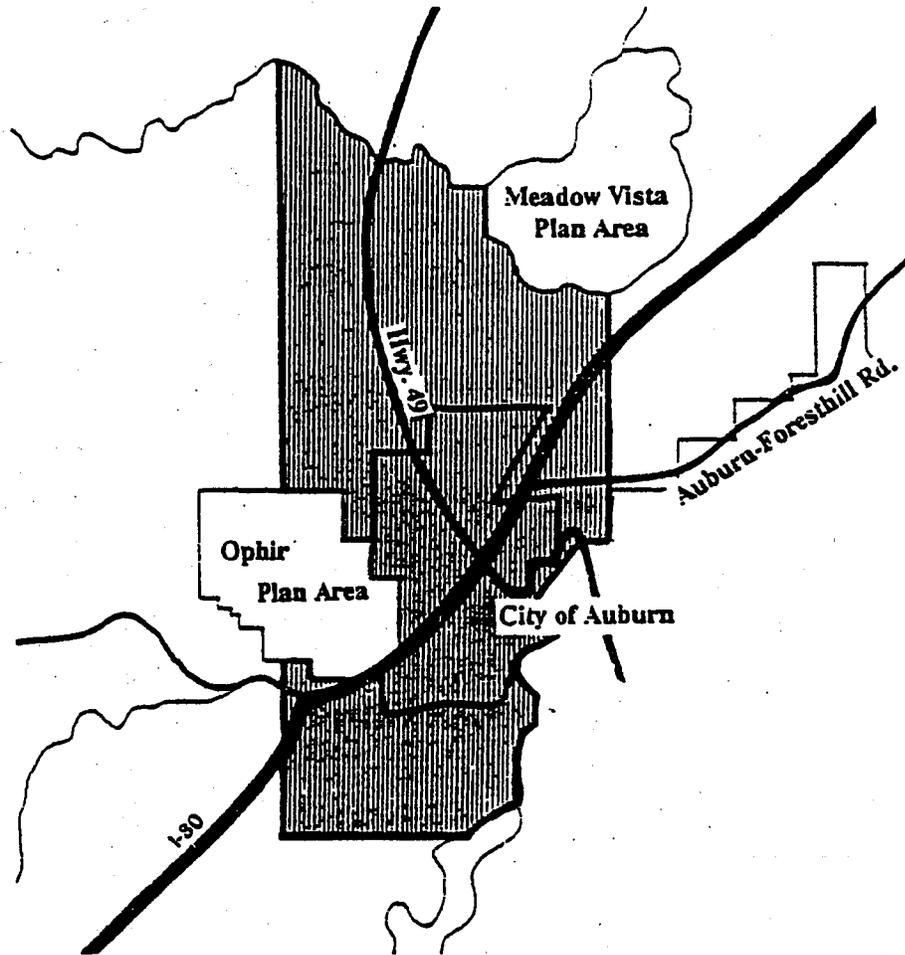


AUBURN/BOWMAN COMMUNITY PLAN PUBLIC SERVICES/PUBLIC FACILITIES STUDY



Submitted to the
Placer County Planning Department
Fred Yeager, Director

September, 1991

90307

QUAD

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CHAPTER ONE

INTRODUCTION

CHAPTER ONE

INTRODUCTION

Placer County is in the process of updating its Community Plan for the unincorporated area around the City of Auburn known as the Auburn/Bowman area, as shown on Figure 1. This Community Plan is part of the Placer County General Plan. Three alternatives are under consideration: Alternative #1, Reduced Holding Capacity; Alternative #2, Consolidation Alternative; and Alternative #3, Expanded Development. The Public Services/Public Facilities Study for the Auburn/Bowman Community Plan was designed to analyze, at a planning level, the public services and public facilities needs - water, sewer, law enforcement, and fire - protection of Alternative #2, which is presently viewed as the preferred alternative.

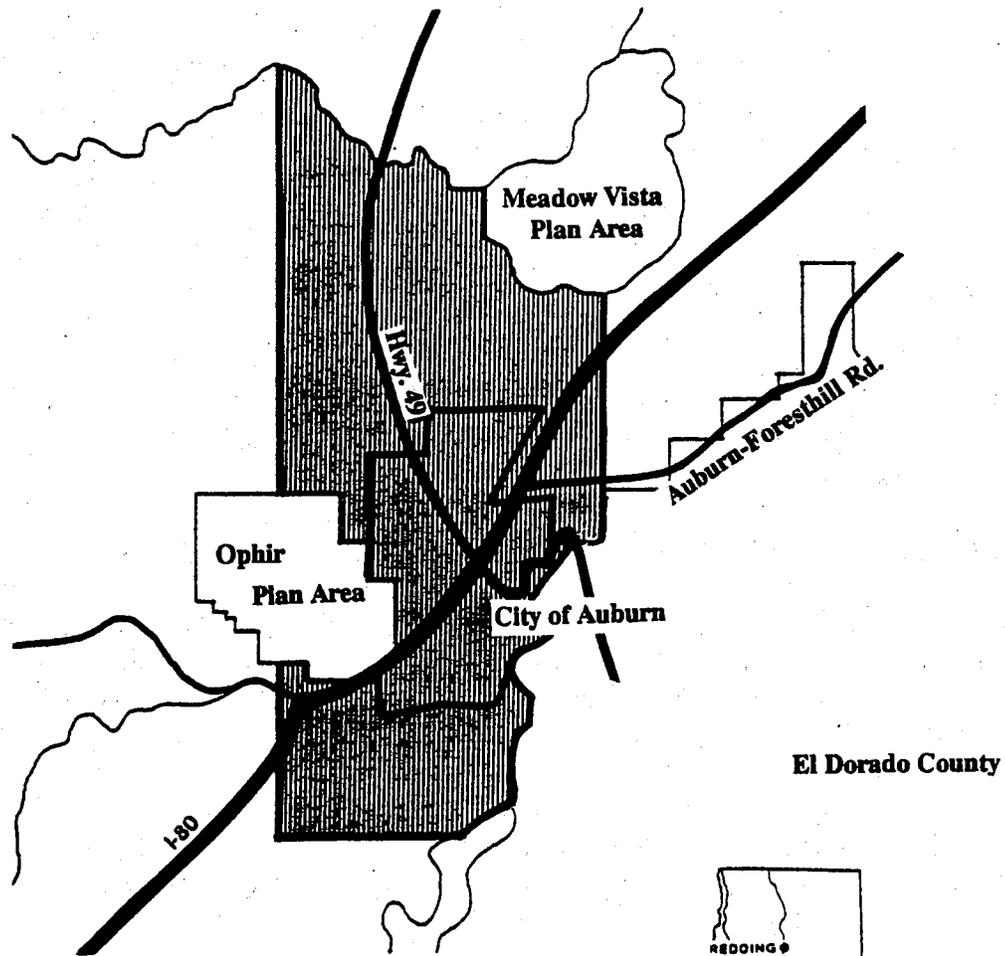
Alternative #2, the Consolidation Alternative, would maintain approximately the same holding capacity as the existing County-adopted Auburn Area General Plan, but consolidate the development into a core area and maintain or reduce existing densities outside the core area.

This alternative seeks to establish a focal point in the north Auburn area and to redirect development along Highway 49 to avoid continued strip commercial development and the negative effects such development has created. This focal area is designed as a compact urban core with "pedestrian" orientations. It takes into consideration the concept of "jobs-housing balance" and attempts to provide residents opportunities to live, work, shop, and recreate within a relatively small geographical area. In exchange for the significant increase in densities in existing urban areas, the plan either reduces or maintains the densities in outlying areas, thereby thwarting sprawl. The plan contains elements which address the major issues raised early in the planning process (i.e. traffic, affordable housing, the appearance of Highway 49, maintenance of the area's rural character, etc.).

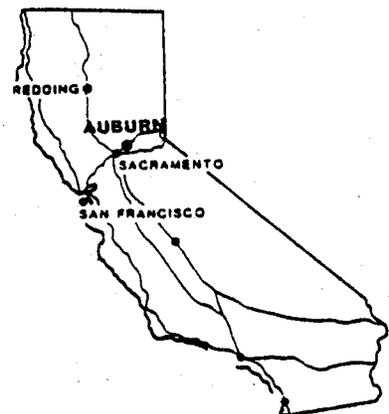
Table 1 sets forth acreage by land use category, holding capacity in residential units, and alternative analysis for Alternative #2 in comparison to the existing Plan. This table also includes a listing of assumptions upon which these calculations and analysis are based. These figures do not include land use or population estimates within the existing city limits of the City of Auburn.

