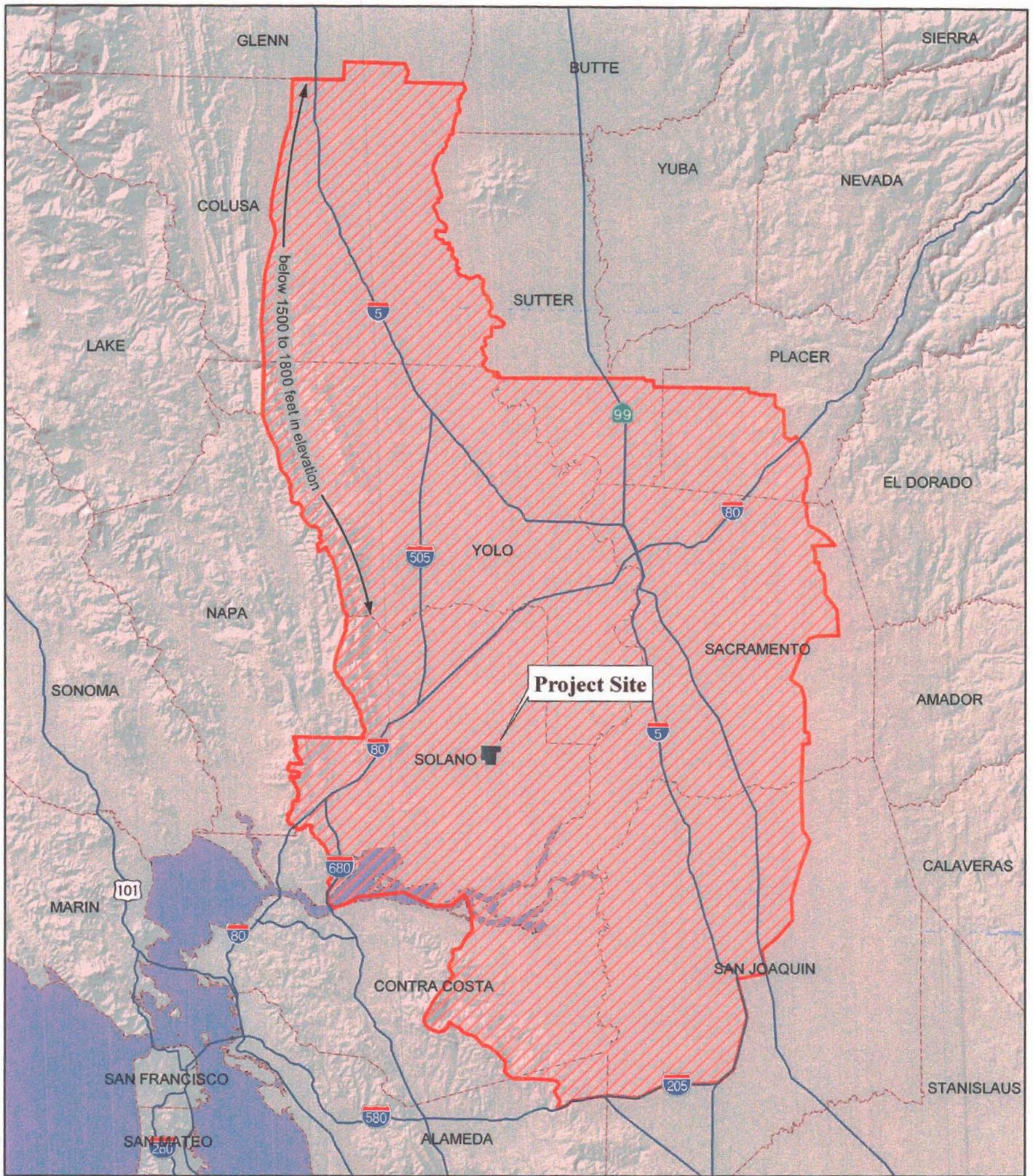
Colusa Generating Station  
E&L Westcoast, LLC  
Colusa County, California



