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 represent exact boundaries,
 rather they represent general
 or approximate boundaries.

SQUAW VALLEY AREA WATER DISTRICTS

TAHOE CEDARS WATER COMPANY

District Overview: The Tahoe Cedars Water Company serves the small town of Tahoma located on the west shore of Lake Tahoe. The systems service area consists of 862 service connections. This report will acknowledge the system as a whole, however it should be noted that only about 100 of the 862 connections are within Placer County. The types of connections are primarily residential dwellings with a few motels and commercial services. The system utilizes a well for its source supply. The current water supply permit was issued in 1965.

Source Information: Source supply to the Tahoma area is a vertical well known as the Elm Street Well. This well has a 12-inch diameter casing and is approximately 180 feet deep. The well is equipped with a 50 h.p. submersible pump producing water at a rate of 450 gpm.

The system is also provided with a Lake Tahoe intake producing water at a rate of 175 gpm. The lake supply is used as an emergency supply source. The intake consists of two 3-inch lines extending a length of 275 feet into the lake and to a depth of 16 -18 feet below the water surface. Additionally, Tahoe Cedars has a 4-inch interconnection with neighboring McKinney Estates water system. The interconnection is used only for emergencies purposes. This intertie is capable of serving only the lower portion of the system, although a pump located at the lower storage tank is capable of pumping water to higher elevations.

The following table lists the sources and their respective uses and production capacities:

SOURCE SUPPLIES
Tahoe Cedars Water Company

Source Name	Use Status	Production Capacity
Elm St. Well	Main source supply	450 gpm
Lake Intake	Emergency	175 gpm
McKinney Intertie	Emergency	80 gpm

Primary Distribution and Transmission: Tahoe Cedars distribution system has one pressure zone maintaining pressures between 25 - 100 psi. Water mains are constructed primarily of dipped and wrapped steel pipe. The sizes range approximately as follows:

4-inch -----	60%
6-inch -----	39%
8-inch -----	1%

The mains are approximately 20 years old and reportedly in good condition.

Storage: Storage for this system is provided by a 124,000 gallon bolted steel tank. The tank is reportedly in good condition. A 10,000 gallon welded steel tank is available in the lower portion, but is no longer used unless needed as a pumping reservoir from the 4-inch intertie with the McKinney Estates system.

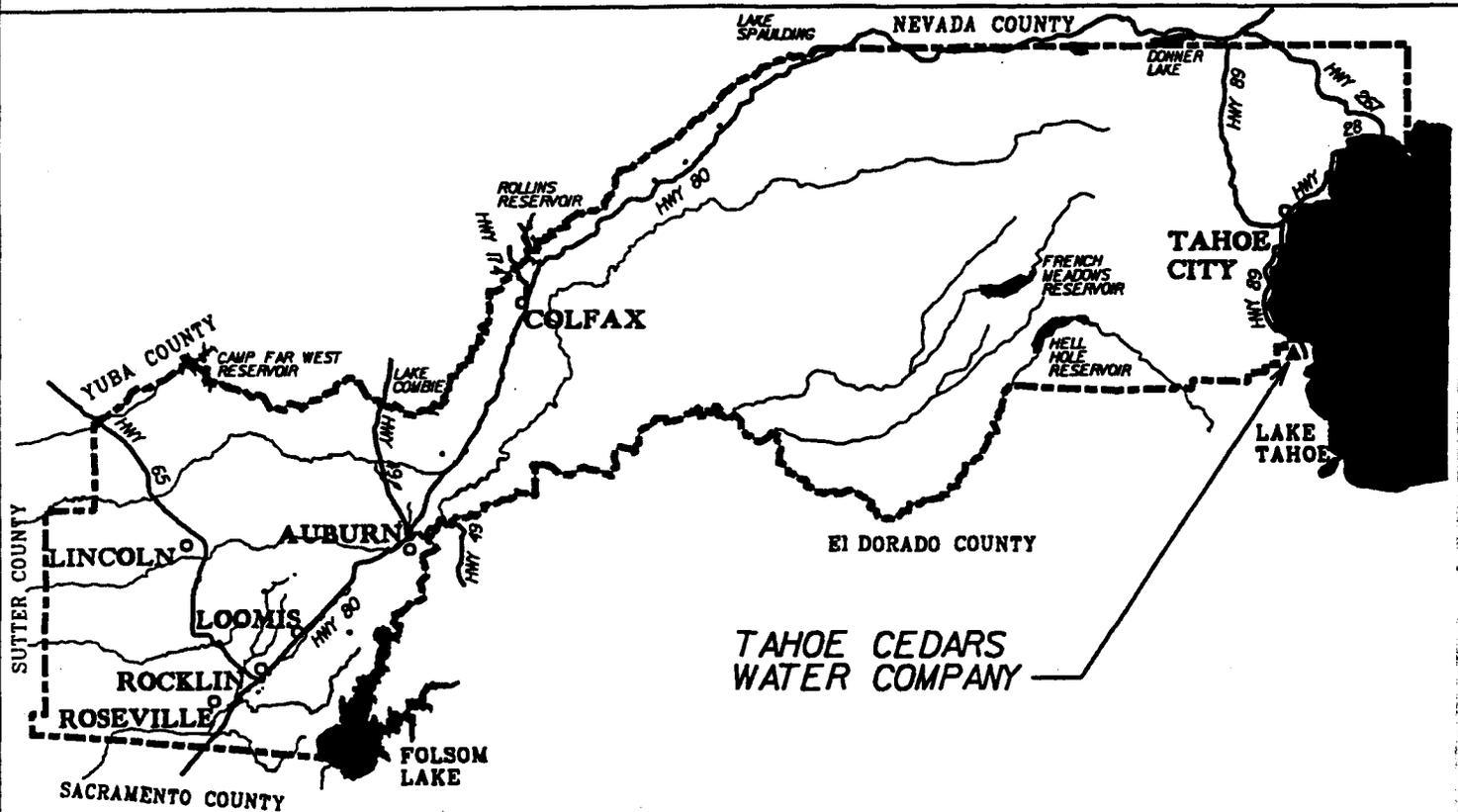
Treatment: The well source is not treated nor equipped with continuous chlorination capabilities. The lake source is, however, equipped with a gas chlorinator.

1990 System Production: The Tahoe Cedars service area consists of 862 service connections, 16 of which are metered. Only 250 of these connections are provided with water service all year around. The permanent population served is about 750 with seasonal fluctuations increasing up to 2,000. Connection types are primarily residential dwellings with a few motels and commercial services. According to the 1991 annual report the system produced a yearly total of 80,871,200 gallons.

Deficiencies and Limitations: Aside from some administrative requirements, and implementation of a cross connection control program, the Tahoe Cedars Water company has no significant deficiencies with supply, service, or sanitary hazards.

System Appraisal: The Tahoe Cedars water system is capable of continually providing an adequate supply of high quality water to its customers. The well source is capable of meeting peak demands and no treatment is currently necessary. A proposed new 200,000 gallon storage tank will further enhance service and reliability of the system.

PLACER COUNTY WATER SYSTEMS



System Name: TAHOE CEDARS WATER COMPANY

Address: P.O. BOX 264, TAHOMA, CA 95733

Contact Name: EARL B. MARR

Phone: (916)-525-7555

Service Area Size: _____ No. Connect.: 862 Population Served: 750-2000

Services Provided: RESIDENTIAL W/SOME MOTEL AND COMMERCIAL SERVICES

Summary System Description

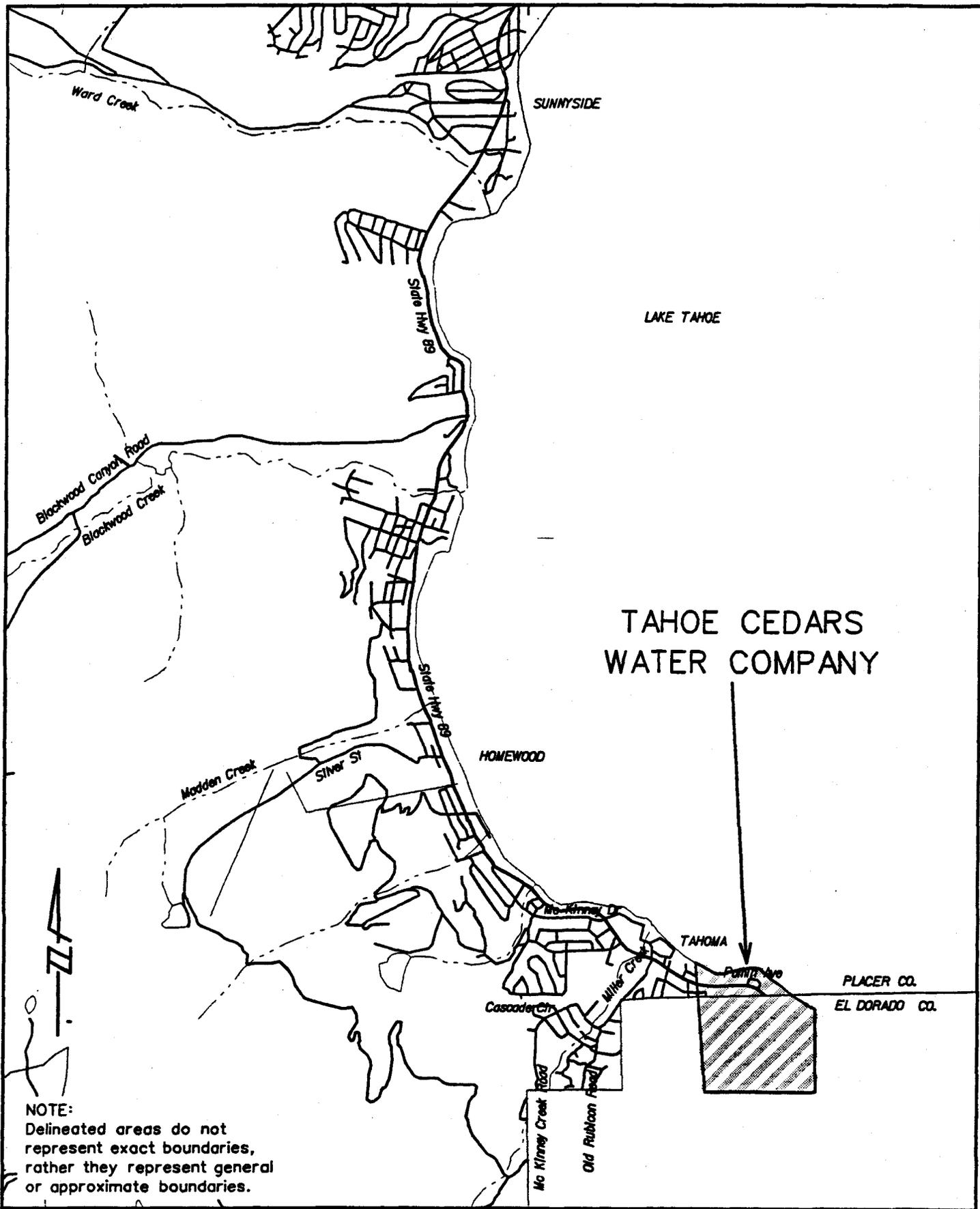
Source: PRIMARY SOURCES ARE; A VERTICLE WELL WITH CAPACITY OF 450 GPM, A LAKE TAHOE INTAKE WITH CAPACITY OF 175 GPM, AND AN INTERTIE WITH MCKINNEY ESTATE WITH CAPACITY OF 80 GPM.

Transmission: THE DISTRIBUTION SYSTEM IS COMPRISED OF 4,6,& 8 INCH WRAPPED AND DIPPED STEEL PIPE. MAINS ARE REPORTEDLY IN GOOD CONDITION.

Treatment: NO TREATMENT IS PROVIDED TO THE WELL WATER. GAS CHLORINATION IS AVAILABLE FOR THE LAKE WATER SOURCE.

Storage: A 124,000 GALLON STORAGE TANK CURRENTLY PROVIDES STORAGE FOR THE SYSTEM. FUTURE PLANS INCLUDE INSTALLATION OF AN ADDITIONAL 200,000 GALLON STORAGE TANK.

Capacity Limitations: NONE IDENTIFIED.



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TAHOE CEDARS WATER COMPANY

TAHOE CITY PUBLIC UTILITY DISTRICT SUBREGIONAL, ALPINE PEAKS, AND MCKINNEY SHORES

District Overview: Tahoe City Public Utility District is comprised of four independent, unconnected, water systems; Tahoe City Subregional, Alpine Peaks, McKinney Shores, and Rubicon. The Rubicon service area is located in El Dorado County, thus is not discussed in this report.

The original water supply permit for Tahoe City Main was issued in 1969. The District is still operating under this permit with no amendments. District water supply stems from surface water (Lake Tahoe), groundwater, and spring sources. The District serves a combination of residential, commercial, camping, and governmental users. Only commercial users are metered.

Significant effort is being given, addressing growing concerns about upcoming water quality regulations (Surface Water Treatment Regulations). A recently completed water system master plan, evaluates options using groundwater verses filtration improvements with existing lake intakes. Study results recommend directing efforts towards utilizing groundwater as main source supply.

Tahoe City Subregional, serving the Tahoe City and surrounding developments, is the largest operating system in the District. The Alpine Peaks service area is located more than 4 miles from the Lake Tahoe Shore along the west side of the lake, serving an area referred to as Ward Valley. The McKinney Shores system is approximately 7 miles south of Tahoe City along Highway 29.

Following is the rate schedule and connection fees assessed during 1991:

Water service connection fee = \$800

Service Size	Metered	Flat Rate
3/4"	No	\$ 271.20/hr
1"	Yes	\$ 542.20/yr
1.5"	Yes	\$ 812.08/yr
2"	Yes	\$1,083.20/yr

The flat rate is in addition to \$1.65/1,000 gallons over 100,000 gallons/year.

Source Information: Three source types supply water to various service areas covered by the utility district; groundwater, lake water, and spring water. Supplying Tahoe City Subregional is three vertical wells and three lake intakes. Three wells have a combined capacity of 2790 gpm, and intakes can supply 2080 gpm.

No permanent interconnections with other systems exists. An emergency intertie can be made with Tahoe Park Water Company by bridging two fire hydrants.

Source Information--Alpine Springs System: The Alpine Springs system derives its water from two horizontal wells drilled into a natural spring area (Riley Spring) on the mountainside above Ward Valley. The wells gravity flow to the system at a combined maximum flow of 200 gpm. No permanent interconnections with other systems exists.

Source Information--McKinney Shores System: The McKinney Shores System derives water from a lake intake pumping station drawing water from Lake Tahoe. The intake line is 4 inch steel pipe

extending 675 from shore to a depth of 60 feet. A 15 h.p. submersible pump provides flow capacity of 150 gpm. Pump operation pump is controlled by storage tank water level. An emergency interconnection exists between this system and the Quail Lake Water Company.

Primary Transmission and Distribution--Tahoe City Subregional: Tahoe City Subregional distribution system contains two pressure zones. The lower zone pressures fluctuate from 25 - 105 psi. The lower zone receives water from all three lake intakes, a well and a spring for a combined flow supply capacity of 3000 gpm. The upper zone pressures fluctuate between 15 - 90 psi. The upper zone receives water from the systems booster stations and a well for a combined capacity of 2,800 gpm.

In recent years the District has adopted responsibility of small neighboring water systems adjacent the upper zone. Many times these systems were old and substandard, resulting in low pressure problems at higher elevations.

Several material types were used to construct distribution facility improvements historically. Materials include, thin wall welded steel, asbestos cement, PVC, polyethylene, polybutylene, and small amounts of ductile and cast iron pipe. Material amounts existing within the system currently are unknown. Sizes of water mains range from 2 -12 inches diameter and are considered to be poor/ fair condition. The District follows a program resulting in continual water main evaluation and replacement.

Overall assessment of the distribution system is fair. A significant amount of inadequately sized and poor condition mains are contained in the system, however a capital replacement program is in effect, helping to replace deteriorated mains each year.

Primary Transmission and Distribution--Alpine Peaks System: Alpine Peaks System contains two pressure zones with pressures fluctuating between 35 and 100 psi. The upper zone is served by the storage tank, while the lower zone is served directly by Riley springs through a pressure reducing station. Due to large elevation differences within district boundaries, a pressure reducing station is placed half-way down the system eliminating high pressure problems.

Water mains are constructed mostly of 6 inch and some 8 inch asbestos cement pipe, and are reportedly in good condition. Accurate maps exist mapping both location and size of mains throughout the system.

Primary Transmission and Distribution--McKinney Shores System: The McKinney Shores system contains one pressure zone maintaining a pressure range between 45 and 70 psi. Mains within the system are constructed primarily of 4 inch steel, 6 inch PVC, and 2 inch and 1 1/2 inch service connections. Condition of the mains is considered to be good.

Storage--Tahoe City Subregional System: Tahoe City Subregional is provided with a total storage capacity of 2.5 million gallons. The storage is divided among four locations throughout the district in five tanks, as shown in the following table.

TAHOE CITY SUBREGIONAL STORAGE FACILITIES

Tank Identification	Storage Material	Capacity (gal)	Number of Tanks
Bunker	redwood	0.5 MG	1
Tahoe Tavern	P.S. Concrete	0.5 MG	2
Highlands	steel	0.5 MG	1
Rocky Ridge	steel	0.5 MG	1

The Highlands and Rocky Ridge tanks serve both upper and lower pressure zones of the Tahoe City Subregional system. The Bunker tank serves the lower pressure zone. The Four Seasons tank normally serves the upper zone and lower tank serves lower pressure zone for the Tahoe Tavern area, however ability exists for these tanks to serve both pressure zones if necessary.

Storage--Alpine Peaks System: The Alpine Springs system contains one 500,000 gallon steel storage tank. The tank is gravity fed from Riley Springs.

Storage--McKinney Shores System: The McKinney Shores system contains one 12,000 gallon redwood storage tank. The tank is fed by a lake intake.

Treatment--Tahoe City Subregional: The lake intakes are exposed to significant contamination hazards such as recreation and sewage pumping stations. Disinfection by chlorination is the only treatment provided. No treatment is provided for the systems existing groundwater sources. Sodium hypochlorite is, however, added occasionally to the storage tanks maintaining the chlorine residual throughout the distribution system.

Treatment--Alpine Springs and McKinney Shores Systems: As with the lake intakes for the Tahoe City Subregional system, the only treatment provided is disinfection by chlorination.

1990 System Production: According to the 1991 annual reports for the 1990 year, the following tables show characteristic information pertaining to system production.

SYSTEM PRODUCTION INFORMATION

1990

Tahoe City Subregional	
Maximum Day Demand	-> unknown
Maximum Month Water Use	-> July/ 62.86 million gallons
Total Annual Water Use (1990)	-> 386.38 million gallons

Number of Services (not including fire hydrants)

Service type	Meters	Flat Rate	Total
general and residential		2260	2260
commercial	125	125	
Total Active Connections	125	2260	2385

Information listed in the above table serves a total permanent population of 8000 which increases up to 20,000 during peak seasonal use.

SYSTEM PRODUCTION INFORMATION 1990

Alpine Springs System			
Maximum Day Demand			-> unknown
Maximum Month Water Use			-> July/ 1.0 million gallons
Total Annual Water Use (1990)			-> 6.90 million gallons
Number of Services (not including fire hydrants)			
Service type	Meters	Flat Rate	Total
general and residential	---	80	80
Total Active Connections	---	80	80

Information listed in the above table serves a total permanent population of 280 which increases up to 350 during peak seasonal use.

SYSTEM PRODUCTION INFORMATION 1990

McKinney Shores System			
Maximum Day Demand			-> unknown
Maximum Month Water Use			-> July/ 2.26 million gallons
Total Annual Water Use (1990)			-> 10.43 million gallons
Number of Services (not including fire hydrants)			
Service type	Meters	Flat Rate	Total
general and residential	----	89	89
Total Active Connections	----	89	89

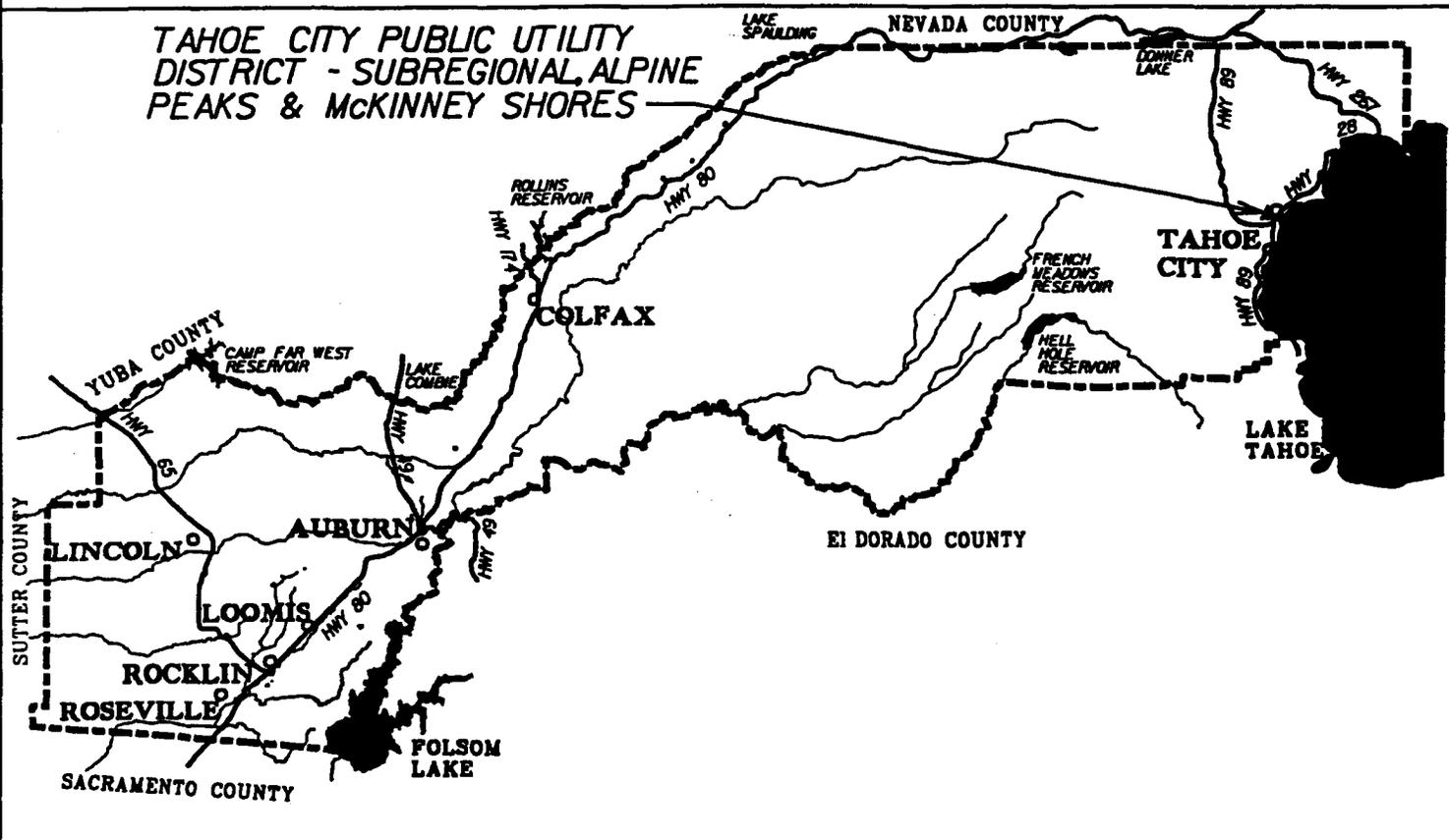
The information listed in the above table serves a total permanent population of 300 which increases up to 800 during peak seasonal use.

Deficiencies and Limitations: An issue facing the Tahoe City Public Utility District are upcoming compliance with Surface Water Treatment Regulations. The District is actively addressing this issue by directing efforts at finding and solely using groundwater as source supply. Other problems occurring are currently being addressed and resolved, such as the capital replacement program for main lines.

Existing Planned Improvements: Most significant of existing future plans are those directed at replacing Lake Tahoe as a source supply with groundwater. Additionally there are numerous capital replacement and upgrade projects, however, these are more directed at maintaining the existing system, as development expansion is limited.

System Appraisal: The Tahoe City Public Utility District plays a significant role in supplying water service to a high populous of the Tahoe Basin. The systems operated by the District are in good shape, or progressing to reach high standards. With little expansion ever expected to take place, financially the District recognizes the need to establish rates and regulations to fund and maintain adequate facilities. The most pressing objective facing the District are compliance with the Surface Water Treatment Regulations. Groundwater replacing the lake supply is a solution being closely evaluated and pursued.

PLACER COUNTY WATER SYSTEMS



System Name: TAHOE CITY PUBLIC UTILITY DISTRICT-SUBREGIONAL, ALPINE PEAKS & MCKINNEY SHORES

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

Contact Name: DAVID ANTONUCCI Phone: (916)-583-3796

Service Area Size: _____ No. Connections: 2554 Population Served: 8580-21,050

Services Provided: RESIDENTIAL AND COMMERCIAL WATER AND WASTEWATER

Summary System Description

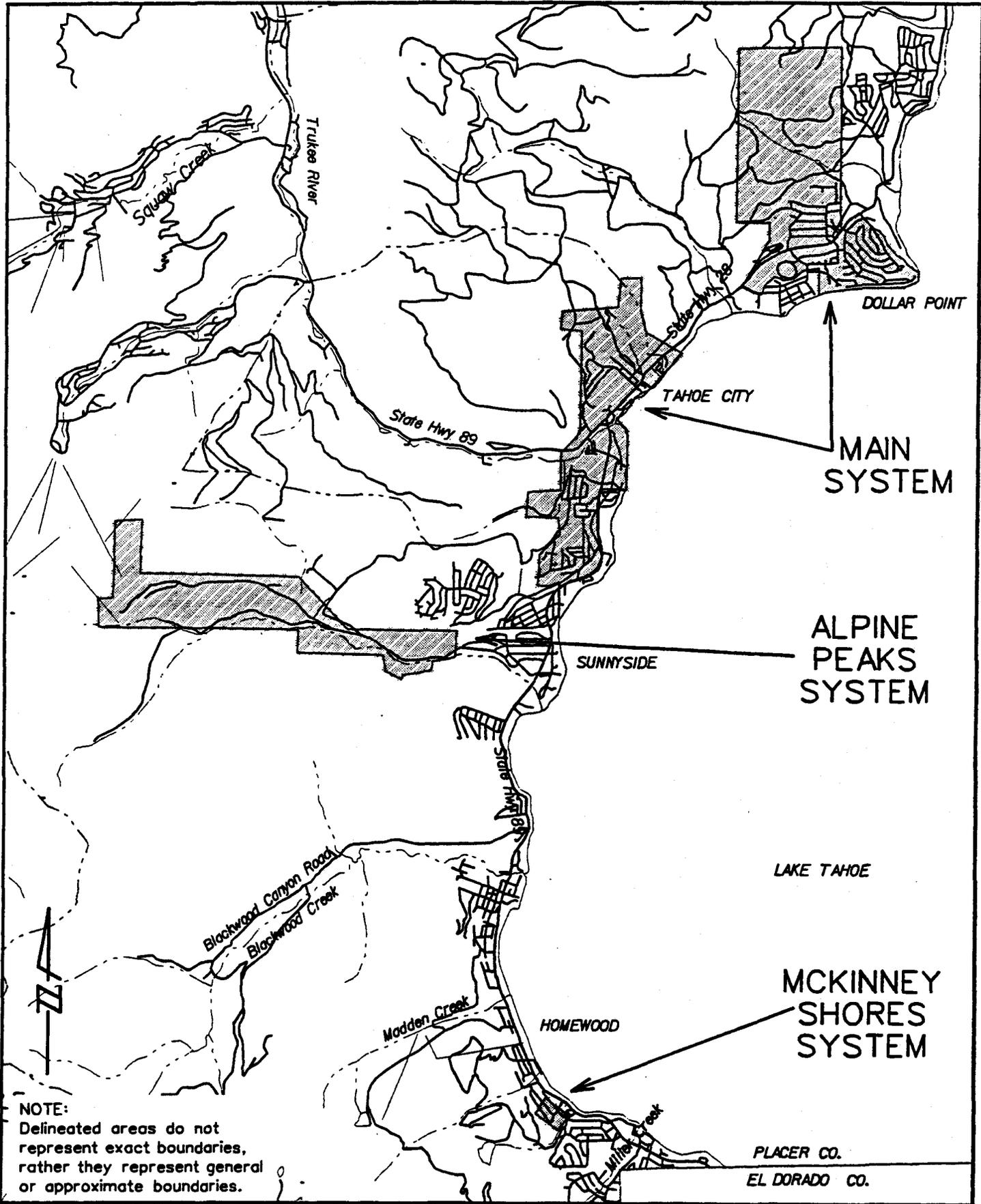
Source: THREE SOURCE TYPES SUPPLY WATER TO THE SERVICE AREAS: SUBREGIONAL- 3 VERTICAL WELLS AND THREE LAKE INTAKES; ALPINE PEAKS-TWO HORIZONTAL WELLS DRILLED INTO A NATURAL SPRING; MCKINNEY SHORES-ONE LAKE INTAKE.

Transmission: SEVERAL TYPES AND SIZE RANGES OF PIPES EXIST THROUGHOUT THE DISTRIBUTION SYSTEM. MUCH OF THE PIPE IS OLD AND UNDERSIZED AS A RESULT OF ADDITION OF SATELLITE DISTRICTS TO THE DISTRICT.

Treatment: ALL SURFACE WATER SOURCES ARE DISINFECTED BY CHLORINATION. NO TREATMENT IS PROVIDED TO GROUNDWATER SOURCES.

Storage: SUBREGIONAL HAS A TOTAL OF 2 MILLION GALLONS OF STORAGE AVAILABLE, ALPINE PEAKS HAS ONE 0.5 MILLION GALLON STEEL TANK, AND MCKINNEY SHORES HAS A 12,000 GALLON REDWOOD TANK.

Capacity Limitations: DISTRIBUTION SYSTEM RENOVATIONS AND COMPLIANCE WITH SURFACE WATER TREATMENT REGULATIONS ARE SIGNIFICANT ISSUES FOR THE DISTRICT.



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TAHOE CITY PUBLIC UTILITY DISTRICT
Water Service Areas

TAHOE PARK WATER COMPANY MAIN SYSTEM, SKYLAND SYSTEM, AND NIELSON SYSTEM

District Overview: The Tahoe Park Water Company, Nielson and Skyland Systems are privately owned by a single owner. The Tahoe Park Water Company is located approximately two miles south of Tahoe City on the west shore of Lake Tahoe. Construction of the company dates back to 1908. Acquisition of two additional service areas (Skyland and Nielson Systems) resulted in a permit renewal in 1979. Relatively few system improvements have been made since the last renewal.

Areas served by the three systems are known as Tahoe Park, Miramar Heights, Sierra Estates, Skyland Area and Nielson Area. The Skyland and Nielson service areas are located along the west shore of Lake Tahoe about 2 miles south of Tahoe Park.

Source Information--Tahoe Park Main System: Sources for the Main system include a large spring and two separate lake intake pumping stations drawing water from Lake Tahoe. The spring is capable of supplying up to 400 gpm; however, it is very susceptible to fluctuations in precipitation, and is currently dry due to the drought. Water from the spring flows by gravity to the storage tanks, and is then pumped into the system.

The two lake intakes known as the Sequoia Street station and Sierra Estates station are capable of producing 550 gpm to the system. The Sequoia Street station is utilized as the primary source only when the spring is dry. The Sierra Estates station is used to assist meeting peak demands.

Two auxiliary sources are available during emergency situations: an interconnection with Talmont Water Company, and an ability to bridge two fire hydrants with Tahoe City Public Utility District.

Source Information--Skyland and Nielson Systems: The Skyland system receives water from a single lake intake station equipped with two 10 h.p. centrifugal pumps. The pumps, used on a rotation basis, are able to provide about 480 gpm to the system. There are no auxiliary sources or emergency connections to the Skyland system currently.

The Nielson System is served by a vertical groundwater well. The water is pumped directly into a hydropneumatic tank and then to the system. The well depth is 60 feet, having pumping capacity of 60-90 gpm. There are currently no auxiliary sources or emergency connections to the Nielson System.

Primary Transmission and Distribution--Main System: Although significant elevation variations exist, the Tahoe Park Main distribution system consists of one pressure zone. Pressures in the upper portion range from 35 -65 psi, pressures in the lower elevations range from 95- 125 psi. Most lower elevation services are equipped with pressure reducing devices.

Water mains are constructed of several materials and range from 2 to 6 inches in diameter. The following table lists distribution mains throughout the Tahoe Park Main system.

DISTRIBUTION AND MAIN MATERIALS AND SIZES

Material	Size	Amount (lf)	Condition
Std. Screw Steel	2 inches	12,000	poor
Welded Steel	2.5-3.5 inches	7,150	poor
Welded Steel	4 inches	3,600	poor
Welded Steel	6 inches	150	poor
Asbestos-Cement	6 inches	1,200	good
C-900 PVC	6 inches	10,150	new

The only true transmission main is contained in the Tahoe Park Main system. This main line is a 6 inch PVC C-900 approximately 1 mile long running between the Tahoe Park area along Highway 89 to the Sierra Estates area.

Primary Transmission and Distribution--Skyland and Nielson Systems: The Skyland has two pressure zones split by a pressure reducing station. Average pressures in the upper zone are 55 psi and 60 psi in the lower zone. Water mains are constructed almost entirely of 4 inch, 10 gage, double dipped and wrapped steel. The system is about 40 years old, and main lines are in poor condition.

The Nielson system is very small and consists primarily of 2 inch galvanized steel main lines. The mains are arranged in a "T" configuration, and are reportedly in good condition. One pressure zones exists having an average pressure of 60 psi. There is only one hydrant in the system which can not be effectively used for flushing purposes. Neither of the systems experiences sediment accumulation or bacterial growth problems.