In contrast, Alternative #1, the Reduced Holding Capacity alternative, would reduce holding capacity while maintaining existing land use patterns, minimize high traffic-generating uses and maximize open space areas. Alternative #3, the Expanded Development Alternative, would increase the existing holding capacity by providing for expanded development opportunities and build-out generally by

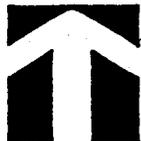
Nevada County



El Dorado County



Map - Not to Scale



NORTH

QUAD

AUBURN/BOWMAN PLANNING AREA

Figure 1

TABLE 1
AUBURN/BOHMAN COMMUNITY PLAN
LAND USE STATISTICS

LAND USE DESIGNATIONS	ACRES OF EACH DESIGNATION		HOLDING CAPACITY IN RESIDENTIAL UNITS				ALTERNATIVE ANALYSIS			
	EXISTING PLAN	ALT #2	EXISTING PLAN		ALTERNATIVE #2		EXISTING PLAN		ALTERNATIVE #2	
			LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
High Density Residential (10-15 DU/AC)	45	388	360	540	3104	4656	21690	48855	27364	54255
Medium Density Residential (6-10 DU/AC)	354	386	1699	2832	1853	3088	9761	21704	12314	24415
Low-Medium Density Residential (4-6 DU/AC)	254	85	813	1219	272	408	3904	8794	4925	9766
Low Density Residential (2-4 DU/AC)	973	1229	1557	3114	1966	3933				
Rural Low Density Residential (4-.9 AC)	1431	420	1272	2862	373	840	108	244	137	271
Rural Residential (.9-2.3 AC)	0	2179	0	0	758	1937	11611028	26152929	14648285	29043501
Rural Estate (2.3-4.6 AC)	12168	9109	2116	4232	1584	3168				
Agricultural (4.6-20 AC)	6156	6545	245	1064	259	1127				
Open Space	0	4564								
Professional Office	0	146								
Commercial	605	417	0	1368	0	1001				
Highway Services	136	0	0	840	0	0				
Industrial	545	652								
County	0	98								
Public	940									
Water Influence	2611									
TOTAL	26218	26218	8063	16162	10172	20169				

See next page for Assumptions and notes concerning this table.

**ASSUMPTIONS AND NOTES
FOR
TABLE 1**

1. 15% of Commercially designated land will develop as residential use.
2. Residential development will not occur on land designated professional office.
3. All high end range figures for residential unit holding capacity assume maximum use of land and do not take into consideration existing land use patterns.
4. Special planning area residential unit holding capacity calculated based on redevelopment of the area to its maximum land use capability. No residential units were allotted for land use designations other than residential within the special planning area.
5. Peak water demand is calculated for residential use, only.
6. Provisions for sufficient school, park, and circulation facilities have not been adequately addressed in any of the alternatives.
7. Multi-family residential densities could increase by 25% for low/moderate income housing projects and/or 225% for senior independent living centers (SILC's) and senior apartment projects.

Source: Placer County Planning Department, 1991.

expanding the existing Plan area designations to larger areas. These alternatives are not the subject of this Study.

The Study presents, in environmental impact format, the setting, impacts, and suggested mitigation measures for each of the four designated public facilities/public services. It also suggests, for each subject area, goals, policies and implementation measures for incorporation in the Community Plan.

The water and wastewater agencies which serve the Plan area have in place and/or are completing master plans which reflect development intensities similar to those of Alternative #2. This study does not attempt to either duplicate or incorporate those studies. No similar planning documents are yet available for the public safety services, although a County Criminal Justice Master Plan has been initiated.

The pertinent portions of a draft of this report were circulated for accuracy review to the public agency staff members who contributed information. Their comments are reflected in this document. Their time and counsel are appreciated.

CHAPTER TWO

WASTEWATER

CHAPTER TWO

WASTEWATER

SETTING

The Community Plan area is served by two wastewater agencies: Placer County, through a Sewer Maintenance District, and the City of Auburn. Portions of the Plan area are served only by onsite disposal (septic tank and leach line) systems. Figure 2 shows the present service areas of the two wastewater agencies.

● COUNTY SEWER MAINTENANCE DISTRICT

The County provides wastewater collection, treatment and disposal facilities to the Bowman area and to developed areas generally north of Auburn. The County's system also serves the incorporated area around the Auburn Airport, including the industrial park. The current County wastewater system serves approximately 4,262 residential units, a population of about 12,300 people. It also serves a disproportionate number of commercial operations, approximately 1,000. The per capita flow at present approaches 118 gallons per day, because of the commercial service load on the system. A more typical per capita flow, including "normal" commercial loading, is 100 gallons per day.

Flow from the Bowman area is pumped to the upstream end of the County's main interceptor line, leading north on and adjacent to Highway 49, to its treatment and disposal facility near the confluence of Dry Creek and Rock Creek (see Figure 2). Residential and commercial average dry weather flows to these facilities are currently about 1.45 million gallons per day (mgd). Peak wet weather flows are about 5.7 mgd. One unit of the plant (the rotating biological contactors) is at about 90% of theoretical capacity, and is scheduled for augmentation in 1993. The plant effluent is discharged to Rock Creek just upstream from Dry Creek; its discharge is in compliance with the Regional Water Quality Control Board's permit requirements (20 parts per million (ppm) of biological oxygen demand (B.O.D.) and 20 ppm of suspended solids during winter streamflows, and 10 ppm of each during summer streamflows).

A master plan for expansion of the existing County wastewater treatment and disposal facility at the Dry Creek/Rock Creek confluence is currently in progress. A master plan for the collection system(s) for the County portion of the Plan area is now underway.

The County's facilities, with the exception of about 8,000 lineal feet of its 15" to 24" Highway 49 interceptor, are well maintained and in good condition. The interceptor was constructed in 1961 of transite pipe, and is failing due to hydrogen sulfide attack. It is scheduled for early, phased replacement.

A portion of the Sewer Maintenance District is served by septic tank effluent pumping (STEP) systems. These systems are used in areas with failing septic systems, but which are too remote from the basic gravity collection system. The County's criteria for permitting this type of piping is a minimum lot size of 2.3 acres. The County is responsible, for the properties served by STEP systems, for septic tank pumping and for pump maintenance, as well as for piping system maintenance.

The Sewer Maintenance District is adequately financed. User fees for gravity sewer-served residential units are \$16.00 per month, and \$27.00 per month for STEP-served residential units. Fees for annexation to the District are \$2,700 per acre; development fees are \$2,800 per dwelling unit.

● **AREA OUTSIDE SEWER MAINTENANCE DISTRICT**

Properties in the unincorporated area which are not served by a standard sewer system or by a STEP system utilize septic tanks under a County permit system. Building permits are issued only upon demonstration by the property owner or his/her agent that there is sufficient area on the property for 100% leachfield redundancy with satisfactory percolation testing and demonstration of an adequate depth of unsaturated soil mantle. The geology and soil conditions in some portions of the Plan area make it difficult to demonstrate adequate soil conditions for development of some parcels.

The County's current adopted standards for new STEP systems and for development based on septic tank/leach field wastewater disposal (percolation tests and soil mantle evaluation) are reasonable and appropriate. The County also normally requires, administratively, percolation and soil mantle testing prior to parcel map and subdivision approvals, and even requires retesting demonstrating compliance with current stringent test requirements for older parcels which were previously tested. These practices are not clearly mandated under present County codes.

The County Health Department has identified several unincorporated areas as needing community service facilities in lieu of existing onsite wastewater treatment/disposal facilities (see Figure 3). After discussion with Health Department and County Public Works Department personnel, the following observations and conclusions are offered with regard to the identified areas:

1. **Sylvan Vista Subdivision Area**

This area, located north of Foresthill Road and east of I-80 in the Bowman area, currently has a sewer system under design to be financed by an assessment district, with construction expected to be completed next year. The system will be connected to the County's Bowman area collection system.

2. **Bean Road/Kemper Road Neighborhood**

Bean Road and Kemper Road, located in northwestern Auburn, are situated in an area topographically tributary to the City of Auburn's wastewater treatment plant. The City of Auburn is proposing an expansion of its Sphere of Influence to include this area, with the expectation that sewage collection and treatment will be provided by the City in the future.

3. **Keena Drive/Bowman Way Neighborhood**

This development, located in the Bowman area along Old Airport Road, is not currently in the County's service area. Service by the County would require major pump station installations.

4. **Merry Knoll Road Area**

The Merry Knoll Road area is northwest of the present city limits of Auburn, adjacent to Wise Forebay. This area will be difficult for the County to serve, probably requiring a STEP system. The topography appears to more readily lend itself to service by the City's wastewater treatment facility.

5. **Ladd Lane/Nelson Drive Area**

This development, in the vicinity of New Airport Road and south of Bell Road, can fairly easily be sewered by the County. However, it is not in the County's present service area.

6. **Shirland Tract/Crockett Road Area**

This area is south of the City of Auburn, adjacent to the city limits, and can be served by the City of Auburn.

7. **Christian Valley**

The Christian Valley area is too remote to be feasibly served at this time. Gravity, or more likely STEP systems, will likely await the time when adjacent

and more distant development permit joint pipeline construction and cooperative financing.

8. Area East of Highway 49 and North of Dry Creek Road

This area, northwest of Auburn Airport, is tributary to the County's wastewater treatment facility and logically should be served by that facility.

