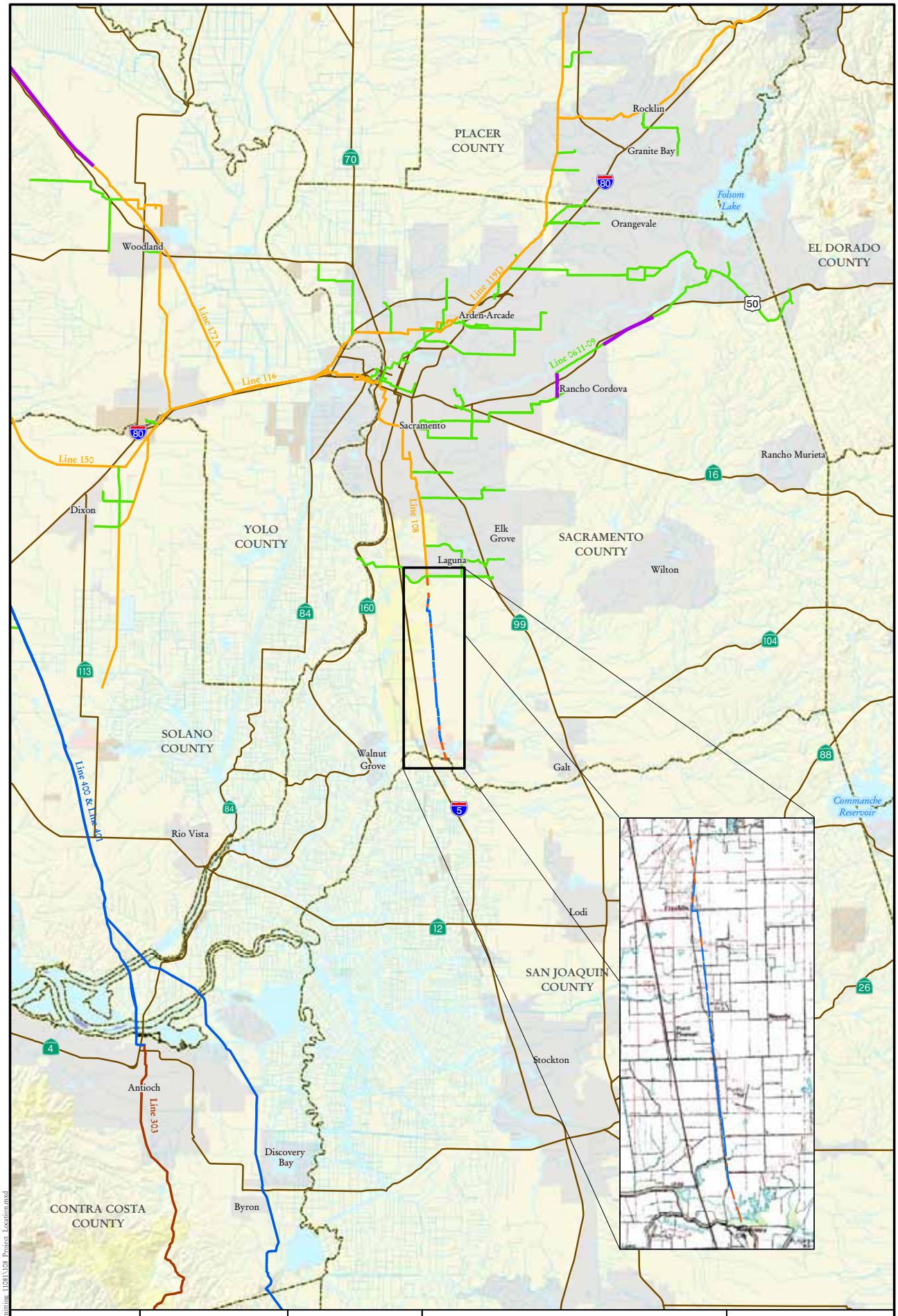


EIP

Source: PG&E, Existing Transmission Lines, Feb. 2006; Trigon EPC, Proposed Line 108 Alignment, Jan 2006; US Census Bureau, City Boundaries, July 2000; TIGER 2K Transportation, 2000; USGS, Hydrography Dec. 1998, and EIP Associates GIS Program, March 9, 2006.