Storage: A 45,000 gallon welded steel storage tank provides storage to the Tahoe Park System. The spring source is primary supplier to the tank; however, the capability exists to fill the tank with the lake intakes.

A 20,000 gallon redwood tank provides storage to the Skyland system. The tank is about 35 years old and considered structurally sound. The tank floats on the system, and is significantly smaller than recommended by the Water Works Standards. The system is quite vulnerable to power outages.

No significant storage is provided in the Nielson system. A hydropneumatic tank is located at the well site having only 3000 gallons of capacity.

Treatment: The lake intake sources of the Main and Skyland Systems are provided with disinfection by chlorination. The Nielson system does not provide any treatment.

1990 System Production: Following are system production tables for each of the three physically separate water systems.

Main System

Maximum Day Production ->unknown
 Month of Maximum Water Use ->July
 Total Annual Water Usage ->200 Ac.-ft.

The Main System serves a total permanent population of 1600 and a seasonal maximum of 3200.

Connections are broken down as follows:

	Metered	Flat Rate	Total
General and Residential	23	399	422
Commercial	4		4
Total Active	27		426

Skyland System

Maximum Day Production unknown
 Month of Maximum Water Use July
 Total Annual Water Usage unknown

The Skyland System serves a total permanent population of 210 and a seasonal maximum of 280.

Connections are broken down as follows:

	Metered	Flat Rate	Total
General and Residential	0	70	70
Commercial	0	0	0
Total Active	0	70	70

Nielson System

Maximum Day Production unknown
 Month of Maximum Water Use July
 Total Annual Water Usage unknown

The Nielson System serves a total permanent population of 12.

Connections are broken down as follows:

	Metered	Flat Rate	Total
General and Residential	0	6	6
Commercial	0	0	0
Total Active	0	6	6

Deficiencies and Limitations-- Main System: The spring source reliability is sensitive to previously yearly precipitation. Additionally, when using the well disinfection of the lake water can become somewhat diluted since the spring source receives no treatment.

Compliance with the surface water treatment regulations is also an issue which will soon have to be addressed for both the Main and Skyland systems. The condition of the Main distributions system is also questionable. Many of the lines freeze because of lack of ground cover and much of the system is quite old.

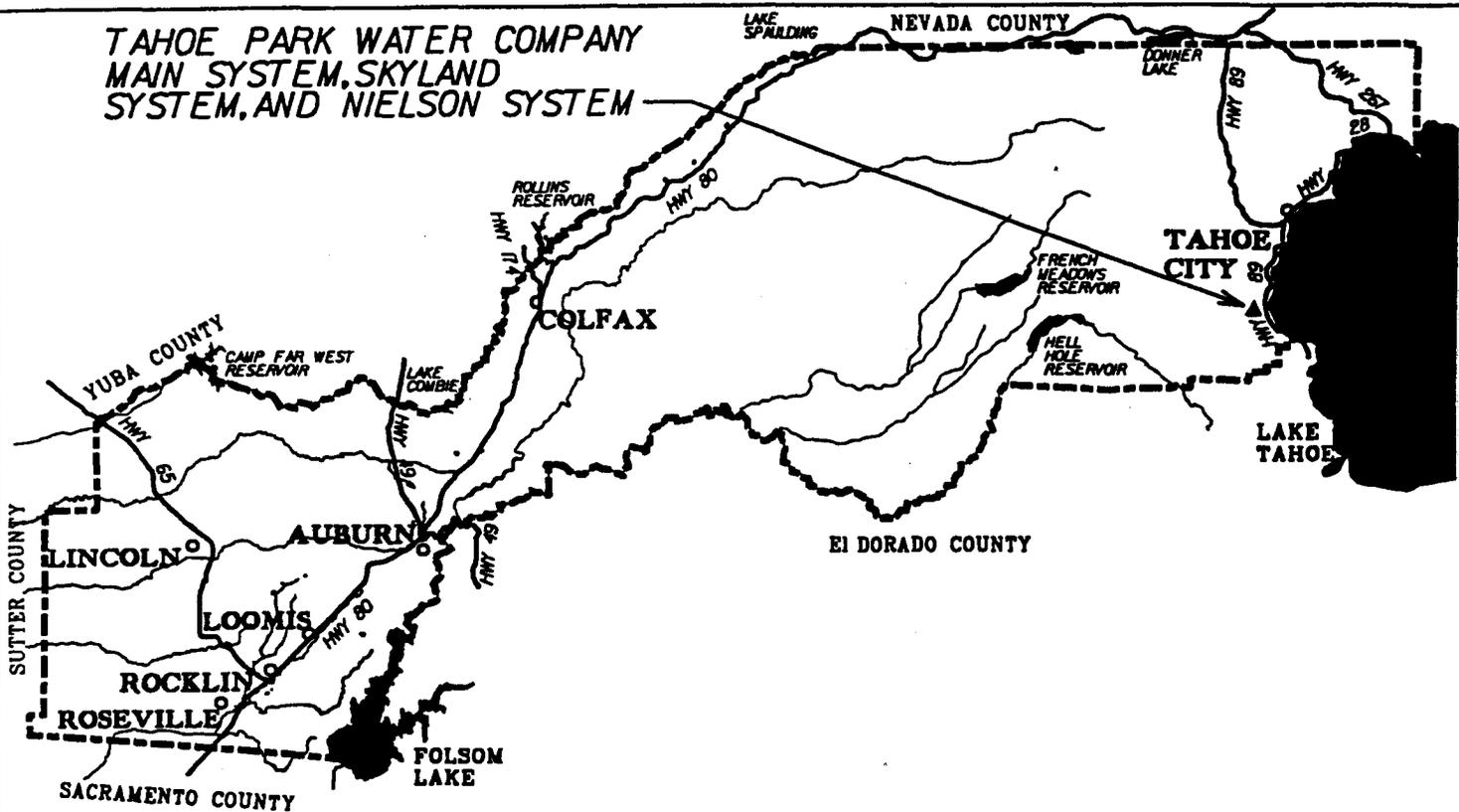
Deficiencies and Limitations--Skyland and Nielson Systems: Presently the Skyland and Nielson systems lack backup supplies during emergencies like power outages. Condition of the distribution system for these systems is also in question. The system is approximately 40 years old and much of the system is undersized.

Existing Planned Improvements: Future plans include interconnecting the Skyland and Nielson systems, thus the Nielson well could serve as source to both. This would enable the Skyland system to abandon its lake intakes which would need to be in compliance with the surface water treatment regulations.

Research for an alternate groundwater supply is currently underway for the Main system. Also, attention is being given to replacement of old undersized mains for all three systems.

System Appraisal: The Tahoe Park systems are well maintained and capable of providing adequate quantities of good quality water. Major issues include a main replacement program, and compliance with the surface water treatment regulations.

PLACER COUNTY WATER SYSTEMS



System Name: TAHOE PARK WATER COMPANY-MAIN, SKYLAND, AND NIELSON SYSTEMS.

Address: P.O. BOX 51, TAHOE CITY, CA 95730

Contact Name: DAVID ROBERTSON Phone: (916)-581-2623

Service Area Size: No. Connections: Population Served: 3200/280/12
Services Provided: PRIMARYLY RESIDENTIAL MAX.

Summary System Description

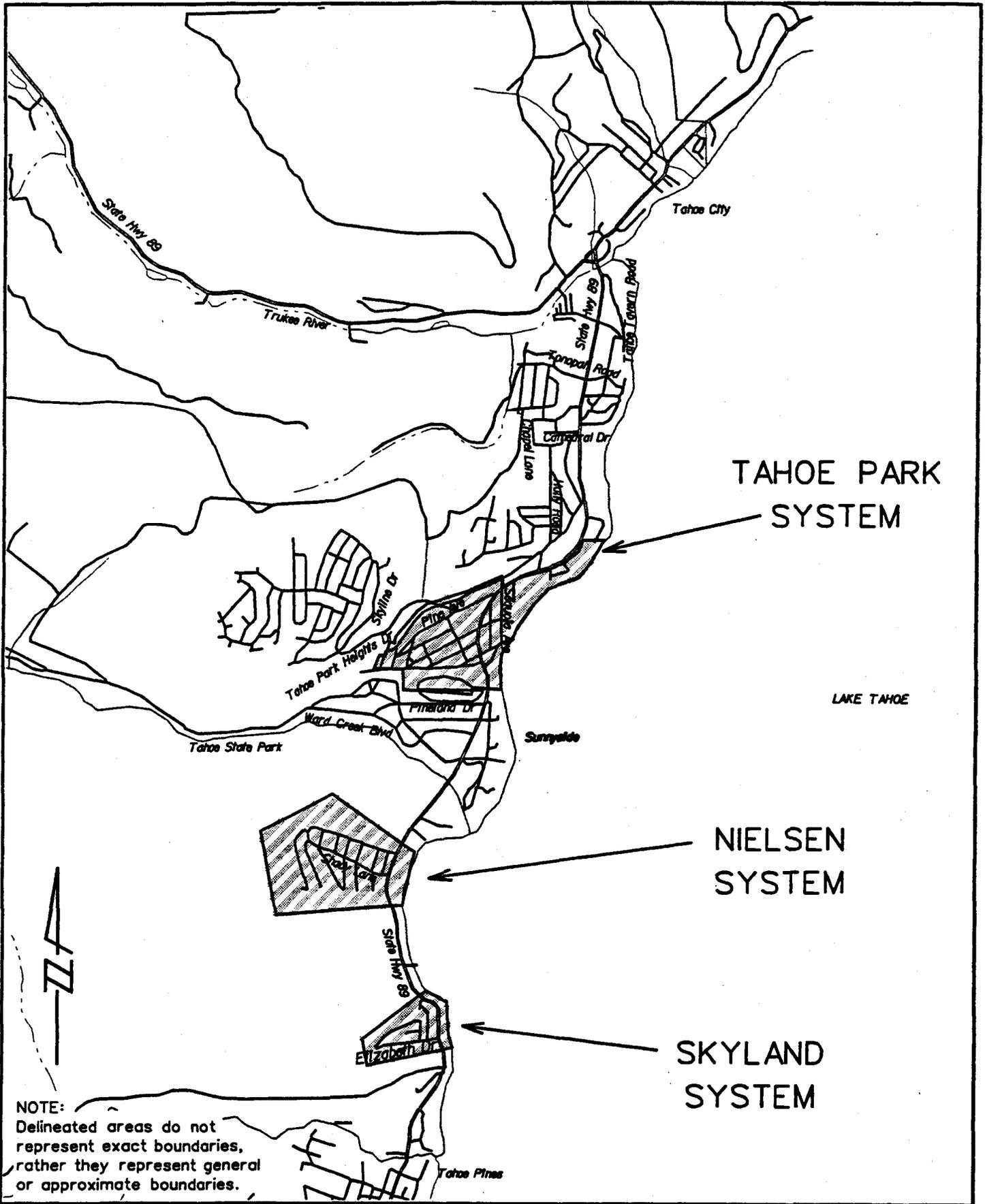
Source: MAIN SYSTEM-INCLUDES A LARGE SPRING AND TWO LAKE TAHOE INTAKES
TOTALING 950 GPM. SKYLAND-HAS A SINGLE LAKE TAHOE INTAKE TOTALING 480 GPM
AND THE NIELSON SYSTEM IS SERVED BY A WELL PRODUCING 60-90 GPM.

Transmission: THE DISTRIBUTION SYSTEM IS COMPRISED OF A WIDE VARIETY AND
RANGE OF PIPE TYPES AND SIZES. MUCH OF THE DISTRIBUTION SYSTEM IS UNDERSIZED
AND IN POOR CONDITION.

Treatment: THE LAKE INTAKES ARE PROVIDED WITH DISINFECTION BY
CHLORINATION. THE NIELSON WELL DOES NOT PROVIDE ANY TREATMENT.

Storage: A 45,000 GALLON WELDED STEEL TANK SUPPLIES GRAVITY STORAGE TO
THE MAIN SYSTEM. A 20,000 GALLON REDWOOD TANK FLOATS ON THE SKYLAND SYSTEM,
AND NO STORAGE IS PROVIDED TO THE NIELSON SYSTEM.

Capacity Limitations: THE SPRING SOURCE FLUCTUATES WITH YEARLY PRECIPITATION.
COMPLIANCE WITH SURFACE WATER TREATMENT REGULATIONS FOR LAKE INTAKES AND
DISTRIBUTION SYSTEM CONDITIONS ARE SIGNIFICANT FUTURE ISSUES.



TAHOE PARK WATER COMPANY
Water Service Areas

TAHOE SWISS VILLAGE UTILITY/TAHOE PINES

District Overview: Tahoe Swiss Village Utility/Tahoe Pines was first granted a water supply permit to operate a domestic water system serving an area between Tahoe Pines and Homewood by Placer County Environmental Health Services in 1963. This Utility operates two systems to serve the combined area. The State Department of Health Services assumed jurisdictional responsibility in the mid 70's. The systems are privately owned and operated.

Source Information: Both systems appropriate water from intakes on Lake Tahoe. The Tahoe Swiss Village Utility intake extends 300 ft. long and is 37 ft. deep. The Tahoe Pines intake is 500 ft. long and 47 ft. deep. System intake structure depths fluctuate with changes in lake level.

Primary Transmission and Distribution: Upgrades over the past decade have renovated the distribution system. The Tahoe Swiss Village Utility intake transmission line is 4 inch and 6 inch pipe extending through the service area to a booster station. The booster station in turn feeds two 12,000 gallon redwood storage tanks. The Tahoe Pines transmission line intake is 4 inch and 6 inch pipe and extends across the service area to a 50,000 gallon storage tank. Distribution lines, considered to be in good shape, are composed primarily of 2,426 feet of steel and C-900 PVC pipe. An interconnection between the systems exists, and is balanced using a Cla-Val at the Tahoe Swiss lower tank. During emergencies Tahoe Swiss Village Utility, Inc. is able to provide service to the system using any one of three sources.

Storage: Three storage tanks are available between the two systems: one 50,000 gallon welded-steel tank and two 12,000 gallon redwood tanks serving the entire service area. The tanks are reportedly in acceptable condition.

Treatment: The only treatment provided is disinfection by chlorination. Each lake intake pump station is equipped with a hypochlorinator operating when the intake pump is activated. Chlorine residual is measured at various points within the system.

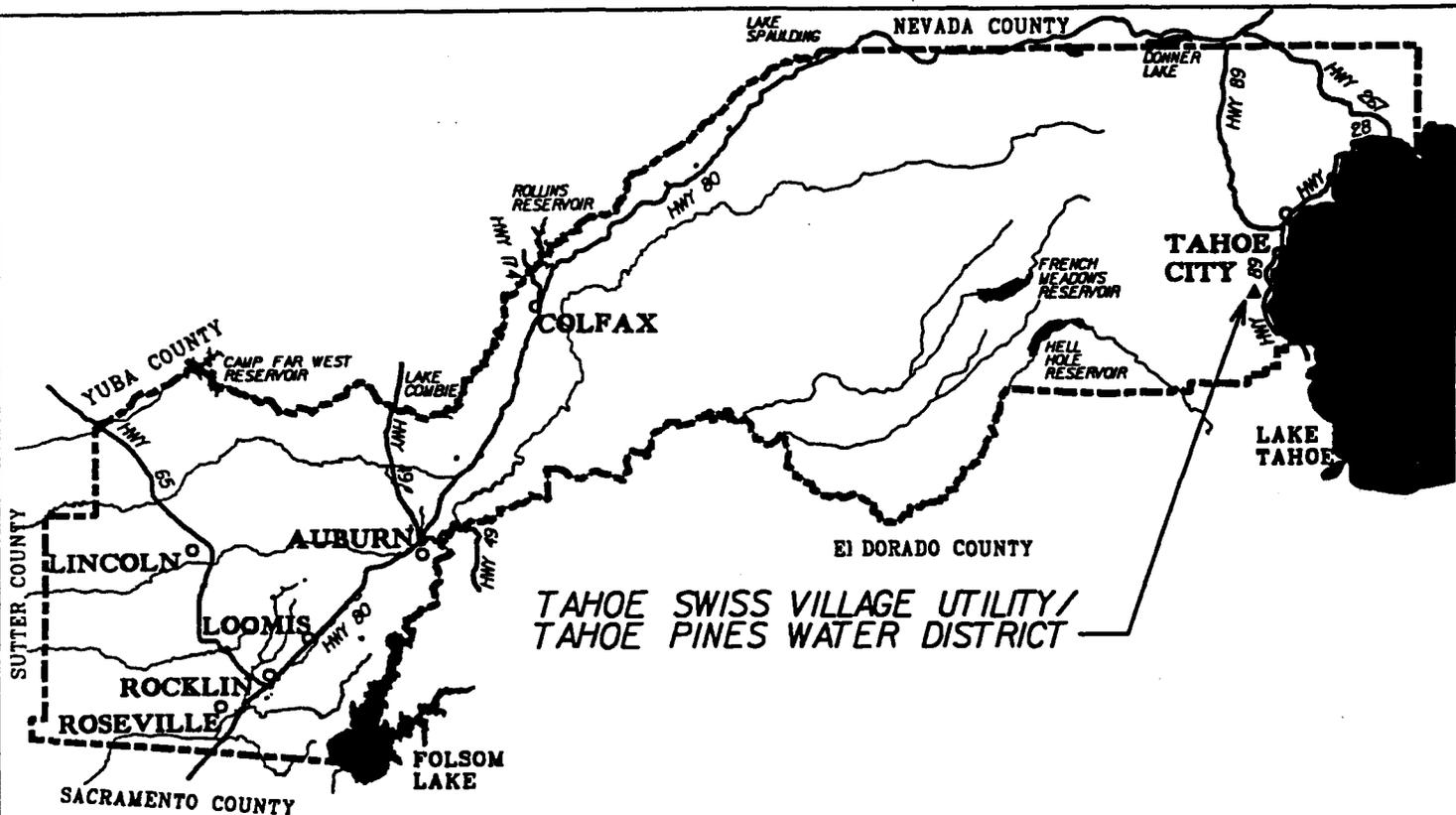
1990 System Production: The systems serve a total of 340 active connections. The system produced an estimated 64 million gallons during the 1990 year with August as the peak month.

Deficiencies and Limitations: No major deficiencies or limitations which prohibit the ability to serve water of adequate quality and supply currently exist. Nevertheless, compliance with newly adopted surface water treatment regulations (SWTR) is an issue which is being addressed. Given the extensive permit process in the Lake Tahoe basin, compliance could become a major issue.

Existing Planned Improvements: Among the most significant planned improvements is compliance with the newly implemented SWTR. Current action to design state-of-the-art treatment facilities is underway. Full compliance with surface water treatment regulations is required by 1993, and it is expected that Tahoe Swiss Village Utility will achieve compliance in an acceptable time frame. Rehabilitation of a spring is also considered a necessary improvement.

System Appraisal: The Tahoe Swiss Utility Inc. service area is privately owned and operated. The distribution and storage facilities are in excellent condition. The most significant issue facing the areas is compliance with surface water treatment regulations. The decision has been made to pursue research, design, and construction of a water treatment facility for both lake intakes and design a spring reconstruction.

PLACER COUNTY WATER SYSTEMS



System Name: TAHOE SWISS VILLAGE UTILITY INC.

Address: P.O. BOX 102, HOMEWOOD, CA 96141

Contact Name: STEVE GLAZER Phone: (916) 525-6659

Service Area Size: No. Connections: 340 Population Served:

Services Provided: EXCLUSVELY RESIDENTIAL CONNECTIONS

Summary System Description

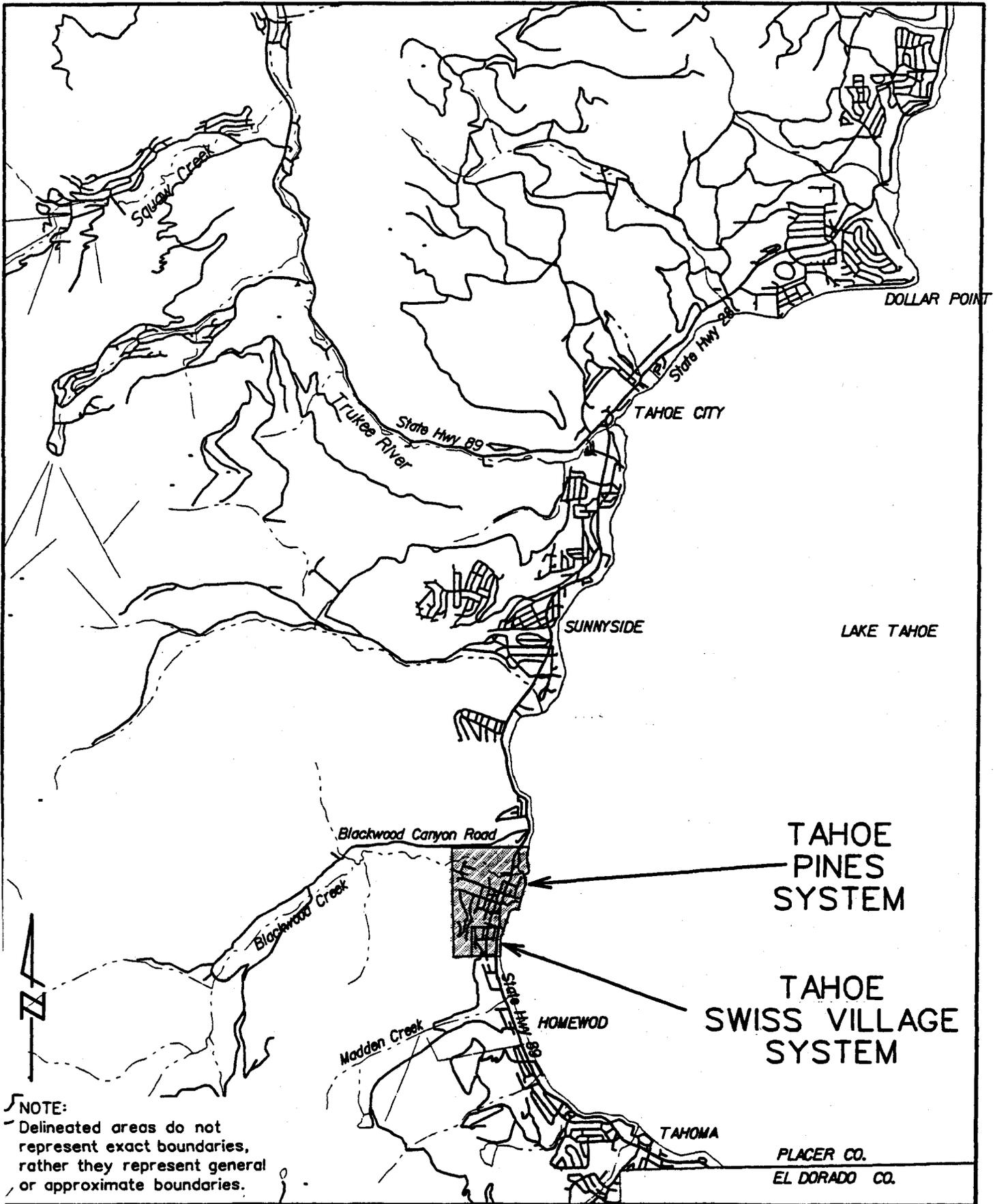
Source: TWO LAKE INTAKES ON LAKE TAHOE. THE SWISS VILLAGE INTAKE IS APPROXIMATELY 300 FT. LONG AND 37 FT. DEEP. THE TAHOE PINES INTAKE IS 500 FT. LONG AND 47 FT. DEEP. THE SYSTEM ALSO USES A 150 FT. DEEP WELL LOCATED AT ST. MICHAELS WOODS AND A SPRING AT THE WEST END OF GRAND AVE.

Transmission: WATER IS TRANSMITTED THROUGH THE SERVICE AREAS VIA A 2, 4 & 6 INCH PIPE TO STORAGE TANKS WHICH GRAVITY FEED THE RESPECTED DISTRIBUTION SYSTEM.

Treatment: THE ONLY TREATMENT PROVIDED IS DISINFECTION BY CHLORINATION.

Storage: 74,000 GALLON OF STORAGE ARE AVAILABLE BETWEEN BOTH SYSTEMS; A 50,000 GALLON WELDED STEEL TANK SERVES THE TAHOE PINES DISTRIBUTION SYSTEM AND (2) 12,000 GALLON REDWOOD TANKS SERVE THE SWISS VILLAGE.

Capacity Limitations: CURRENT EFFORTS ARE DIRECTED TOWARDS IMPLEMENTING WATER TREATMENT PROCESSES TO COMPLY WITH SURFACE WATER TREATMENT REGULATIONS.



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PLACER CO.
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TAHOE SWISS VILLAGE UTILITY Water Service Areas

TALMONT RESORT IMPROVEMENT DISTRICT

District Overview: Talmont is located on the west side of Lake Tahoe, approximately 2 miles southeast of Tahoe City. Until 1990 Talmont was regulated by Placer County Environmental Health Department. Its undergoing jurisdictional change with a permit application to Department of Health Services.

The District is governed by a five member elected board of directors. The elected supervisor always sits on the board. The subdivision has not changed much since it was constructed in the 1960's. It is expected that full potential buildout will never be reached.

Source Information: Talmont Resort Improvement District is supplied by a well, located on Washoe Way and constructed in 1959. The well is approximately 250 ft. deep. It is equipped with a 50 h.p. submersible pump providing approximately 250 gpm. Talmont also has one intertie with Tahoe Park Water Company. The intertie consists of a 2 inch connection to a booster pump located in the well pump building. The intertie is used only during emergencies and can transmit water both directions.

Primary Distribution and Transmission: Large elevation variations within the district boundaries of Talmont Resort Improvement District constitute three pressure zones within the distribution system. Pressure reducing valves regulate pressures throughout the system keeping them between 40 - 50 psi.

Water is pumped from the well to a steel bolted reservoir called the Skyline tank, which serves as source for the Silver Tip tank. A 50 h.p. booster pump at the Skyline tank supplies the Silver Tip tank. The Silver Tip tank supplies the lower distribution system. Booster pumps (10 hp and 8 hp) operating alternately, supply the Mont Clair tank which in turn gravity feeds the middle pressure zone. A booster pump at the Mont Clair also supplies the upper pressure zone.

Ninety-five percent of the distribution mains in the Talmont system are constructed of asbestos-cement pipe. Eighty-five percent of the lines are 6 inch and ten percent is 8 inch diameter. The remaining five percent is made up of 6 inch cast iron. Overall condition of the mains is considered to be good.

Storage: The system is provided with a total storage capacity of 381,000 gallons between three storage tanks. The storage tanks are outlined in the following table.

STORAGE TANKS

Tank Name	Location	Material	Size	Condition
Skyline	lower zone	steel bolted	60,000	good
Silver Tip	middle zone	steel bolted	110,000	good
Mont Clair	upper	steel bolted	210,000	good

The Skyline tank, constructed in 1985, acts as a pumping reservoir and receives water directly from the well 500 feet below. Water from this tank is pumped to the Silver Tip tank prior to entering the distribution system.

The Silver Tip tank receiving water from the Skyline tank serves the lower pressure distribution zone. It also acts as a pumping reservoir to the Mont Clair storage tank. The tank was constructed in the 1960's and is being replaced in the near future.

The Montclair tank is the upper-most tank receiving water from the Silver Tip tank pumping station. This tank floats on the middle zone of the system and also acts as a pumping reservoir for a booster pump supplying the upper pressure zone.

The tanks are all telemetry controlled through phone lines. The provided storage capacity more than doubles the 160,000 gallons of storage required by Water Works Standards. Under normal conditions enough storage is provided to supply the District for approximately one week.

Treatment: Water produced and distributed by this system receives no treatment. The bacteriological and chemical quality of the water is reported excellent. The well is not equipped with chlorination facilities nor does it have connections or taps necessary for emergency disinfection.

1990 System Production: The systems service area consists of approximately 260 service connections, all of which are flat rate charged, serving a permanent resident population of 450. Seasonal variations can cause substantial population increases up to 1500. According to the 1991 annual report the system provided a maximum monthly water use of 8.2 million gallons during the month of July. The system provided a total 63.4 million gallons for the 1990 year.

The system is equipped with water meters between each storage facility. These water meters allow for monitoring of water use and also assist in leak detection.

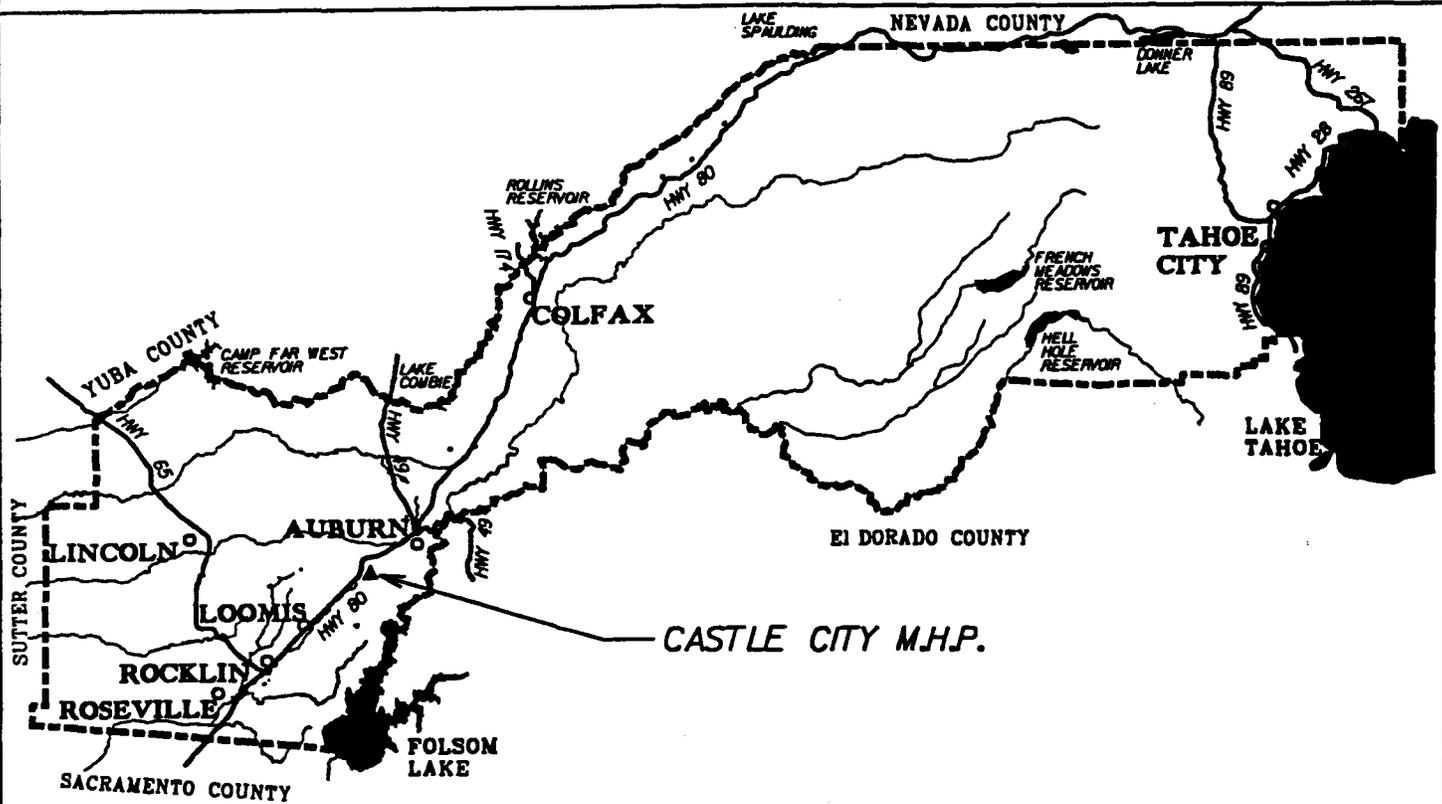
Deficiencies and Limitations: The Talmont Resort Improvement District experiences no significant difficulties or limitations which prohibit supplying water of adequate quality and quantity.

Existing Planning Improvements: Like most water systems within the Tahoe Basin, development within Talmont Improvement District service area boundaries is quite stagnant and is projected to remain that way for quite some time. The most significant improvement planned is replacement of the 110,000 gallon steel tank. In the mid 80's the District began implementation of a capital improvement fund. This fund provides for main replacement and other maintenance costs such as storage tank maintenance; however, replacement of a storage tank using current funds would more than deplete the account. Therefore, a one time assessment fee applied to all residents is going to pay for replacement this time.

The depth of a sanitary seal on the well or whether the seal actually exists is currently unknown. Surface water is not a great health threat; however, probability always exists for contamination.

System Appraisal: As previously stated, development within Talmont Resort Improvement District service areas is stagnant. Adequate water delivery of sufficient quality and quantity exists to the system. The major function of the District is maintenance and operation, of which funding from the capital improvement program is expected to greatly assist. Another important issue is the sanitary seal on the well. Little is known about this characteristic, and research will probably will be needed for future requirements.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: CASTLE CITY MOBILE HOME PARK

Address: 1400 NEWCASTLE ROAD

Contact Name: RON COLEMAN, OPERATOR Phone: (916)-663-3544

Service Area Size: 58 ac. No. Connect.: 200 Population Served: 320

Services Provided: WASTEWATER COLLECTION, TREATMENT AND DISPOSAL.

