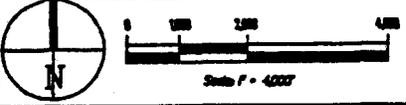


Placer County General Plan

Figure _____
Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND Penryn Waste Treatment Facility

- Streets
- County Line
- Waterways
- District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

PLACER COUNTY DEPARTMENT OF PUBLIC WORKS - SMD NO. 3

General Information: The Placer County Department of Public Works Sewer Maintenance District No. 3 wastewater management facility is located 5 miles east of Rocklin and 1.5 miles west of the Folsom Reservoir on the Auburn Folsom Road at Dick Cook Road. Discharge is governed by RWQCB Waste Discharge Requirements Order No. 90-040, Federal USEPA NPDES Permit No. CA0079367, and Monitoring and Reporting Program No. 90-040, adopted on February 23, 1990.

The treatment and disposal facilities are located in the Loomis Basin with surface drainage to Miners Ravine.

Wastewater Generation/Sources: The Placer County SMD No. 3 serves 300 residences and a minor commercial district (one mini mart). The RWQCB indicated in November 1989 that no industrial wastewater contributors are evident. The average domestic wastewater flow to the plant is currently 70,000 gpd ADWF. Full buildout of the area is estimated at 800 residences.

Collection System Description: The service area of the PCSMD No. 3 is located in the Loomis Basin. There are 300 residential and 1 commercial connections. Most of the collection system was constructed in 1962 using 6-inch to 15-inch clay sewer lines. The system is a gravity type and has about 130 manholes and 3 lift stations. The design capacity of the collection system is 3 mgd PWWF and recent flows suggest the system has seen 30% of the design capacity.

Deficiencies: The existing collection system does not have a significant problem with inflow and infiltration.

Proposed Improvements: There are currently no planned, proposed or required improvements for the collection system.

Wastewater Treatment System Description: Placer County SMD No. 3 wastewater treatment processes consist of screening, primary sedimentation, trickling filtration, secondary sedimentation, clariflocculator/sand filtration, chlorination disinfection and dechlorination. A pressure alarm was installed on the chlorine feed reclaim pump station in September 1990. Sludge processing facilities include anaerobic digestion and drying beds. The design capacity is 350,000 gpd. Currently only about 70,000 gpd, or 20% of the design flow, is seen through the plant. The current WDR's limit plant discharge to less than 300,000 gpd (30-day ADWF).

Solids from the drying beds are disposed of at the Western Regional landfill.

Deficiencies: The treatment plant is operating well below design flow and therefore system operations must be adjusted in accordance to the current flowrates. Historically the plant has had difficulties with recurring effluent pH violations. However, this past pH difficulty should be alleviated with ponding pH control equipment planned to be installed in 1992.

Currently identified treatment system deficiencies include the construction of a new chlorine contact chamber.

Proposed Improvements: Planned, proposed or required improvements to the treatment system include the construction of a new chlorine contact chamber.

Disposal System Description: Effluent is discharged to Miners Ravine and is subject to strict quality objectives during the recreational season.

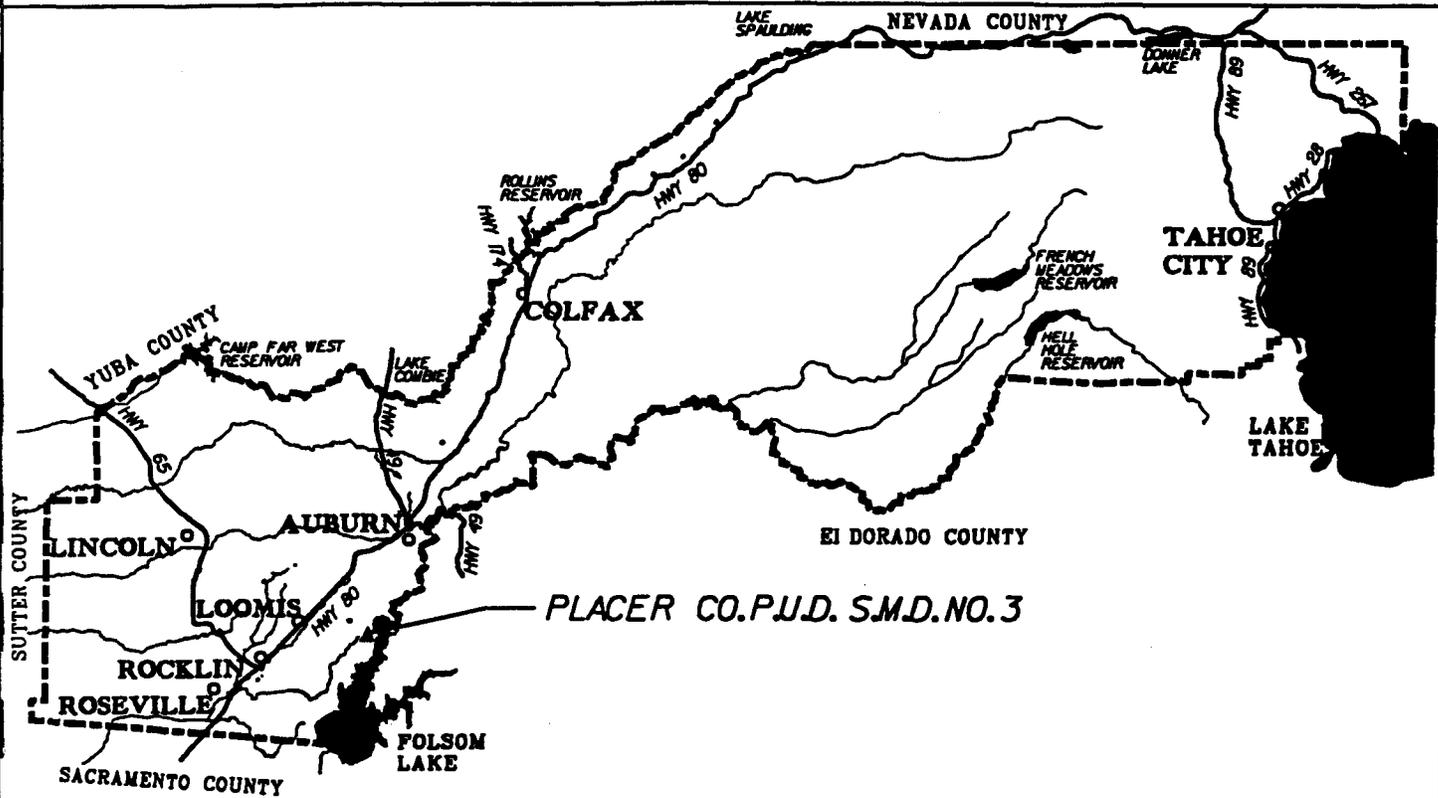
Deficiencies: There are currently no identified disposal system deficiencies.

Proposed Improvements: There are currently no planned, proposed or required improvements to the disposal system.

Financing: Improvement, operations and maintenance costs for the collection, treatment and disposal systems are funded by user fees and connection fees.

System Appraisal: Future growth is limited by the Loomis Basin General Plan recommendations and zoning. The current wastewater treatment plant discharge is limited by permit to 300,000 gpd (30-day ADWF). Plant design capacity is 350,000 gpd (ADWF).

PLACER COUNTY WASTEWATER SYSTEMS



PLACER CO. P.U.D. S.M.D. NO. 3

System Name: PLACER COUNTY DEPT. OF PUBLIC WORKS - S.M.D. NO. 3

Address: 11144 B AVENUE, DEWITT CENTER, AUBURN, CA 95603

Contact Name: WARREN TELLEFSON Phone: (916)-889-7500

Service Area Size: _____ No. Connect.: 300 Population Served: _____

Services Provided: COLL. TREATMENT AND DISPOSAL FOR RESIDENTIAL & COMMERCIAL DEVELOP.

Summary System Description

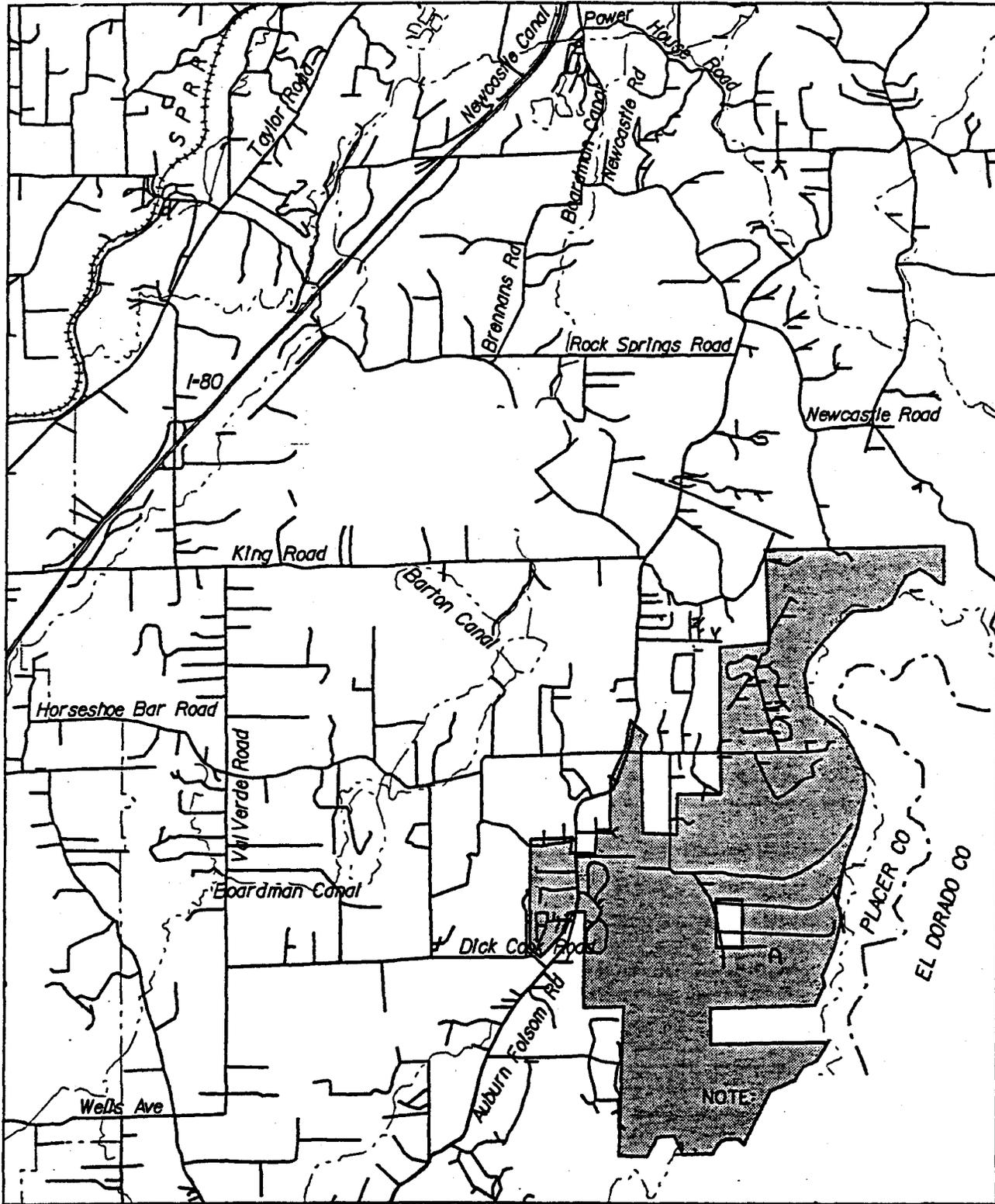
Service Area Characteristics: THE SERVICE AREA IS LOCATED IN LOOMIS BASIN CONSISTING OF LOWER FOOTHILLS OF THE SIERRA NEVADAS. TOPOGRAPHY CONSISTS OF OAK WOODLANDS AND GRASSLANDS. SOILS TYPICALLY HIGH IN CLAY AND WEATHERED GRANITE.

Collection: WASTEWATER GENERATION IS COLLECTED WITHIN 6 TO 15 INCH MAINS AND GRAVITY CONVEYED TO THE TREATMENT PLANT.

Treatment: A 0.35 MGD TREATMENT PLANT CURRENTLY OPERATED AT 20% CAPACITY. TREATMENT PROVIDED INCLUDES SCREENING PRIMARY SEDIMENTATION, TRICKLING FILTERATION, SECONDARY SEDIMENTATION, CLARIFLOCCULATOR/SAND FILTERATION, CHLORINATION AND

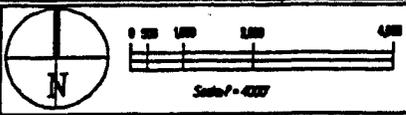
Disposal: EFFLUENT IS DISCHARGED TO MINERS RAVINE. SOLID WASTE IS HAULED AWAY TO WESTERN REGIONAL LANDFILL. DECHLORINATION.

Capacity Limitations: DESIGN CAPACITY IS CURRENTLY 0.35 MGD. THE PLANT IS CURRENTLY OPERATING AT ABOUT 20% CAPACITY.



Placer County General Plan

Figure — Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND Placer Co. Dept. of Public Works SMD No. 3

- Streets
- County Line
- Waterways
- District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

PLACER COUNTY SERVICE AREA NO. 23--BLUE CANYON

General Information: Placer County Service Area No. 23 serves the community of Blue Canyon, located 36 miles northeast of Auburn (Sec 14, T16N, R11E, MDB&M). Discharge from the facility is permitted by RWQCB Waste Discharge Requirement Order No. 73-9 which was adopted on July 28, 1972.

Surface drainage is to Blue Canyon, a perennial stream, thence to the North Fork of the North Fork American River.

Wastewater Generation/Sources: Blue Canyon has a present transient recreational population occupying 26 residential and no commercial connections. The wastewater is considered domestic in nature.

Collection System Description: The collection system was originally constructed in 1973. Most of the collection system was constructed using 6-inch clay sewer line and is designed to flow by gravity. Manholes are sealed with rubber "O" rings and permit minimal infiltration and inflow. The mains are flushed out when necessary using a hydro-vacuum tank truck.

Deficiencies: There are currently no identified collection system deficiencies.

Proposed Improvements: There are no currently planned, proposed or required improvements to the existing collection system.

Wastewater Treatment and Disposal System Description: The wastewater management system at Blue Canyon was built in 1973. Wastewater flow is conveyed to a 16,000 gallon underground septic tank-leachfield system in the winter. The septic tank is designed to periodically alternate flow between two leach lines. Originally sewage was planned to be diverted to two evaporation/percolation ponds in the summer or when infiltration capacity was exceeded in winter; however, the pond system is not used to date. The design capacity of the system is 25,000 gpd or equivalent to 280 persons.

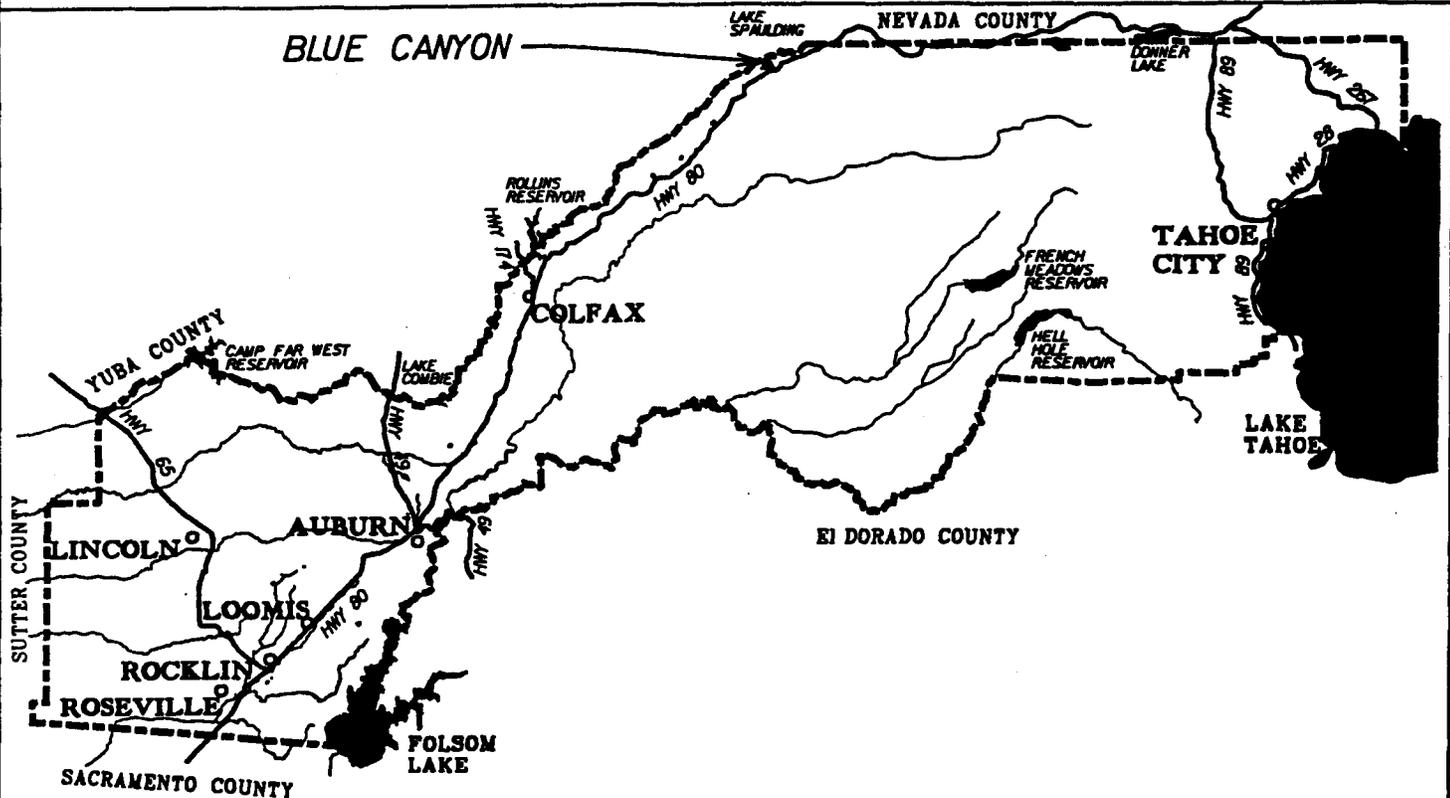
Deficiencies: Individual septic tank systems in the area are in various stages of malfunction. Currently there are no identified treatment and disposal deficiencies in the existing system.

Proposed Improvements: There are currently no planned, proposed or required improvements to the existing treatment/disposal system.

Financing: Improvements, operations and maintenance costs are funded by user and connection fees.

System Appraisal: In general, the overall condition of the Placer county Service Area No. 23 (Blue Canyon) collection, treatment and disposal system is considered good. It is anticipated that adequate capacity remains to meet future demands. Existing connections only number 26 residences and the design capacity of the system is estimated to be 280 persons.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: PLACER COUNTY SERVICE AREA NO.23 - BLUE CANYON

Address: 11144 B AVENUE, DEWITT CENTER, AUBURN, CA 95603

Contact Name: WARREN TELLEFSON Phone: (916)-889-7500

Service Area Size: _____ No. Connect.: 26 Population Served: _____

Services Provided: WASTEWATER COLLECTION AND MANAGEMENT

Summary System Description

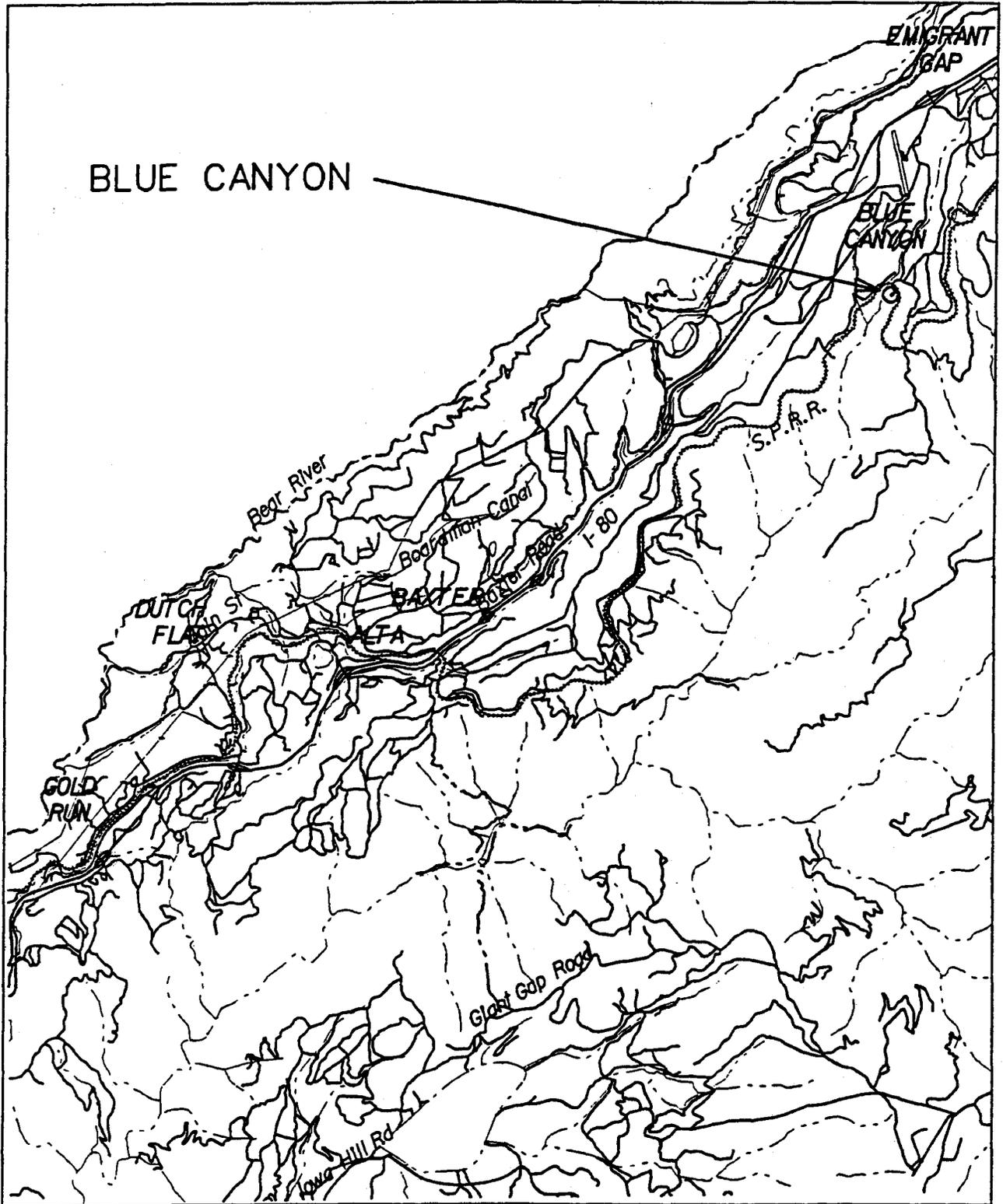
Service Area Characteristics: BLUE CANYON IS LOCATED 36 MILES NORTHEAST OF AUBURN ALONG HWY 80. THE AREA IS FORESTED WITH AN ABUNDANCE OF EXPOSED GRANITE IN THE SIERRA NEVADA RANGE.

Collection: THE COLLECTION SYSTEM WAS CONSTRUCTED IN 1973, COMPRISED PRIMARILY OF 6 INCH CLAY PIPE. THE SYSTEM GRAVITY FLOWS TO A 16,000 UNDERGROUND SEPTIC TANK - LEACHFIELD DISPOSAL SYSTEM. THERE ARE 26 RESIDENTIAL CONNECTIONS.

Treatment: STANDARD SEPTIC - LEACHFIELD TREATMENT IS PRACTICED. THE SEPTIC TANK IS DESIGNED TO ALTERNATE BETWEEN TWO LEACHFIELDS.

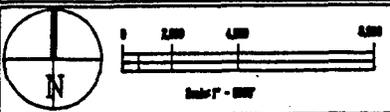
Disposal: EFFLUENT IS DISPOSED OF BY ONE OF THE AVAILABLE LEACHFIELDS. SOLIDS ARE PUMPED FROM THE SEPTIC TANK AND HAULED TO A PERMITTED FACILITY FOR DISPOSAL.

Capacity Limitations: MALFUNCTIONS AMONG AREA SEPTIC SYSTEMS NOT USING THE COMMON TANK ARE NUMEROUS. EXISTING FACILITIES HAVE ADEQUATE CAPACITY TO MEET FUTURE SERVICE NEEDS.



Placer County General Plan

Figure — Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND Placer County Service Area No. 23-Blue Canyon

- Streets
- Waterways
- County Line
- District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

PLACER COUNTY SERVICE AREA NO. 24--APPLEGATE

General Information: Placer County Service Area No. 24 serves the town of Applegate, which is located north of Bowman on Highway 80 (Sec 4,5,8 & 9, T13N, R9E, MDB&M). Wastewater is regulated by RWQCB Waste Discharge Requirements Order No. 73-10 adopted on July 28, 1972.

Surface drainage is to an intermittent tributary of Clipper Creek thence the North Fork American River.

Wastewater Generation/Sources: Presently, the Applegate wastewater collection system consists of only 35 connections. There are 33 residential and 2 commercial connections. The remaining unconnected homes rely on septic tank-leachline systems. The wastewater flow to the treatment system rarely exceeds 10,000 gpd.

