

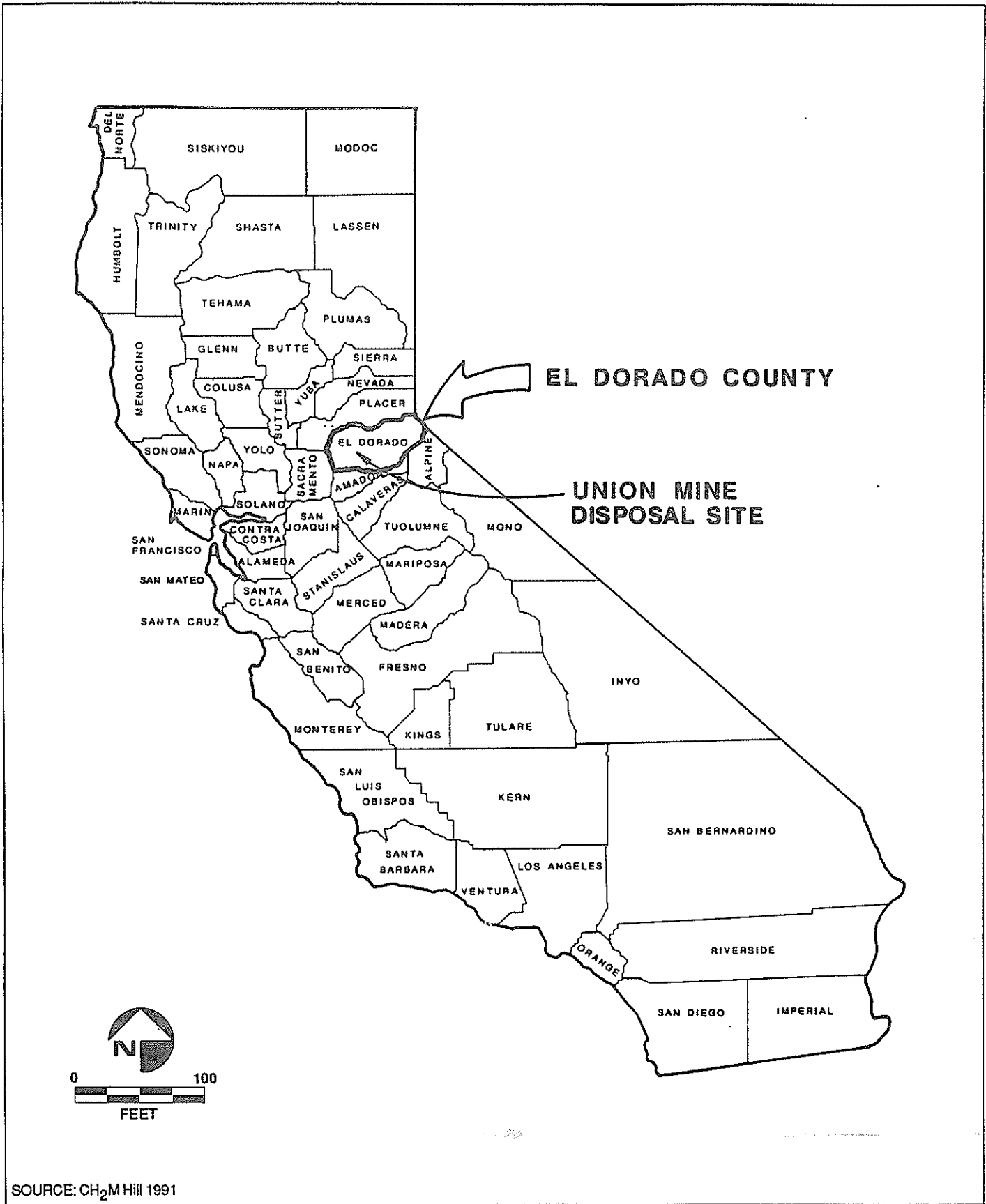
# 1. INTRODUCTION AND BACKGROUND

## Introduction

This environmental impact report (EIR) has been prepared in compliance with the criteria, standards and procedures of the California Environmental Quality Act (CEQA) of 1970, and state CEQA guidelines as amended. The EIR is intended to inform public decision makers, other responsible or interested agencies, and the general public of the potential environmental effects of a proposed project.

This EIR was prepared for the expansion and eventual closure of the Union Mine Disposal Site, which is located on an existing 217-acre parcel, plus an additional 20 acres of private property in the western portion of El Dorado County, California. The project also consists of the development of a leachate/septage treatment plant and ancillary facilities near the existing landfill which will be evaluated under a separate CEQA analysis (Figure 1-1 and Figure 1-2). As part of ~~separate environmental considerations~~, this project the County of El Dorado is currently initiating the re-zoning of 200+ acres of BLM property adjacent to the Union Mine Disposal Site, plus the 20-acre previously privately owned parcel previously mentioned from RA-20 (rural agriculture) to A (agriculture). The County is in the process of acquiring 92 93+ acres of the BLM property through a land exchange. ~~The County has filed a negative declaration for the rezone (see Land Use, Section 3K).~~ The Department of the Interior, Bureau of Land Management (BLM) is ~~preparing~~ prepared a concurrent NEPA (National Environmental Protection Act) driven Environmental Assessment (EA) for the 92 93+ acre land exchange with El Dorado County. The EA did not identify any significant environmental effects resulting from the propose land exchange. A Finding of No Significant Impact (FONSI) was determined and prepared for the land exchange. The EA and the FONSI are included in this report as Appendix I.