Summary System Description

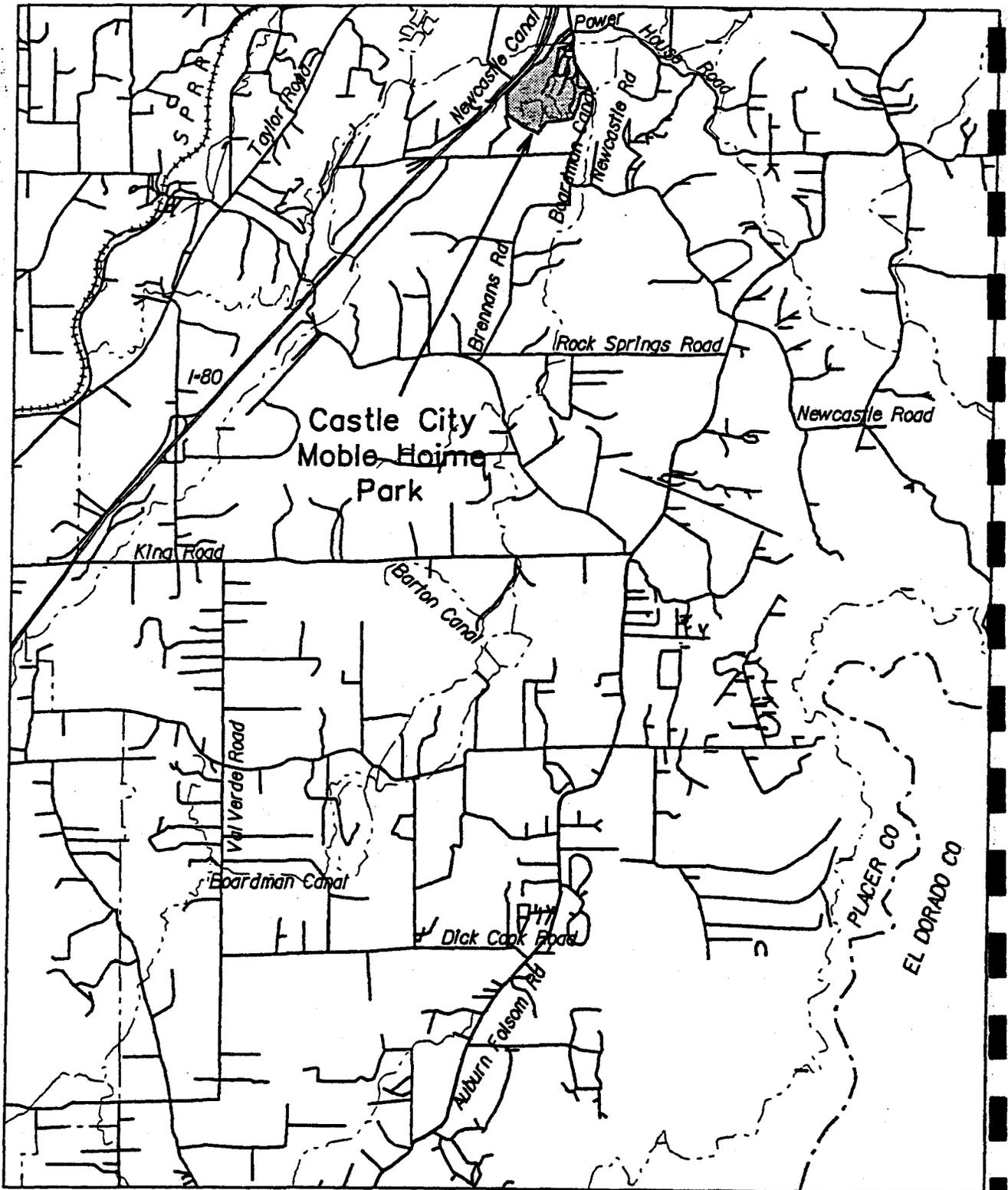
Service Area Characteristics: LOCATED ONE MILE SOUTHWEST OF NEWCASTLE. FOOTHILLS, OAK WOODLANDS AND GRASSLANDS. 58 ACRE MHP. FACILITIES CURRENTLY SERVE ABOUT 200 OF 259 UNITS.

Collection: WASTEWATER IS COLLECTED VIA A STANDARD GRAVITY TYPE SYSTEM.

Treatment: PROVIDED BY 2 STABILIZATION PONDS OPERATED IN SERIES. PONDS OCCUPY 6.3 ACRES WITH AN AVERAGE DEPTH OF 6 FEET. NEW POND SYSTEM WAS CONSTRUCTED IN 1971.

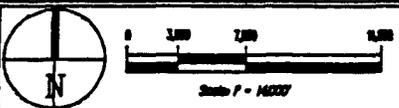
Disposal: EVAPORATION DISPOSAL FROM THE STABILIZATION PONDS DURING THE DRY SEASON.

Capacity Limitations: PERMITTED DISCHARGE TO PONDS IS NOT TO EXCEED 22,000 GPD.



Placer County General Plan

Figure _____ Wastewater Service Area

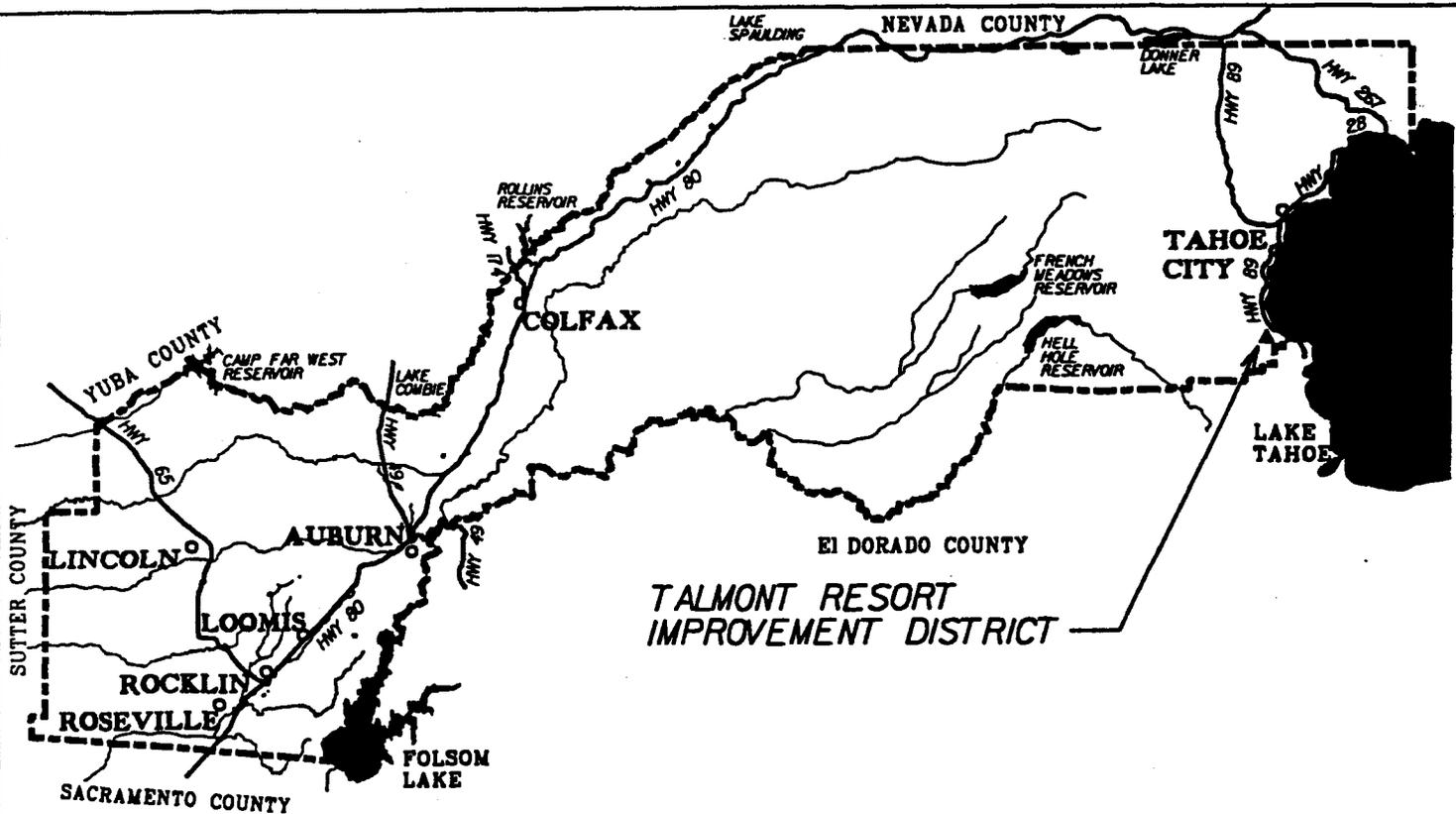


Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND		Castle City 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.

PLACER COUNTY WATER SYSTEMS



System Name: TALMONT RESORT IMPROVEMENT DISTRICT

Address: P.O. BOX 1294, TAHOE CITY, CA 95730

Contact Name: LOU BIRO

Phone: (916)-583-4976

Service Area Size: No. Connections: Population Served: 450-1500

Services Provided: PRIMARILY RESIDENTIAL

Summary System Description

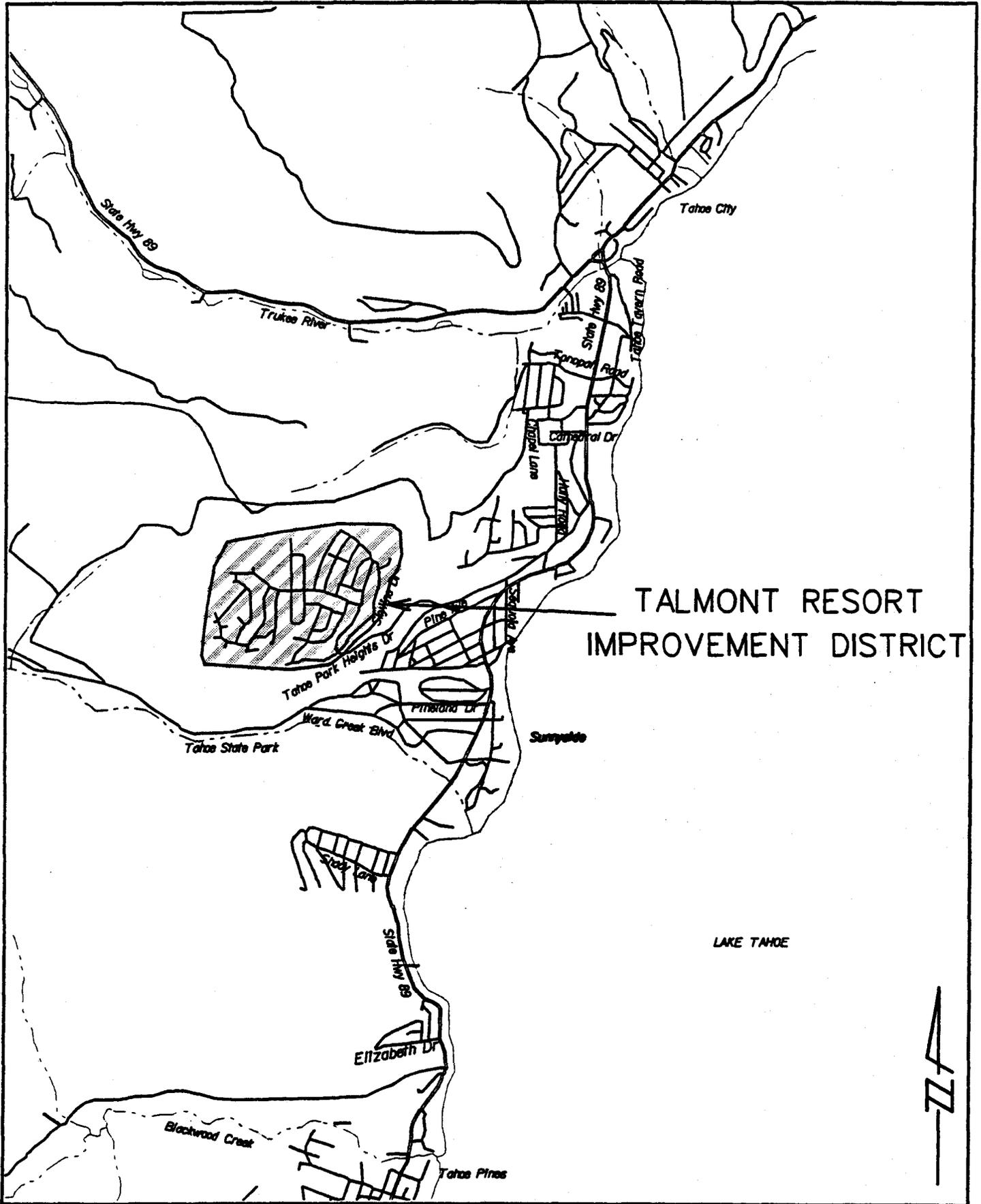
Source: THE DISTRICT IS SUPPLIED BY A WELL WHICH WAS CONSTRUCTED IN 1959. THE WELL HAS THE CAPACITY TO PROVIDE 250 GPM. A 2-INCH EMERGENCY INNERTIE ALSO EXISTS WITH TAHOE PARK WATER COMPANY.

Transmission: NINETY-FIVE PERCENT OF DISTRIBUTION MAINS ARE CONSTRUCTED OF ASBESTOS CEMENT PIPE. THE REMAINING FIVE PERCENT ARE 6 INCH CAST IRON. MOST MAINS RANGE FROM 6 - 8 INCH DIAMETER.

Treatment: WATER PRODUCED AND DISTRIBUTED BY THIS SYSTEM RECEVES NO TREATMENT.

Storage: THE SYSTEM IS PROVIDED WITH A TOTAL STORAGE CAPACITY OF 381,000 GALLONS BETWEEN THREE STORAGE TANKS.

Capacity Limitations: THE DISTRICT EXPERIENCES NO SIGNIFICANT DIFFICULTIES OR LIMITATIONS, WHICH PROHIBIT SUPPLYING WATER OF ADEQUATE QUALITY AND QUANTITY.



TALMONT RESORT
IMPROVEMENT DISTRICT

LAKE TAHOE

TALMONT RESORT IMPROVEMENT DISTRICT

WARD WELL WATER COMPANY

District Overview: The Ward Well Water Company was granted a water supply permit in 1959 by the Placer County Health Department. Jurisdictional surveyance changed to State Department of Health Services in 1975. Ward Well Water Company is located in the Ward Valley area just off the west shore of Lake Tahoe.

Source Information: Ward Well water shed is the fourth largest in the Tahoe basin, inclusive of 1) Upper Truckee River, 2) Trout Creek, and 3) Blackwood Creek. The water shed covers an area of 31.0 square kilometers.

Ward Well Water Company consists of three well sources. Current production rates are as follows: Well 1 (55 gpm), Well 2 (90 gpm), and Well 3 (75 gpm). According to the California Code of Regulations, Title 22, (CCR) the minimum source capacity of 400 gpm is required for a this system. Current maximum production rate for all sources in this system is 220 gpm, thus yielding a 180 gpm deficit.

Primary Transmission and Distribution: The distribution system consists of a single pressure zone. Operating pressures range between 125-170 psi. System mains consists of 12 gage dipped and wrapped steel (42%), and galvanized steel pipe (58%). Pipe sizes range form 4 - 6 inches and 1 - 2.5 inches respectively. Most of the mains are reportedly in good condition.

Storage: The distribution system is equipped with a 55,000 gallon concrete tank which provides storage and system pressure. The tank is in fair condition.

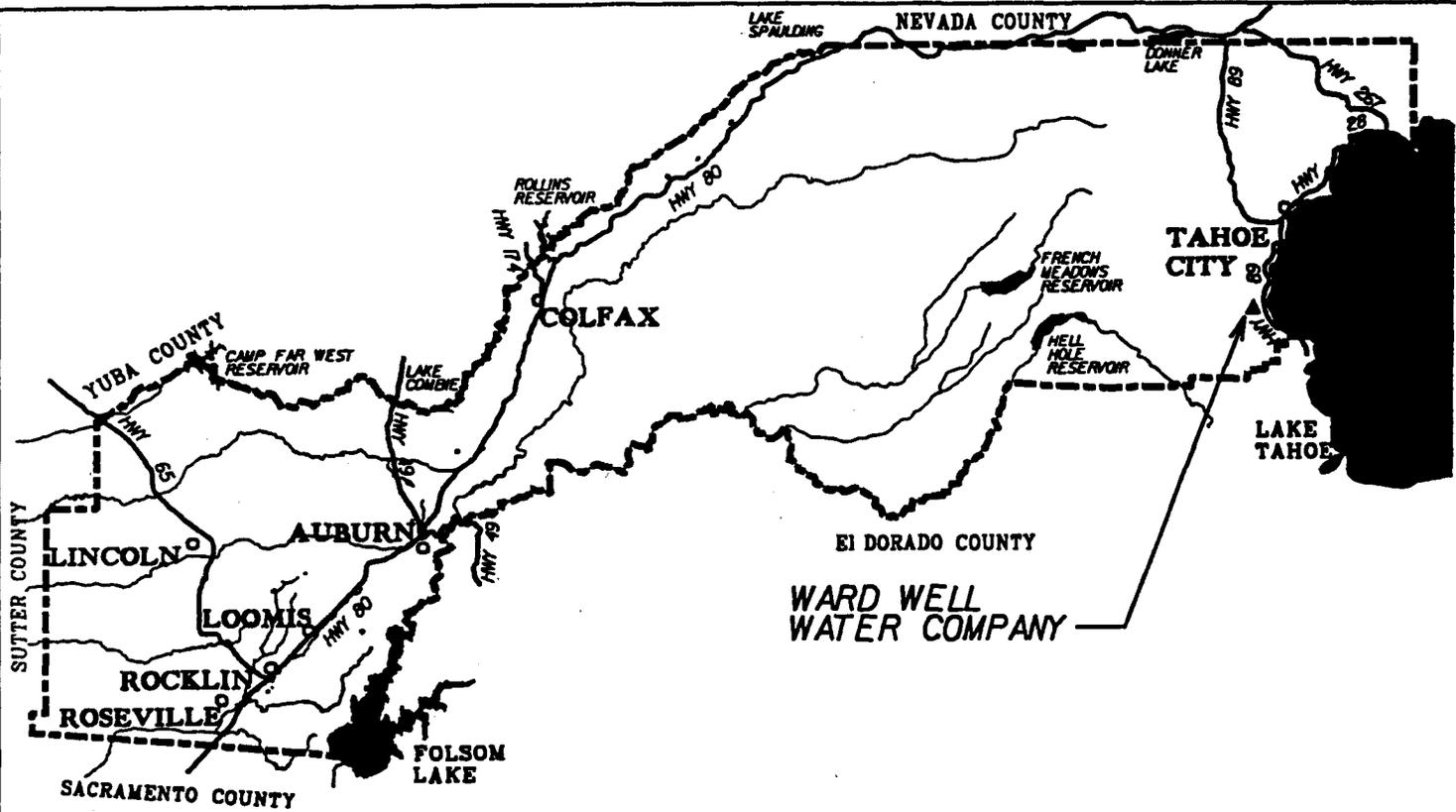
Treatment: No treatment is provided at any of the well sites.

1990 System Production: According to the 1991 annual report Ward Well Water Company provided service to 196 residential connections during 1990. Since there are no meters within the system production capacities are unknown.

Deficiencies and Limitations: The only real deficiencies with the system is the condition of the storage tank and the production deficit outlined by the CCR's.

System Appraisal: The Ward Well Water Company is able to provide good quality to its customers. Other than the above mentioned deficiencies mentioned, the water system is in good shape. Should continued development ever resume water supply will be a limiting factor as the system currently exists.

PLACER COUNTY WATER SYSTEMS



System Name: WARD WELL WATER COMPANY

Address: P.O. BOX 503, TAHOE CITY, CA 95730

Contact Name: STEVE McDONALD Phone: (916)-581-2231

Service Area Size: _____ No. Connect.: 197 Population Served: UNKNOWN

Services Provided: FLAT RATE RESIDENTIAL

Summary System Description

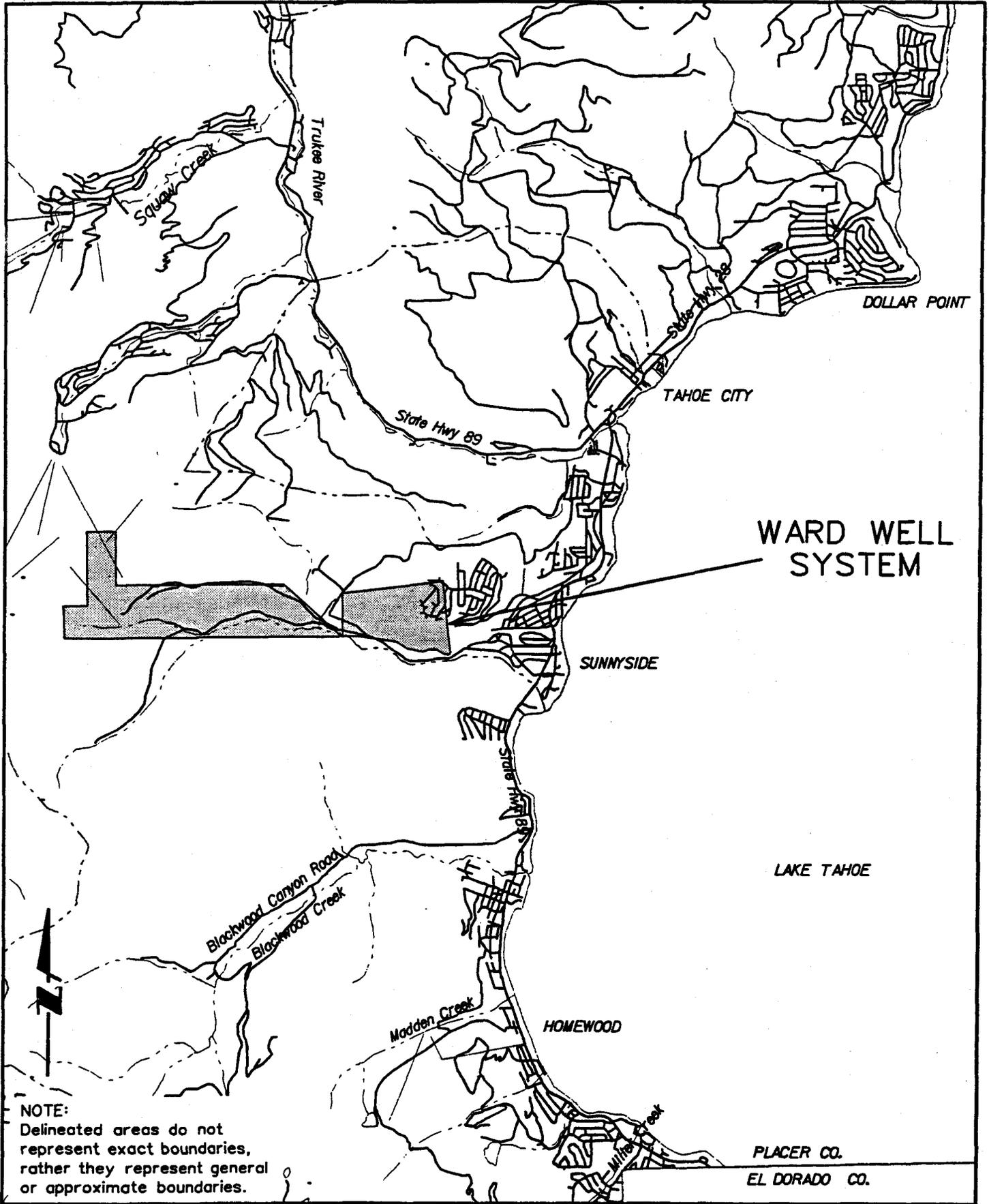
Source: THE SYSTEM CONSISTS OF THREE WELL SOURCES HAVING A COMBINED CAPACITY OF 220 GPM.

Transmission: THE DISTRIBUTION MAINS CONSIST OF 12 GAUGE DIPPED AND WRAPPED STEEL AND GALVANIZED STEEL PIPE.

Treatment: NO TREATMENT IS PROVIDED TO WATER PRODUCED BY THE SYSTEM.

Storage: THE SYSTEM IS EQUIPPED WITH A 55,000 GALLON CONCRETE TANK WHICH PROVEDES BOTH STORAGE AND PRESSURE.

Capacity Limitations: MANY OF THE ADMINISTRATIVE MONITORING DUTIES AND REPORTS NEED EITHER IMPLEMENTATION OR UPDATING.



NOTE:
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 represent exact boundaries,
 rather they represent general
 or approximate boundaries.

WARD WELL WATER COMPANY

Water Service Areas

WEIMAR WATER COMPANY

District Overview: Weimar is an unincorporated community located approximately 13 miles northeast of Auburn. Weimar Water Company, an investor owned company, serving three other water districts: Midway Heights, Timber Hills Mutual Water Company, and the Weimar Institute.

The company started in 1964 with construction of a 1 MGD water treatment plant and currently operates under a permit issued in 1987. The 1 MGD conventional water treatment plant draws water from PCWA's Boardman Canal.

Following is the rate schedule assessed during 1991:

Service Size	Metered
5/8"	\$8.20 per month service charge, 1st 300 ft ³ @ 1.14/100 ft ³ ; 1.49/over 300 ft ³
3/4"	\$9.00 per month service charge, 1st 300 ft ³ @ 1.14/100 ft ³ ; 1.49/over 300 ft ³
1"	\$12.20 per month service charge, 1st 300 ft ³ @ 1.14/100 ft ³ ; 1.49/over 300 ft ³
1.5"	\$16.25 per month service charge, 1st 300 ft ³ @ 1.14/100 ft ³ ; 1.49/over 300 ft ³
2"	\$22.00 per month service charge, 1st 300 ft ³ @ 1.14/100 ft ³ ; 1.49/over 300 ft ³

Source Information: Weimar Water Company purchases water from PCWA's Boardman Canal. Water is purchased by the Miners Inch (1/40 CFS or 11.25 gpm). A pump station located along the Boardman Canal pumps water to the conventional water treatment plant.

Primary Transmission and Distribution: Water is lifted from the canal by two pumps to a 460,000 gallon rectangular raw water basin. Full treatment is then provided using dual media gravity filters. The treated water is then boosted to fill (4) 60,000 gallon steel storage tanks, which gravity feed the system. Water mains throughout the system are composed of steel (approximately 77%) and PVC (approximately 23%). The steel mains range in size from 2 - 14 inches diameter and range in good to poor condition. The PVC lines range from 4 - 8 inch and are in good condition. Due to the amount and age of steel lines an aggressive corrosion control program is practiced.

Storage: Storage provided to the system consists of a 460,000 gallon raw water reservoir, and (4) 60,000 gallon steel storage tanks. The raw water reservoir is constructed of earth embankments. The steel storage tanks are reportedly in fair condition.

Treatment: Full complete conventional treatment is provided for water drawn from the Boardman Canal. Significant sanitary hazards are exposed to the canal, such as recreation, drainage from I-80, on-site sewers, and dead animals. Water is coagulated with alum, flocculated, settled, then filtered through dual media gravity filters followed by chlorination. The treatment plant capacity is 1 MGD. Turbidity fluctuations in Boardman Canal is an occasional problem after winter rainstorms.

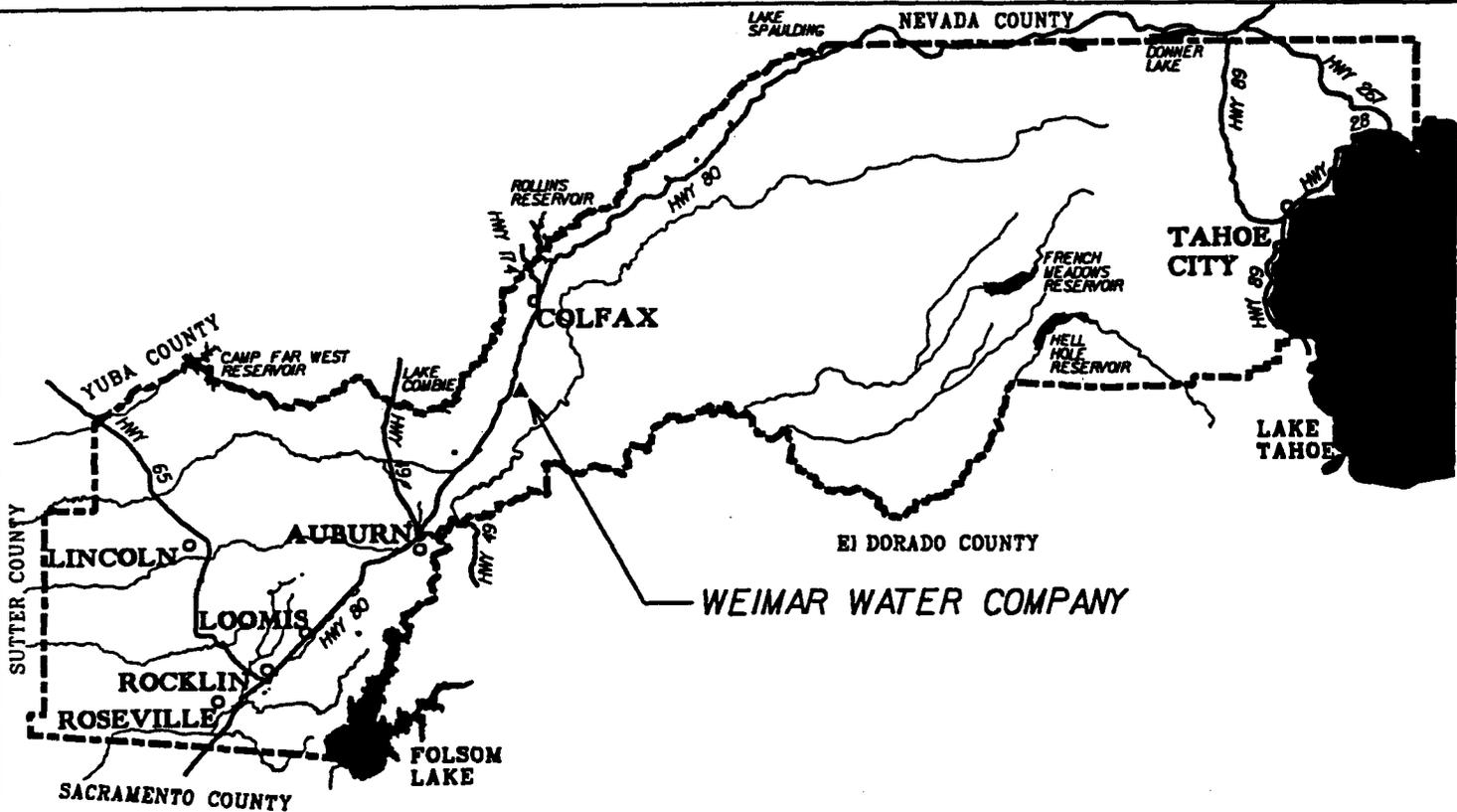
1990 System Production: According to the 1991 annual report 300 connections serve a permanent population of approximately 750. Three of these connections serve other water utilities. Maximum day production by the system was 0.45 million gallons, with the month of September experiencing the highest demands. Water is purchased by the miners inch from PCWA.

Deficiencies and Limitations: There exists no major deficiencies or limitations with the system

Existing Planned Improvements: Long range planning is directed at expanding the present service area to serve the entire Eden Valley from Weimar to (but not including) Colfax.

System Appraisal: The Weimar Water Company is in excellent condition for both treatment and source supply. It is also expected to conform with the Surface Water Treatment Regulations with only minor changes. The most serious problem facing the company would be drought effects on the Lake Spaulding Water Shed Area, which might require water rationing. Rationing has never been required in the past.

PLACER COUNTY WATER SYSTEMS



System Name: WEIMAR WATER COMPANY

Address: 2000 'O' ST, SUITE 200, SACRAMENTO CA 95814

Contact Name: FRED FAHLEN Phone: (916)-637-4441

Service Area Size: No. Connections: 300 Population Served: 750

Services Provided: SERVE RESIDENTIAL AND THREE OTHER WATER UTILITES.

Summary System Description

Source: THE COMPANY PURCHASES WATER FROM P.C.W.A'S BOARDMAN CANAL BY THE MINERS INCH.

Transmission: WATER IS LIFTED FROM THE CANAL TO A 460,000 GALLON RAW WATER BASIN. THE DISTRIBUTION SYSTEM IS COMPOSED OF STEEL (77%) AND PVC (23%) MAINS.

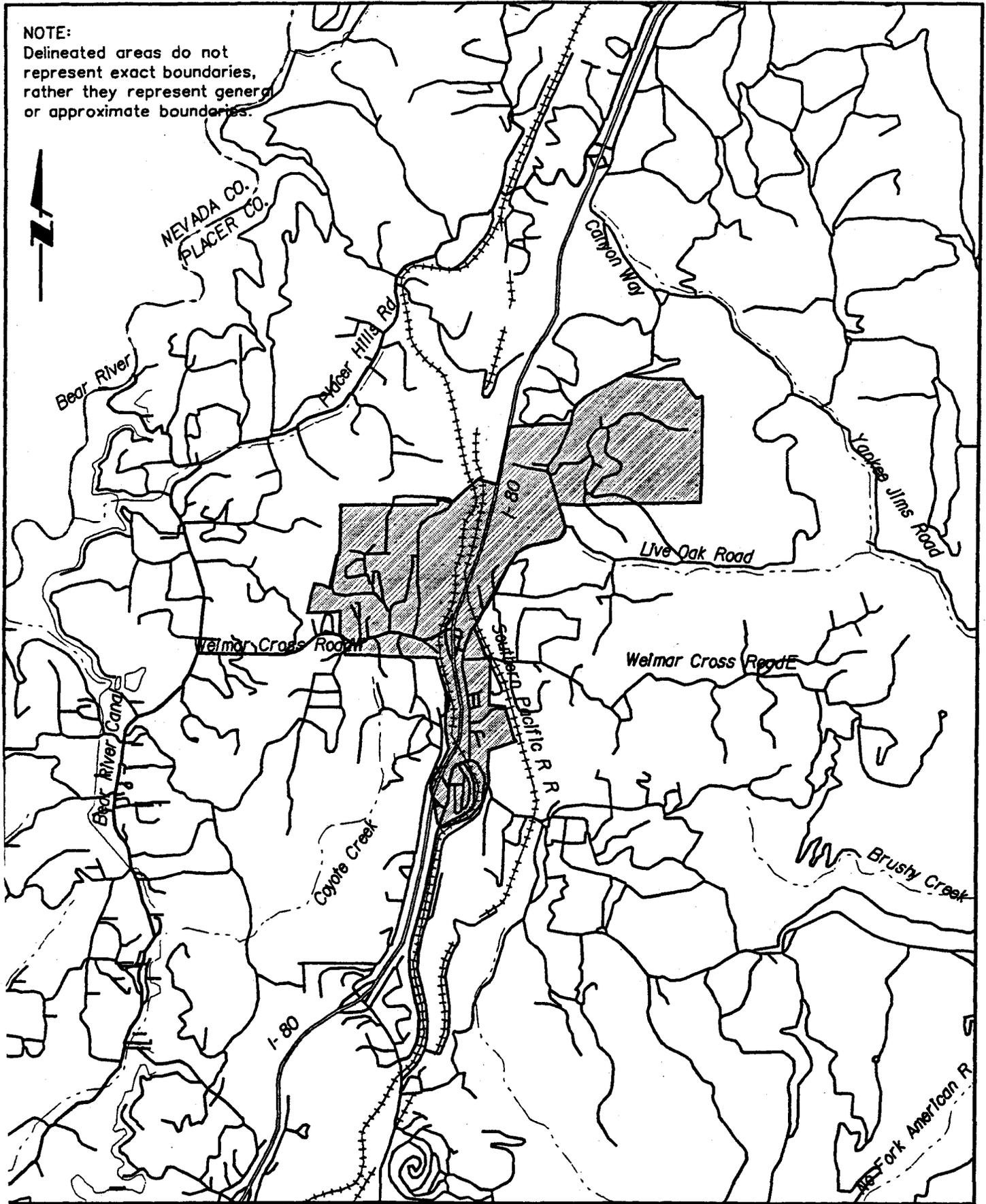
Treatment: FULL COMPLETE CONVENTIONAL TREATMENT IS PROVIDED BY A 1MGD TREATMENT PLANT.

