



DEPLETION OF GROUNDWATER SUPPLIES OR INTERFERENCE WITH GROUNDWATER RECHARGE

The CCL will require approximately 42,900 gpd of water on average, with a peak water demand of 80,000 gpd. During the course of a year, the CCL will require approximately 48.1 afy, of which approximately 44.0 afy (39,200 gpd) will be satisfied by groundwater. The remaining water demand (4.1 afy) will be satisfied by application of leachate on the landfill for dust control purposes and from water that may be obtained from the adjacent Vintage Wine Trust property. Potable water demand for CCL employees will continue to be satisfied by bottled supplies.

Water demand for the expansion of several landfill components and construction of additional landfill modules will increase during the proposed expansion project. Water use should be quantified through the installation of meters on all of the water supply wells and from the adjacent winery property. The well meters and water levels should be read regularly (monthly) and used to calculate actual site water demand. Water for construction of the expansion modules may exceed the capabilities of the on-site water supply system. If additional water is required, it is considered feasible to reactivate Weir Well No. 3 to obtain an additional 16 gpm. If further additional supply is required, additional well(s) could be installed on-site within the Pismo Formation to satisfy additional water demands.

No significant groundwater level declines have been noted within the monitoring well record available on-site since 1989 (refer to the discussion in the Hydrogeologic Connectivity section). With the installation of water meters, and the use of alternate sources of water for dust control (leachate and possibly Vintage Wine Trust water), reliance on off-site water to satisfy construction needs related to cell development and general water conservation practices on-site, will reduce this potential impact to a level that is **less-than-significant**.

CONTRIBUTION TO RUNOFF

According to the project description, the surface drainage control system will consist of a series of benches, culverts, natural drainage channels, and sedimentation basins. Finished landfill slopes will be graded to slopes of 3H:1V (horizontal:vertical) or flatter and will include benches placed every 50 feet of elevation. Flat surfaces at the top of the slope (top deck) will be sloped to approximately a 3 percent grade to discourage formation of ponds and too-rapid runoff, which would increase erosion.

Surface water runoff will be directed to one of three detention basins designed to accommodate flows from 100-year, 24-hour storm events, where sediment and other debris can settle out. When eventually full, the basins will outfall to tributaries of Pismo Creek. The grading controls and topographical alteration, if properly implemented, will minimize the impact of creating runoff that exceeds the capacity of planned storm water drainage systems to a level that is **less-than-significant**.



SUBSTANTIAL DEGRADATION OF WATER QUALITY

Any water quality impacts from the CCL will be well-documented through the processes described within the MRP, which also provides methods for mitigation of any detected water quality exceedences. Therefore, compliance with the existing and any forthcoming MRPs will reduce this impact to a level that is **less-than-significant**.

INCREASED AGRICULTURAL USE

Agricultural demand could increase significantly, as estimated by the Morro Group (2008), and compete for groundwater resources in the designated hydrogeologic study area. Groundwater demand associated with the expansion of agricultural and, to a lesser extent, residential uses could increase from an estimated current demand of 261 afy to as much as 925 afy in 20 years. A simple water balance for the area indicates groundwater is not sufficient to support such land use changes. Implementation of the project, along with full build-out of neighboring properties and maximum conversion of agricultural properties to vineyards would create a condition that would have **significant, unavoidable impacts on the groundwater resource**.

MONITORING AND MAINTENANCE OF LANDFILL CAPS

California Code of Regulations will require that the CCL prepare a preliminary closure and post-closure maintenance plan. Typical plans describe the methods that will be used to close a landfill in a manner that protects the long-term health of the public and the environment. The long-term maintenance plan will specify programs to maintain the integrity of the final cover, drainage system, leachate control system, landfill gas system, groundwater monitoring system, and the final grading. Details of potential costs, specific responsibilities, and logistical issues will be included in the post-closure maintenance plan.