● **CITY OF AUBURN**

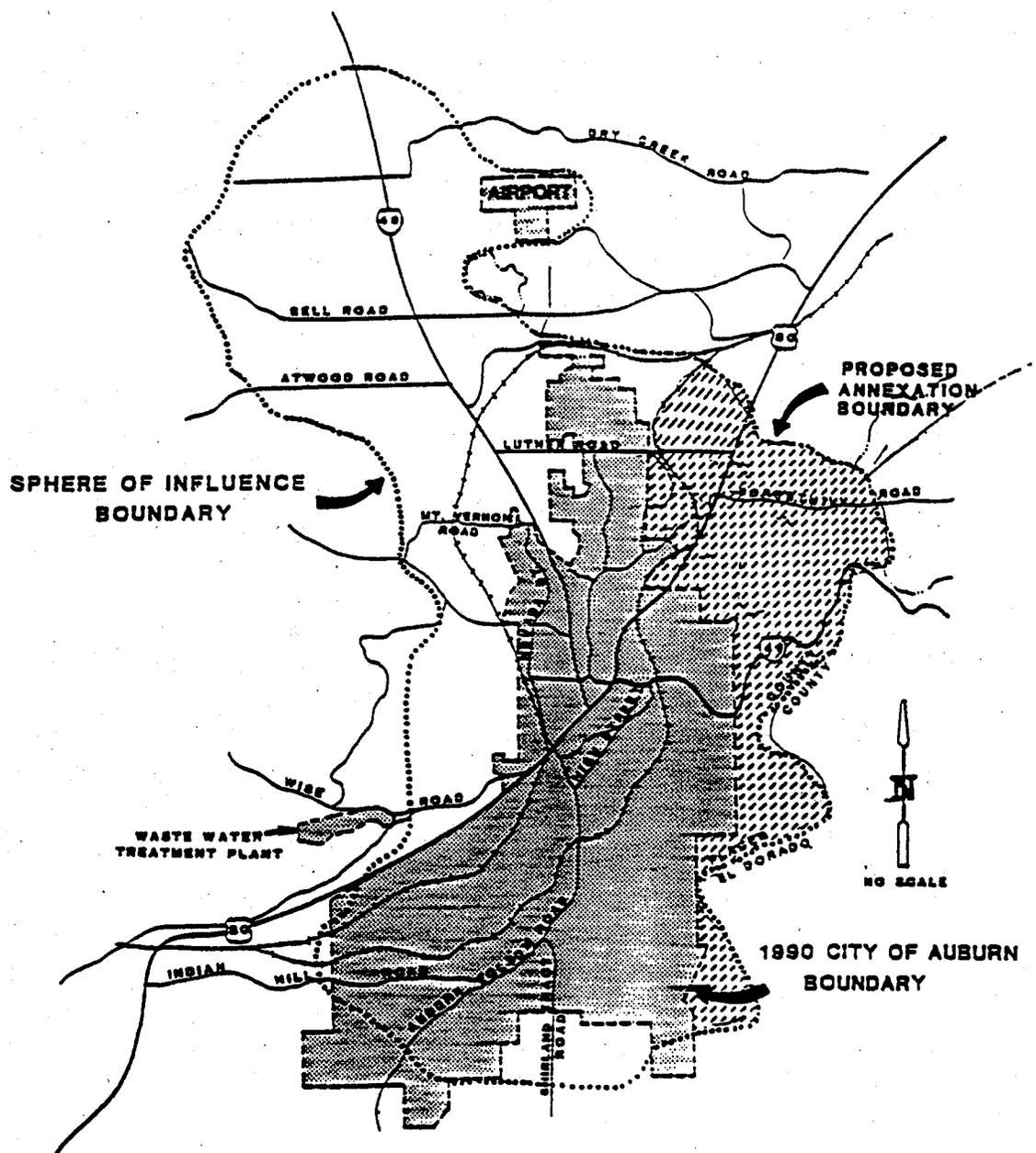
The City of Auburn provides wastewater collection, treatment and disposal facilities to the incorporated area only. The City facilities serve a population of approximately 10,500, and an area of 4,148 acres, approximately 90% of which is developed. The plant currently meets the Regional Water Quality Control Board's discharge standards for its effluent to Auburn Ravine Creek at the treatment plant site west of the City. The City's average daily dry weather flow is about 1.0 mgd; wet weather peak flow exceeds 6.0 mgd. Permitted dry-weather discharge is 1.23 mgd. The City's plant is operated by a private firm under contract to the City. The cost of plant operation and collection system maintenance is approximately \$450,000 per year.

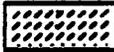
The City currently has in progress a master planning study considering expansion alternatives for the treatment plant on the present site. One purpose of the expansion under consideration is to provide sewer service to a proposed major annexation (2,329 acres) which would extend northeast along I-80 and east to the County line (see Figure 4; hereinafter referred to as the "east I-80 annexation area"). The City also has tentatively scheduled for 1992 a collector system master plan study.

Auburn's current monthly rate for residential service is \$8.25. A significant increase in these rates is projected to finance necessary plant expansion using certificates of participation as a financing vehicle, supplementing existing enterprise fund cash reserves. Development fees for wastewater facilities financing are currently \$1,400 per residential unit.

IMPACTS

The development of the Plan area, under Alternative #2, to full buildout will involve significant additional urbanization compared to existing development. It does not, however, significantly increase total urbanization over that which might occur with the previously adopted Auburn Area General Plan. On the contrary, Alternative #2 may permit additional residential units to be developed with STEP systems or utilizing onsite septic tank/leachfield systems, while concentrating the need for standard gravity sewer systems.



Legend	
	Proposed Annexation: 2,329.3 ac / 3.64 sq mi
	Existing City Area: 4,148.0 ac / 6.48 sq mi
	Airport: 253.4 ac / 0.40 sq mi
	Wastewater Plant: 228.0 ac / 0.36 sq mi

SOURCE: City of Auburn



**Proposed Annexation
City of Auburn**

**Figure
4**

At 100 gallons per day, Alternative #2 Plan buildout would generate from 1.0 to 3.7 million gallons per day additional wastewater flow to central sewage systems. These figures assume that fifty percent of residential parcels of one acre or more are connected to either a gravity sewer system or a STEP system. Flow will increase or decrease, depending on the validity of this assumption; however, because of the poor soil conditions found in the area, it is safe to assume that at least 50 percent will require connection during the planning period. The design of trunk lines, pump stations, and treatment and disposal facilities to accommodate these increased flows must be the subject of engineering studies undertaken on a continuing basis, dependent upon growth timing and phasing patterns.

The projected development rate under Plan Alternative #2, which would accommodate an annual population increase of approximately 3 to 4 percent, will permit orderly planning and financing of wastewater system improvements to serve Plan area development. Both of the wastewater agencies serving the Plan area, the Sewer Maintenance District and the City of Auburn, have financially stable wastewater facilities revenue/expenditure programs and are fiscally capable of financing needed wastewater system improvements.

Current and potential perceived problems exist regarding responsibility for wastewater collection, treatment and disposal. An example of existing wastewater responsibility concerns is the Bowman area pumped discharge to the County system, with its attendant pumping requirement and hydrogen sulfide generation potential. This area is topographically tributary to the City of Auburn's wastewater treatment system (see Figure 2 for location of "Generalized Watershed Boundary"). An extension and corollary of this area of concern is the City's ability to more effectively serve the proposed east I-80 annexation area, although provision of such service is dependent on expansion of the City's sewage treatment plant and probable enlargement of components of the City's gravity sewer system to handle increased flows. Alternative #2 of the Community Plan suggests no obvious solutions to these concerns, as the present jurisdictional boundaries for the Sewer Maintenance District and the City of Auburn do not promote the efficient provision of wastewater service to the growth projected to occur under Alternative #2 of the Community Plan in those areas.

The City of Auburn can, by adopted Council policy, serve only development within the incorporated City. It is evident that the existing lift station in the County system which serves the Bowman area (the Auburn Ravine lift station) could be eliminated as, possibly, could lift stations serving the proposed east I-80 annexation area. Such elimination would, however, require additional analysis as well as a change in City policy on providing service to areas outside the City limits. Considering the constraints of the economics and timing of development, and the jurisdictional concerns of the area's wastewater agencies, the County's present design

practices minimize new lift station installations to the extent possible within the Plan area's topographic and surface geologic characteristics.

There is no technically adequate basis for estimating the total number of septic tank/leachfield systems that can be accommodated in watersheds as geologically complex as those constituting the Plan area. Areas such as Christian Valley cannot be fully developed, and existing septic tank/leach line problems in such areas may not be solvable, until adjacent and more distant development activity permit joint pipeline construction and cooperative financing of needed gravity or, more likely, STEP facilities.

The County has, correctly, not identified minimum parcel sizes for which onsite septic tank/leachfields will be allowable. Such identification creates enforcement difficulties as compared to the existing proof-of-adequacy permit system or, worse, continuing performance problems if the proof-of-adequacy procedure is weakened by minimum parcel size definition.