0 2.5 5
Miles

1 inch equals 5 miles

Existing Transmission Line Proposed Line 108

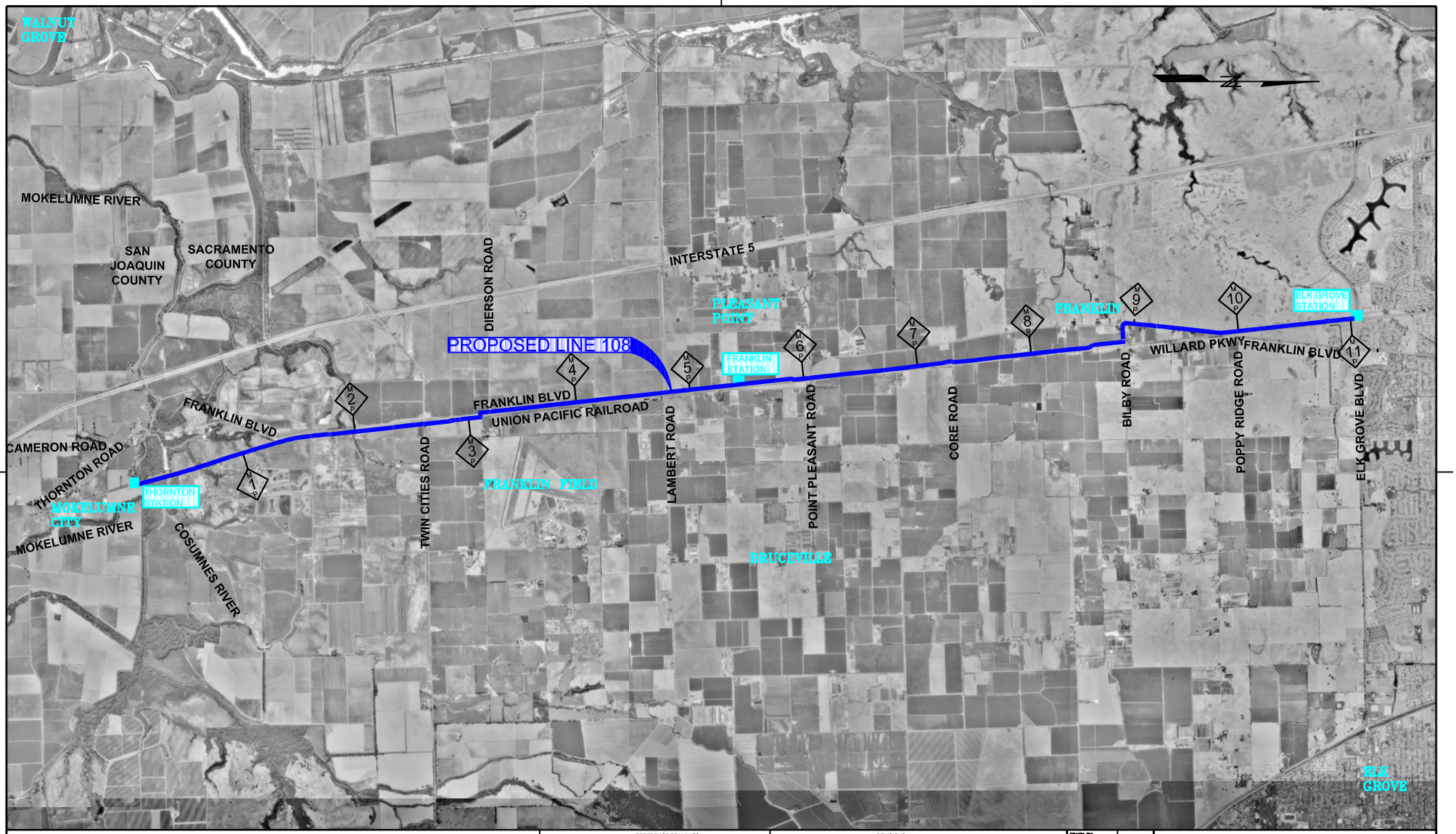
- Active Pipe, DFM
- Active Pipe, BB
- Active Pipe, LT
- Propose Pipe
- HDD
- Trench
- Hammer Bore