Storage: STORAGE TO THE SYSTEM CONSISTS OF A 460,000 GALLON RAW WATER RESERVOIR AND (4) 60,000 GALLON STEEL TANKS.

Capacity Limitations: THERE ARE NO IDENTIFIED MAJOR DEFICIENCIES OR LIMITATIONS WITH THE SYSTEM.

NOTE:

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



WEIMAR WATER COMPANY
Water Service Area

Appendix B
Community Wastewater Systems



APPENDIX B

COMMUNITY WASTEWATER SYSTEMS

This appendix includes detailed summary information for each of the 37 community wastewater systems reviewed for Chapter 6 of the *Placer County General Plan Draft Background Report*. For each system, most, if not all, of the following information is summarized:

- General Information
- Wastewater Generation/Sources
- Collection System Description
- Wastewater Treatment and Disposal System Description
- System Deficiencies
- Proposed Improvements
- Financing
- System Appraisal

Following each of these detailed summaries is an "executive summary" sheet that includes a location map and a summary description of the individual system. Finally, for each individual system described, there is a service boundary map.

COMMUNITY WASTEWATER SYSTEMS REVIEWED

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ALPINEER CLUB, INC.

General Information: The Alpineer Club, Inc., lodge is located one mile east of Norden, off Highway 80, in the Tahoe National Forest (NE1/4 of Sec 20, T17N, R15E, MDB&M). Alpineer Club facilities are located on land leased from the U.S. Forest Service, Tahoe National Forest. Wastewater from the site is permitted by RWQCB Waste Discharge Requirement Order No. 85-293 which was adopted on October 25, 1985.

Surface drainage from the facilities flows to the South Fork Yuba River.

Wastewater Generation/Sources: Domestic wastewater only is generated by the lodge facilities. The Alpineer Club, Inc., lodge has a capacity of 40 guests with typical use of the facilities occurring on weekends during the skiing season.

Wastewater Treatment and Disposal System Description: A new septic tank and leachfield system was constructed by the members of the Alpineer Club in the summer of 1984 in response to RWQCB Cease and Desist Order No. 76-160. The new wastewater disposal facility is upslope from the lodge in an area which has a lower groundwater table than the old leachfield site and the new site soils are more conducive to percolation.

The new on-site sewage disposal system consists of three septic tanks which operate in series. Wastewater is pumped from the third septic tank upslope to the subsurface leachfield. The septic tank system has a total volume of 5,000 gallons (one-2,000 and two-1,500 gallon tanks) and the new leachfield occupies 3,300 square feet of surface area.

System Deficiencies: Chronic failures of the old septic-leachfield system were the result of a high seasonal groundwater table and an insufficient percolation rate. Effluent had surfaced and spilled into the South Yuba River initiating the RWQCB enforcement response. Alpineer Club members initiated attempts to repair the old system, which included cleaning the septic tank and leach lines, installing an additional 250 feet of leach line, and covering the leachfield area with a plastic tarp to slow snow melt infiltration. Unfortunately this repairs failed to appreciably fix the system and problems recurred until the new system was installed.

Since the installation of the new on-site sewage disposal system there have been no reported difficulties with wastewater disposal

Proposed Improvements: At this time, no known improvements are scheduled for the Alpineer Club, Inc., wastewater facilities. The regulatory agencies recommend that the Alpineer Club, Inc., wastewater system be connected to the Donner Summit Public Utilities District via a new lateral line which is located about 200 feet from the Lodge.

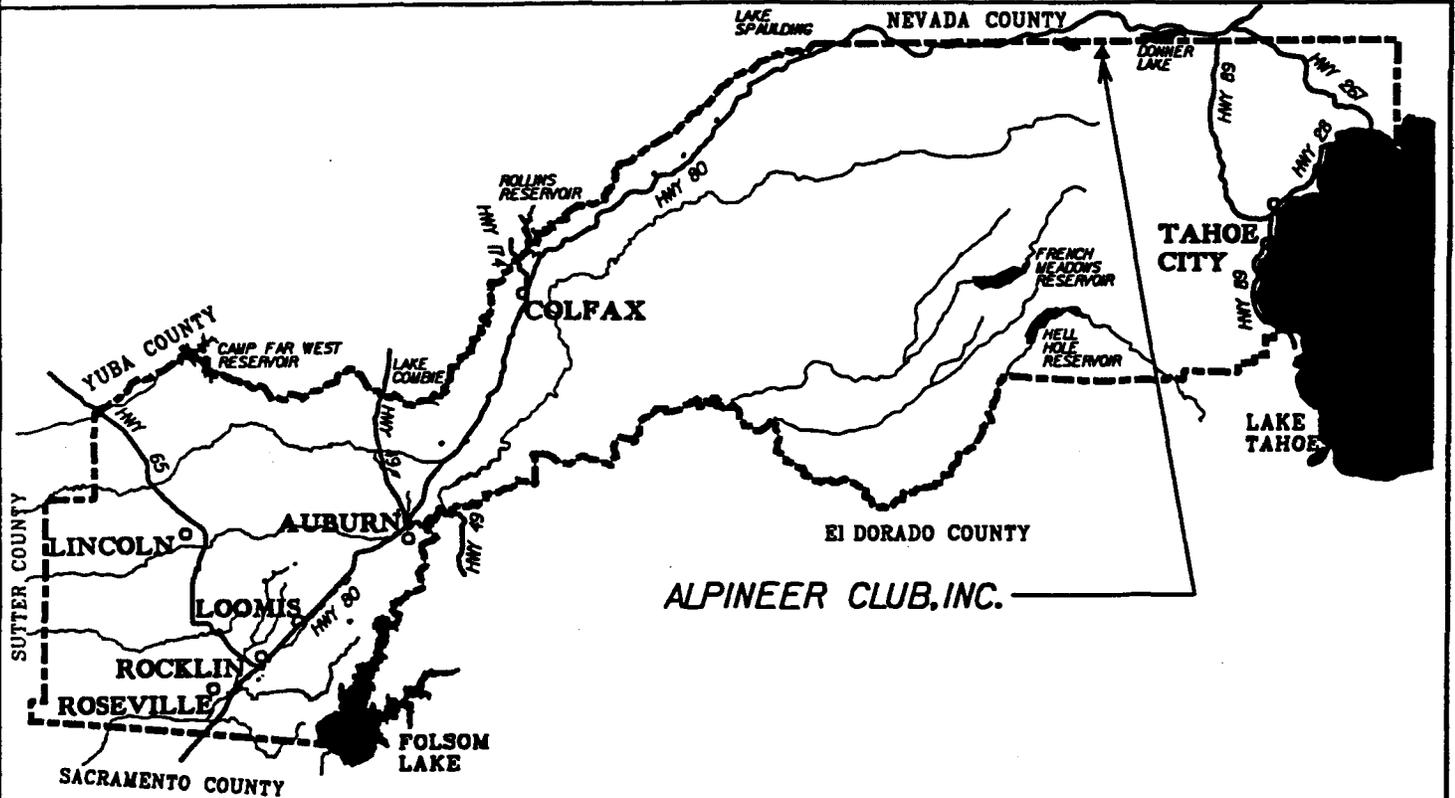
Financing: Financing for operations and maintenance of the Alpineer Club wastewater system is provided by club dues paid by each of the individual members. In cases where large improvements are necessary, an assessment of the total improvement costs is apportioned to the members.

System Appraisal: In the Summer of 1984 the Alpineer Club, Inc., constructed a new septic-leachfield system on additional Forest Service property which is located up-slope from the Lodge and exhibits soils and groundwater conditions more conducive to supporting an on-site wastewater disposal system. Inspections by RWQCB staff which have occurred since the new disposal facilities were constructed have

not found any evidence of septic or leachfield system failure.

Future connection of the Alpineer Club, Inc., wastewater flows to the Donner Summit PUD system is mandated by the regulatory agencies by 1993. Alpineer Club members are planning to hook-up to the Donner Summit PUD system by the compliance date. Future expansion of the Lodge, or additional wastewater generation, is not planned by the Alpineer Club, Inc., in the near-term.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: ALPINEER CLUB, INC.

Address: DONNER PASS ROAD, NORDEN, CA

Contact Name: MEL PEARCE

Phone: (916)-453-6480

Service Area Size: 1 PARCEL No. Connect.: 1 Population Served: 40

Services Provided: WASTEWATER COLLECTION TREATMENT AND DISPOSAL FROM SEASONAL LODGE

Summary System Description

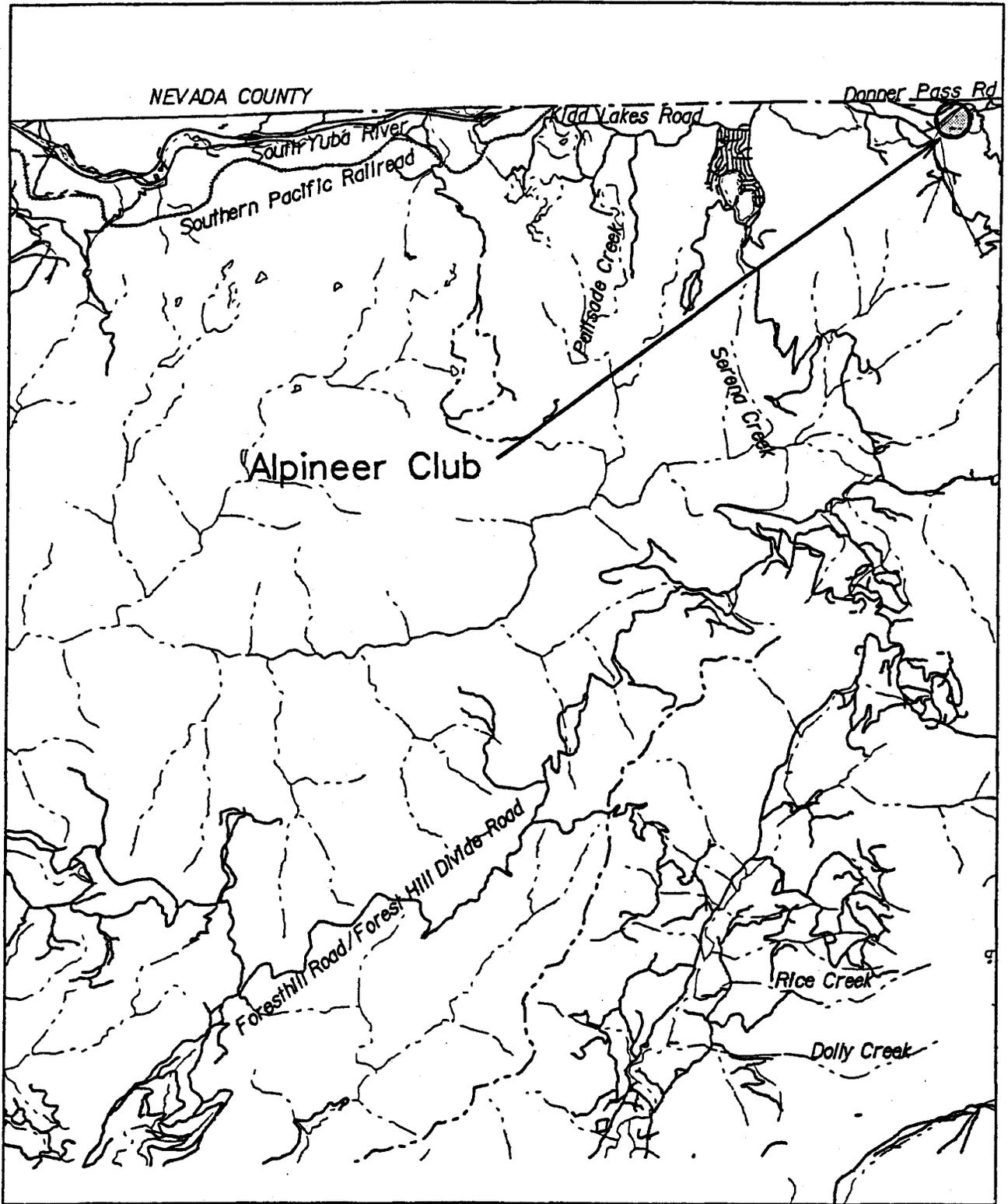
Service Area Characteristics: SIERRA MOUNTAINS REAR DONNER SUMMIT. TAHOE NATIONAL FOREST LAND. LEASED. GRANITE AND WELL FORESTED. SEASONAL USE MAINLY IN WINTER AS SKI LODGE. 40 PERSON CAPACITY.

Collection: WASTEWATER COLLECTED FROM LODGE RESTROOMS AND KITCHEN THEN CONVEYED THROUGH A 4 INCH LINE TO SEPTIC SYSTEM.

Treatment: PROVIDED BY ON-SITE SEPTIC SYSTEM. 5,000 GALLONS, 3 SEPTIC TANKS, PUMPED UPGRADIENT THROUGH A 2 1/2-INCH PVC PIPELINE TO A SUBSURFACE LEACHFIELD. NEW TANKS AND LEACHFIELD INSTALLED DUE TO OLD SYSTEM FAILURE.

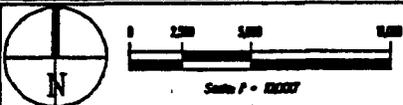
Disposal: NEW SUBSURFACE LEACHFIELD INSTALLED IN 1984 WITH PROVISIONS TO DIVERT SURFACE RUNOFF. APPROXIMATELY 3,300 SQUARE FOOT OF SURFACE AREA OCCUPIED BY FIELD.

Capacity Limitations: LIMITED SYSTEM CAPACITY DESIGNED FOR LODGE OCCUPANCY OF 40 PERSONS. NO PLANS FOR EXPANSION.



Placer County General Plan

Figure — Wastewater Service Area



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

LEGEND **Alpineer Club**

- Streets
- Waterways
- County Line
- District Service Area

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

AUBURN VALLEY SERVICES CORPORATION AND CASTLEWOOD CORPORATION

General Information: The Auburn Valley Services Corporation owns and operates the Auburn Valley Subdivision community wastewater treatment and disposal facility which is designed to serve 136 dwelling units and a golf clubhouse at full build-out. The wastewater facilities are located 1/4 mile west of the 18th tee on the Auburn Valley Country Club golf course on an easement of 200 acres of Castlewood, et al, property in Auburn.

At the request of the County of Placer, 3-1/2 years ago, the Auburn Valley Service Corporation and property owners formed a group to develop the system into County Service Area 28, Zone 91. Meetings are held once per month.

Discharge from the Auburn Valley Subdivision is permitted under RWQCB Waste Discharge Requirement Order No. 79-170 and Monitoring and Reporting Program Order No. 79-170. These documents were adopted on July 27, 1979.

Surface drainage from the area is to the Bear River.

Wastewater Generation/Sources: The Auburn Valley Subdivision and Country Club facilities were designed to accommodate an ADWF discharge of 43,000 gpd of domestic wastewater from 136 residences and a golf clubhouse. The wastewater is considered domestic in nature.

Approximately 20,000 gpd (ADWF) of wastewater are currently being generated with a peak wet weather flow of 27,000 gpd.

Collection System Description: Currently there are only 43 residences and the golf course clubhouse connected to the system. Ultimate build-out is for 136 residences and the clubhouse. Flows from the clubhouse are estimated to be equivalent to 12 dwelling units. Of the unoccupied lots, approximately 10 are owned by individuals with the remainder owned by two land owners who have an approved plan to immediately build on 25 lots after the current building moratorium is lifted and one owner is working on developing 54 others.

Wastewater collection is via gravity sewers through 6-inch diameter asbestos cement (AC) lines and conveyed to the treatment facilities. The collection system is conventional in design with manholes provided about every 400 feet and an average sewer line depth of 4 feet. The original sewer system was constructed in 1976. There are no lift stations in the system.

Deficiencies: The collection system seems to have problems with inflow and infiltration. Inflow and infiltration contribution has been determined to be from the individual house laterals. Additional investigation of house laterals in the near term is being planned. A recent TV inspection verified that the sewer system mainlines were sound. There are not any other known deficiencies in the collection system.

Proposed Improvements: At this time planning is being considered to address the house lateral inflow and infiltration contribution. It is likely that the problem will be solved by mid-1993.

Wastewater Treatment and Disposal Systems Description: 200 acres within the subdivision are designated by easement for sewer use only. The treatment and disposal system is within this designated area. Wastewater is conveyed to five evaporative ponds for treatment and storage. The ponds comprise a total volume of 10.8 million gallons, approximately 4.1 acres and are operated in series. Designed for full build-out, only three of the ponds have been used to date with two of the five remaining empty.

The 1979 RWQCB WDR's stipulated that the design of the impoundments include the placement of an underlying clay layer for the ponds due to their planned location which is situated on areas of fractured rock. A clay layer with a minimum thickness of two feet thick and compacted to decrease permeability was to be incorporated into the design to assist in preventing percolation of wastewater containing potentially pathogenic organisms to the groundwater. This upgrade has to date not been carried out.

Deficiencies: Known deficiencies in the recent past include the discovery of potential leakage from the ponds which was documented in a RWQCB inspection report in 1988 and in a report prepared by the engineers retained by the homeowners. Auburn Valley Subdivision homeowners have expended a large effort to determine if indeed the leakage is from the ponds.

At this time there is some discussion over whether the ponds were adequately lined and several engineering/geotechnical firms were retained by the homeowners to determine if the ponds were leaking. Current thought is that there is a leak through a dike on pond C. The ponds are built in rock therefore expansion of the pond system is not thought to be cost effective.

Other known treatment system deficiencies include lack of a spray irrigation system.

Proposed Improvements: A predesign report submitted by Dewante & Stowell in October, 1989, recommended improvements to the wastewater management facility. Suggested alternatives included refinement of the existing treatment scheme by enlarging and lining the existing ponds and establishing the spray irrigation system. An additional alternative included conversion from the existing pond treatment process to a "packaged" treatment plant with surface discharge.

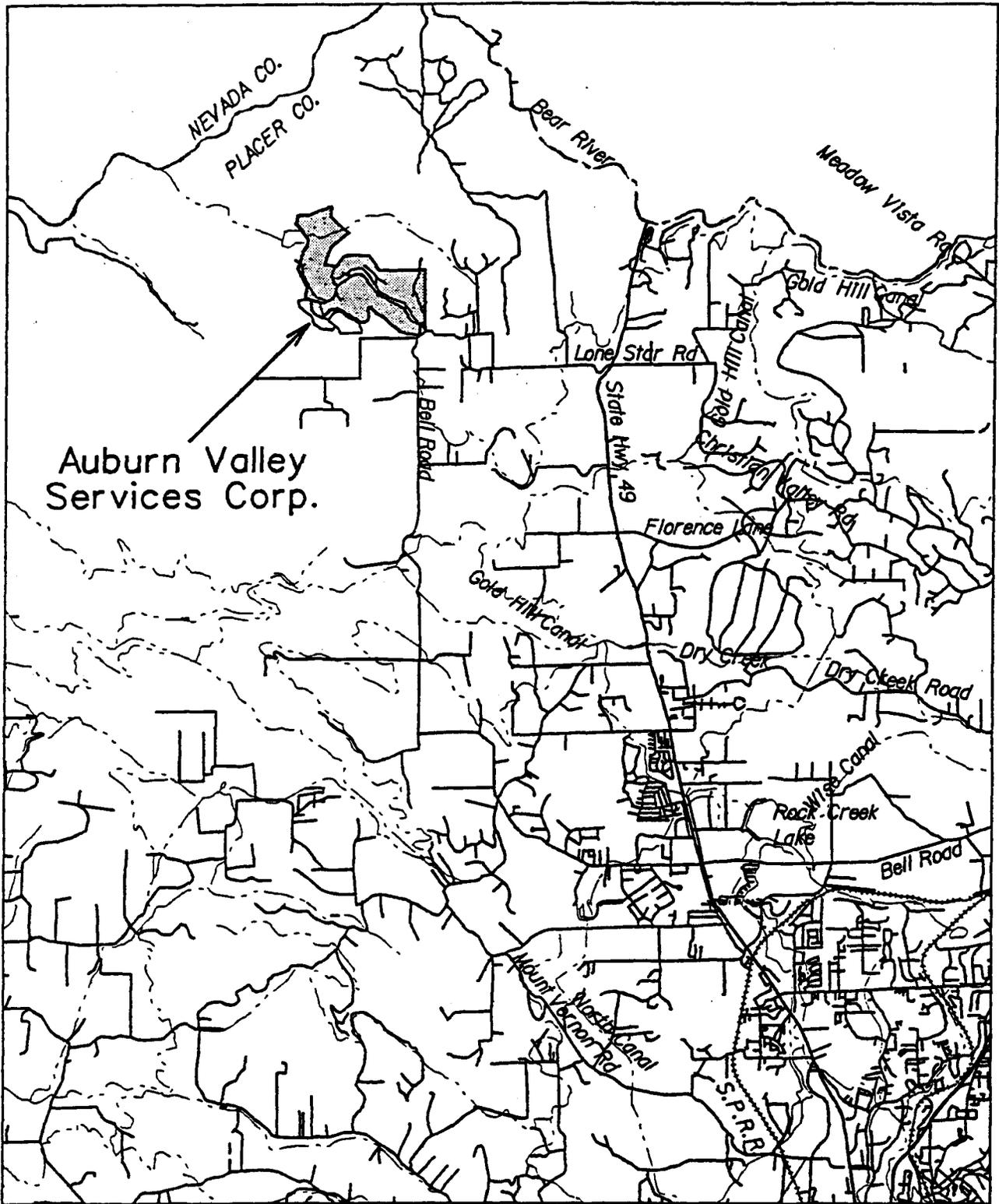
The packaged treatment plant process was determined as the best apparent alternative and construction of the improvements is scheduled to be initiated in 1992. These scheduled improvements will necessitate revisions of the discharge requirements by the RWQCB in the near-term.

Difficulties with the proposed plan for the treatment and disposal improvements include determining the methodology for disposal. RWQCB preference is not to allow treated effluent discharge to a lined pond disposal system. Current thought is to construct an outfall to the Bear River, approximately one mile away. A preliminary survey for the pipeline has been undertaken and the plan is being developed.

Financing: The Auburn Valley Subdivision (Auburn Valley Services Corporation wastewater collection, treatment and disposal facilities operations and maintenance costs are funded entirely by homeowner fees. Proposed treatment and disposal system improvements in the near-term will be funded by bond issues (through the County and repaid by assessment district fees).

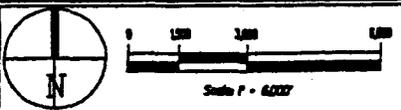
System Appraisal: Existing wastewater flow for the system is now at 20,000 gpd and remaining capacity is 23,000 gpd which should be adequate for the near-term. Existing Auburn Valley Subdivision wastewater facilities are not considered adequate by the regulatory agencies due to the reported leakage of the ponds.

Planned near-term refurbishment of the wastewater facilities should result in a significantly improved treatment and disposal system. The newly completed "packaged" plant treatment system will be designed to effectively treat and dispose of the anticipated wastewater quantities and should enable the subdivision to effectively treat its wastewater without substantially degrading the surrounding surface or groundwater. Design flows for the new wastewater treatment system are set for 40,000 gpd (ADWF).



Placer County General Plan

Figure _____
Wastewater Service Area



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

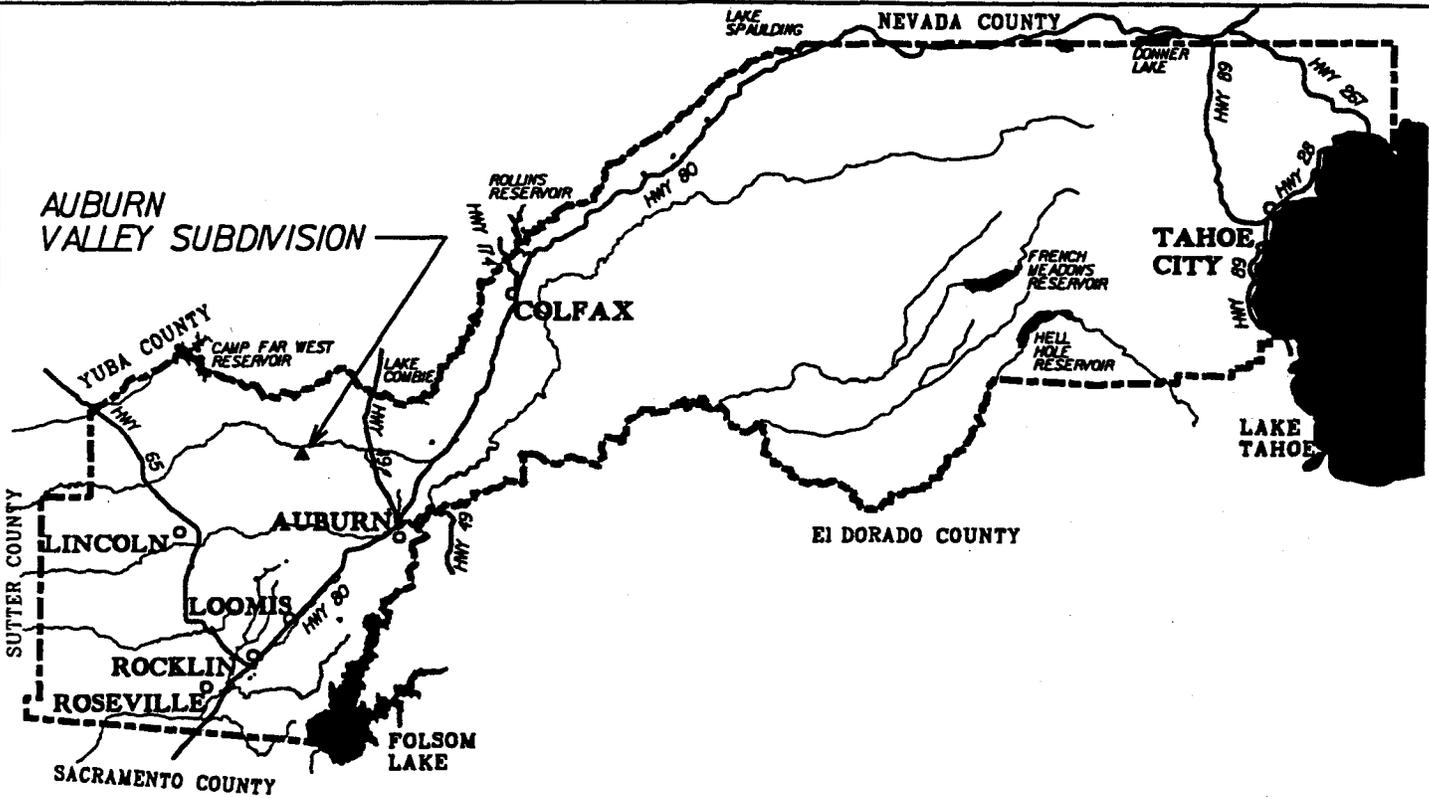
LEGEND

Auburn Valley Services Corp.

- Streets
- Waterways
- County Line
- District Service Area

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

PLACER COUNTY WASTEWATER SYSTEMS



System Name: AUBURN VALLEY SERVICES CORP. & CASTLEWOOD CORP. (AUBURN VALLEY SUBDIVISION)
 Address: 8800 AUBURN VALLEY ROAD, AUBURN CA (CLUB); P.O. BOX 5456, AUBURN CA 95604 (AVSC)
 Contact Name: LLOYD BISSING, PRESIDENT, HOMEOWNERS ASSOC. Phone: (916)-269-1810
 Service Area Size: _____ No. Connect.: 52 Population Served: 120
 Services Provided: WASTEWATER COLLECTION, TREATMENT AND DISPOSAL

Summary System Description

Service Area Characteristics: FOOTHILLS OF SIERRA NEVADA RANGE. ROLLING HILLS, OAKS AND GRASSLANDS.

Collection: 6 INCH SEWER LINES. GRAVITY SYSTEM. STD MANHOLES APPROXIMATELY ONE MILE OF COLLECTION LINE. 51 RESIDENTIAL AND 11 COUNTRY CLUB CONNECTIONS.

Treatment: CURRENTLY A POND SYSTEM. 5 PONDS IN SERIES. NEAR TERM IMPROVEMENT WILL BE A "PACKAGED" ACTIVATED SLUDGE PLANT WITH 30/30 TREATMENT LEVEL

Disposal: CURRENT PROVIDED BY EVAPORATION/PERCOLATION THROUGH THE POND SYSTEM. POSSIBLE NEW SYSTEM WILL INVOLVE A ONE-MILE PIPELINE WITH SURFACE DISCHARGE TO BEAR RIVER.

Capacity Limitations: 43,000 GPD DESIGN FLOW WITH EXISTING POND SYSTEM. DESIGN FLOW OF 40,000 PLANNED FOR PACKAGED PLANT SYSTEM.

CITY OF AUBURN

General Information: The City of Auburn Wastewater Treatment Plant is located west of the City between Ophir Road and Wise Road at 10441 Ophir Road in Auburn. The facility is operated by Sanitation and Operation Consultants, Inc., a private firm under contract to the City. Original wastewater facilities were constructed in 1976 with partial funding by State and Federal Clean Water Grant monies.

Wastewater discharge is regulated by RWQCB Waste Discharge Requirements Order No. 89-221, Federal USEPA NPDES Permit No. CA0077712, and RWQCB Monitoring and Reporting Program No. 89-221, effective since December 1989. The USEPA and the SWRCB have classified discharge from the City of Auburn facilities as a major discharge.

Surface runoff is to Auburn Ravine.

Wastewater Generation/Sources: City of Auburn wastewater collection, treatment and disposal facilities serve 3,170 residential and 345 commercial and industrial connections for a total of 3,515 connections. The wastewater is considered municipal in nature. The total population served is about 10,000.

Collection System Description: The oldest known pipeline in the collection system is dated to 1892 and some lines were also installed in the 1920's which are 5-inch diameter. A majority of the collection system improvements were installed in the 1960's, late 80's and early 90's. Wastewater is collected from an approximately 5 square mile service area through about 42 miles of sewer line. Pipe diameters range from 6 inch to 24 inch. Materials of construction include VCP, CIP and PVC. A majority of the collection system is gravity however, there are 9 lift stations and 12,000 feet of 6 and 8 inch pressure main.

Deficiencies: Severe infiltration and inflow problems within the collection system have caused hydraulic overloading at the treatment plant and the eventual release of partially treated wastewater to Auburn Ravine. These conditions warranted the issuance of Cease and Desist Order No. 77-223 on May 26, 1977. Collection system renovation and plant improvement activities were undertaken starting in 1983 with funding assistance provided by a Clean Water Grant. The Cease and Desist Order was rescinded on January 26, 1990 with RWQCB Order No. 90-025.

Television based inspections of the collection system in the recent past identified ten "hot spots" where improvements are warranted. The High Street project was identified as one of these ten remediation projects needed. Three of the identified projects have been completed to date. Starting in 1989, lining of manholes was initiated to reduce inflow. Manhole lining was an ongoing project up to 1991.

Other known collection system deficiencies are outlined in the SOCI memo to the City Public Works Department.

Proposed Improvements: In addition to the recently completed improvements to the collection system, lining or replacement of two pipelines in High Street is planned in the near-term. Also, the city is about three months from completion of a CAD map system for the entire collection system which is an extension of the County maps.

Wastewater Treatment System Description: The City of Auburn Wastewater Treatment Plant, situated on 70 acres, commenced operation in 1976. Wastewater is treated to secondary effluent quality levels. Wastewater treatment incorporates four equalization ponds, an aerated grit chamber, a comminutor and

bar screen, an extended aeration mode oxidation ditch, secondary clarifier, return sludge pumping system, chlorination and dechlorination processes, and sludge lagoons.

The design capacity of the existing secondary treatment facilities is 1.23 mgd. Current dry weather flows through the treatment plant average 1.0 mgd ADWF. Winter flows surpassing the hydraulic capacity of the facility are diverted to the equalization ponds for storage. Peak wet weather flows have been estimated to sometimes exceed 6.0 mgd. Emergency holding and bypass treatment ponds, which occupy 16 acres and have a usable volume of 30 million gallons, accommodate the excessive wet weather flows.