The several areas previously identified in the unincorporated area as requiring community wastewater service facilities will require additional study to determine the most appropriate course of action. Certain of the areas will be more readily served if the City of Auburn expands its service area, either through agreement with the County or annexation. This is particularly true in the east I-80/Bowman area and in certain identified areas northwest of the present city limits. Community wastewater service to the areas will assure protection of public health. However, as noted above, economic constraints and jurisdictional concerns must be appropriately addressed as a part of the process.

MITIGATION MEASURES

It is recommended that the County consider the following mitigation measures to reduce the impacts of Alternative #2 regarding wastewater facilities and service:

- Legislatively adopt the administrative procedures currently utilized to review parcel maps and subdivisions which are to be served by onsite wastewater treatment and disposal systems.
- Extend community sewer service to areas identified as requiring such service as the issues of finance and jurisdiction are resolved and as protection of public health dictates.
- Provide City sewer service to the east I-80 annexation area, either through an agreement with the City to serve the area, or through annexation of the area to the City.

- With the City of Auburn, create a joint powers authority to operate the County's and the City's wastewater systems to assure maximum design, construction, and operational efficiencies.

If the third and fourth mitigation measures identified above prove infeasible, it may be desirable for the County and the City to consider:

- A continuing joint planning effort for wastewater service in the Plan area incorporating the possibility of County-contracted service by the City to areas which can best be served by City facilities or City-contracted service by the County to areas best served by the County.

With or without the implementation of the suggested mitigation measures, wastewater disposal will neither induce growth in the Alternative #2 Community Plan scenario nor constrain such growth. Wastewater system planning, regulations and financing mechanisms in place are adequate to accommodate the planned growth under this alternative. Such growth would, however, occur in the area absent such adequacy (albeit most likely at lower densities), given the growth pressures resulting from the area's amenities and its proximity to the Sacramento metropolitan area.

AUBURN/BOWMAN COMMUNITY PLAN SUGGESTED WASTEWATER GOALS, POLICIES, AND IMPLEMENTATION MEASURES

GOALS:

- Provide centralized, environmentally sound, and cost-effective wastewater collection, treatment and disposal facilities for urban-density development.
- Require environmentally sound and effective long-life onsite wastewater disposal systems for rural development.
- Achieve functional consolidation of wastewater facilities serving the Plan area.

POLICIES:

- Complete, and regularly update, the master planning studies for the facilities necessary to implement functional consolidation.
- Continue the usage of present technically-based criteria for approval of rural development with septic tank/leachfield systems.
- Facilitate the extension of STEP service or conventional wastewater collection service to areas with failing onsite systems.

IMPLEMENTATION MEASURES:

- Adopt by ordinance the administrative procedures for reviewing parcel maps and subdivisions to be served by onsite wastewater treatment and disposal systems.
- Continue the rate and fee structures essential to finance construction, operation and maintenance of consolidated facilities.
- Undertake more precise studies of areas identified as being in need of community sewer service.
- Enter into an agreement with the City of Auburn to serve the east I-80 annexation area (unless the area is annexed to the City of Auburn).
- Create a joint powers authority with the City of Auburn to operate both the County and City wastewater systems.

Or, as an alternative to the fourth and fifth implementation measures listed above:

- Initiate a continuing joint planning effort for wastewater service in the Plan area which incorporates the possibility of County-contracted service by the City to areas which can best be served by City facilities or City-contracted service by the County to areas best served by the County.

DATA SOURCES - WASTEWATER

1. Richard Guillen, City Engineer/Public Works Director, City of Auburn, personal communication.
2. Warren Tellefson, District Sanitary Engineer, Public Works Department, Placer County, personal communication.
3. Lynn Johnson, Supervising Environmental Health Specialist, Environmental Health Division, Placer County Health Department, personal communication.
4. Auburn/Bowman Community Plan Land Use Statistics and Land Use Designation Mapping, Planning Department, Placer County.
5. Draft Placer County SMD 1 Wastewater Treatment Plant Capacity Expansion Report, Harris & Associates, February 1991

6. Specifications for Placer County On-Site Septic Tank Effluent Systems, Placer County
7. Collection System Map, Placer County SMD 1
8. Anderson Geotechnical Consultants, Inc., Geotechnical Report for Auburn Waste Water Treatment Plant Upgrade, October 1990.
9. Cranmer Engineering Inc., City of Auburn Wastewater Treatment Plant Planning Study, March 1985.

CHAPTER THREE

WATER SUPPLY

CHAPTER THREE

WATER SUPPLY

SETTING

Domestic water in the Plan area is principally supplied by three agencies: Nevada Irrigation District (NID), Placer County Water Agency (PCWA), and Christian Valley Community Services District. Figure 5 shows the water service area boundaries of these agencies. Many individual parcels and developments are supplied with pumped groundwater by individual wells. A number of residences still utilize direct connections to irrigation ditches as a water supply.

● GROUNDWATER

Rural residential uses in the northern and western portions of the Plan area generally depend on groundwater for domestic needs. Groundwater in sufficient quantities to supply domestic requirements occurs only along open fractures within metamorphic and granitic rock units. Terrace deposits are of insufficient occurrence to provide a significant groundwater supply.

Sedimentary rock is of insufficient extent to provide a groundwater resource. Permeability is very low because of high cementation of particles. Volcanic rock in the Plan area is impermeable and contains no groundwater. Surface water does penetrate to the underlying conglomerate along open vertical joints in the volcanic deposits.

The predominant rock type in the Plan area is metamorphic. The depth at which groundwater flows occur in metamorphic rock varies significantly. About 25% of domestic wells were, prior to the current drought, completed at less than 90 feet and 75% at less than 160 feet. The fact that significant flows are reported for a few wells (less than 10%), at depths greater than 160 feet, indicates that there was reason for drilling deeper when the occurrence of additional water was predicted and the need was sufficiently high. The average production figure reported at those depths (up to 160 feet) was 14-15 gallons per minute (gpm). It is currently necessary, in many instances, to exceed the previous 160 foot depth to secure adequate water supplies.

There is also a significant amount of granite rock in the Plan area. The most common depth intervals at which groundwater is encountered in the granitic rocks are 60 to 70 feet. The average production for granitic rock wells within the planning area is 9-10 gpm.

In general, groundwater in the Auburn/Bowman area is of moderate to high quality. The only problem areas encountered have been in serpentine rock where groundwater can be salty and brackish. However, in recent months, the Placer County Health Department has noted an excessive nitrate problem, apparently affecting the extreme southeast portion of the Plan area.

Parcels and developments in the Plan area and adjacent to the Plan area (e.g. the Auburn Valley Country Club development) have experienced difficulties in maintaining adequate groundwater-supplied water quantities during recent drought years.

- **SURFACE WATER**

Surface water supplies are, in general, obtained through a series of Pacific Gas and Electric canals bringing water to the Plan area from the Bear and Yuba Rivers. The two major agencies hold the essential water rights to these supplies; Christian Valley purchases water from PCWA. All three agencies treat and distribute water within their service area.

Nevada Irrigation District (NID)

NID serves approximately 1,800 customers in the North Auburn area, both east and west of Highway 49. The District itself covers portions of three counties, and provides both agricultural and domestic water service; it is headquartered in Grass Valley.

NID has indicated that it has more than sufficient water rights to provide for planned growth in its North Auburn service area. The District's Locksley Lane treatment plant, currently 3.0 million gallons per day (mgd) capacity, is to be expanded to at least 4.5 mgd capacity at the existing site. Expansion is anticipated during the summer of 1993.

The District currently estimates a maximum day flow of 1.20 gpm per service. The District system is intertied at two locations to the Placer County Water Agency system.

NID has recently (1987) updated its Master Plan for the North Auburn area; it is proposed to be updated again after the Auburn/Bowman Community Plan is adopted. NID's Master Plan currently provides for storage and for transmission mains sufficient to achieve a maximum fire flow of 3,500 gallons per minute (gpm) for 1½ hours upon system buildout (it is currently 3,300 gpm) in most commercial and industrial areas.

The District currently has a total residential connection fee of \$2,120 for a service requiring a 5/8" meter. Connection fees and the monthly rate structure are sufficient

to fund current master-planned facilities expansions; developers must pay the costs of extending services to their developments.

Placer County Water Agency (PCWA)

The Placer County Water Agency serves the City of Auburn and the adjacent urban portions of the Auburn/Bowman area. Under the Agency's contract with PG&E the District can purchase up to 55,000 acre feet of water annually to supply the Auburn/Bowman area (typically, 55,000 acre feet of annual usage would supply about 18,000 acres of single-family, 4-unit-to-the-acre, urban residential development). The Agency's water supply is sufficient to serve buildout of its service area as projected under Alternative #2 of the Community Plan.

The District has two water treatment plants serving the Plan area, one located north of Bowman and the other ("Auburn") at the intersection of I-80 and the Auburn-Foresthill Road. Each has a 5 mgd capacity. A 10 million gallon storage tank is currently under construction at the Bowman plant, and the expansion of that plant to 20 mgd capacity is being designed and should be completed in 1994. For comparison purposes, the Placer County Planning Department has estimated peak flow demand of Alternative #2 Community Plan buildout for the entire Plan area as 14.6 to 29 mgd.