The Union Mine Disposal Site is a Class III municipal solid waste disposal site; it is owned by the County of El Dorado and operated by El Dorado Landfill, Inc. (EDL). The site and the area around the site were mined extensively for gold from 1850 to 1940, and the site is underlain by underground workings from the Church and Union Mines. Records maintained by El Dorado County indicate that the



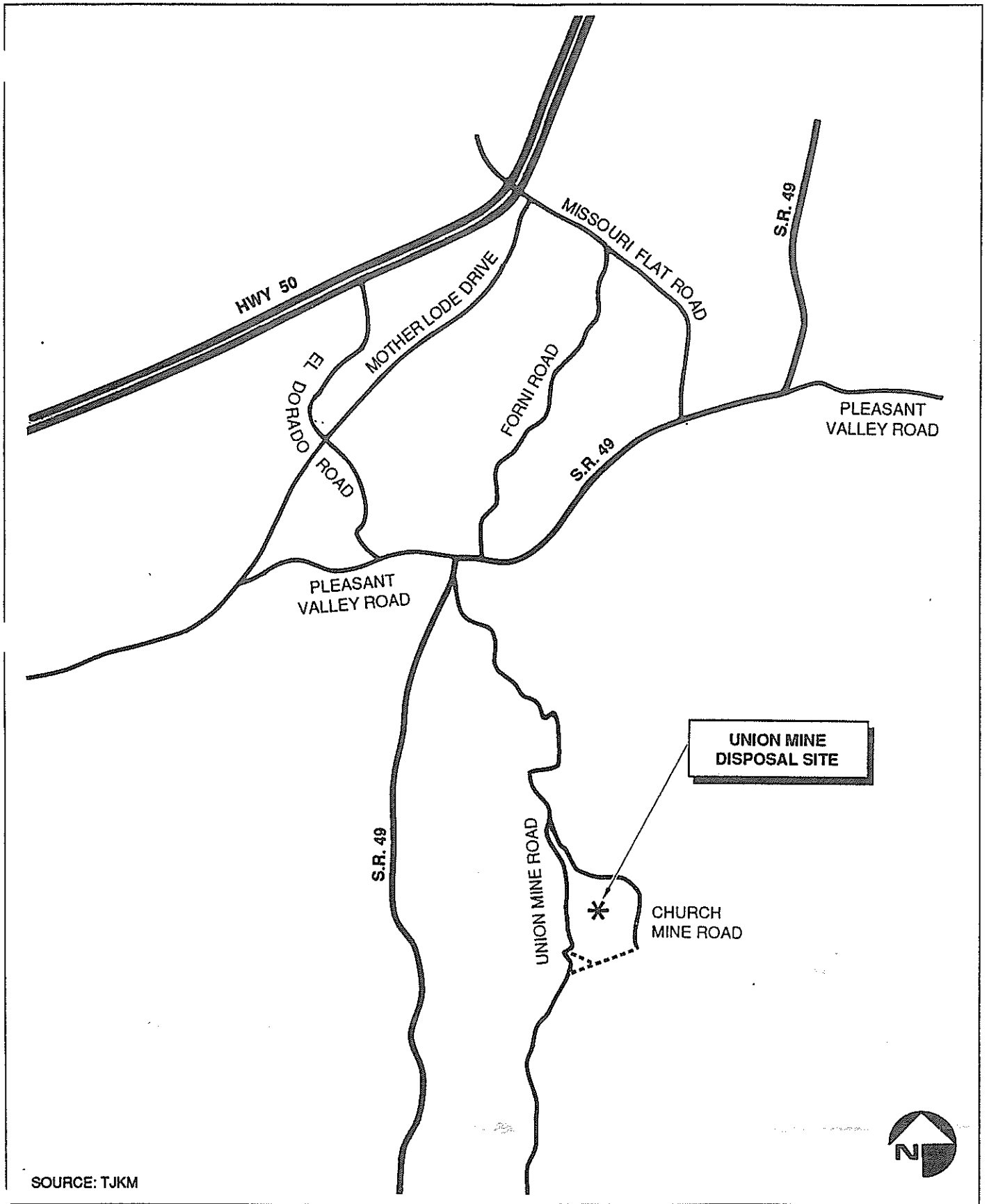
SOURCE: CH<sub>2</sub>M Hill 1991

FIGURE



General Site Location

1-1



SOURCE: TJKM



Vicinity Map

FIGURE

1-2

property was used as an illegal refuse dump as early as the 1940s. The County of El Dorado obtained the 217-acre property in June 1962 and operated the facility as an open burn dump until 1969, at which time it was converted to a solid waste sanitary landfill. The site was operated by the El Dorado County Department of Public Works until 1978, when the operation of the facility was contracted to El Dorado Landfill, Inc.