The WDR requires that the Closure and Postclosure Plan be submitted to the RWQCB by August 18, 2006. The CCL has not done so in anticipation of acceptance of formalized expansion plans. Therefore, the RWQCB considers the CCL to be out of compliance. However, the RWQCB has stated that formal enforcement is not likely as long as they submit the Closure and Postclosure Plan in a "timely manner," that is, upon acceptance of the formalized expansion plans.

Compliance with RWQCB and IWMB final cover designs and post-closure maintenance plans, which will describe the specific methods to determine that the landfill caps remain effective, will minimize this impact to a level that is **less-than-significant**.

SUMMARY AND CONCLUSIONS

In this water resources assessment, the impacts of anticipated pumping demand for the proposed CCL expansion on local groundwater levels, reliability and quality were evaluated. Groundwater use for the proposed landfill expansion is expected to be pumped from the Weir Well Nos. 1 and 2 at a build-out pumping rate of 39,200 gpd or 44 afy. Peak water demand,



expected to occur on weekdays during the driest and warmest months, is estimated to be about 80,000 gpd. Well Nos. 1 and 2, with the possible later reactivation of Well No. 3, are capable of satisfying the daily demand. Water demand associated with construction of the landfill modules will likely be greater than the current sources can supply. Therefore, as was the case during the prior landfill expansions, the contractors may be required to temporarily obtain water from an off-site source during construction.

The CCL is not currently permitted by the Environmental Health Department to supply water for its employees by bottled water sources for drinking. Such use will need to be permitted by the San Luis Obispo County Environmental Health Department as a non-transient, non-community water system. Even though the proposed source for potable use for the 120 future employees will be bottled sources, the CCL will be required to submit chemical and bacteriological analyses of all water sources that could come in contact with employees to prove that the water is potable.

Surrounding groundwater demand could increase significantly during the next 20 years due to intensification of agriculture and, to a lesser extent, residential in-filling. Total groundwater demand within a defined hydrogeologic study area could increase by as much as 254 percent. CCL demand may increase by approximately 26 percent, domestic demand may increase by 61 percent, and vineyard demand may increase by over 300 percent. Groundwater supply in the designated study area is likely not sufficient to satisfy the cumulative water demand if agricultural intensification and residential development occur as projected.

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- Rizzoli, Bruce Rizzoli (2007), personal communication, dated November 20.



PERSONS CONTACTED

Cold Canyon Landfill, Mr. Bruce Rizzoli

San Luis Obispo County, Public Works Department, Water Resources Unit, Mr. Syllas Cranor

