



Municipal Service Review: Background Report

Final

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Yuba Local Agency Formation Commission



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ACRONYMS

ADWF:	Average dry weather flow
AFB:	Air Force Base
afa:	Acre-feet per annum
ccf:	Hundreds of cubic feet
CCTV:	Closed circuit television
CEQA:	California Environmental Quality Act
cfs:	Cubic feet per second
CIWMB:	California Integrated Waste Management Board
CY:	Calendar year
DFG:	California Department of Fish and Game
DWR:	California Department of Water Resources
EPA:	U.S. Environmental Protection Agency
ERAF:	Educational Revenue Augmentation Fund
FPD	Fire Protection District
FY:	Fiscal year
GIS:	Geographic Information Systems
gpm:	Gallons per minute
IRWMP:	Integrated Regional Water Management Plan
ISO:	Insurance Services Organization
JPA:	Joint Powers Authority
LAFCO:	Local Agency Formation Commission
MCL:	Maximum Contaminant Level
mg:	Millions of gallons
mgd:	Millions of gallons per day
MS4:	Municipal separate storm sewer systems
MSR:	Municipal Service Review
NA:	Not applicable
NP:	Not provided
NPDES:	National Pollutant Discharge Elimination System
OPR:	Governor's Office of Planning and Research
PWWF:	Peak wet weather flow
RCD:	Resource conservation district
RD:	Reclamation District
RWQCB:	Regional Water Quality Control Board
SCADA:	Supervisory Control and Data Acquisition
SDWA:	Safe Drinking Water Act
SOI:	Sphere of influence
SWP:	State Water Project
SWRCB:	State Water Resources Control Board
TDS:	Total dissolvable solids
TMDL:	Total maximum daily load
USBR:	U.S. Bureau of Reclamation
UWMP:	Urban Water Management Plan
WWTP:	Wastewater treatment plant

P R E F A C E

Prepared for the Yuba Local Agency Formation Commission (LAFCO), this report is a countywide municipal service review—a state-required comprehensive study of services within a designated geographic area. This MSR focuses on local agencies and other municipal service providers in Yuba County.

C O N T E X T

Yuba LAFCO is required to prepare this MSR by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code §56000, et seq.), which took effect on January 1, 2001. The MSR reviews services provided by public agencies—cities and special districts—whose boundaries and governance are subject to LAFCO. In order to provide comprehensive information on service provision, other service providers—private companies and public agencies which are not subject to LAFCO—are included in this MSR.

C R E D I T S

The authors extend their appreciation to those individuals at many agencies that provided planning and financial information and documents used in this report. The contributors are listed individually at the end of this report.

Yuba LAFCO Executive Officer, John Benoit, provided project direction and review. Credit for archival review and organization undertaking belongs to John Benoit and his team, including LAFCO clerk Paige Hensley, consultant Alexander Hebert-Brown and LAFCO analyst Christopher Hodge. Alexander Hebert-Brown conducted boundary archival research and coordinated mapping. Jerry Henry of the Yuba County Information Technology Division prepared maps and conducted GIS analysis.

This report was prepared by Burr Consulting. For planning and environmental consultation, Burr Consulting coordinated with EDAW, Inc. Beverly Burr served as project manager. Jennifer Stephenson served as lead analyst. Alexander Hebert-Brown and Cynthia Schuster served as analysts. Research assistance was provided by Oxana Kolomitsyna and Radu Oprea.

1. EXECUTIVE SUMMARY

This is the first countywide Municipal Service Review (MSR) report prepared for the Yuba Local Agency Formation Commission (LAFCO). An MSR is a State-required comprehensive study of services within a designated geographic area, in this case, Yuba County. The MSR requirement is codified in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56000 et seq.). Once MSR findings are adopted, the Commission will update the spheres of influence (SOIs) of cities and special districts in Yuba County.

SERVICE PROVIDERS

This report focuses on municipal services in Yuba County. Water, wastewater, flood control and drainage, fire, emergency medical, law enforcement, transportation, park and recreation, cemetery, library, mosquito and vector control, and resource conservation services are included. The focus of the review is service providers under LAFCO jurisdiction within Yuba County, as shown in Table 1-1.

Table 1-1: Local Agencies

Cities	Levee & Reclamation Districts
City of Marysville	Marysville Levee District
City of Wheatland	Reclamation District #10
Cemetery Districts	Reclamation District #2103
Browns Valley Cemetery District	Reclamation District #784
Brownsville Cemetery District	Reclamation District #817
Camptonville Cemetery District	Water Districts
Keystone Cemetery District	Brophy Water District
Marysville Cemetery District	Browns Valley Irrigation District
Peoria Cemetery District	Camp Far West Irrigation District
Smartville Cemetery District	Cordia Irrigation District
Strawberry Valley Cemetery District	Linda County WD
Upham Cemetery District ¹	Nevada Irrigation District ¹
Wheatland Cemetery District	North Yuba Water District
Community Services Districts	Olivehurst PUD
Camptonville CSD	Ramirez Water District
District 10-Hallwood CSD	South Feather Water & Power Agency ¹
Loma Rica-Browns Valley CSD	South Yuba Water District
River Highlands CSD	Wheatland Water District
Fire Districts	Yuba County Water Agency
Dobbins-Oregon House FPD	Other Districts
Foothill FPD	Sutter-Yuba Mosquito and Vector Control
Linda FPD	District ¹
Plumas/Brophy FPD	Yuba County Resource Conservation District
Smartville FPD	County Service Areas (44)
Note: (1) Multi-county local agency for which the principal LAFCO is other than Yuba.	

The report also includes information on private service providers and other governmental service providers to the extent necessary to establish relationships, quantify services, and provide a

comprehensive overview of services in Yuba County, recognizing that LAFCO has no authority over these types of agencies.

GROWTH

The countywide population has grown by 19 percent, from 60,219 to 71,929, between 2000 and 2008. Since 2000, the total acreage of prime farmland in Yuba County has decreased by nearly six percent as a result of development in the southwestern part of the County.

There are five centers of planned and proposed development in the County: Plumas Lake, City of Wheatland SOI, East Linda, North Arboga, and the Brophy/South Yuba area northwest of Wheatland along SR 65. Development has been proposed or planned on 75 percent of land in Plumas Lake, 59 percent in the Wheatland SOI, 47 percent in East Linda, 27 percent in North Arboga, and 15 percent in Brophy/South Yuba.

Proposed and planned developments would add 62,470 dwelling units and 1,040 acres of non-residential development. The population would grow to 254,483 if such potential development in the MSR area materializes, and higher if further development should occur. Transportation and water planners are anticipating substantially less growth. Increased communication between land use and infrastructure planners is needed to ensure that long-term water and transportation planning accounts for the future needs of the area.

The jobs-housing balance is relatively low in the unincorporated areas and Wheatland. By prioritizing development projects that would create local jobs, land use authorities may attempt to achieve a more desirable jobs-housing balance.

Urbanization and growth present a number of challenges to the MSR area in balancing the competing needs and preferences of agricultural and urban uses.

WATER

As a water-rich area, Yuba County has adequate water supplies on the whole. Yuba County Water Agency (YCWA) and Browns Valley Irrigation District (BVID) are major water rights holders whose future water supplies are affected by increased instream flow requirements of the Lower Yuba River Accord.

Certain areas with relatively low well yields need adequate water supplies and infrastructure capacity for delivery of surface water:

- Browns Valley Irrigation District (BVID) needs pipeline infrastructure to extend raw water service to unserved portions of its boundary area. The planned Spring Valley development needs water treatment and conveyance infrastructure, which would be developer funded.
- The North Yuba Water District (NYWD) lacks distribution and conveyance capacity to deliver adequate water to its service area. A pipeline is needed to provide adequate capacity. The distribution system is undersized and in poor condition, and needs to be replaced or rehabilitated.

- Nevada Irrigation District (NID) lacks treatment and upstream canal capacity needed to accommodate even minimal growth in the Smartville area. NID is required by a 1926 Railroad Commission Order to serve this area, but has remaining capacity for only nine domestic connections. Needs include a new water treatment plant site and facility, or alternatively a pipeline from the Lake Wildwood water treatment plant.
- As a result of groundwater overdraft in the Wheatland Water District (WWD) area, well yields are low in the area north of Dry Creek. Surface water supplies are needed and related canal infrastructure is being developed by YCWA. WWD needs to plan and develop a local distribution system to ensure that the water is put to beneficial use by 2010.

Groundwater quality is generally good in the South Yuba Groundwater Basin, but is saline in portions of the WWD and South Yuba Water District (SYWD) service areas. Groundwater contamination has occurred on Beale AFB, although the water is not used for drinking purposes and the problem is being remediated.

Emergency water supplies are provided in Wheatland, Marysville, Olivehurst Public Utilities District (OPUD) and Beale AFB service areas, but Linda County Water District (LCWD) and Smartville have no water storage facilities. The relatively isolated Challenge, Rackerby and Forbestown communities depend on water storage tanks that are leaking and in poor condition and need replacement. Camptonville and Gold Village need additional water storage to ensure adequate water supplies during periods of shortage.

As urbanization and growth occur, areas presently served by surface water would likely be served by urban water purveyors presently dependent on groundwater. Due to historic overdraft of the South Yuba Groundwater Basin, there may be inadequate groundwater supplies to serve future development in the long term. Actual impacts on the groundwater subbasin would depend greatly on the extent of existing surface and groundwater use on land that would be urbanized in the future. To grow and plan responsibly, an evaluation should be conducted of the safe annual yield of the groundwater subbasin and the nature of current irrigation practices on land that would be urbanized in the future.

In the meantime, major water rights holders, particularly BVID and YCWA, should make best efforts to preserve water rights and extend pending deadlines for perfection of those rights to ensure availability of surface water supplies for future municipal uses. Given a potential need for treated surface water to serve future municipal needs, there are significant policy questions and challenges for agricultural and urban interests in Yuba County to resolve. The water purveyors and land use authorities need to develop a forum for ongoing discussion and resolution of these issues. To date, no agency has taken the lead in tackling this controversial policy issue.

FLOOD

Urban areas must achieve protection from a 200-year flood event. Levee integrity standards have increased substantially as a result of recent floods in California and New Orleans. Substantial levee investments are being made to ensure that urban areas in Yuba County receive needed flood protection.

Reclamation Districts (RDs) 10 and 817 serving rural areas have unacceptable levee maintenance records. RD 817 has not imposed assessments to fund appropriate service levels; whereas, RD 10

imposed an assessment for the first time in 2008. RD 2103 provides adequate services largely through volunteer efforts, but will need funding for paid staff as urbanization proceeds. RD 784 does not maintain levees to an urban standard due to lack of funding; its drainage responsibilities overlap with the County and drainage services are not presently adequate. Marysville Levee District provides adequate maintenance, although funding per levee mile is below the urban standard.

A regional levee maintenance program could offer reclamation districts professional staff and appropriate equipment, and enhance service levels.

Those benefiting from levees should contribute to maintenance costs. Annexation of the eastern portions of the Linda and Olivehurst communities to RD 784, and reorganization of RD 817 would better align boundaries with the areas benefited.

WASTEWATER

LCWD, Marysville and Wheatland need to upgrade wastewater facilities to meet evolving regulatory requirements. Facility sharing would help providers reap economies of scale. Marysville is operating near its permitted capacity. Conveyance of Marysville flows to the upgraded LCWD wastewater plant may be the most cost-effective solution. Another option is the conveyance of Marysville and LCWD flows to OPUD. Wheatland needs to build a new wastewater treatment plant (WWTP) to accommodate growth. Wheatland has an opportunity to collaborate with neighboring Beale Air Force Base in developing adequate facilities; the base seeks an outside party to invest in its aging WWTP.

There are as many as 35,675 housing units planned for areas not presently within any wastewater providers' boundary area. Of these, 14,730 units are planned for areas within the City of Wheatland's existing SOI. Although OPUD has already upgraded its WWTP, the existing site can only be expanded to accommodate build-out of its existing service area and SOI—Plumas Lake, North Arboga and Olivehurst. To serve additional flows, OPUD would have to acquire additional land for further expansion. Growth areas would most likely be served by LCWD and Wheatland. A dividing line in the vicinity of Ostrom Road may be appropriate to accommodate gravity flows and minimize infrastructure costs.

River Highlands CSD has struggled to provide appropriate service levels. The 84 homes in the Gold Village development pay relatively high sewer rates to fund replacement of a failed plant. The very small district has management, financing and regulatory compliance challenges. Accountability for community service needs is minimal.

FIRE

Marysville, Linda Fire Protection District (LFPD), OPUD and Loma Rica-Browns Valley Community Services District (LRBVCSO) provide the highest service levels at present, offering fire stations that are staffed 24 hours a day. These providers need additional financing and efficiencies to attain standard urban service levels of four professional firefighters staffing each fire station.

Wheatland, Plumas Brophy Fire Protection District (PBFPD) and Smartville Fire Protection District (SFPD) offer stations that are staffed with paid firefighters during daytime hours, and rely on call firefighter response in the evenings and on weekends. They need additional financing and fire stations equipped with dormitory facilities to provide 24-hour service.

In the foothill areas, providers serve expansive territory with limited resources, and provide service largely through volunteer efforts. Low densities in these areas do not yield enough revenue to fund staffed fire stations.

Only within the city limits of Marysville and Wheatland do response times meet the National Fire Protection Association guideline of six minutes at least 90 percent of the time. Nonetheless, most service providers' response times meet State guidelines. Bi-County Ambulance response times exceed standards at Beale AFB. Loma Rica-Browns Valley and Dobbins-Oregon House did not disclose response times.

Consolidation of fire service is an option for urbanized and urbanizing territory in the Brophy, Linda, Olivehurst and Plumas Lake areas. Consolidation of LFPD and OPUD would promote efficient service areas and optimize response times in this growing urban area. Detachment of adjacent urbanizing areas from PBFPD is an option that would offer these areas the urban service levels that future residents would most likely expect. Alignment of fire providers' boundaries with their service areas would better promote equitable financing and public safety. Annexation of the Clippermills community to Foothill Fire Protection District is an option.

LAW ENFORCEMENT

The countywide serious crime rate has declined in the last decade, and is now comparable to neighboring Sutter and Butte counties. Within Yuba County, the unincorporated areas and Wheatland benefit from below-average crime rates. Like many urban centers, Marysville experiences greater demand for law enforcement services due to an above-average crime rate.

Law enforcement providers offer adequate service levels based on response times to high-priority incidents and staffing levels. Crime clearance rates in the unincorporated areas and Wheatland could be improved.

The Yuba County Sheriff's Department (YCSD) and Wheatland Police Department both reported a need for new station headquarters due to deficiencies in current facilities.

STREETS

During peak conditions, highways are congested in Marysville and Wheatland. Additional highway capacity is needed. Caltrans plans to widen State Route 20 by 2017, and SR 70 by 2013. The Wheatland area needs an SR 65 bypass to direct traffic flows around the city center and improve traffic flow to Beale AFB. The Marysville area needs increased roadway capacity to and from Yuba City, and has plans to widen the 5th Street bridge by 2018. The planned Yuba River Parkway, set to begin construction in 2008, will serve as a bypass and provide some congestion relief in Marysville. Local agencies should aggressively pursue regional traffic impact fees to ensure that growing Yuba City and other neighboring areas pay their fair share toward needed highway investments.

The unincorporated areas and Wheatland have significant street maintenance and rehabilitation needs. The City of Wheatland has established a priority list of streets for rehabilitation or major maintenance activities, and the plan will be implemented as funding becomes available. Wheatland needs to implement a computerized pavement management system to prioritize and optimize its street investments.

There are 44 County Service Areas (CSAs) through which maintenance of private roads in unincorporated areas are maintained. Governance options include dissolution of six CSAs that are inactive.

OTHER SERVICES

On the whole, park service levels are adequate. Park acreage meets standards in Marysville and OPUD, and would need to be enhanced to meet adopted standards in the growing unincorporated areas and Wheatland. Dobbins, Oregon House, Camptonville, Smartville, Gold Village, and Loma Rica lack developed local parks. There are unmet maintenance needs in Linda and infrastructure needs in Olivehurst. Existing recreation programming is inadequate. Financing mechanisms are in place to ensure that future growth contributes toward local park development needs. Regional parks and trail networks are growth-related infrastructure needs for which financing mechanisms and service providers have not yet been developed. Formation of a countywide regional park district is an option.

Public cemetery providers have sufficient capacity at present and room for expansion, but do have capital needs. Six of the 10 cemetery districts provide year-round maintenance, while four provide maintenance only one to three times per year. In several cases, cemetery districts are not compliant with legal requirements relating to fees and constraints on burial of non-residents. Camptonville Community Services District is not legally authorized to provide cemetery service, and needs to petition LAFCO for approval so that the inactive Camptonville Cemetery District may be dissolved. Governance options include adjusting Brownsville, Strawberry Valley and Upham Cemetery Districts' boundaries to ensure that residents of the Clippermills and Rackerby communities have legal access to the cemetery preferred by the majority in these communities.

2. LAFCO AND MUNICIPAL SERVICE REVIEWS

This report is prepared pursuant to legislation enacted in 2000 that requires LAFCO to conduct a comprehensive review of municipal service delivery and update the spheres of influence (SOIs) of all agencies under LAFCO's jurisdiction. This chapter provides an overview of LAFCO's history, powers and responsibilities. It discusses the origins and legal requirements for preparation of the municipal service review (MSR). Finally, the chapter reviews the process for MSR review, MSR approval and SOI updates.

LAFCO OVERVIEW

After World War II, California experienced dramatic growth in population and economic development. With this boom came a demand for housing, jobs and public services. To accommodate this demand, many new local government agencies were formed, often with little forethought as to the ultimate governance structures in a given region, and existing agencies often competed for expansion areas. The lack of coordination and adequate planning led to a multitude of overlapping, inefficient jurisdictional and service boundaries, and the premature conversion of California's agricultural and open-space lands.

Recognizing this problem, in 1959, Governor Edmund G. Brown, Sr. appointed the Commission on Metropolitan Area Problems. The Commission's charge was to study and make recommendations on the "misuse of land resources" and the growing complexity of local governmental jurisdictions. The Commission's recommendations on local governmental reorganization were introduced in the Legislature in 1963, resulting in the creation of a Local Agency Formation Commission, or "LAFCO," operating in every county except San Francisco.

The Yuba LAFCO was formed as a countywide agency to discourage urban sprawl and encourage the orderly formation and development of local government agencies. LAFCO is responsible for coordinating logical and timely changes in local governmental boundaries, including annexations and detachments of territory, incorporations of cities, formations of special districts, and consolidations, mergers and dissolutions of districts, as well as reviewing ways to reorganize, simplify, and streamline governmental structure. The Commission's efforts are focused on ensuring that services are provided efficiently and economically while agricultural and open-space lands are protected. To better inform itself and the community as it seeks to exercise its charge, LAFCO conducts service reviews to evaluate the provision of municipal services within the County.