Collection System Description: The collection system consists of about 7,500 linear feet of 6-inch line and one lift station.

Deficiencies: Currently there are no identified collection system deficiencies.

Proposed Improvements: Currently there are no planned, proposed or required collection system improvements.

Wastewater Treatment and Disposal System Description: The Applegate Wastewater Treatment System, constructed in 1974, consists of a lift station and three oxidation ponds operated in series, each containing one acre. The treatment system is designed for a population of 100, or 10,000 gpd.

Provisions are made for overflow from pond No. 3 to an intermittent tributary of Clipper Creek which is tributary to the North Fork American River. Disposal of wastewater during ordinary conditions is by evaporation and percolation.

Deficiencies: In 1986, overflow of an undetermined amount of partially treated wastewater pond effluent occurred.

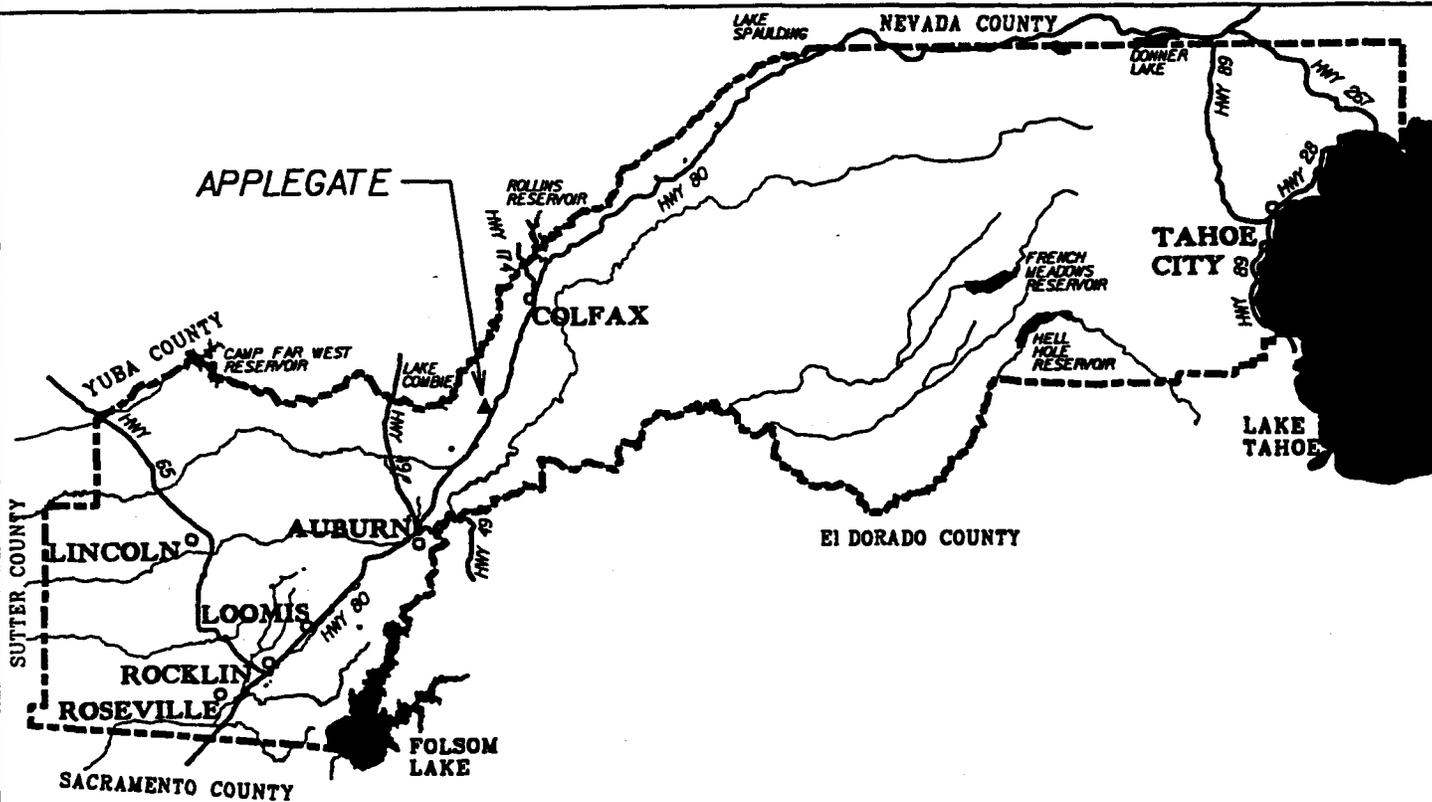
Identified current system deficiencies include lack of plant capacity to handle a 100-year precipitation event.

Proposed Improvements: There are currently no planned, proposed or required treatment or disposal system improvements.

Financing: Improvements, operations and maintenance costs are funded by user fees and connection fees.

System Appraisal: The treatment/disposal system is at capacity and the area has a self-imposed connection ban. Currently there are no plans for near term expansion or upgrades to the system.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: PLACER COUNTY SERVICE AREA NO.24 APPELEGATE

Address: 11144 B AVENUE, DEWITT CENTER, AUBURN, CA 95603

Contact Name: WARREN TELLEFSON Phone: (916)-889-7500

Service Area Size: _____ No. Connect.: 35 Population Served: _____

Services Provided: PROVIDE FOR COLLECTION AND DISPOSAL FOR RESIDENCES

Summary System Description

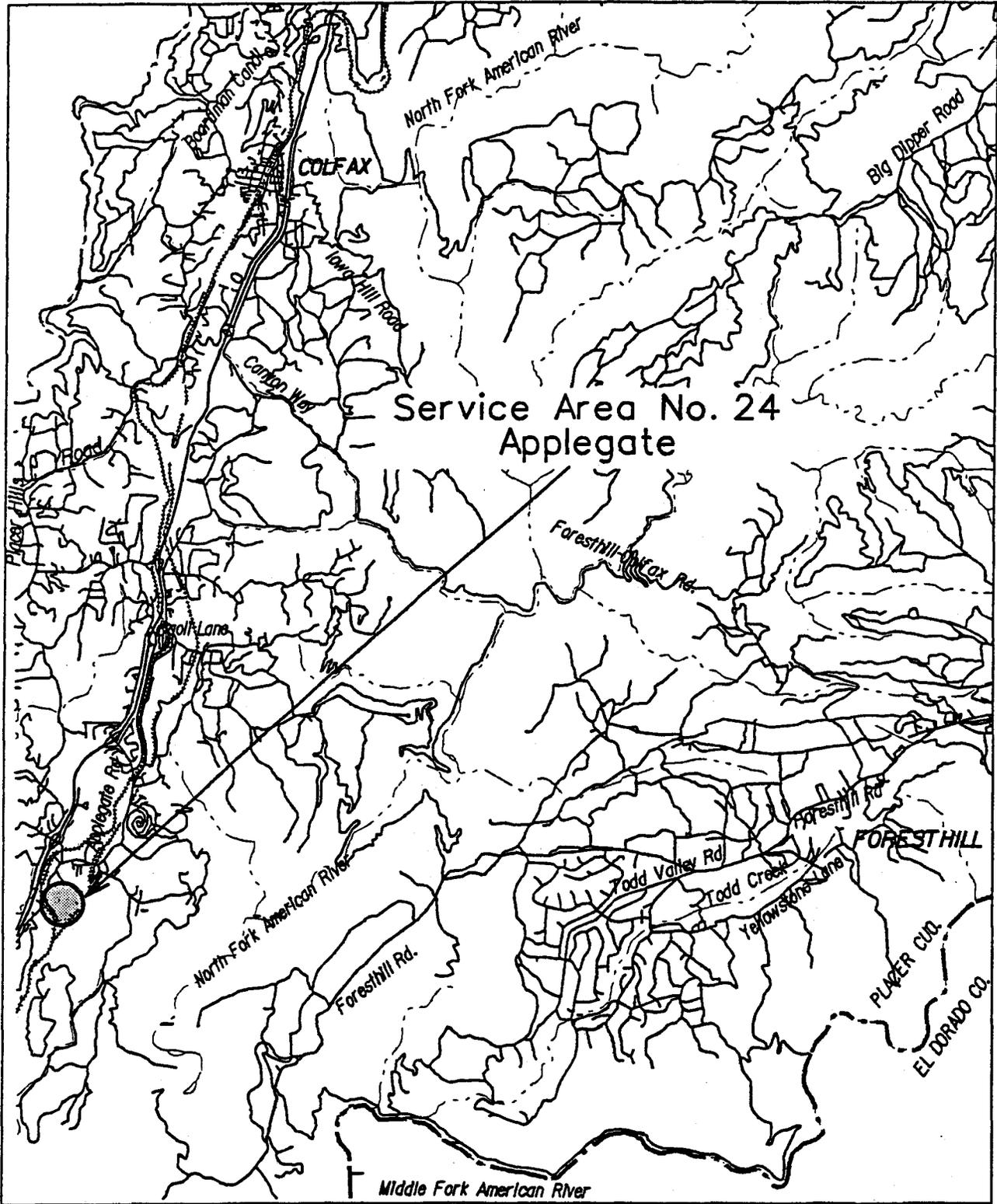
Service Area Characteristics: APPELEGATE IS LOCATED JUST NORTH OF BOWMAN ALONG HWY 80. THE AREA IS IN THE FORESTED SIERRA NEVADAS.

Collection: WASTE IS COLLECTED AND CONVEYED TO A LIFT STATION VIA 6 INCH PCP PIPE.

Treatment: EFFLUENT IS CONVEYED BY THE LIFT STATION TO THREE OXIDATION PONDS FOR TREATMENT AND DISPOSAL.

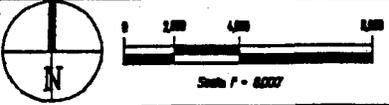
Disposal: EVAPORATION/PERCOLATION THROUGH THE THREE PONDS AT THE WWTP.

Capacity Limitations: THE SYSTEM IS DESIGNED TO HANDLE 10,000 GPD. CURRENTLY THERE IS A CONNECTION BAN SINCE THE SYSTEM IS AT CAPACITY.



Placer County General Plan

Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND
 Placer Co. Service Area No. 24-Applegate

- Streets
- County Line
- Waterways
- District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

PLACER COUNTY SERVICE AREA NO. 28--SHERIDAN

General Information: Placer County Service Area No. 28, Zone No. 6, located on 11th Street, Sheridan, CA, serves the community of Sheridan (Sec 13, T13N, R5E, MDB&M). Discharge is governed by RWQCB Waste Discharge Requirements Order No. 88-157, Federal EPA NPDES Permit No. CA0079341, and Monitoring and Reporting Program No. 88-157, adopted on September 23, 1988.

Surface runoff from the treatment plant area is to a drainage ditch, tributary to Yankee Slough, then to the Bear River. Seasonal surface discharge is permitted from 1 December to 31 March under certain conditions as outlined in the WDR's.

Wastewater Generation/Sources: The community of Sheridan contains 200 homes and businesses and discharges domestic wastewater. Placer County imposed a moratorium on new connections in 1985 in response to chronic hydraulic overloading at the treatment plant. In 1988 the treatment and disposal facilities were permitted by the RWQCB to mitigate the overloading and satisfy the regulatory mandates which now allow seasonal surface discharge. It was determined that the ponds were not big enough to handle winter flow conditions when no spray irrigation disposal is available. New WDR's were issued by the RWQCB to allow seasonal surface discharge of treated plant effluent after chlorination disinfection.

Collection System Description: Most of the existing collection system was constructed in 1974 using 6-inch to 8-inch PVC sewer lines. The system uses gravity collection with typical manhole spacing and one lift stations.

Deficiencies: Inflow and infiltration to the existing collection system has been a problem in the recent past. Excessive inflow problems are the principal cause for hydraulic capacity problems experienced at the Sheridan plant since 1982.

Proposed Improvements: Planned, proposed or required collection system improvements include maintenance to mitigate inflow and infiltration problems.

Wastewater Treatment System Description: The Sheridan wastewater treatment system consists of three oxidation ponds and a chlorination system. The plant has a design capacity of 40,000 gpd (ADWF) and the existing plant flow is at about 40,000 gpd (ADWF). The treatment plant site is about 20 acres and does not have much room for expansion of either ponds or irrigation systems. Additional property is not available for future expansion.

Deficiencies: Past compliance issues at the treatment plant include some operational violations such as elevated TSS levels and non-chlorinated plant effluent, freeboard in the ponds and a lift station overflow. Provisions were made in to correct these occurrences and operations planning has made adjustments to forestall additional occurrences.

Operational difficulties due to hydraulic overloading related to the collection system problems with inflow and infiltration also cause system upset.

There are no other currently identified deficiencies with the existing treatment plant.

Proposed Improvements: There are no currently planned, proposed, or required improvements to the treatment system other than the exception that a new system will be proposed prior to any new connections are allowed. A new treatment system may require development of a new treatment facility

with discharge to the Bear River watershed.

Disposal System Description: The existing disposal system consists of a 7 acre spray irrigation system for dry weather disposal and a seasonal surface discharge system for wet weather disposal to a drainage ditch which is tributary to Yankee Slough. Runoff from the spray field is returned to pond No. 1. Wet weather surface discharge is limited by the current WDR's to between 1 December and 31 March and only when the spray field is saturated and the freeboard in the ponds is less than 18 inches for the primary pond and less than 24 inches in the secondary and polishing ponds. Surface discharge must also be sufficiently oxidized and disinfected prior to release.

Deficiencies: The State Department of Health Services and the Placer County Health Department determined that the current level of wastewater treatment at Sheridan is adequate to preclude contamination to the receiving waters. Nevertheless, inadvertent discharge of unchlorinated effluent occurred in 1988 and pond freeboard violations were noted in May 1991.

Ineffective management practices are thought to have aggravated the capacity predicaments experienced at the spray irrigation disposal site.

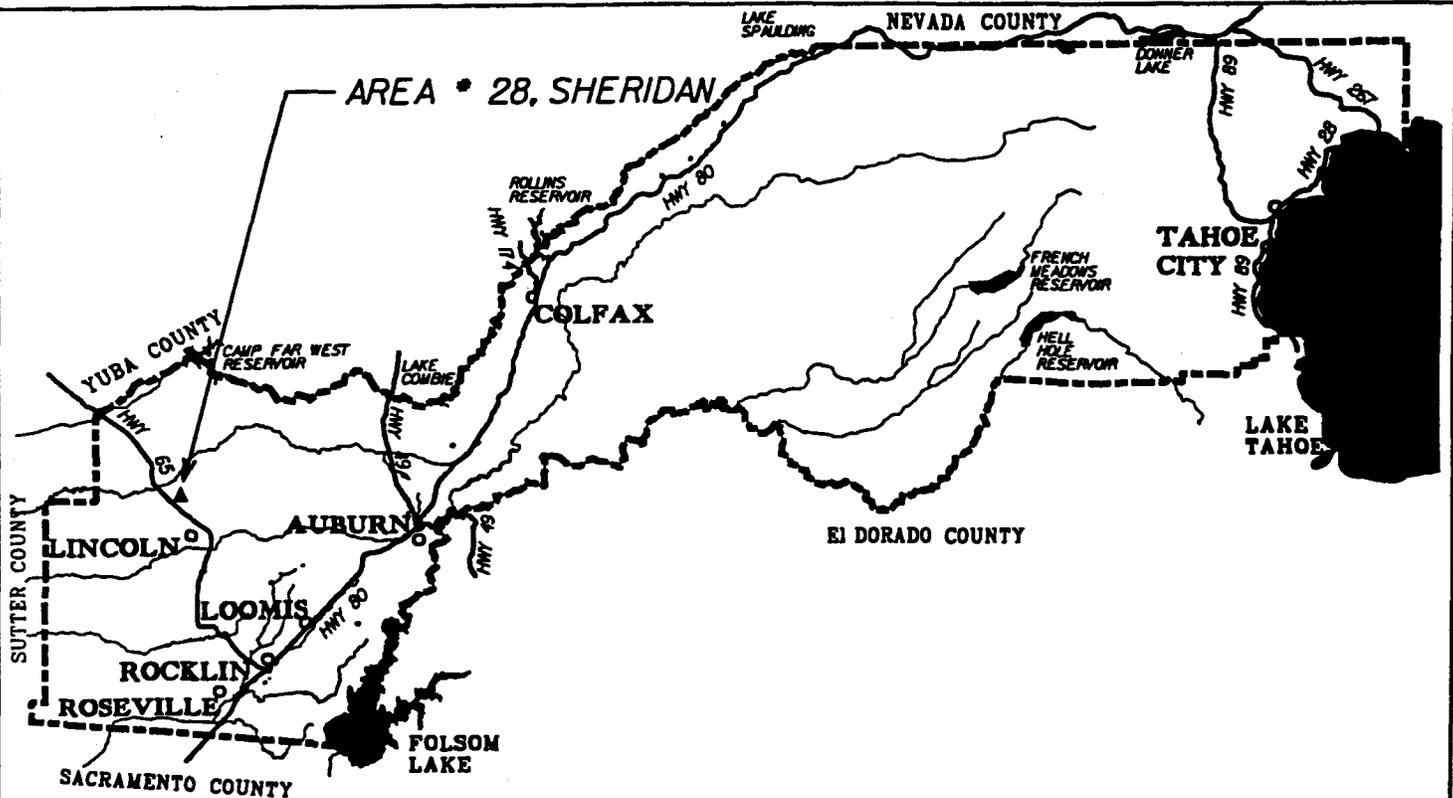
Currently identified disposal system deficiencies include lack of capacity for additional hook-ups.

Proposed Improvements: If new connections are planned or required in the future, facilities upgrade will be necessary.

Financing: Improvement, operations and maintenance costs for Placer County Service Area No. 28, Zone 6, Sheridan sewage collection, treatment and disposal system are funded through user fees and connection fees.

System Appraisal: Perhaps the most prominent problem for the Sheridan wastewater system is the condition of the existing collection system which suffers from excessive inflow and infiltration. Design and permitted disposal capacity for the existing treatment and disposal system is 40,000 gpd (ADWF) and the existing discharge is about 40,000 gpd, or 100% of plant capacity.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: PLACER COUNTY SERVICE AREA NO.28, SHERIDAN

Address: 111444 B AVENUE/DEWITT CENTER, AUBURN CA 95603

Contact Name: WARREN TELLEFSON Phone: (916)-889-7500

Service Area Size: _____ No. Connect.: 200 Population Served: _____

Services Provided: COLLECTION TREATMENT AND WASTEWATER DISPOSAL

Summary System Description

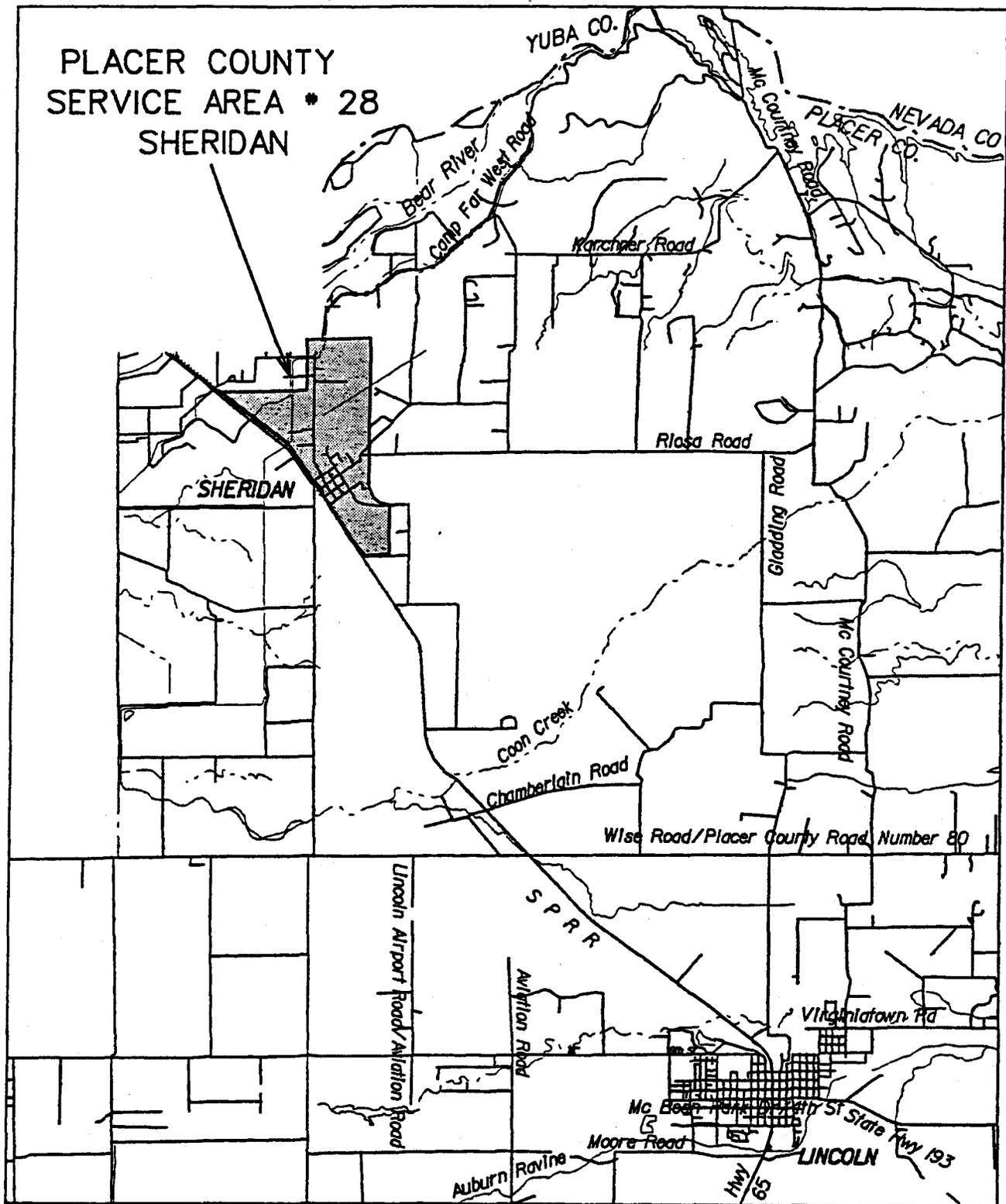
Service Area Characteristics: THE SHERIDAN COMMUNITY IS LOCATED JUST NORTH OF LINCOLN.THE AREA IS MOSTLY LOW-LYING FLAT LAND AND ROLLING HILLS WITH SOME OAKS.

Collection: HOMES AND BUSINESSES DISCHARGE TO A 6 & 8 INCH PVC MAIN CONVEYING SEWAGE TO THE TREATMENT PLANT.THE SYSTEM OPERATES ON GRAVITY. THERE IS ONE LIFT STATION IN THE COLLECTION SYSTEM.

Treatment: TREATMENT AND DISPOSAL FACILITIES WERE RETROFITTED IN 1988 THUS MITIGATING HISTORICAL OVERLOADING.THE TREATMENT SYSTEM CONSISTS OF THREE OXIDATION PONDS AND A CHLORINATION/DECHLORINATION SYSTEM.

Disposal: THE DISPOSAL SYSTEM CONSISTS OF A 7 AC.SPRAY IRRIGATION SYSTEM FOR DRY WEATHER AND SEASONAL SURFACE DISCHARGE DURING WET WEATHER. SLUDGE IS HAULED AWAY TO A PERMITTED FACILITY.

Capacity Limitations: DUE TO LACK OF PLANT CAPACITY,THERE IS A SELF-IMPOSED CONNECTION BAN.



Placer County General Plan

Fig. — **Wastewater Service Area**

Date: 1/15/92

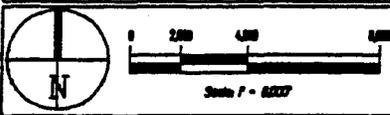
Prepared by:
PSOMAS & ASSOCIATES

LEGEND

Placer Co. Service Area No. 28 - Sheridan

	Streets		County Line
	Waterways		District Service Area

NOTE:
Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.



PLACER COUNTY SEWER MAINTENANCE DISTRICT NO. 1

General Information: Placer County Sewer Maintenance District No. 1 wastewater treatment and disposal facilities are located on the northern end of Auburn just east of Highway 49 (Sec 20, T13N, R8E, MDB&M). The treatment plant is located at 11755 Jaeger Road. Wastewater is collected from the Bell Road area and the Dewitt Center as well as all of North Auburn outside the Auburn City limits.

Wastewater from Placer County Sewer Maintenance District No. 1 is permitted under RWQCB Waste Discharge Requirements Order No. 87-099, Federal USEPA NPDES Permit No. CA0079316, and RWQCB Monitoring and Reporting Program No. 87-099, adopted on June 26, 1987.

Discharge and surface drainage from the wastewater treatment plant site is to Rock Creek at tributary of Dry Creek and the Bear River.

Wastewater Generation/Sources: Modifications and expansion activities at the Placer County SMD No. 1 Wastewater Treatment Plant, funded by the Clean Water Grants Act, were completed in 1984. The improvements to the plant allowed connection in 1985 of the outmoded DeWitt Center Sewage Treatment Plant and service to the Bell Road area, which previously experienced chronic septic system failures. The treatment plant receives municipal wastewater. A wet weather flow of 6.34 mgd was recorded in March 1991.

Collection System Description: Most of the existing collection system was constructed in 1960's and 70's using 6-inch to 24-inch PVC, clay and ACP sewer lines. The system uses gravity collection with typical manhole spacing and 23 lift stations.