Deficiencies: Past treatment plant upsets were considered mainly due to excessive inflow and infiltration which caused hydraulic overloading at the plant. Another reason cited for plant upsets was an inability to operate the plant at its design wet weather flow rate due to inadequate sludge lagoon capacity and return sludge pumping capacity.

A Clean Water Grant partially funded improvements to the chlorination and dechlorination facilities, the addition of storage pond aerators, cleaning of storage pond No. 2, the addition of pond return flow capability, and side weir modifications. The City also installed mechanisms to allow increased dewatering of the sewage lagoons. With these recent improvements the treatment facilities are operating within the design capacity.

Remaining identified treatment plant deficiencies which were recently improved include replacement of the air lift return activated sludge pumps with screw lift pumps. A Somat system was installed for solids dewatering but has not been meeting the manufacturer's specifications. To alleviate this problem, the city plans to fund a belt press. A second clarifier is also being planned in the near-term.

In addition it is considered that a limiting plant capacity factor is the mixing capacity of the oxidation ditch.

Proposed Improvements: The December, 1989, RWQCB discharge requirements contained a time schedule for installation of adequate flow metering. The flowmeter improvements were completed in August of 1988. Metering improvements should expedite plant operations by optimizing drainage of wastewater from the storage ponds during off peak hours.

Additional planned treatment plant improvements include the diversion of existing direct flow from a subdivision which currently flows to pond #3 instead to a plug flow diversion box.

Disposal System Description: In accordance to existing permit conditions, plant effluent is discharged to Auburn Ravine Creek. During an emergency winter overflow crisis, partially treated wastewater from the pond No. 4 can be bypassed to the chlorine contact chamber and mixed with secondary effluent before discharge. Monitoring restrictions in such cases apply to the total coliform, suspended solids and BOD in the combined effluent.

Dried sewage sludge is hauled to a Class III sanitary landfill in Lincoln, CA.

Deficiencies: Identified disposal system deficiencies include the failure of the Somat system to remove solids.

Proposed Improvements: Reclamation of effluent for irrigation purposes is thought to be a viable disposal option. Beneficial reuse of sludge, such as agricultural soil amendment, is a desirable option for

future management. Near-term City plans include the funding of a two meter belt press for solids processing.

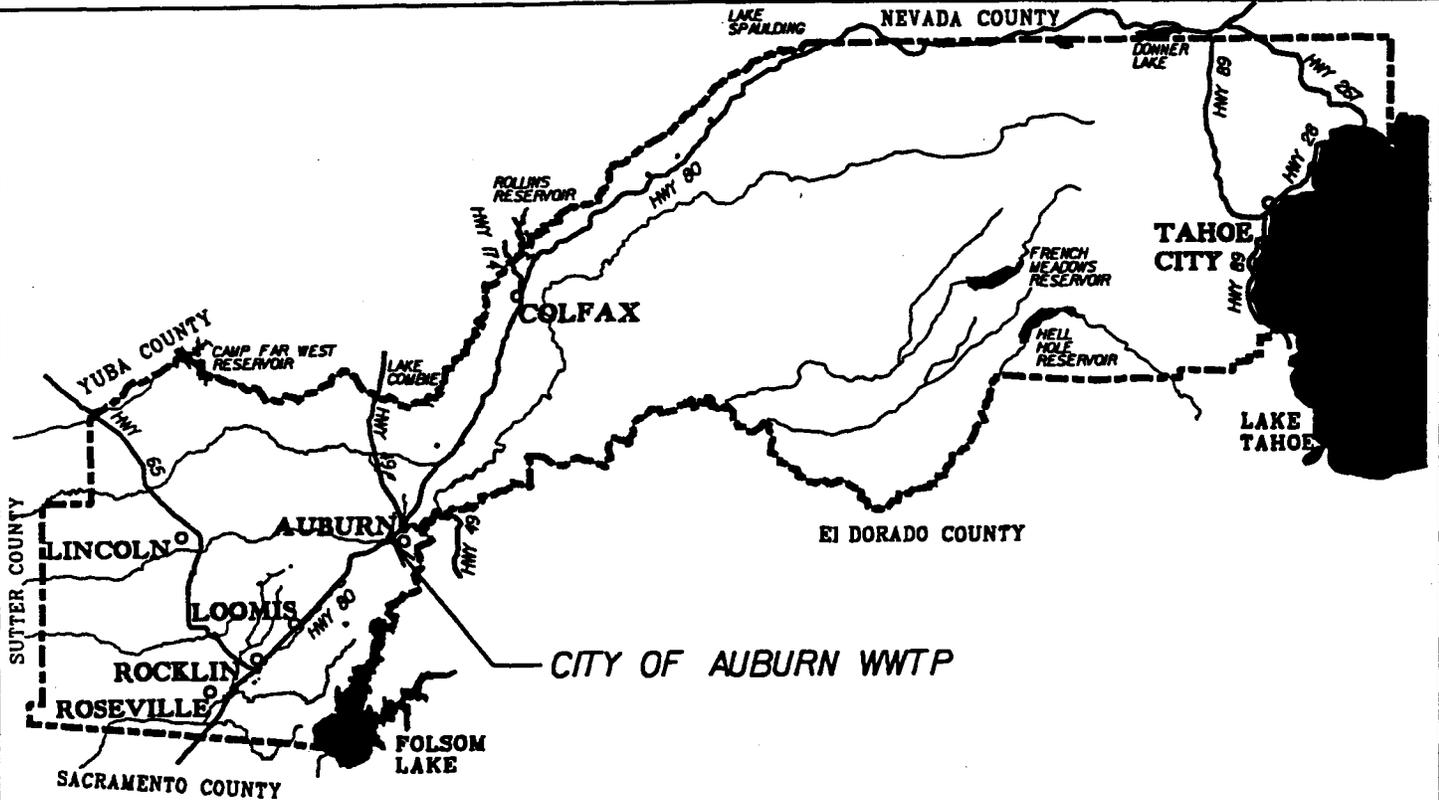
Financing: Original construction and subsequent improvement costs for the collection, treatment and disposal facilities were partially funded by the Clean Water Grant process. Local share costs for construction and improvements were funded by City funding processes.

Operations and maintenance costs are funded by the City operations budget of the Public Works Department.

System Appraisal: Treatment plant processes selected for design and construction were expected to provide secondary level discharge quality. Despite past sludge handling deficiencies, treatment plant performance and discharges were in general compliance with the permit conditions. Recent plant improvements will allow the facilities to maintain the requirements of its discharge requirements.

The existing plant site can accommodate an expansion of current treatment processes to handle an average flow of 2.5 to 3.0 mgd, equitable to a 25,000 service area population. Planned system expansions which include future upgrade of the treatment system to tertiary treatment level and elimination of sulfur dioxide and chlorine gases with the use of liquid hypochloride and sodium metabisulfite (NaHSO_3) as alternatives and planned for 1995 and will provide a total system capacity of 5.5 mgd ADWF. This is the maximum expansion threshold which will include tertiary treatment to meet the state discharge requirements.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: CITY OF AUBURN

Address: 1103 HIGH STREET, AUBURN

Contact Name: TERRY HOUGHTON, FACILITY SUPERVISOR Phone: (916)-823-1483

Service Area Size: _____ No. Connect.: 3,515 Population Served: 10,000

Services Provided: WASTEWATER COLLECTION TREATMENT AND DISPOSAL

Summary System Description

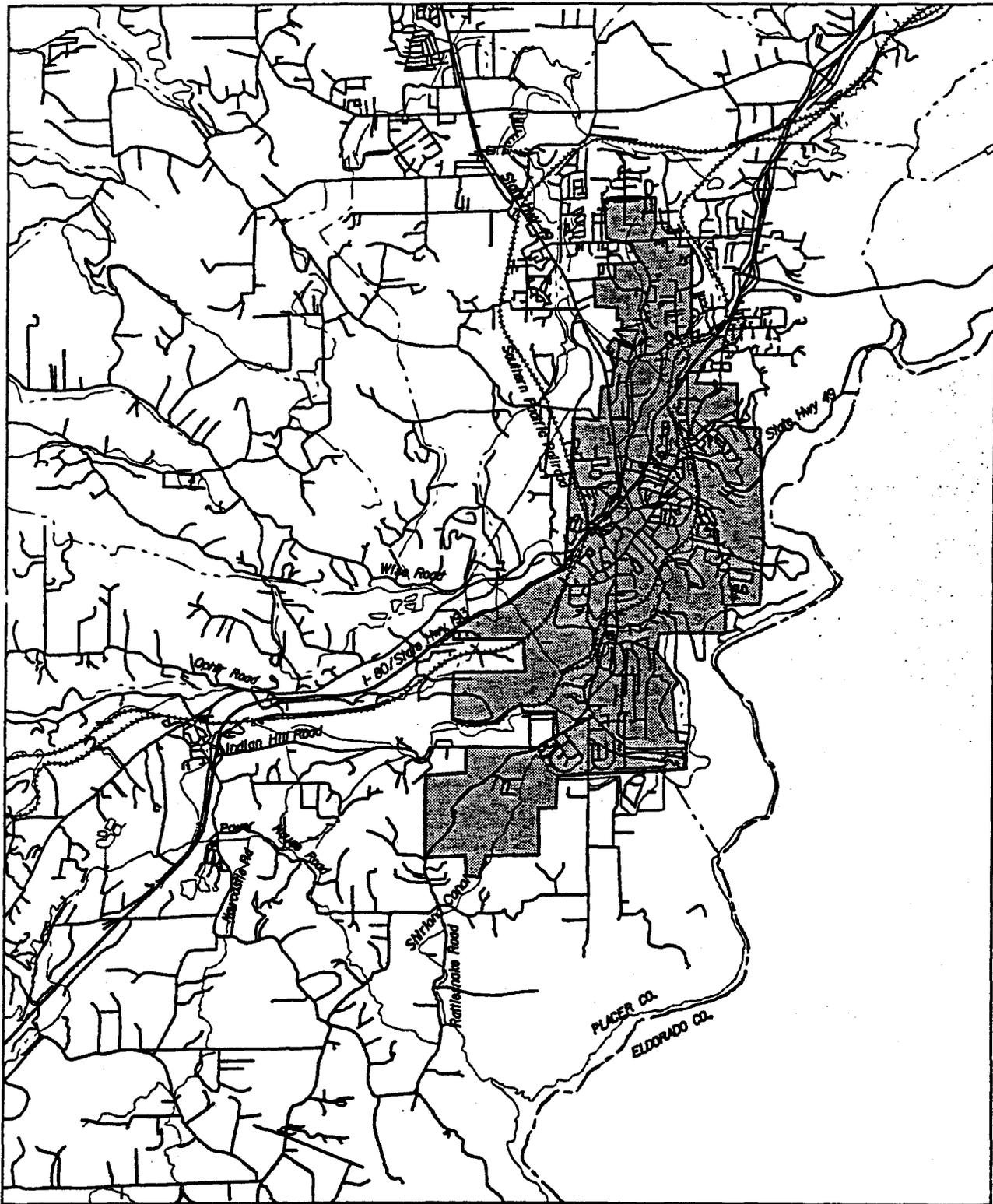
Service Area Characteristics: FOOTHILL LOCATION IN THE SIERRA NEVADA RANGE. ROLLING HILLS, OAK WOODLANDS, GRASSLANDS. FACILITIES SERVE THE CITY OF AUBURN AND OUTLYING AREAS.

Collection: FACILITIES SERVE A POPULATION OF 10,000. THERE ARE 3,170 RESIDENTIAL AND 345 COMMERCIAL AND INDUSTRIAL CONNECTIONS. AVERAGE AGE OF COLLECTION SYSTEM IS 20 YEARS. LINE SIZES VARY FROM 6 INCH TO 24 INCH.

Treatment: SECONDARY TREATMENT LEVEL PROVIDED BY 4 EQUALIZATION BASINS, HEADWORKS, EXTENDED MODE OXIDATION DITCH, SECONDARY CLARIFIER, CHLORINATION AND DECHLORINATION.

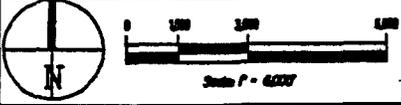
Disposal: SURFACE DISCHARGE IS TO AUBURN RAVINE CREEK. SOLIDS ARE DRIED AND TRANSPORTED TO LINCOLN CLASS III LANDFILL.

Capacity Limitations: DESIGN CAPACITY OF EXISTING PLANT IS 1.23 MGD. POTENTIAL FOR EXPANSION ON EXISTING SITE TO A CAPACITY OF 2.5 OR 3.0 MGD WHICH IS EQUITABLE TO A POPULATION OF ABOUT 25,000. EXPANSION TO 5.5 MGD MAX ULTIMATE.



Placer County General Plan

Figure _____ Wastewater Service Area



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

LEGEND

City of Auburn

- Streets
- Waterways
- County Line
- District Service Area

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

CALIFORNIA CONSERVATION CORPS PLACER ENERGY CENTER

General Information: The Placer Energy Center is a camp operated by the California Conservation Corps. The camp is located five miles north of the City of Auburn at 3710 Christian Valley Road. Wastewater is permitted under RWQCB Waste Discharge Requirement Order No. 86-135 which was adopted on June 27, 1986. The wastewater facility was constructed in the 1950's.

Wastewater Generation/Sources: The Placer Energy Center contains barracks, offices, and work areas. About 100 full and part-time residents occupy the camp. Wastewater generated by the facility is considered municipal in nature.

Collection System Description: The existing collection system is gravity flow and contains about 200 feet of clay main lines and ABS service laterals. There are six buildings currently connected to the collection system.

Deficiencies: Collection system infiltration and inflow is a minimal consideration.

Proposed Improvements: Line replacement is accomplished only when a break occurs.

Wastewater Treatment and Disposal System Description: Sewage treatment and disposal facilities at the camp consists of a 20,000 gallon concrete septic tank, two pumps and distribution unit, four evaporation/percolation ponds, and a spray irrigation field. Wastewater from the septic tank is pumped to the first two ponds for partial treatment and pumped again to the second set of ponds.

Whenever conditions allow, the second set ponds (#3 & #4) are emptied by means of the pump system to the spray irrigation field after a minimum settling time of 48 hours. Drainage from the spray pasture returns to the first two ponds, although the application rate of 10 gpm usually precludes significant runoff. The spray irrigation system typically operates about 11 hours per day in season.

A pit adjacent to the septic tank is designed to hold overflow which may occur in the event of a power or pipeline failure. Septage solids which accumulate in the tank are pumped about four times per year and hauled off-site by a contracted company to Rocklin. A grease trap which serves the kitchen is cleaned about once per year.

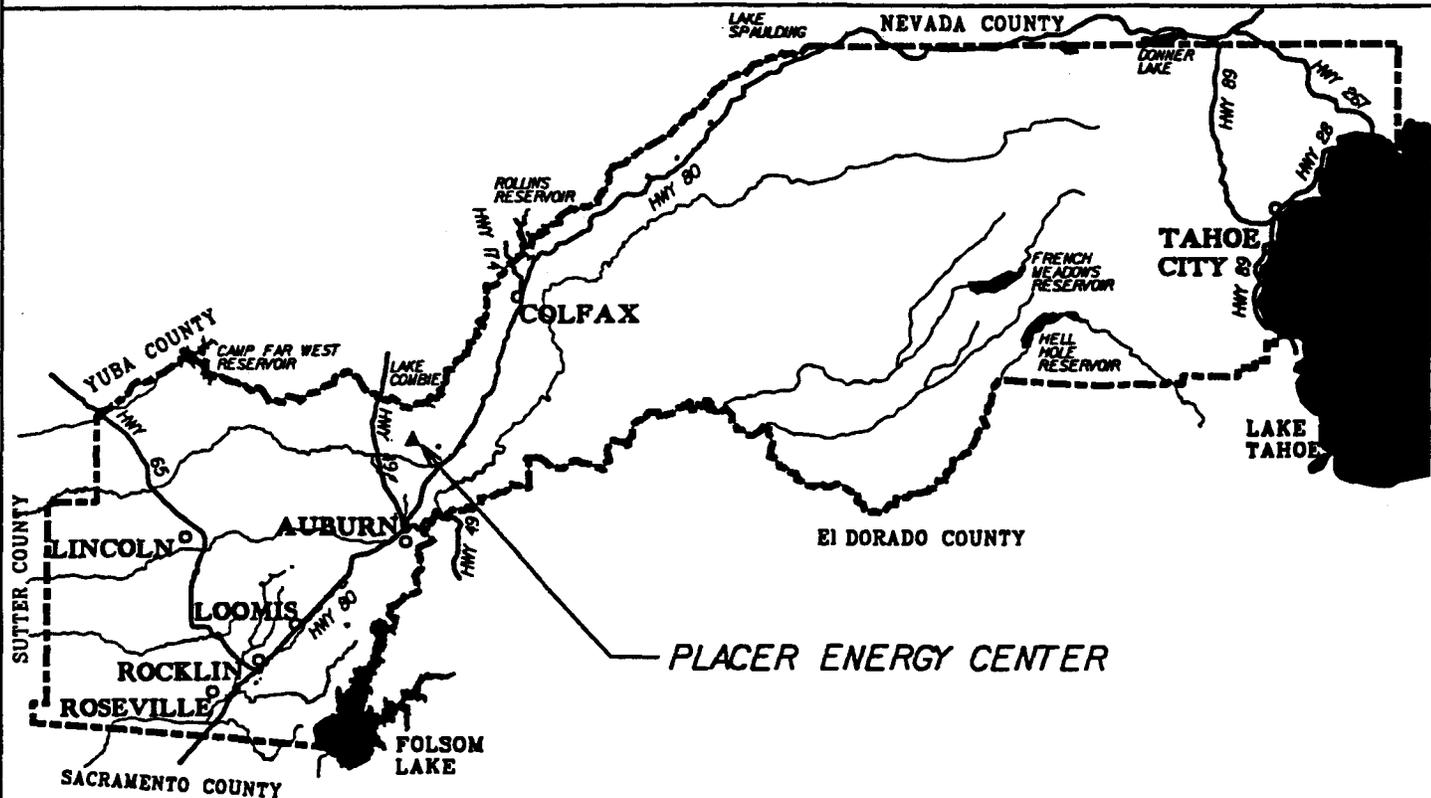
Deficiencies: The general condition of the treatment and disposal facilities is reportedly in good shape. No other known deficiencies exist at this time.

Proposed Improvements: The Placer Energy Center may eventually connect with the City of Auburn wastewater management facilities.

Financing: Funding for the Placer Energy Center is provided by the California Conservation Corps which is entirely funded by state funds.

System Appraisal: In general the Placer Energy Center wastewater collection, treatment and disposal facilities are considered in good condition and are providing adequate treatment and effluent quality for discharge to the spray field disposal system. Currently the Center does not anticipate any expansion. The Center would like to hook-up to the City of Auburn collection system and abandon its own on-site wastewater system. Currently there are not any plans to accomplish this proposed change in the near-term.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: CALIFORNIA CONSERVATION CORPS - PLACER ENERGY CENTER

Address: 3710 CHRISTIAN VALLEY ROAD, AUBURN, CA 95603

Contact Name: CLAUDIA RODGERS, MAINTENANCE MECHANIC Phone: (916)823-4900

Service Area Size: 80 ac. No. Connect.: 6 Population Served: 100 :

Services Provided: RESIDENTIAL JOB TRAINING PROGRAM, WATER & WASTEWATER

Summary System Description

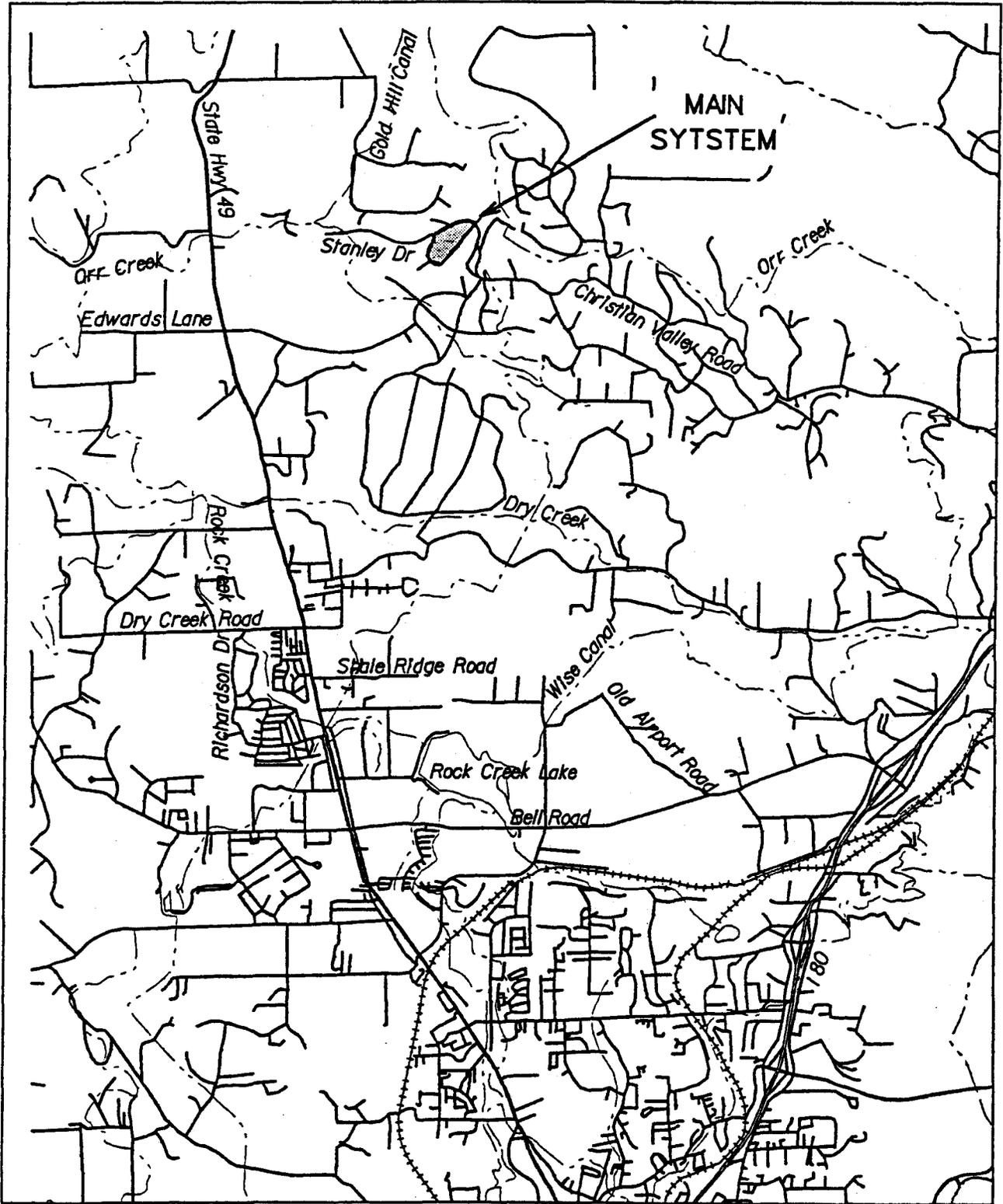
Service Area Characteristics: FACILITIES SERVE THE BARRACKS, OFFICES AND WORK AREAS. APPROXIMATELY 60 FULL AND PART TIME RESIDENTS OCCUPY THE COMP. FOOTHILLS LOCATION OF THE SIERRA NEVADA RANGE. WOODED ROLLING HILLS.

Collection: WASTEWATER IS COLLECTED THROUGH APPROXIMATELY 200 FT. OF GRAVITY SEWER LINE AND CONVEYED TO THE TREATMENT PLANT. STANDARD CONSTRUCTION OF COLLECTION SYSTEM WITH 2 MANHOLES.

Treatment: PRIMARY TREATMENT IS ACCOMPLISHED BY A 20,000 GALLON SEPTIC TANK. TWO LIFT PUMPS AND A DISTRIBUTION UNIT CONVEY WASTEWATER FROM THE SEPTIC TANK TO 4 EVAPORATION/PERCOLATION PONDS.

Disposal: SEASONAL DRY WEATHER DISPOSAL TO A SPRAY IRRIGATION FIELD. APPLICATION RATE IS ABOUT 10 GPM AND OPERATION IS ABOUT 11 HOURS PER DAY, IN SEASON. RUNOFF FROM SPRAY FIELD IS CAPTURED AND RECYCLED.

Capacity Limitations: CURRENT FLOW FOR THE SYSTEM IS APPROXIMATELY 3,600 GPD. NO CURRENT PLANS FOR EXPANSION BEYOND EXISTING SERVICES.



Placer County General Plan

Figure — **Wastewater Service Area**

Date: 1/15/92

Prepared by:
PSOMAS & ASSOCIATES

Scale: 1" = 400'

LEGEND

Calif. Conservation Corps
Placer Energy Center

Streets County Line
Waterways District Service Area

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

CASTLE CITY MOBILE HOME PARK

General Information: The Castle City Mobile Home Park (Castle City MHP) is located one mile southwest of Newcastle at 1400 Newcastle Road. Wastewater is regulated by RWQCB Waste Discharge Requirement Order No. 75-169 and Monitoring and Reporting Program No. 75-169 which were adopted on July 25, 1975. Surface water runoff is to Secret Ravine. No surface discharge is permitted.

Wastewater Generation/Sources: The Castle City MHP encompasses 58 acres and provides services to about 200 mobile homes which represents a design population of approximately 400. An ultimate development of 295 units (design population of 540) is anticipated. In accordance to the RWQCB permit conditions the mean dry weather discharge from the facilities is not to exceed 22,000 gpd. The wastewater is considered domestic in nature.

Wastewater Collection, Treatment and Disposal System Description: The construction material of the Castle City Mobile Home Park collection system is Transite or ABS. The system has four manholes.

Wastewater flows from the collection system by gravity directly into pond No. 1 which in turn overflows into pond No. 2. There is no outflow structure at pond No. 2. The stabilization ponds, incorporating 6.3 acres, have an average depth of 6 feet and are fenced. An older single pond system which was constructed in 1964 served the MHP until the new two-pond system was constructed in 1971. At that time the old pond system was abandoned.

Two underdrain systems are installed to prevent natural spring water from entering the ponds. Each underdrain system consists of a 6-inch perforated pipe and a gravel bed. The gravel is covered by a plastic membrane and then by earth. Samples from the drain pipe are periodically collected by the Placer County Health Department. The RWQCB Monitoring and Reporting Program mandates weekly sampling in order to detect the presence of coliform organisms.

Deficiencies: There are no known system deficiencies.

Proposed Improvements: At present, there are no planned improvements to the existing collection, treatment and disposal system.

In addition to the above-mentioned planned improvements, modifications to the existing system could provide additional capacity. A valve or siphon between pond No. 1 and pond No. 2 could help maintain wastewater in both ponds thus increasing the total evaporation rate. Sprinklers could be installed on the hillside above the ponds to achieve increased evaporation and transpiration. If necessary a third pond could be constructed to provide supplementary storage capacity.

Financing: Funding of improvements, operations and maintenance costs for the Castle City Mobile Home Park wastewater facilities come from rent of mobile home lots.

System Appraisal: In general the Castle City Mobile Home Park wastewater collection system is in good condition. Since the 1971 improvements to the treatment and disposal system were made the system reportedly has typically satisfied the requirements of the RWQCB waste discharge permit.

CITY OF COLFAX

General Information: The City of Colfax Wastewater Treatment Plant (Colfax WWTP) is located about one mile southeast of downtown Colfax at Grand View Road. Discharge from the facility is permitted under RWQCB Waste Discharge Requirement Order No. 90-166, Federal EPA NPDES Permit No. CA0079529, and Monitoring and Reporting Program No. 90-166 effective June 22, 1990.

Wastewater Generation/Sources: Wastewater treated at the City of Colfax plant is considered of a municipal nature. The permitted average dry weather flow (ADWF) to the treatment facilities is 160,000 gpd. Current ADWF is about 140,000 gpd. Average annual discharge from the system is 250,000 gpd (including the wet weather contribution). The system serves 370 residential, 96 commercial and no industrial connections.

Collection System Description: Three major service areas combine to create the total collection service area to the Colfax system; the Downtown area, Illinois Town area and the West High School area. The Downtown area is considered the oldest and the average age of the collection network is about 50 years. The Illinois and West High School collection system areas are newer with an average age of 8 years.

The Downtown area was constructed in 1910 and is mainly 4-inch and 6-inch diameter clay gravity sewer lines. In 1989 the downtown collection area underwent some rehabilitation with 1,650 feet of old line replaced with new clay line.

The Illinois area collection system was mainly constructed in 1984 of PVC pipeline material and is about 10,000 lineal feet in overall length. Collection within the system is by gravity and typical manhole spacing is approximately every 300 feet. Constructed in 1987, the West High School area collection system is PVC pipeline material and is about 5,600 lineal feet in overall length.

Collection within the system is by gravity and typical manhole spacing is about every 300 feet. There are 6 lift stations and 146 manholes within the existing collection system. There are about 12 miles of total collection system pipelines which vary in size from 4, 6, 8, 10 and 15 inches in diameter. Some of the existing collection system lines are 75 years old.

Deficiencies: The City of Colfax collection system is considered in fair overall condition with the primary deficiency being inflow and infiltration.

Overall system capacity is 5 mgd and is considered adequate. Although some improvements were made the Downtown area, this portion of the collection system still does experience some inflow and infiltration problems. Inflow and infiltration is considered a problem in the aged sections of the collection system. Other identified collection system deficiencies include undersized collection areas and deteriorated or damaged pipelines.

Proposed Improvements: Planned, proposed or required collection system improvements include an infiltration and inflow study with associated work to follow. An RFP for the inflow and infiltration was circulated in October 1991.

Wastewater Treatment System Description: Construction of the new City of Colfax Wastewater Treatment Plant was completed in 1979. The treatment scheme consists of prechlorination for odor control, a comminutor and bar screen, two mechanically-aerated aerobic-anaerobic facultative treatment ponds in series, and an unlined storage pond.

The design capacity of the treatment plant is 1.5 mgd; however, the existing ADWF to the plant is about 140,000 gpd with a permitted maximum of 160,000 gpd ADWF. Considering infiltration and inflow, and rainfall on the ponds, the actual winter flow sometimes exceeds 300,000 gpd.

Deficiencies: The storage pond, which has a capacity of 69 million gallons, has experienced seepage problems since its construction in 1979. Seepage drains to a tributary of Smuthers Ravine, which is a tributary of Bunch Creek and the North Fork American River. This is a permitted discharge.

The RWQCB WDR's specify a time schedule for compliance with reduction of coliform levels in the WWTP effluent. Past effluent coliform levels have been detected in excess of 1,600 MPN/100 ml.

Proposed or Accomplished Improvements: The City has installed new chlorine contact facilities to rectify the high effluent coliform problem. The new chlorination disinfection facilities were brought on line in November 1991.

Additional planned, required or proposed improvements to the treatment facilities include pre-engineering planning for the next phase expansion of the treatment plant which is scheduled for 1992-93 or 1993-94. Also ongoing is a current application to amend the effluent permit (WDR) to allow 200,000 gpd discharge.

Disposal System Description: Effluent disposal from the Colfax WWTP is by two methods; spray irrigation in the summer and subsurface seepage disposal on a year-round basis. Seepage disposal in accordance to the discharge permit is limited to 130,000 gpd from 15 May to 15 October. Seepage disposal in the winter months sometimes exceeds 130,000 gpd with the average annual seepage disposal rate of 100,000 gpd. A sprinkler irrigation system covering 43 acres is used for evapotranspiration disposal. Spray disposal lowers the storage pond in the summer.

Sewage solids disposal have to date not been required.

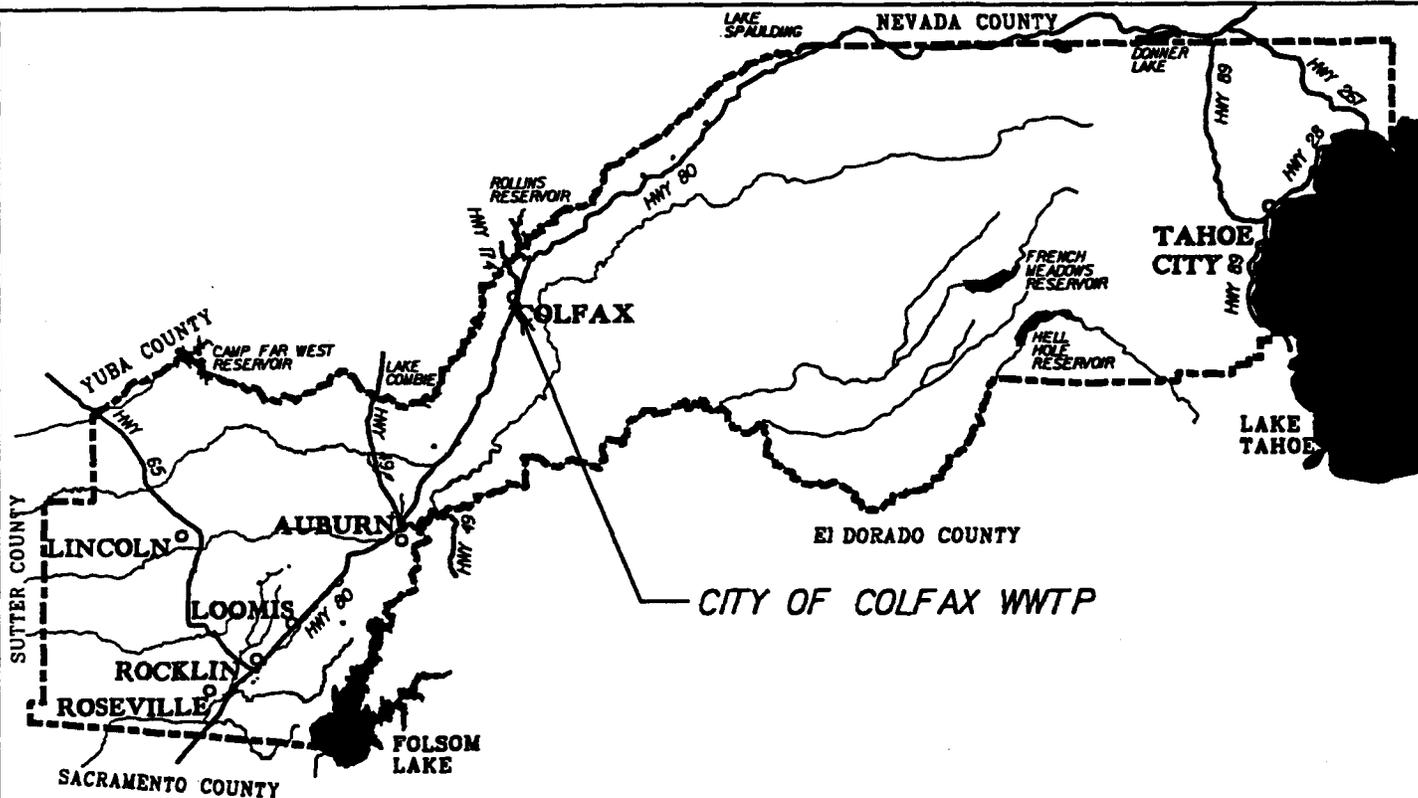
Deficiencies: Currently there are no identified deficiencies within the existing disposal system.