FIGURE 2-1
PROJECT OVERVIEW

Line 108 Replacement Project

Sacramento and
San Joaquin Counties, CA

N:\GIS\Projects\Trigon EPC Permitting 1108\1108 Project Location.mxd



NOTES:

LEGEND:

PROPOSED LINE 108 (CLASS 1)

STATION LOCATION

MILEPOST

REFERENCE DRAWINGS		REVISIONS						
DWG. NO.	TITLE	NO.	DESCRIPTION	DATE	BY	CHK.	APPR.
		2	ISSUE FOR REVIEW	03/01/05	CL		
		1	REMOVED ALTERNATES	12/8/05	CL		
		0	ISSUED FOR REVIEW	11/17/05	CLJ		

DRAWN BY: CLJ 11/17/05
CHECKED BY:
REVIEWED BY:
APPROVED BY:
PROJECT MANAGER:
SCALE: 1"=2000' / 1:24000

TRIGON EPC

Pacific Gas and Electric Company

LINE 108 REPLACEMENT
LOCATION MAP - FIGURE 2-2
SAN JOAQUIN/SACRAMENTO COUNTIES CALIFORNIA

PROJECT NUMBER	DRAWING NUMBER	REV.
2116-01	FIGURE 2-2	C

No effect would occur on slender Orcutt grass or Sacramento Orcutt grass since they are not known to occur in the action area. Additionally no effect would occur on bald eagles since they do not nest in the action area.

There are no interrelated or interdependent actions associated with this project, and therefore no impacts would occur. This project is not dependent upon any other projects and no projects are dependant upon this one.

Cumulative Effects (State and private actions)

Cumulative effects include the effects of future State, local, or private actions that are reasonably certain to occur in the action area considered in this BA. Future federal actions that are unrelated to the proposed project are not treated as cumulative effects for the purpose of consultation under Section 7 of the ESA because they will require separate consultation in the future.

All of the potential vernal pool crustacean habitat lies either on the Stone Lakes National Wildlife Refuge or along the UP Railroad right of way. Because of the wetland resources, a Section 7 consultation with the Service would be required for any impacts to this area. Additionally impacts to fisheries resources would be tied to actions on the Mokelumne or Cosumnes River, which would also trigger either Section 404 of the CWA or Section 10 of the Rivers and Harbors Act and require a Section 7 consultation.

Conversion of agricultural uses in Sacramento County would not require a special use permit, grading permit or any other type of discretionary action by the County. Therefore, this type of conversion may go unnoticed by the local and general agencies and an unknown amount of wetland habitat could be affected by deep-ripping for the planting of crops, vines, and/or orchards. However, the suitable habitat for endangered species primarily lies within either the Stone Lakes National Wildlife Refuge or the Cosumnes River Preserve who have committed to preserving this habitat and would be required to consult with the resource agencies prior to impacting this habitat.

Analysis of Alternative Actions

Alternative 1: No Project Alternative

The No Project Alternative would not result in the construction and operation of a natural gas pipeline between the Elk Grove and Thornton Stations. The active segment of the existing Line 108 pipeline would continue to provide distribution services to local landowners. No impacts to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and transportation would occur under the No Project Alternative.

The proposed Line 108 Replacement Project would provide a new replacement pipeline to allow expanded capacity of the Line 108 system to in order to meet the needs of the Sacramento area's growing population. Implementation of the No Project Alternative would not install a new pipeline by the January 2009 winter season and could result in emergency curtailment, or interruption of services, to approximately 160,000 residential and small commercial gas accounts under Abnormal Peak Day (APD) design condition.

Alternative 2: Franklin Boulevard Alternative

The Franklin Boulevard Alternative would involve construction of the Line 108 pipeline along Franklin Boulevard (Figure 2). From Thornton Station, the route would travel west across agricultural fields to Thornton Boulevard. At Thornton Boulevard, the route would precede north crossing the Cosumnes River Preserve. At this point, Thornton Boulevard becomes Franklin Boulevard. The route would continue north along Franklin Boulevard to Elk Grove Boulevard. At Elk Grove Boulevard, the route would head directly west to Elk Grove Station.