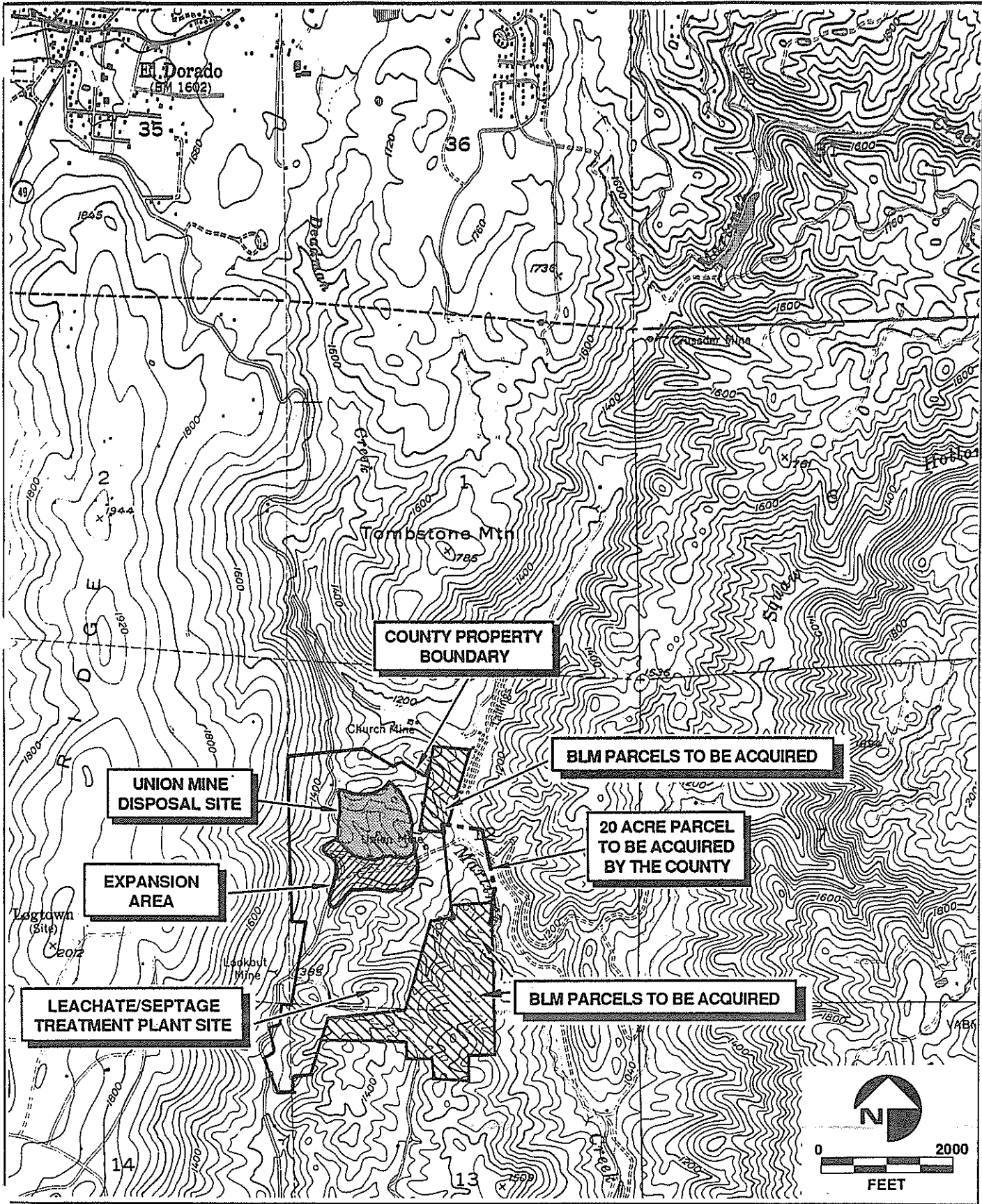
The existing waste disposal unit at the Union Mine Disposal Site currently occupies approximately 33 acres of the 217-acre county property. The county is currently acquiring additional buffer lands adjacent to the Union Mine Disposal Site which will bring the total acreage to over 350 acres. In 1990, the landfill received an estimated 312,000 cubic yards (approximately 64,000 tons) of nonhazardous solid wastes. The proposed expansion would extend the landfill area approximately 14 acres south of the existing fill area. The service life of the existing landfill plus the expansion area is expected to provide disposal capacity for approximately 22.6 years.

#### Setting and Location

The site is located approximately 3 miles south of the town of El Dorado in El Dorado County, California. Access to the site is along Union Mine Road, a paved two-lane road maintained by the county. The active solid waste disposal site is confined to approximately 33 acres in the northern portion of the 217-acre parcel owned by the county. The location of the parcel and the Union Mine Disposal Site is shown in Figure 1-3.

The existing Union Mine Disposal Site is situated in a canyon with rugged, steep topography. The elevations of the ridges surrounding the site range from 1,180 to 1,475 feet mean sea level (MSL) (Figure 1-3). The elevation of the current active waste disposal area ranges from 1180 to 1280 feet MSL. Slopes surrounding the site are heavily vegetated with brush and trees.