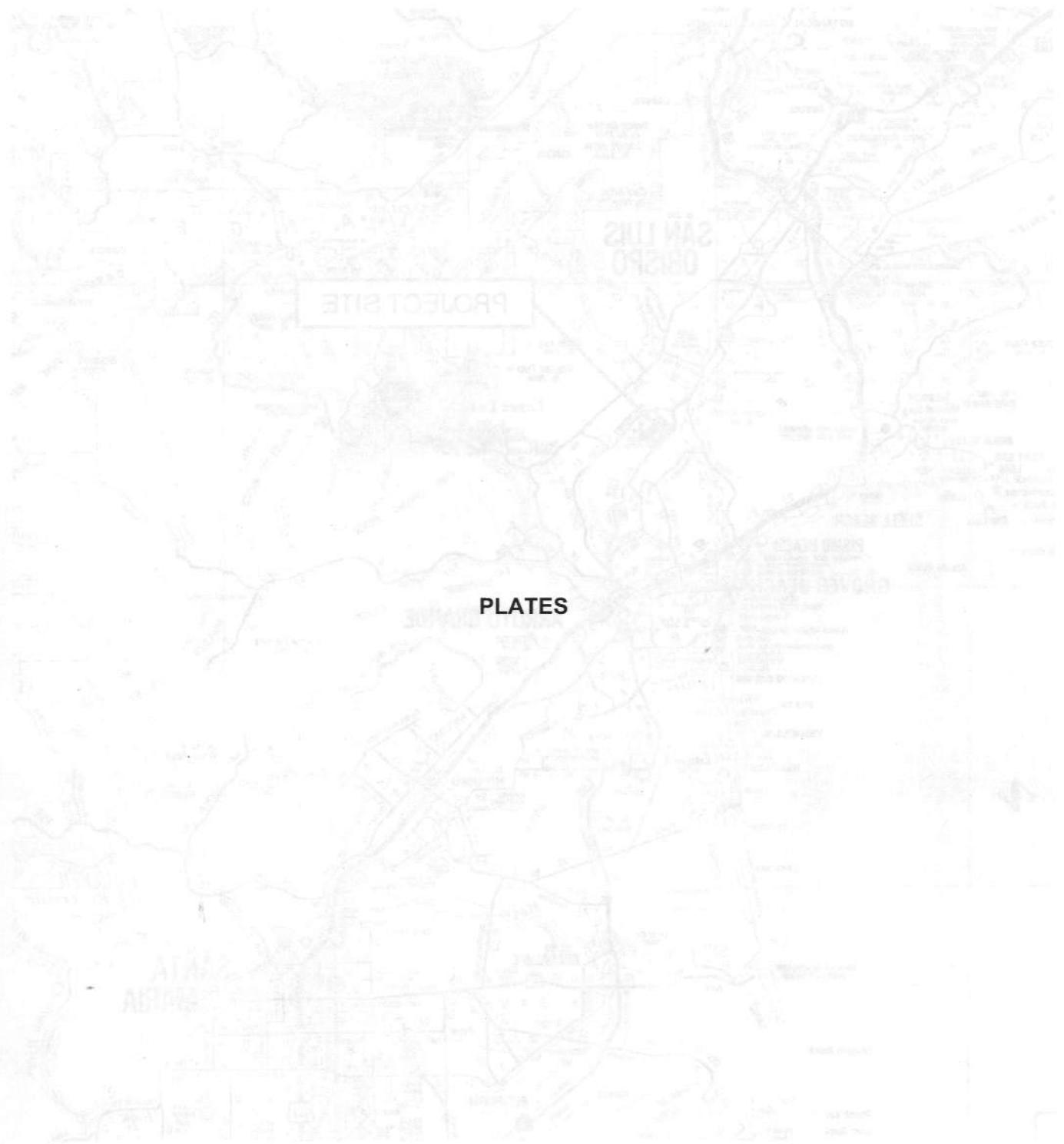
San Luis Obispo County, Environmental Health Department, Mr. Brad Pryor

Department of Public Health (DPH) Drinking Water Program, Santa Barbara District staff.

California Regional Water Quality Control Board, Central Coast Region (2007), Mr. Martin Fletcher

California Department of Water Resources, Mr. Michael Van Raalte.