Deficiencies: Inflow and infiltration is a problem for the existing collection system. Plans for collection system remediation were undertaken in 1991 to correct collection system deficiencies.

Currently identified deficiencies with the existing collection system include inflow and infiltration problems due to deteriorated pipelines.

Proposed Improvements: Planned, proposed or required collection system improvements include correction of inflow and infiltration problems by continuous annual pipe replacement of approximately 8,000 feet of transite pipe over a 3 year schedule.

Wastewater Treatment System Description: The Placer County SMD No. 1 treatment plant consists of comminution, grit removal and a primary clarifier, rotating biological contactors (RBC's), intermediate clarification, dual media filters, chlorine contact chambers, sludge digestors, final clarifiers, dechlorination processes, sludge belt press, reclaimed water system, and 24,320 square feet of sewage sludge drying beds. Major modifications and improvements to the treatment plant were last completed in 1984 and in 1988. Planned future improvements are scheduled for 1993 and include expansion of the RBC's.

Recent major improvements (1984) to the plant included replacement of the biofilters with RBC's, and addition of dual media effluent filters, a second chlorine contact chamber, and a second sludge digester. In 1988, more filters, a third chlorine contact chamber, and a sludge press were added. The average dry weather flow capacity of the plant, expected to be adequate through 1993, is rated as 1.8 mgd (ADWF). Expansion to 2.3 mgd is planned for 1993.

Deficiencies: Currently there are no identified deficiencies with the existing treatment plant.

Proposed Improvements: An expansion currently planned for 1993, concurring with the present WDR's, will increase capacity to 2.3 mgd. A preliminary engineering report completed in 1988 by Harris & Associates estimated these improvement costs at \$1,965,000.

There are currently no other planned, proposed or required improvement to the treatment system.

Disposal System Description: Effluent from the Placer County SMD No. 1 wastewater treatment plant is discharged into Rock Creek, a tributary of Dry Creek and the Bear River.

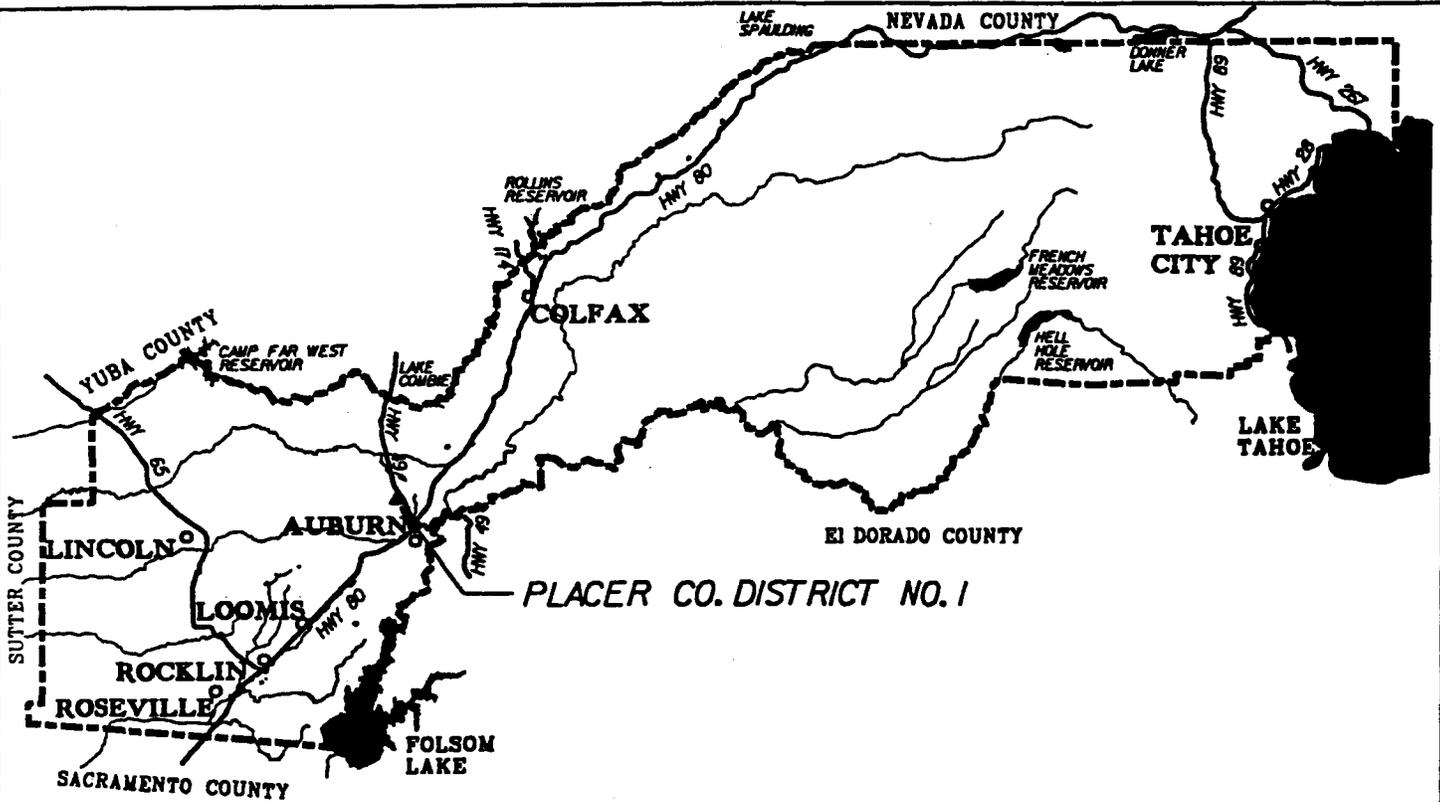
Deficiencies: Past compliance issues are considered minor. The system is well maintained and generally in good compliance with regulatory agency mandates. There are currently no identified deficiencies with the existing disposal system. Problems associated with past minor discharge violations have been corrected.

Proposed Improvements: There are currently no planned, proposed or required improvement to the disposal system.

Financing: Improvement, operations and maintenance costs for Placer County Sewer Maintenance District sewage collection, treatment and disposal system are funded through user fees and connection fees.

System Appraisal: The current discharge limitation is 1.8 mgd for the wastewater treatment plant with an additional capacity up to 2.3 mgd. Future expansion to 2.3 mgd is currently planned for 1993.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: PLACER COUNTY SEWER MAINTENANCE DISTRICT NO.1

Address: 11144 B AVENUE, DEWITT CENTER, AUBURN, CA 95603

Contact Name: WARREN TELLEFSON Phone: (916) 889-7500

Service Area Size: _____ No. Connect.: 5,000 Population Served: _____

Services Provided: WASTEWATER MANAGEMENT

Summary System Description

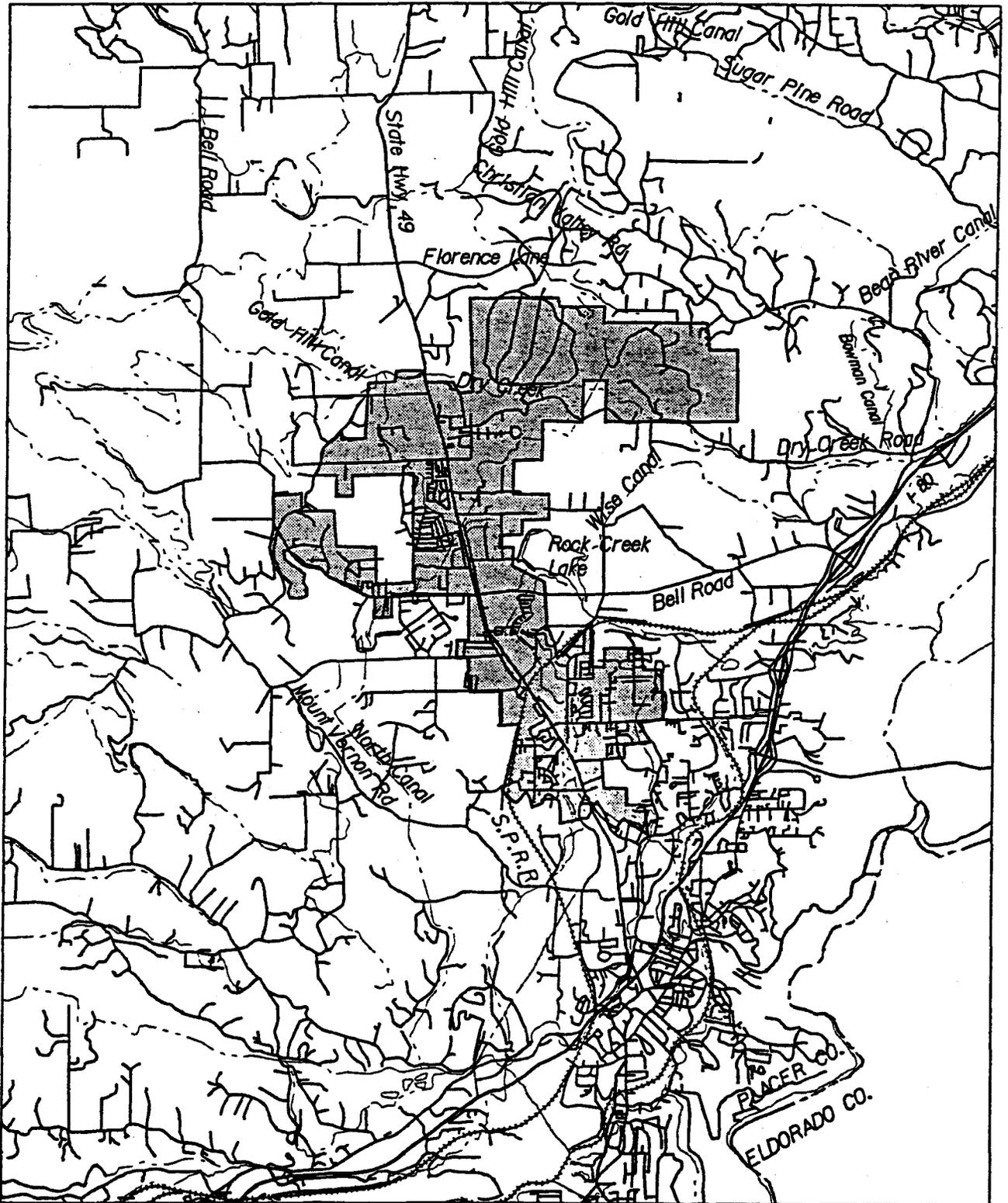
Service Area Characteristics: FACILITIES ARE LOCATED JUST NORTH OF AUBURN ALONG EAST SIDE OF HWY 49. THE AREA IS JUST BORDERING THE HIGHER OAK FOOTHILLS AND LOWER FORESTED SIERRA NEVADAS.

Collection: MOST OF THE COLLECTION SYSTEM WAS CONSTRUCTED IN 1960's & 1970's. THE SYSTEM FLOWS BY GRAVITY TO THE TREATMENT PLANT, BUT HAS 12 LIFT STATIONS IN OUTLYING AREAS.

Treatment: THE TREATMENT PLANT CONSISTS OF ROTATING BIOLOGICAL CONTACTORS, DUAL MEDIA FILTERS, CHLORINE CONTACT CHAMBERS, SLUDGE DIGESTORS, FINAL CLARIFIERS, DECHLORINATION PROCESSES, SLUDGE BELT PRESS, RECLAIM WATER SYSTEM, AND SLUDGE DRYING BEDS.

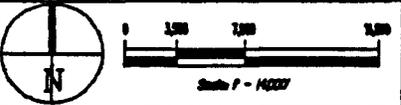
Disposal: EFFLUENT FROM THE WASTEWATER TREATMENT PLANT IS DISCHARGED INTO ROCK CREEK - A TRIBUTARY OF DRY CREEK AND THE BEAR RIVER. SOLIDS ARE HAULED AWAY TO A PERMITTED FACILITY.

Capacity Limitations: DESIGN CAPACITY OF WWTP IS 1.8 MGD WITH POTENTIAL FOR EXPANSION TO 2.3 MGD.



Placer County General Plan

Figure _____ Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND Placer County Maintenance District No. 1

- Streets
- County Line
- Waterways
- District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

PLACER COUNTY SEWER MAINTENANCE DISTRICT NO. 2

General Information: Placer County Sewer Maintenance District No. 2 collection and conveyance facilities are located in the Granite Bay area between Folsom Lake and the limits of the City of Roseville. The treatment and disposal of the wastewater collected in the Placer County Sewer Maintenance District No. 2 collection system is conveyed to the Roseville Regional Wastewater Treatment Plant.

Surface drainage from the District area is to the American River.

Wastewater Generation/Sources: Initial collection system construction activities for the Placer County SMD No. 2 wastewater collection system were funded by Water Grants and local funding contributions and. The improvements to the area allowed connection to the City of Roseville Regional Sewage Treatment Plant which has alleviated previously experienced chronic septic system failures in the region.

The Placer County Sewer Maintenance District No. 2 system collects wastewater from approximately 4,000 residential and light commercial connections. Wastewater is considered municipal in nature. Average dry weather flows experienced by the system are about 1.3 mgd.

Collection System Description: Most of the existing collection system was constructed in the 1960's, 70's and 80's using 6-inch to 33-inch PVC, clay and ACP sewer lines. The system uses gravity collection with typical manhole spacing and six lift stations.

Deficiencies: Inflow and infiltration is a problem for the existing collection system. Plans for collection system remediation are ongoing with annual remediation work on the system performed on a pre-determined inspection and construction schedule to correct collection system deficiencies.

Currently identified deficiencies with the existing disposal system include identified inflow and infiltration problems in the existing collection system due to deteriorated lines.

Proposed Improvements: Planned, proposed or required collection system improvements include correction of inflow and infiltration problems with the remediation of the deficient lines.

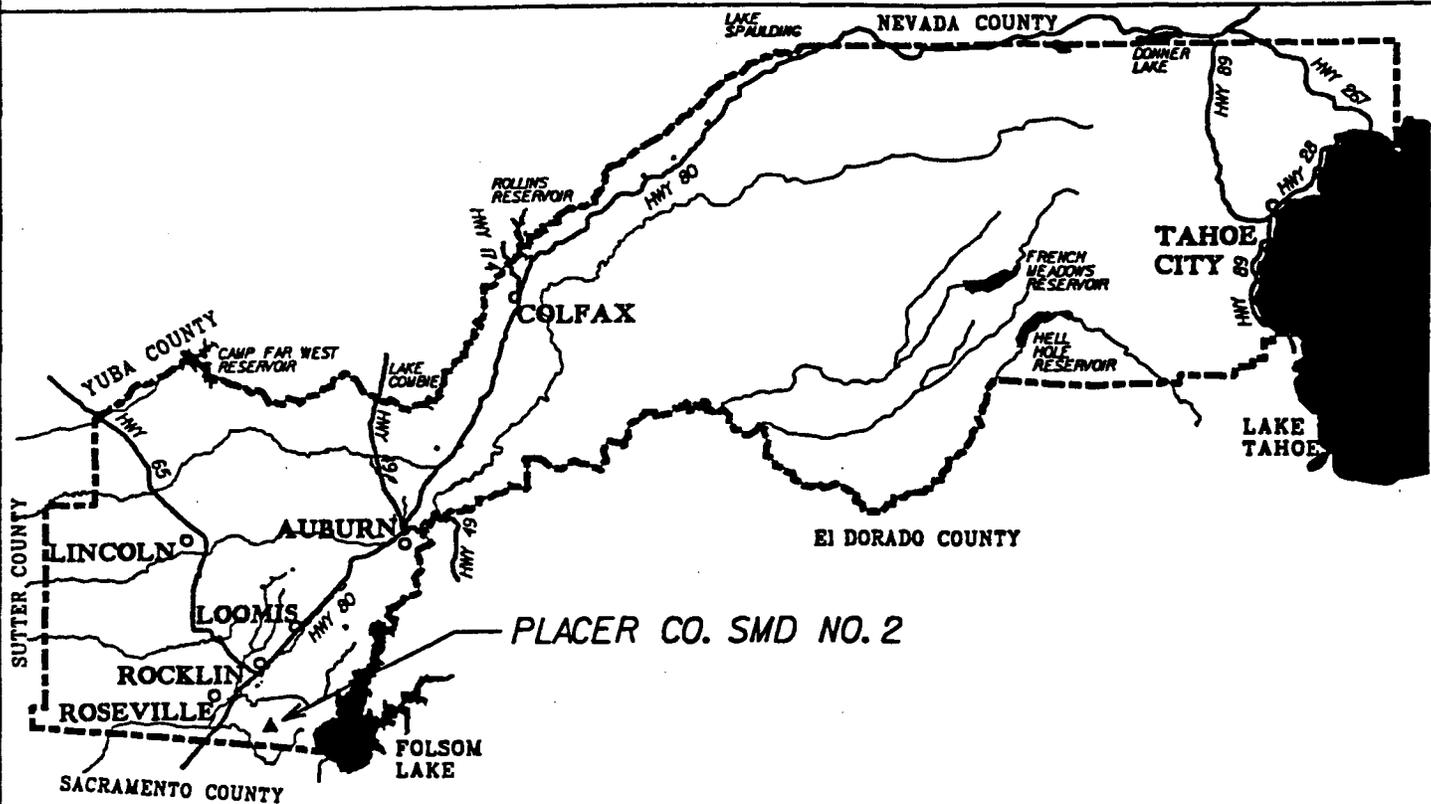
Wastewater Treatment and Disposal System Description: The Placer County SMD No. 2 collection system conveys wastewater collected to the City of Roseville Regional Wastewater Treatment Plant for treatment and ultimate disposal by surface discharge. Reference the City of Roseville section of this Report for additional information.

Financing: Improvement, operations and maintenance costs for Placer County Sewer Maintenance District sewage collection, treatment and disposal system are funded through user fees and collection fees.

System Appraisal: The current average dry weather flow experienced in the Placer County Sewer Maintenance District No. 2 wastewater collection system is approximately 1.3 mgd. In general the system is considered in adequate condition except for some inflow and infiltration problems which are being corrected through an annual remediation program.

Wastewater collected in the District is conveyed to the City of Roseville Regional Wastewater Treatment Plant for treatment and disposal.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: PLACER COUNTY SEWER MAINTENANCE DISTRICT NO.2

Address: 11144 B AVENUE, DEWITT CENTER, AUBURN, CA 95603

Contact Name: WARREN TELLEFSON Phone: (916)-889-7500

Service Area Size: _____ No. Connect.: 4,000 Population Served: _____

Services Provided: WASTEWATER COLLECTION AND CONVEYANCE

Summary System Description

Service Area Characteristics: THE SERVICE AREA IS LOCATED IN THE GRANITE BAY AREA. THE DISTRICT SERVES THE AREA FROM FOLSOM LAKE TO THE ROSEVILLE CITY LIMITS. TOPOGRAPHY CONSISTS OF VALLEY, FOOTHILLS, OAKS AND GRASSLANDS.

Collection: MOST OF THE COLLECTION SYSTEM WAS CONSTRUCTED IN 1960's & 1970's. THE SYSTEM FLOWS BY GRAVITY TO THE TREATMENT PLANT, BUT HAS 12 LIFT STATIONS IN OUTLYING AREAS.

Treatment: THE TREATMENT PLANT CONSISTS OF ROTATING BIOLOGICAL CONTACTORS, DUAL MEDIA FILTERS, CHLORINE CONTACT CHAMBERS, SLUDGE DIGESTORS, FINAL CLARIFIERS, DECHLORINATION PROCESSES, SLUDGE BELT PRESS, RECLAIM WATER SYSTEM, AND SLUDGE DRYING BEDS.

Disposal: DISPOSAL THROUGH THE ROSEVILLE FACILITIES WHICH DISCHARGE TO DRY CREEK.

Capacity Limitations: _____



PLACER COUNTY SERVICE AREA NO. 28--ZONE 11 - SABRE CITY

General Information: Placer County Service Area No. 28, Zone 11, Sabre City Wastewater Treatment Plant is owned by the County of Placer and operated by the Placer County Department of Public Works. The facility is situated north of PFE Road between Walerga Road and Cook Riolo Road near the Placer and Sacramento County line (SE 1/4, Sec 7, T10N, R6E, MDB&M).

Discharged wastewater is authorized under RWQCB Waste Discharge Requirements Order No. 91-149, Federal USEPA NPDES Permit No. CA0078786, and RWQCB Monitoring and Reporting Program No. 91-149, adopted on June 28, 1991.

Discharge and surface drainage is to Dry Creek, tributary to Natomas East Main Drainage Canal and thence to the American River or Sacramento River (depending on the flow conditions).

In 1981 Placer County took over the operations and maintenance of the facilities from Sacramento County.

Wastewater Generation/Sources: Monthly average wastewater flow is 45,000 gpd (ADWF) from 206 residential connections. There are no commercial or industrial connections. A new development of approximately 5,000 units is planned between Roseville and Watt Avenue which would be connected to the Roseville Regional WWTP. Currently there is a moratorium on additional connections to the Sable City WWTP.

Collection System Description: Most of the existing collection system was constructed in the 1960's using 6 to 10-inch VCP and ABS sewer lines. The system uses gravity collection with typical manhole spacing and there are no lift stations.

Deficiencies: Currently there are no identified deficiencies with the existing collection system.

Proposed Improvements: Currently there are no planned, proposed or required improvement to the collection system.

Wastewater Treatment System Description: The Sabre City treatment system was constructed in the early 1960's and consists of two surface aerated waste stabilization ponds with chlorination and dechlorination. Current monthly average flow is about 45,000 gpd and design flow is 45,000 gpd with no expansion capability.

Deficiencies: Currently identified deficiencies with the existing treatment plant include lack of capacity for new connections.

Proposed Improvements: The Placer County PUD is exploring funding and treatment alternatives in order to meet the RWQCB's permitting goals which specify a no-surface-discharge objective. The treatment alternative being considered as the best choice is connection to the Roseville Regional Wastewater Treatment Plant.

Currently planned, proposed or required improvement to the treatment system include abandonment of the plant and connection to Roseville when available.

Disposal System Description: Treated effluent is discharged to Dry Creek, a tributary to Natomas East Main Drainage Canal. Discharge must be limited to 45,000 gpd (ADWF, May to October).

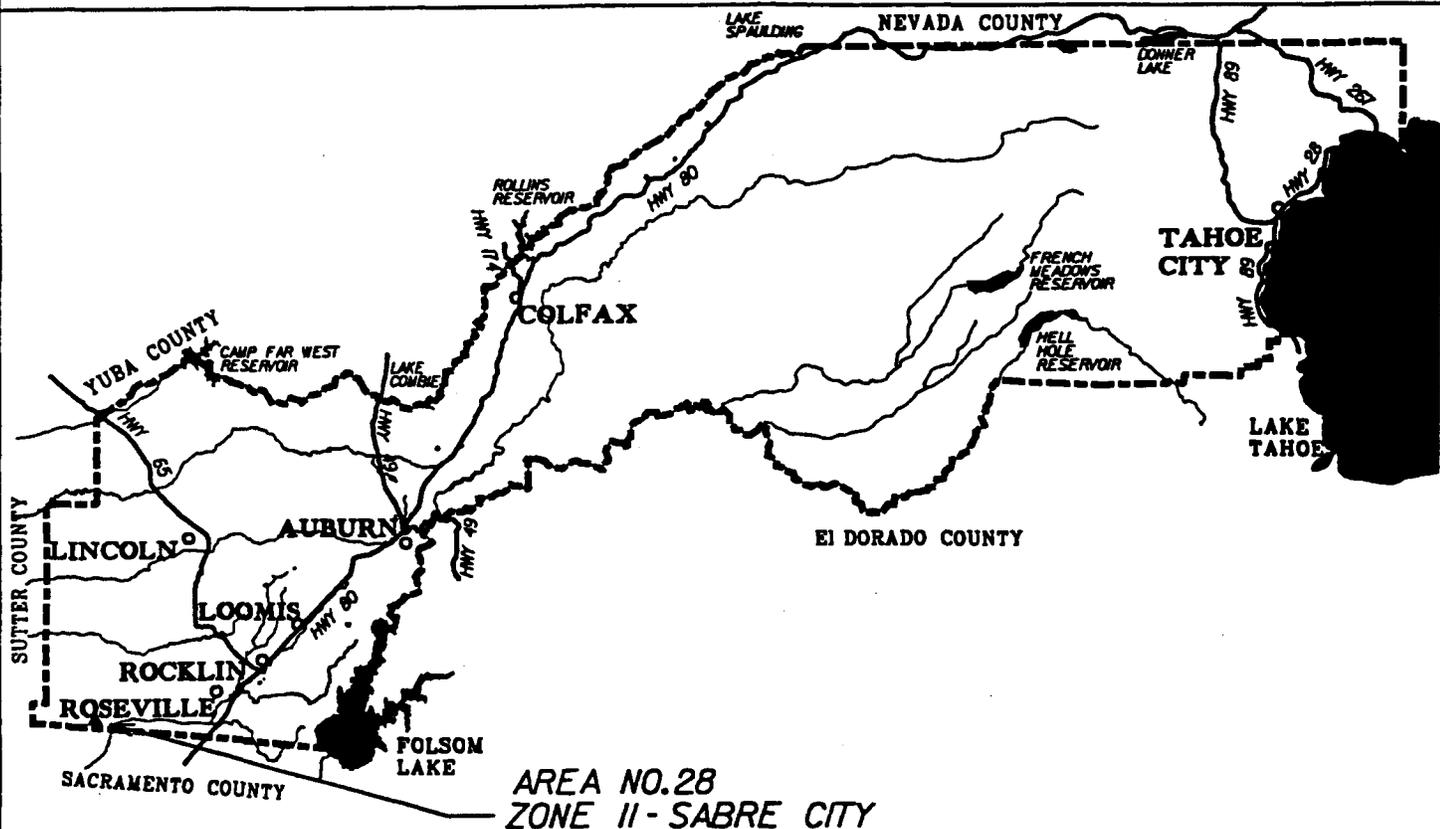
Deficiencies: Inspection reports confirm general compliance with the WDR's and the Monitoring and Reporting Program, however, concentrations of dissolved oxygen in the receiving waters have reportedly fallen below 5.0 mg/l and other minor discharge violations related to BOD, TSS, temp, coliform and pH have occurred.