The top of the existing disposal site has a minimum slope of 1 percent, with existing side slopes of up to 1.5:1 (horizontal:vertical) having 15-foot-wide horizontal benches. The landfill configuration generally slopes to the south and east into the existing canyon and gullies. Martinez Creek, also known as Deadman's



FIGURE

1-3



Topographic Vicinity Map of Union Mine Disposal Site

Creek, is a perennial stream which flows year-round approximately 500 feet east of the landfill. All surface runoff from the site drains into an unnamed tributary to the south and then to Martinez Creek.

#### Purpose, Need, and Objectives

El Dorado is a rural county with only two incorporated cities, Placerville and South Lake Tahoe. More than 70 percent of the 132,750 residents (1990) live outside the incorporated cities. The county has been divided into two distinct waste management areas: the West Slope Waste Management Area and the Lake Tahoe Waste Management Area (Figure 1-4.)

The Union Mine Disposal Site is the only operating municipal waste facility serving the western portion of El Dorado County (West Slope Waste Management Area). Municipal solid waste generated in the Lake Tahoe Waste Management area is now sent to the Douglas County landfill in Gardnerville, Nevada, via the South Lake Tahoe transfer station. As of approximately October 1, 1991, solid waste from the Lake Tahoe Waste Management Area will be shipped to the Lockwood Landfill in Storey County, Nevada.

The proposed project would expand the capacity of the existing landfill and would provide continued solid waste disposal capacity for western El Dorado County. As stated in the 1989 revision of the El Dorado County Solid Waste Management Plan (CoSWMP), the generation of municipal solid waste should increase proportionately with the rise in the county's population. The population of El Dorado County is expected to increase at an average rate of 3.6 percent per year through the year 2000 (an increase of over 46,000 residents). The county's projected waste generation for the year 1998 is expected to be approximately 40,150 tons greater than the waste generated in 1989 (147,460 tons expected in 1998 versus 107,310 tons in 1989) (County of El Dorado 1989). However, after the year 2000, per capita waste disposal rates are expected to be reduced approximately 50 percent through the implementation of recycling programs, public education, and source reduction mandated by the California Integrated Waste Management Act of 1989 (Assembly Bill 939).