LAFCO regulates, through approval, denial, conditions and modification, boundary changes proposed by public agencies or individuals. It also regulates the extension of public services by cities and special districts outside their boundaries. LAFCO is empowered to initiate updates to the SOIs and proposals involving the dissolution or consolidation of special districts, mergers, establishment of subsidiary districts, and any reorganization including such actions. Otherwise, LAFCO actions must originate as petitions or resolutions from affected voters, landowners, cities or districts.

Yuba LAFCO consists of five regular members: two members from the Yuba County Board of Supervisors, two city council members, and one public member who is appointed by the other

members of the Commission. There is an alternate in each category. All Commissioners are appointed to four-year terms. The Commission members are shown in Table 2-1.¹

Table 2-1: Commission Members, 2008

Appointing Agency	Members	Alternate Members
Two members from the Board of Supervisors appointed by the Board of Supervisors.	Mary Jane Griego Don Schrader	Hal Stocker
Two members representing the cities in the county. Must be a city officer and appointed by the City Selection Committee.	Enita Elphick, <i>City of Wheatland</i> Ben Wirtschafter <i>City of Marysville</i>	Michael Selvidge
One member from the general public appointed by the other six Commissioners.	Brent Hastey	Roger Shelton

MUNICIPAL SERVICE REVIEW ORIGINS

The MSR requirement was enacted by the Legislature months after the release of two studies recommending that LAFCOs conduct reviews of local agencies. The “Little Hoover Commission” focused on the need for oversight and consolidation of special districts, whereas the “Commission on Local Governance for the 21st Century” focused on the need for regional planning to ensure adequate and efficient local governmental services as the California population continues to grow.

LITTLE HOOVER COMMISSION

In May 2000, the Little Hoover Commission released a report entitled *Special Districts: Relics of the Past or Resources for the Future?* This report focused on governance and financial challenges among independent special districts, and the barriers to LAFCO’s pursuit of district consolidation and dissolution. The report raised the concern that “the underlying patchwork of special district governments has become unnecessarily redundant, inefficient and unaccountable.”²

In particular, the report raised concern about a lack of visibility and accountability among some independent special districts. The report indicated that many special districts hold excessive reserve funds and some receive questionable property tax revenue. The report expressed concern about the lack of financial oversight of the districts. It asserted that financial reporting by special districts is inadequate, that districts are not required to submit financial information to local elected officials, and concluded that district financial information is “largely meaningless as a tool to evaluate the effectiveness and efficiency of services provided by districts, or to make comparisons with neighboring districts or services provided through a city or county.”³

¹ Public member Art Aseltine served as Commissioner for 37 years, and retired in 2008.

² Little Hoover Commission, 2000, p. 12.

³ Little Hoover Commission, 2000, p. 24.

The report questioned the accountability and relevance of certain special districts with uncontested elections and without adequate notice of public meetings. In addition to concerns about the accountability and visibility of special districts, the report raised concerns about special districts with outdated boundaries and outdated missions. The report questioned the public benefit provided by health care districts that have sold, leased or closed their hospitals, and asserted that LAFCOs consistently fail to examine whether they should be eliminated. The report pointed to service improvements and cost reductions associated with special district consolidations, but asserted that LAFCOs have generally failed to pursue special district reorganizations.

The report called on the Legislature to increase the oversight of special districts by mandating that LAFCOs identify service duplications and study reorganization alternatives when service duplications are identified, when a district appears insolvent, when district reserves are excessive, when rate inequities surface, when a district's mission changes, when a new city incorporates and when service levels are unsatisfactory. To accomplish this, the report recommended that the State strengthen the independence and funding of LAFCOs, require districts to report to their respective LAFCO, and require LAFCOs to study service duplications.

COMMISSION ON LOCAL GOVERNANCE FOR THE 21ST CENTURY

The Legislature formed the Commission on Local Governance for the 21st Century ("21st Century Commission") in 1997 to review statutes on the policies, criteria, procedures and precedents for city, county and special district boundary changes. After conducting extensive research and holding 25 days of public hearings throughout the State at which it heard from over 160 organizations and individuals, the 21st Century Commission released its final report, *Growth Within Bounds: Planning California Governance for the 21st Century*, in January 2000.⁴ The report examines the way that government is organized and operates and establishes a vision of how the State will grow by "making better use of the often invisible LAFCOs in each county."

The report points to the expectation that California's population will double over the first four decades of the 21st Century, and raises concern that our government institutions were designed when our population was much smaller and our society was less complex. The report warns that without a strategy open spaces will be swallowed up, expensive freeway extensions will be needed, job centers will become farther removed from housing, and this will lead to longer commutes, increased pollution and more stressful lives. *Growth Within Bounds* acknowledges that local governments face unprecedented challenges in their ability to finance service delivery since voters cut property tax revenues in 1978 and the Legislature shifted property tax revenues from local government to schools in 1993. The report asserts that these financial strains have created governmental entrepreneurship in which agencies compete for sales tax revenue and market share.

The 21st Century Commission recommended that effective, efficient and easily understandable government be encouraged. In accomplishing this, the 21st Century Commission recommended consolidation of small, inefficient or overlapping providers, transparency of municipal service delivery to the people, and accountability of municipal service providers. The sheer number of special districts, the report asserts, "has provoked controversy, including several legislative attempts

⁴ The Commission on Local Governance for the 21st Century ceased to exist on July 1, 2000, pursuant to a statutory sunset provision.

to initiate district consolidations,”⁵ but cautions LAFCOs that decisions to consolidate districts should focus on the adequacy of services, not on the number of districts.

Growth Within Bounds stated that LAFCOs cannot achieve their fundamental purposes without a comprehensive knowledge of the services available within its county, the current efficiency of providing service within various areas of the county, future needs for each service, and expansion capacity of each service provider. Comprehensive knowledge of water and sanitary providers, the report argued, would promote consolidations of water and sanitary districts, reduce water costs and promote a more comprehensive approach to the use of water resources. Further, the report asserted that many LAFCOs lack such knowledge and should be required to conduct such a review to ensure that municipal services are logically extended to meet California’s future growth and development.

MSRs would require LAFCO to look broadly at all agencies within a geographic region that provide a particular municipal service and to examine consolidation or reorganization of service providers. The 21st Century Commission recommended that the review include water, wastewater, and other municipal services that LAFCO judges to be important to future growth. The Commission recommended that the service review be followed by consolidation studies and be performed in conjunction with updates of SOIs. The recommendation was that service reviews be designed to make nine determinations, each of which was incorporated verbatim in the subsequently adopted legislation. The legislature since consolidated the determinations into six required findings.

MUNICIPAL SERVICE REVIEW LEGISLATION

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires LAFCO review and update SOIs not less than every five years and to review municipal services before updating SOIs. The requirement for service reviews arises from the identified need for a more coordinated and efficient public service structure to support California’s anticipated growth. The service review provides LAFCO with a tool to study existing and future public service conditions comprehensively and to evaluate organizational options for accommodating growth, preventing urban sprawl, and ensuring that critical services are provided efficiently.

Effective January 1, 2008, Government Code §56430 requires LAFCO to conduct a review of municipal services provided in the county by region, sub-region or other designated geographic area, as appropriate, for the service or services to be reviewed, and prepare a written statement of determination with respect to each of the following topics:

- 1) Growth and population projections for the affected area;
- 2) Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies;
- 3) Financial ability of agencies to provide services;
- 4) Status of, and opportunities for shared facilities;

⁵ Commission on Local Governance for the 21st Century, 2000, p. 70.

- 5) Accountability for community service needs, including governmental structure and operational efficiencies; and
- 6) Any other matter related to effective or efficient service delivery, as required by commission policy.

MUNICIPAL SERVICE REVIEW PROCESS

For local agencies, the MSR process involves the following steps:

- **Outreach:** LAFCO outreach and explanation of the project
- **Data Discovery:** provide documents and respond to LAFCO questions
- **Map Review:** review and comment on LAFCO draft map of the agency's boundary and sphere of influence
- **Profile Review:** review and comment on LAFCO draft profile of the agency
- **Review MSR:** review and comment on LAFCO draft MSR
- **LAFCO Hearing:** attend and make public comments on MSR

MSRs are exempt from California Environmental Quality Act (CEQA) pursuant to §15262 (feasibility or planning studies) or §15306 (information collection) of the CEQA Guidelines. LAFCO's actions to adopt MSR determinations are not considered "projects" subject to CEQA.

The MSR process does not require LAFCO to initiate changes of organization based on service review findings, only that LAFCO identify potential government structure options. However, LAFCO, other local agencies, and the public may subsequently use the determinations to analyze prospective changes of organization or reorganization or to establish or amend SOIs. LAFCO may act with respect to a recommended change of organization or reorganization on its own initiative, at the request of any agency, or in response to a petition.

Once LAFCO has adopted the MSR determinations, it must update the SOIs for 81 local agencies, including two cities, 35 independent special districts and 44 county service areas. The process for SOI updates will begin with the MSR consultant issuing a paper in July 2008 identifying SOI options for the local agencies. Thereafter, the LAFCO Executive Officer will review the SOIs and issue a staff report with analysis and recommendations on SOI updates. Ultimately, the LAFCO Commission decides what SOI updates to adopt. A CEQA determination will then be made on a case-by-case basis once the proposed project characteristics are clearly identified.

3. STUDY AREA

This chapter provides an overview of Yuba County and the municipal service providers within its bounds. For overviews of each local agency, please refer to Appendix A.

AREA OVERVIEW

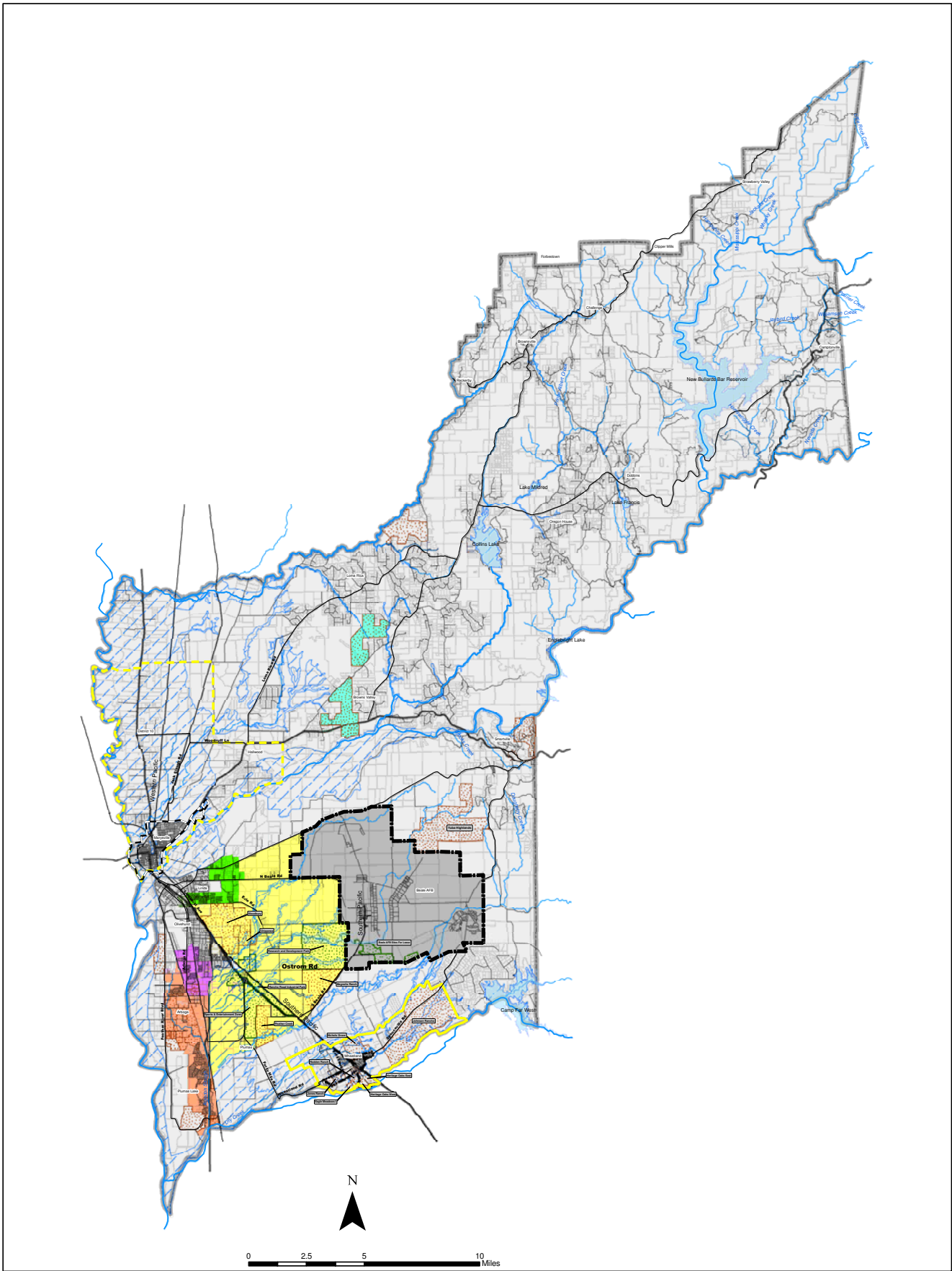
Yuba County is a primarily agricultural county located in the northern Sacramento Valley and the western foothills of the Sierra Nevada mountain range. It spans 631 square miles, extending from the Bear River in the south to Honcut Creek and the Yuba-Butte and Yuba-Plumas county lines in the north, and from the Feather River in the west to the Yuba-Nevada and Yuba-Sierra county lines in the east.

The Yuba, Feather and Bear Rivers are major rivers flowing through the area. The fertile soils created by the rivers support agricultural croplands, primarily orchards, rice farms, and pasture lands. Prime farmland, farmland of statewide importance and unique farmland make up 21 percent of the County land area, according to 2006 State Department of Conservation data. Soper-Wheeler, a tree farming operation is a major land holder. Grazing land, including leased lands on Beale Air Force Base (AFB), constituted 35 percent.

Open space, mineral, timber, low-density residential, and vacant lands comprised 43 percent of the area. Tahoe and Plumas National Forests (U.S. Forest Service) and Spenceville Wildlife Recreation Area (California Department of Fish and Game) are major open space uses. The U.S. Bureau of Land Management owns significant open space and vacant lands. Western Aggregate, a gravel and sand mining operation, is a major land holder in the Goldfields area. Water bodies make up 1.5 percent of the area. Bullards Bar Reservoir, Collins Lake and the Camp Far West Reservoir are major water storage sites.

Urban uses comprised only three percent of the area in 2006. The cities of Marysville and Wheatland and the unincorporated valley communities of Linda, Olivehurst, Plumas Lake and the Beale AFB residential area are the most urbanized. Unincorporated foothill communities include Smartville, Camp Far West, Browns Valley, Brownsville, Camptonville, Challenge, Dobbins, Oregon House, Loma Rica, Rackerby, Strawberry Valley, and Log Cabin.

A 45-minute drive from downtown Sacramento, southern Yuba County has recently attracted significant housing development activity and is poised for significant population and economic growth in the future. Plumas Lake, East Linda and the City of Wheatland are recent growth areas. Planned and proposed developments indicate future growth is likely in the area northwest of Wheatland and southwest Beale AFB (on and off base) along with the recent growth areas. Planned and proposed developments are shown on Figure 3-1.



Legend

- City Of Marysville
- City of Marysville Primary Sphere of influence
- City Of Wheatland
- City of Wheatland Sphere Of Influence
- Economic Development Areas
- Planned and Proposed Subdivisions
- East Linda Specific Plan
- North Arboya Study Area
- Spring Valley Specific Plan
- Plumas Lake Specific Plan
- Brophy/South Yuba Area
- Projected Post-Improvement Floodplain*

* Source: MBK Engineers

Figure 3-1
Development Areas
Yuba County

Yuba County Information Technology - GIS
Drawn By: J. Henry
Date: 04/30/08
File: YubadevelopmentsCounty.mxd



DRAFT

COUNTY HISTORY

The County's first known occupants were Native Americans—Nisenan, also known as the Southern Maidu—who lived in the area in 6,000 BC or earlier and whose mortar bowls carved into bedrock can still be found in various sites on Beale AFB. During the Gold Rush, the Nisenan scattered to the foothills and other areas and many died of infectious diseases.

Settlers began to arrive by stagecoach and pack wagon in the mid 1840s. Ruts from the wagon trains of settlers at that time can still be seen in the Camp Far West area. Survivors of the 1846 Donner Party tragedy settled in Johnson Rancho located east of Wheatland. During the Gold Rush, Marysville developed as a trading post and stopping point for riverboats from Sacramento and San Francisco. By 1850, the foothills had attracted mining camps and supply stations, and Yuba County was officially formed. Marysville was incorporated in 1851 as one of California's oldest cities and became the Yuba County government seat.

The communities of Brownsville, Dobbins and Oregon House formed in the early 1850s as stage and freight stops for miners and camps in the foothills. Many hotels and houses opened at this time to serve travelers, including the Dobbins Hotel, the Oregon House, the Bowers Place, the Stanfield House, and the Peoria House. The Columbus House, in Strawberry Valley, served as a trading center for the surrounding area. The community of Camptonville also formed at this time, around the Nevada House hotel, and grew considerably following the discovery of gold in 1852. The community of Challenge, then known as Challenge Mills, reached its peak from 1870 to 1890 with the various saw mills that operated in the region.

The practice of hydraulic mining in the late 1850s and early 1860s had a devastating effect on the Yuba watershed. As millions of tons of mining debris flowed into the Yuba, Feather and Sacramento Rivers, the riverbeds rose and shifted to new channels causing major flooding. Some of the effects of hydraulic mining—ponds, gravel deposits and soil buildup—can be seen today in the Yuba Goldfields along with a series of dredge tailings.

The valley portion of the County was temporarily inhabited by hunters and trappers from the Hudson Bay Company between 1830 and 1842. Early settlers raised horses and cattle and later transitioned to grains. The Wheatland Hop Riot in 1913 was the first major farm labor confrontation in California and resulted in state regulation of farm labor camp conditions. Migrants settled in Olivehurst in the 1930s during the peak of the Great Depression and the dust bowl as part of a State labor camp.

The federal government established Camp Beale, a military training camp, in 1942. During World War II, Camp Beale was home to more than 60,000 soldiers, a prisoner-of-war encampment and a 1,000-bed hospital. After the War, Beale AFB was established and the remainder of the Camp was transferred to civilian use, including 11,000 acres where Spenceville Wildlife and Recreation Area is now located. U-2 planes, used for high-altitude reconnaissance, have been based there since 1975. The RQ-4 Global Hawk, an unmanned reconnaissance aircraft, arrived at the AFB in 2004.