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

Financing: Past wastewater collection, treatment and disposal system improvements have been partially funded by Clean Water Grant monies. Funding for planned future improvements is by means yet to be identified; however, local share costs will be funded by connection fee reserves. Local share of capital improvements, and operations and maintenance costs, is by service and connection fees.

System Appraisal: In general the City of Colfax wastewater collection, treatment and disposal facilities are considered adequate. Overall system capacity is presently permitted to an average dry weather flow of 160,000 gpd with an treatment plant expansion capability to 200,000 gpd. Plans to increase treatment plant capacity are underway at this time.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: CITY OF COLFAX

Address: GRANDVIEW ROAD, COLFAX 95713

Contact Name: WILLIAM ENOCH OR DAVE WOODFORD Phone: (916)-346-2313, 8640

Service Area Size: 1000 ac. No. Connect.: 466 Population Served: 1,450
Services Provided: WASTEWATER COLLECTION, TREATMENT AND DISPOSAL. APPROX.

Summary System Description

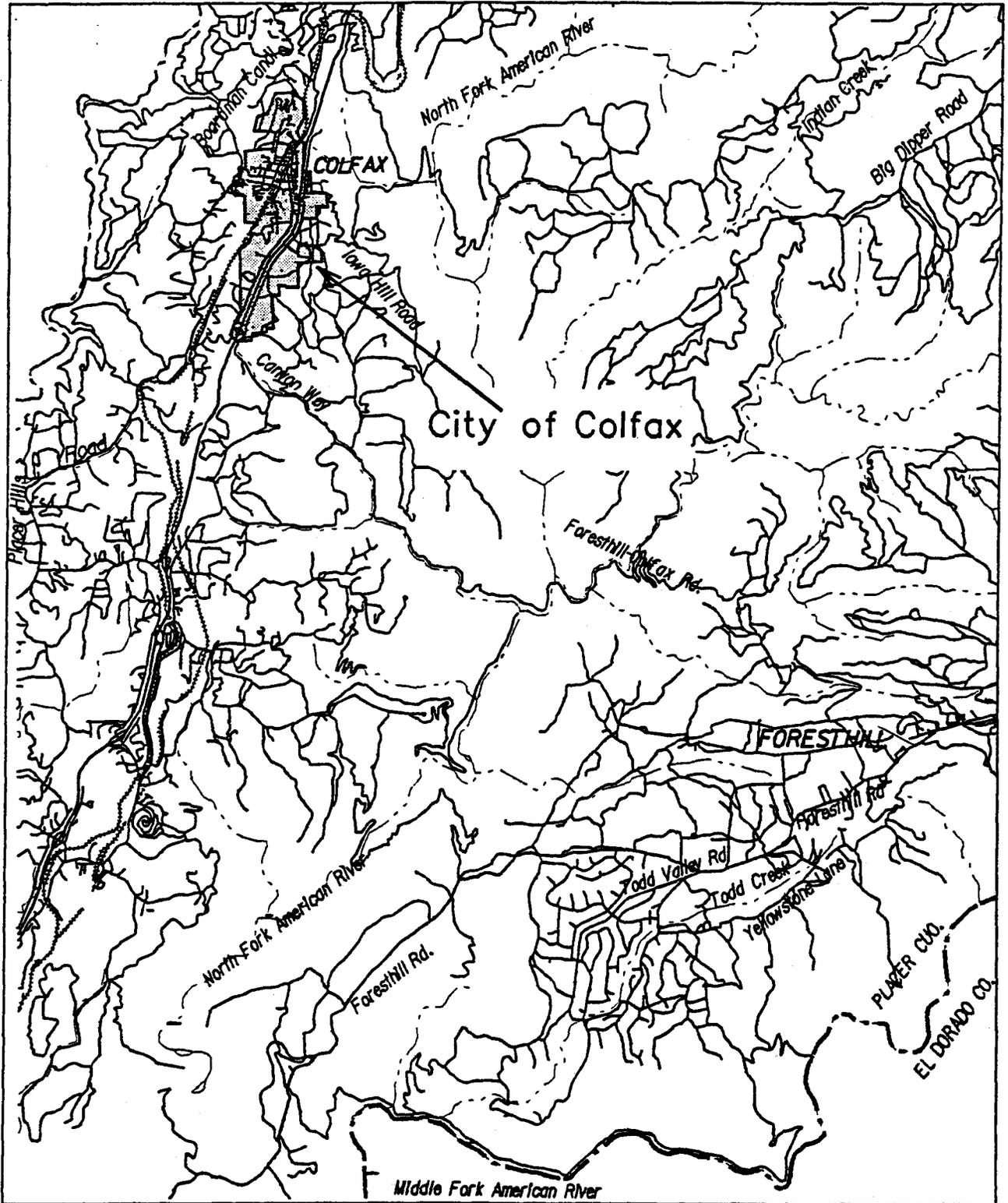
Service Area Characteristics: FACILITIES SERVE A 1,000 ACRE AREA WHICH INCLUDES 370 RESIDENTIAL AND 96 COMMERCIAL CONNECTIONS. LOCATED IN THE SIERRA NEVADA RANGE. FORESTED HILLY LAND.

Collection: WASTEWATER IS COLLECTED FROM 3 MAJOR SERVICE ZONES; DOWNTOWN, ILLINOIS TOWN AND WEST HIGH SCHOOL AREAS. GRAVITY SYSTEM INCLUDES 146 MANHOLES AND 6 LIFT STATIONS.

Treatment: TREATMENT PLANT CONSTRUCTED IN 1979. CONSISTS OF HEADWORKS, TWO AERATED FACULTATIVE LAGOONS AND AN UNLINED STORAGE POND. EXISTING ADWF IS ABOUT 140,000 GPD.

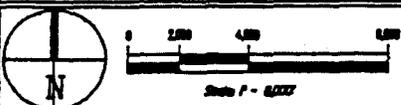
Disposal: SUBSURFACE SEEPAGE ON A YEAR-ROUND BASIS WITH SPRAY IRRIGATION IN THE SUMMER TO 43 ACRES OF SPRAY FIELD. 69 MG STORAGE POND IS USUALLY 65% EMPTIED BY END OF SUMMER USING IRRIGATION.

Capacity Limitations: PERMITTED MAXIMUM OF 160,000 GPD (ADWF). POTENTIAL TO EXPAND TO 200,000 GPD. APPLICATION FOR EXPANSION IN PROGRESS.



Placer County General Plan

Figure 1 Wastewater Service Area



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

LEGEND

- | | | | |
|--|-----------|--|-----------------------|
| | Streets | | County Line |
| | Waterways | | District Service Area |

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

DEPARTMENT OF TRANSPORTATION-GOLD RUN

General Information: The California Department of Transportation operates the Gold Run Roadside Rest Area on both sides of Highway 80, nine miles east of Colfax (SW 1/4, Sec 4, T15N, R10E, MDB&M). Discharge from the facility is regulated by RWQCB Waste Discharge Requirement Order No. 83-091 and Monitoring and Reporting Program No. 83-091, adopted by the RWQCB on August 12, 1983.

Wastewater Generation/Sources: Domestic wastewater is generated from restrooms and from recreational vehicle waste discharges. There are no unusual wastestream constituents evident from past monitoring results. There is a seasonal drop-off in wastestream quantity during the winter months.

Collection System Description: Wastewater is collected from both restroom facilities and recreational vehicle dumps on each side of the Highway and conveyed to the treatment and disposal facilities.

Deficiencies: There are currently no identified collection system deficiencies.

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

Wastewater Treatment and Disposal System Description: The Gold Run Sewage Treatment Facility utilizes septic tanks, a stabilization pond on the west side of the highway, a leachfield and a sprinkler irrigation system. The septic tank, pond and spray irrigation system is used to manage a maximum permitted summertime wastewater stream of 41,000 gpd. Gold Run handles a permitted maximum of 18,000 gpd of wastewater in the winter by disposing effluent from the septic tanks, through the stabilization pond and to a subsurface leachfield.

Pond effluent is chlorinated prior to disposal, nevertheless, contact with aerosol drifts from the sprayed effluent by the public is a serious concern. Mitigation measures to alleviate this issue include mitigation for stringent low effluent coliform levels and maintenance of trees as a partition between the spray field and highway. A collection basin at the base of the sprinkler field contains and returns runoff to the pond.

Septage solids are pumped from the tank and hauled to a permitted disposal site.

Deficiencies: There are currently no identified deficiencies in the treatment and disposal system.

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

Financing: Funding for system improvements, operations and maintenance is provided through state funding methods.

System Appraisal: The facilities are considered adequate for the existing traffic flow presently being serviced. As traffic increases across Highway 80 and more patrons frequent the existing facilities, some additional expansion may be necessary.

DEPARTMENT OF TRANSPORTATION-WHITMORE MAINTENANCE STATION

General Information: The California Department of Transportation operates the Whitmore Maintenance Station on Highway 80, 3.5 miles east of Baxter. The wastewater generated from the maintenance station is regulated by RWQCB Waste Discharge Requirement Resolution No. 59-118, adopted March 19, 1959.

Wastewater Generation/Sources: It was estimated in March 1959 that 65 workers are quartered in a dormitory at the Whitmore Maintenance Station and discharge domestic wastes to the wastewater collection, treatment and disposal facilities.

Collection System Description: Wastewater is collected from restroom and kitchen facilities.

Deficiencies: There are currently no identified collection system deficiencies.

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

Wastewater Treatment and Disposal System Description: Wastewater treatment and disposal facilities consist of septic tank and leachfield. The WDR's give several water quality parameters to monitor and physical conditions to meet in the event of potential accidental discharge to Canyon Creek.

Septage solids are pumped from the tank and hauled to a permitted disposal site.

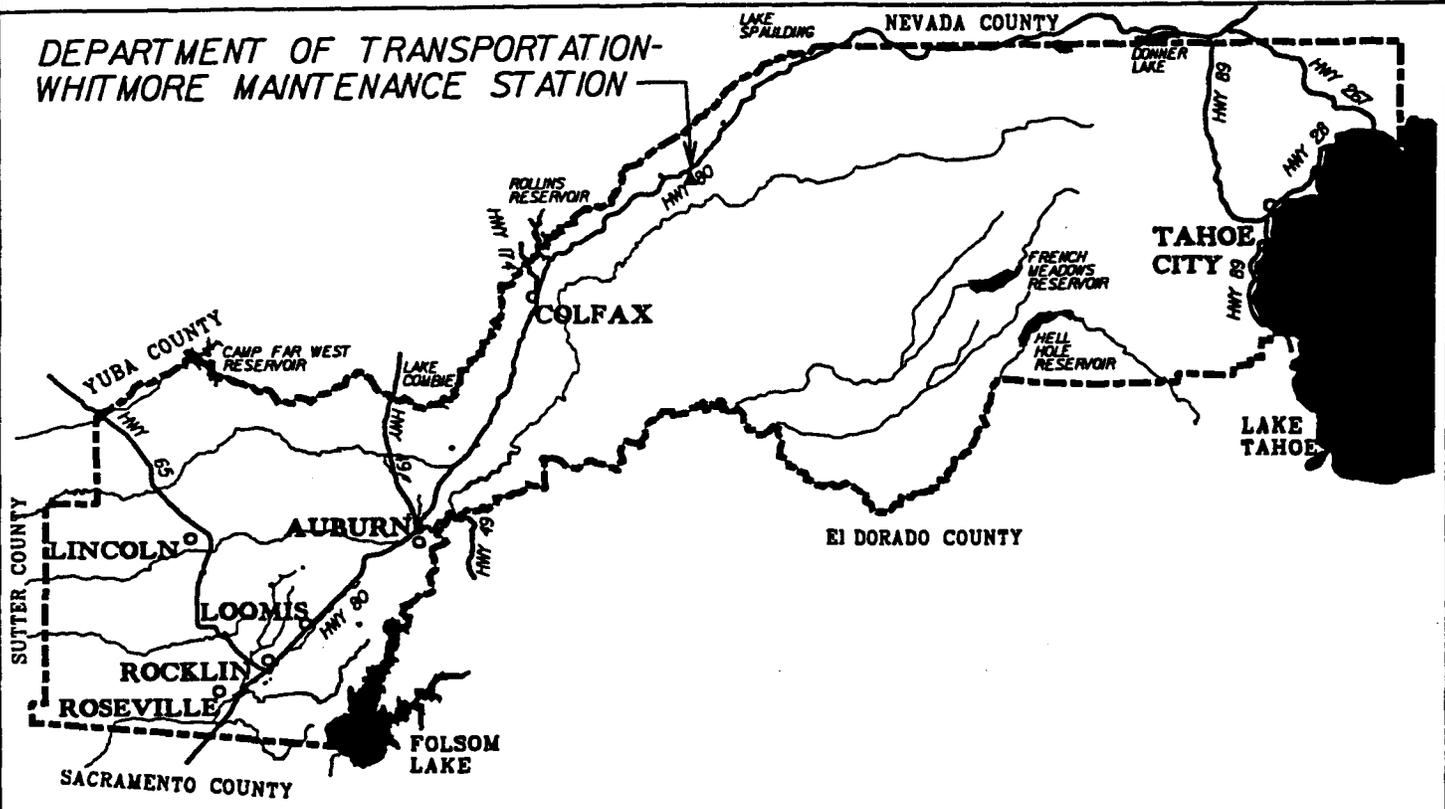
Deficiencies: There are currently no identified treatment and disposal system deficiencies.

Proposed Improvements: Currently there are no planned, required or proposed improvements to the treatment and disposal system.

Financing: Funding for system improvements, operations and maintenance is provided through State Department of Transportation processes.

System Appraisal: The existing facilities are considered adequate for the wastewater flow presently being serviced. The California Department of Transportation is not planning to expand the facility.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: DEPT.OF TRANSPORTATION-WHITMORE MAINTENANCE STATION

Address: 3.5 MILES EAST OF BAXTERON HWY 80

Contact Name: STEVE THOMPSON, REGIONAL MANAGER Phone: (916)-389-2883

Service Area Size: _____ No. Connect.: 2 Population Served: 65 :

Services Provided: WASTEWATER COLLECTION, TREATMENT AND DISPOSAL

Summary System Description

Service Area Characteristics: CALTRANS. ROAD MAINTENANCE STATION WITH ABOUT 65 WORKERS QUARTERED IN A DORMITORY.

Collection: WASTEWATER IS COLLECTED FROM THE STATION RESTROOM AND KITCHEN FACILITIES AND CONVEYED BY GRAVITY TO AN ON-SITE SYSTEM.

Treatment: SEPTIC TANK AND LEACHFIELD SYSTEM.

Disposal: SUBSURFACE DISPOSAL THROUGH PERCOLATION FROM LEACHFIELD DISPOSAL SYSTEM.

Capacity Limitations: DESIGN CAPACITY OF THE SYSTEM IS 3,900 GPD.



DEPARTMENT OF PARKS & RECREATION - GRANITE BAY

General Information: The State Department of Parks & Recreation, American River District, owns and operates the Granite Bay State Park. Wastewater discharge is permitted by old RWQCB Sewage Discharge Requirements Resolution No. 69-205, which was adopted on March 14, 1969. An Application for Facility Permit/Waste Discharge was filed in December 1989 and the RWQCB is presently considering new waste discharge requirements and issuance of a new Order. The Granite Bay facilities are located in the Folsom Lake State Recreation Area, on the west side of the lake some four miles north of Folsom Dam.

Wastewater Generation/Sources: Visitors to Granite Bay State Park generate the wastestream collected and treated by the Granite Bay State Park wastewater facilities. Estimated wastewater flows in the spring and summer months are about 5,000 gpd whereas flows are approximately 500 gpd in the fall and winter months. The wastestream is considered domestic in nature.

Collection System Description: Constructed in 1968, the existing collection system is composed of 4-inch ABS or PVC sewer lines. The collection system is about 3,000 feet in overall length. Wastewater is collected from restroom facilities, a small park office, lifeguard building, food concession facility and one residence.

Deficiencies: There are currently no identified collection system deficiencies.

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

Wastewater Treatment and Disposal System Description: The Granite Bay State Park wastewater treatment system is composed of six septic tanks of which the largest is 1,800 gallons and two leachfields. Leachfield No. 1 was refurbished with new materials in 1983. The size of leachfield No. 1 is 100 feet by 85 feet. Construction of leachfield No. 2, 125 feet by 100 feet in area, was completed in 1987.

Septage solids are pumped from the tank on a frequency of about every two or three years and hauled away for disposal. Tanks are inspected on an annual basis.

Deficiencies: Surfacing of wastewater commonly occurs during heavy park usage in the summer months due to leachfield inadequate capacity. The RWQCB affirmed in September 1985 that there exists a potential for water quality degradation and objectionable odors generation. The disposal areas have been surface bermed to preclude polluted runoff from the disposal areas.

There are currently no identified treatment and disposal system deficiencies.

Proposed Improvements: Currently there are no planned, required or proposed improvements to the treatment and disposal system.

Connection to a sewer system and regional wastewater treatment plant is encouraged by the RWQCB.

Financing: Improvement capital and operations and maintenance costs are funded by capital outlay budgets and category I and II maintenance budgets. As of this writing, the State Park System is facing serious financial downsizing. Budgets are being slashed, positions cut and personnel laid off. Future budgets for operations and improvements are questionable.

System Appraisal: At this time the State Department of Parks and Recreation does not plan to expand the facility.

HEATHER GLEN COMMUNITY SERVICES DISTRICT

General Information: The Heather Glen Community Services District oversees operation of a mobile home subdivision located a half mile northeast of Applegate at Applegate Road and Heather Glen Drive. Wastewater discharge from the Heather Glen Estates Mobile Home Subdivision is permitted by RWQCB Waste Discharge Requirements Order No. 90-268 and Monitoring and Reporting Program No. 90-268, adopted on February 28, 1990. Initial WDR's were adopted in 1963 for disposal to a stabilization pond. Surface runoff from Heather Glen Estates is to an un-named tributary to North Fork American River.

Wastewater Generation/Sources: Heather Glen Estates comprises build-out capability to 80 mobile home lots with a present occupancy of 75 lots. Present wastewater flowrate to the stabilization pond is about 10,000 gpd. The wastestream is considered domestic in nature.

Collection System Description: Constructed in 1963, the existing collection system is composed of 4, 6, and 10-inch non-techite type gravity sewer lines. The collection system is about 7,840 feet in overall length. Wastewater is collected from each of the mobile homes at the Park.

Deficiencies: The existing collection system does not experience excessive inflow and infiltration. There are currently no identified collection system deficiencies.

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

Wastewater Treatment and Disposal System Description: The Heather Glen Community Services District wastewater treatment and disposal system presently treats about 10,000 gpd ADWF. Collected wastewater is discharged to a fenced stabilization pond with overflow sprayed on an adjacent area. Existing daily flow is about 50 percent of the wastewater treatment and disposal design capacity of 20,000 gpd. System flows are currently approximately 10,000 gpd.

Accumulated solids in the stabilization pond have to date not required any disposal activity.

Deficiencies: Past treatment and disposal system problems include a few odor complaints, some septic conditions in the stabilization pond, and improper pond freeboard reporting to the RWQCB.

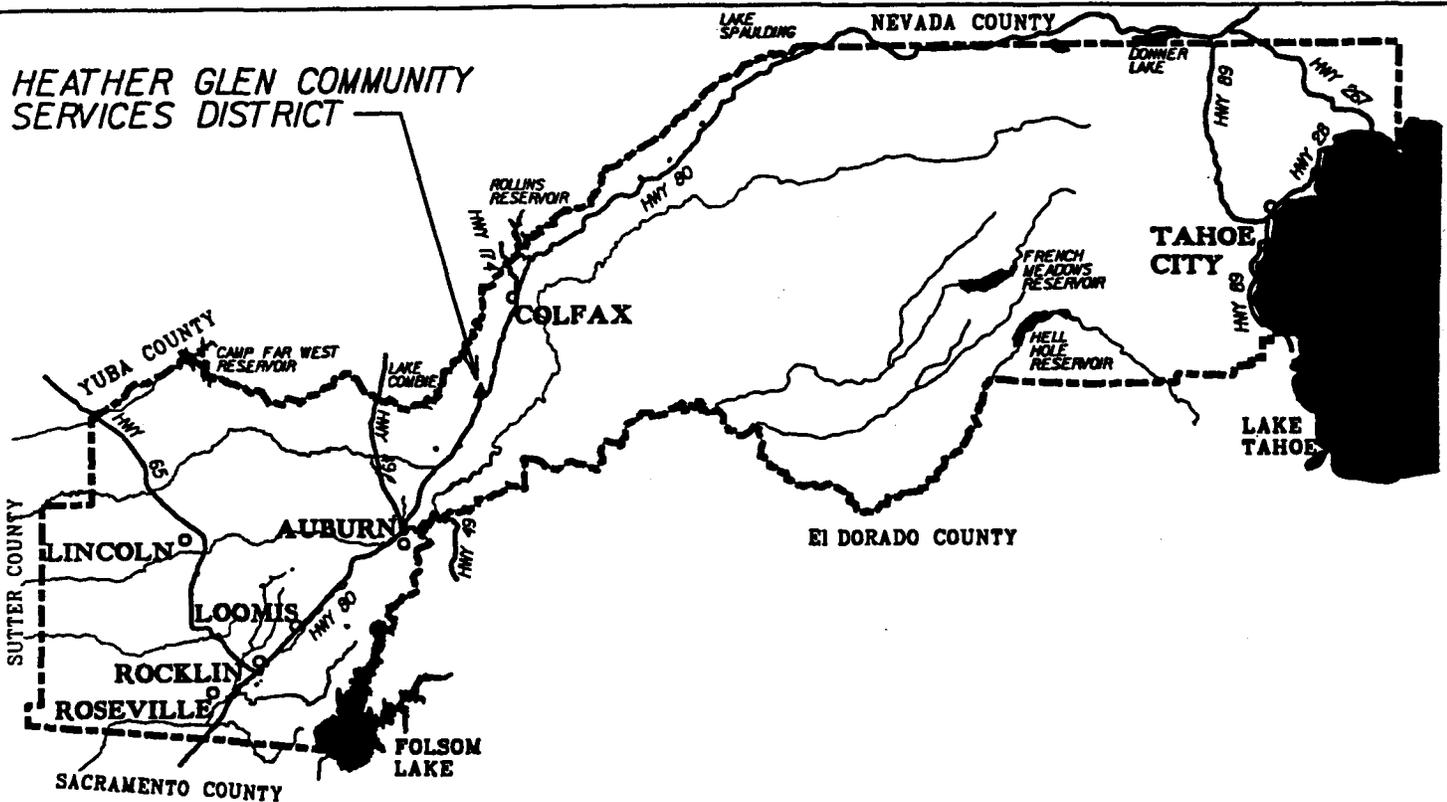
Other identified treatment and disposal system deficiencies include the reporting of pond levels nearing overflow height in 1991.

Proposed Improvements: Planned, required or proposed improvements to the treatment and disposal system are pending per the recommendation of the Heather Glen Community Services District consulting engineer in the near term.

Financing: Funding for the Heather Glen wastewater collection, treatment and disposal facilities is by Heather Glen CSD user and connection fees.

System Appraisal: Overall the existing Heather Glen Subdivision wastewater system reportedly is serving the present wastewater flows adequately. Although the subdivision is nearing full build-out, the wastewater system has additional capacity remaining to service the anticipated future flows. There currently are not any existing plans to expand the subdivision.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: HEATHER GLEN COMMUNITY SERVICES DISTRICT
 Address: APPLEGATE ROAD AND HEATHER GLEN DRVE, APPLEGATE, CA
 Contact Name: JAY HUSSEY Phone: (916)-878-2513
 Service Area Size: _____ No. Connect.: 78 Population Served: 114
 Services Provided: WASTEWATER COLLECTION, TREATMENT AND DISPOSAL

Summary System Description

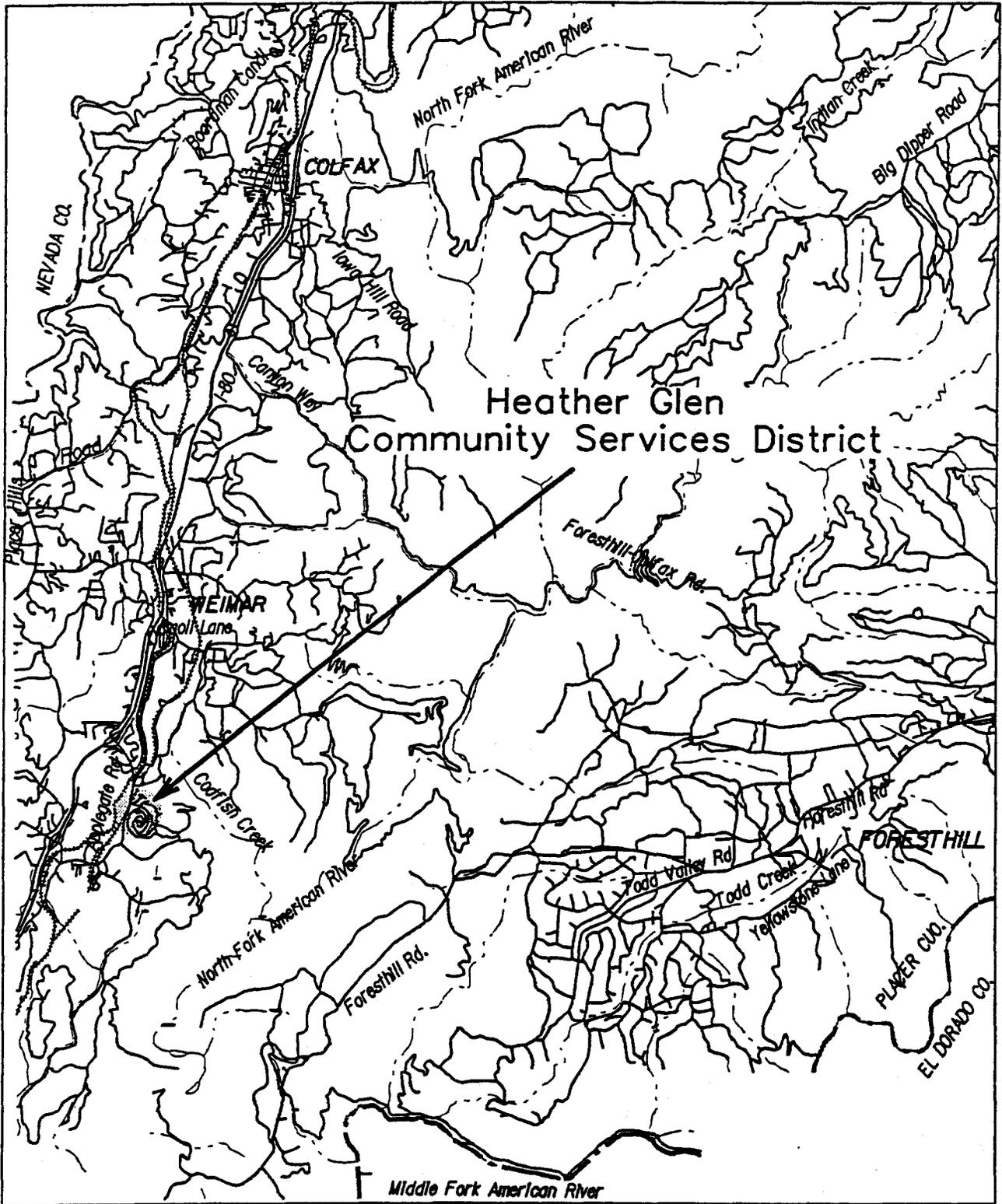
Service Area Characteristics: MOBILE HOME PARK LOTS ARE SERVED BY THE SYSTEM. TOPOGRAPHY OF AREA IS MOUNTAINOUS SIERRA NEVADA WOODED FOOTHILLS.

Collection: WASTEWATER GENERATED BY THE MOBILE HOME RESIDENCES IS CONVEYED BY 4, 6, & 10 INCH NON TECHITE TYPE GRAVITY SEWER LINES TO THE TREATMENT PLANT.

Treatment: PROVIDED BY A SINGLE, FENCED, STABILIZATION POND. EXISTING AVERAGE DAILY FLOW IS ABOUT 10,000 GPD (ADWF).

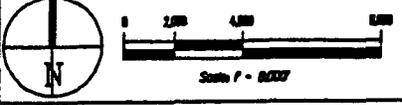
Disposal: PERCOLATION/EVAPORATION

Capacity Limitations: ULTIMATE BUILD-OUT TO 80 MOBILE HOMES. DESIGN CAPACITY OF EXISTING FACILITIES IS 20,000 GPD.



Placer County General Plan

Figure _____ Wastewater Service Area



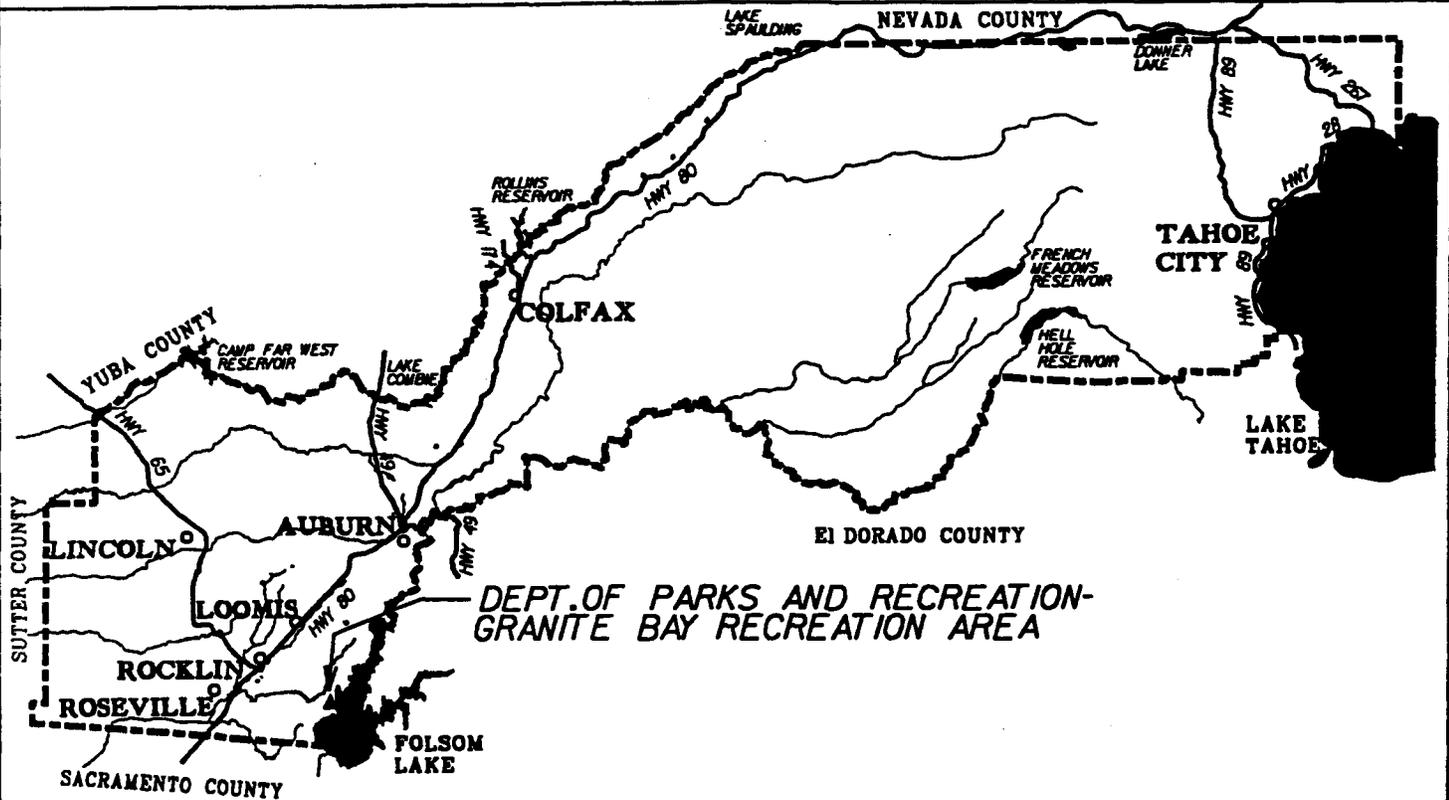
Date: 1/15/92
 Prepared by:
PSOMAS & ASSOCIATES

LEGEND
 Heather Glen Community Services District

- Streets
- Waterways
- County Line
- District Service Area

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

PLACER COUNTY WASTEWATER SYSTEMS



System Name: DEPT. OF PARKS AND RECREATION-GRANITE BAY RECREATION AREA

Address: 7806 FOLSOM-AUBURN ROAD, FOLSOM, FOLSOM LAKE STATE REC. AREA

Contact Name: JOHN JONES Phone: (916)-988-0205

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

Services Provided: WASTEWATER COLLECTION, TREATMENT AND DISPOSAL

Summary System Description

Service Area Characteristics: STATE RECREATIONAL AREA LOCATED ON THE WEST SIDE OF FOLSOM LAKE. ROLLING SIERRA NEVADA FOOTHILLS WITH OAK WOODLANDS AND GRASSLANDS.