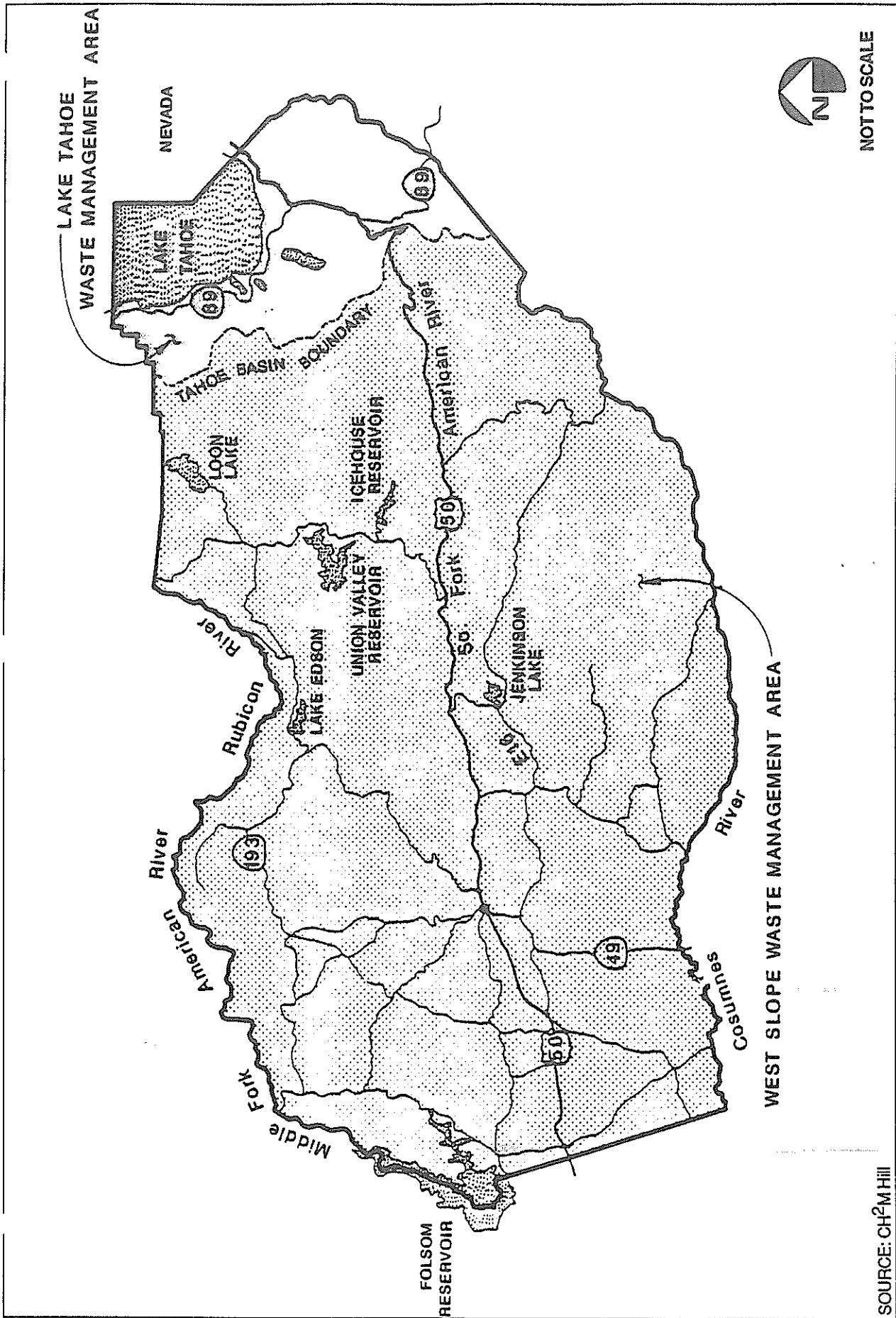


FIGURE  
**I-4**

Waste Management Areas of El Dorado County



### California Integrated Waste Management Act (AB 939)

In 1989, the State of California enacted Assembly Bill (AB) 939, the California Integrated Waste Management Act. The purpose of this act is to "reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible, to improve regulation of existing solid waste landfills, to ensure that new solid waste landfills are environmentally sound, to streamline permitting procedures for solid waste management facilities, and to specify the responsibilities of local governments to develop and implement integrated waste management programs."

The Integrated Waste Management Act and amendments thereto require that each county prepare a countywide integrated waste management plan which will effectively replace the existing county solid waste management plan (CoSWMP). The plans are to be prepared with direct input from cities, in accordance with published regulations, and submitted to the California Integrated Waste Management Board (CIWMB). The Act requires that each plan include three key features: 1) a source reduction and recycling element, 2) a facility siting element, and 3) a discussion of significant waste management problems and specific solutions for respective jurisdictions. All source reduction and recycling elements (SRREs) must be prepared and approved by January 1992. The SRREs will specifically address the volume and types of wastes generated within a jurisdiction. This information will be used for the purpose of providing a baseline for determining specific diversion plans to meet the legislative goals of 25% reduction in waste entering landfills by 1995 and 50% reduction by the year 2000.

### Discretionary Actions Required

The Union Mine Disposal Site is currently operating under a solid waste facilities permit issued by the CIWMB and waste discharge requirements (WDRs) from the Regional Water Quality Control Board (RWQCB). Expansion and closure of the landfill will require permits and approvals from several regulatory agencies. If the landfill expansion is implemented as proposed, a Special Use Permit will be required from the County Planning Division. A rezoning of the 20-acre private parcel and the 92 93+ acre BLM property to be acquired by the county will also be required (currently in process as Resolution No. 50-91). Additional discretionary



requirements include new WDRs from the RWQCB, and a new solid waste facilities permit from the CIWMB.