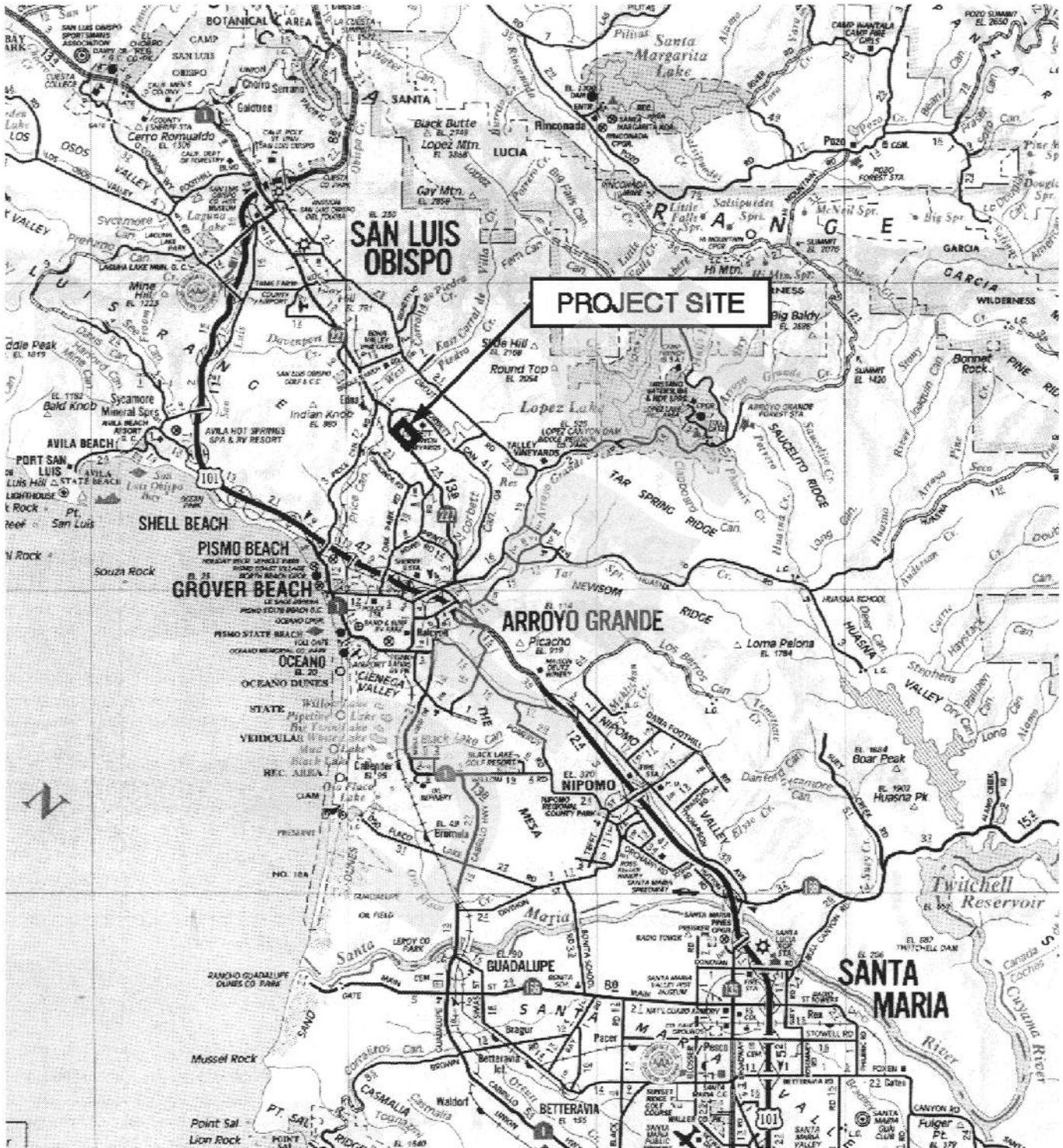
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PLATES

VICINITY MAP
San Luis Obispo County, California
City of San Luis Obispo
City of Pismo Beach