Collection: WASTEWATER IS COLLECTED FROM THE PUBLIC AND DEPARTMENT RESTROOM FACILITIES USING A GRAVITY SEWER SYSTEM, AND 4 LIFT STATIONS.

Treatment: PROVIDED BY 6 SEPTIC TANKS, THE LARGEST OF WHICH IS 1,800 GALLONS, AND TWO LEACHFIELDS. ESTIMATED SUMMER FLOWS ARE ABOUT 5,000 GPD AND WINTER FLOWS ARE ESTIMATED AT ABOUT 500 GPD.

Disposal: SUBSURFACE SOIL DISPOSAL VIA LEACHFIELDS. TOTAL LEACHFIELD AREA IS 21,000 SQUARE FEET.

Capacity Limitations: DESIGN CAPACITY FOR THE ON-SITE SYSTEM IS NOT AVAILABLE.



CITY OF LINCOLN

General Information: The City of Lincoln wastewater treatment plant facilities are located on Nicolaus Road in Lincoln (Sec 17, T12N, R6E, MDB&M). Discharge from the City of Lincoln wastewater treatment plant is permitted by RWQCB Waste Discharge Requirements Order No. 83-027 and Monitoring and Reporting Program No. 83-027, adopted on February 25, 1983.

Clean Water Grant monies helped fund system improvements including collection system up-grades to reduce inflow and infiltration and the purchase of 111 acres of land for spray irrigation disposal in 1975.

In 1987 a Phase III expansion plan was developed by the City which would improve the plant headworks, influent pumps, aerators, effluent lift station and initiate spray disposal to a nearby golf course and airport. This expansion would boost capacity to 1.4 mgd and proposed discharge to Markham Ravine along with spray disposal. Plans for the expansion were almost complete by June, 1988, however by August the RWQCB was questioning the need for expansion base on the existing flows and anticipated development.

The expansion proposal rested until 1989-90 when it was pushed again by the City. In February of 1990 the Federal Aviation Administration objected to the proposed reclamation spray field near the airport as posing a potential bird problem. In March of 1990 the financing (Clean Water Grant) was approved, the 1.4 mgd expansion project was ready to go out for bid and existing wastewater flows were at 75% of plant capacity and projected to reach capacity by the end of 1991-92. By November 1990 expansion construction was underway. Expansion improvements are complete with final grant close out efforts (preparation of O & M Manuals, etc.) now being completed.

Wastewater Generation/Sources: Wastewater treated at the City of Lincoln plant is considered of a municipal nature. The permitted average dry weather flow (ADWF) to the treatment facilities is 800,000 gpd.

Collection System Deficiencies: Repairs to the collection system were undertaken in 1975 to decrease infiltration and inflow. Since those repairs were made, the existing collection system experiences reduced inflow and infiltration.

Wastewater Treatment System Description: The existing treatment facilities and processes consist of headworks (comminutor), six surface-aerated facultative treatment lagoons, three storage ponds, and chlorination disinfection. Current permitted treatment plant capacity is 800,000 gpd.

Deficiencies: It was estimated in March 1990 that the plant is operating at 75 percent of design capacity and was projected to reach full capacity by 1991-92. Improvements to bring the plant capacity up to 1.4 mgd were undertaken in late 1990 and completed in December, 1991. Since the recent plant improvements were completed the treatment plant has adequate capacity to meet the anticipated near-term future growth.

Proposed Improvements: Planned, required or proposed improvements to the treatment system include new headworks (parshall flume and two comminutors), pumps, additional aerators, and an additional chlorinator for future use.

Disposal System Description: The City of Lincoln currently disposes of effluent to a 111 acre spray irrigation system located adjacent to the plant. The spray disposal field is bermed and has a runoff detention dam to inhibit surface runoff from the area. A recirculation pumping system collects spray field

runoff which may pool at the retention dam. Required improvements to the spray system included replacement of defective sprinkler heads, and reconfiguration of the sprinklers to comply with safety regulations.

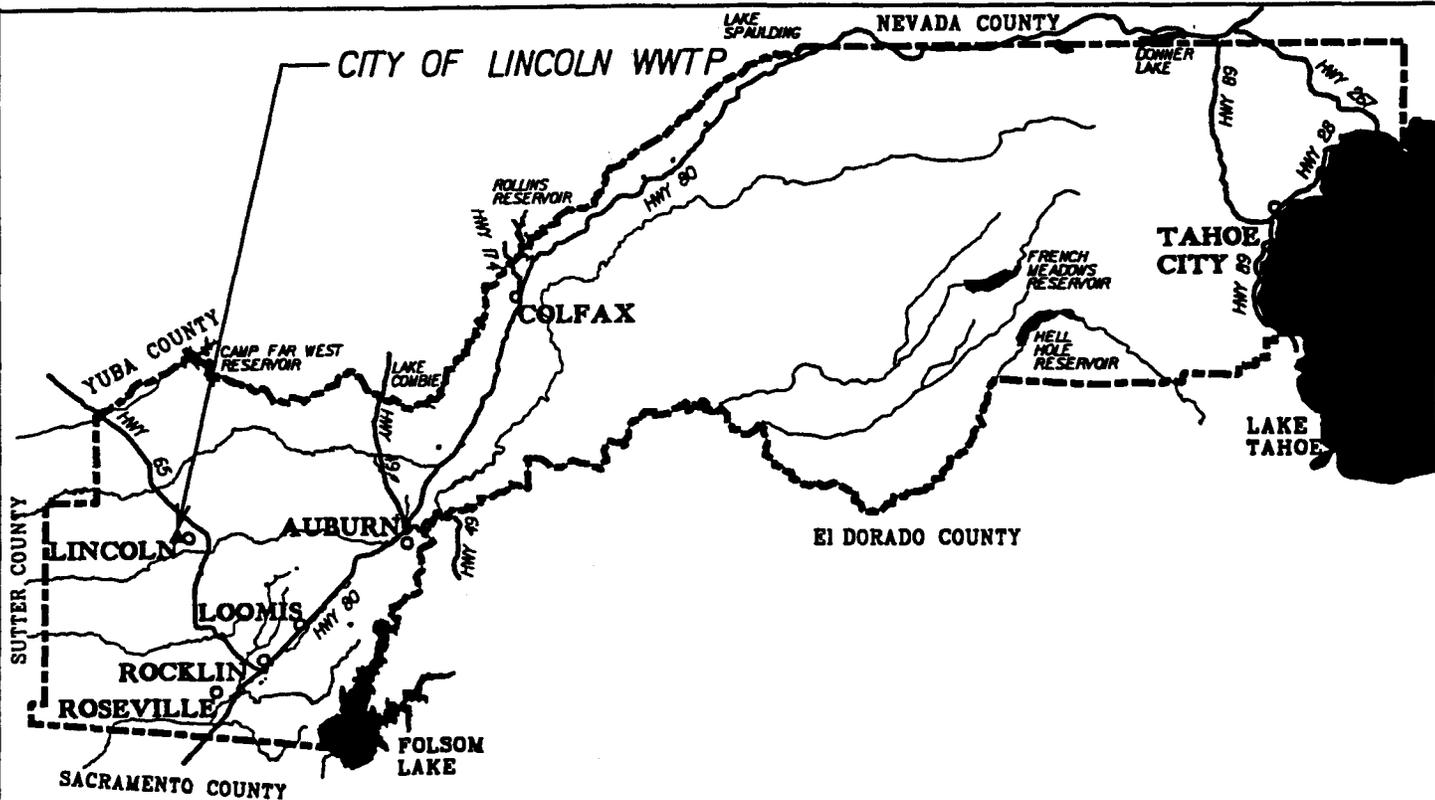
Proposed Improvements: An increase in the quantity of authorized land disposal to 800,000 gpd as part of the Phase III expansion was completed in 1991. The permit approval for additional disposal quantity was contingent on construction of two supplementary aerated facultative ponds, an additional storage pond, and restoration of the existing spray irrigation system.

Planned, proposed or required improvements on the disposal system which have been identified at this time include future effluent pump station to send effluent to the airport golf course storage lake and irrigation system.

Financing: Many of the improvements which have occurred since the initial construction of the City of Lincoln WWTP have been partially funded with Clean Water Grant monies. Local share portions of the improvement costs as well as operations and maintenance costs are funded through service fees, connection fees, and other funding.

System Appraisal: In general the City of Lincoln wastewater collection, treatment and disposal facilities are considered adequate to service the existing wastewater flows. Overall system capacity is presently permitted to an average dry weather flow of 800,000 gpd with an treatment plant expansion capability to 1,400,000 gpd.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: CITY OF LINCOLN - WWTP

Address: NICOLAUS ROAD, LINCOLN, CA

Contact Name: RALPH HITCHCOCK Phone: (916) 645-3314

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

Services Provided: WASTEWATER COLLECTION, TREATMENT AND DISPOSAL

Summary System Description

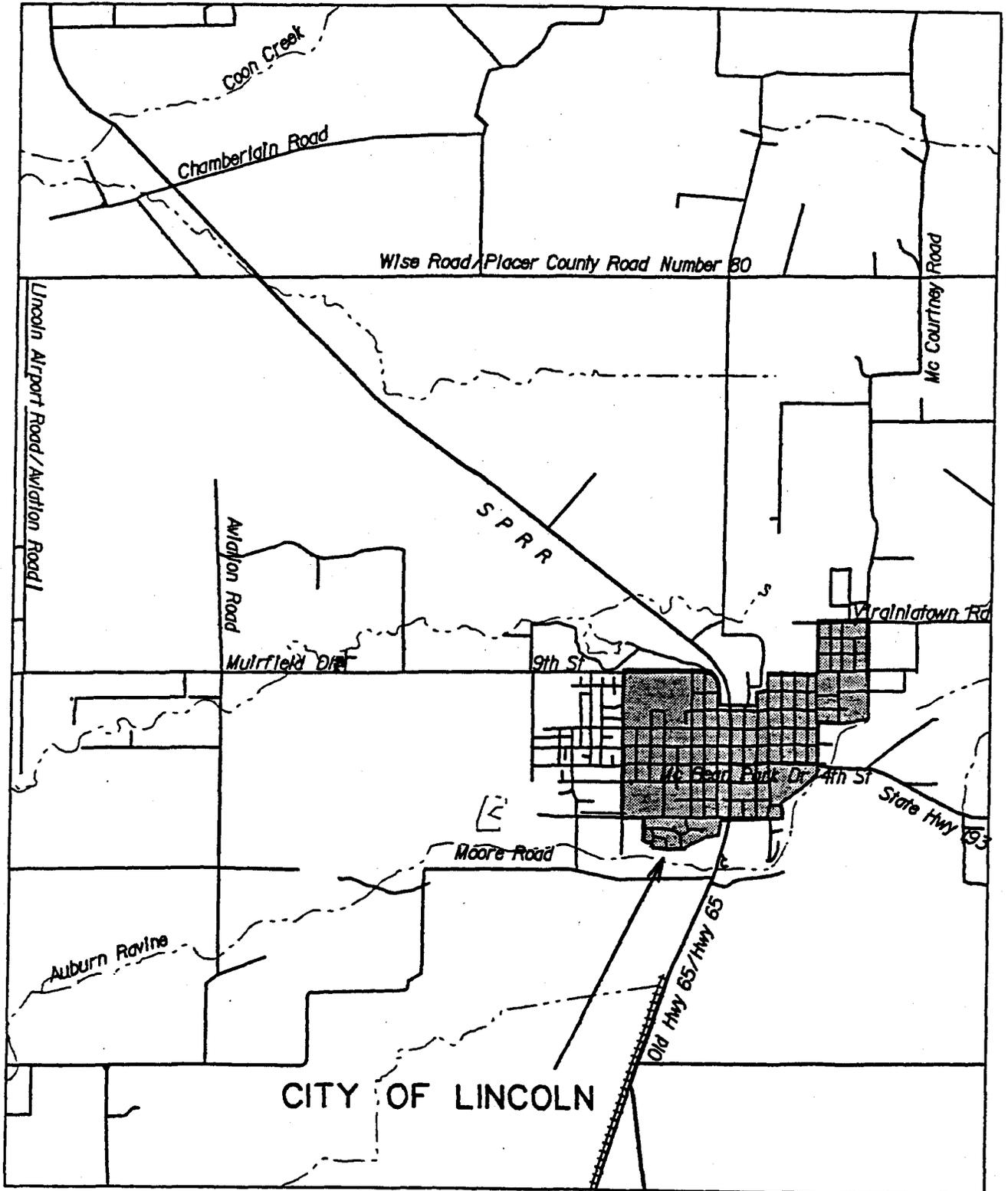
Service Area Characteristics: FACILITIES TREAT WASTEWATER GENERATED BY THE RESIDENCES AND COMMERCIAL ESTABLISHMENTS IN THE CITY AND SURROUNDING AREA. TOPOGRAPHY IS BASE OF FOOTHILLS, OAK WOODLANDS.

Collection: WASTEWATER IS COLLECTED FROM _____ RESIDENCES, _____ COMMERCIAL AND _____ INDUSTRIAL CONNECTIONS AND CONVEYED THROUGH GRAVITY SEWER LINES TO THE TREATMENT PLANT.

Treatment: PROVIDED BY HEADWORKS, SIX SURFACE AERATED FACILITIES, LAGOONS, AND THREE STORAGE PONDS.

Disposal: SPRAY IRRIGATION DISPOSAL TO A 111-ACRE SPRAY FIELD RUNOFF IS COLLECTED AND RECYCLED.

Capacity Limitations: CURRENT PERMITTED DISCHARGE IS 800,000 GPD. EXPANSION TO 1.4 MGD IS FEASIBLE.



Placer County General Plan

Figure _____

Wastewater Service Area

Date: 1/15/92

Prepared by:
PSOMAS & ASSOCIATES

Scale: 1" = 400'

LEGEND

City of Lincoln

- Streets
- County Line
- Waterways
- District Service Area

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

NACO WEST-EMIGRANT GAP

General Information: Naco West, Inc., a Bellvue Washington firm, operates the Snowflower campground facility which is located near Highway 80, off the Yuba Gap Exit, at 41776 Yuba Gap Drive. The facilities are located on about 720 acres of Naco West owned property. Altitude at the campground is approximately 5,800 feet.

The campground was first opened in 1974. This operation provides year-round recreational services for camping as well as a small ski lift for wintertime activities. Due to the close proximity to the larger Tahoe Basin resorts the Snowflower Campground offers a wide variety of recreational latitude.

Wastewater discharge from the facility is permitted under RWQCB Waste Discharge Requirements Order No. 82-004 and Monitoring and Reporting Program No. 82-004 which were adopted on January 22, 1982.

Surface drainage from the area is to North Fork American River (Lake Snowflower).

Wastewater Generation/Sources: Wastewater is generated by campground facilities which include 11 restrooms with toilets, showers, and sinks and one recreational vehicle dump station. Wastewater generated is considered domestic in nature.

Collection System: Most of the existing collection system was constructed in 1974 using 2-inch to 4-inch PVC sewer lines. The system uses gravity collection with typical manhole spacing of 400 feet and 8 lift stations. Collection system capacity is 150 gpm (typical).

Deficiencies: The existing collection system does not have difficulties with inflow and infiltration. There are no currently 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: Naco West's Snowflower Campground facility employs an on-site septic leachfield treatment/disposal system to handle the wastestream generated by the area. Construction of the wastewater system was finished in 1988, with initial start-up occurring in 1974. The design capacity of the individual septic system are 2,000 - 3,500 gpd. A 100% expansion capacity is available to the system by constructing the reserve leachfield systems.

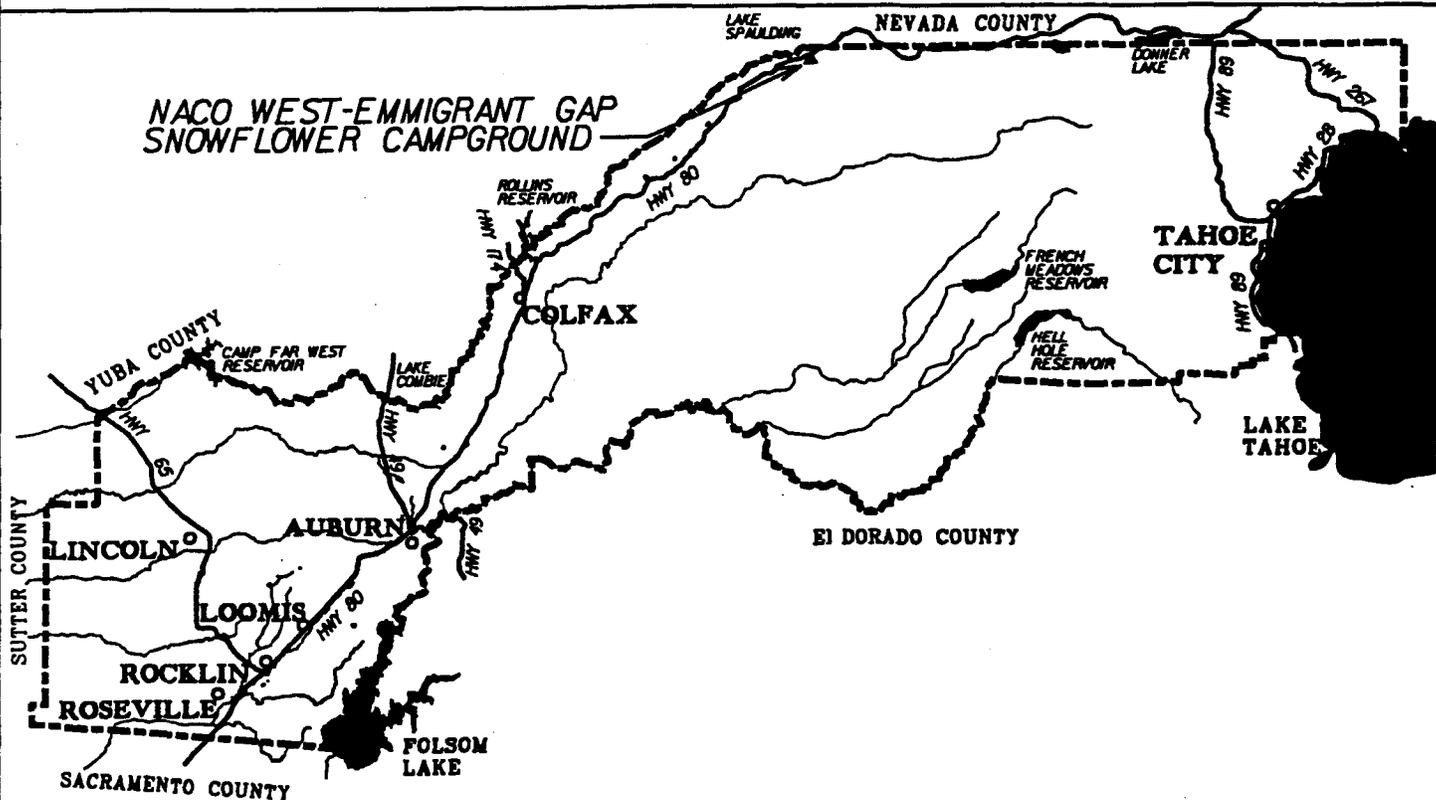
The wastewater treatment and disposal system uses numerous septic tanks and leachfields.

Deficiencies: Currently there are no identified disposal system deficiencies. There are currently no planned, proposed or required improvements to the treatment and disposal system.

Financing: Improvement, operations and maintenance costs for the Naco West Snowflower Campground sewage collection, treatment and disposal system are funded through Naco West corporate funds.

System Appraisal: In general the Naco West Snowflower system is considered to be in good shape overall. The existing design capacity of the system is 30,000 gpd with no plans for expansion in the near term.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: NACO WEST - EMIGRANT GAP (SNOWFLOWER CAMPGROUND)

Address: 41776 YUBA GAP DRVE, EMIGRANT GAP CA

Contact Name: JIM JAEGER, PROJECT ENGINEER Phone: (206)-462-4497

Service Area Size: 720 ac. No. Connect.: 15 Population Served: 800 MAX.

Services Provided: WASTEWATER MANAGEMENT AT AN RV.CAMPGROUND TRANSIENT

Summary System Description

Service Area Characteristics: FACILITIES SERVE THE ELEVEN CAMPGROUND RESTROOMS AND A RECREATIONAL VEHICLE DUMP STATION, ALONG WITH A LODGE, OFFICE, AND MANAGER RESIDENCE. ALL LOCALIZED SEPTIC SYSTEM FOR WASTEWATER.

Collection: LOCALIZED WITHIN THE IMMEDIATE AREA OF THE CAMPGROUND FACILITY. SEVERAL PUMP STATIONS ARE REQUIRED FOR WASTEWATER CONVEYANCE.

Treatment: PROVIDED BY SEVERAL SEPTIC TANK ON-SITE DISPOSAL SYSTEM.

Disposal: SEPTIC TANK EFFLUENT IS CONVEYED TO LEACHFIELDS FOR SUBSURFACE DISPOSAL. MANY OF THE INDIVIDUAL SEPTIC SYSTEMS USE PUMPS.

Capacity Limitations: DESIGN CAPACITY OF THE WASTEWATER SYSTEM IS VARIABLE FOR EACH OF THE SYSTEMS IN THE CAMPGROUND. CAPACITIES RANGE FROM 1500 TO 3500 GPD.



NEWCASTLE SANITARY DISTRICT

General Information: The Newcastle Sanitary District wastewater treatment plant is located west of Highway 80, between Newcastle and Penryn, on Taylor Road (NE 1/4, Sec 25, T12N, R7E, MDB&M) approximately one mile northwest of the Town of Newcastle. Discharge from the Newcastle Sanitary District WWTP is permitted under RWQCB Waste Discharge Requirement Order No. 78-226. This document was adopted on November 17, 1978.

Surface water drainage from the site is to Secret Ravine. No discharge to surface watercourses is allowed under the permit conditions.

Wastewater Generation/Sources: In 1991, Newcastle Sanitary District had 181 residential connections, 9 commercial connections, and 4 schools which generated a total of 45,000 gpd ADWF.

Wastewater generated by the City of Newcastle is considered municipal in nature.

Collection System Description: A total of 3.5 miles of clay pipes with concrete joints, reportedly about 80 years old, comprises the collection system. Construction of the collection system was likely to have been standard trench with native backfill of decomposed granite. Existing average dry weather daily flows of 48,300 gallons (peak 605,000 gpd in September 1991) and average wet weather daily flows of 122,000 gpd (March 1991).

Deficiencies: The existing collection system experiences particularly high wet weather flows due to infiltration and inflow problems. Inflow is considered to be the larger contributor of the two factors. In March 1989, the wet weather flow was reportedly 250,000 gpd with an estimated 4-hour peak exceeding 600,000 gpd. Unfortunately, an appeal to the SWRCB in April 1990, requesting a grant to study the collection system, was rejected based on the fact that study funds for collection systems were only available for unsewered areas. The SWRCB suggested the City apply for Small Community Grant monies to fund the study.

Other identified collection system deficiencies include manhole restoration services, house lateral improvements and low manhole covers.

Proposed Improvements: Currently there are plans to rehabilitate the collection system. These plans are on hold for the present. A planned program of collection system rehabilitation will be developed after the wastewater master plan is completed.

Wastewater Treatment System Description: The treatment plant, constructed in the early 1970's, consists of a headworks (diversion structure), one primary treatment aerated lagoon, a secondary treatment lagoon, two storage ponds, a chlorine disinfection system, and spray irrigation land disposal. The ponds operate in series. Design flow for the treatment plant is 70,000 gpd ADWF and limited by spray field capacity. High flow of 605,000 gpd was recorded during rain storms. Average dry weather flow in September 1991 was 48,300 gpd with average wet weather flow of 122,000 gpd in April 1991.

Deficiencies: The Newcastle Sanitary District treatment plant is susceptible to odors and, in October 1986, aerators were installed in the ponds to alleviate this problem.

Other identified treatment plant deficiencies include need for an interpond (pipe) system between treatment ponds #1 and #2, limitation on amounts of effluent to spray field (20,000 gpd) and chlorination facilities.

Storage in #3 and #4 storage ponds is not adequate for long periods of rainfall.

Proposed Improvements: Planned, proposed or required treatment plant improvements are to be determined after and as a result of the Wastewater Master Plan. If the present method of disposal is retained, spray system expansion would be required.

Disposal System Description: Disposal facilities for the Newcastle Treatment Plant consist of two storage ponds and a spray irrigation field. The spray irrigation field contains a 6-inch AC pipeline and 85 active spray heads over an area of 25 acres. The application rate is 450+ gpm. Permitted disposal capacity is 70,000 gpd.

Deficiencies: Identified deficiencies in the existing disposal system include inadequate storage at present flows during long and heavy rainfall events. No alternate means of disposal are currently available.

Proposed Improvements: Planned, proposed or required improvements for the disposal system which have been identified at this time will be determined at the time the Wastewater Management Plan is completed and will depend upon the results of the Wastewater Management Plan.

Financing: Many of the improvements which have occurred since the initial construction of the City of Newcastle WWTP have been partially funded with grant monies. Local share portions of the improvement costs as well as operations and maintenance costs are funded through District connection fees and annual service charges.

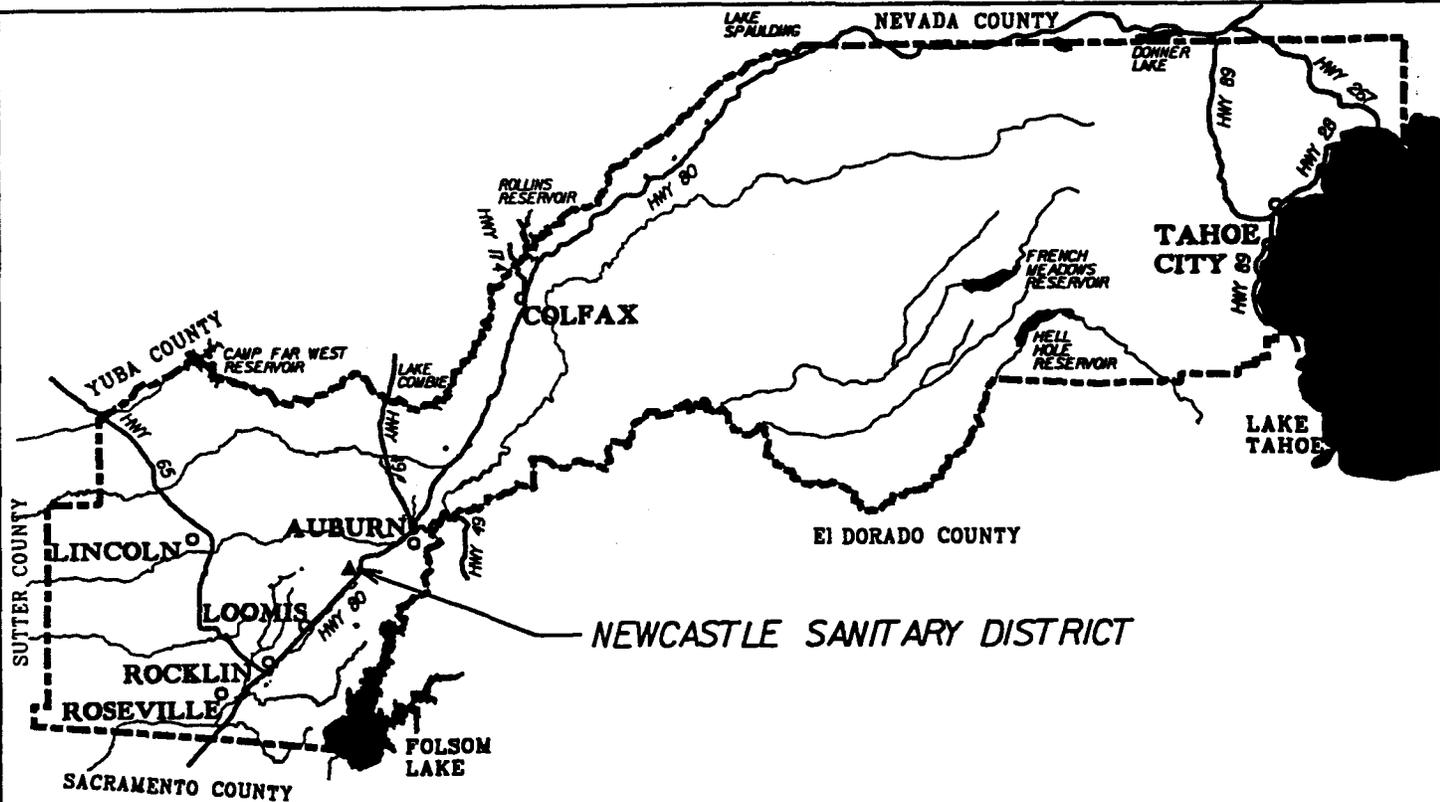
System Appraisal: In general the City of Newcastle wastewater collection, treatment and disposal facilities are considered to lack storage and be sending too much effluent for spray disposal daily (70,000 gpd). Overall system capacity is presently permitted to an average dry weather flow of 70,000 gpd. Plans to increase treatment plant capacity are needed and underway at this time.

This existing collection system is in need of rehabilitation and the trunk sewer system is limited.

Presently the Newcastle Wastewater Treatment Plant system is in general compliance with the regulatory requirements except for effluent discharge to the disposal spray field.

Treatment and disposal capability will be required prior to any major increase in connections can be allowed. Improvements will be outlined in the pending Master Plan.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: NEWCASTLE SANITARY DISTRICT
Address: TAYLOR ROAD, NEWCASTLE, CA
Contact Name: LEONARD ORSOLINI Phone: (916)-663-3173, 3428
Service Area Size: _____ No. Connect.: 194 Population Served: 663
Services Provided: WASTEWATER MANAGEMENT

Summary System Description

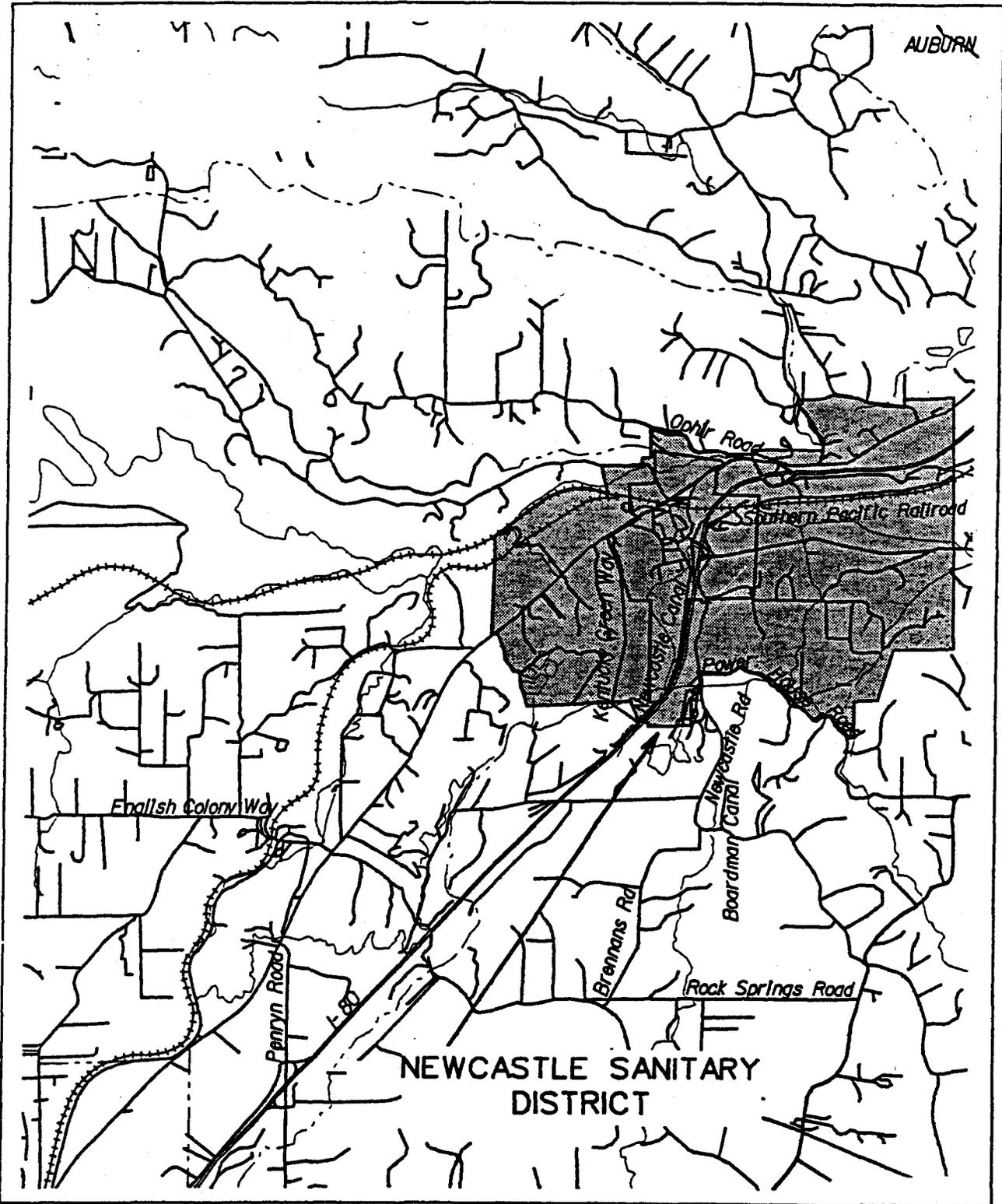
Service Area Characteristics: FACILITIES SERVE THE CITY OF NEWCASTLE AND SURROUNDING AREA.