This alternative would have the same level of impact on water resources as the proposed project, as it would require HDDs to cross any waterways. The impact on biological resources would be less as fewer natural resources would be crossed even though wetland resources occur adjacent to the road, especially south of Desmond Road. Impacts associated with cultural and paleontological resources and geologic hazards were assumed to be equivalent to the proposed project. However, construction impacts associated with this alternative would be much greater. Because it would be constructed within Franklin Boulevard, the proposed project would require at least one lane of the road to be closed. This would result in an increase in transportation and air quality impacts, because re-routing of traffic along the entire project alignment/roadway would increase traffic delays, and would also likely result in a longer period of construction. Potential significant impacts related to construction impacts are the reasons that this alternative was eliminated from further analysis and consideration.

Alternative 3: Remove and Replace the Existing Line 108 Pipeline

The Remove and Replace the Existing Line 108 Pipeline Alternative would follow the existing Line 108 pipeline (Figure 3). From Thornton Station, Line 108 travels north along the east side of the Union Pacific Railroad (UPRR) tracks to Lambert Road. At Lambert Road, the pipeline heads west under the UPRR tracks to Franklin Boulevard. The route then heads north along the west side of Franklin Boulevard to approximately 1,000 feet south of Point Pleasant Road. At this point, the pipeline aligns with the west side of the UPRR tracks, and continues north to a farm road approximately 2,600 feet south of Bilby Road. The pipeline then heads east under the UPRR and follows the east side of the tracks and Willard Parkway until the intersection of Willard Parkway, Franklin Boulevard and the UPRR. At this point the pipeline heads west under the UPRR tracks, following on the west side north to the Elk Grove Station.

This alternative would require excavation of the entire pipeline to remove the existing Line 108 pipeline. While it would likely not require excavation in and across the Mokelumne and Cosumnes Rivers, it would require excavation within the Stone Lakes National Wildlife Refuge and Cosumnes River Preserve which would result in substantial impacts to wetland resources and special status species habitat when compared to the proposed project. Further, features have been constructed over the existing pipeline and could not be removed in order to remove the pipeline. For these reasons, this alternative was eliminated from further analysis.

Alternative 4: Line 172/DFM Alternative

An alternative to re-connecting the Thornton and Elk Grove Stations would be to install parallel pipeline capacity to Line 172 from the north, and to the Mather Distribution Feeder Main (DFM) that serves Rancho Cordova and Folsom (Figure 4). The Line 172 parallel would be 13.5 miles of 24-inch diameter pipeline, constructed roughly along the Southern Pacific Railroad, from the intersection of County Roads 97 and 16 in northern Yolo County, to just south of the Yolo County line. Construction would occur in a rural area, primarily through agricultural fields but would require crossing some waterways including natural drainages and irrigation canals. This

design would also require additional parallel pipeline capacity be installed to the Mather DFM serving Rancho Cordova and Folsom. This would require a 1.35 mile 12-inch diameter pipe along Routier Road from Older Placerville Road to Folsom Boulevard in the community of Rosemont and a 3.2 mile 12-inch diameter pipeline along Folsom Boulevard from Sunrise Boulevard to Hazel Avenue in the City of Rancho Cordova.

While this alternative would meet the primary objective of providing gas distribution to growing areas of Sacramento County, it would not provide a looped system, nor would it increase the service reliability to customers in south Sacramento. Construction of this alternative would require an additional seven miles of disturbance, some of which would occur in developed suburban communities. This would likely result in greater construction impacts (traffic, noise, and air quality). Biological impacts would likely be fewer than compared to the proposed project, as this alternative would not cross any preserve areas. Because this alternative fails to meet some of the project objectives and would result in greater construction impacts, it was eliminated from further analysis.

Conclusion and Determination

The proposed project will have no effect on slender Orcutt grass, Sacramento Orcutt grass, or bald eagle because they do not occur in the action area. The proposed project is not likely to adversely affect VELB, fisheries resources, or giant garter snake with the implementation of the conservation measures and use of HDD construction technologies. The proposed project is not likely to adversely affect vernal pool fairy shrimp or vernal pool tadpole shrimp for the following reasons:

- The proposed project alignment and construction techniques have been altered to avoid direct impacts to potential habitat.
- Conservation measures will be implemented to ensure that the hydrology of the overall vernal pool system through the action area will not be disrupted.
- Indirect impacts are not expected to occur, but should the Service conclude otherwise, PG&E would purchase preservation credits.

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