A master plan for PCWA water service to the Bowman/Auburn area has been adopted by the Agency. The plan provides for a 15 mgd expansion of the Bowman treatment plant. The master plan has ultimate future maximum day demand for the total Bowman/Auburn/Ophir area as 43.5 mgd. This information is presented in the master plan for "information purposes only, to provide the reader with a frame of reference." The calculation is based on full buildout of all parcels included in the 1979 Auburn/Bowman Community Plan and the 1983 Ophir Community Plan areas.

PCWA proposes to finance the planned Bowman treatment plant expansion from current cash reserves and from loan instruments based on developer fees and rates. Current developer fees are \$3,418 for a 5/8" metered residential unit.

Christian Valley Community Services District

This smaller agency is headquartered at 3333 Christian Valley Road and serves about 480 residential customers in the northern portion of the Auburn/Bowman area, north of Dry Creek Road. CVCS D purchases its water supply from Placer County Water Agency and treats that supply at its water treatment plant near the intersection of Westridge Circle and Pondorex Road. After the water is treated, it is pumped approximately two miles to a 1.5 million gallon covered reservoir where it is stored and subsequently distributed to its service area.

In 1990, total water usage was 128 million gallons (mg), an average daily demand of approximately 0.36 mg. During peak summer months, the average daily water flow is approximately .7 mg and winter months average .15 mg. The maximum daily flow is estimated at 1 mg. The treatment facilities are currently reported to be near capacity during peak periods. There are no immediate expansion plans for either the water treatment plant or reservoir. Further development in the Christian Valley Community Services District service area must be preceded by water treatment plant expansion or by service from PCWA.

IMPACTS

As noted, the County has estimated the peak water demand anticipated with Alternative #2 Plan buildout to be 29 mgd. This estimate does not fully take into account the significant water demands associated with commercial, industrial, and public facilities connections and usage. NID has, for example, experienced peak day demands of approximately 1,886 gallons per day (gpd) per connection. At this unit demand, total demand at Plan area buildout would be 34 mgd.

Even with this high demand estimate, it appears that the current expansion plans of the two major water agencies will meet total Plan area needs. PCWA's current planning for 25 mgd of treatment capacity, and NID's program for service to 4,148 customers at the saturation point of the current General Plan projected system buildout (approximately 7 mgd), essentially match maximum projectable system demands for the Plan area. NID has noted, however, that the expansion of its facilities beyond 6 mgd will be very expensive.

The Alternative #2 projected Plan buildout anticipates up to 4,306 units of residential development on parcels of 2.3 acres or more in size. Historically such low-density residential development has principally utilized well supplies. Recent experience during drought years, particularly where large developments of rural estates are involved, has indicated that there are potential problems with reliance on well supplies. These problems may dictate either review of current standards for the evaluation of the adequacy of well supplies or expansion of surface water distribution systems by the major agencies.

The Alternative #2 Plan recognizes existing parcel sizes in Christian Valley. The concurrent possibility of STEP wastewater service to the Christian Valley area, if STEP-served developments north of Christian Valley occur, presages additional treated water demand in the District. Because of increased regulatory agency impacts on water treatment operations, it would be desirable to transfer responsibility for, or to contract with a major agency for, operation of the District's water treatment facility. This transfer of responsibility need not involve a change in district boundaries, but rather a negotiated contractual relationship.

Although not directly related to Community Plan consideration or implementation, concern has been expressed regarding overlap of water supply agency boundaries. Figure

5 demonstrates that the areas of overlap are minimal, even though one such area includes the DeWitt Center area which is proposed for intensive urban development. The general DeWitt Center area is currently served in part by both PCWA and NID. No significant impacts are identified and no mitigation measures for existing or any potential areas of overlap are proposed. The two major agencies have cooperated in providing service to developing portions of the Plan area and duplication of actual facilities is minimal. When the DeWitt Center area is developed, developers will have an opportunity to be served by either major water agency. When such service provision is determined, appropriate boundary changes can be undertaken with the cooperation of the two agencies and LAFCO. Neither agency has expressed a desire to exclude the other from providing such service, and there appears to be no service related reason for selecting one agency, as opposed to the other, at this time. It would be preferable, however, that the major development proposed for the area be served by a single water agency.

Another area of overlap exists between PCWA and CVCSD. CVCSD presently serves the developed portion of the overlap area and it would seem logical for them to continue to serve, however, this is tied to the future of the District, as discussed elsewhere in this report.

Representatives of the Auburn Valley Country Club area have discussed with both the NID and the PCWA the costs of extending surface water supplies to serve their area. The proposals presented have included assessment district/benefit district concepts which would equitably apportion transmission line/distribution line costs to benefitted properties. These conceptual approaches provide the most feasible means of financing such projects when an individual developer or a limited number of homeowners cannot afford to front needed line extension costs on a cash basis. As with the DeWitt Center area, service to this area by a single agency will be preferable.

The usage of raw, untreated, irrigation ditch water for domestic purposes is not acceptable or currently legal. The treatment by homeowners onsite of such water, using proprietary treatment units, is often ineffective. The major surface water suppliers in the Plan area have cooperated to the extent feasible with the Health Department in replacing such non-permitted usage with standard treated surface water supply, and should actively continue to phase out such usage.

It does not appear that water supply is a constraint to properly phased, contiguous development of the Alternative #2 - designated urban-density portions of the Plan area. Water supply may, however, act as a constraint to development of the rural-density portions of the Plan area that must be dependent upon groundwater supplies or upon major, developer-financed distribution system extensions.

MITIGATION MEASURES

Inasmuch as the existing facilities, and master-planned additions to such facilities, of the two major water supply agencies serving the Plan area can accommodate the maximum development projected for Alternative #2, there are no area-wide Plan-related mitigation measures required with respect to surface water supplies.

- Transfer of responsibility for operation of the Christian Valley Community Services District water treatment facility should be explored.
- Closely monitor development within the Christian Valley Community Services District until water treatment plant capacity is expanded.
- Extend a surface water supply to the Auburn Valley Country Club area.

With respect to potential impacts related to Plan implementation and groundwater supplies, potential adverse socio-economic impacts related to well failures may be partly mitigated by:

- Imposition of more restrictive requirements for determination of groundwater supply adequacy in terms of minimum well production per dwelling unit at the time that individual parcels or subdivisions are created.

The Health Department has expressed concern over remaining individual residential canal-served water supplies. It is suggested, as a mitigation measure responsive to that concern, that:

- The Health Department should be directed by the Board of Supervisors to initiate and carry out a continuing program of education and enforcement leading to the replacement of such supplies with safe water sources.

AUBURN/BOWMAN COMMUNITY PLAN SUGGESTED WATER SUPPLY GOALS, POLICIES, AND IMPLEMENTATION MEASURES

GOAL:

- Provide for each resident and business in the Plan area an adequate, reliable, and safe water supply at a reasonable cost.

POLICIES:

- Encourage, through allowable densities and distribution of land uses, the maximum feasible usage of treated surface water supplies rather than groundwater supplies as a basis for land development.
- Encourage continuing cooperation between water supply agencies in order to minimize costs of service and increase reliability of supply and treatment.
- Discourage establishment of additional water treatment facilities not operated by the two major water supply agencies.
- Encourage elimination of existing individual residential canal water supplies and their replacement with safe water sources.

IMPLEMENTATION MEASURES:

- Explore the feasibility of transfer of responsibility for operation of the Christian Valley water treatment facility to a major agency.
- Closely monitor development within the Christian Valley Community Services District until water treatment plant capacity is expanded.
- Facilitate the extension of a surface water supply to the Auburn Valley Country Club area by NID or PCWA.
- Imposition of more restrictive requirements for determination of groundwater supply adequacy in terms of minimum well production per dwelling unit at the time that individual parcels or subdivisions are created.
- Initiation and implementation by the Health Department of an education and enforcement program leading to the replacement of canal-served water supplies with safe water sources.

DATA SOURCES - WATER SUPPLY

1. Vernon Smith, Associate Engineer, Nevada Irrigation District, personal communication.
2. Einar Maisch, Agency Engineer, Placer County Water Agency Engineering Department, personal communication.

3. Lynn Johnson, Supervising Environmental Health Specialist, Environmental Health Division, Placer County Health Department, personal communication.
4. Ed Bailey, Operations Manager, Christian Valley Community Services District, personal communication.
5. Auburn/Bowman Community Plan Land Use Statistics and Land Use Designation Mapping, Planning Department, Placer County.
6. North Auburn Treated Water System Master Plan Update, 1987, Nevada Irrigation District, Vernon Smith and Robert G. Singleton.
7. Final Environmental Impact Report, Bowman Water Treatment Plant Expansion, Placer County Water Agency, 1990; prepared by ECOS, Inc.
8. Revised Draft, Placer County Water Agency Bowman/Auburn Master Plan, January 31, 1991; Placer County Water Agency Engineering Department.

CHAPTER FOUR
FIRE PROTECTION

CHAPTER FOUR

FIRE PROTECTION

SETTING

Fire services are currently provided to the Plan area by the Placer Foothills Consolidated Fire Protection District, the City of Auburn Fire Department, the California Department of Forestry and the Newcastle Fire District. Figure 6 shows the present service areas of the fire protection agencies and station locations.