Collection: A 3.5 MILE CLAY PIPE GRAVITY, COLLECTION SYSTEM SERVES 181 RESIDENTIAL AND 13 COMMERCIAL CONNECTIONS. HIGH INFLOW AND INFILTRATION DUE TO COLLECTION SYSTEM AGE.

Treatment: PROVIDED BY AN AERATED LAGOON SYSTEM CONSISTING OF HEADWORKS, TWO PRIMARY TREATMENT LAGOONS, TWO STORAGE PONDS AND CHLORINATION DISINFECTION SYSTEM.

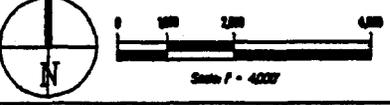
Disposal: EFFLUENT FROM THE STORAGE POND IS DISTRIBUTED OVER A 25 ACRE SPRAY IRRIGATION FIELD.

Capacity Limitations: DESIGN FLOW FOR THE FACILITIES IS 70,000 GPD (ADWF).



Placer County General Plan

Figure _____
Wastewater Service Area



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

LEGEND Newcastle Sanitary District

- Streets
- Waterways
- County Line
- District Service Area

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

OAKLAND SKI CLUB NORDEN

General Information: The Oakland Ski Club lodge is located one mile east of Norden, off Highway 49, in the Tahoe National Forest (NE 1/4, Sec 20, T17N, R15E, MDB&M). Land occupied by the Lodge is leased from the U.S. Forest Service. Wastewater from the lodge is permitted by RWQCB Waste Discharge Requirements Order No. 85-292 which was adopted on October 25, 1985.

Surface drainage from the area is to the South Fork Yuba River. No surface discharge is permitted in accordance with the RWQCB WDR's.

Wastewater Generation/Sources: Lodge facilities have a guest capacity of 40. Primary use of Oakland Ski Club lodge occurs on weekends during the skiing season.

Wastewater Collection, Treatment and Disposal System Description: The Oakland Ski Club lodge wastewater collection, treatment and disposal system consists of a septic tank/leachfield configuration which serves the restroom and kitchen facilities of the premises.

A new septic tank and leachfield system was constructed in the 1983 in response to RWQCB Cease and Desist Order No. 76-163. Chronic failures of the old system were the result of a high seasonal groundwater table and an insufficient soils percolation rate. Effluent from the old system surfaced and spilled into the South Yuba River drainage prompting the RWQCB enforcement action. Care was taken in construction of the new system to minimize surface runoff and snow-melt infiltration into the new leachfield.

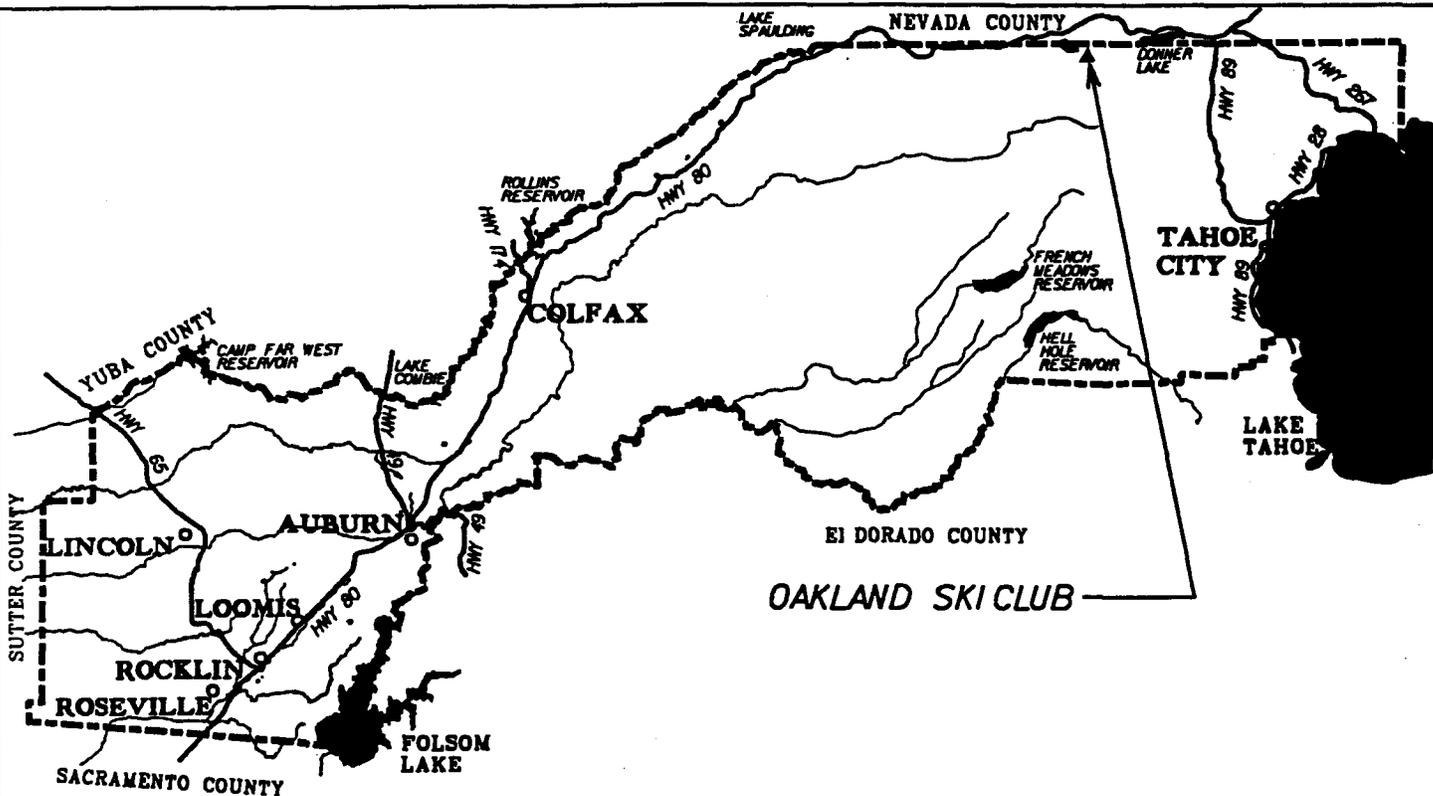
Deficiencies: Since the installation of the new septic tank and leachfield there have been no observed violations of the discharge permit conditions. There are no known deficiencies in the existing wastewater system.

Proposed Improvements: Connection to the Donner Summit Public Utility District WWTP is planned for implementation by October 1993.

Financing: Improvements and operations and maintenance costs on the Oakland Ski Club wastewater facilities are currently funded from fee assessments for members and volunteer labor. When hook-up to the Donner Summit PUD system occurs (planned for 1993), connection and service fees will be charged to the Oakland Ski Club.

System Appraisal: Since the Oakland Ski Club undertook septic tank and leachfield replacement and repair actions in 1983 the system has performed without reported difficulty. The system is designed for a 40 person flowrate and there are not plans to provide additional capacity or growth in the near-term. Hook-up to the Donner Summit PUD collection system is planned by October 1993.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: OAKLAND SKI CLUB

Address: 27731 MEDLAR DRVE, HAYWARD CA 94544

Contact Name: MIKE CONTI Phone: (510)-376-6145

Service Area Size: _____ No. Connect.: _____ Population Served: 40

Services Provided: WASTEWATER COLLECTION TREATMENT AND DISPOSAL

Summary System Description

Service Area Characteristics: LOCATED IN THE SIERRA NEVADAS NEAR NORDEN ON TAHOE NATIONAL FOREST LAND. HEAVY FORESTED AND HIGHLY GRANITE.

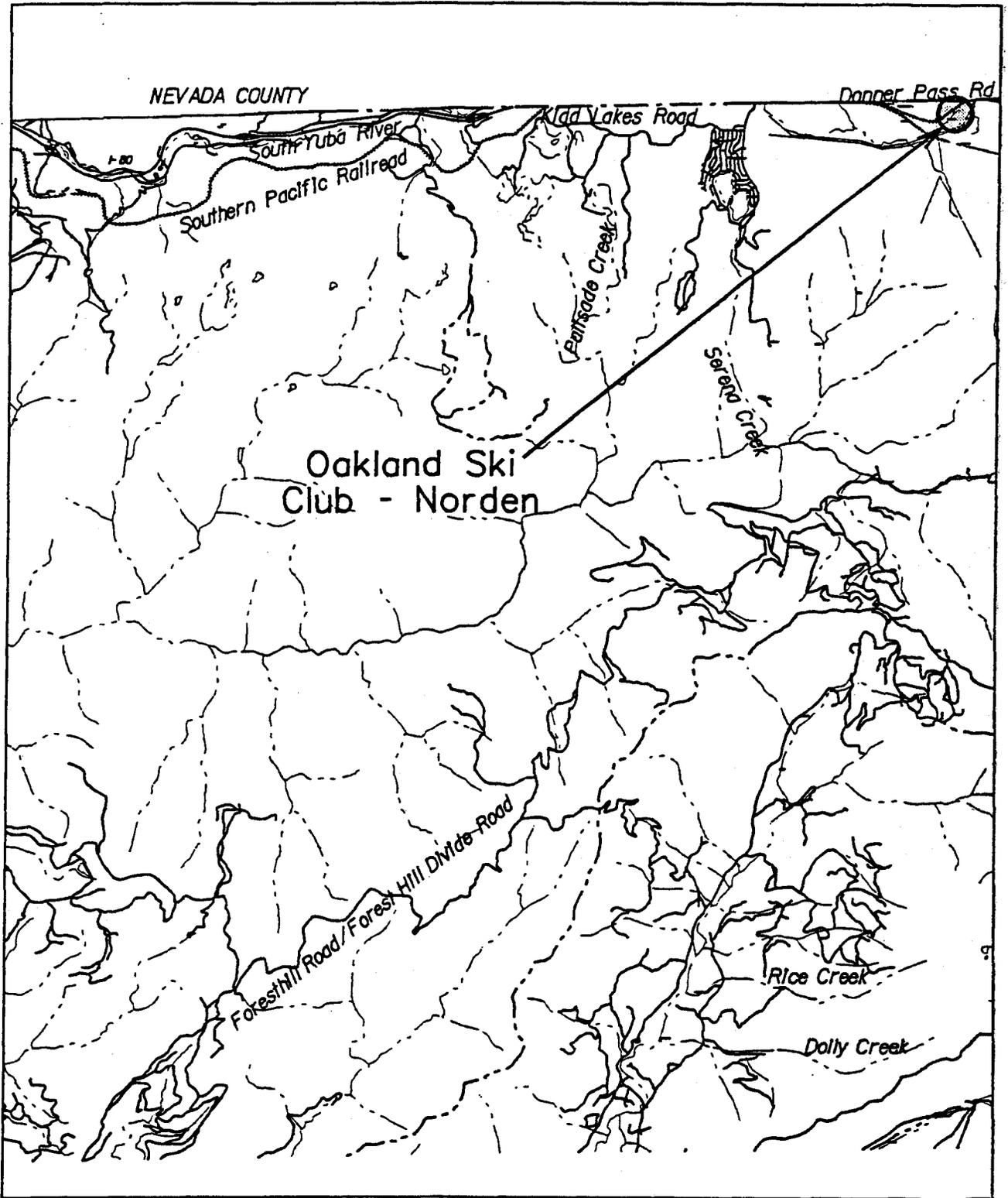
LAND LEASED FROM U.S. FOREST SERVICE.

Collection: ON-SITE DISPOSAL CONSISTING OF SEPTIC TANK AND LEACHFIELD. SYSTEM CONSTRUCTED IN 1983.

Treatment: STANDARD SEPTIC TANK TREATMENT SYSTEM, CONSISTING OF A GALLON TANK AND SUB-SURFACE LEACHFIELD.

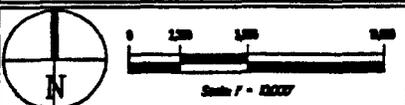
Disposal: SOLIDS ARE DISPOSED BY PUMPING SEPTIC TANK AND OFF-SITE HAULING TO PERMITTED DISPOSAL.

Capacity Limitations: SINCE INSTALLATION OF SEPTIC TANK AND LEACHFIELD THERE HAVE BEEN NO OBSERVED DIFICIENCIES WITH THE SYSTEM. PLANNED HOOK-UP TO DONNER SUMMIT P.J.D. BY OCT. 1993.



Placer County General Plan

Figure Wastewater Service Area



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

LEGEND
 Oakland Ski Club-Norden

- Streets
- County Line
- Waterways
- District Service Area

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

SHADY GLEN MOBILE HOME PARK

General Information: The Shady Glen Mobile Home Park is located at the intersection of Highway 174 and Rollins Reservoir about 1-1/2 mile north of Colfax (S 1/2, Section 27, T15N, R9E, MDB&M). Wastewater generated from the mobile home park is regulated by RWQCB Waste Discharge Requirement Order No. 86-187, adopted September 26, 1987.

Surface drainage from the treatment plant site is to an unnamed tributary of the Bear River whereas runoff from the disposal site is to Slaughter Ravine and thence to the North Fork American River.

Wastewater Generation/Source: The Shady Glen Mobile Home Park currently has 120 mobile home units, other rentals, and a restaurant. Currently the wastewater discharge flowrate is about 15,000 gpd ADWF of domestic wastewater.

Collection System Description: Constructed in 1972, the Shady Glen collection system is composed of 4, 6 and 8-inch transite and PVC lines. Collection throughout the system is by means of gravity flow. There are not any lift stations in the system. Total length of the collection system is about 2,500 lineal feet.

Deficiencies: The existing collection system does not suffer from significant inflow and infiltration. There are currently no other identified collection system deficiencies.

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

Wastewater Treatment and Disposal System Description: Shady Glen's original treatment and disposal system was constructed in 1963 and consisted of a single treatment lagoon and disposal to hillside irrigation. In 1973 a new "packaged" activated sludge type treatment plant was constructed to replace the old system.

Today the treatment facilities consist of an activated sludge plant located within the mobile home park property boundaries. After treatment through the activated sludge plant, the wastewater flows through two oxidation ponds operated in series and then to a 2.4 acre hillside spray irrigation system. Both the oxidation ponds and the spray disposal area are outside the mobile home park area.

Provision is made to bypass the activated sludge plant and divert raw wastewater directly into the ponds. Effluent from the second pond is used to irrigate the hillsides during the summer months. Irrigated runoff is returned to the second oxidation pond.

The treatment facilities, which were upgraded and expanded in 1973, accommodates an ultimate build-out mobile home park capacity of 120 units which represents an design flow of 24,000 gpd of wastewater.

Solids disposal is by drying.

Deficiencies: RWQCB inspection reports indicate a propensity for compliance with the Waste Discharge Requirement specifications, however, in April 1988 it was found that there was a lack of earthwork to prevent irrigation runoff from leaving the designated disposal area. Reconstruction of the runoff diversion channels to collect the effluent for return to the second pond was completed in 1990.

There are currently no identified treatment and disposal deficiencies.

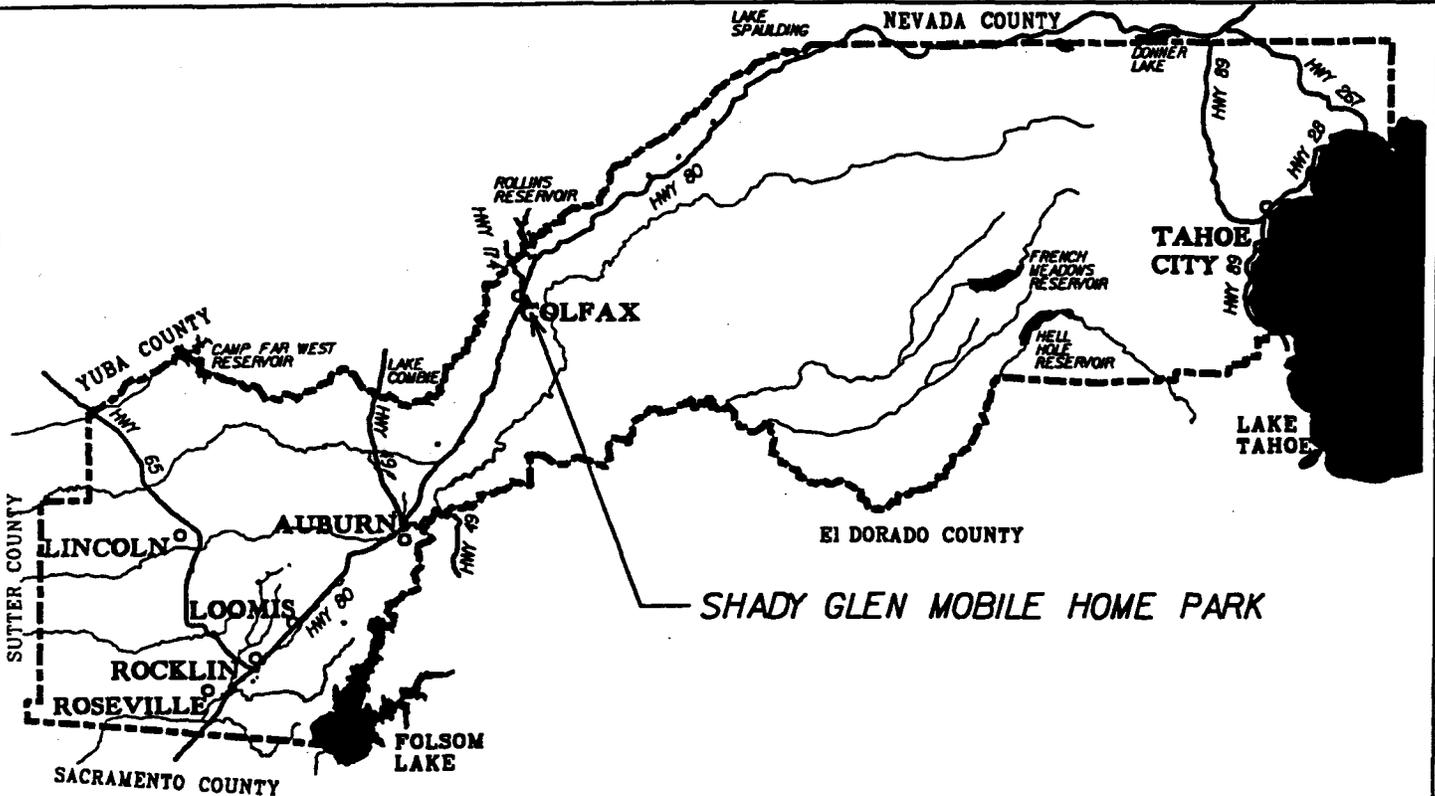
Proposed Improvements: Currently there are no planned, proposed or required treatment and disposal improvements.

Financing: Improvement, operations and maintenance cost are funded by the property owner.

System Appraisal: Recent inspections by the RWQCB have noted a well maintained system overall which is meeting the compliance goals in accordance with the permit conditions.

The existing collection, treatment and disposal system has sufficient capacity to meet the full build-out conditions of the Shady Glen Mobile Home Park which is 120 units. There are no plans to expand beyond that full build-out limit in the future. The existing system has a estimated remaining life of 50 years at which time it is expected that the system will undergo rehabilitation or hook-up to a regional treatment facility.

PLACER COUNTY WASTEWATER SYSTEMS



System Name: SHADY GLEN MOBILE HOME PARK

Address: 450 GLADYCON ROAD *46, COLFAX, CA 95713

Contact Name: JOHN A. PANELLI/OWNER Phone: (916)-346-8228

Service Area Size: 30 ac. No. Connect.: 126 Population Served: VARIES

Services Provided: WASTEWATER COLLECTION TREATMENT AND DISPOSAL

Summary System Description

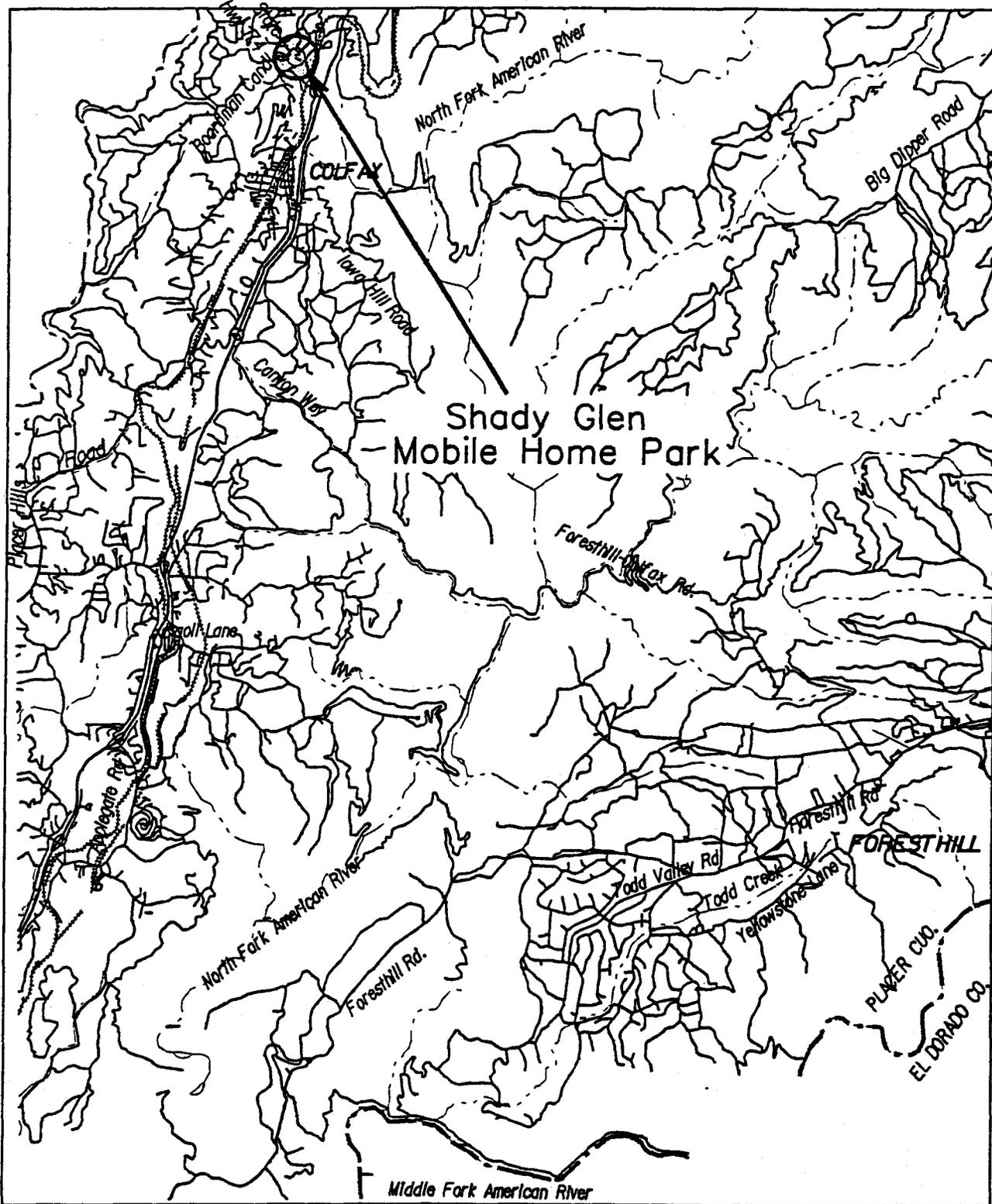
Service Area Characteristics: FACILITIES SERVE 126 UNITS AND A RESTAURANT HAVING 15,000 GPD DOMESTIC WASTEWATER. THE PARK BOUNDARIES INCLUDE A SLUDGE PLANT, TWO OXIDATION PONDS AND SPRAY IRRIGATION OF A 2.4 AC. HILLSIDE.

Collection: THE ACTIVATED SLUDGE PLANT DISCHARGES TO TWO OXIDATION PONDS. EFFLUENT FROM THE SECOND POND IS USED TO IRRIGATE HILLSIDES DURING SUMMER MONTHS.

Treatment: TREATMENT PRACTICED IS OXIDATION POND TREATMENT. HILLSIDE SPRAY IRRIGATION RUNOFF IS RETURNED TO THE SECOND POND.

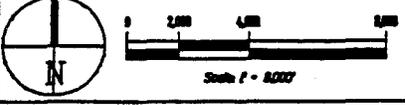
Disposal: SURFACE DISCHARGE IS NOT PERMITTED BY THE CURRENT WDR's. SOLIDS ARE DRIED AND TRANSPORTED TO LINCOLN CLASS III LANDFILL.

Capacity Limitations: CONTINUED MAINTENANCE MUST BE PRACTICED IN ORDER TO KEEP RUNOFF DISCHARGE FROM ESCAPING DESIGNATED DISPOSAL AREA.



Placer County General Plan

Figure 1 Wastewater Service Area



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

LEGEND Shady Glen 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.

PENRYN WASTE COLLECTION FACILITY

General Information: The community of Penryn is located ten miles southwest of the City of Auburn along Highway 80.

In the past, wastewater management for the Penryn community was accomplished by on-site septic/leachfield systems. On July 8, 1987, the County of Placer adopted Ordinance No. 3820-B declaring a moratorium on issuance of building permits and septic tank permits in the Penryn community area due to septic system failures. The Ordinance did not prohibit the issuance of a permit to reconstruct, repair, abandon, or operate an existing system, but required residents to connect to a new public sewer system when one became available.

In 1987 the County of Placer, with the assistance of Clean Water Grant funding, conducted a pollution study to determine the magnitude of the pollution problem. The study was completed in April and concluded that there was extensive septic tank system problems and bacteriological contamination within the community. Documentation included surfacing of sewage from leachfield areas, sewage odors and grey water found in community drainages.

In 1988 it was determined that the most cost effective solution was to construct a sewage collection system for the Penryn community and hook-up to the Roseville Regional WWTP through the Loomis/Rocklin collection system which is operated and maintained by the South Placer Municipal Utility District.

There are no RWQCB WDR's for the system, either for discharge or maintenance, since the system is hook-up to the South Placer MUD system.

Surface drainage from the area is to Dry Creek, thence Natomas East Canal, thence to the Sacramento River.

Wastewater Generation/Sources: The Penryn community contains 90 developed parcels, including a minor commercial center. The area of the parcels ranges from 0.1 acres to 5 acres, with an average size of about 0.6 acres. There are approximately 112 residential and 42 commercial connections to the Penryn collection system.

Wastewater Collection, Treatment and Disposal Description: Currently only septic/leachfield systems and the new sewage collection system are in use throughout the Penryn community. Septic/leachfield systems serving the existing developed properties are being abandoned as the properties connect to the collection system. Ultimately all septic systems will be abandoned and all parcels will be hooked up to the collection systems. The new collection system was constructed in 1988 to 1990 and consists of 19,000 feet of VCP line and has 80 sanitary manholes. Line sizes vary from 6-inches to 8-inches and materials of construction include VCP and DIP.

Treatment and disposal of the Penryn wastewater collected by the newly installed system occurs at the Roseville Regional WWTP.

Deficiencies: Septic system operations at the Penryn community have been a longstanding problem and a major public health concern. Shallow ground water, compounded with the proximity of the parcels and substandard septic systems, impedes proper wastewater percolation and treatment. The Wastewater Pollution Study for the Community of Penryn, completed in April 1987, documented significant bacteriological contamination of wells and roadside ditches caused by these failures. Surveys back to the

1960's indicate a history of septic system failures in this area.

Since the construction of the new collection system there have not been any reported deficiencies or major problems.

Proposed Improvements: Wastewater generated by the community of Penryn is currently managed on-site septic systems and the new collection system.

There are currently no additional planned, proposed or required collection system improvements.

Financing: Financing for the Penryn community wastewater system improvements, operations and maintenance was obtained from assessment district financing, grant funding, connection fees, and monthly service charges.

Current collection system connection and annual service fees are outlined in the following table.

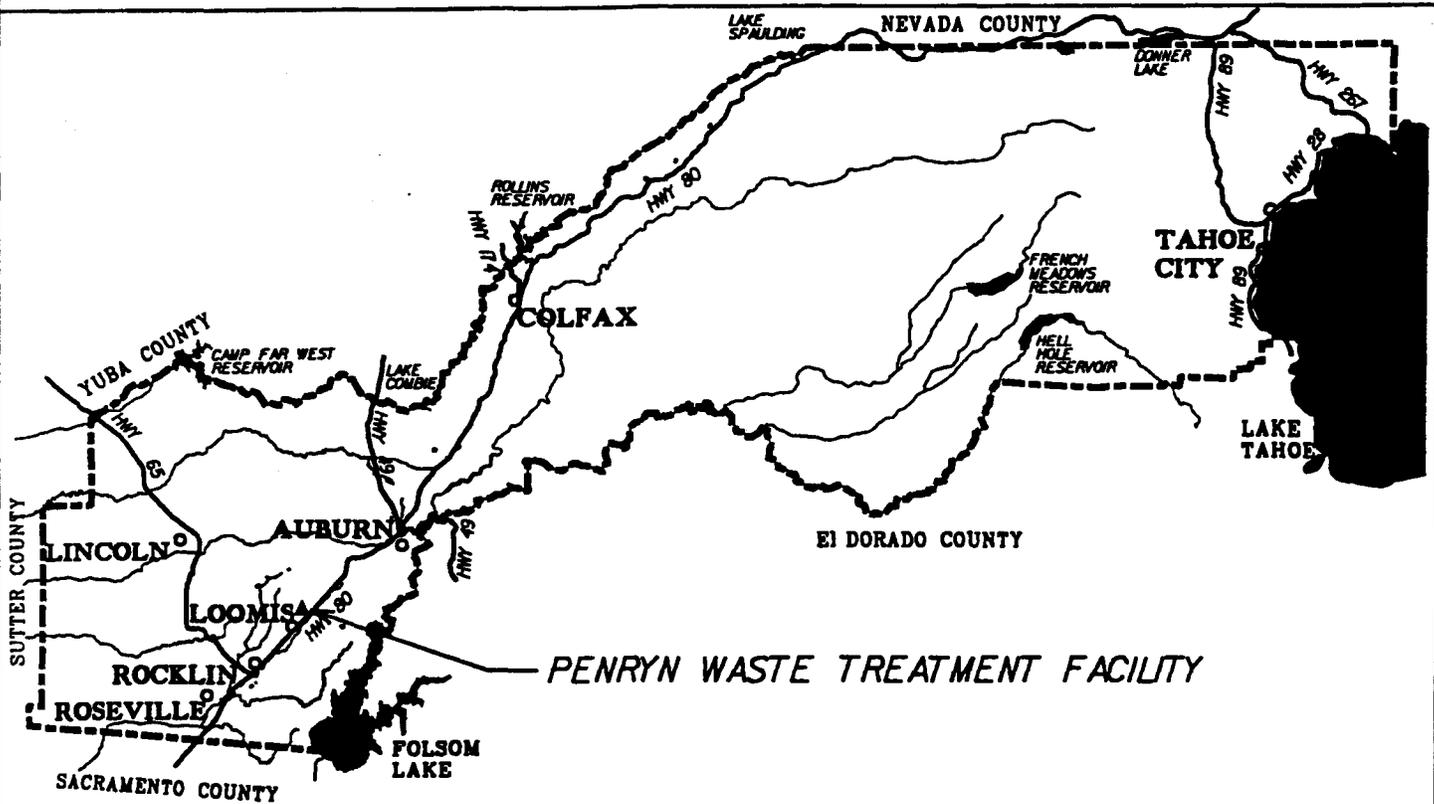
PENRYN COLLECTION SYSTEM FEE SCHEDULE

Participation Charge (Connection Fee)	\$3,550 per edu*
Monthly Service Charge	\$9 per edu
Penryn Sewer Main Line Extension	
Assessment District (Penryn Road) Reimbursement Fee	\$450 per edu

*\$50.00 per edu increase scheduled July 1, 1992.

System Appraisal: The Penryn community wastewater collection system was constructed in 1989 to 1990 and has a design capacity of 0.364 mgd. The system currently has a flow of about 0.213 mgd and no potential for expansion past the current 0.364 mgd. It is not anticipated that additional expansion of the system will occur in the near-term.

PLACER COUNTY WASTEWATER SYSTEMS



PENRYN WASTE TREATMENT FACILITY

System Name: PENRYN WASTE TREATMENT FACILITY

Address: SOUTH PLACER M.U.D., P.O. BOX 45, LOOMIS CA 95650

Contact Name: RICHARD R. STEIN, ENGINEERING ASSISTANT Phone: (916)-652-5877

Service Area Size: 220 ac. No. Connect.: 154 Population Served:

Services Provided: WASTEWATER COLLECTION AND MANAGEMENT

Summary System Description

Service Area Characteristics: PENRYN IS LOCATED ABOUT 10 MILES SOUTHWEST OF AUBURN ALONG HWY 80. THE OAK WOODLANDS AND GRASSLANDS ARE SUBJECT TO SEASONAL HIGH GROUND WATER. THE COMMUNITY CONTAINS 90 DEVELOPED PARCELS AVERAGING 0.6 AC. IN SIZE.

Collection: WASTEWATER GENERATED BY THE COMMUNITY OF PENRYN IS COLLECTED THROUGH 3.5 MILES OF SEWER LINE AND CONVEYED TO THE SOUTH PLACER MUNICIPAL UTILITY DISTRICT SYSTEM. THE PENRYN SYSTEM WAS INSTALLED IN 1989 TO 1990.

Treatment: PENRYN WASTEWATERS ARE TREATED AT THE ROSEVILLE REGIONAL WWTP.

Disposal: DISPOSAL AT THE ROSEVILLE WWTP IS TO DRY CREEK AS PERMITTED SURFACE DISCHARGE.

Capacity Limitations: THE PENRYN COLLECTION SYSTEM HAS A DESIGN CAPACITY OF 0.364 MGD (253 EDU) CURRENT FLOWS ARE 0.213 MGD. (154 EDU).