FIGURE 3

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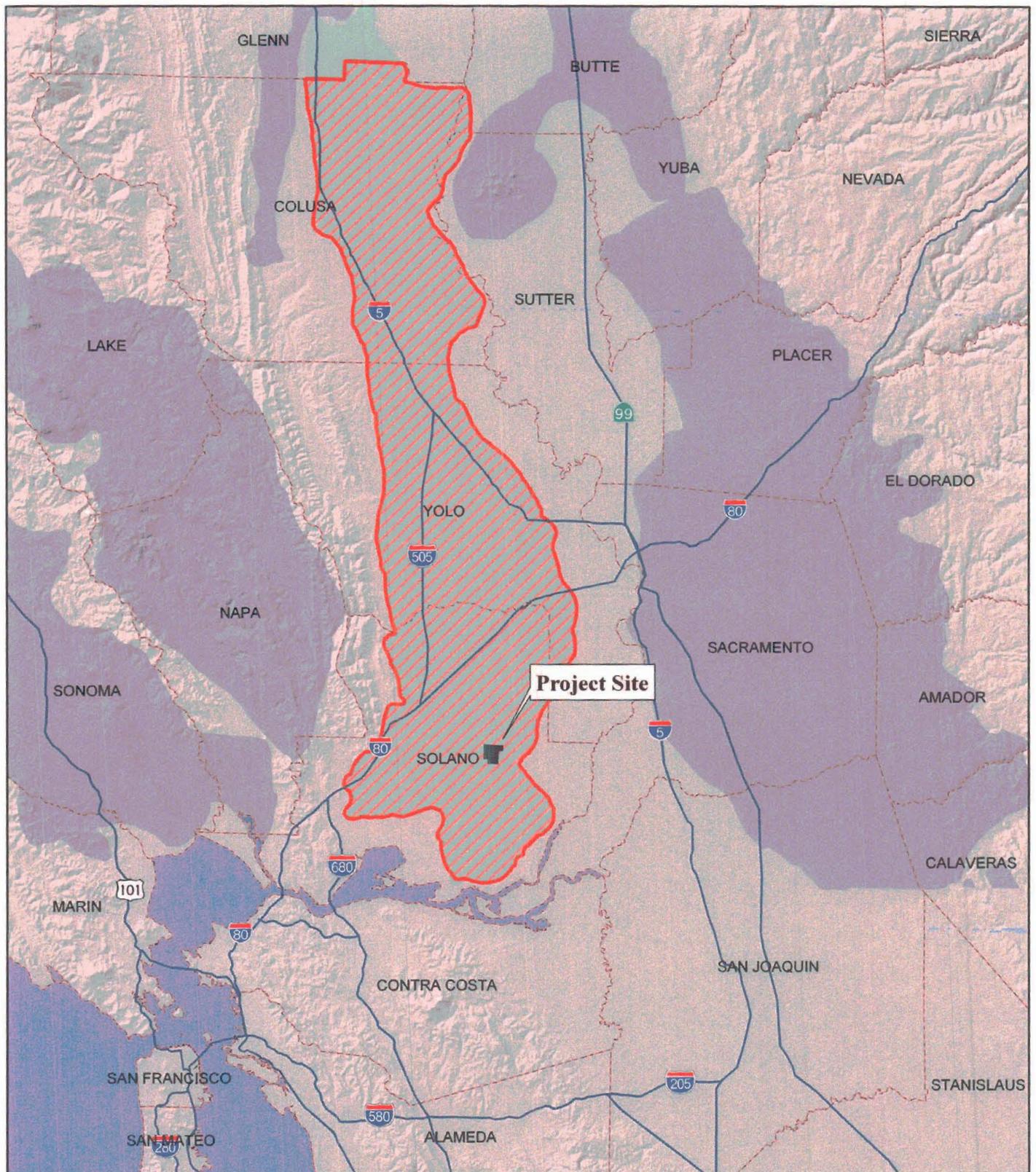
LSA



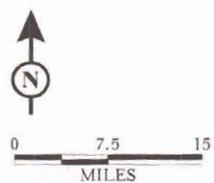
-  SERVICE AREA
-  SOLANO-COLUSA VERNAL POOL REGION
-  ADJACENT VERNAL POOL REGIONS
-  MAJOR HIGHWAYS
-  COUNTY BOUNDARIES

*Elsie Gridley Mitigation Bank*

Service Area for  
Perennial Wetlands, Seasonal Wetlands,  
and Riparian Wetlands  
(not including vernal pools)



LSA



-  SERVICE AREA
-  SOLANO-COLUSA VERNAL POOL REGION
-  ADJACENT VERNAL POOL REGIONS
-  MAJOR HIGHWAYS
-  COUNTY BOUNDARIES

*Elsie Gridley Mitigation Bank*

Service Area for  
Vernal Pools and  
Associated Special-status Species