- **PLACER FOOTHILLS CONSOLIDATED FIRE PROTECTION DISTRICT**

The Placer Foothills Consolidated Fire Protection District boundary includes an area generally west and north of the City of Auburn. Fire stations serving the Plan area are:

Station #1	11645 Atwood Road - North Auburn
Station #2	9305 Crater Hill Road - Ophir
Station #3	12990 Luther Road - Bowman
Station #4	6150 Grass Valley Highway - North Auburn

Station #1 serves as the administrative office and also is the primary response station to North Auburn. Located in Ophir, Station #2 covers the unincorporated area west of Auburn, and Station #3 serves the Bowman area northeast of the Auburn city limits. Situated approximately one mile south of the Nevada/Placer County line, Station #4 has been located to serve a rural area north of Dry Creek along both sides of State Highway 49.

The four fire stations have been situated throughout the District's service area to allow the primary response station to be within a five-mile driving distance. This travel distance standard has allowed the District to maintain an Insurance Service Organization (ISO) rating of 4 for all urban areas served by community water systems.

The ISO uses a Fire Suppression Rating Schedule with ten public protection classifications, with Class 1 receiving the most rate recognition and Class 10 receiving no recognition. The Fire Suppression Rating Schedule defines different levels of public fire suppression capabilities which are recognized in the individual property fire insurance rate establishment procedures.

The District owns and operates six fire engines, four specialized wildland/grassland trucks, three water tankers, one rescue unit and two 100' aerial trucks, and employs 55 firefighters. In addition to the Fire Chief and administrative assistant, there are 7 full-time and 13 part-time firefighters together with 35 paid volunteers.

● **CITY OF AUBURN FIRE DEPARTMENT**

Serving area within the city limits, the Auburn Fire Department operates from five stations. Four of these municipal fire stations are located to serve the populated urban areas, with the fifth station established at the Auburn Airport industrial center. These stations maintain a three-minute response time and are located as follows:

Martin Park Fire Station	High and El Dorado Streets
City Hall Fire Station	1103 High Street (old City Hall)
Maidu Fire Station	Auburn Folsom Road and Maidu Drive
Gietzen Fire Station	Sacramento Street and Auburn Folsom Road
Airport Fire Station	New Airport Road and Earhart Avenue

Located in the northeastern portion of the city, Martin Park Fire Station's primary response area includes east Auburn and the northeast developments near Bowman. The City Hall Fire Station is located at the former City Hall on High Street and serves as a reserve station for central and northern Auburn. The Gietzen Fire Station is located to serve the central and southwestern portions of the city, while the Maidu Fire Station covers an area extending to the southern and southwestern edges of the city limits. Municipal fire departments in California and throughout the nation attempt to maintain a five-minute response time to all exposures. The City of Auburn, with five stations, exceeds this generally accepted standard.

The City presently administers an impact mitigation fee program which is intended to partially offset the cost of fire protection to new developments.

The Department operates 12 fire engines, one aerial ladder based on an engine chassis (Quint) and one rescue truck, and employs two full-time fire service personnel, a part-time fire marshal and an assistant fire chief. With 45 volunteer fire suppression personnel, the City of Auburn has an ISO rating of 4.

● **CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

The California Department of Forestry and Fire Protection (CDF) has primary responsibility for fire suppression and fire prevention services throughout the mountainous regions of California. While the CDF is basically devoted to providing state-mandated wildlands fire protection, it also provides contract fire service protection to individual counties.

With one fire truck assigned from the Placer Ranger Unit Headquarters, located in the Bowman area at Lincoln Way and Rhodes Krueger Drive, the CDF serves the Bowman and Christian Valley area northeast of Auburn. Under contract with Placer County to provide urban fire services to the Bowman/Christian Valley area, the CDF relies on automatic aid from both the Auburn Fire Department and the Placer Foothills Consolidated Fire Protection District.

With the automatic aid agreements and available water, the Bowman area has a 4 rating by the ISO. The Christian Valley area, which is outside the five mile driving distance from the CDF station at Bowman, is not rated by the ISO. In rural areas, fire stations are generally located within a five-mile driving distance from developed areas. However, there are no specific standards set forth by State or federal agencies for such areas.

● **NEWCASTLE FIRE PROTECTION DISTRICT**

Approximately 200 acres of the Auburn/Bowman Community Plan area is within the Newcastle Fire Protection District. This area includes the Auburn Indian Rancheria, an unincorporated island situated in the southwestern portion of the City of Auburn, and also includes lands along Indian Hill Road just west of the Auburn city limits.

Located in the community of Newcastle, the fire station is situated at the intersection of Newcastle Road and Indian Hill Road, approximately 1.5 miles west of the Auburn/Bowman Community Plan boundary. With six part-time paid fire suppression personnel, four fire engines, one water tanker and a rescue truck, an ISO rating of 7 has been established for the District. An impact mitigation fee is levied on all new construction. The funds are used to expand fire services to meet growth demands.

● **PLACER HILLS FIRE PROTECTION DISTRICT**

Although the Placer Hills Fire Protection District serves an area northeast of and outside the Plan area, the boundaries are coterminous with the CDF responsibility area and the Placer Foothills Consolidated Fire Protection District. The District maintains three fire stations and operates eight fire engines and two water tankers. Fire suppression personnel include 49 volunteers and one paid fire prevention officer.

IMPACTS

Staffing levels are not established by the number of employees (volunteer or paid) that a department maintains, but by the average number of fire suppression personnel that respond to emergency calls. Existing fire protection services within the Placer Foothills Consolidated Fire Protection District and the City of Auburn, with staffing levels and response records well within accepted standards, are generally adequate to meet present demands. In the southwestern portion of the Plan area, the Newcastle Fire Protection

District and/or the Auburn Fire Department provide a reasonable level of fire service, although it would be more logical for the area, including the Indian Rancheria, to be served exclusively by the City of Auburn.

The level of fire protection service in the Bowman/Christian Valley area northeast of Auburn does not meet the generally accepted fire standards available to the remaining portions of the Auburn/Bowman Community Plan area. The service level for this area reflects a lack of adequate fire service funding by Placer County. CDF could, with adequate funding, provide the additional equipment and staffing necessary to provide fire service levels equal to the City of Auburn and/or the Placer Foothills Consolidated Fire Protection District.

A structure fire in the CDF protection area receives a response by only one fire engine and one or two firefighters. In comparison, the Placer Foothills Consolidated Fire Protection District attacks a structure fire with a minimum of two fire engines and a water tanker. Between 5 and 15 firefighters would also respond to an emergency. However, as a result of automatic aid (a dispatcher automatically alerts another department) or mutual aid (CDF requests assistance), structure fires in Bowman and Christian Valley actually receive a higher level of service. In fact, fire protection services are, to a degree, being subsidized by other districts and agencies. Community Plan Alternative #2 will increase the difficulty of providing adequate fire protection in the Bowman/Christian Valley area as additional residential, commercial and industrial growth occurs.

In order to adequately serve its present area of responsibility CDF would need to do the following:

- Construct a new station north of Dry Creek Road and west of I-80 (bringing Christian Valley within the five mile response distance)
- Purchase a water tender and 100 foot ladder truck
- Employ additional personnel sufficient to allow 3 firefighters to be on 24 hour duty
- Establish a minimum volunteer force of 15 persons

Although taking the above steps would permit CDF to adequately serve the area, the area can be more cost effectively and efficiently served through expansion of the Placer Foothills Consolidated Fire Protection District.

Should the Local Agency Formation Commission approve an expansion of the Placer Foothills Consolidated Fire Protection District boundaries, the served property owners and the County of Placer would pay higher fire protection costs. The District currently levies an annual Fire Suppression Assessment fee of \$48 for single family homes (\$24 for mobile homes). Currently, Placer County's contract provides for an \$18,000 annual payment to

CDF for fire protection services in the Bowman/Christian Valley service area. Using the present tax sharing provisions with the Placer Foothills Consolidated Fire Protection District as a guide, the 1990-91 annual cost would be approximately \$40,000.

If the North Bowman/Christian Valley area annexes to the Placer Foothills Consolidated Fire Protection District, the District would close Station #3 and build a new station on a three to five acre site north of Dry Creek Road and west of I-80. Preliminary estimates place construction and development costs at \$300,000 for this facility, a 4,000 square foot structure which includes living quarters for 24-hour fire protection services. Although the equipment from Station #3 would be moved to the new North Bowman area, additional equipment would be required. This equipment includes a water tanker and 100' aerial and a wildland/grassland fire truck which would cost approximately \$200,000 to \$250,000.

This new facility should be staffed by three full-time fire suppression personnel. Nights and weekends would be covered by part-time employees with paid volunteers providing backup support for fire calls and emergency medical services. In addition to fire suppression and emergency medical services, full-time personnel would maintain the station and all equipment and engines.