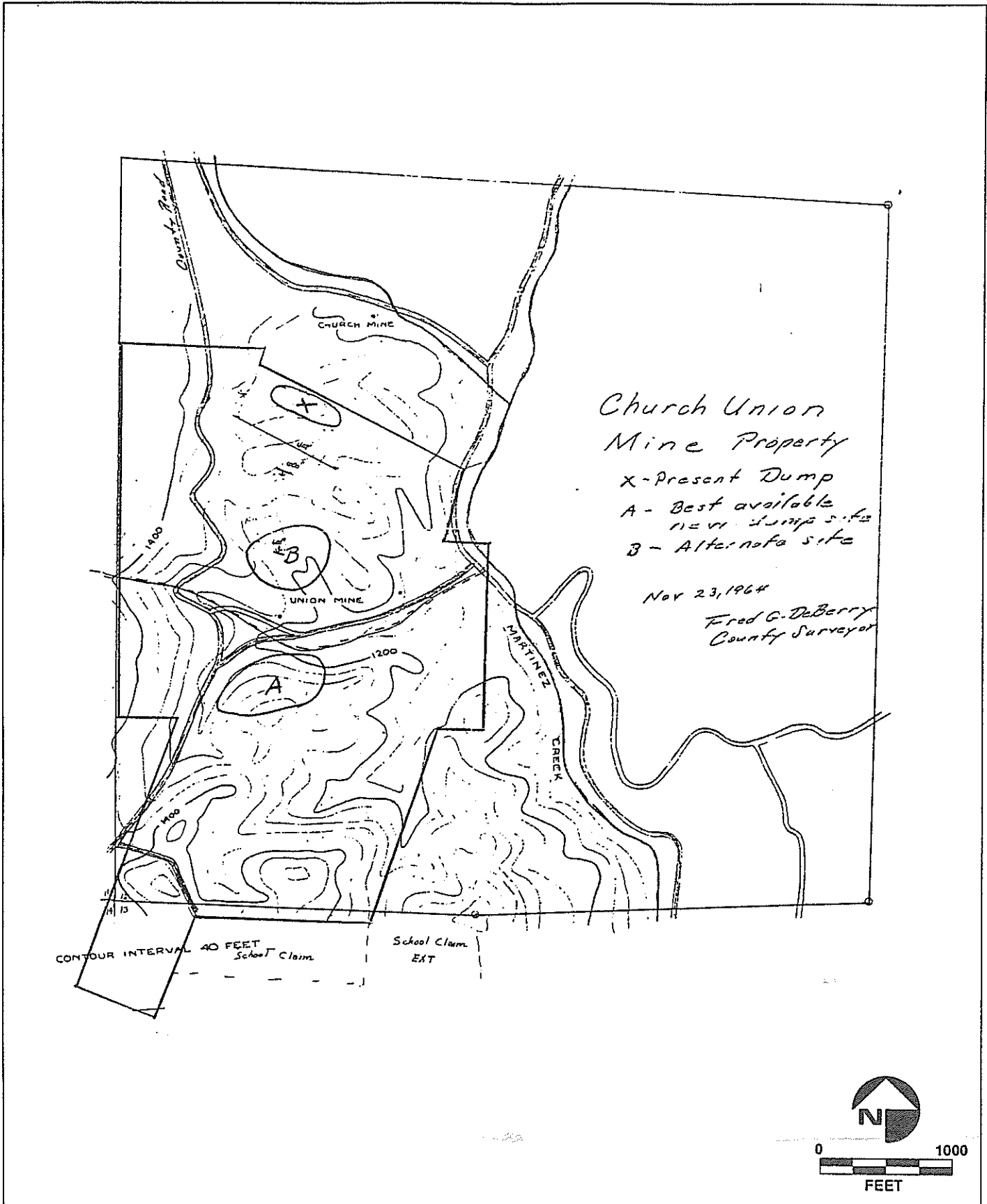
#### Historical Discretionary Actions

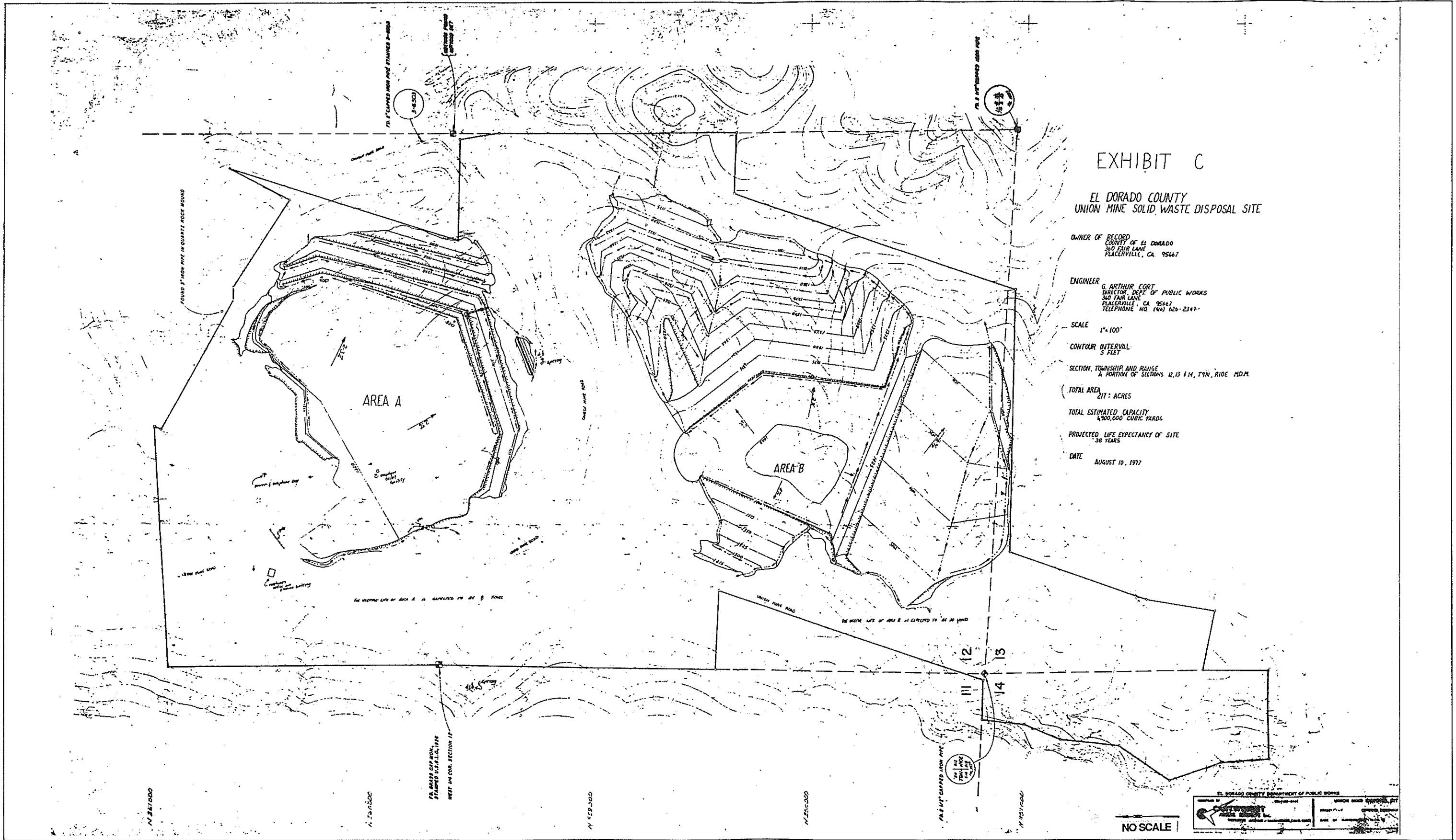
The initial permit for operation of the landfill was issued by the El Dorado County Department of Public Works in August 1977. A solid waste facilities permit (Decision 78-225) was issued by the State Solid Waste Management Board on December 14, 1978. A new solid waste facilities permit is currently being prepared and will be issued prior to the initiation of expansion activities. A permit of waste discharge was issued in 1972 by the RWQCB as Order No. 72-227 for the operation of a Class II-a solid waste disposal site (now called Class III); this order was revised in 1980 by Order No. 80-023. New waste discharge requirements, Order No. 88-149, were adopted by the RWQCB on August 12, 1988. The WDRs were subsequently modified in 1989 due to RWQCB Cease and Desist Order No. 89-244 for arsenic contaminated soils (which have since been excavated and removed for disposal at the Kettleman Hills Class I facility in Kern County, California).