DEMOGRAPHICS: 2000 CENSUS

There were 60,219 residents in Yuba County, as of the 2000 Census. The population in the unincorporated communities was approximately 45,727, with 2,224 in the City of Wheatland and 12,268 in the City of Marysville, as shown in Table 3-2.⁶ The population in the unincorporated areas at that time included 5,641 at Beale Air Force Base with the remainder concentrated in the southwest valley portion of the County and spread thinly throughout the foothills.

Wheatland and Maryville population densities are 2,306 and 3,624 residents per square mile, respectively.⁷ The rural unincorporated territory in the County is less densely populated than Wheatland and Marysville with an average of 89 residents per square mile.

There were a total of 20,535 households throughout the County. There were approximately 2.9 persons per household on average. Households in the southern portion of the County in the communities of Linda, Olivehurst, Beale AFB and Ostrom were on average slightly larger than the remainder of the County, with over three persons per household. The smallest households on average are in the communities of Camptonville and Brownsville, with 2.2 individuals per household.

Income per capita throughout the County was \$14,124. The communities of Honcut and Prarie had a significantly higher per capita income of \$41,926. Loma Rica and Browns Valley also average over \$20,000 per individual. The community of Linda had the lowest income per capita in the County with only \$9,784. Accordingly, Linda also had the highest rate of poverty with 38 percent of the population living under the poverty line. Other communities with high poverty rates were Plumas Lake (26 percent), Strawberry Valley (25 percent) and Camptonville (25 percent).

⁶ The boundaries for the 2000 Census Designated Places do not coincide with the community boundaries shown in Table 3-3.

⁷ Densities are based on the 2008 population reported by the Department of Finance.

Table 3-2: County Residents by Community, 2000

Area	Pop.	Avg. Household Pop.	Income Per Capita	% Below Poverty Line	Area Description
Wheatland and Vicinity	3,151	2.9	\$15,875	18%	Wheatland and surrounding area—Forty Mile Rd. to Camp Far West Rd., Ostrom Rd. to the county line.
Marysville	12,270	2.5	15,461	18%	Incorporated City boundaries
Brophy	1,409	2.7	16,173	13%	West of Beale AFB to SR 65, north from Ostrom Rd. to the Yuba River
Linda	13,432	3.3	9,784	38%	South of Simpson Dantoni Rd. to Erle Rd., from Riverside Dr. to Griffith Ave.
Olivehurst	10,892	3.2	12,023	18%	Between Arboga Rd. and SR 70, from Plumas Arboga Rd. to Pasado Rd.
Plumas Lake	1,177	2.9	14,108	26%	South of the airport, SR 70 west to the county line
Ostrom	341	3.2	14,171	22%	Between SR 70 and Forty Mile Rd, from Ostrom Rd to the county line.
Beale AFB ¹	5,641	3.2	11,172	6%	The boundaries of the Base.
Camp Far West	415	3.0	15,426	18%	Southeast corner of the County surrounding Camp Far West Reservoir.
Smartville	386	2.7	15,426	18%	Yuba River to Beale AFB and Spenceville Rd. and Road 1034 to the county line.
Hallwood	1,598	2.7	17,718	14%	South of Woodruff Ln. to the Yuba River, from the county line to Kibbe Rd.
Honcut/Prairie	548	2.7	41,926	5%	North of Woodruff Ln. to the county line, from the county line to just west of Loma Rica Rd.
Loma Rica	2,783	2.8	20,293	9%	From Marysville Rd. north to the county line, east of Loma Rica Rd.
Browns Valley	1,502	2.6	20,953	9%	South of Marysville Rd. to the Yuba River, east of Kibbe Rd.
Dobbins	781	2.3	18,413	18%	From Indiana School Rd to Bullards Bar Reservoir, from the county line north to Oregon Hill Rd.
Oregon House	1,422	2.4	20,881	15%	East from the county line to Indiana School Rd., just north of Collins Lake.
Challenge	262	2.3	14,751	24%	North from Oregon Hill Rd. to the county line, between Bullards Bar Reservoir and Challenge Cutoff Rd.
Brownsville	1,441	2.2	17,164	19%	West from Challenge Cutoff Rd. to the county line
Camptonville	656	2.2	14,902	25%	East of Bullards Bar Reservoir to the county line, between the county line and the North Yuba River.
Strawberry Valley	112	2.4	14,902	25%	North of the North Yuba River to the county line, including the entire northeaster tip of the County.
Countywide Total	60,219	2.9	14,124	21%	

Source: 2000 Census
Notes:
(1) Population in group quarters on Beale AFB not included.

GROWTH AND DEVELOPMENT

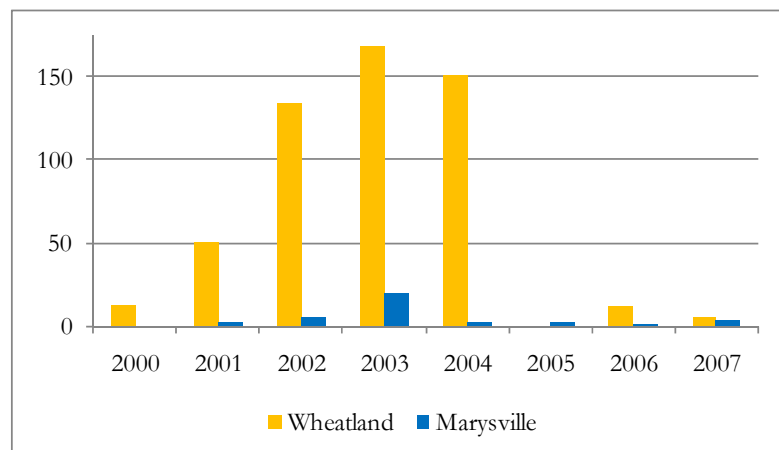
RECENT GROWTH

Since the 2000 Census, the countywide population has grown by 19 percent, from 60,219 to 71,929 at the beginning of 2008. Wheatland showed rapid development from 2002 to 2004. In the unincorporated territory, the southwestern communities of Plumas Lake and Linda experienced rapid residential growth from 2003 to 2005. In the southeast portion of the County, the Sleep Train Amphitheater was completed and began holding concerts in 2000. Marysville development peaked in 2003; however, growth during this time was limited.

Residential Development

Figure 3-3: Wheatland and Marysville New Residential Building Permits, 2000-7

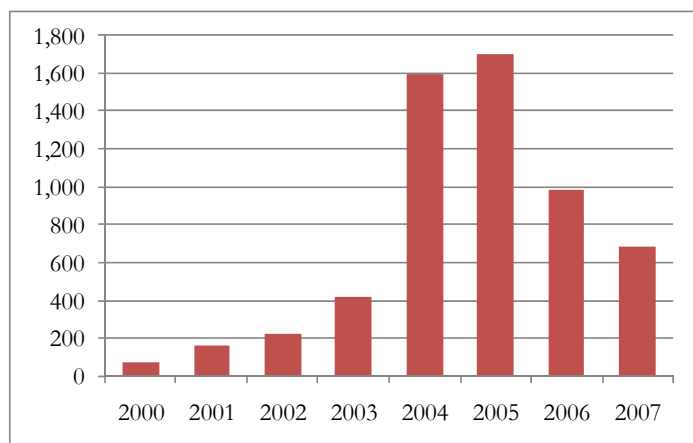
Within the Wheatland city limits, permits issued for new residential construction peaked in 2003, waned in 2004 and dropped off in 2005, as shown in Figure 3-3. In 2006, there was a slight rebound in the number of permits issued; however, 2007 had little permit activity with only five permits issued during the year.



In Marysville, building permits issued for new residential construction peaked in 2003 at 20 permits, all for single family residences. Between 2000 to 2007, the City averaged four building permits per year.

Figure 3-4: Unincorporated New Residential Building Permits, 2000-7

In unincorporated areas, there was significant growth in both residential and non-residential construction, particularly in 2004 and 2005 as shown in Figure 3-4.⁸ Most of this growth occurred in the southwest portion of the County in the Plumas Lake and East Linda Specific Plan areas. Housing growth slowed in 2006. The number of permits issued has steadily declined since 2005 due to economic changes and restrictions imposed by



⁸ 2007 permit activity was annualized based on year-to-date activity in prior years.

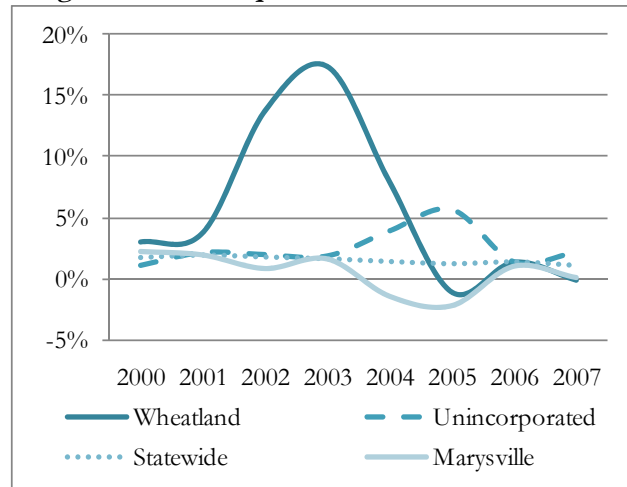
Central Valley Flood Protection Board pending completion of levee improvements. Between 2000 and 2007, the County issued a total of 5,827 permits or 728 permits annually on average.

Population Growth

As a result of the significant residential development, population in the City of Wheatland and unincorporated Yuba County has shown rapid growth—outperforming statewide growth in most years since 2002. The population on Beale AFB has declined since the 2000 Census from 5,641 to 3,300 in FY 07-08.⁹

The unincorporated population grew by more than five percent in 2005. Population growth in the unincorporated areas occurred primarily in the southwest. Growth slowed in 2006 to 1.4 percent but recovered in 2007 to 2.2 percent.

Figure 3-5: Population Growth Rates, 2000-7



The City of Wheatland has experienced much growth and urban development. The City of Wheatland population has grown from 2,224 as reported in the 2000 Census to 3,510 in 2008, according to the Department of Finance (DOF). The population grew dramatically in 2002 and in 2003, with the growth rate peaking in 2003, and declining thereafter. Between 2006 and 2007, the population grew by 1.4 percent, which is comparable to statewide growth within cities. The population declined slightly in 2008 (0.1 percent).

The City of Marysville population has grown from 12,268 as reported in the 2000 Census to 12,719 in 2008. Marysville experienced a general decline in population from 2003 to 2006. During 2006, Marysville population growth increased by one percent, which was slightly lower than growth in Wheatland, throughout the County and statewide. Population increased slightly in 2007 as well (0.05 percent), still a slower rate than other jurisdictions’ growth rates with the exception of Wheatland.

Agricultural Land

The County is primarily agricultural with 228,113 acres of farmland in 2006. Most of the farmland is used for grazing purposes. There were 41,993 acres of prime farmland, 32,372 acres of unique farmland, 11,019 acres of farmland of statewide importance, and 142,729 acres of grazing

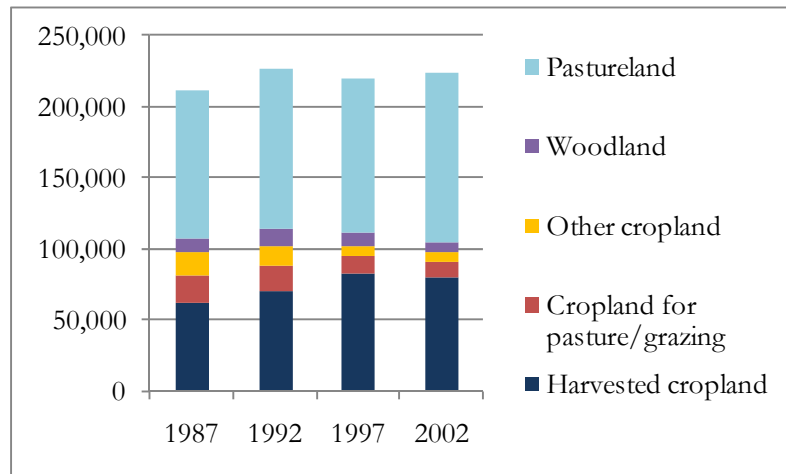
⁹ Interview with Harl Sanderson, Deputy for Installation Support, Beale AFB, March, 29, 2008.

land in the County in 2006.¹⁰ Prime farmland is land that is most suitable for general intensive agricultural uses, due to its ability to sustain long term production of agricultural crops.¹¹

Figure 3-6: Yuba County Farmland, 1987-2002

Prior to the period of rapid development in the County, from 1992 to 2002, the total acreage of Yuba County farmland remained virtually unchanged, while pastureland grew by over five percent and harvested cropland grew by 13 percent, as shown in Figure 3-6.¹²

Since 2000, the total acreage of prime farmland in Yuba County has decreased by nearly six percent.¹³ The County Agricultural



Commissioner noted that the recent loss of prime farmland was in the southwestern area of the County due to rapid development, and other areas within the County had not yet experienced prime farmland conversion.

¹⁰ California Department of Conservation Division of Land Resource Protection, *Yuba County Important Farmland 2006*, Farmland Mapping and Monitoring Program, 2007.

¹¹ In order to be considered prime farmland by the Department of Conservation, the area must have been used for irrigated agricultural production at some time during the last four years, and the soil must meet the physical and chemical criteria for prime farmland as determined by the USDA Natural Resources Conservation Service (NRCS).

In order to be considered prime farmland by LAFCO under Government Code §56064, the area must not have been developed for a use other than agricultural, and must meet any of the following qualifications: (a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible; (b) Land that qualifies for rating 80 through 100 Storie Index Rating; (c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003; (d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre; (e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.

¹² The data source for Figure 3-6 is the U.S. Department of Agriculture, Census of Agriculture.

¹³ California Department of Conservation, Farmland Mapping and Monitoring Program 2000-2006.

ECONOMY

Jobs

There are approximately 20,000 jobs in the County.¹⁴ The top industries by employment are government, health care and social assistance, educational services, retail trade, and arts, entertainment and recreation, as shown in Table 3-7.¹⁵

Major non-military employers are the County, Rideout Memorial Hospital, Caltrans, PG&E, Yuba Community College District, Aramark and Live Nation at the Sleep Train Amphitheater, and Naumes.

¹⁴ Authors' estimates based on analysis of Dun & Bradstreet, County Business Patterns and Quarterly Census of Employment and Wages (QCEW) data.

¹⁵ Due to the marketing nature of the Dun and Bradstreet data, the number of government employees reported is most likely under-represented.

Table 3-7: Employment by Select Industries

Industry	County	Percentage	City of Wheatland			
			Beale	Wheatland	Wheatland Vicinity	Smartville
Total	19,951	100%	5,631	395	1,265	61
Government/Public Administration	5,327	27%	3,513	23	30	0
Arts, Entertainment & Recreation	982	5%	43	40	700	0
Health Care and Social Assistance	2,181	11%	400	19	0	0
Professional & Technical Services	726	4%	310	0	76	0
Educational Services	2,030	10%	108	208	0	0
Retail Trade	1,568	8%	150	38	5	5
Construction	804	4%	99	13	77	0
Business Services	559	3%	98	5	34	0
Manufacturing	924	5%	116	0	0	0
Agriculture	937	5%	0	5	287	0
Wholesale Trade	613	3%	0	9	6	49
Transportation & Warehousing	417	2%	5	0	50	0
Accommodation & Food Services	851	4%	32	14	0	0
Industry	City of					
	Brophy	Marysville	Linda	Olivehurst	Plumas Lake	Hallwood ¹
Total	140	6,166	2,757	493	1,100	309
Government/Public Administration	0	989	708	6	10	0
Arts, Entertainment & Recreation	0	24	28	0	0	12
Health Care and Social Assistance	0	1,343	135	141	12	0
Professional & Technical Services	0	200	12	0	0	0
Educational Services	0	426	771	229	31	10
Retail Trade	0	851	317	17	29	5
Construction	41	187	85	15	133	16
Business Services	0	179	160	6	11	30
Manufacturing	0	260	190	0	276	35
Agriculture	22	17	30	0	329	185
Wholesale Trade	8	106	110	8	130	7
Transportation & Warehousing	22	119	36	25	126	0
Accommodation & Food Services	0	477	126	7	0	0
Industry	Browns Valley		Dobbins-Oregon House		Other ³	
	Valley	Camptonville	Oregon House	Foothills ²	Loma Rica	Other ³
Total	82	130	251	224	140	807
Government/Public Administration	0	40	0	8	0	0
Arts, Entertainment & Recreation	0	5	18	0	0	112
Health Care and Social Assistance	0	0	0	100	6	25
Professional & Technical Services	0	0	46	0	13	69
Educational Services	12	20	44	20	68	83
Retail Trade	26	0	27	25	0	73
Construction	0	0	11	7	24	96
Business Services	11	0	5	0	0	20
Manufacturing	5	0	6	0	0	36
Agriculture	0	25	12	25	0	0
Wholesale Trade	0	0	8	0	0	172
Transportation & Warehousing	0	0	0	7	12	15
Accommodation & Food Services	0	40	28	20	0	107

Sources: Dun and Bradstreet, County Business Patterns, Quarterly Census of Employment and Wages, and author's estimates.

Notes:

(1) Hallwood includes the communities of Hallwood, Honcut and Prairie.

(2) The foothills area includes the communities of Challenge, Brownsville and Strawberry Valley.

(3) Other represents employment in businesses with less than five employees in the County, which is not available by community.

Services, including health care, accommodations, professional, business and information services, comprise 27 percent of jobs. Employment in the health care and social assistance industry represents 11 percent of all jobs in the County, of which Rideout Memorial Hospital employs approximately 30 percent of health care workers. Other major industries within the County are education (10 percent) and arts, entertainment and recreation (five percent). While agriculture is a significant industry for the County in terms of revenue, the industry represents only five percent of jobs. There are a number of farming and ranching operations within the more rural portions of the County; including AKT Wheatland Ranch, Bishop's Pumpkin Farm, Gilbert Orchards, Chase National Kiwi Farms, Shintaffer Farms, and Whitney Warren Ranch.

Major employers in the City of Wheatland include the local school district, Big Al's Market, the Independent Officials Association, and Bank of America. Educational services comprise more than 50 percent of all jobs in the City. Other significant industries are arts and entertainment (the Independent Officials Association) and retail trade.

Many major employers, including the County, Caltrans and the hospital are located in the City of Marysville, along with numerous smaller firms. There are a total of 214 employers in the City constituting 6,166 jobs.¹⁶ Significant industries are health care, government, and retail trade, which represent 22, 16 and 14 percent of all jobs within the City, respectively.