Proposed Improvements: There are no currently planned, proposed or required improvement to the treatment system.

Financing: Improvement, operations and maintenance costs for Placer County Service Area No. 28, Zone 11, Sabre City sewage collection, treatment and disposal system are funded through user fees and connection fees.

System Appraisal: Current permitting limits discharge to 45,000 gpd (ADWF). Planning at this time indicates that abandonment of the existing treatment and disposal facilities and connection to the Roseville Regional Wastewater Treatment Plant by 1993-94. This will allow abandonment of the existing Sabre City discharge to Dry Creek. Current planning thought is that Sabre City wastewater will be connected to a 5000 unit development which is slated for the area between Roseville and Watt Avenue. This plan will be in conformance with the goals of the RWQCB WDR's.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: PLACER COUNTY SERVICE AREA NO. 28 ZONE II-SABRE CITY

Address: 11144 B AVENUE, DEWITT CENTER, AUBURN, CA 95603

Contact Name: WARREN TELLEFSON Phone: (916)-889-7500

Service Area Size: _____ No. Connect.: 206 Population Served: _____

Services Provided: WASTEWATER MANAGEMENT

Summary System Description

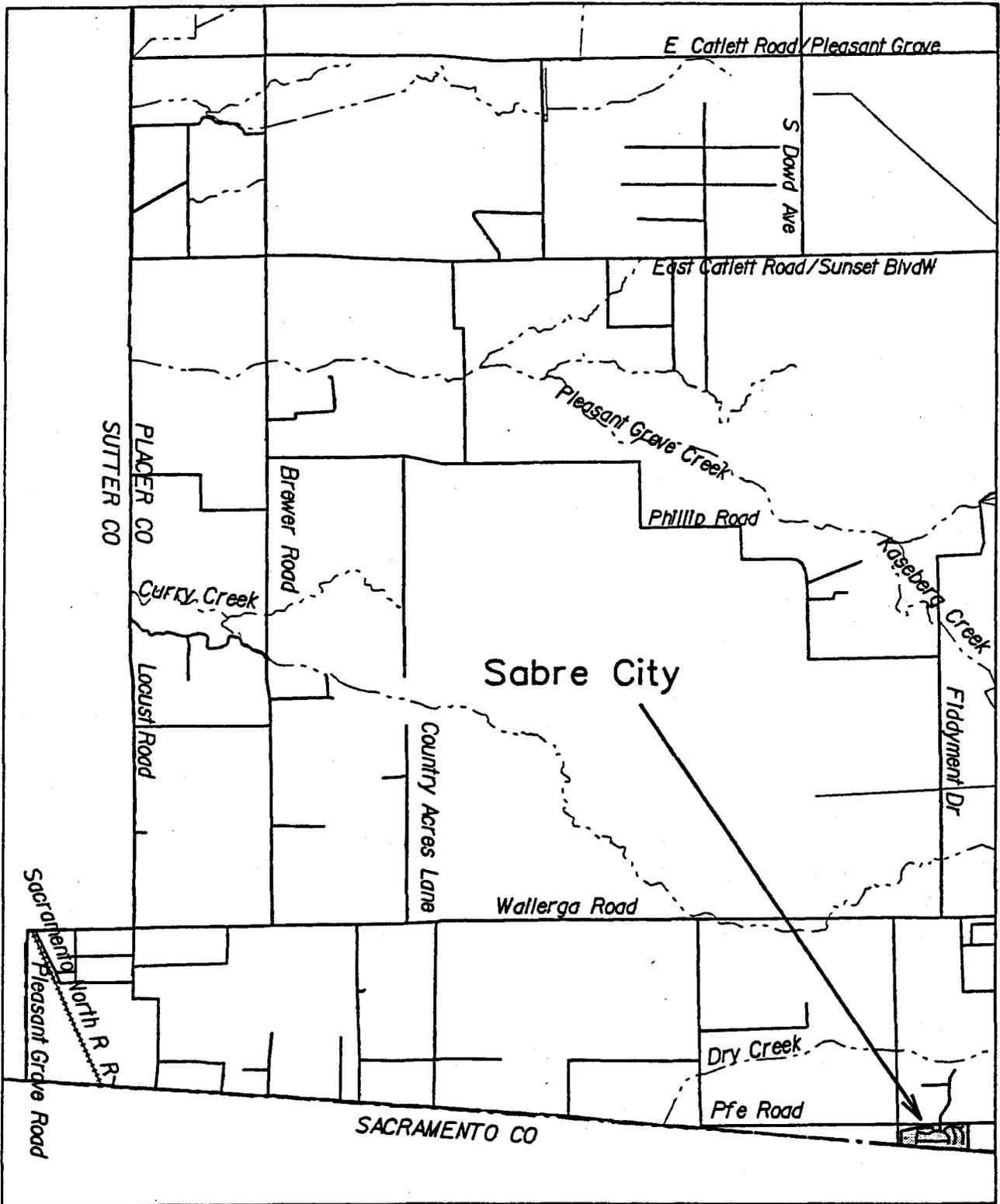
Service Area Characteristics: THE FACILITY IS LOCATED NORTH OF PFE ROAD BETWEEN WALERGA ROAD AND COOK RIOLO ROAD.

Collection: MOST OF THE EXISTING COLLECTION SYSTEM WAS CONSTRUCTED IN THE 1960's. THE SYSTEM USES GRAVITY COLLECTION TRANSPORTING SEWAGE TO THE TREATMENT AREA VIA A 10 INCH CLAY PIPE.

Treatment: THE TREATMENT SYSTEM CONSISTS OF TWO AERATED WASTE STABILIZATION PONDS WITH CHLORINATION AND DECHLORINATION. DESIGN FLOW CAPACITY IS 45,000 GPD.

Disposal: DIRECT SURFACE DISCHARGE TO DRY CREEK.

Capacity Limitations: THE MOST SIGNIFICANT DEFICIENCY WITHIN THE SYSTEM IS THE LACK OF CAPACITY FOR FUTURE CONNECTIONS.



Placer County General Plan

Fig. _____ **Wastewater Service Area**

Date: 1/15/92

Prepared by:
PSOMAS & ASSOCIATES

Scale 1" = 6000'

LEGEND

Placer Co. Dept. of Public Works SA #28-Sabre City

	Streets		County Line
	Waterways		District Service Area

NOTE:
Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

RAINCO, INC. - CISCO GROVE

General Information: Cisco Grove Resort is operated by Rainco, Inc. and consists of one residence, a restaurant, one gas station and one motel unit. The resort is located approximately eight miles west of Soda Springs along Highway 80 (Sec 29, T17N, R13E, MDB&M).

Wastewater from the resort is regulated by RWQCB Waste Discharge Requirements Order No. 87-211 and Monitoring and Reporting Program No. 87-211 which were adopted on December 11, 1987.

Drainage from the resort area is to the South Yuba River.

Wastewater Generation/Sources: The Cisco Grove Resort consists of one gasoline station, one restaurant, one motel unit and one residential connections and generates approximately of 5,000 gpd of domestic wastewater. Ultimate design flow is 10,000 gpd. There is a minor potential for volatile organic contaminates in the wastestream from the gas station.

Collection System Description: Most of the existing collection system was constructed in 1963 using 4-inch to 6-inch clay sewer lines. The system uses gravity collection with typical manhole spacing and has no lift stations.

Deficiencies: There are currently no identified deficiencies with the existing collection system.

Proposed Improvements: There are currently no planned, proposed or required collection system improvements.

Wastewater Treatment and Disposal System Description: Domestic wastewater is treated in an extended aeration package treatment plant and settling tank. The design capacity of the package plant is 10,000 gpd. RWQCB Inspection Reports do not indicate any problems with the treatment system.

Effluent is discharged to three subsurface leachfields. A seasonal high ground water table and soil not particularly conducive to percolation caused the surfacing of wastewater in the recent past. The old leachfield was abandoned and two new leachfields were constructed in response to these limitations. This new disposal system has alleviated surfacing problems and allowed increased disposal flexibility. The RWQCB Monitoring and Reporting Program calls for testing of all leachfield system facilities, including pump stations, septic tanks, distribution lines, and effluent disposal areas on a weekly basis.

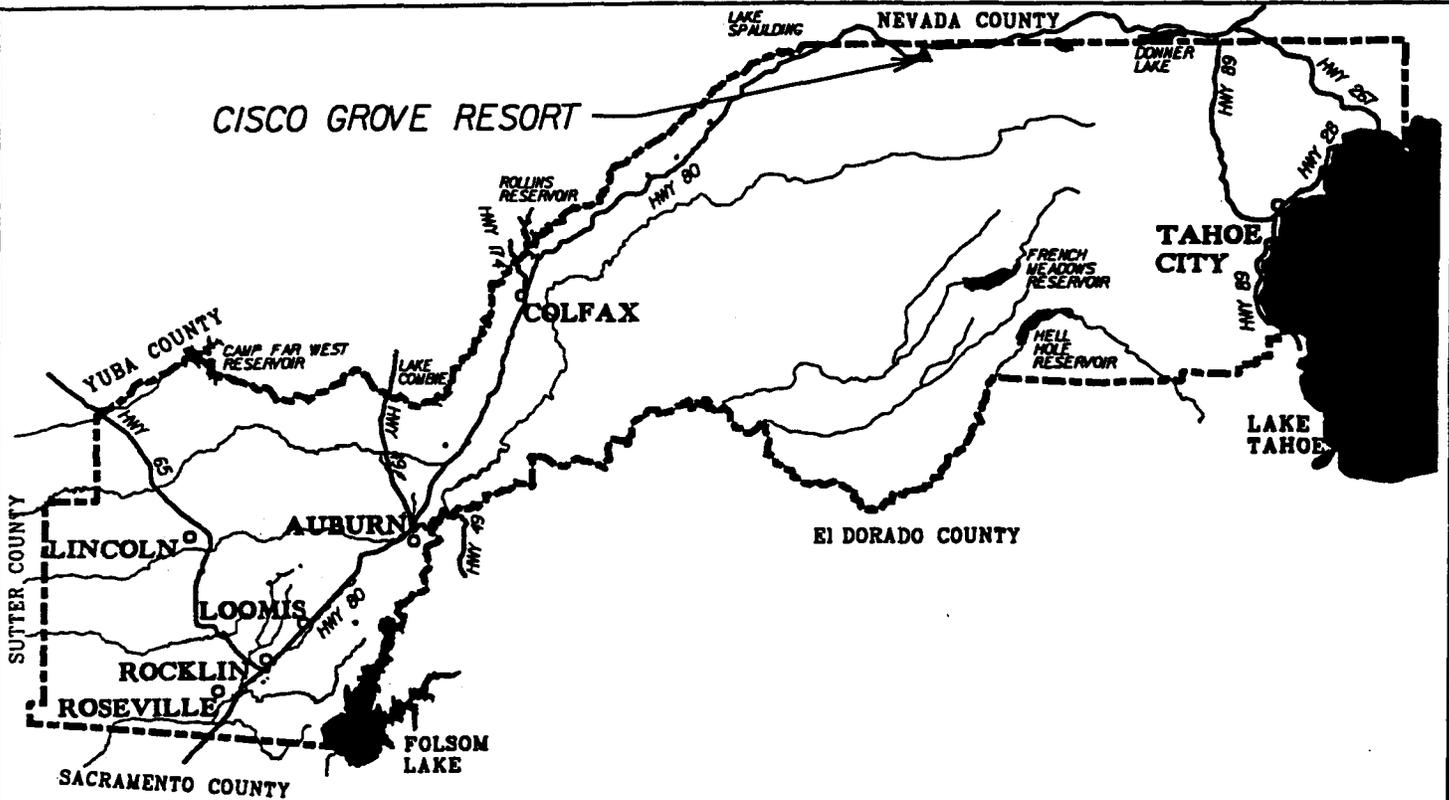
Deficiencies: Currently there are no identified deficiencies with the existing treatment plant and disposal system.

Proposed Improvements: There are currently no planned, proposed or required improvement to the treatment and disposal system.

Financing: Improvement, operations and maintenance costs for the Cisco Grove Resort sewage collection, treatment and disposal system are funded by resort funds.

System Appraisal: In general the Cisco Grove wastewater system is considered adequate to meet the existing and planned future flows. Existing flowrates to the plant are about 5,000 gpd average dry weather flow and 4,000 gpd peak wet weather flow. Design capacity for the system is 10,000 gpd. There are not any existing plans to expand the system or create additional system capacity in the near-term.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: RAINCO, INC. - CISCO GROVE RESORT

Address: P.O. BOX 760, SODA SPRINGS, CA 95728

Contact Name: KARL A. MIENER, PROPRIETOR Phone: (916) 426-3221

Service Area Size: _____ No. Connect.: 4 Population Served: VARIES

Services Provided: WASTEWATER MANAGEMENT

Summary System Description

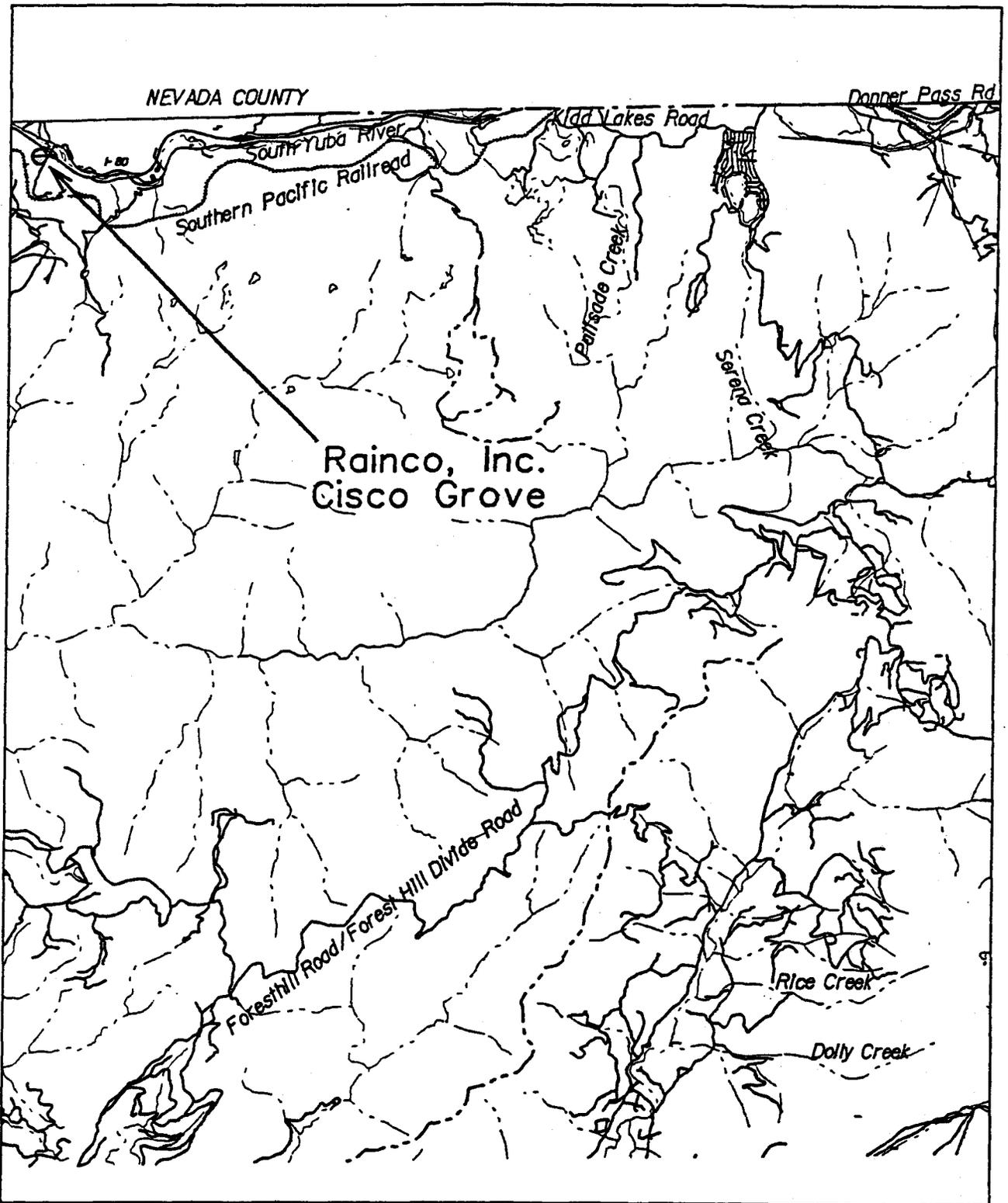
Service Area Characteristics: FACILITIES SERVE ONE GAS STATION, A RESTAURANT ONE MOTEL UNIT AND ONE RESIDENTIAL CONNECTION TO SATISFY WASTEWATER MANAGEMENT NEED.

Collection: A 300 FOOT TOTAL LENGTH CLAY TYPE GRAVITY SEWER SYSTEM SERVES THE RESORT AREA.

Treatment: PROVIDED BY AN EXTENDED AERATION PACKAGED TREATMENT PLANT AND SETTLING TANK.

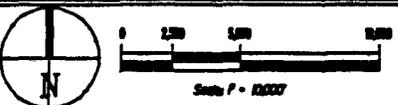
Disposal: EFFLUENT IS DISCHARGED AT THREE SUBSURFACE LEACHFIELDS.

Capacity Limitations: DESIGN CAPACITY OF THE WASTEWATER PLANT IS 10,000 GPD.



Placer County General Plan

Figure _____
Wastewater Service Area



Date: 1/15/92
Prepared by:
PSOMAS & ASSOCIATES

LEGEND

**Rainco, Inc.
Cisco Grove**

Streets	County Line
Waterways	District Service Area

NOTE:
Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

CITY OF ROSEVILLE REGIONAL WASTEWATER TREATMENT PLANT

General Information: The City of Roseville Regional Wastewater Treatment Plant is located southwest of the City of Roseville on Booth Road on the Dry Creek Drainage (Secs 9 & 10, T10N, R6E, MDB&M). Treatment and disposal facilities are located on City of Roseville Corporation Yard property.

Discharge from the City of Roseville Regional Wastewater Treatment Plant is permitted by RWQCB Waste Discharge Requirement Order No. 87-202, Federal USEPA NPDES Permit No. CA0079502, and RWQCB Monitoring and Reporting Program Order No. 87-202. These regulatory documents were adopted on December 11, 1987.

Surface drainage is to Dry Creek, tributary to Natomas East Main Drainage Canal, thence the Sacramento River.

Wastewater Generation/Sources: The Roseville Regional Wastewater Treatment Plant manages wastewater from the City of Roseville and, since 1986, Southeast Placer and Sunset Industrial Park. Such service area consolidation eliminated the use of four outmoded wastewater treatment facilities in the area which continually violated RWQCB discharge criteria.

Wastewater treated by the WWTP is considered municipal in nature, with significant commercial and minor industrial contribution.

Collection System Description: Materials of construction vary widely. Line sizes vary from 6-inch to over 42-inch. The system uses gravity collection with typical manhole spacing and lift stations were required for adverse grades.

Deficiencies: The collection system experiences some difficulty with inflow and infiltration. Peak design flow for the new treatment plant expansion is 45 mgd while the average dry weather flow is 18 mgd.

Proposed Improvements: Planned, proposed or required improvements to the collection system include a proposed gravity line, pump station and 20-inch force main serving new development north of the treatment plant has been designed with construction anticipated to begin in 1992.

Wastewater Treatment System Description: The design capacity of the Roseville Regional Wastewater Treatment Plant is 11.75 mgd average dry weather flow (ADWF) and peak wet weather flow of 21 mgd.

Wastewater treatment processes include activated sludge with contact stabilization, secondary clarification, and filtration. Chemical coagulation occurs upstream of the effluent filters.

A pretreatment program, approved by the EPA, regulates the discharge of industrial wastewater to the plant.

Deficiencies: A minimum of five industrial users, H.B. Fuller Company, Southern Pacific Transportation Co., Formica Corp., Hewlett Packard, and Reynolds Metals Company, were not in compliance with industrial pretreatment requirements in 1991. The City of Roseville issued a Cease and Desist Order to H.B. Fuller Company in January 1991 with interim mitigation measures and a time schedule for the completion of a pretreatment plant.

Identified current treatment plant deficiencies are being resolved with the treatment plant expansion

currently under construction.

Proposed Improvements: The current Roseville Regional Wastewater Treatment Plant improvement and expansion project is scheduled for completion in September 1993. The overhauled plant will have an ADWF capacity of 18 mgd with nitrogen removal capability.

Although the RWQCB and the Department of Fish and Game have concurred with more tolerant standards for pH and receiving water temperature, the current wastewater treatment plant expansion contains pH adjustment processes and a cooling tower.

Future improvements to the wastewater treatment system are currently under investigation to determine options for treatment and disposal of 60 to 80 mgd.

Disposal System Description: An average of 6 mgd of effluent is discharged to Dry Creek, a tributary of the Natomas East Main Drainage Canal and the Sacramento River. Strict discharge requirements as mandated by the RWQCB must be met prior to any release to Dry Creek. Sludge is dewatered by belt press and hauled offsite to the Western Regional Sanitary Landfill.

Deficiencies: The Roseville Regional Wastewater Treatment Plant has experienced TSS and receiving water turbidity violations. Strict enforcement of industrial pretreatment standards will most likely alleviate this concern. Excessive chlorine residuals detected in Dry Creek in 1990 can be suppressed with regular monitoring efforts and fine adjustment of plant operations.

There are presently no identified disposal system deficiencies.

Proposed Improvements: The renovated Roseville Regional Wastewater Treatment Plant will have Title 22 effluent quality.

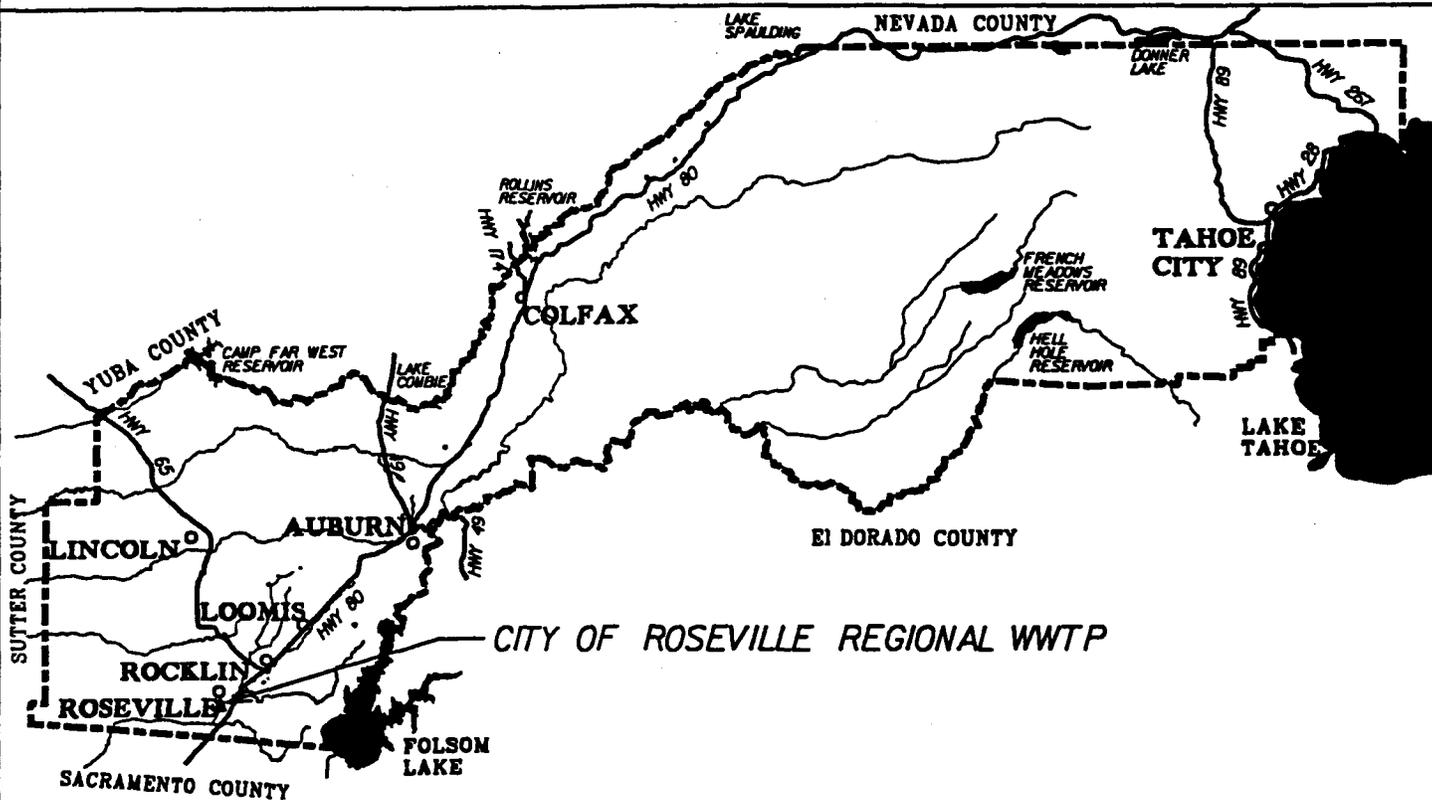
A reclaimed water pump station will be installed in response to the RWQCB's aversion to increased surface water discharge to the Dry Creek Drainage. Utilization of this station and associated pipelines, designed to convey 6 mgd, will irrigate golf courses and City of Roseville parks and could transport effluent to the Pleasant Grove Basin in order to preserve Dry Creek water quality.