With the development proposed in Alternative #2, it is assumed that both the Placer Foothills Consolidated Fire Protection District and the Auburn Fire Department will be adding and/or replacing fire engines. However, land use distribution proposed by Alternative #2 will not result in a need for additional stations.

Although the Newcastle Fire Protection District can serve the southwestern portion of the Plan area, as development occurs, the City of Auburn should extend fire protection to this territory. City fire protection service has been significantly improved in the southern portion of the community with recent construction of the City's Maidu Fire Station located at the northeast corner of Auburn Folsom Road and Maidu Drive. Response time from this station would not exceed 5 minutes.

Although extensive annexation to the north and northwest along Grass Valley Highway (Highway 49) is not anticipated, fire protection services in this area should remain with the Placer Foothills Consolidated Fire Protection District. Annexations that alter fire protection responsibilities in North Auburn would not improve the level of fire service, but would reduce District revenues and therefore have an adverse financial impact on the District's current and future operations. There is a current agreement between the City of Auburn and the District regarding future annexations north and northwest of the City, which permits fire service to remain with the District.

The proposed east I-80 annexation could result in improved fire protection services to this portion of the Bowman area. The primary improvement would result from enforcement of effective fire code regulations and active fire prevention services. Alternatively, this area could be annexed to the Placer Foothills Consolidated Fire Protection District; however,

response time from the recommended new North Bowman/Christian Valley station would not compare to the City's Martin Fire Station presently located at the Foresthill and I-80 interchange. Annexation and subsequent provision of City fire protection service to the area generally east of I-80 and south of Foresthill Road would not have an adverse financial impact on the Placer Foothills Consolidated Fire Protection District, as this area is presently outside the District's boundary. Annexation to the City, or to the Placer Foothills Consolidated Fire Protection District, would reduce the CDF's initial fire suppression responsibilities.

With the development of a new station north of Bowman, the Placer Foothills Consolidated Fire Protection District would need to add another 100-foot aerial truck. Although the City of Auburn has a 40-foot aerial, this engine needs to be replaced and/or supplemented with a 100-foot aerial to meet the need for fire protection of the multi-story building construction that can be expected within the Plan area during the next twenty years.

MITIGATION MEASURES

The following mitigation measures are recommended to reduce the impacts of growth anticipated by Alternative #2.

- The Placer Foothills Consolidated Fire Protection District should continue to serve North Auburn and should be expanded to also serve the North Bowman/Christian Valley area now covered by CDF from its Placer County Ranger Unit Headquarters in Bowman.
- Upon expansion of the Placer Foothills Consolidated Fire Protection District to encompass North Bowman/Christian Valley, the District should close Station #3 and build a new station north of Dry Creek Road.
- Provide improved fire protection service to the area described as the proposed I-80 annexation area (see Figure 4) through annexation of the area to the City, or through annexation to the Placer Foothills Consolidated Fire Protection District.
- Provide improved fire protection service to the areas south and southwest generally to the Auburn/Bowman Community Plan boundary through annexation to the City of Auburn.
- During the planning period both the City of Auburn and Placer Foothills Consolidated Fire Protection District will need to improve their aerial capacity including more 100-foot aerial trucks.
- The County and City should consider creation of Mello-Roos districts in newly developing areas to offset the costs of capital outlay as well as ongoing fire

services operations. Impact mitigation fees should also be considered by the fire districts to offset capital costs for fire stations as identified herein and as may be incorporated in the updated Auburn/Bowman Community Plan.

- The California Department of Forestry (CDF) should continue to provide state-mandated wildlands protection throughout the Community Plan area, and to provide contract services, as needed.

AUBURN/BOWMAN COMMUNITY PLAN SUGGESTED FIRE PROTECTION GOALS, POLICIES, AND IMPLEMENTATION MEASURES

GOALS:

- Provide fire safety through increased emphasis upon fire prevention programs, fire code enforcement and fire safety education.
- Maintain a highly trained fire fighting force which will respond quickly and with adequate resources to control emergency fire and rescue incidents.
- Provide self supporting fire protection service.

POLICIES:

- Identify key fire loss problems and design appropriate fire safety education programs to reduce fire incidents and losses.
- Control fire losses and fire protection costs through continued emphasis upon automatic fire detection, control and suppression systems.
- Continue and strengthen automatic aid agreements to take maximum advantage of cost savings and improved services available through the joint use of existing public resources.
- Maintain a prefire planning program with selected high risk occupancies reviewed at least annually.

IMPLEMENTATION MEASURES:

- Continued provision of fire protection to North Auburn by the Placer Foothills Consolidated Fire Protection District.
- Expansion of the Placer Foothills Consolidated Fire Protection District to serve the North Bowman/Christian Valley area.

- Closure of Station #3 and construction of a new station north of Dry Creek Road upon expansion of the Placer Foothills Consolidated Fire Protection District to encompass North Bowman/Christian Valley.
- Execution of an agreement with the City of Auburn to serve the east I-80 annexation area (unless the area is annexed to the City of Auburn) or annexation of the area to the Placer Foothills Consolidated Fire Protection District.
- Transfer responsibility for fire protection in the southwestern Auburn/Bowman Community Plan area to the City of Auburn.
- Acquisition of additional 100-foot aerial trucks by the City of Auburn and Placer Foothills Consolidated Fire Protection District during the planning period.
- Creation of Mello-Roos districts by the County and City in newly developing areas to offset the costs of capital outlay and ongoing operational costs, and imposition of impact mitigation fees by Placer County to offset capital costs for fire stations.
- Continued provision by CDF of wildlands protection throughout the Community Plan area, and provision of contract services as needed.
- Inspect all new construction and remodel projects for fire code compliance prior to issuance of certificates of occupancy.
- Inspect and test all automatic fire extinguishing systems in accord with State Fire Marshal regulations and the National Fire Protection Standards.
- Establish training requirements with firefighter certification for paid fire fighters and volunteer firefighter certification for on-call firefighters.

DATA SOURCES - FIRE PROTECTION

1. Ron Wright, Chief, Placer Foothills Consolidated Fire Protection District, personal communication
2. Hank Weston, Director, California Department of Forestry, personal communication.
3. Jim Hoffmier, Battalion Chief, California Department of Forestry, personal communication
4. Sam McLain, Chief, Auburn Fire Department, personal communication

5. **Howard Leal, Fire Marshal, Auburn Fire Department, personal communication**
6. **Roy Vega, Chief, Newcastle Fire Protection District, personal communication.**
7. **Glenn Nelson, Fire Prevention Officer, Placer Hills Fire Protection District, personal communication.**
8. **Auburn/Bowman Community Plan Land Use Statistics and Land Use Designation Mapping, Planning Department, Placer County.**
9. **Fire District Map, Placer Foothills Consolidated Fire Protection District.**
10. **Managing Fire Services, International City Management Association, Municipal Management Series.**

CHAPTER FIVE
PUBLIC PROTECTION

CHAPTER FIVE

PUBLIC PROTECTION

SETTING

The law enforcement needs of the Auburn/Bowman Plan area are served by two agencies, the Placer County Sheriff's Department and the City of Auburn Police Department. In addition, traffic enforcement and accident investigations in the unincorporated area are provided by the California Highway Patrol. The County Sheriff's Department is responsible for law enforcement in the unincorporated area. The Auburn Police Department is responsible for law enforcement within the city limits and maintains informal cooperative service agreements with the Sheriff's Department. There is also a formal mutual aid agreement in effect.

● PLACER COUNTY SHERIFF'S DEPARTMENT

The Placer County Sheriff's Department has headquarters located in the DeWitt Center at 11500 "A" Avenue in North Auburn, as shown on Figure 7.

The Department has a staff of 275 permanent employees; 170 of those are sworn positions and assigned to enforcement and custodial duties. The remaining 105 employees are civilians performing various administrative, communications and clerical duties. The full-time staff is augmented by 35 reserve officers. The Department is organized in a traditional manner consisting of five divisions: patrol services, investigations/coroner, corrections, marshals and a Tahoe sub-station. With the exception of the captain in charge of the Tahoe sub-station, who reports directly to the Sheriff, all division commanders report to the chief deputy. The Department provides service to residents of Placer County which encompasses some 1,400 square miles and serves a population of 90,000 in the unincorporated area.

Presently, six deputies are assigned to the Auburn/Bowman Plan area, providing service on a 24-hour, 7 day a week basis. Deputies work out of the Sheriff's headquarters station which is located in the Plan area.

During calendar year 1990, the Department responded to an estimated 35,000 calls for service in the entire county. It is estimated that 2,450 or 7 percent of all calls for service were in the Plan area. Although exact figures are not available, a major portion of these calls were of a minor nature such as shoplifting, service station drive-outs, thefts, and aid to motorists. Due to a lack of data, an analysis of percentage of calls for service to the

population in the Auburn/Bowman Plan area was not made. However, it is assumed that the calls for service are about average in relationship to the population of the area.

Calls for service are prioritized as follows: priority one calls, which include all in-progress felonies or are life threatening, are responded to in approximately 8 minutes. Priority two calls include all felony calls not considered life threatening and are responded to the same as priority one calls. Priority three calls are all other calls and responded to as officers are available. The time element will vary; data is not available.