Jobs-Housing Balance

The jobs-housing balance in unincorporated Yuba County was 0.8 in 2005. By comparison, there were 0.6 jobs per housing unit on average in Wheatland, 1.6 jobs per housing unit in Marysville and 1.4 jobs per housing unit on average in Sacramento region cities.¹⁷

The Wheatland General Plan anticipates significant commercial growth, with the job-housing balance increasing to 0.9 by 2025. Marysville has not projected the future job-housing balance; however, the City has initiated several plans to promote new business in the downtown area of the City, including the Downtown Marysville Marketing Plan and Downtown Economic Strategic Development Plan. The City reported that the completion of the Caltrans headquarters and the planned expansion of the Rideout Hospital are expected to add additional jobs, particularly in the health care field.

¹⁶ Author's estimates from the Dun and Bradstreet marketing data, augmented by County Business Patterns for businesses of less than 10 employees and author's research on major employers that were not reported in the two databases.

¹⁷ Marysville jobs-housing balance is based on housing units in 2006 reported by DOF and SACOG estimates of employment from the Metropolitan Transportation Plan 2035 Draft. Wheatland and Sacramento region cities' jobs-housing balance are from the 2006 Wheatland General Plan Update, pp. 3-25.

Sales Tax

Analogous to the population growth seen in the County, sales have risen as well. The majority of growth in taxable sales has occurred in the unincorporated areas of Yuba County. Countywide, unincorporated areas contributed 59 percent of taxable sales in 2000 and 67 percent in 2006.

Taxable sales per capita in the unincorporated areas countywide rose from \$5,045 per resident in 2000 to \$7,080 per resident in 2006, and from \$12,599 to \$14,153 in Marysville during the same timeframe. Conversely, taxable sales per capita in Wheatland have declined since 2000 to \$2,590 per resident in 2006, as shown in Figure 3-8, as residential growth outpaced commercial growth.

Figure 3-8: Yuba County Taxable Sales per Capita, 2000-6

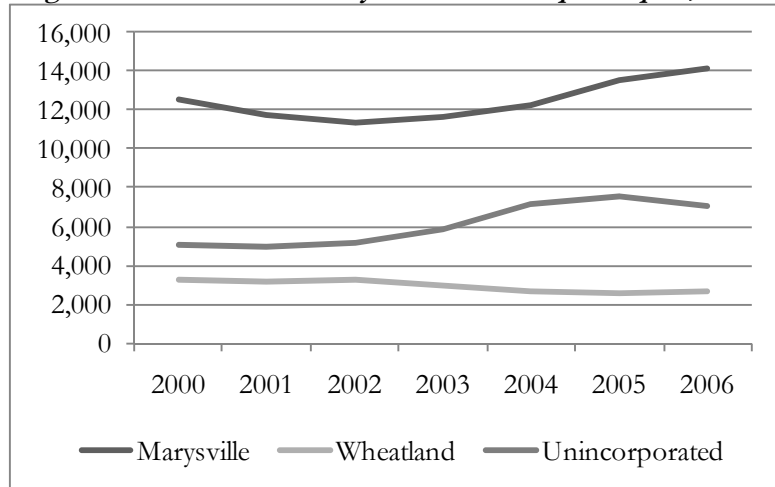


Table 3-9: Taxable Sales in Neighboring Counties, 2006

While the County has experienced growth in taxable sales since 2000, sales per capita remain significantly lower than surrounding counties. Yuba County (including the cities of Marysville and Wheatland) averaged \$8,471 in taxable sales per capita in 2006. By comparison, Butte and Nevada counties averaged \$13,082 and \$13,629 respectively, while Sutter and Placer counties averaged \$15,614 and \$23,721 respectively in the same year.

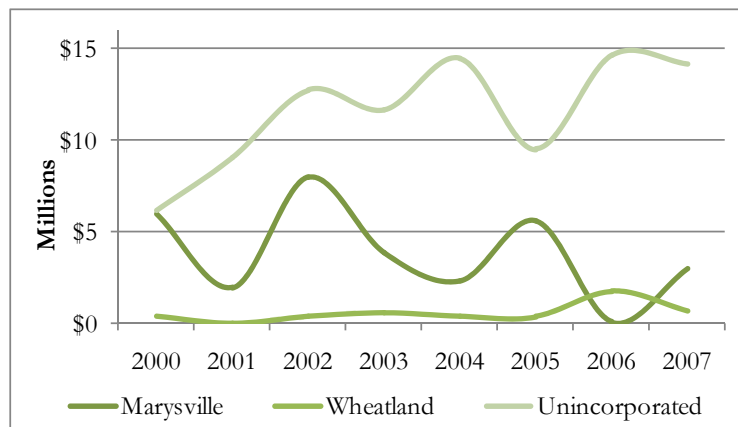
County	Taxable Sales per Capita
Yuba	\$8,471
Butte	13,082
Nevada	13,629
Sutter	15,614
Placer	23,721

Non-Residential Development

The value of new commercial, industrial and institutional development has generally increased countywide, as depicted in Figure 3-10. New non-residential construction values increased in 2006, but declined again in 2007.

Figure 3-10: New Non-Residential Permit Value, 2000-7

Most of the non-residential construction in the unincorporated areas was located in the southwestern portion of the County along with the residential development. Non-residential construction grew in Wheatland to \$1.8 million in 2006 but declined to \$700,000 in 2007. In the unincorporated areas, new value declined from \$14.6 million in 2006 to \$14.2 million in 2007. In Marysville, non-residential development declined



sharply in 2006 but recovered to over \$3 million in 2007.¹⁸

PLANNED & PROPOSED DEVELOPMENT

There are 84 proposed and planned developments within the County, covering in excess of 23,000 acres, including nearly 2,000 acres of non-residential development, with over 62,470 potential new dwelling units. Although the timing of many developments is uncertain due to current soft economic conditions, the plans illustrate that population could increase by 183,738 in the coming years.

Table 3-11: Proposed and Planned Development by Area

	# of Projects	Development Acres ¹	% of area with proposed developments ²	# of Units
Plumas Lake Specific Plan	24	4,663	85%	13,776
East Linda Specific Plan	12	837	47%	2,874
North Arboga Study Area	10	411	27%	2,025
Wheatland SOI ³	13	5,134	59%	16,673
Marysville	5	6	0.26%	90
Brophy/South Yuba	5	3,770	15%	15,665
Foothills	4	7,730		8,970
Other ⁴	12	559		2,397
Total	85	23,110	6%	62,470

Notes:
 (1) Development acres includes all acres within the subdivision, including residential, non-residential and open space.
 (2) The totals areas of the "foothill" and "other" categories is undefined, and a ratio of proposed developments could not be calculated.
 (3) Developments in Wheatland SOI include planned and proposed developments within the City limits and within the existing SOI that have not been constructed.
 (4) Developments outside of the specific plan areas in Olivehurst and Linda are aggregated as other (e.g., Terra Linda).
 (5) Economic development areas, including the Sports/Entertainment Zone, the Research and Development Park, Rancho Road Industrial Park, and the Beale lease site are excluded from the developments lists as these are areas where the land use authority is seeking development but there are no known proposed or planned projects.

There are five centers of proposed development in the County: 1) the Plumas Lake Specific Plan area, 2) the East Linda Specific Plan area, 3) the North Arboga Study Area, 4) the City of Wheatland and SOI, and 5) northwest of Wheatland along SR 65 in the community of Brophy, as shown in Table 3-11.¹⁹ In addition, there are a few proposed developments scattered in the northern portion of the County in the foothills. For a detailed list of all development projects, see Table 13-1.

Proposed and planned development information consists of projects that were actively proposed or planned during the course of the MSR study (i.e., in 2007 or 2008). Development information is meant to illustrate the approximate extent and location of possible future growth in the coming

¹⁸ Construction Industry Research Board, 2008.

¹⁹ The Yuba Highlands development was defeated by a ballot measure in February 2008; however, the developer plans to make a revised proposal for the development.

years, and should not be interpreted as definitive. During the course of the MSR study, there was a significant slowdown in the housing market; as a result, some of the potential developments were in a state of dormancy by the time the MSR was published. Many of the potential developments have not been approved by the respective land use authority.

Plumas Lake Specific Plan

There are a total of 24 developments planned or proposed in the Plumas Lake Specific Plan (PLSP) area, located in the southwest tip of the County along the Union Pacific Railroad. Upon completion, the developments are proposed to consist of 13,776 dwelling units across 4,663 acres.

Major developments currently under construction within the PLSP area are the 535-acre Plumas Lake Cobblestone development, the 474-acre Rio Del Oro development, and the 795-acre Wheeler Ranch development. Major planned development areas include the 577-acre Country Club Estates development and the 550-acre Bear River development.²⁰

East Linda Specific Plan

There are 17 proposed and planned developments within and adjacent to the East Linda Specific Plan area, comprising 852 acres and 3,033 dwelling units. A majority of the developments are less than 50 acres. The largest development is the 390-acre Edgewater development, which is already under construction. A greater part of the Edgewater development has been completed with all major infrastructure completed and 963 dwellings constructed of the proposed 1,358.

North Arboga Study Area

There are 10 planned and proposed developments in the North Arboga Study Area (NASA). Upon completion, the developers are proposing a total of 2,025 dwelling units on 411 acres. The largest development in NASA is Thoroughbred Acres, just south of McGowan Parkway. The developer, David Lanza, plans to construct 445 dwelling units on 111 acres of land.

Wheatland SOI Area

Significant growth is anticipated within Wheatland's existing SOI as currently proposed developments are constructed. There are a total of 16,673 residential dwelling units planned or proposed within the City of Wheatland and its SOI. Proposed developments within the City's existing bounds include Almond Estates, Heritage Oaks East and West, and Jones Ranch. Proposed developments outside of the City bounds, but inside the City's existing SOI, include Johnson Rancho, Eagle Meadows I, II and III, Nichols Grove, Weststar Roddan Ranch, and two Landmark developments. Total acreage for these developments is 5,134 and over 350 acres of proposed commercial and industrial space. In addition, there are two proposed projects (a Raney development and the Wheatland wastewater treatment plant) just outside of Wheatland's SOI, for which applications are being processed by Wheatland.

²⁰ The Bear River development is located just outside the PLSP area to the southwest, adjacent to other PLSP developments. The project proposed to be annexed to the PLSP in its March 2008 Draft EIR.

The most sizeable proposals in the Wheatland area are Johnson Rancho, Jones Ranch and Heritage Oaks (East and West). Johnson Rancho, the largest of the three, is a proposed 3,300-acre development bordered by Dry Creek to the north and the Bear River to the south. AKT Development, River West Investments and Lennar Communities are the three major developers of the project. The initial plans call for over 9,000 residential units and 300 acres of commercial property. The development was still in the early planning stages, as of early 2008.

Jones Ranch, by Lakemont Communities, is a 194-acre development area annexed to the southwest of the City of Wheatland, south of Wheatland Road. The plan for development includes over 550 residential units and two acres of neighborhood commercial area.

Heritage Oaks, by Premier Homes and Devalentine Family Partnership, is a 235-acre project area annexed to the southeast of the City of Wheatland, southwest of SR 65 to the County line. The plan for development includes nearly 780 residential units and over 20 acres of commercial land, including a 120,000-square foot shopping center, an 80-room hotel, and a 6.5-acre mini-storage facility.

Brophy/South Yuba

Feather Creek, Magnolia Ranch, Woodbury, and Chippewa are proposed for the unincorporated area northwest of Wheatland along SR 65. These developments are proposed to total 3,730 acres with 15,665 additional dwelling units.

Feather Creek is a 700-acre proposed project located southwest of SR 65, east of Forty Mile Road. Sage Community Group proposes to develop 2,945 housing units, 20-acre school site, 151 acres of open space and parks, and a four-acre neighborhood commercial site for a possible store and a gas station. The developer has proposed a specific plan, and related CEQA documentation is anticipated to be released for public review in 2008.

On the northeast side of SR 65, Magnolia Ranch is a 1,028-acre proposed development along South Beale Road, south of Ostrom Road. Montna Farms hopes to develop the site with a mixture of residential, commercial and industrial uses. The project is being processed concurrent with the Yuba County General Plan Update, which the County anticipates will be completed in the spring of 2009. The land use map has not been finalized; preliminary plans include 5,000 residential units along with over 40 acres of neighborhood commercial zoned land. In addition, over 165 acres will consist of a business park and light industrial center.

Woodbury is a 1,633-acre development located northeast of the intersection of SR 65 and 70 and south of Erle Road. Reynen & Bardis Communities plans to develop over 6,300 residential units, along with over 60 acres of neighborhood commercial areas, and a 56-acre business park located in the northwest of the development. In total, the development is projected to contain over 217 acres of non-residential uses.

Chippewa, by RAH Development, is a 368-acre project located to the immediate southeast of the Woodbury development, east of the intersection of SR 65 and 70. At build-out, Chippewa will contain nearly 1,100 single-family and 280 multi-family residential units. The single family residential units will be built at a density ranging from four to six dwelling units per acre, with the multi-family residential units being built at a density of 20 dwelling units per acre.

There are four major non-residential economic development areas in the Brophy/South Yuba area. These economic development areas are designated by the land use authority for commercial or industrial activities but there are no known proposed or planned projects with the exception of the proposed casino discussed here. The Sports/Entertainment Zone is a 1,000-acre planning area located adjacent to SR-65 in the northeast and Forty Mile Road in the west. The Sleep Train Amphitheatre occupies 90 acres in the southernmost portion of the zone. The County aims to attract sports, entertainment and commercial uses to the remaining 343 available acres. The Estom Yumeka Maidu Tribe has proposed a 170 room casino within the Sports/Entertainment Zone.²¹ Plans for the casino have not yet been approved by the County.

In addition, Beale AFB has proposed to lease 430 acres in the southwest corner of the Base as part of an enhanced use leasing project. Beale AFB has released a request for qualifications for proposals by private and municipal entities to lease the wastewater treatment plant location along with two other sites on the base. The areas are conducive to rail-accessible industrial uses, wastewater treatment, and renewable energy development.²²

The 2,492-acre Research and Development Park, is located east of SR 65 and southwest of Beale AFB. The County aims to attract corporate campuses, office complexes, and other commercial or light industrial ventures to this location.

The Rancho Road Area, zoned for industrial and commercial use, is 500 acres of land adjacent to the Sports/Entertainment Zone and SR-65. The area offers freeway frontage. Infrastructure has not yet been developed.

Foothills

There are four major developments proposed in the foothills of Yuba County, with 8,970 proposed dwelling units spread over 7,730 acres.

Yuba Highlands is a proposed development of more than 2,900 acres located north of Beale Air Force Base in the River Highlands Community Plan area. The Yuba Highlands development was defeated by a ballot measure in February 2008; however, the developer plans to make a revised proposal for the development.²³ Developer Gary Gallelli originally proposed to develop over 5,101 residential units, over 20 acres of core and neighborhood commercial areas, and 64 acres of business park. The project EIR was approved by the County Board of Supervisors in 2007. Area voters rejected the proposal in 2008, but a lower-density version may be proposed for this site in the future.

The County adopted a specific plan for Spring Valley in 1992, which can accommodate up to 3,500 dwelling units and 27.5 acres of commercial land spread over 2,450 acres at build-out. A development agreement was approved in 1996 between the County and the developer, Axel

²¹ U.S. Department of the Interior, 2008, pp. 2-14.

²² Air Force Press, Beale AFB-Introduction, 2008.

²³ The developer had not released a revised Yuba Highlands development plan as of July 2008. Opponents of development in Yuba Highlands indicated that the preferred land use for the area is one at “reasonable grazing densities,” and that a new development plan for the area would have to be “significantly smaller” in size than originally proposed.

Karlshoej. The developer anticipated submitting a tentative map to the County after approaching the community in Summer 2008.

In addition, Foster Development Group has proposed the Quail Valley Estates, an equestrian ranch project that would include 300 additional homes on 2-acre parcels across 1,500 acres, adjacent to the Yuba-Butte county line along Los Verjeles Road. The plan also calls for a 1,000-acre conservation easement. The developer was in the CEQA process as of early 2008.

The developer Klein Robinson has proposed a 70-lot development just south of the Yuba River along the Yuba-Nevada county line. Of the proposed lots in Excelsior, 39 would be estate lots ranging from five to 20 acres and 31 lots would be on .25 to .33 acre lots. The entire subdivision would consist of 880 acres, of which 794 acres would be dedicated to open space. The development is in the initial planning stages, and the developer has not yet submitted an application to the County.

GROWTH STRATEGIES

Wheatland

Guiding principles for future growth adopted by the Planning Commission and City Council include creating a strong local employment base; balancing development on both sides of the existing SR 65 and railroad tracks; reinforcing downtown as the traditional and cultural core of the city (but not as the central commercial district); planning the City to accommodate future freeway and arterial expansion; and emphasizing neighborhood-oriented growth.

Wheatland's General Plan identifies three strategies to accommodate projected long-term growth—annex additional land outside of the City limits, continue infill development where land is available and encourage the re-use of underutilized lands. The City has pursued the first strategy already, having annexed 479 acres in 2006, doubling the size of the city. Several infill projects have been approved since the General Plan update. Residential policies include preservation and enhancement of existing neighborhoods through maintenance, rehabilitation, and infill development and development of distinct neighborhoods with a range of services such as parks, schools, and neighborhood shopping. Commercial development will be directed to the area adjacent to the proposed SR 65 bypass, Downtown, and the northeastern portion of the planning area.

The City's existing SOI extends beyond the boundary north to Dairy Rd (west of SR 65) and Dry Creek Levee (east of SR 65), west of Oakley Lane (0.75 miles in the southwestern portion and one mile in the northwestern portion), south to the Yuba-Sutter and Yuba-Placer county lines, and east to the western Camp Far West area. The City's has planned for the portion of the City's SOI west of Jasper Lane in its 2006 General Plan update. The City proposes to expand its SOI north to Ostrom Road, west to Forty Mile Road, east to include the Camp Far West community, and south to the Bear River. The City also proposes an area of concern—where the City would be notified of County development plans—that would extend north to Erle Road and the residential area of Beale AFB and west to SR 70.

Marysville

The City's primary growth objective, given the current real estate market, is to encourage commercial development and redevelopment in the downtown area and infill development

throughout the City. The City's 2004 economic development strategic plan for downtown Marysville outlines a vision to revitalize downtown and compete with neighboring commercial centers (e.g., Yuba City). The City's strategy is to capitalize on its small-town charm and preserve historic landmarks and character to attract regional spending power and tourists. In addition to typical infill challenges, constraints include parking, pockets of blight and empty storefronts. The City's downtown marketing plans call for showcasing the City's history, improving the presentation of empty storefronts, and active retention and recruitment of businesses. The City has faced challenges in implementing this vision and competing with Yuba City as a business location. However, major projects, such as the Caltrans District 3 Headquarters and Rideout Memorial Hospital expansion, are anticipated to bring more jobs and activity to the City.