Planned, proposed or required disposal system improvements include

Financing: Funds of \$46,000,000 are secured for the current Roseville Regional Wastewater Treatment Plant improvement and expansion project. Operations and maintenance costs are funded by sewer user charges.

System Appraisal: Future options for wastewater treatment and disposal are uncertain, although the need for extreme and punctual planning is clear. The City of Roseville and the RWQCB estimated in January 1990 that the service area will eventually produce 60 to 80 mgd of wastewater. The current improvement and expansion project will only increase the capacity of the Roseville Regional Wastewater Treatment Plant from about 12 mgd to 18 mgd. The City of Roseville agreed to complete a study of wastewater management alternatives, which may involve construction of a new treatment plant on Pleasant Grove Creek. That study is underway.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: CITY OF ROSEVILLE - REGIONAL WWTP

Address: 316 VERNON STREET, ROSEVILLE, CA 95678

Contact Name: JERRY JACKSON, DIR. ENVR. UTILITIES Phone: (916)-781-0330

Service Area Size: _____ No. Connect.: _____ Population Served: _____

Services Provided: WASTEWATER MANAGEMENT

Summary System Description

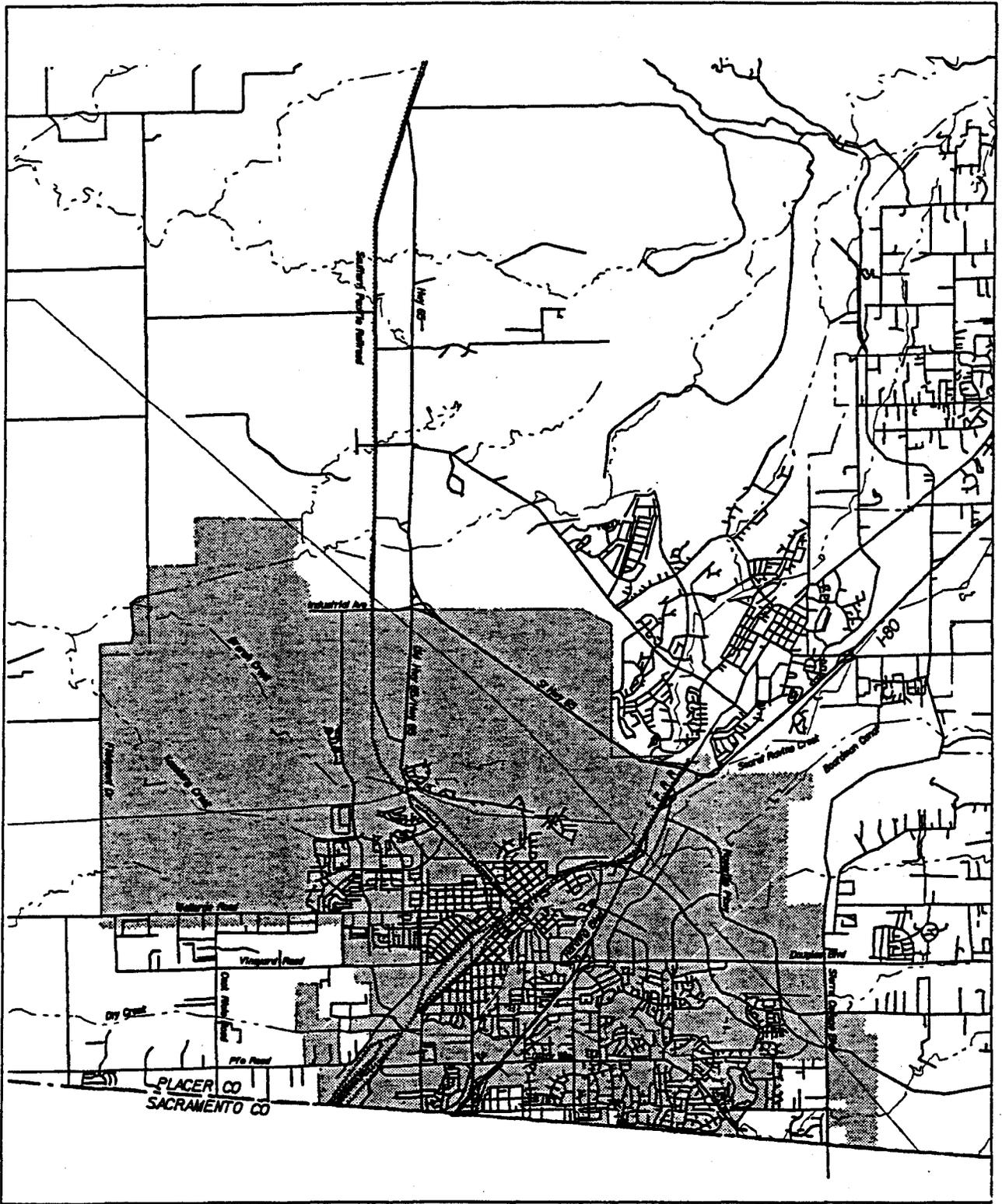
Service Area Characteristics: MANAGES WASTEWATER FROM THE CITY OF ROSEVILLE AND, SINCE 1986, SOUTHEAST PLACER AND SUNSET INDUSTRIAL PARK.

Collection: _____

Treatment: PROCESSES INCLUDE CONTACT STABILIZATION, SECONDARY CLARIFICATION, CHEMICAL COAGULATION, AND FILTRATION. DESIGN CAPACITIES OF ROSEVILLE REGIONAL WASTEWATER TREATMENT PLANT ARE 11.75 MGD (ADWF) AND 21 MGD (PWWF).

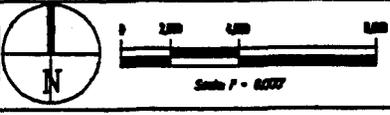
Disposal: EFFLUENT DISCHARGED TO DRY CREEK, A TRIBUTARY OF THE NATOMAS EAST MAIN DRAINAGE CANAL AND THE SACRAMENTO RIVER. SLUDGE OFF HAULED TO A WESTERN REGIONAL SANITARY LANDFILL.

Capacity Limitations: CURRENT IMPROVEMENT AND EXPANSION PROJECT WILL INCREASE CAPACITY TO 18 MGD (ADWF), HOWEVER, SERVICE AREA WILL EVENTUALLY REQUIRE 60 TO 80 MGD.



Placer County General Plan

Figure _____ Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND

City of Roseville

- Streets
- County Line
- Waterways
- District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

SIERRA LAKES COUNTY WATER DISTRICT

General Information: Sierra Lakes County Water District operates a water supply service and wastewater collection system. The wastewater facility is located north of Interstate 80 ion Soda Springs and is operated by Donner Summit PUD.

The District's engineer recently completed the *Sierra Lakes County Water District Five Year Facilities Plan* (May 1990). An EIR assimilating the ecological effects of this facility was prepared by the Donner Summit Public Utilities District.

Surface drainage from the area is to Serena Creek which flows through the District and southerly to the American River.

Wastewater Generation/Sources: The *Sierra Lakes County Water District Five Year Facilities Plan* projects growth to 740 units by the year 2000, a 64% increase from the number of 1990 service connections.

Peak wet weather wastewater flow is estimated at 738 gpd/unit. Of this total, 69% of the flow is due to infiltration/inflow (I/I).

Collection System Description: The Sierra Lakes CWD wastewater collection and export system contains four internal pump stations. The pump stations are connected by force mains and operate in series. Pump station #4 discharges to station #3, station #3 discharges to station #2, and station #2 supports station #1.

Pump station #1 is the export pump station. All wastewater generated by Sierra Lakes CWD is transported to Donner Summit PUD through an 8-inch force main at a maximum rate of 1.05 mgd.

Most of the existing collection system was constructed in 1961 using 6-inch to 10-inch clay sewer lines. The system uses gravity collection with typical manhole spacing and 4 lift stations.

Deficiencies: The Sierra Lakes CWD wastewater collection system, particularly the pump station #2 system, experiences significant inflow and infiltration problems. Surcharging caused a manhole to overflow in January 1988 spilling approximately 100 gallons of raw sewage.

Other identified collection system deficiencies include old pumping stations. The wet pit, submersible pump stations were constructed in the early 1960's. Pumps and controls have been replaced as needed but the facilities are antiquated and will need upgrading at some point.

Proposed Improvements: According to the 1990 *Sierra Lakes County Water District Five Year Facilities Plan*, a study to identify specific inflow and infiltration problems and their solutions is budgeted for the first year of the plan. Additional construction money for collection system improvements is budgeted for each year thereafter.

Examination of the tracts available for development shows most of the future sewer connections will be served by pump station #4. Consequently, each of the pump stations will experience the effects of increased wastewater flow.

Analysis of the current 8-inch export force main confirms adequacy through the year 2000.

Wastewater Treatment and Disposal System Description: Sierra Lakes CWD contracts with Donner Summit PUD for treatment and disposal of wastewater. Treated effluent is disposed by land irrigation in summer with seasonal surface discharge to the South Yuba River.

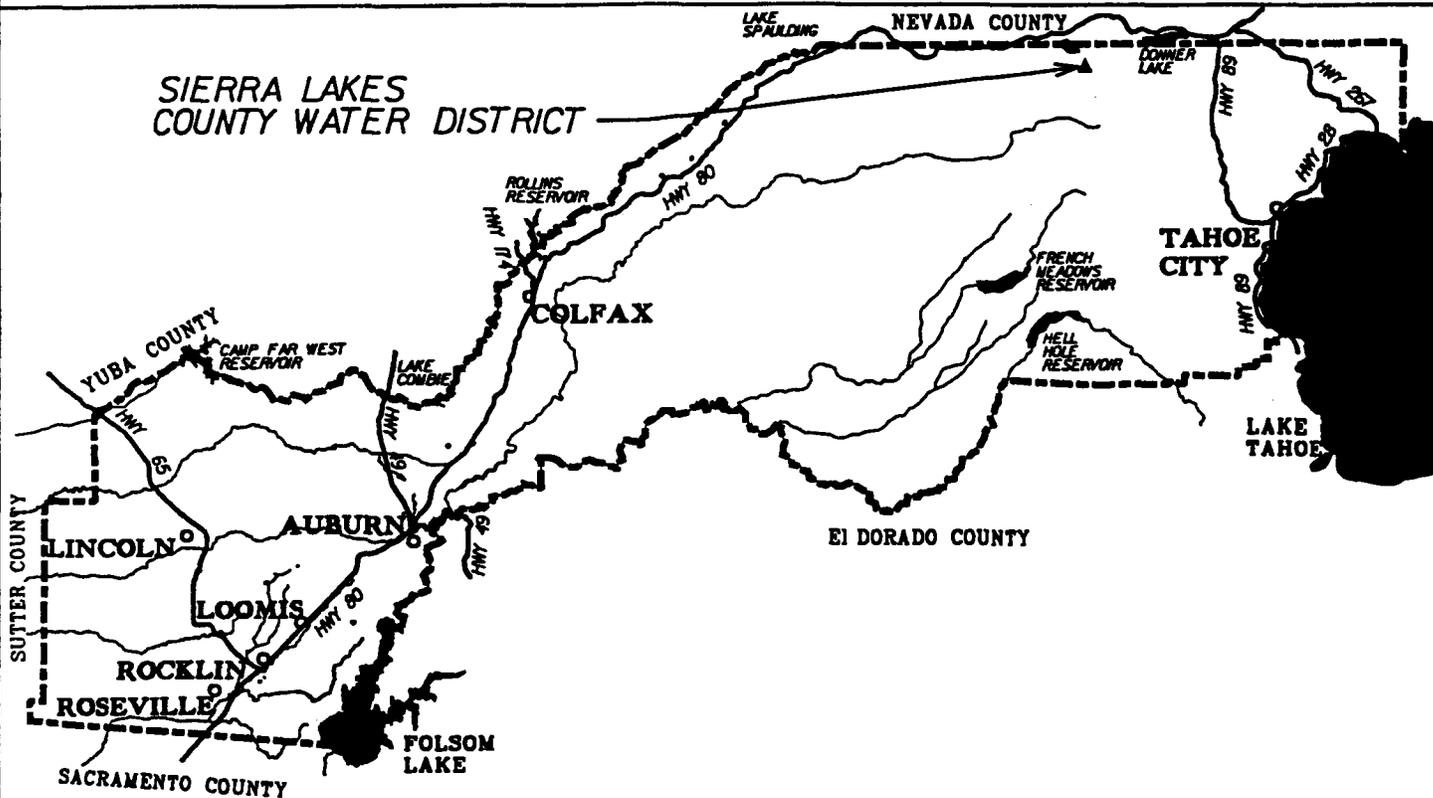
Deficiencies: The volume of wastewater exported to Donner Summit PUD has approached the limit of the contract.

Proposed Improvements: Sierra Lakes CWD is investigating options for future wastewater treatment and disposal. One alternative calls for construction of new facilities at Sierra Lakes CWD with potential for surface discharge to the South Yuba River or the American River. (The capacity of the old Sierra Lakes CWD wastewater treatment facility in February 1983 was 200,000 gpd.) Storage of raw sewage with pipeline transportation to an upgraded Donner Summit PUD Wastewater Treatment Plant is also being considered as an alternative.

Financing: The *Sierra Lakes County Water District Five Year Facilities Plan* discusses financing alternatives for facilities improvements. The total cost for wastewater management, water system, and operational upgrades is estimated at about \$3,000,000 for the planning period. Funding for wastewater facilities operations and maintenance comes from connection fees, service fees and taxes collected by the District.

System Appraisal: Sierra Lakes CWD is currently investigating options for future wastewater treatment and disposal. These include a study, design, and construction of a new Sierra Lakes CWD facility or transportation to an upgraded Donner Summit PUD Wastewater Treatment Plant. Existing system facilities have reached their safe capacity.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: SIERRA LAKES COUNTY WATER DISTRICT

Address: P.O. BOX 156, SODA SPRINGS, CA 95728

Contact Name: CHRIS SWANBERG, PRESIDENT Phone: (916)-482-1720

Service Area Size: _____ No. Connect.: _____ Population Served: _____

Services Provided: WASTEWATER COLLECTION AND EXPORT

Summary System Description

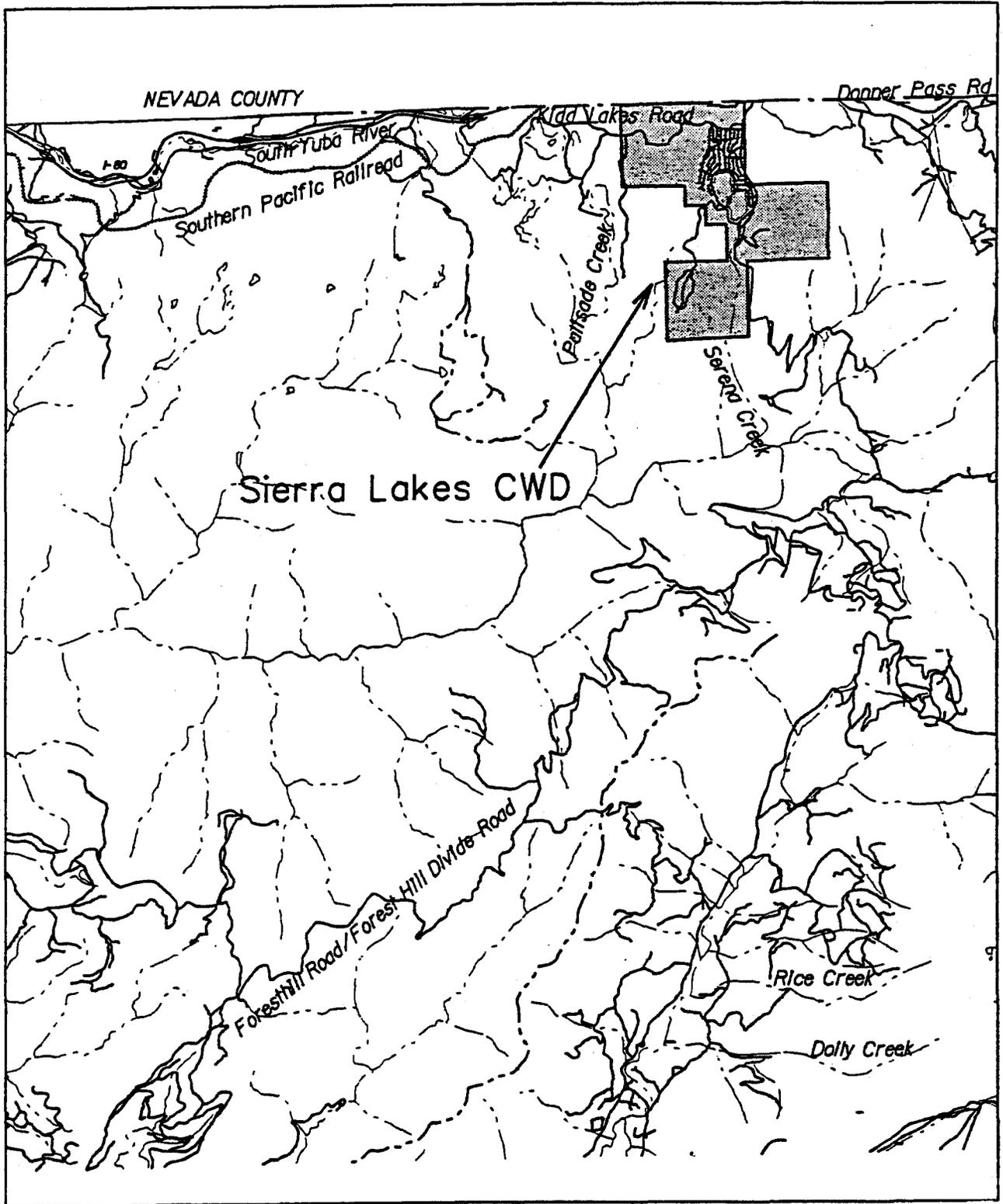
Service Area Characteristics: SIERRA NEVADA RANGE. MOUNTAINOUS LOCATION, WELL FORESTED. HILLY TERRAIN.

Collection: FOUR PUMP STATIONS OPERATE IN SERIES. 69% OF THE FLOW IS DUE TO 1/1. MAXIMUM RATE THROUGH FORCE MAIN IS 1.05 MGD.

Treatment: CONTRACTS WITH DONNER SUMMIT PUD FOR TREATMENT AND DISPOSAL OF WASTEWATER.

Disposal: TREATED EFFLUENT IS DISSPOSED BY LAND IRRIGATION IN SUMMER WITH SEASONAL SURFACE DISCHARGE TO THE SOUTH YUBA RIVER.

Capacity Limitations: PROJECTS GROWTH TO 740 UNITS BY YEAR 2000, A 64% INCREASE FROM THE NUMBER OF 1990 SERVICE CONNECTIONS. VOLUME OF WASTEWATER EXPORTED TO DONNER SUMMIT PUD HAS APPROACHED LIMIT OF CONTRACT.

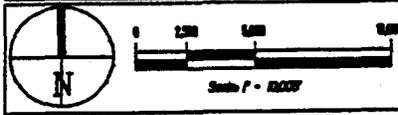


Placer County General Plan

Figure _____ **Wastewater Service Area**

Date: 1/15/92

Prepared by: **PSOMAS & ASSOCIATES**



LEGEND

Sierra Lakes CWD

	Streets		County Line
	Waterways		District Service Area

NOTE:
Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

SKY VIEW TERRACE MOBILE HOME PARK

General Information: Sky View Terrace Mobile Home Park is located in Todd Valley, 3.5 miles southwest of Foresthill on the Todd Valley Road. The mobile home park opened in 1963 and was formerly called Todd Valley Trailer Court. Wastewater generated from the park is permitted by RWQCB Waste Discharge Requirements Order No. 82-076, effective on June 25, 1982.

Surface drainage is to Middle Fork American River.

Wastewater Generation/Sources: The mobile home park currently has 130 trailer sites and, estimating an average of 290 gallons per site per day, generates approximately 37,500 gpd of domestic wastewater. The expected capacity of the park is an occupancy of 135 sites with an estimated flow of 39,000 gpd of wastewater (ADWF).

Collection System Description: Most of the existing collection system was constructed in 1970's and 80's using 3-inch to 4-inch ABS and some 6-inch transite sewer lines. The system uses gravity collection with one manhole and one lift station. Lift is from Pond #2 about 400 feet to manhole and then gravity flow to Pond #3.

Deficiencies: Currently there are no identified deficiencies with the existing collection system.

Proposed Improvements: Currently there are no planned, proposed or required collection system improvements.

Wastewater Treatment and Disposal System Description: The treatment facilities consist of three ponds acting as a sequential clarification process. Wastewater flows by gravity into the first and second ponds and is pumped into the third pond. Initial solids separation occurs in the first pond. Aerators were installed in ponds #1 and #2 to enhance treatment in 1982. Pond #3 was added in 1982 to provide final finish and added hydraulic capacity. The average dry weather flow to the treatment plant is currently estimated at no more than about 37,500 gpd. Design capacity for the plant is 39,000 gpd.

Surface drainage from ponds #1 and #2 is to Peachstone Gulch. Surface drainage from pond #3 is to Todd Creek. Both drainages converge downstream with Middle Fork American River. No surface water discharge or bypass is allowed under the current discharge requirements.

Deficiencies: Inspection reports confirm general compliance with the RWQCB Waste Discharge Requirements and the Monitoring and Reporting Program, however, ground water monitoring wells were neglected in a June 1982 report. There are two monitoring stations near pond #3 with 12 and 20 foot depths, each monitored monthly. In 1986 a drainage ditch overflowed into pond #1 and was permitted to be pumped to the river.

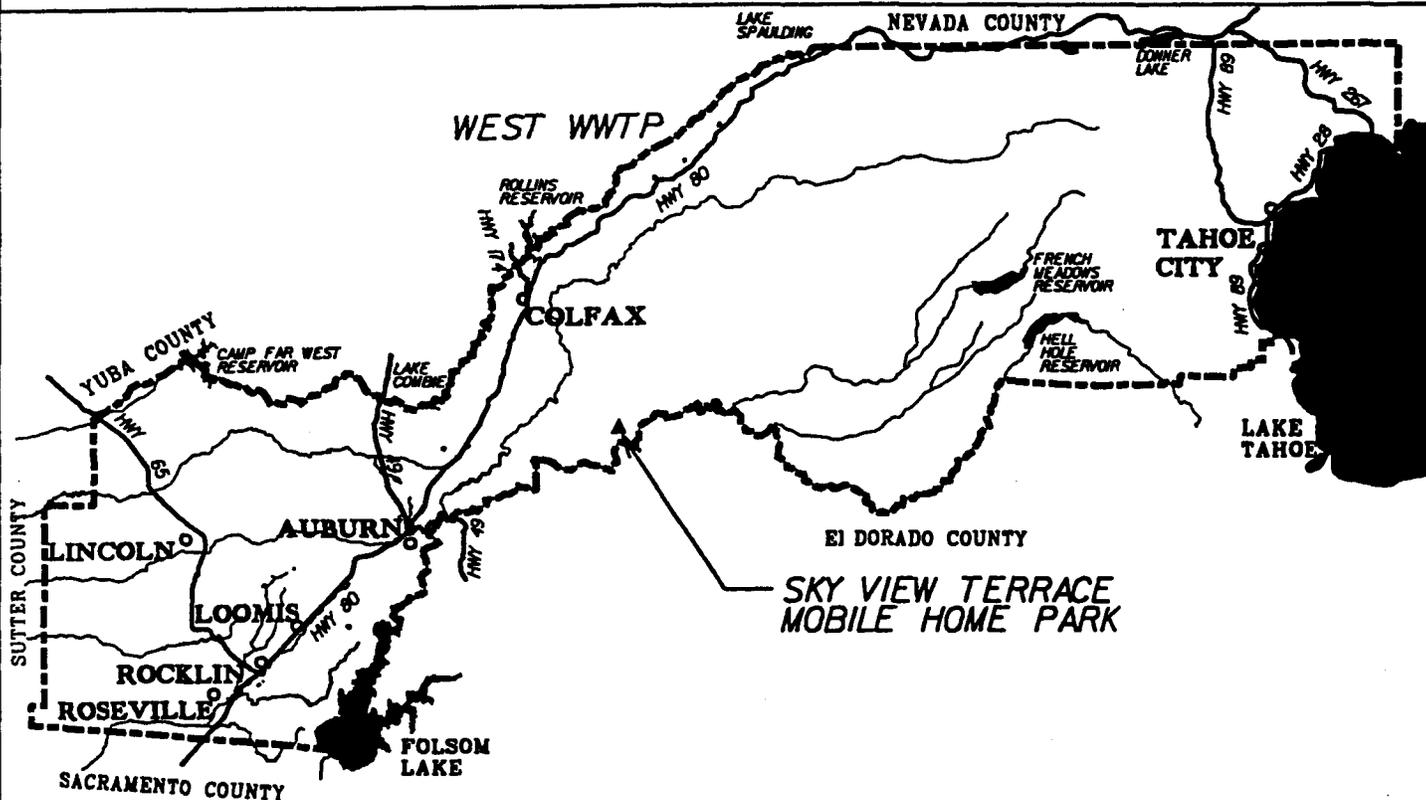
Proposed Improvements: At this time there are no planned, proposed or required improvement to the treatment and disposal system.