#### Site History and Historical Operations

As mentioned previously, the landfill site and surrounding areas were mined extensively for gold from 1850 to 1940. In 1962, the county acquired the property and operated the site as a refuse burn dump until 1969, when the site was converted to a solid waste landfill. Figure A shows the landfill site plan as it was envisioned in 1964. Figure B shows the county's landfilling intentions from the site's 1978 Solid Waste Facilities Permit.

Mining History. The Union Mine Disposal Site is underlain by the Mariposa meta-sedimentary geologic unit, which is composed of clay slates, graphitic schists, and interbeds of greywacke and pebble conglomerates. Numerous hydrothermal quartz veins occur in shear zones, bedding planes, and joint systems within this formation. These veins provide the mineralized zones (gold) that were mined so extensively in the area.





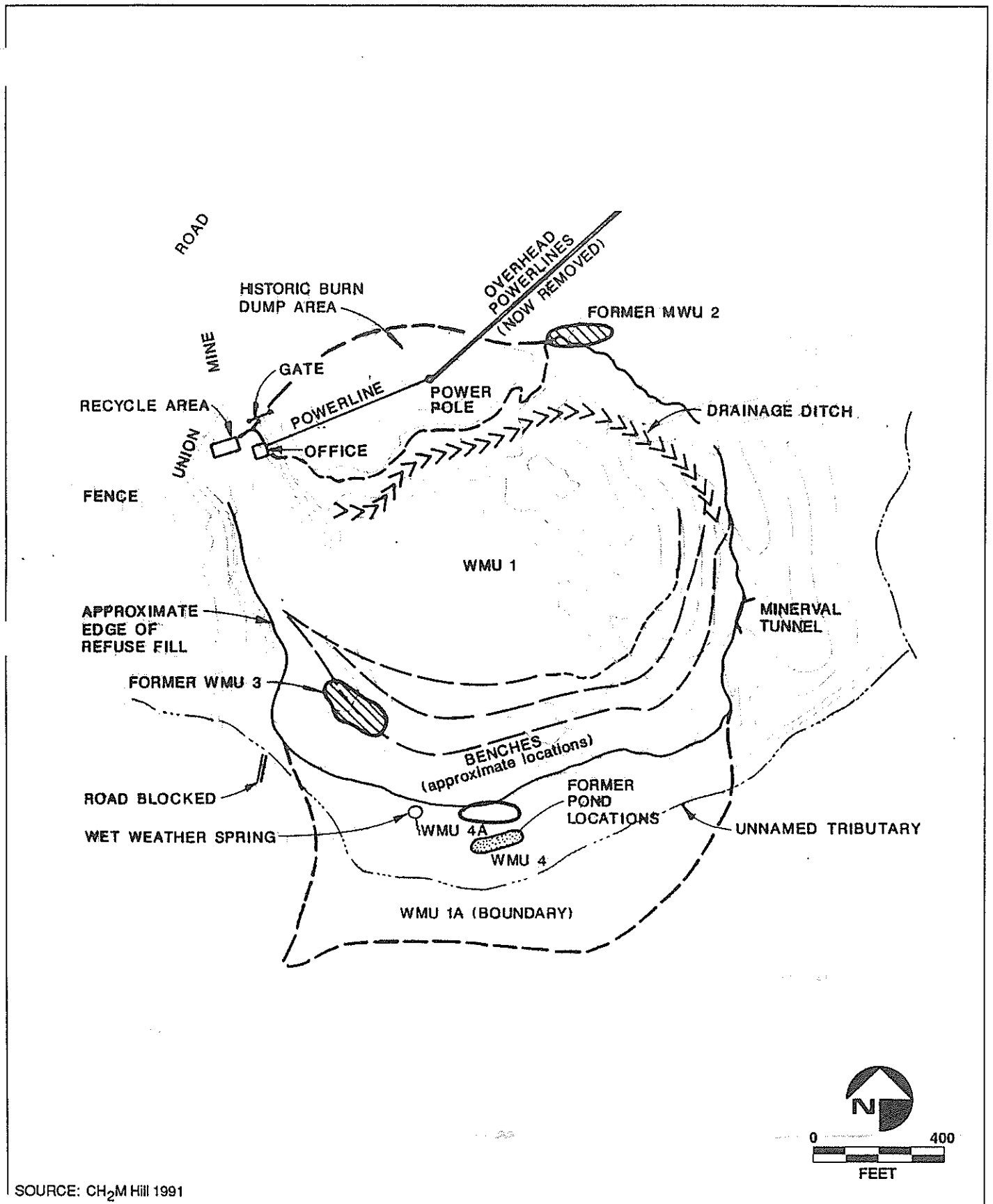
Seven patented (now abandoned) mining claims are located within the county-owned Union Mine Disposal Site property, and include the Church–Union, Sam Hill, Empress–"Julia Beard", Alabama, Golden Rod, Gold Dust, and Minerva. A more detailed discussion of the site's history is included in Section 3E, Cultural Resources/Archaeology, as well as Appendix F of this EIR.