Marysville's existing SOI currently includes a primary SOI and an "ultimate growth area." The primary SOI area includes the City's boundary area as well as territory north of the city limits. The primary SOI is located north of the Yuba River, and extends north to Woodruff Lane in the northeast and Ramirez Road in the northwest, east to Kibbe Road, and west to the Yuba-Sutter County line. The City proposes to retain its primary SOI, which the City considers to be its future growth area. The "ultimate growth area" is located north of the City's primary SOI. This area is bounded by Ramirez Road in the south and east, the Yuba-Sutter County line in the west, and the Yuba-Butte County line in the north. LAFCO's vision was that this area "may not develop within the next 20 years, but ultimately will be developed."

The City considers its future growth area to be annexable territory north of the city lying between SRs 20 and 70. Due to costs of extending wastewater and drainage infrastructure to this area, viable development would require critical mass, most likely a large proposed development. The City anticipates that significant investment in drainage and sewage infrastructure would be necessary, including 100-200 year flood protection and extension of sewage pipeline across Jack Slough for development west of Jack Slough. The latter would require a pipeline running under the slough or over a bridge. The City does not anticipate that significant water infrastructure investments would be needed to serve the area.

Countywide

The primary guiding goals for land use and development in the General Plan include creating and maintaining convenient and centrally located commercial areas and employment centers, economic expansion and diversification, retention of the most productive agricultural lands, and preservation of open space. The 2008 General Plan Update Background Report reiterates these goals, and establishes that any new growth should primarily focus on existing developed areas, such as the communities of Linda, Olivehurst and Plumas Lake. Community input during the General Plan Update Town Hall Forums emphasized the need for more commercial and industrial businesses in Yuba County to provide shopping and employment opportunities that do not require long-distance travel.²⁴

The Economic Development Strategic Plan identifies several strategies to provide programs and incentives to retain and expand business activities in the County.²⁵ Strategies include marketing to

²⁴ Yuba County, *General Plan Update Background Report: Land Use*, 2008.

²⁵ Yuba County, *Economic Development Strategic Plan & Resource Guide*, 2007.

promote Yuba County as a preferred place to live, attraction of new business and investment through incentives, retention of existing enterprises, development of commercial and community facilities, education and training programs to provide skilled employees, communication through community outreach, promotion of tourism to bring in out-of-area dollars, and research to maintain a public information database.

Commercial and industrial development in the County will be directed to the Research and Development Park and the industrial parks adjacent to the Yuba County Airport, as well as planned commercial zones in the Plumas Lake Specific Plan, East Linda Specific Plan, North Arboga Study Area and the Olivehurst Avenue Specific Plan. Infrastructure needs necessary for development of the Research and Development Park are yet to be identified.

The commercial areas prioritized by the County are within the Yuba-Sutter Enterprise Zone. The Enterprise Zone includes the communities of Linda and Olivehurst—generally between McGowan Parkway and Simpson Dantoni Road and from Feather River Boulevard east to Mercury Way. The zone was designated by the State in 1986, and renewed in 2006 for 15 years. Incentives include below-market (15 percent) land prices and low-interest financing for local businesses.

POPULATION PROJECTIONS

There are a total of 62,470 housing units planned or proposed throughout the County. Once absorbed, the County population will grow by about 183,738 if new homeowners’ households are comparable in size to existing households. Assuming the planned and proposed developments are built and absorbed, the County population would grow to 254,483.²⁶ Once planned units are absorbed, the population in the existing Wheatland boundaries and SOI would grow to 52,698, in the Marysville city limits and primary SOI to 12,945, and in other parts of the County to 188,840. Future population growth will depend on entitlement outcomes for proposed developments, housing supply in adjacent areas, and absorption rates.

Table 3-12: Population Projections

At build-out the population in the existing Wheatland and Marysville city limits and SOIs are projected to be 57,100 and 34,043, respectively. The Wheatland 2006 General Plan projected that the population would grow to 30,100 by the year 2025 in the portion of the City’s

	Marysville Primary SOI ¹	Wheatland SOI	Remainder of County	Total
2007	12,713	3,513	54,519	70,745
2007 & Planned and Proposed Development	12,945	52,698	188,840	254,483
Build-out	34,043	57,100	NA ³	NA
Notes:				
(1) Marysville build-out estimates reported by the City based on interest in development in the northern portion of the primary sphere.				
(2) Unincorporated areas less the existing Wheatland SOI and Marysville primary SOI.				
(3) Build-out projections are not available for the unincorporated areas until the General Plan Update has				

²⁶ The 2020 population projection is based on the number of proposed units multiplied by the average household size (three persons) as reported in 2007 by DOF for both the City of Wheatland and unincorporated areas of the County. All proposed developments within Wheatland’s existing SOI (including the proposed Johnson Rancho development with 9,200 units) are included in the projections for the City. The remaining developments are included in the unincorporated projections.

SOI west of Jasper Lane; an additional 27,000 residents are expected in the Johnson Rancho subdivision. The City of Marysville plans for 13,450 individuals by 2020 in its General Plan housing element and an estimated 20,593 in the northern portion of the City's SOI. The build-out population for the unincorporated area is pending completion of the County General Plan Update.

By comparison, the California Department of Finance and SACOG project countywide growth to be less than proposed and planned development would indicate. DOF countywide population projections would be consistent with only one-quarter of the planned units being constructed and absorbed by 2020, and only two-fifths by 2030. Similarly, the most recent (2004) SACOG projections appear to be low, and would be consistent with approximately one-third of planned units being developed in the County by 2035. The County's *2004 Development Impact Fee Update Report* had projected approximately 162,412 for the County by 2020.

Land use planners in high-growth areas, such as the southern portion of the County, should periodically update development plans and growth projections so that long-term water and transportation planning accounts for the future needs of the area.

SERVICE PROVIDERS

Municipal services are provided to the County by 85 local agencies under LAFCO jurisdiction, as well as federal and state agencies, the County and private service providers. Local government agencies under LAFCO jurisdiction include the Cities of Marysville and Wheatland, four community services districts, 13 water and irrigation districts, five reclamation districts, five fire protection districts, 10 cemetery districts, 44 county service areas, and miscellaneous districts. Beale AFB and Yuba County are the largest service providers not subject to LAFCO.

The agencies provide municipal services through a wide array of service configurations, including service directly by agency employees or volunteers, contracts with other service providers, or jointly with a contracted provider, as shown in Table 3-13. The Cities of Wheatland and Marysville, Yuba County Water Agency, Beale AFB, Yuba County, and other urban providers are professionally managed agencies providing services primarily with paid staff. Many of the rural districts rely on board members, board members' farm workers and volunteers to provide services. To look up providers by geographic areas, see the overview maps (Appendix B) and the constituent guide to providers by community (Appendix A preface).

Table 3-13: Service Providers

Service Provider	Water			Retail			Flood Control	Stormwater/Drainage	Sewer			Fire			Police		Streets			Parks		Miscellaneous										
	Water Supply	Groundwater Extract	Groundwater Mgmt	Water Treatment	Domestic	Irrigation			Recycled	Collection	Treatment	Disposal	Structure Protection	Wildland Protection	Paramedic	Ambulance	Dispatch	Law Enforcement	Traffic	Dispatch	Maintenance	Lighting	Sweeping	Traffic Signals	Maintenance	Recreation	Golf	Cemetery	Library	Mosquito Control	Resource Conservatn	Solid Waste
Cities and Independent Special Districts Subject to LAFCO Jurisdiction																																
City of Marysville								●	●	●	●	○		○	○	●	●	●	●	●	○	●	●		○	●				○		
City of Wheatland		●		●	●			●	●	●	●	●			○	○	●	●	○	●	○	●	●						○			
Brophy Water District						●																										
Browns Valley Cemetery District																											●					
Browns Valley Irrigation District	●	●				●																	○	○								
Brownsville Cemetery District																											●					
Camp Far West Irrigation District						●																										
Camptonville Cemetery District																											×					
Camptonville CSD	●	●		●	●						●	●	●	○	○												●					
Cordua Irrigation District	●					●																										
District 10-Hallwood CSD											○	○	○	○	○																	
Dobbins-Oregon House FPD											●	●	●	○	○																	
Foothill FPD											●	●	●	○	○																	
Keystone Cemetery District																										●						
Linda County Water District		●		●	●				●	●	●																					
Linda Fire Protection District											●	●	●	○	○																	
Loma Rica-Browns Valley CSD											○	○	○	○	○																	
Marysville Cemetery District																											×					
Marysville Levee District							●																									
Nevada Irrigation District	●			●	●	●	●																	●								
North Yuba Water District	●			●	●	●																										
Olivehurst Public Utilities District		●		●	●			●	●	●	●	●	●	○	○				●				●									
Peoria Cemetery District																										●						
Plumas-Brophy FPD											●	●	●	○	○																	
Ramirez Water District						●																										
Reclamation District 10							●																									
Reclamation District 784							●	●																								
Key:																																
● indicates service provided currently by agency staff														△ indicates service provided by agency staff and by contract with another provider																		
○ indicates service provided directly by contract with another service provider														× indicates formation purpose not presently exercised																		

Service Provider	Water						Flood Control	Stormwater/Drainage	Sewer			Fire			Police		Streets			Parks		Miscellaneous										
	Water Supply	Groundwater Excerpt	Groundwater Mgmt	Water Treatment	Retail				Collection	Treatment	Disposal	Structure Protection	Wildland Protection	Paramedic	Ambulance	Dispatch	Law Enforcement	Traffic	Dispatch	Maintenance	Lighting	Sweeping	Traffic Signals	Maintenance	Recreation	Golf	Cemetery	Library	Mosquito Control	Resource Conservatn	Solid Waste	
					Domestic	Irrigation																										Recycled
Reclamation District 817							Δ	●																								
Reclamation District 2103							Δ																									
River Highlands CSD		●				●		×	●	●	●							×				●										
Smartville Cemetery District																									●							
Smartville FPD											●	●	●	○												●						
South Feather Water & Power Agency																																
South Yuba Water District			●			Δ																										
Strawberry Valley Cemetery District																									●							
Sutter-Yuba MVCD																												●				
Upham Cemetery District																									●							
Wheatland Cemetery District																									●							
Wheatland Water District						×																										
Yuba County RCD																															●	
Yuba County Water Agency	●		●				●																Δ									
Major Non-LAFCO Providers																																
Yuba County							●							●	●	●	●	Δ		○	Δ				●					○		
Beale Air Force Base		●	●	●	●		●	●	●	●	●	●	○	●	●	●	●	●				●	●	●		●	●				○	
Bi-County Ambulance													●																			
California Dept. of Fish & Game																						●	●							●		
California Dept. of Forestry and Fire Protection											●	●	●	○	●																	
California Highway Patrol															●	●	●															
California Water Service Company															●	●	●															
Caltrans																																
Dry Creek Mutual Water Co.		○				●																										
Hallwood Irrigation Company		○				●																										
Plumas Mutual Water Company		○				●																										
Yuba-Sutter Disposal																															●	
Yuba-Sutter Transit																																

Key:
 ● indicates service provided currently by agency staff
 ○ indicates service provided directly by contract with another service provider
 Δ indicates service provided by agency staff and by contract with another provider
 × indicates formation purpose not presently exercised

Service Provider	Water						Flood Control	Stormwater/Drainage	Sewer			Fire			Police			Streets			Parks			Miscellaneous													
	Water Supply	Groundwater Extrect	Groundwater Mgmt	Water Treatment	Retail				Collection	Treatment	Disposal	Structure Protection	Wildland Protection	Paramedic	Ambulance	Dispatch	Law Enforcement	Traffic	Dispatch	Maintenance	Lighting	Sweeping	Traffic Signals	Maintenance	Recreation	Golf	Cemetery	Library	Mosquito Control	Resource Conservatn	Solid Waste						
					Domestic	Irrigation																										Recycled					
CSA 43 (Brownsville)								o										o																			
CSA 44 (Dobbins)								o											o																		
CSA 45 (Oregon House)								o											o																		
CSA 46 (Smartville)								o											o																		
CSA 48 (Olivehurst)								o											o	o																	
CSA 53 (Oregon House)								o											o																		
CSA 54 (Oregon House)								o											o																		
CSA 55 (Browns Valley)								o											o																		
CSA 59 (Oregon House)								o											o	o																	
CSA 60 (Browns Valley)								o											o																		
CSA 61 (Browns Valley)								o											o																		
CSA 63 (Browns Valley)								o											o																		
CSA 67 (CSA is not yet active)								x											x	x																	
Inactive CSAs																																					
CSA 47 (Oregon House)								x											x																		
CSA 49 (Browns Valley)								x											x																		
CSA 51 (Smartville)								x											x																		
CSA 56 (Linda)								x											x	x																	
CSA 57 (Challenge)								x											x																		
CSA 58 (Browns Valley)								x											x																		

Key:
 ● indicates service provided currently by agency staff
 ○ indicates service provided directly by contract with another service provider
 Δ indicates service provided by agency staff and by contract with another provider
 × indicates formation purpose not presently exercised

4. WATER

This chapter reviews domestic and irrigation water services in Yuba County, including how these services are provided by the special districts, cities and other providers not under LAFCO jurisdiction. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing. Government structure options are identified for local agencies under LAFCO jurisdiction.

Table 4-1: Water Service Providers

OVERVIEW

This section provides an overview of the water service providers, water service areas, and water regulatory context in Yuba County.

SERVICE PROVIDERS

There are nine domestic (potable) water providers in Yuba County. Two of the domestic providers also serve irrigation water. In addition, there are 11 irrigation water purveyors in Yuba County, as shown in Table 4-1.

The Yuba County Water Agency (YCWA) conveys surface water to irrigation water providers throughout much of Yuba County and conducts groundwater management and water planning. YCWA does not distribute surface water to municipal water purveyors.

For a geographic overview of the water suppliers, please refer to Figures 4-2 and 4-3. For a detailed profile of each individual agency, please refer to Appendix A.

Service Provider	Water Supply	Groundwater Extraction	Groundwater Mgmt	Water Treatment	Distribution		
					Domestic	Irrigation	Recycled
Domestic Water Providers							
Beale Air Force Base *		•	•	•	•		•
California Water Service Co. *		•		•	•		
Camptonville CSD	•	•		•	•		
City of Wheatland		•		•	•		
Linda County Water District		•		•	•		
Nevada Irrigation District *	•			•	•	•	
North Yuba Water District	•			•	•	•	
Olivehurst Public Utilities District		•		•	•		
River Highlands CSD		•			•		
Irrigation Water Providers							
Brophy Water District						•	
Browns Valley Irrigation District	•	•				•	
Camp Far West Irrigation District						•	
Cordua Irrigation District	•					•	
Dry Creek Mutual Water Co. *						•	
Hallwood Irrigation Co. *						•	
Plumas Mutual Water Co. *						•	
Ramirez Water District						•	
S. Feather Water & Power Agency *	•			•	•	•	
South Yuba Water District			•			•	
Wheatland Water District						•	
Yuba County Water Agency	•		•				
* indicates provider is not subject to Yuba LAFCO jurisdiction							
Note:							
(1) Wheatland Water District is expected to begin irrigation water service by 2009.							

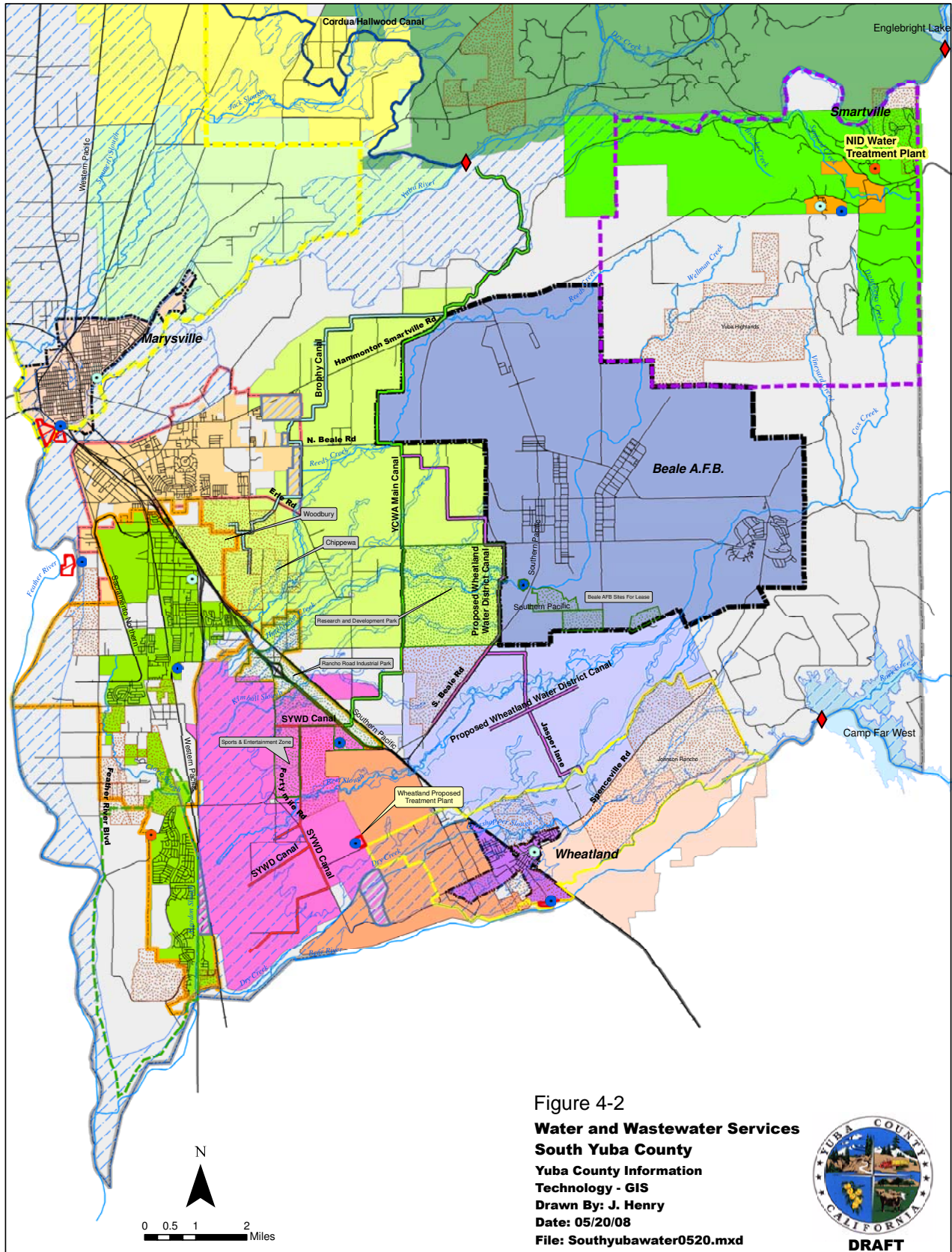


Figure 4-2
Water and Wastewater Services
South Yuba County
Yuba County Information
Technology - GIS
Drawn By: J. Henry
Date: 05/20/08
File: Southyubawater0520.mxd