Financing: Improvement, operations and maintenance costs for the Sky View Mobile Home Park wastewater collection, treatment and disposal system are funded through Sky View Terrace trailer space rental fees or special financing for large improvements.

System Appraisal: Upon full buildout of the Sky View Terrace Mobile Home Park, mechanical aerators which were installed in the first and second ponds and the addition of the third pond have enhanced

treatment performance. Full build-out average dry weather flow will be 39,000 gpd and is expected to be reached in 1992. Plans for additional expansion beyond this level are not being considered at this time.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: SKY VIEW TERRACE MOBILE HOME PARK

Address: 21200 TODD VALLEY ROAD • 25, FORESTHILL, CA 95631

Contact Name: CAL LYONS, MANAGER Phone: (916)-367-2218

Service Area Size: 56 ac. No. Connect.: 135 Population Served: 400

Services Provided: WASTEWATER MANAGEMENT

Summary System Description

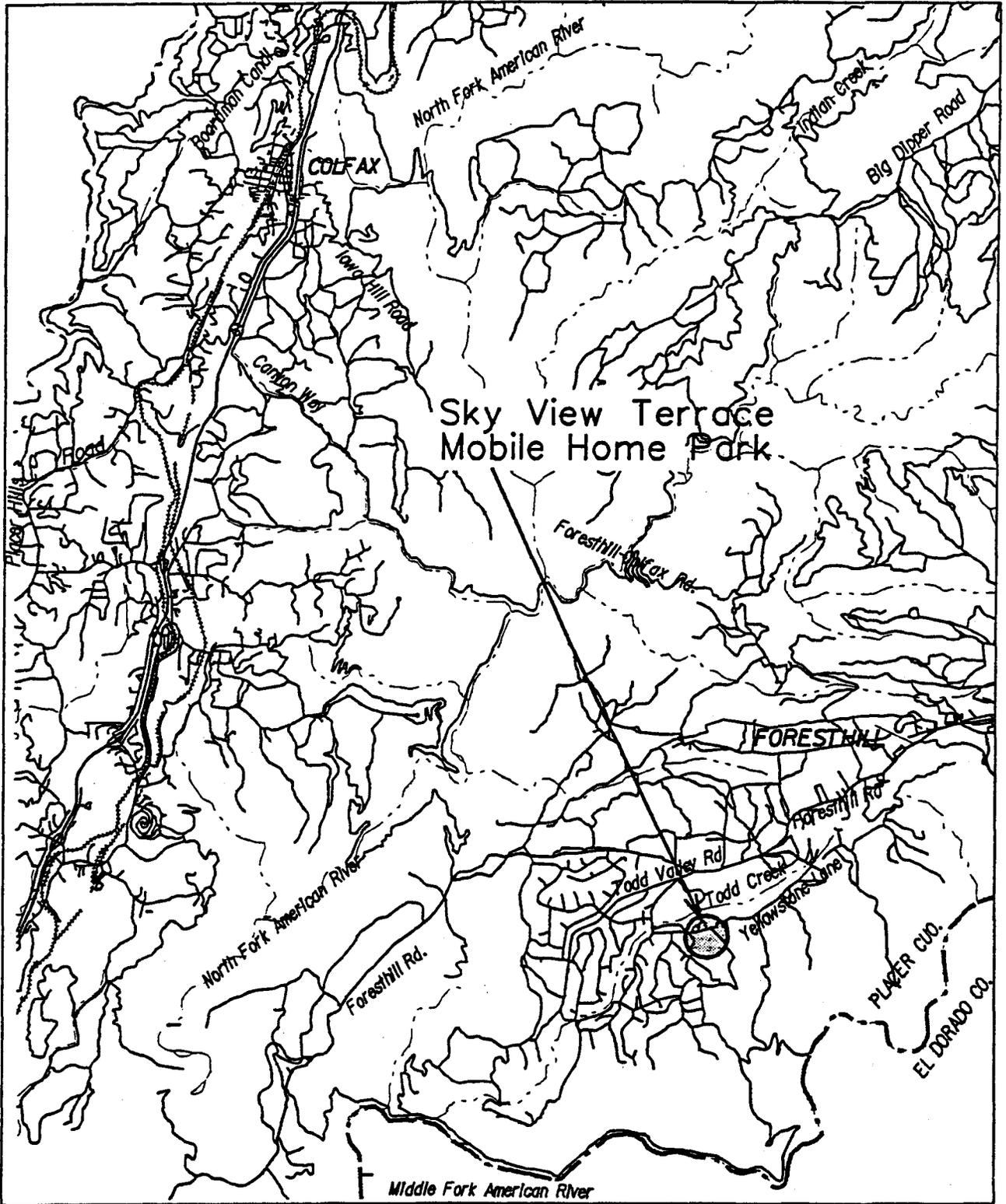
Service Area Characteristics: THE PARK CURRENTLY HAS 130 TRAILER SITES AND GENERATES ABOUT 37,500 GPD. EXPECTED CAPACITY OF PARK IS 135 SITES OR 39,000 GPD OF WASTEWATER.

Collection: THE EXISTING COLLECTION SYSTEM IS CONSTRUCTED OF ABS. AND TRANSITE PIPE.

Treatment: THREE PONDS ACT AS A SEQUENTIAL CLARIFICATION PROCESS. INITIAL SOLIDS SEPARATION OCCURS IN FIRST POND.

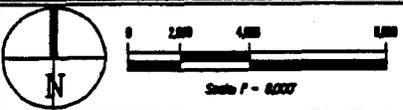
Disposal: EVAPORATION AND PERCOLATION.

Capacity Limitations: UPON FULL BUILDOUT OF PARK, MECHANICAL AERATORS INSTALLED IN FIRST AND SECOND PONDS WILL ENHANCE TREATMENT PERFORMANCE. ULTIMATE CAPACITY IS 39,000 GPD.



Placer County General Plan

Figure _____ Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND Sky View Terrace Mobile Home Park

- Streets
 - County Line
 - Waterways
 - District Service Area
- NOTE:**
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

SOUTH SUTTER WATER DISTRICT--CAMP FAR WEST

General Information: The South Sutter Water District-Camp Far West Reservoir is located on the Bear River about fifteen miles southeast of Marysville (Sec 27, T14N, R6E, MDB&M). Wastewater from the facility is regulated by RWQCB Waste Discharge Requirements Order No. 87-210 and Monitoring and Reporting Program No. 87-210 which were adopted on December 11, 1987.

Surface drainage from the facilities is to the Camp Far West Reservoir and thence to the Bear River.

Wastewater Generation/Sources: The South Side Activity Area encompasses 67 camp sites and 37 day use facilities. The camp sites and day use facilities are supported by 2 fixed restrooms and several portable/chemical toilets.

Collection System Description: Wastewater from the two fixed bathrooms is conveyed by a gravity collection system to an oxidation/evaporation pond. The population served is variable mostly consisting of campers and recreational day users. The wastewater generated is considered domestic in nature.

Deficiencies: Currently there are no identified deficiencies with the existing collection system.

Proposed Improvements: Currently there are no planned, proposed or required collection system improvements.

Wastewater Treatment and Disposal System Description: Wastewater from the campsite facilities is conveyed to a single oxidation/evaporation pond. An emergency overflow pipe which was used for emergency overflows was removed.

Wastewater from the portable/chemical toilets is hauled offsite for disposal.

Deficiencies: A single oxidation/evaporation pond treats the wastewater flows. Although the system has never reportedly overflowed the potential for offsite migration of partially treated wastewater may exist.

Regulatory agency compliance issues in the past have mainly focused on delinquent monitoring report submittals.

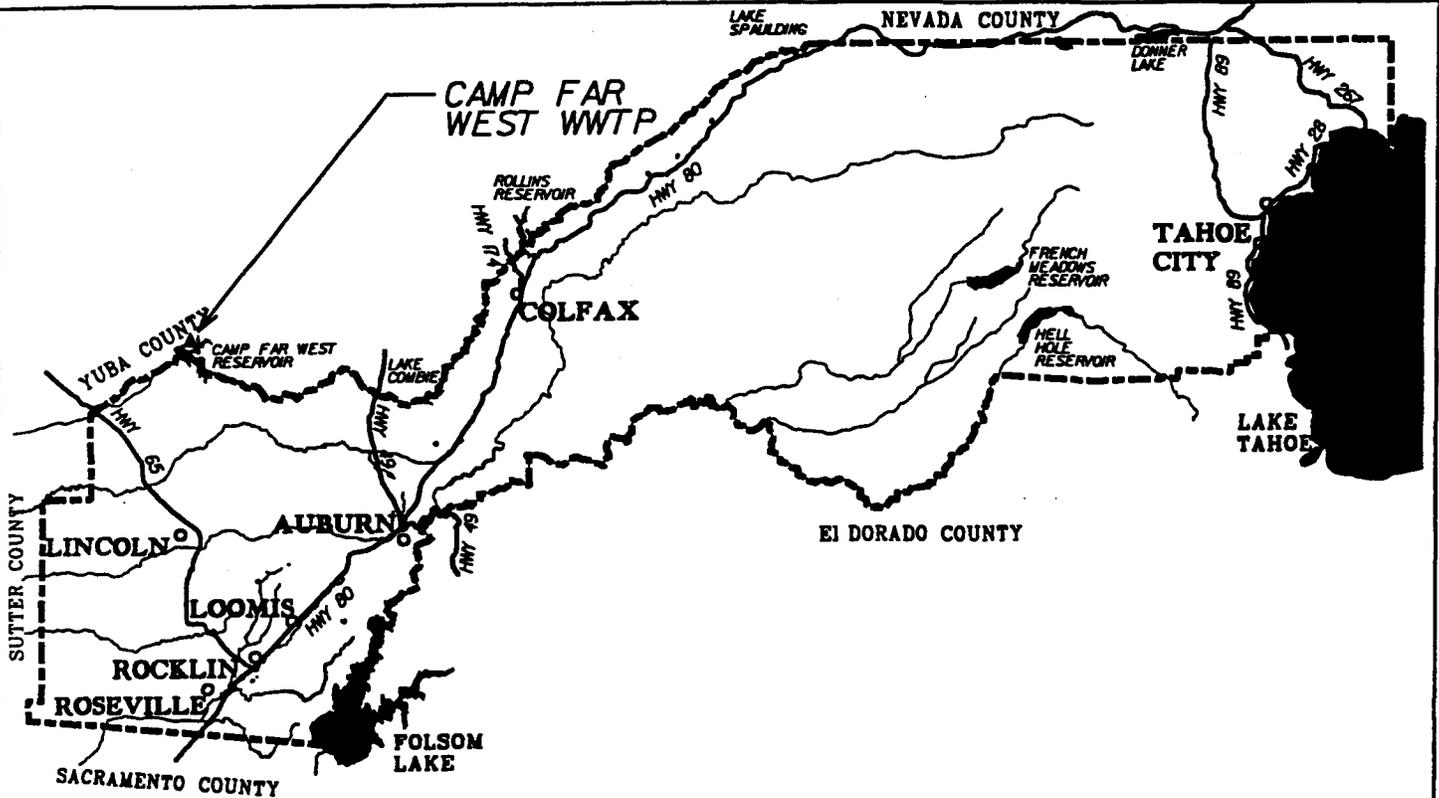
Currently there are no identified deficiencies with the existing treatment and disposal facilities.

Proposed Improvements: There are no near term planned, proposed or required improvements to the treatment and disposal system.

Financing: Improvement, operations and maintenance costs for the sewage collection, treatment and disposal system are funded through South Sutter Water District funding and campsite use fees.

System Appraisal: The Camp Far West wastewater collection, treatment and disposal system is designed for a peak wet weather flow of 53,000 gpd. The system is currently at about 80% of its design capacity. Plans for additional capacity are not being considered at this time.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: SOUTH SUTTER WATER DISTRICT - CAMP FAR WEST
 Address: FIFTEEN MILES SOUTHEAST OF MARYSVILLE ON BEAR RIVER
 Contact Name: ROBERT MELTON, GENERAL MANAGER Phone: (916) 656-2242
 Service Area Size: 67 SITES No. Connect.: 2 Population Served: VARIABLE
 Services Provided: WASTEWATER MANAGEMENT

Summary System Description

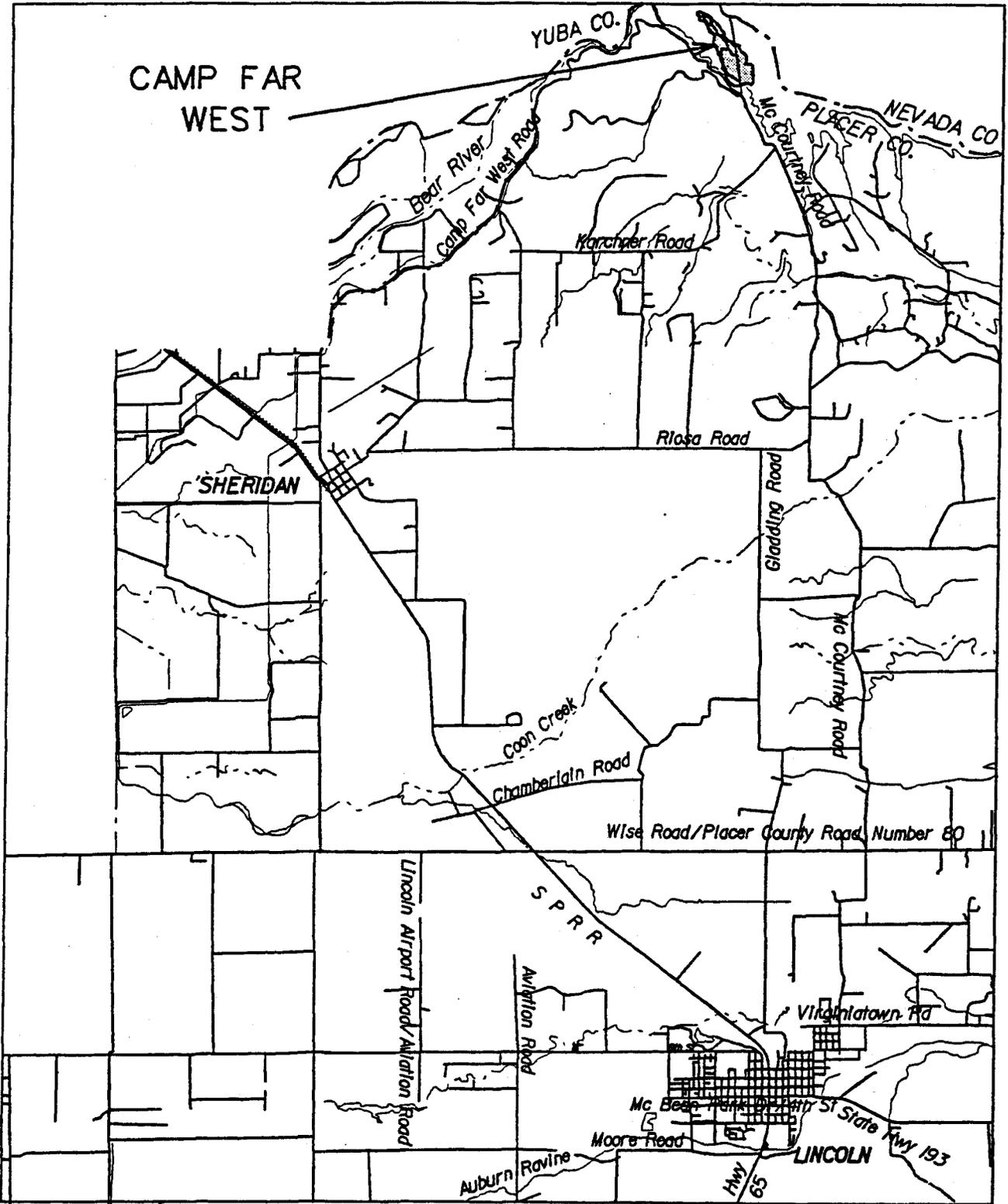
Service Area Characteristics: SOUTH SIDE ACTIVITY AREA ENCOMPASSES 67 CAMPSITES AND DAY USE FACILITIES.

Collection: NO CAMP SITES ARE CONNECTED TO SEWAGE HOOKUPS. HOWEVER THE CAMP SITES AND DAY USE FACILITIES ARE SUPPORTED BY FIXED RESTROOMS AND PORTABLE/CHEMICAL TOILETS.

Treatment: OXIDATION POND.

Disposal: EVAPORATION. WASTEWATER FROM PORTABLE/CHEMICAL TOILETS IS HAULED OFFSITE.

Capacity Limitations: DESIGN CAPACITY OF THE FACILITIES IS 53,000 GPD.



Placer County General Plan

Figure — Wastewater Service Area

Date: 1/15/92

Prepared by
PSOMAS & ASSOCIATES

Scale 1" = 6000'

N

LEGEND South Sutter Water District-Camp Far West

	Streets		County Line
	Waterways		District Service Area

NOTE:
Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

U. S. FOREST SERVICE FRENCH MEADOWS

General Information: Waste discharge requirements were rescinded by the RWQCB for the U.S. Forest Service, French Meadows System on November 22, 1991 by RWQCB Order No. 91-236. this system is now under the regulatory and enforcement requirements of the Placer County Department of Health and Medical Services, Division of Environmental Health.

WEIMAR INSTITUTE

The Weimar Institute is located ten miles northeast of the City of Auburn, west of U.S. Highway 80, between Auburn and Colfax, at 20601 West Paoli Lane (Sec 28, T14N, R9E, MDB&M). Wastewater from the facility is permitted under RWQCB Waste Discharge Requirements Order No. 88-082, Federal USEPA NPDES Permit No. CA0077925, and RWQCB Monitoring and Reporting Program No. 88-025. The WDR's and the Monitoring and Reporting Program were adopted on May 20, 1988.

Surface drainage is to Coyote Creek, thence Wooley Creek and Lake Combie.

Wastewater Generation/Sources: The Weimar Institute operates a wastewater treatment plant to treat domestic wastewater from a school, health center, staff houses, and dormitories. A total population of 550 (1977 estimate) is served by the wastewater system. Average dry weather discharge is 11,000 gpd. Wastewater generated is considered domestic in nature.

Collection System Deficiencies: There are currently no identified deficiencies with the existing collection system.

Proposed Improvements: Currently there are no planned, proposed or required collection system improvements.

Wastewater Treatment System Description: The Weimar Institute Sewage Treatment Facility consists of an Imhoff tank, trickling filter, and three oxidation ponds.

The Weimar Institute undertook a planned rehabilitation of the treatment and disposal system to sufficiently treat discharge of 27,000 gpd. Approval of technical information demonstrating adequate performance of the leachfield is the premise for RWQCB discharge permitting for this expansion.

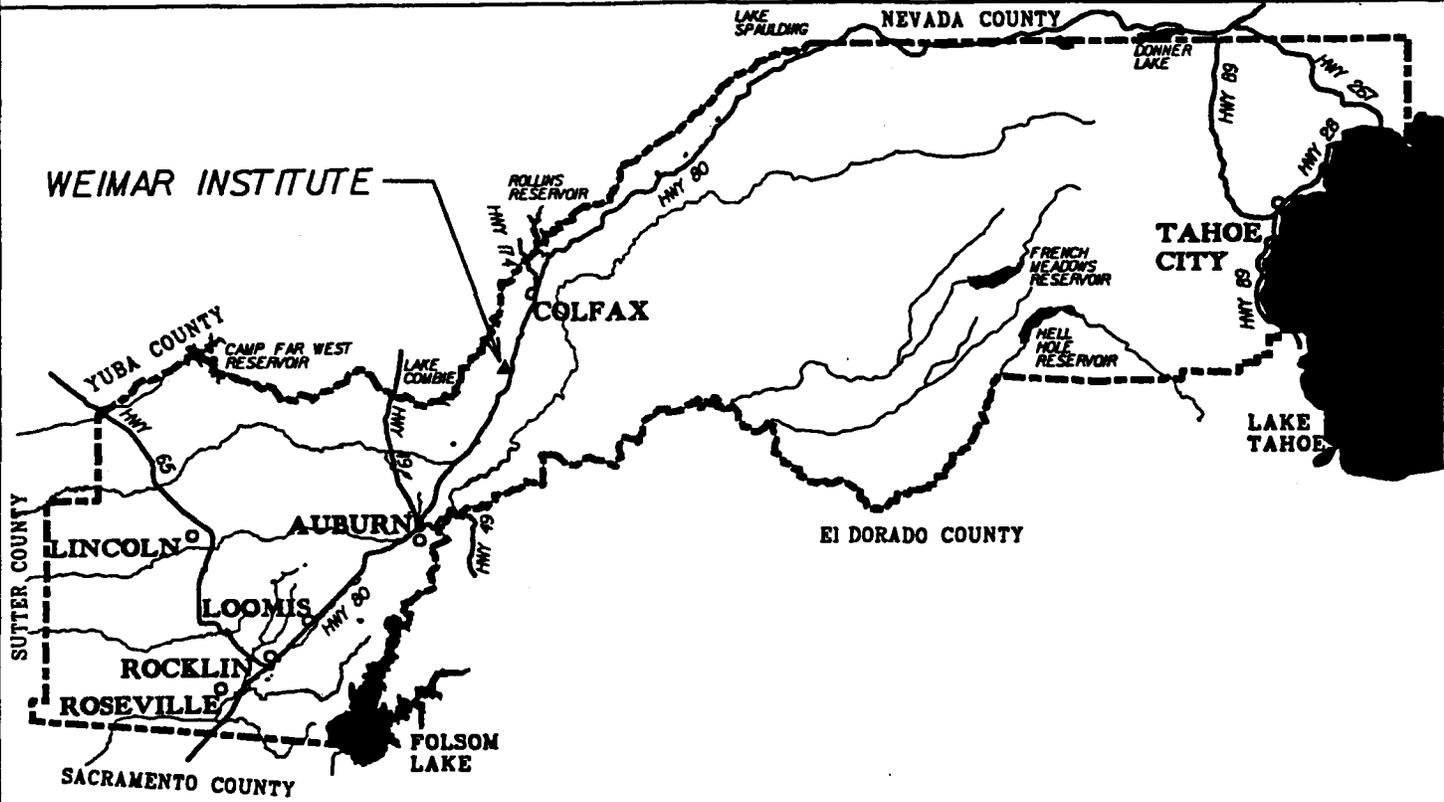
These recent improvements have increased the hydraulic capacity of the treatment facilities. Reconstruction of the oxidation ponds negated spring activity and increased capacity. Also, surface runoff controls were constructed and the levees, subject to seepage, were replaced. These improvements were made in response to Cleanup and Abatement Order of January 18, 1982, Cease and Desist Order No. 76-169, and an Administrative Civil Liability Order.

Disposal System Description: Effluent from the wastewater treatment plant is discharged into a subsurface leachfield.

Deficiencies: Direct discharge of wastes to surface waters or surface water drainage courses is prohibited. An overflow to Coyote Creek of 10,000 gallons which occurred in June 1989, presumably the work of vandals. In 1985, a spill of 69,000 gallons of wastewater warranted the issuance of a fine from the RWQCB. The Monitoring and Reporting Program designates two locations for taking samples from Coyote Creek.