Average response time to calls in the project area is slightly less than the accepted 12 minute response time in most other areas of the county. Given the staffing patterns in most Sheriff's departments, greater distances to travel to calls and expanded patrol areas, compared to cities, the 8 to 12 minute response time is well within acceptable limits.

The methodology used by the Department to determine staffing levels is a 1:1,000 ratio of officers to population. This exact ratio is not always possible to maintain and will vary depending on available funding. This is an accepted national standard used by many law enforcement agencies.

● AUBURN POLICE DEPARTMENT

The Auburn Police Department is located at 1215 Lincoln Way at the Auburn Civic Center in central Auburn (See Figure 7).

The Department currently has a permanent staff of 28 full-time employees, of which 20 are sworn positions and 8 are civilians. The staff includes one police chief, one captain, one lieutenant, four patrol sergeants, two detectives, eleven police officers and eight civilians who perform the duties of secretary, parking enforcement, dispatcher/clerks, and animal control. Department staff is augmented by a reserve officer working vacation relief and two part-time employees, a police services aide, who works 20 hours a week, and a part-time dispatcher who works one day a week. The Department provides service to a city with a population of approximately 10,500, containing 4,148 acres.

Calls for service are prioritized as follows: priority one calls which include all in-progress felonies or are life threatening are responded to in an average time of 3.3 minutes. Priority two calls include all in-progress misdemeanor calls or felony calls where life is not threatened and have an average response time of 6.0 minutes. Priority three calls are all other calls and have an average response time of 11 minutes. Response times are well within acceptable national and state standards.

The two approaches used by the Department to determine staffing levels are the ratio of officers to population and the calls for service formula. Calls for service ratios are not used herein since the data was not available from the city. The national standard for ratio of officers to population is 1:1,000. The California Peace Officers Commission recommends

using the calls for service formula: allowing one-third of an officer's time to respond to calls for service (obligated time), one-third of the time for preventive patrol (unobligated time), and one-third administrative time (reports, personal time, etc).

Presently, the City of Auburn is considering the proposed east I-80 annexation (see Figure 4). The Department estimates that if the area under consideration is annexed to the City, five additional police positions would be required to provide the City's existing level of service to the newly annexed area. The added staff would consist of four police officers and one detective and would serve the needs of this area when fully developed.

The Department has recently moved into a new 9,000 square foot law enforcement facility. The facility was planned with future growth in mind and is intended to accommodate law enforcement needs of the projected population growth for the Plan area. The new police facility does not include a jail, as all prisoners are lodged at the Placer County Jail which is located within four miles of the city center.

IMPACTS

Given the total population described in Alternative #2 for the Plan area, from a low of 27,364 to a high of 54,255, and applying the ratio of officers to population of 1:1,000, a total of 21 to 48 additional positions would ultimately be required to provide the current level of service to the Plan area by either the Sheriff's Department or the Auburn Police Department or a combination of the two agencies. This is in addition to current Sheriff's personnel and personnel needed to serve planned population within the present Auburn city limits. Assuming development would occur in an orderly manner over the next twenty years, officers would need to be added at the rate of 1 to 3 officers annually.

With the planned Alternative #2 growth of the Plan area, it will be difficult for the Sheriff's Department to maintain its current level of staffing of officers to population. There should be a commitment of funds to accommodate an increase in staff of 1 to 3 new deputies a year over the next 20 years. Much of the planned development in the Plan area is urban in nature, and therefore involves a higher level of service expectation on the part of residents: shorter response times of 3 to 5 minutes for emergency calls as compared to the present 8 minute response by the Sheriff's Department.

Associated with the addition of sworn officers to staff the Plan area by either the Sheriff's Department or the Auburn Police Department, additional support personnel will be required: dispatch personnel, records clerks, and custodial personnel. However, there is insufficient information to calculate the exact impact on support service staffing. Likewise, equipment needs - vehicles and safety equipment - must be determined as personnel are added. Typical rates for conventional urban police departments, in the absence of more complete data regarding local calls for service and other factors, may be used in derivation of gross estimates of support staff and equipment needs. Support staff (non-sworn) personnel may be projected as 25% of sworn officer needs. Vehicle needs may be

estimated, in the absence of a personalized vehicle assignment program and assuming usage of a motor pool by investigation and specialty personnel, as one vehicle per five sworn officers.

The Placer County Sheriff's headquarters is a converted military facility constructed in the 1940s which houses the administrative, patrol and investigative units of the department. The facility is considered obsolete and a new facility is needed, a need which will be intensified by Plan area development. A County Criminal Justice Master Plan is in progress. It will identify the need for new facilities as well as methods of providing such facilities.

The present jail facility located at 2775 Richardson Drive in Auburn is overcrowded, with 140 beds. A new 230-bed facility is currently under construction at the same location and is due for completion by the fall of 1991. Although the jail is separated from the Sheriff's headquarters, it is within the DeWitt Center complex. Due to present jail overcrowding and an increasing number of arrests, the Department estimates that the new jail facility will be at maximum capacity by the end of 1991. There are no plans under consideration to expand the current jail facility or build another jail at this time. It should be noted that jail needs reflect the growth of the entire County, not just that of the Auburn/Bowman area. However, growth at the Alternative #2 level will have a significant impact on an already overcrowded jail facility and will contribute to the need for additional jail construction.

The Sheriff's Department has expressed its desire to continue to serve the Auburn/Bowman area as it urbanizes. The City of Auburn has expressed a desire to serve portions of the Plan area through annexation within their Sphere of Influence. The new Auburn Police Department facility was planned with future growth in mind and the County is also planning for future growth as evidenced by the preparation of a new Criminal Justice Master Plan.

MITIGATION MEASURES

The following mitigation measures are recommended to reduce the impact of Alternative #2 on public protection facilities/services:

- The Placer County Sheriff's Department and the Auburn Police Department should continue with their cooperative services agreement for serving the fringe areas of the city. A good working relationship presently exists between the two agencies, predicated upon mutual trust and respect. This relationship must be strengthened and extended into the years ahead.
- As the Plan area becomes more urbanized in accord with the Community Plan, a joint planning effort should be undertaken between the Placer County Sheriff's Department and the Auburn Police Department to insure that law enforcement meets the needs of the community.

- As the Plan area becomes even more densely populated near the Auburn city limits, annexation to the city of the most urbanized areas may be an appropriate alternative. Absent such annexation, increases in Sheriff's Department staffing to enable provision of urban-level services should be considered.
- Incorporate an impact mitigation fees program or Mello-Roos financing mechanism in the Community Plan, addressing the needs of law enforcement. The capability to serve the Plan area by either agency depends largely on their respective financial ability to pay for services. Therefore, future financial constraints need to be assessed and the impacts known well in advance of any commitments to serve the area.

The ideal approach to providing law enforcement services to the Plan area would consolidate the Placer County Sheriff's Department and the Auburn Police Department into one facility, sharing an integrated records and communications system, along with sharing the cost of support personnel. The Sheriff's Department would serve those areas more rural in nature and the Auburn Police Department would provide service to the more densely populated areas. It is evident that the ideal approach to providing law enforcement to the project area through a functional consolidation of the two agencies is not practical at this time. The Sheriff's Department is in need of a new headquarters building and additional jail facilities in order to maintain its current level of service to this and other areas of the county. To consider consolidation of facilities or services would not be feasible for this reason, as well as for reasons of jurisdictional and employee concerns.

Growth in the Plan area will occur regardless of which agency provides law enforcement services to the area. However, implementation of the suggested mitigation measures will reduce the negative public protection impacts of such growth.

AUBURN/BOWMAN COMMUNITY PLAN SUGGESTED PUBLIC PROTECTION GOALS, POLICIES, AND IMPLEMENTATION MEASURES

GOAL:

- Provide public protection services which are appropriate for the urban and rural development proposed by the Community Plan, increasing the level of such services as development occurs.

POLICIES:

- Undertake, within the two public protection agencies serving the Plan area, joint planning studies regarding functional areas of shared staff services, cooperation and coordination which will improve public protection in the Plan area.

- Adequately finance public protection agencies' needs for facilities expansion, staffing, and equipment to correspond to Plan area growth and development.

IMPLEMENTATION MEASURES:

- Continuation of the cooperative services agreement between the Placer County Sheriff's Department and the Auburn Police Department for the fringe areas of the City of Auburn.
- Addition of staff and support services by the Sheriff's Department sufficient to provide an urban level of law enforcement within unincorporated portions of the Plan area.
- Implementation of an impact mitigation fees program and/or Mello-Roos district financing in newly developing areas, which address the needs of law enforcement.

DATA SOURCES - PUBLIC PROTECTION

1. Larry Newman, Captain, Patrol Services, Placer County Sheriff's Department, personal communication.
2. Michael Morello, Police Chief, Auburn Police Department, 1103 High Street, personal communication.
3. Auburn/Bowman Community Plan Land Use Statistics and Land Use Designations Mapping, Planning Department, Placer County.
4. Local Government Police Management, International City Management Association, Municipal Management Services.