DRAFT

Legend

- | | | | |
|--|--|-----------------------------------|--|
| City Of Marysville | Water Storage | Linda County Water District - SOI | NID Service Area |
| Marysville - Primary Sphere Of Influence | Wastewater Treatment Plant | Wheatland Water District | Browns Valley Irrigation District |
| City Of Wheatland | Water Treatment Plant | Plumas Mutual Water Company | Hallwood Irrigation Company |
| City of Wheatland Sphere Of Influence | Dams | South Yuba Water District | Cordua Irrigation District |
| River Highlands CSD | Olivehurst Public Utility District | Brophy Water District | Areas Of Overlapping Boundaries |
| River Highlands CSD Sphere Of Influence | Olivehurst Public Utility District - SOI | Dry Creek Mutual Water Company | No Water Service Provided |
| Percolation Ponds | Linda County Water District | Camp Far West Irrigation District | Projected Post-Improvement Floodplain* |

*Source: MBK Engineers

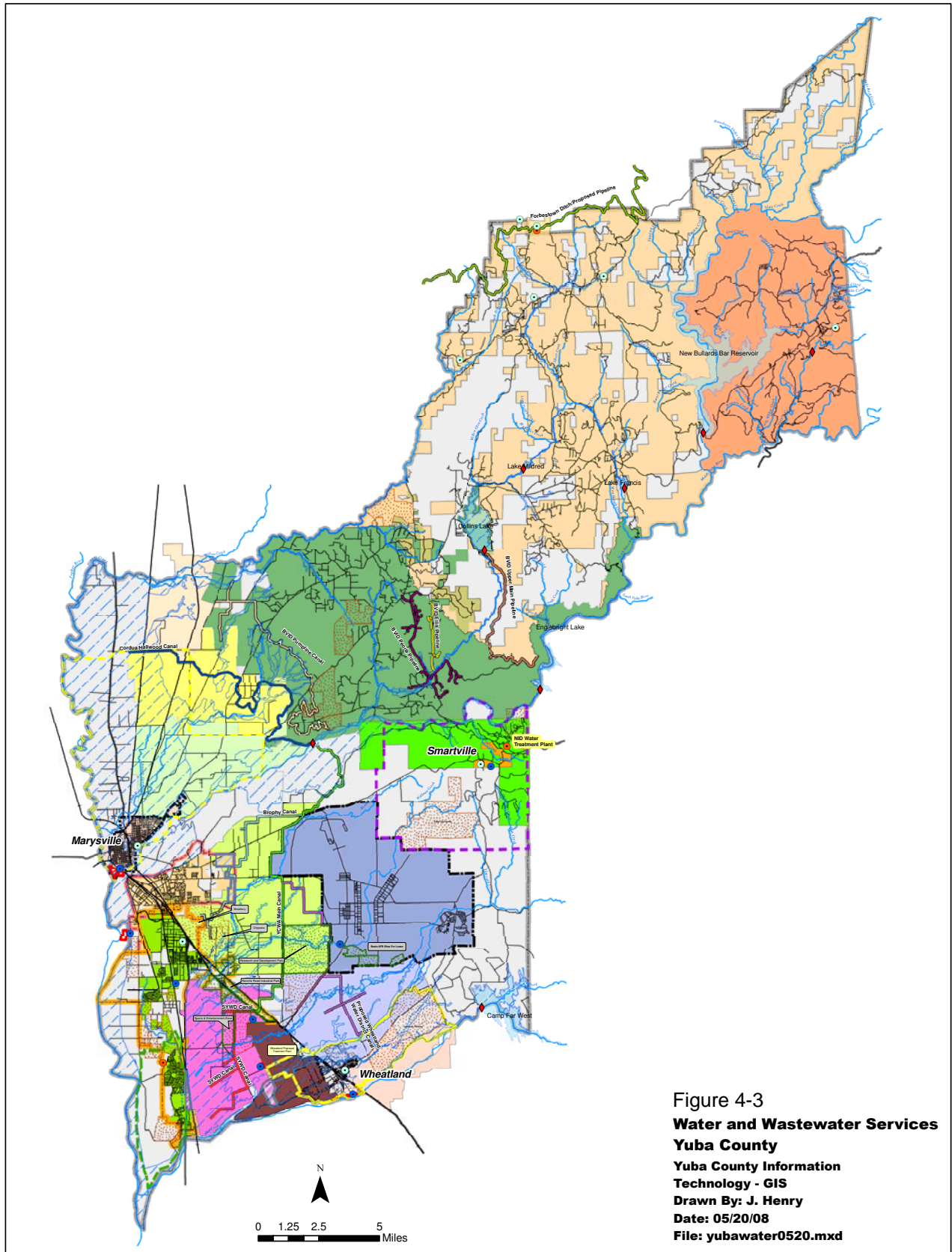
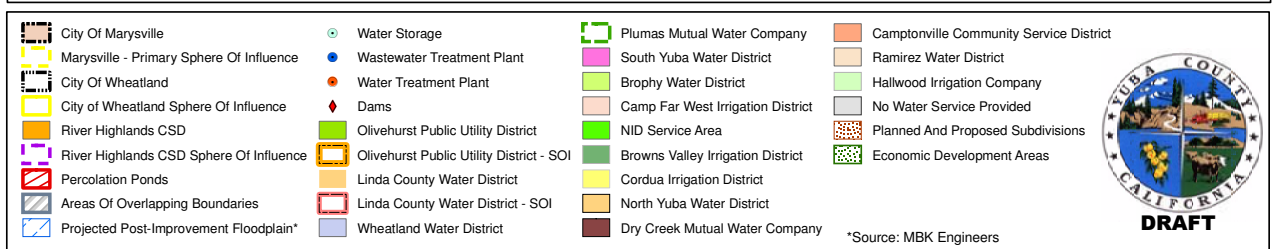


Figure 4-3
Water and Wastewater Services
Yuba County
Yuba County Information
Technology - GIS
Drawn By: J. Henry
Date: 05/20/08
File: yubawater0520.mxd



Potable Water Providers

Table 4-4: Potable Water Providers

The nine potable water providers in Yuba County are shown in Table 4-4. These include all “community water systems” except those classified as “very small” and all local agencies providing domestic water service.²⁷

Beale Air Force Base (AFB) serves treated groundwater to employees and residences located on the AFB. The AFB’s water supply is provided entirely by the South Yuba Groundwater Subbasin. Domestic water is treated at a groundwater treatment plant that was built in 2003 to address high levels of iron and manganese in the water. The

base supplied a total of 1,863 acre-feet (af) of water in 2005. There are hazardous waste sites and other sites with groundwater contamination. LAFCO does not have jurisdiction over the base.

The California Water Service Company (Cal Water) serves treated groundwater to the City of Marysville. The investor-owned utility serves 50 communities from its 25 water systems spread throughout California. The City of Marysville water supply is provided entirely by the North Yuba Groundwater Subbasin. Water is disinfected, water at two wells is treated to address high levels of manganese. Cal Water supplied a total of 3,287 af of water in 2005. LAFCO does not have jurisdiction over Cal Water.

Camptonville Community Services District (CCSD) serves treated surface and groundwater to 68 connections in the Camptonville community. The District’s primary water supply is surface water from Campbell Gulch, and secondary supply is groundwater. CCSD relies on groundwater to augment supplies during summer months and dry years and during storm events, which can make Campbell Gulch water muddy. The water is treated with disinfection processes. The District supplied 33 af in 2005.

Service Provider	Groundwater	Surface	Recycled	Annual Demand 2005 (af)
Domestic Water				20,941
Beale AFB	●			1,863
Cal Water - Marysville	●			3,287
Camptonville CSD	●	●		33
City of Wheatland	●			924
Linda County Water District	●			3,521
NID - Smartville		●		95
North Yuba Water District		●		1,460
Olivehurst Public Utilities District	●			3,430
River Highlands CSD ¹	●			58
Other Unincorporated Areas ¹	●			6,270
Notes: (1) Estimated based on treatment plant operating at 83% of capacity. (2) Estimated based on average per capita use of 270 gpcd. Sources: water providers, authors' estimates				

²⁷ The potable water providers within the scope of the study include all “community water systems,” except “very small” systems serving less than 500 people, and all local agencies providing domestic water service. “Community water systems” were identified from the U.S. EPA’s Safe Drinking Water Information System database, and are defined by EPA as public drinking water systems that serve the same people year-round. Excluded from the scope of the review are “non-community water systems,” such as schools and camps, and “very small” providers serving fewer than 500 people, such as mobile home parks.

The City of Wheatland provides retail water services to 1,058 customers in the form of groundwater pumping, treatment, water quality testing, conveyance, storage, and delivery. The City's water supply is provided entirely by the South Yuba Groundwater Subbasin. The water is treated with chlorine to meet disinfection requirements set by the California Department of Public Health (DPH). The City distributed 924 af of water in 2005.

Linda County Water District (LCWD) serves treated groundwater to 3,360 customers in the community of Linda. LCWD's water supply is provided entirely by the South Yuba Groundwater Subbasin. Contaminants are removed from the water at four wellhead treatment facilities; treatment processes include removal of gases, and filtering of iron and manganese. The District distributed 3,521 af in 2005.

Nevada Irrigation District (NID) serves domestic water to 44 customers in the Smartville vicinity. NID was formed in 1921 to provide irrigation water to southwest Nevada County. It holds water rights on the Middle and Lower Yuba Rivers. Smartville had been served by Excelsior Water and Power Company until 1926 when Excelsior properties in Yuba County were sold to the District. A 1926 Railroad Commission Order compels NID to continue serving Smartville areas formerly served by Excelsior.²⁸ NID delivers surface water (i.e., snowmelt and treated wastewater effluent) to Smartville, conveying it through earthen ditches and treating it at a small treatment plant in Smartville. Smartville lies within the NID SOI, but not within its boundary. Nevada LAFCO has jurisdiction over NID.

North Yuba Water District (NYWD) serves surface water to 729 treated water connections in Forbestown, Rackerby, Challenge, and Brownsville. The NYWD water supply is surface water from Feather River/Slate Creek and Dry Creek. Domestic water is treated at the NYWD filtration plant in Forbestown through clarifiers and filters. The District distributed 7,445 af in 2005, of which 4,500 af was sold to Yuba City. The District sells water to Yuba City, because the source is at a lower elevation than the NYWD service area and cannot flow to NYWD by gravity. NYWD relies on South Feather Water & Power Agency (SFWPA) for transmission of water to its service area. When an SFWPA agreement with PG&E expires in 2010, NYWD water rights will increase.

Olivehurst Public Utility District (OPUD) serves groundwater to 5,221 connections. OPUD's water supply is provided entirely by the South Yuba Groundwater Subbasin. Contaminants, such as iron and manganese, are removed from the water at four wellhead treatment facilities. Treatment processes include chlorine injection and pressurized sand filters at each of the facilities. In addition, the Olivehurst facilities remove gases, which is not necessary at the Plumas Lake facilities. . The District distributed 3,430 af in 2005. OPUD does not actively distribute recycled water, but could do so in the future as its wastewater treatment plant produces tertiary treated wastewater.

River Highlands Community Services District (RHCSA) serves domestic water to 84 residences in the Gold Village community in the Smartville vicinity. The District provides groundwater pumping, water quality testing, storage, and delivery services. The independent special district was formed in 1980 to provide water, wastewater and other services to a then-planned development, called River Highlands, which ultimately was not built. In 1990, LAFCO approved annexation of

²⁸ The Railroad Commission is a predecessor agency of the California Public Utilities Commission.

Gold Village to the District. Water supplies to the community were curtailed at times during 2006 and 2007 related to a wastewater treatment plant failure and pump failures.

The remainder of the County is served by private wells and minor drinking water systems, such as those at various mobile home parks. There were approximately 6,900 residences in 2005 in Yuba County that were not served by the public water systems discussed above. Those homes rely on groundwater basins for their water supply. Associated domestic water use was approximately 6,038 af in 2005.²⁹

Irrigation Water Providers

Table 4-5: Irrigation Water Providers

As a major water rights holder on the Yuba River, YCWA delivers about 310,000 acre-feet (af) of surface water annually to its member units, and transfers an annual average of 76,000 af to the State and water providers outside the area.³⁰ Following a devastating flood, the independent special district was formed in 1959 to develop infrastructure for flood protection, water supply and hydroelectric power generation with Yuba River flows. YCWA operates the New Bullards Bar Dam and Reservoir and smaller diversion dams in the upper watershed, and generates hydroelectric power. Its surface water sources include the North Yuba River, Oregon Creek and the Middle Yuba River. YCWA provides surface water supplies to seven member units—Brophy Water District, Browns Valley Irrigation District, Cordua Irrigation District, Dry Creek Mutual Water Company, Hallwood Irrigation Company, Ramirez Water District, and South Yuba Water District—and is developing a system to convey surface water to the Wheatland Water District.

Service Provider	Groundwater	Surface	Recycled	Annual Demand 2005 (af)
Irrigation Water				514,100
Brophy Water District		●		61,096
Browns Valley Irrigation District		●		40,619
Camp Far West Irrigation District		●		11,543
Cordua Irrigation District		●		61,969
Dry Creek Mutual Water Co.		●		9,525
Hallwood Irrigation Co.		●		50,466
NID - Smartville		●		NP
North Yuba Water District		●		1,485
Plumas Mutual Water Co.		●		7,335
Ramirez Water District		●		15,850
S. Feather Water & Power Agency ¹		●		865
South Yuba Water District		●		35,456
Wheatland Water District	●			30,421
Private wells - North Yuba ²	●			39,300
Private wells - South Yuba ²	●			56,379
Private surface water rights ²		●		91,791
Notes: (1) Estimated based on average per acre use of 2.5 af for prunes.				
(2) IRWMP estimates for agriculture uses less specific districts' uses.				
Sources: YCWA, DWR, water providers, authors' estimates				

²⁹ Domestic water use for residences not connected to the domestic water systems discussed above was estimated based on the average per capita water use in 2005 of 270 gallons per capita per day (gpcd).

³⁰ An acre foot is the amount of water required to cover an area of one acre to a depth of one foot. It is equivalent to 325,851 gallons.

There are 13 raw water distributors serving Yuba County, as shown in Table 4-5.³¹

Brophy Water District (BWD) distributes Yuba River surface water to 30 customers, primarily rice farmers. The boundary area encompasses approximately 17,200 acres. Portions of the boundary area are not irrigated by surface water. BWD was formed in 1965, but was inactive until the groundwater overdraft of 1982. BWD began receiving surface water from the Goldfields jointly with South Yuba Water District (SYWD) in 1983, and became a member unit of YCWA in 1985. BWD contracts with YCWA for all water supplies, and for canal operations and maintenance services.

Browns Valley Irrigation District (BVID) distributes Yuba River, Dry Creek and Tennessee Creek surface water to 1,489 customers, of which 12 are located outside its boundary.³² The boundary area encompasses 55,400 acres, primarily rice and pasture uses, of which 23,133 are presently served. The District reported that 3,070 acres of irrigable land is presently unserved. BVID was formed in 1888, and holds its own water rights on the Yuba River, Dry Creek and Tennessee Creek. BVID holds rights to store Dry Creek flows at Collins Lake. BVID also contracts with YCWA for Yuba River supplies during irrigation season. BVID has 82,734 af in delivery rights, and 16,300 af in Collins Lake storage rights (in excess of withdrawal rights), excluding its water rights for power purposes.

Camp Far West Irrigation District (CFWID) distributes irrigation water to 13 customers with 3,500 irrigated acres in southeast Yuba County (southeast of Wheatland) and northern Placer County. CFWID has rights to the first 13,000 af annually of Bear River surface water in the Camp Far West Reservoir. South Sutter Water District releases water at the Camp Far West diversion dam into the Camp Far West canal on the north side of the river and the South Sutter canal on the south side of the river. The water is distributed through a system of canals and ditches.

Cordua Irrigation District (CID) distributes Yuba River surface water to 133 customers, seven of which are outside its boundary. Its boundary area of approximately 11,500 acres is primarily used for rice farming, and secondarily prunes; the District is not providing service to 266 acres of orchards in the northwest portion of the District where groundwater is used for micro-irrigation. Formed in 1919, the District holds its own water rights to 60,000 af in Yuba River flows, and contracts with YCWA for 12,000 af.³³ The District has been using water from the Yuba River since the late 1890s and began deliveries from YCWA in 1971. The Cordua/Hallwood Canal diverts water from the Yuba River at the Daguerre Point Dam, which then flows through the Hallwood Irrigation Company service area into the CID boundaries. CID then diverts the necessary water from the canal to its distribution ditches. The remaining water in the canal flows to Ramirez Water District. Ramirez Water District reimburses CID for conveyance services.

³¹ The irrigation water providers within the scope of the study include all service providers that are providing service to multiple connections, and excludes private ranches and farms holding water rights permits associated with their own water use.

³² Connections outside of the boundary are located northeast of the District, near Old Marysville Road. In 2007 the District served a total of 88 af to connections outside bounds.

³³ CID holds a pre-1914 appropriative right to divert up to 75 cfs from the Yuba River for agricultural use, and 1940 and 1948 appropriative rights to divert an additional 90 cfs.

Dry Creek Mutual Water Company (DCMWC) serves Yuba River irrigation water to a 5,100-acre area with orchards, rice and pasture uses that is located west of SR-65 and the City of Wheatland. Originally part of Wheatland Water District (WWD), landowners detached from WWD and formed the Company in 1991 as a member unit of the YCWA. In 1996, the Company signed a water service agreement with YCWA and began to receive surface water from the Yuba River. YCWA conveys water through the South Yuba Canal to just north of the Company's service area. LAFCO does not have jurisdiction over DCMWC.

Hallwood Irrigation Company (HIC) delivers Yuba River irrigation water to approximately 115 agricultural users in the community of Hallwood northeast of the City of Marysville. Its service area covers approximately 12,000 acres with rice and pasture in the northern portion of the territory, alfalfa and wheat in the south, and orchards along the Yuba River. HIC has pre-1914 and 1940 water rights, although HIC agreed in a 1971 settlement agreement to receive 78,000 af of water from YCWA.³⁴ Water is diverted at Daguerre Point Dam. LAFCO does not have jurisdiction over HIC.

NID served 18 raw water connections in the Smartville area in 2006. NYWD serves approximately 100 irrigation connections, primarily in the Dobbins and Oregon House areas; its irrigation service area is no larger than 2,500 acres, containing cattle ranchers, a winery and vegetable farmers, among other crops.