Financing: Improvement, operations and maintenance costs for the sewage collection, treatment and disposal system are funded through Weimar Institute funds.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: WEIMAR INSTITUTE

Address: 20601 WEST PAOLI LANE, WEIMAR, CA 95736

Contact Name: KAREN AWADE, EXECUTIVE VICE PRES. Phone: (916)-637-4111

Service Area Size: _____ No. Connect.: _____ Population Served: _____

Services Provided: WASTEWATER MANAGEMENT

Summary System Description

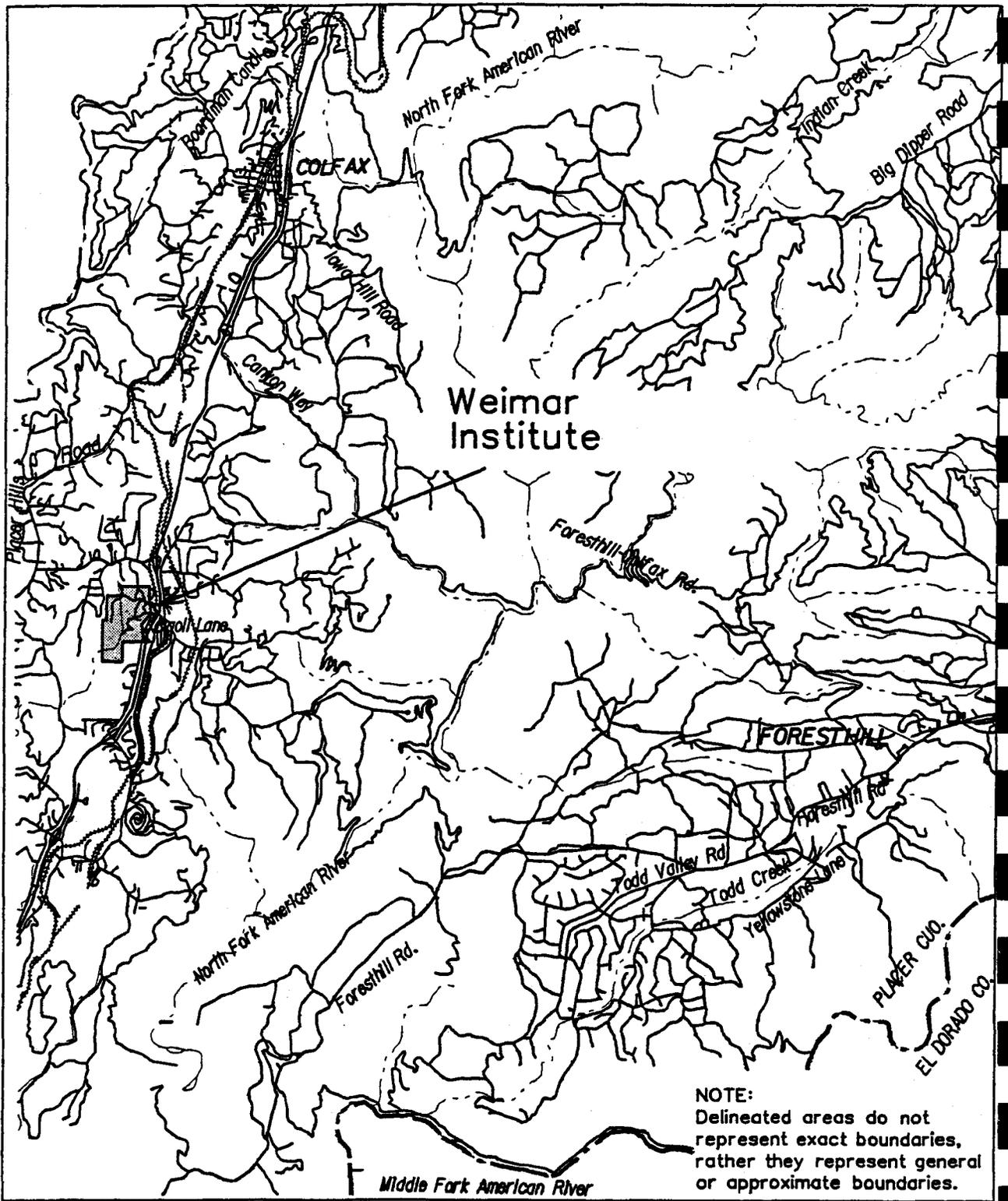
Service Area Characteristics: LOCATED 10 MILES NORTHEAST OF THE CITY OF AUBURN, WEIMAR INSTITUTE CONSISTS OF A SCHOOL, HEALTH CENTER, STAFF HOUSES, AND DORMITORIES.

Collection: _____

Treatment: WASTEWATER TREATMENT CONSISTS OF AN IMHOFF TANK, TRICKLING FILTER, AND THREE OXIDATION PONDS. ADFW OF 11,000 GPD.

Disposal: EFFLUENT DISCHARGED TO A LEACHFIELD.

Capacity Limitations: APPROVAL OF TECHNICAL INFORMATION DEMONSTRATING ADEQUATE PERFORMANCE OF THE LEACHFIELD IS THE PREMISE FOR EXPANSION TO 27,000 GPD (ADWF).



NOTE:
Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

Placer County General Plan

Figure — **Waste Water Service Area**

Date: 1/10/92

Prepared by:
PSOMAS & ASSOCIATES

Scale: 1" = 400'

LEGEND

Weimar Institute

	Streets		County Line
	Waterways		District Service Area

NOTE:
Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

NORTH TAHOE PUBLIC UTILITY DISTRICT

General Information: The North Tahoe Public Utility District (North Tahoe PUD) operates a wastewater collection and exportation system. The North Tahoe PUD was formed in 1948 to address the problem of septic tank system failures which were threatening the water quality of Lake Tahoe. Originally the Kings Beach, Brockway and Tahoe Vista areas were included in the North Tahoe PUD; however, in 1970 a new joint wastewater treatment plant was constructed in Tahoe City allocating an expansion of the district to include all developed lands in the area.

In 1978 a regionalization of the northern and western portions of the Lake Tahoe area occurred and all wastewater collected was conveyed to a new treatment facility constructed in the Martis Valley (see Tahoe-Truckee Sanitation Agency).

Any discharge of liquid or material resulting from operations by the North Tahoe PUD is regulated by Revised Waste Discharge Requirements Order No. 6-83-51, effective on December 15, 1983. No monitoring and reporting program is currently proposed.

Wastewater Generation/Sources: Wastewater is generated by residents and businesses from the Kings Beach, Brockway, Kingswood, Tahoe Estates, Agate Bay Subdivisions, Carnelian Bay, Carnelian Woods, Ridgewood, Ceder Flat, Lake Forest, Fulton Acres, Carnelian Heights, Chinquapin, Dollar Cove, Dollar Point Unit 8 and Tahoe Vista communities located along the north and northwest shores of Lake Tahoe.

There are 4,656 residential and 194 commercial connections in the system (Total 4,850). The service area is 4,158 acres with an estimated resident population of 8,000 and an estimated seasonal population of over 20,000.

The 1991 dry weather wastewater flow is nearly 0.89 mgd which correlates to about 73 gallons/capita/day. According to the 1991 *North Tahoe Public Utility District Master Sewer Plan*, the anticipated dry weather wastewater flow in the year 2003 is 1.04 mgd.

Before issuing new sewer connection permits, North Tahoe PUD, a member entity of the Tahoe-Truckee Sanitation Agency, must be provided evidence of development approved by the Tahoe Region Planning Agency (TRPA), which will determine if the proposed development is consistent with the Lake Tahoe Basin Water Quality Plan. The TRPA is a compact formed by California and Nevada to perpetuate Lake Tahoe water quality.

Collection System Description: The North Tahoe PUD maintains 94 miles of gravity sewer, 6.25 miles of force mains, and 4 primary and 14 satellite pumping stations. There are 1,598 manholes. Sewer line sizes vary from 4-inch to 36-inch and the materials of construction include clay, asbestos cement, cast iron and PVC pipe materials.

Collection system components were installed during three major timeframes. Shortly after the formation of the district in 1948, about 37,000 feet of sewer lines were heavily constructed in 1952. Then in 1960 another major effort to install about 67,000 feet of lines was undertaken. Finally during the period between 1967 and 1973 approximately 322,000 feet of line was installed. The average age of the collection system is therefore about 31 years old.

Deficiencies: Minimal information is available on the condition of 45% of the sewer system due to construction and easement constraints which limit access.

The western section of downtown Kings Beach, the Cedar Flat tract, Tahoe Marina/Tahoe Estates, the eastern region of Kings Beach and Brockway, and the Kingswood Estates are areas of the North Tahoe PUD collection system that have been documented with excessive infiltration/inflow (I/I) in comparison to current goals and standards.

Funding limitations prevent a desirable frequency of maintenance.

Other currently identified deficiencies with the existing collection system include establishing and maintaining access to easement areas, funding, facility replacements, establishing adequate reserve levels, and cost accounting to ensure optimum efficiency.

Proposed Improvements: North Tahoe PUD has identified twenty sewer line replacement projects. It is recommended in the *North Tahoe Public Utility District Sewer Master Plan*, that required repairs and replacements are made over a seven year period, beginning in 1990. During the final six years of the program an average of 1,700 linear feet of sewer line will be replaced annually.

North Tahoe PUD is in the process of implementing an information management system to optimize maintenance operations.

Additional planned, proposed or required collection system improvements include pump station modifications for emergency power, replacement of underground storage tanks, provide system mapping for field operations. Replacement of the Dollar Hill force main and replacement of pump station variable speed controllers for efficiency.

Wastewater Treatment and Disposal System: Wastewater from North Tahoe PUD is conveyed to the Tahoe-Truckee Sanitation Agency (T-TSA) Regional Wastewater Treatment Plant in Martis Valley. The various pump stations in the North Tahoe PUD system transport the wastewater to the Dollar Main Pump Station from which it is pumped over dollar hill through a 0.6 mile 20-inch lined steel main to a group interceptor that carries the flow through the TCPUD service area to the T-TSA interceptor.

Financing: North Tahoe PUD, in accordance to the financial strategy introduced in the *North Tahoe Public Utility District Sewer Master Plan*, plans to raise the connection fee to \$2,000 and gradually increase monthly sewer rates, from \$13.86 in 1991 to \$22.47 in the year 2000.

A Certificate of Participation issue is needed to fund capital improvements from 1990 to 1993. General obligation bond proceeds are proposed to support subsequent improvements. The *North Tahoe Public Utility District Sewer Master Plan* advocates that \$450,000 is spent each year on collection system repairs and replacement and another \$30,000 to \$60,000 is budgeted for emergency uses.

Operations and maintenance costs for the sewage collection, treatment and disposal system are funded through a combination of service fees and Ad Valorem tax revenue. The system has a vehicle fleet of 46 and personnel consisting of 2 mechanics and 4.3 administrative staff. Administration costs were budgeted for \$475,000 for fiscal year 1991-92 with an annual operations cost budgeted for \$850,000 and annual non-operating cost budgeted at \$168,000 and direct capital outlay of \$138,000.

The current fee schedule for the system is outlined in the following table.

NORTH TAHOE PUD SYSTEM FEE SCHEDULE

Type of Connection	Code	Units	Charge Per Unit	
			Monthly	Annually
Residential	R	Living Unit	14.86	178.32
Residential (non-taxed)	D	Living Unit	17.86	214.32
Motel w/o Kitchen/Guest Facilities	M	Living Unit	3.72	44.64
Motel with Kitchen	N	Living Unit	4.85	58.20
Motel Res/Stock Coop/Studio	A	Living Unit	9.86	118.32
Campsite with Sewer Connection	K	No. of Sites	7.44	89.28
Campsite w/o Sewer Connection	Q	No. of Sites	6.52	78.12
Restaurants and Bars	F	No. Seats Inside	1.14	13.68
		No. Seats Outside**	0.38	4.56
Snack Bars	J	No. Plumbing Fixture Units	1.13	13.68
Laundries	L	No. 10 lb Machines	6.10	73.20
Theaters	T	No. of Seats	0.14	1.68
Service Stations	P	No. Service Bays	19.91	238.92
Barber Shops	H	No. Service Chairs	3.91	46.92
Markets	G	No. Plumbing Fixture Units	2.60	31.20
		No. of Seats	0.14	1.68
Churches	C	No. of Seats	0.14	1.68
Beauty Shops	V	No. Service Chairs	6.51	78.12
Marina Boat Pumping Facility	X	Each	13.96	167.52
Other Business	B	No. Plumbing Fixture Units	1.48	17.76
Schools	U	No. of Seats	0.0167	0.20
Other Business (non-taxed)	E	No. Plumbing Fixture Units	AS MAY BE DETERMINED	
Animal Shelter	O		40.81	489.72
Swimming Pools	Y	Per Pool	2.96	35.52
Special Charges				
Inspections Per Visit:			\$ 25.00	
Service Lateral Cleaning and Testing, Inspection of New Services and Existing Services				
Inspection Fee (more than 2 inspections)			\$ 50.00	
Administrative Fee, Connection Charge Refunds			\$250.00	
Delinquency Charges				
Penalty			10%	
Monthly Charge			1%	
Tapping Charge, Sewer Stub			\$150.00	
Reconnection Charge, Sewer Service			\$100.00	
After Normal Working Hours Service Call minimum or actual time and materials			\$ 35.00	
Returned Check Charge			\$ 10.00	
Wastewater disposal Fees			\$ 6.00 per 1,000 gallons	

System Appraisal: The North Tahoe PUD operates a wastewater collection and conveyance system. The 1991 North Tahoe Public Utility District Sewer Master Plan identifies operating and facility needs and develops a rational financing program.

Collection system design daily flow is 11 mgd with a current average daily flow of 0.95 mgd and a peak daily flow of 3.8 mgd. Anticipated dry weather flow in the year 2003 is 1.04 mgd with a capability to collect and transport in excess of 6 mgd. Near-term planning includes the connection of additional service areas.

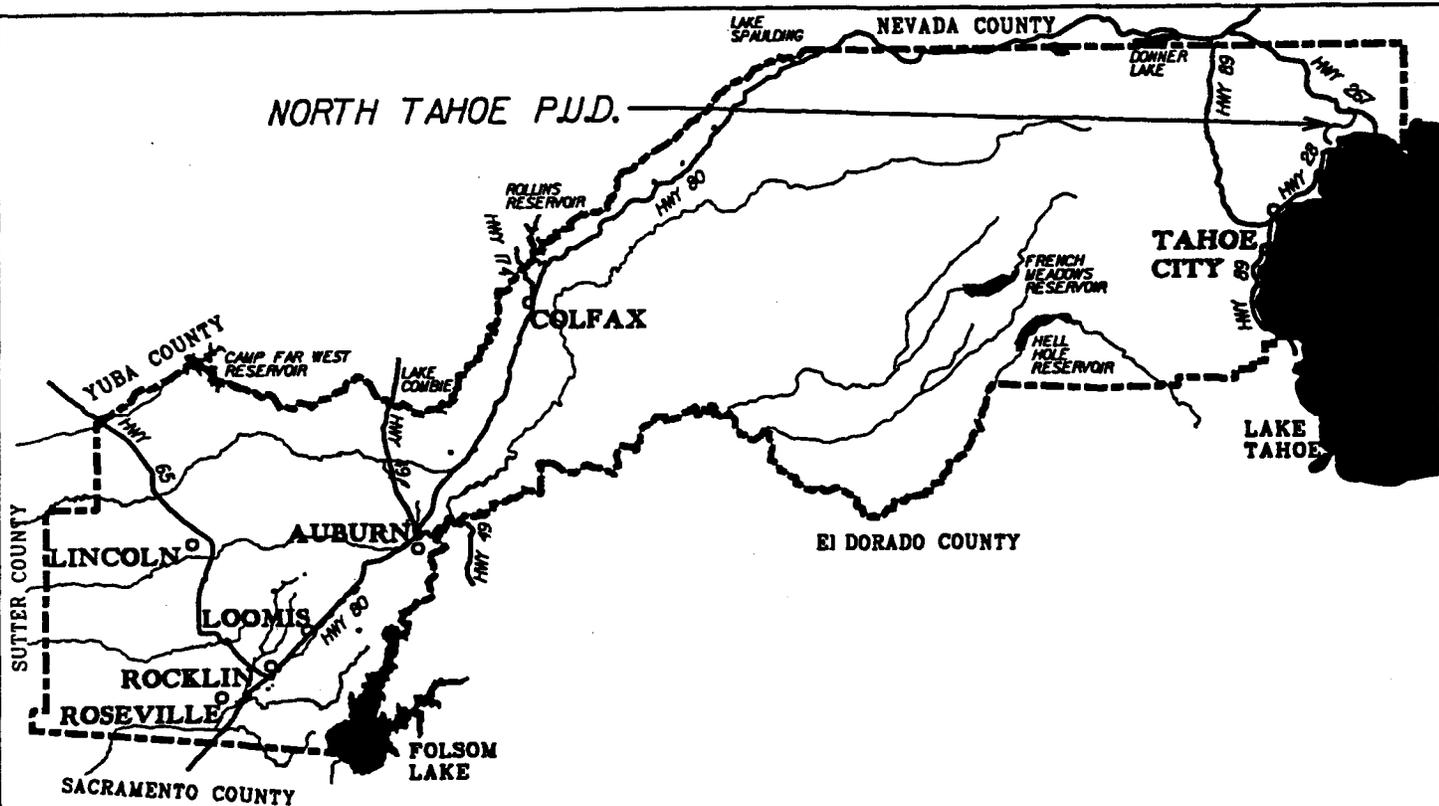
Identified apparent problems include:

- Funding constraints and associated limitations
- An inability to cost account by task
- Moderate to high inflow and infiltration in some areas
- Lack of redundant force main lines
- Inadequate access to lines in easement areas
- Old age of some portions of the collection system
- Lack of back-up power for satellite pump stations
- Enforcement of a grease control ordinance

The system has a good record for sustained operational continuity even through inclement weather conditions. The number of overflows or spills from the system averages less than one per year and there are currently no outstanding regulatory enforcement actions. The system is considered to have a high level of operational readiness and adequate level for emergencies.

In general the North Tahoe PUD wastewater collection and conveyance system is considered in adequate overall condition.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: NORTH TAHOE P.U.D.

Address: 875 NATIONAL AVENUE, TAHOE VISTA, CA 96148

Contact Name: LEON C. SCHEGG, CHIEF ENGINEER Phone: (916)-546-4212

Service Area Size: 4158 ac. No. Connect.: 4850 Population Served: 8,000 ±

Services Provided: WASTEWATER COLLECTION AND TRANSPORT

Summary System Description

Service Area Characteristics: KINGS BEACH, BROCKWAY, TAHOE VISTA, CARNELIAN BAY, CEDAR FLAT, AND DOLLAR COVE COMMUNITIES LOCATED ALONG THE NORTH SHORE OF LAKE TAHOE.

Collection: 94 MILES OF GRAVITY SEWER, 6.25 MILES OF FORCE MAINS, AND 18 PRIMARY AND SATELLITE PUMPING STATIONS.

Treatment: WASTEWATER TRANSPORTED TO TAHOE-TRUCKEE SANITATION AGENCY MARTIS VALLEY WASTEWATER TREATMENT PLANT.

Disposal: T TSA EFFLUENT DISCHARGED BY GROUND INJECTION WITH SEASONAL DISPOSAL TO SPRAY IRRIGATION FIELD.

Capacity Limitations: DEVELOPMENT MUST GAIN CONSENT OF TAHOE REGION PLANNING AGENCY BEFORE DISTRICT ISSUES NEW SEWER CONNECTION PERMITS. CURRENT SYSTEM DESIGN CAPACITY IS 11.0 MGD. THIS CAPACITY IS IN EXCESS OF ALL GROWTH SCENARIOS.

TAHOE CITY PUBLIC UTILITY DISTRICT

General Information: The Tahoe City Public Utilities District provides water, sewer collection, and recreational services to the north and west shores of Lake Tahoe.

Wastewater discharged from Tahoe City PUD is not permitted under RWQCB WDR's since the collection system is connected to the Tahoe-Truckee Sanitation Agency (T-TSA) regional wastewater treatment plant. Maintenance projects are however regulated by Revised Waste Discharge Requirements Order No. 6-83-50, adopted on December 15, 1983. No monitoring of wastewater management processes is currently required.

Wastewater Generation/Sources

Tahoe City PUD extends services to most developments from Emerald Bay to Dollar Point. The collection system can be divided into 25 flowsheds. Most flowsheds are served by one or more lift stations which deliver wastewater to the T-TSA interceptor. There are approximately 6,600 residential connections and 200 commercial connections in the system. The wastestream is considered municipal in nature.

Peak dry weather flow occurs in July and August with a six year average of 1.37 mgd. Winter season wastewater flows are usually less than summertime flows, however, average flows in February through April 1986 exceeded 1.5 mgd under the influence of infiltration/inflow (I/I). Daily flows averaged almost 2.2 mgd in March 1986.

Average daily flow over the six year period beginning in 1985 was 1.08 mgd; however, the six year ADWF was estimated to be 1.26 mgd.

Before issuing new sewer connection permits, Tahoe City PUD, a member entity of the Tahoe-Truckee Sanitation Agency, must gain the consent of the Tahoe Region Planning Agency (TRPA), which will determine if the proposed development is consistent with the Lake Tahoe Basin Water Quality Plan. The TRPA is a compact formed by California and Nevada to perpetuate Lake Tahoe water quality.

Collection System Description: The sewer service area is divided into 25 flow sheds, each facilitated by one or more pump stations which convey wastewater to the Tahoe-Truckee Sanitation Agency (T-TSA) Truckee River Interceptor which flows to the T-TSA Regional Wastewater Treatment Plant. Tahoe City PUD pipelines and pump stations were generally designed to serve a much greater population than currently inhabits, or is likely to inhabit the area in the future.

Tahoe City PUD staff has established and sustained an excellent maintenance program.

A majority of the collection system was installed in 1970 and the average system age is 22 years. Line sizes range from 6 inches to 42 inches and the materials of construction include PVC, ACP, VCP, and RCP. There are 20 lift stations in the system with pumping capacities ranging from 0.002 to 2.4 mgd.

Deficiencies: Collection system capacity limitations have only been recorded under extreme conditions produced by excessive I/I.

In response to increasing wastewater flows, Tahoe-Truckee Sanitation Agency conducted an *Intensive Flow Evaluation* (prepared by CH2M Hill) on the wastewater collection systems of each member agency in

1984. The study disclosed collection systems with groundwater infiltration exceeding 500 gallons/day/inch/mile. The Tahoe City PUD collection system experienced the most extreme groundwater infiltration at 754 gallons/day/inch/mile. A gravity sewer line replacement schedule outlines replacement to the year 2001 which involves approximately 13,000 feet of pipeline at an estimated cost of 1.5 million dollars.

Proposed Improvements: Tahoe City PUD proposes to undertake a flow monitoring program. This program includes upgrading of flow monitoring equipment in the pumping stations and introduction of digital recorders. In addition, fifteen satellite flow monitoring stations, each consisting of a flume, level recording instrument, and a SCADS transmitter, are planned for installation.

The *Public Review Draft of the Tahoe City Public Utility District Sewer Master Plan* identifies \$10,400,000 in replacement costs over the next decade and \$637,000 in new capital additions. All capital improvements, including costs associated with replacement, repair, or upgrade of collection system components and development of a flow monitoring program, are summarized in the Capital Improvement Plan.

Wastewater Treatment and Disposal System: Wastewater from Tahoe City PUD is conveyed to the Tahoe-Truckee Sanitation Agency Regional Wastewater Treatment Plant in Martis Valley.

Financing: The Capital Assets Management Program represents a method for funding the future replacement of Tahoe City PUD's sewer utility capital assets.

The impact of the recommended Capital Improvement Plan and the Capital Assets Management Program on sewer rates was evaluated under a number of funding scenarios in the *Public Review Draft of the Tahoe City Public Utility District Sewer Master Plan*. All of the alternatives are based on the assumption that \$400,000 in property tax revenues will be available annually to fund some capital improvements.

Improvement, operations and maintenance costs for the sewage collection, treatment and disposal system are funded through connection fees and annual service fees. The current fee schedule for the system is outlined in the following table.

TAHOE CITY PUD SYSTEM FEE SCHEDULE

Connection			Charges	Annual Charge
Code	Type of Connection	Unit Description		
A	Residential	Dwelling Unit	\$131.00	\$1,000.00
B	Motel without Kitchen	Each	53.32	395.00
C	Motel with Kitchen	Each	56.88	435.00
D	Campsite with Sewer Connection	Each	66.08	490.00
E	Campsite w/o Sewer Connection	Each	56.88	435.00
F	Restaurants	Per Seat	7.24	50.00
G	Bars	Per Seat	7.24	50.00
H	Snack Bars	Each	197.00	1,475.00
I	Laundries	Per Machine	26.68	200.00
J	Theater	Each	393.92	2,945.00
K	Service Station	Each	197.00	1,475.00
L	Barber Shop/Beauty Salon	Each	131.08	980.00
M	Hotel Room w/o Bath	Each	33.64	250.00
N	Hotel Room with Bath	Each	53.32	395.00
O	Marina Boat Pumping Facility	Each	197.00	1,475.00
P	Commercial or Professional Building Not Otherwise Listed and Churches	Floor space up to 1,000 sq.ft. Plus for each additional 1,000 sq.ft. or fraction Plus for each 1/2 to 1 sewer unit* Plus for less than 1/2 sewer unit*	131.08 66.08 131.08 66.08	1,000.00 500.00 1,000.00 500.00
R	Swimming Pool Wastes	Per year	66.08	440.00
S	Temporary Discharges	\$.59 per 1,000 gallons, plus \$.59 per 1,000 gallons per lift	None	
T	Non-Taxable Properties	Two times applicable rate for proper category	As Determined	131.08
U	Unclassified		As determined	As Determined

Note: Minimum Annual Charge for any use of the sewage works is \$131.08.

Bond Required for Property Owner Doing Own Work	500.00
Reconnection Fee (Section XV F)	95.00

*One sewer unit is equal to 20 plumbing fixture units (see TCPUD Ordinance for plumbing fixture units explanation).