Disposal History Prior to Activation of Sanitary Landfilling. Illegal dumping of wastes had begun on the site by the early 1940s. Refuse was illegally placed in the canyon areas, along roadways, and also down open mine shafts. Prior to 1969 and the operation of the site as a sanitary landfill, the Union Mine Disposal Site operated as a burn dump. The area of the burn dump is reported to have extended from what is now the borrow area down the slopes now overlain by refuse fill. The burn dump activities were responsible for some nuisance complaints. Residue from the burn activities was bulldozed from the face and became scattered on the hillsides (Peters 1964). A portion of the dump area was set aside for the disposal of car bodies and other bulky materials; however, many car bodies were dumped on the hillsides surrounding the disposal site (Peters 1964).

Historical Waste Disposal Areas. The historic waste management facility consisted of four waste disposal areas (known at that time as waste management units or WMUs), as shown in Figure 1-5. At this time, only the existing active landfill and portions of old ponds are identifiable onsite. Current and historic waste disposal areas are described below.

Existing Active Landfill (formerly referred to as WMU-1). The existing landfill extends above the natural topography of the canyon and covers an approximate area of 33 acres. The existing landfill is unlined and constructed over native materials. The county has estimated that the existing landfill area has a total refuse capacity of 3.1 million cubic yards, and as of 1991, approximately 1.1 million cubic yards of capacity remains. The proposed landfill expansion would provide approximately 1.7 million cubic yards of additional capacity, for a total capacity of 4.96 million cubic yards.

Inactive Septage Pond Within Northern Area of the Existing Landfill (No Longer Identifiable; formerly referred to as WMU-2). The surface area of the pond has been documented by the county as approximately 40 feet by 140 feet.



FIGURE

1-5

Site Features

It contained septage tank pumping residue and grease trap waste. Records indicate that the pond was constructed in 1981 with a liner of compacted natural geologic materials. The pond regularly received approximately 600,000 to 950,000 gallons per year of septage wastes from 1982 to 1985. The discharge of septage wastes into the pond ceased in 1986. In 1987, several loads of septage were discharged into the pond due to an emergency shutdown at the El Dorado County Sewage Treatment Facility (EMCON 1987). Grease trap wastes consisting of nonrenderable vegetable and animal fats were regularly discharged to the pond until 1987. According to the operator, the grease trap wastes remaining in the pond were mixed with soil in 1987, added to the pond, and the pond was covered with native soil and rock. The pond has since been covered with refuse and is now intermingled within the northern area of the landfill.

Inactive Septage Pond Located in the Southwest Corner of the Active Landfill (No Longer Identifiable; formerly referred to as WMU-3). The pond is documented to have measured approximately 150 feet by 500 feet. The pond received sewage and grease trap wastes until 1981 (EMCON 1987) when operation of the pond ceased with construction of the septage ponds (WMU-2). The pond is no longer visible. The operator indicated that the pond was closed and covered. At least one lift of refuse now covers the old pond location.

Unlined Ponds (Closed in 1990; formerly referred to as WMU-4 and 4A). At the direction of state agencies, two unlined shallow ponds were constructed by El Dorado County at the southern toe of the landfill in the early 1970s to control the discharge of mine drainage to the unnamed tributary south of the existing disposal site (refer to Figure 1-5). Together, the two ponds were estimated to cover an area of approximately 3,000 square feet. Arsenic concentrations in the sediment in the larger upper pond were detected above 22 CCR hazardous levels in 1988, and the pond was declared subject to the Toxic Pits Cleanup Act of 1984 (TPCA) (RWQCB 1988). Discharge to the ponds ceased in 1988 in order to meet the requirements of the TPCA. The county was issued an exemption by the RWQCB from the provisions and requirements of TPCA on December 8, 1989. The county prepared an Arsenic Mitigation Report that was submitted to the RWQCB in March 1990. The report was submitted in response to Cease and Desist Order No. 89-244 which required the county to

close WMU-4 and dispose of soils contaminated with arsenic. The Cease and Desist Order required the county to remove contaminated soils by October 1, 1990 and was, in fact, completed on September 30, 1990. In compliance with the order, the soils contaminated with arsenic were excavated and disposed of at the Class I Kettleman Hills hazardous waste facility. The area has been regraded to prevent ponding.