Plumas Mutual Water Company distributes Feather River water to four orchards in the Plumas Lake area. The Company holds post-1914 appropriative water rights to 14,000 af, which is transported through State Water Project facilities. DWR has contractual obligations to serve Feather River water to the Company, along with other water districts, as a result of settlement agreements stemming from the construction of Oroville facilities. LAFCO does not have jurisdiction over the company.

Ramirez Water District (RWD) distributes Yuba River water to 10 connections within its 5,900-acre boundary area where rice is farmed. The northern boundary of the District extends into Butte County, in the community of Honcut. District users all rely on a system of canals and ditches for water delivery, with water flowing from the Yuba River diversion point through the Cordua/Hallwood Canal within Hallwood Irrigation Company (HIC) and CID boundaries and delivered to RWD at three locations.

South Feather Water & Power Agency (SFWPA) serves two parcels in Yuba County just east of Ramirez Road along the Yuba-Butte county line in the community of Loma Rica. The 346-acre service area in Yuba County is a prune-growing area. The Agency's water supply is provided primarily from the upper watershed of the South Fork of the Feather River and upper portion of the Slate Creek watershed. SFWPA also transmits water through its facilities to NYWD with whom it shares water rights and hydroelectric generation revenues. Butte County is the principal county, and Butte LAFCO has jurisdiction over this agency.

South Yuba Water District (SYWD) serves raw water to about 8,500 irrigated acres located south of Olivehurst and west of Wheatland, mostly between SRs 70 and 65. Of the 20 connections served, one is outside its bounds. Formed in 1979, the District relies on surface water from the

³⁴ HIC has a pre-1914 appropriative right to divert 150 cfs from the Yuba River, and a 1940 appropriative right to divert 100 cfs from the Yuba River.

Yuba River through a water supply contract agreement with YCWA. In addition to purchased supplies, the relatively low-lying district also receives about 4,000 af of spill water. District users rely on a canal and ditch system for water delivery, with water flowing through the YCWA Main Canal. SYWD repairs and monitors the ditch system. SYWD is not directly responsible for maintenance of the Main Canal; it reimburses YCWA for canal operations and maintenance costs. SYWD conducts groundwater management activities due to historic groundwater overdraft and salinity.³⁵

By 2010, Wheatland Water District (WWD) plans to serve Yuba River surface water to about 9,200 acres north of Dry Creek. Farmers within WWD currently rely on the South Yuba Groundwater Subbasin; the presently irrigated area is estimated to use 30,421 af. Formed in 1954, WWD has attempted unsuccessfully to acquire surface water on several occasions over the years. YCWA has secured grant funds to help finance the capital costs of extending the YCWA Main Canal to WWD. YCWA will develop the canal and related backbone infrastructure on WWD's behalf. WWD is responsible for design, construction and expansion of the local irrigation distribution system and must complete this work by 2010 to retain contractual commitments for 40,300 af in surface water. WWD has not yet planned the local system, but reported that most of the larger landowners north of Dry Creek will receive service.

In addition to the amounts used by the various local agencies and service providers, there are growers reliant on their own private groundwater wells and surface water rights for irrigation. Approximately 30 percent of irrigation needs are met by groundwater pumping.³⁶ The area north of Marysville (within Reclamation District 10) relies primarily on groundwater for irrigation. Portions of BWD and DCMWC did not elect to receive surface water, and portions of the Reclamation District 784 service area rely on groundwater. The amounts shown in Table 4-5 reflect agricultural groundwater estimates made in the IRWMP less the estimate for WWD groundwater use.³⁷ Additionally, growers with their own surface water rights rely on surface water for irrigation.

WATER SOURCES

Table 4-6: MSR Area Water Sources, 2005

The MSR area water sources are surface water from the Yuba, Bear and Feather rivers, and from Dry Creek, Tennessee Creek, Deer Creek, and Campbell Gulch. Groundwater sources are the North Yuba and South Yuba Groundwater Subbasins.

Yuba River

Yuba River surface water supplied approximately 54 percent of the MSR area's 2005 uses, excluding private parties' exercise of water rights. YCWA, BVID, CID and

Source	Amount
Surface Water	
Yuba River	244,579
Dry Creek/Collins	25,184
Bear River	11,543
Feather River	11,145
Tennessee Creek	1,219
Deer Creek	95
Campbell Gulch	33
Groundwater	
N. Yuba	46,700
S. Yuba	110,000

³⁵ South Yuba Water District, *Groundwater Management Plan*, Feb. 9, 1998.

³⁶ YCWA, *Groundwater Management Plan*, 2005.

³⁷ GEI Consultants, Inc., *Yuba County Integrated Regional Water Management Plan: Draft Report*, January 2008, p. 4-20.

Hallwood Irrigation Company are public agencies with water rights to this source.

The Yuba River water supply is a function of precipitation and instream flow requirements for fish and recreation. The North, Middle and South Yuba Rivers form the upper watershed area. YCWA has rights to divert 1.2 million af, the average annual flows, of the North and Middle Yuba Rivers into its New Bullards Bar Reservoir. YCWA may divert into the reservoir from October to June with 562-732,000 af of effective reservoir storage capacity (net of hydroelectric and seasonal flood control reserves). Upper Yuba water rights holders include NID, PG&E and South Feather Water and Power Agency with combined rights to 480,000 af. Not counting releases from New Bullards Bar Reservoir, about 400,000 af flow into Englebright Dam. The dam is operated by the U.S. Army Corps of Engineers, has a 70,000 af reservoir and releases flows through YCWA and PG&E hydroelectric generation facilities. Below the dam at the Smartville gage, the average annual unimpaired flow is about 2.45 million af, and has varied from 0.4 million af in 1977 to 4.9 million af in 1986.³⁸

Available water is affected by precipitation and snowmelt. Water supply is affected by evolving requirements for Yuba River flows relating to hydroelectric generation and fish needs, and by those outside Yuba County seeking water supplies, particularly drought supplies.

Below Englebright Dam is the 24-mile segment known as the lower Yuba River. The unimpaired flow at Smartville is about 2.4 million af in an average year, having varied from 0.4 million in 1977 to 4.9 million in 1986. YCWA has rights to divert at a rate of 1,593 cubic feet per second (cfs) lower Yuba River water for irrigation and other uses.³⁹

YCWA faces a number of requirements for instream flows that affect its water supply, reducing it below the water rights discussed above. New Bullards Bar Reservoir must release at least 5 cfs to the North Yuba River year-round. Below Englebright Dam, the minimum instream flow must be at least 600-700 cfs and must fall within limits for relatively continuous and uniform flows. At Daguerre Point Dam (after the diversion point for YCWA member units), there must be remaining flows of at least 70-400 cfs depending on the time of year. The Yuba River Accord increases the flow requirement.

Rights to Yuba River water are subject to a number of agreements to allocate water among various providers and the State with various parties holding senior and junior rights. Water supply and fishery interests for Yuba River flows have conflicted over the years.

The State Water Resources Control Board (SWRCB) is responsible for granting water rights permits and approving certain transfers of water rights, to investigate violations and reconsider or amend water rights. SWRCB adopted Water Right Decision 1644, which required YCWA to increase flows, address water temperature concerns for salmon and steelhead, and reduce fish losses at diversion facilities. That decision was litigated, remanded by the court to SWRCB, re-issued by SWRCB in 2003, and subsequently litigated. The Lower Yuba River Accord resolves the litigation

³⁸ HDR Engineering and Surface Water Resources, Inc., *Proposed Lower Yuba River Accord: Draft Environmental Impact Report*, 2007, p. 5-1.

³⁹ A flow of 1,593 cfs for ten months of the year equates to approximately 0.9 million af.

by providing increased flows for fisheries; to accomplish this, there are related agreements by which YCWA member units conduct conjunctive use projects and water exports are protected.

YCWA has 416,000 af in annual surface water contractual commitments to its member units, of which approximately about 341,000 are actually used. During water transfer years (when there is water available for transfer), YCWA transfers on average about 100,000 af to providers outside Yuba County. Most of the transfers have been sold to the State Water Project and Environmental Water Account for Bay-Delta fisheries.⁴⁰ Under the Accord, YCWA will transfer at least 60,000 af through 2015 and at least 20,000 af thereafter annually to those outside the area. The actual transfer will depend on conditions in the YCWA FERC license to be renegotiated by 2016. Under the Accord, Yuba River instream requirements will range from 260,000 af in a dry year to over 574,000 af in a wet year. Under the Accord, YCWA will implement conjunctive use programs with a portion of the proceeds from future water transfers, to be operated consistently with the safe yield of the groundwater basin. During dry years, YCWA member units will voluntarily rely on groundwater freeing up surface water for downstream users.

Dry Creek

BVID has post-1914 appropriative rights to surface water from Dry Creek to serve a maximum of 11,000 acres within its boundaries. In any year, BVID is prohibited from directly diverting from Dry Creek more than 11,000 af from November to June, and withdrawing from storage at Collins Lake more than 35,600 af. Water from Collins Lake is released through the bottom of the Virginia Ranch Dam; the water flows to the southeast through the Upper Main Pipeline, to the north by the Thousand Trails Ditch, or to the west via the Tennessee Ditch and the Harding Canal. Water is distributed to the south from Dry Creek and dam releases via the Sicard Ditch.

Feather River

NYWD and Plumas MWC rely on Feather River surface water.

NYWD appropriative rights to Feather River/Slate Creek (also known as the South Fork Project) effectively amount to 3,700 af at present, although NYWD may establish beneficial use in the future to up to 23,700 af from this source. Due to overlapping water rights, NYWD and SFWPA negotiated a state-mandated agreement in 1958 that limits NYWD water deliveries to 3,700 af through 2010 when the SFWPA agreement with PG&E expires. The SWRCB approved a water rights order in 2004 that allows NYWD up to 23,700 afa from the South Fork Project through the Forbestown Ditch. The board intended this amount to provide for the long-term needs of NYWD. In 2010, NYWD may use these rights in its own service area, but must expand distribution capacity to do so. The NYWD-SFWPA agreement allows for 4,500 af to be delivered to NYWD at Miners Ranch Terminal, which is located at a lower elevation than the NYWD service area. NYWD sells the 4,500 af in supply initially to PG&E for power generation at the Kelly Ridge Powerhouse, and then to Yuba City, which diverts the flow from the Feather River.

Plumas MWC holds post-1914 appropriative water rights to 14,000 af of Feather River surface water, which is transported through State Water Project facilities.

⁴⁰ HDR and Surface Water Resources, Inc., 2007, pp. 2-14 and 5-10. Over the years, other recipients have included Contra Costa Water District, the City of Napa and East Bay Municipal Utility District.

Bear River

The CFWID water source is the Bear River watershed. CFWID has senior rights to the first 13,000 af annually of Bear River surface water in the Camp Far West Reservoir.⁴¹

The water supply is primarily influenced by rainfall. The Bear River originates on the west side of the Sierra Nevadas at a 5,500 foot elevation near Lake Spaulding and flows southwest 65 miles to its confluence with the Feather River (at mile 12), draining portions of Nevada, Placer, Sutter and Yuba counties. The average unimpaired flow is estimated at 323,000 af with the average impaired flow at 292,535 af. The median flow is 21 cfs.

One mile downstream from Camp Far West Dam, at river mile 15, is the Camp Far West Diversion Dam operated by the South Sutter Water District (SSWD). SSWD releases Bear River water at the diversion dam into the Camp Far West Canal on the north side of the river and the South Sutter Canal on the south side of the river. On the south side, the water flows down SSWD's main canal into a turnout for CFWID's canal on the south side of the Bear River. The amount of water released by SSWD is based on water orders submitted by landowners in the District.

In most years, the reservoir is full by mid-February. CFWID is not required to contribute water to implement the objectives in the 1995 Bay-Delta Plan. CFWID previously relied on groundwater until groundwater levels in the area began to decline in the 1950s.

Other Surface Water

BVID has post-1914 appropriative water rights to Tennessee Creek surface water for a maximum of 2,712 af.

The primary water source for Smartville is surface water. During irrigation season, the primary water supply to the area is surface water from melting snowpack, which is collected in Scotts Flat Reservoir, and imported water. From mid-April through mid-October, NID releases this water from the reservoir; during the remainder of the year, there are relatively low flows of this water source to Smartville. From mid-October to mid-April, the Smartville area water supply is augmented by wastewater effluent emitted from the Nevada City Wastewater Treatment Plant. The wastewater is treated to a tertiary level, discharged into Deer Creek and conveyed through creeks and canals to Smartville. The source water is considered by the State to be poor quality. Possible water contamination sources are the Nevada City WWTP, which discharges into Deer Creek upstream from the canal, and grazing lands where cattle have access to the canal.

Camptonville CSD has pre-1914 water rights to 33.8 af per year from Campbell Gulch at a rate of diversion of 0.33 cfs. The water from Campbell Gulch was identified as being very good quality.

North Yuba Groundwater Subbasin

The North Yuba Groundwater Subbasin composes approximately 10 percent of the water used in 2005. The subbasin is bounded on the north by Honcut Creek, on the west by the Feather River,

⁴¹ CFWID water rights are contractual rights extended through a 1957 agreement with South Sutter Water District; prior CFWID water rights are included in the 13,000 af.

on the south by the Yuba River, and on the east by the Sierra Nevada foothills. The groundwater storage capacity estimated to a depth of 200 feet is 620,000 af.⁴²

Farmers in Reclamation District 10 use groundwater as their primary source of water for irrigation. Cal Water serves groundwater from the basin to Marysville.

The IRWMP identifies 46,700 af in water from this source was used in 2005.

Surface water deliveries to the area were fairly consistent between 1977 and 1985, when the subbasin recharge was approximately 11,000 afa.⁴³ The amount in storage is responsive to surface water use. Groundwater pumping (about 129,000 af) that occurred during groundwater substitution transfer years (1991, 1994, 2001 and 2002) resulted in a storage decline of about 100,000 af, although groundwater levels tended to recover within a few years of groundwater substitution transfers.

South Yuba Groundwater Subbasin

The South Yuba Groundwater Subbasin is bounded by the Yuba, Feather, and Bear rivers, and, to the east, by the Sierra Nevada foothills. The subbasin provided approximately 110,000 af in water supplies to the MSR area in 2005.

The groundwater subbasin is generally unconfined to a depth of about 300 feet, and possibly confined or semi-confined by clay layers below that depth.⁴⁴ The subbasin recharges naturally along the upper reaches of the lower Yuba River, downstream from the Sierra Nevada foothills. Areas along the Bear River appear to be minor recharge zones due to its lower river flow volume and less transmissive soils there. Groundwater generally migrates in a southwest or west direction. The potential for direct artificial recharge is limited by low infiltration rates of overlying soils. YCWA plans to deliver surface water to the WWD, allowing in-lieu recharge in an area where 70,000 af of depleted aquifer storage capacity has been identified.

WWD and portions of Reclamation District 784 rely on this water source. Once WWD is shifted to surface water by 2010, reliance on groundwater will be reduced by about 27,000 af. Urban development in the MSR area is expected to rely on groundwater. Planned developments in the Wheatland vicinity are expected to generate additional urban demand of about 15,000 af. Long-term build out of the Wheatland vicinity would generate 46,000 af or more in urban water demand.

The subbasin is estimated to have a storage capacity of at least 1.1 million af.⁴⁵ Precipitation and irrigation water percolate into the groundwater subbasin with average annual recharge of the entire South Yuba Subbasin estimated at 17,000-21,500 af annually.

⁴² YCWA, *Groundwater Management Plan*, 2005, p. 17.

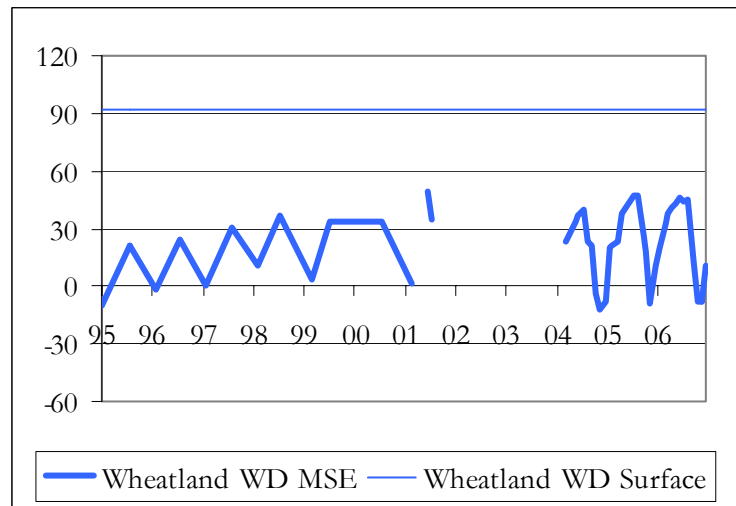
⁴³ HDR and Surface Water Resources, Inc., 2007, p. 6-41.

⁴⁴ HDR and Surface Water Resources, Inc., 2007, chapter 6.

⁴⁵ YCWA, 2005, Table 3. A subsequent MWH estimate of 7.5 million af capacity refers to the combined capacity of both the North and South Yuba groundwater basins.

Figure 4-7: WWD Groundwater Surface Elevation, 1995-2007

Historical irrigation pumping of groundwater resulted in a large pumping depression across the subbasin, especially near the Wheatland area. Groundwater levels have recovered since irrigation began using surface water, except in the WWD area. Surface water delivery began in 1986 in SYWD and Brophy WD, and in 1998 in the DCMWC service area. Surface water delivery to WWD is expected to begin by 2010.



Groundwater surface elevation data from 1947 to 2007 indicates groundwater level recovery in the DCMWC and Brophy Water District service areas. Beale AFB groundwater levels rose 25 feet in the last 15 years due to a shift from groundwater to surface water use in the agricultural area west of the base.⁴⁶ Within WWD, monitoring wells near the southwest corner of Beale AFB indicate recovery, but a well located near Jasper Lane indicates little change in the groundwater level from 1995 to 2007, as shown in Figure 4-7. The southeast portion of WWD has low soil permeability and well yields. Groundwater surface elevation data were not available for recent periods in Wheatland or SYWD. Some places in the foothills, such as in the Camp Far West and Smartville areas, have known groundwater supply problems.

Under the Lower Yuba River Accord, YCWA will arrange for member units' groundwater substitution of 25,000 to 71,000 af annually. Groundwater substitution transfers have been conducted in the past in 1991, 1994, 2001 and 2002; the subbasin recovered from those transfers within a few years. YCWA and its member units will be required to monitor and report on subbasin conditions during implementation of the Accord; YCWA will implement an adaptive management program to identify and mitigate local impacts.

Water quality is generally good in the subbasin. Saline groundwater can be caused by overpumping that allows saline water to migrate from deeper zones of the subbasin to shallower zones; other potential causes include agricultural runoff and downward seepage of sewage.⁴⁷ In the WWD service area, saline water quality has forced farmers to abandon at least two wells. Groundwater at some SYWD and DCMWC wells is saline with TDS levels near or slightly above the secondary mcl.⁴⁸ However, salinity at or near the secondary MCL does not limit use of

⁴⁶ Central Valley RWQCB, Order No. R5-2007-0025, p. 2.