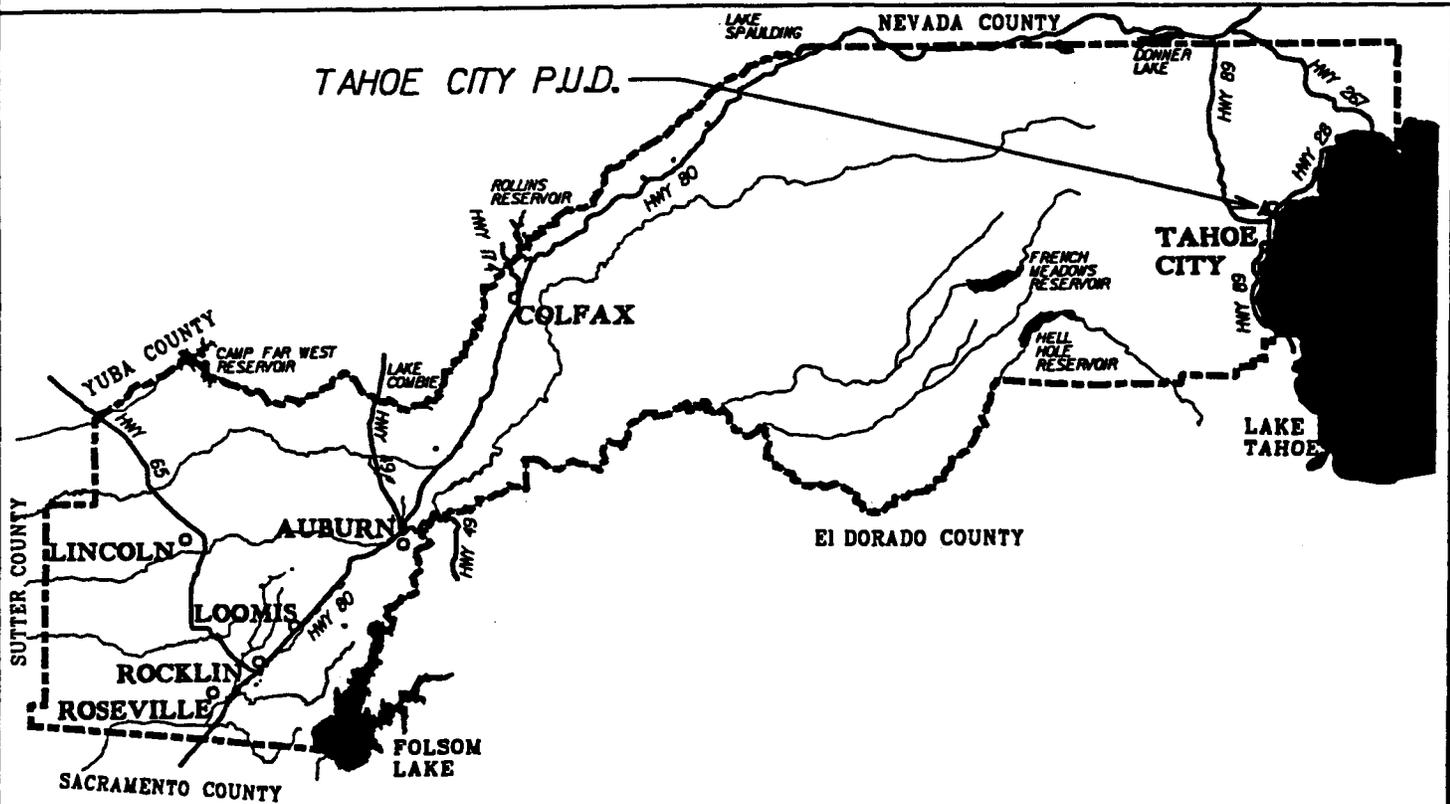
Source: Tahoe City PUD, Ordinance 195, effective January 1, 1991.

System Appraisal: Tahoe City PUD provides a wastewater collection service. Wastewater is transported to the Tahoe-Truckee Sanitation Agency Regional Wastewater Treatment Plant.

The 1991 *Public Review Draft of the Tahoe City Public Utility District Sewer Master Plan* defines the capital improvements necessary to maintain effective wastewater collection and develops financing mechanisms to fund these improvements.

In general the Tahoe City PUD wastewater collection and conveyance system is considered in good overall condition. Collection system design capacity is 3 to 6 mgd with a current flow of nearly 1.08 mgd and a potential maximum expansion to 7.0 mgd. Due to building regulations in the Tahoe Basin, there will be only minimal growth in future years.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: TAHOE CITY PUBLIC UTILITY DISTRICT

Address: P.O. BOX 33, TAHOE CITY, CA 95730

Contact Name: DAVID ANTONUCCI, GEN. MANAGER/CHIEF ENGR. Phone: (916)-583-3796

Service Area Size: _____ No. Connect.: 6,800 Population Served: _____

Services Provided: WATER, WASTEWATER COLLECTION AND RECREATIONAL SERVICES

Summary System Description

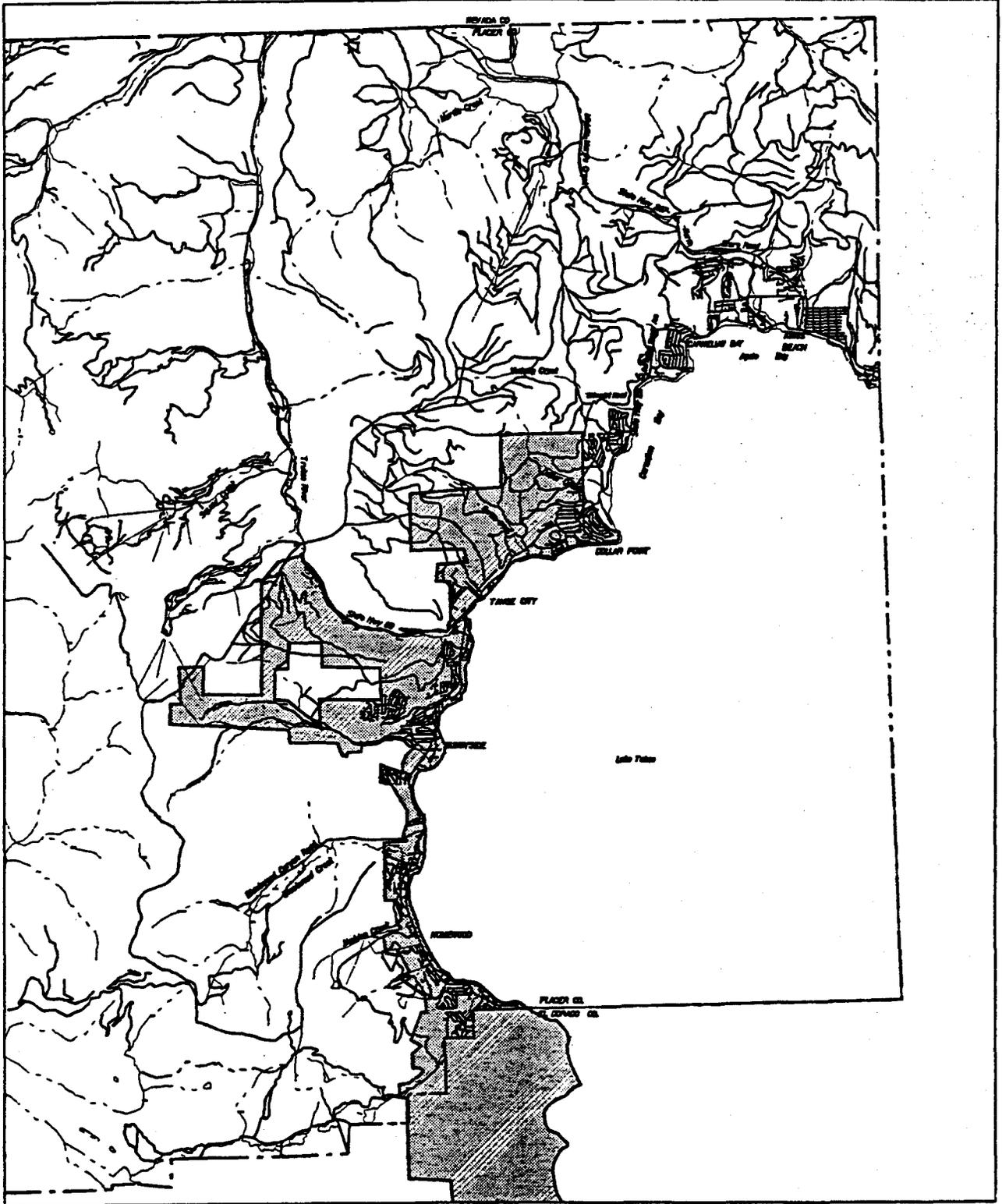
Service Area Characteristics: NORTH AND WEST SHORES OF LAKE TAHOE.
HILLY TERRAIN, WELL FORESTED.

Collection: THE WASTEWATER COLLECTION SYSTEM SERVES MANY DEVELOPMENTS
FROM EMERALD BAY TO DOLLAR POINT. WASTEWATER IS CONVEYED TO THE T-TSA
TRUCKEE RIVER INTERCEPTOR FOR EXPORT TO THE T-TSA TREATMENT PLANT.

Treatment: PROVIDED BY THE T-TSA REGIONAL WASTEWATER TREATMENT FACILITIES
IN THE MARTIS VALLEY. TERTIARY LEVEL TREATMENT IS PROVIDED AT THE
T-TSA FACILITY.

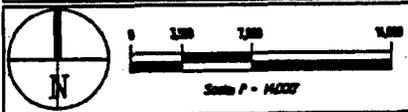
Disposal: EFFLUENT FROM THE T-TSA FACILITIES IS DISCHARGED TO SUBSURFACE
TRENCHES AND SEASONALLY DISCHARGED TO SPRAY IRRIGATION FIELDS.

Capacity Limitations: CURRENT FLOWS ARE 1.08 MGD (6-YR. ADWF, 1985-90).
DESIGN CAPACITY FOR THE T.C.P.U.D. SYSTEM IS 3 TO 6 MGD WITH A POTENTIAL FOR
EXPANSION TO 7.0 MGD. CAPACITY EXCEEDS EXPECTED FUTURE USE.



Placer County General Plan

Figure _____ Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND

Tahoe City PUD

- Streets
- Waterways
- County Line
- District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

SQUAW VALLEY COUNTY WATER DISTRICT

General Information: Squaw Valley County Water District, located in Olympic Valley, provides water supply, sewer collection, and fire protection services. It was organized under the provisions of Division 12 of the Water Code and incorporated in 1964.

Wastewater Generation/Sources: Squaw Valley CWD covers fifteen square miles and provides sewer collection service to approximately 750 permanent residents through 861 sewer connections. There are 821 residential and 40 commercial connections.

The 1991 population within Squaw Valley CWD is estimated to be about 750 on a continual basis. Olympic Valley has a transient seasonal population which culminates at 20,000 to 25,000 during the winter holidays.

In 1990, 68.3 million gallons of wastewater was generated by Squaw Valley CWD, a decrease of 9.1 million gallons from the previous year.

Collection System Description: The Squaw Valley CWD wastewater collection system consists of 84,610 linear feet, or sixteen miles, of sewer main (45,820 linear feet of 6-inch diameter pipe, 15,539 feet of 8-inch pipe, 9,960 feet of 10-inch pipe, 2,853 feet of 12-inch pipe, 128 feet of 14-inch pipe, and 10,310 feet of 15-inch pipe) and 355 standard sanitary manholes. The Resort at Squaw Creek installed an additional 1.7 miles of sewer main in 1990.

Several collection system improvements were made in 1990. Squaw Valley CWD replaced about 320 feet of pipeline on an easement between Tiger Tail and Forest Glen Roads to the tune of \$43,355. Earth stabilization work to protect an interceptor line was accomplished with funds contributed by Tahoe-Truckee Sanitation Agency.

Deficiencies: Currently identified deficiencies with the existing collection system include determining sources of inflow and infiltration.

Proposed Improvements

Squaw Valley CWD proposes to complete a water and sewer master plan, comprehensive as-built maps, and installation of a computerized maintenance program before 1994. Planned, proposed or required collection system improvements include implementation of a District T.U. program to identify inflow and infiltration sources.

Wastewater Treatment and Disposal System: Wastewater from Squaw Valley CWD is conveyed to the Tahoe-Truckee Sanitation Agency (T-TSA) Regional Wastewater Treatment Plant in Martis Valley through the T-TSA gravity interceptor main.

Financing: The minimum connection fee per new single family dwelling unit is \$1,125 and a tapping fee based on the actual district cost. Fixture units added to existing dwellings are \$20/equivalent fixture unit. New connections for commercial customers may include additional charges depending on the size of the project and availability of the system.

Squaw Valley CWD annual service charge for residences is \$103.20. Commercial and industrial wastewater service charges are delineated in Chapter 2, Schedule B of the 1990 *Squaw Valley County*

Water District Code.

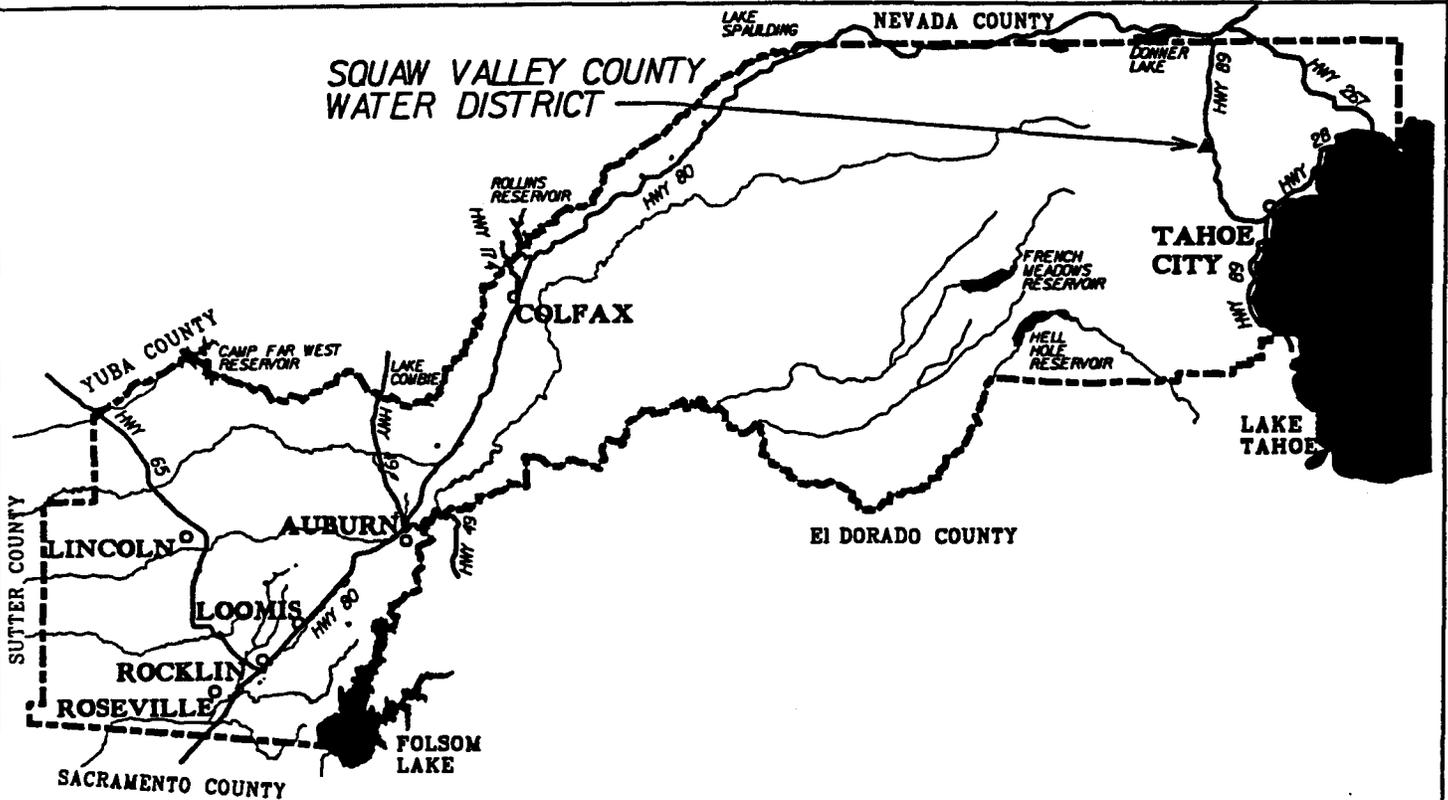
Operations and maintenance costs for the sewage collection system are funded through taxes and annual service fees. Improvements are funded through capital reserve funds obtained from connection fees.

The operations budget for fiscal year 1990-91 was \$66,325 and the administration budget was \$138,156.

System Appraisal: Squaw Valley County Water District provides a wastewater collection service for the Olympic Valley area. Wastewater is transported to the Tahoe-Truckee Sanitation Agency Regional Wastewater Treatment Plant.

In general the Squaw Valley County Water District wastewater collection and conveyance system is considered in good overall condition. Collection system design capacity is 1.0 mgd with a current flow of nearly 0.3 mgd. Anticipated flow in the year 2000 is 0.5 mgd with a potential maximum to expand to 1.0 mgd. Near-term planning does not include the connection of additional service areas.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: SQUAW VALLEY COUNTY WATER DISTRICT

Address: P.O. BOX 2026, OLYMPIC VALLEY, CA 96146

Contact Name: RICHARD L. LIERMAN, GENERAL MANAGER Phone: (916) 583-4692

Service Area Size: 15 sq. mi. No. Connect.: 861 Population Served: 750

Services Provided: WATER SUPPLY, WASTEWATER COLLECTION, FIRE PROTECTION

Summary System Description

Service Area Characteristics: SERVES RESIDENTS IN OLYMPIC VALLEY. TRANSIENT SEASONAL POPULATION CULMINATES AT 20,000 TO 25,000 DURING WINTER HOLIDAYS.

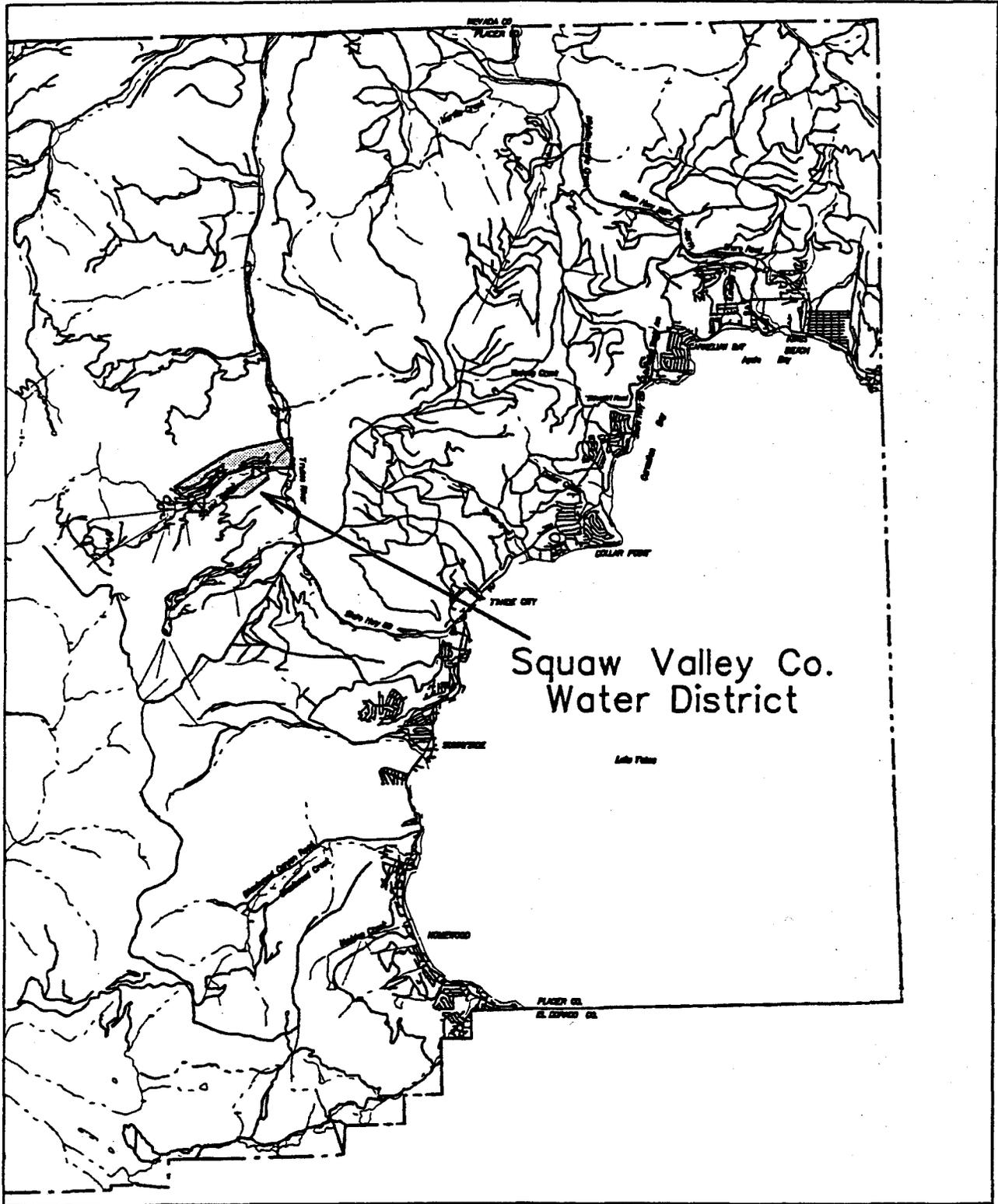
68.3 MILLION GALLONS WASTEWATER GENERATED IN 1990.

Collection: SYSTEM CONSISTS OF 16 MILES OF SEWER MAIN. THE RESORT AT SQUAW CREEK INSTALLED ADDITIONAL 17 MILES IN 1990.

Treatment: WASTEWATER TRANSPORTED TO TAHOE-TRUCKEE SANITATION AGENCY MARTIS VALLEY WASTEWATER TREATMENT PLANT.

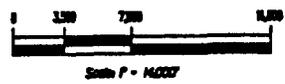
Disposal: T-TSA EFFLUENT DISCHARGED TO SUBSURFACE TRENCHES WITH SEASONAL DISPOSAL TO SPRAY IRRIGATION FIELD.

Capacity Limitations: CURRENT PERMITTED WASTEWATER FLOW IS 0.3 MGD. SYSTEM DESIGN CAPACITY IS 1.0 MGD WITH NO POTENTIAL FOR EXPANSION ABOVE 1 MGD.



Placer County General Plan

Figure  Wastewater Service Area



Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND Squaw Valley County Water District

-  Streets
-  Waterways
-  County Line
-  District Service Area

NOTE:
 Delineated areas do not represent exact boundaries, rather they represent general or approximate boundaries.

ALPINE SPRINGS COUNTY WATER DISTRICT

General Information: Alpine Springs County Water District wastewater collection system serves the community of Alpine Meadows in the Powder Bowl and Alpine Meadows Ski Areas of the Tahoe Basin. The Alpine Springs County Water District mailing address is P.O. Drawer E, Tahoe City, CA 95730.

The community wastewater treatment and disposal system was abandoned by Alpine Springs CWD and the collection system was hooked up to the Tahoe-Truckee Sanitation Agency facilities. At that time the RWQCB issued Board Order No. 6-87-46 rescinding the WDR's (No.6-76-7) which prescribed the discharge requirements for the old Alpine Springs CWD wastewater treatment facilities.

Wastewater Generation/Sources: Wastewater discharged to the collection system is generated by 520[±] residential and 3 commercial connections. The average dry weather flow for the existing collection system is 0.03 mgd and the design capacity of the system is 0.5 mgd. Severe storms in February 1986 resulted in wastewater flows exceeding 200,000 gpd.

Collection System Description: The Alpine Springs CWD wastewater collection system consists of 61,700 linear feet, or about twelve miles, of sewer main (47,000 linear feet of 6-inch diameter pipe, 5,700 feet of 8-inch pipe, 9,000 feet of 10-inch pipe). Except for the River Run Project which has PVC pipe, most of the sewer is made of asbestos cement pipe.

The 1987 *Report on Sewer & Water Systems* indicates that Alpine Springs CWD does not experience excessive infiltration/inflow (I/I) problems and has relatively few manholes and pipelines requiring repairs. In any case, Alpine Springs CWD has an active and effective maintenance program.

Deficiencies: Currently identified deficiencies with the existing collection system include some main line sections which have reverse fall or sagging areas.

Proposed Improvements: A sewer maintenance program is proposed for 1990 through 1996 for the purposes of determining pipeline condition and setting priorities for repairs and replacement. The projected cost of this maintenance program exceeds \$30,000. Significant capital improvements to the Alpine Springs CWD wastewater collection system are not anticipated in the next five to ten years.

Additional planned, proposed or required collection system improvements include general line and/or manhole replacement line replacements as identified by the sewer maintenance program and television inspection of the main trunk line.

Wastewater Treatment and Disposal System: Wastewater from Alpine Springs CWD is conveyed to the Tahoe-Truckee Sanitation Agency Regional Wastewater Treatment Plant in Martis Valley through the T-TSA interceptor main. Demolition of the abandoned wastewater treatment plant was accomplished in 1991 at a cost of \$30,000.

Financing: Primary sources of revenue for improvements, operations and maintenance for the Alpine Springs CWD wastewater collection include property tax, sewer service fees, and interest income. The current fee schedule for the system is outlined in the following table.

ALPINE SPRINGS CWD SYSTEM FEE SCHEDULE

Annual Service Fee	\$ 75.00
Sewer Connection Fee (2 bedroom house) (includes connection fee of \$525.00 and an inflow and infiltration surcharge of \$350.00)	\$875.00

System Appraisal: Alpine Springs County Water District provides a wastewater collection service. Wastewater is transported to the Tahoe-Truckee Sanitation Agency Regional Wastewater Treatment Plant. In general the Alpine Springs CWD wastewater collection and conveyance system is considered in adequate overall condition. Collection system design capacity is 0.5 mgd (peak) with a current flow of nearly 0.05 mgd. Anticipated flow in the year 1992 is 0.05 mgd. Near-term planning does include the connection of additional service areas. Proposed areas for additional connection may include the Phase II expansion of the River run Condos (24 units) and the White Wolf Lodge (54 rooms).