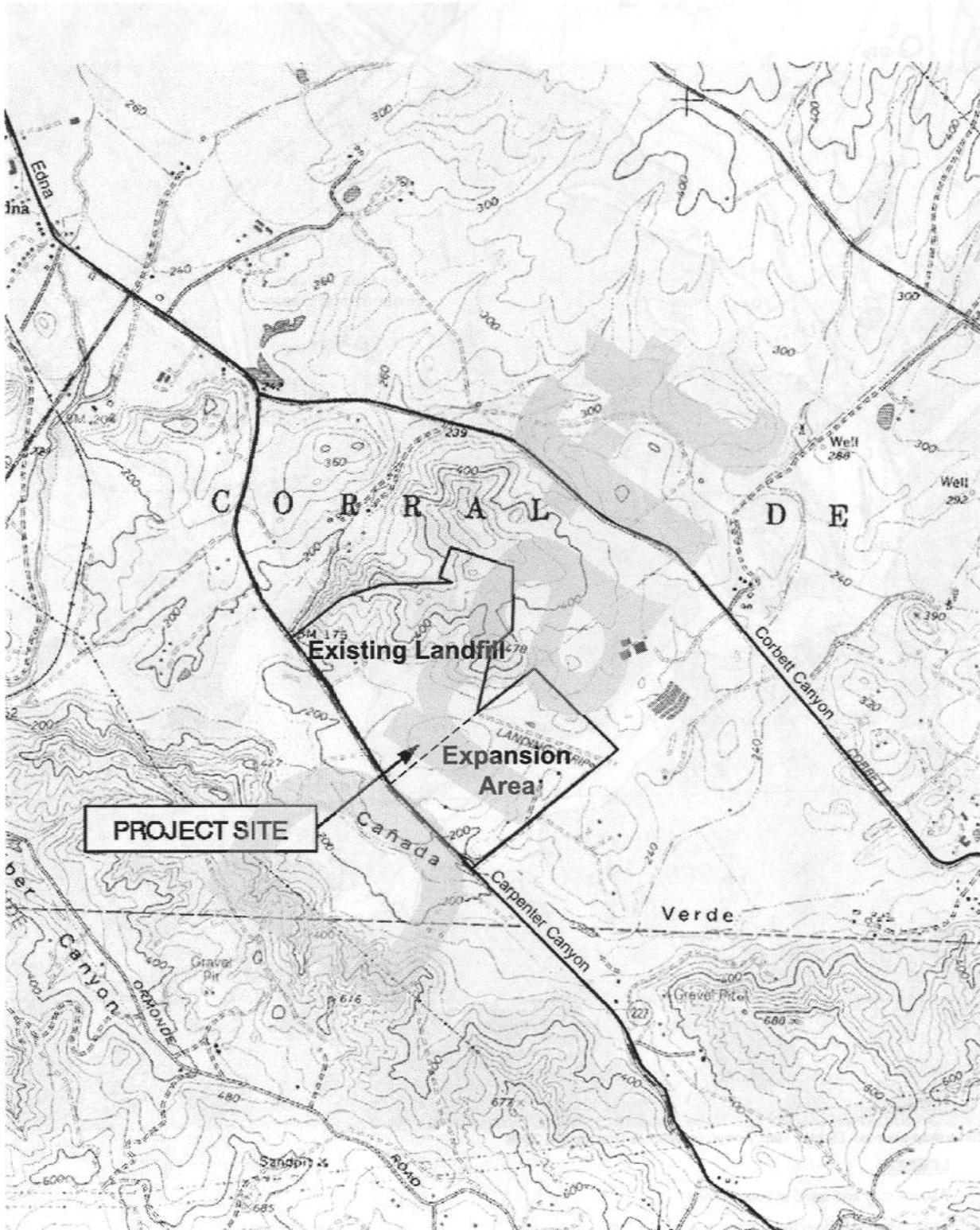




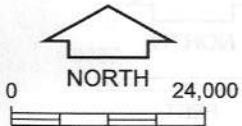
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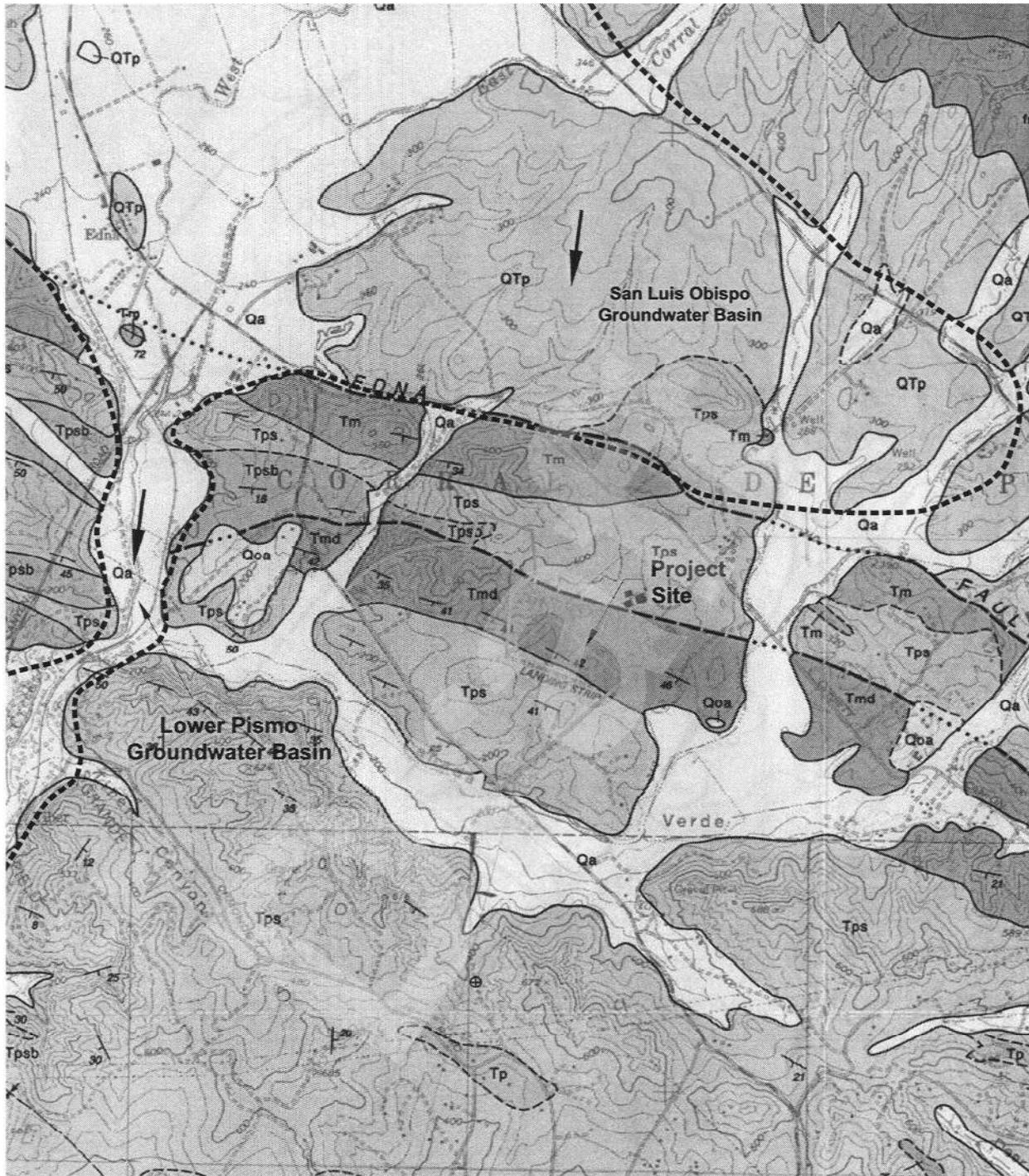
VICINITY MAP
Water Resources Assessment
Cold Canyon Landfill Expansion
San Luis Obispo County, California



Base map source: USGS quadrangle - Arroyo Grande NE.



SITE LOCATION MAP
Water Resources Assessment
Cold Canyon Landfill Expansion
San Luis Obispo County, California



Base map source: Dibblee Map, Arroyo Grande NE Quadrangle, 2006

LEGEND

- Qa** Alluvial clay and sand of valley areas
- Qoa** Older alluvium dissected
- QTp** Paso Robles Formation - pebble, gravel, sand and gravel pebbles
- Tps/Tpsb** Pismo Formation - sandstone
- Tm/Tmd** Monterey Formation
- Approximate boundary of groundwater basin
- Approximate direction of groundwater flow

**REGIONAL GROUNDWATER
BASINS AND GEOLOGIC MAP**
Water Resources Evaluation
Cold Canyon Landfill Expansion
San Luis Obispo County, California