⁴⁷ HDR Engineering and Surface Water Resources, Inc., *Proposed Lower Yuba River Accord: Draft Environmental Impact Report*, 2007, p. 6-67; Yuba County Water Agency, Groundwater Management Plan, 2005, pp. 26 and 51-2.

⁴⁸ HDR Engineering and Surface Water Resources, Inc., *Proposed Lower Yuba River Accord: Draft Environmental Impact Report*, 2007, pp. 6-20, 6-21 and 9-11. Total dissolved solids (TDS) in water means small inorganic and organic particles—often from agricultural runoff, soil contamination and sewage treatment plants—affecting water palatability.

groundwater for agricultural irrigation. YCWA monitors groundwater salinity conditions as part of the groundwater monitoring plan for groundwater substitution transfers.⁴⁹

Groundwater contamination has occurred on Beale AFB, although the water is not used for drinking purposes. The AFB actively remediates TCE and PCE (solvents) contamination in groundwater in several areas, including TCE-contaminated areas in the vicinity of a closed landfill and a flightline area in the vicinity of maintenance buildings.⁵⁰ The AFB plans to remediate gasoline recently detected in groundwater in the family housing area. The AFB monitors groundwater in the flightline area at 80 well sites. Located downstream from the AFB are the BWD and WWD service areas.

YCWA conducts groundwater monitoring at 23 wells, while DWR monitors 58 wells in Yuba County.⁵¹ Future revenues from water transfers are expected to fund expansion of YCWA's groundwater and conjunctive use activities.

Other Sources

New sources of water supply may be needed to accommodate projected population and economic growth, even if the public continues to improve water conservation practices. Stormwater capture, water storage and recycled water are strategies for enhancing water supply. Recycled water—wastewater treated to tertiary standards—holds promise to supplement supplies and match water quality with its uses. Already in use for landscaping at Beale AFB, there is potential for expansion of this resource through development of distribution infrastructure. OPUD produces tertiary effluent at its wastewater treatment plant, but does not presently distribute it. Other wastewater providers intend to upgrade to tertiary treatment in the coming years; additional recycled water supplies will be available in the coming years.

PLANNING CONTEXT

Regional water planning has become increasingly critical to increase drought preparedness, regional self-sufficiency, sustainable resource management, and to improve coordination among land use and water planners. The Legislature promoted the concept by authorizing local public agencies to form regional water management groups and adopt regional plans to address qualified programs or projects (SB 1672). The legislation requires DWR to prioritize funding for projects identified in integrated regional water management plans (IRWMPs). Integrated resource planning is a comprehensive systems approach to resource management and planning that explores the cause-and-effect relationships affecting water resources. The plans are recommended to not only analyze the watershed and espouse principles, but also to effect change by including a finance plan with

⁴⁹ Correspondence from YCWA Assistant Manager, Scott Matyac, July 17, 2008.

⁵⁰ Trichloroethylene (TCE) is used in metal degreasing, as a raw material to make other chemicals, as a cleaner in electronics manufacturing, and for general solvent purposes such as in paints, paint strippers, and adhesives. TCE mainly affects the central nervous system, causing headache, nausea, dizziness, clumsiness, drowsiness. Heavy exposure can damage the liver and kidneys. TCE causes cancer in animals and may cause cancer in humans. Tetrachloroethylene (PCE) originates in the environment from discharges to soil, air and water as a result of dry cleaning, textile operations, and metal degreasing processes. Long-term exposures to PCE can cause adverse effects to liver, kidneys, and the central nervous system. PCE may cause cancer.

⁵¹ YCWA, 2005, p. 35.

prioritized objectives, an implementation plan, and plans for ongoing performance measurement to evaluate progress.

YCWA served as lead agency for preparing the Yuba IRWMP, which was adopted in 2008. The primary priorities established by the plan are improving local flood protection and regional flood management, and implementing the Lower Yuba River Accord. Secondary priorities include increased use of recycled urban wastewater, long-term water supply reliability and water quality, exploring opportunities to deliver surface water to urban water users in the region, and improving recreational opportunities. Through a collaborative process, the IRWMP identified and ranked proposed infrastructure and planning projects.

Both YCWA and DWR conduct groundwater monitoring and planning. Legislation requires the SWRCB to establish a comprehensive statewide groundwater quality monitoring program; the first comprehensive groundwater evaluation is to be completed by 2010. YCWA prepared a groundwater management plan of both the North and South Yuba Groundwater Subbasins in 2005, and has established a groundwater monitoring program.

Urban water suppliers are required by the Urban Water Management Planning (UWMP) Act to prepare a water shortage contingency plan every five years. The plan describes and evaluates sources of water supply, efficient uses of water, demand management measures, implementation strategy and schedule, and other relevant information and programs. Providers serving at least 3,000 connections or 3,000 af are subject to the UWMP requirement. Cal Water, LCWD and OPUD were subject to the requirement in 2005. Cal Water and LCWD completed UWMPs; OPUD did not. The City of Wheatland served 1,058 connections in 2005, and is not yet subject to the requirement.

SERVICE DEMAND

This section provides an overview of water uses, a general discussion of factors affecting water demand, analysis of water demand indicators and conservation efforts, and projections of future needs for water.

Table 4-8: Water Demand, 2005 (acre-feet)

Within Yuba County, water demand is predominantly agricultural. Irrigation accounts for 91-96 percent of demand within the MSR area. Municipal water use accounted for only 4-9 percent of 2005 demand, as shown on Table 4-8.

Estimates of water usage vary depending on the methodology and assumptions used to estimate usage by those

relying on private wells and surface water rights. The MSR estimates calculate private well usage for domestic purposes based on the number of households not served by municipal water purveyors

Type of Water Use	MSR		IRWMP	
	Use	%	Use	%
Urban Uses	20,941	4%	49,100	9%
Municipal water purveyors	14,671	3%		
Private wells	6,270	1%		
Irrigation Uses	514,100	96%	514,100	91%
Irrigation water purveyors	326,630	61%		
Private surface water rights	91,791	17%		
Private wells	95,679	18%		
Total - All Uses	535,041		563,200	
Sources: water providers, DWR, SWRCB, DOF, IRWMP				

and average water use of 270 gallons per capita per day. By comparison, the IRWMP calculated urban use based on a 1995 DWR land use survey and average water use per acre.⁵²

Urban uses are expected to increase in future years, and irrigation demand to decrease as a result of urbanization and development. Future growth is addressed later in this section. Chapter 3 provides the residential population and job base, proposed development and population projections, and a description of growth strategies and areas.

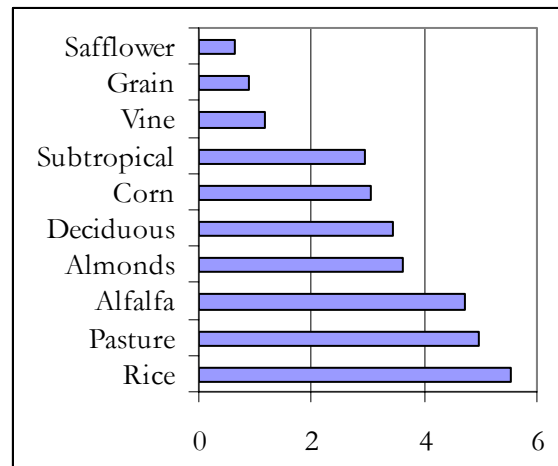
IRRIGATION WATER

Figure 4-9: Yuba County Water Use by Crop, 2003 (acre-feet per acre)

Agricultural water use is generally determined by the extent of irrigated acreage, the relative proportions of types of crops grown, climatic conditions, and irrigation efficiency.

Countywide crops need up to 5.5 af of applied water per acre irrigated.⁵³ Rice requires 5.5 af, almonds 3.6 af, and grapes 1.2 af.

The amount of water needed and used has generally declined over time as growers and water suppliers implement design, delivery, and management practices to increase production efficiency and conserve water. An indicator of agricultural water use efficiency improvement is that statewide agricultural production per unit of applied water increased by 38 percent from 1980 to 2000.



Some water suppliers are lining canals, developing spill recovery and tail water return systems, employing flow regulating reservoirs, improving pump efficiency, and managing surface water conjunctively with groundwater. The use of concrete-lined ditches for irrigation is a best management practice that helps reduce the amount of water lost to leaks and evaporation.

At the on-farm level, pressurized, drip and micro-irrigation help conserve water compared with gravity (furrow, flood) irrigation techniques. Most California orchards and vineyards, and some annual fruits and vegetables, are irrigated using pressurized irrigation systems. Almost all trees and vines established since 1990 are irrigated using micro-irrigation. Since 1990, the crop area under micro-irrigation in California more than doubled.⁵⁴ Growers continue to make significant investments in on-farm irrigation system improvements, such as lining head ditches and using micro-irrigation systems.

⁵² GEI Consultants, Inc., *Yuba County Integrated Regional Water Management Plan: Draft Report*, January 2008, pp. 4-15 – 4-20.

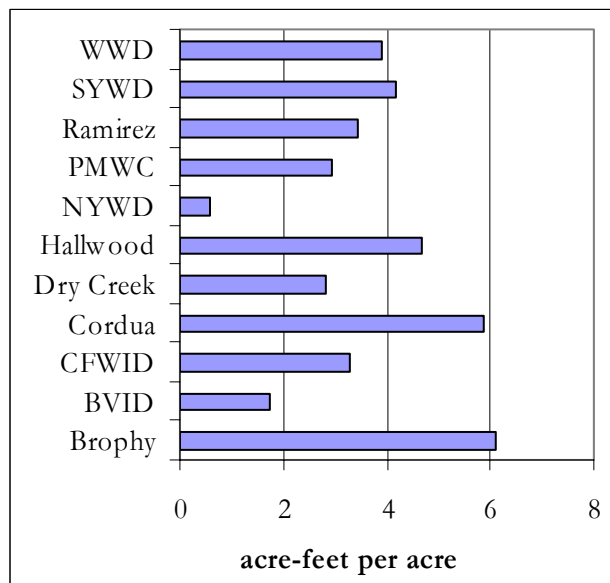
⁵³ California DWR, *Annual Land & Water Use Data: Applied Water by County*, 2003. Average for Yuba County is displayed.

⁵⁴ California DWR, *California Water Plan*, 2005, p. 4-314.

Figure 4-10: Irrigation Water Use by Provider, 2005 (acre-feet per acre)

Within the MSR area, surface water use averaged 3.7 af per acre. Usage varied from a low of 0.6 af per acre in NYWD to a high of 6.1 in BWD.

Crop mixtures vary among the irrigation providers. Farmland is common in the valley, particularly in areas near the rivers. Orchards of almonds and walnuts are common along the Bear River south of Dry Creek. In SYWD, the most common crops are rice and pasture. In BWD, rice, prunes, peaches and walnuts are farmed. In WWD, rice, orchard (walnuts) and pasture are most common. Farmers within CFWID primarily produce orchard crops and rice. In the BVID service area, grazing land is common. In the CID and RWD service areas, the primary crop is rice; there are also prunes grown in CID. In Hallwood Irrigation Company, crops include rice and pasture in the north, alfalfa and wheat in the south, and orchards along the river.



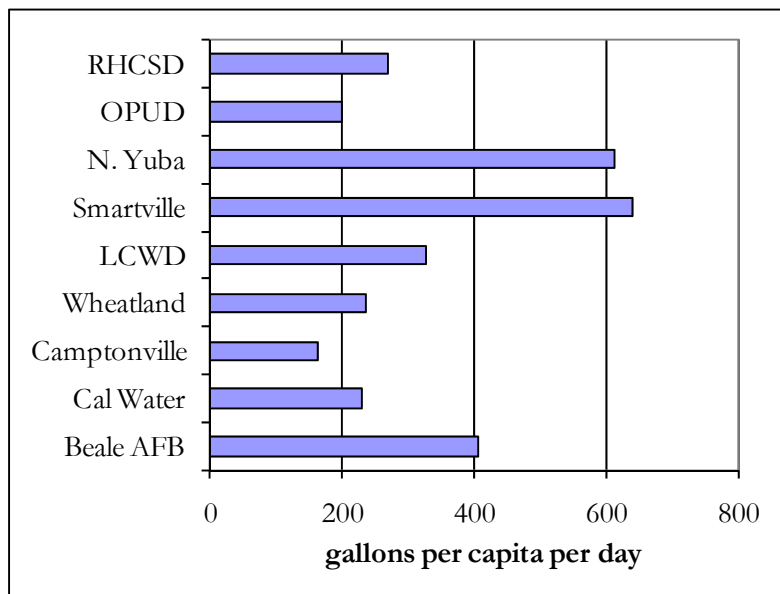
It should be noted that estimates of the acreage of the service area are approximate. In some cases, such as NYWD, the estimated service area is overstated. Most of the service providers do not track the precise area irrigated.

DOMESTIC WATER

Figure 4-11: Potable Water Use, 2005

In the Sacramento region, the average urban community consumes 286 gallons per capita per day (gpcd).⁵⁵ Potable water use amounted to 270 gpcd on average in Yuba County.

In Marysville, use averaged 230 gpcd. It was 201 gpcd in the OPUD area, 237 in Wheatland, 327 in Linda CWD, and 368 at Beale AFB. Use averaged 245 gpcd in the NID service area as a whole.



⁵⁵ California DWR, 1998, chapter 4.

Per capita water use varied from a low of 163 gpcd in Camptonville to a high of 611 in NYWD.

Per capita water usage at the AFB is higher than in neighboring areas due to the large daytime population at the AFB and the expansive acreage. There are more substantial non-residential water uses at Beale AFB than in surrounding communities. There were 5,700 military and civilian personnel working at the AFB, substantially more than the 4,400 residents in 2005. Some of the land is leased for grazing purposes with associated water uses.

Per capita water demand is greatest in rural and suburban areas and least in urbanized areas. The per capita water demand differences relate in part to differences in outdoor water use between communities. Lot size is a significant factor affecting differences in per capita demand. Structure age is another factor expected to affect demand differences, as newer buildings tend to have modern, water-efficient plumbing fixtures.

Urban water demand is primarily affected by population and economic growth and by water use efficiency. Clearly, population and economic growth lead to greater groundwater use. As the number of residents and jobs grows, the more showers are taken, toilets flushed and dishes washed. Not only does demographic and economic growth affect water demand, so too does the efficiency of water use.

Domestic residential water is used for outdoor, toilet, shower, cleaning, and kitchen uses. Outdoor uses, such as landscaping, swimming pools and washing cars, are the most significant portion, consuming 44 percent of domestic water statewide.⁵⁶ Water demand varies over the course of the year, with typically greater use during the summer months. The differences between peak and average water demand largely reflect outdoor water use for landscaping, irrigation and swimming pools. Toilet flushing is the second most important use of water—constituting about 23 percent of use. Showering and bathing consume about 18 percent of domestic water. Dishwashers and clothes washing machines consume 12 percent of domestic water. The remainder of California water consumption relates to cooking and other kitchen uses.

Over time, water use levels change in response to changes in water prices, improvements in the efficiency of plumbing fixtures and conservation programs aimed at encouraging consumers to upgrade to efficient plumbing fixtures. These effects are interrelated. For example, water price increases can encourage consumers to reduce their water use directly (e.g., fewer showers) or prompt them to upgrade fixtures (e.g., water-efficient toilets).

Urban water suppliers have been required to install water meters on new municipal and industrial services connections since 1992, and must install meters on all municipal connections by 2025 under AB 2572. Beale AFB, Cal Water, RHCS D and OPUD have not yet installed meters on all accounts. Cal Water has meters on 32 percent of account; OPUD has metered 44 percent of accounts; RHCS D has not metered any of its accounts. CCSD, the City of Wheatland, LCWD, NID, and NYWD have metered all accounts.

Water providers must begin by 2010 to charge metered customers based on volume of water. When the City of Wheatland implemented rates charged based on water used, consumption per

⁵⁶ U.S. EPA, 1995. Figures reflect average share of domestic consumption in California.

meter declined by approximately 29 percent.⁵⁷ The water inspector described usage charges as typically decreasing demand on a similar order. RHCSD has not yet implemented charging rates based on amount of water used. OPUD has implemented rates based on water use in Plumas Lake, the North Arboga Study Area and portions of Olivehurst, but not yet throughout the entirety of its service area. By early 2009, OPUD anticipates that it will be metering and charging water usage rates to 58 percent of its connections.

New state and federal requirements for the efficiency of plumbing fixtures have been implemented in the last two decades. Particularly in the early 1990s, new state and federal regulations required high-efficiency showerheads, ultra low-flow toilets and efficient kitchen faucets in new construction. For example, state toilet standards in the 1980s required toilets to consume no more than 3.5 gallons per flush; in 1992, new standards reduced toilet water use to 1.6 gallons per flush. For buildings constructed since 1992, toilet-related water use is less than half the level in buildings built during the 1980s. In buildings constructed prior to 1992, toilets tend to use 4.5-5 gallons per flush. Over time, more efficient plumbing fixtures are becoming prevalent, reducing per capita water use. Although there are no requirements in place for clothes washers, traditional clothes washers use approximately 41 gallons per load while high-efficiency machines use only 23.⁵⁸

Conservation programs help expedite consumers' rate of conversion to more efficient plumbing fixtures. Conservation efforts may affect outdoor water use efficiency by providing recycled water for large landscape accounts, auditing these accounts and conducting public information campaigns to encourage the use of water-efficient plants and gardening practices.

Many California water providers are signatories to the California Urban Water Conservation Council (CUWCC) agreement, through which service providers pledge to develop and implement 14 conservation "best management practices." Within Yuba County, Cal Water is the only signatory among the domestic water providers.

PROJECTED DEMAND

Urban development will tend to reduce overall water needs in the MSR area. Existing agricultural uses rely mostly on surface water; whereas future urban development is expected to rely on groundwater in the growing water service areas.

Proposed and planned development would add 53,136 residential units on 15,307 acres in the South Yuba Groundwater Basin.

The IRWMP estimated a net impact based on the assumption that 16,240 acres would be urbanized, of which approximately half is presently in agricultural use. The IRWMP estimates that urban groundwater use would increase by 35,700 af as a result, but agricultural groundwater use would decline by 65,600 af due to urbanization of agricultural land and to future delivery of 40,800 af of surface water to the WWD service area.⁵⁹ Groundwater pumping in the Olivehurst, Linda and

⁵⁷ DPH, *City of Wheatland Annual Inspection Report*, Sept. 26, 2007.

⁵⁸ Mayer et al., 2001.

⁵⁹ The IRWMP analysis assumes future urban acreage would use approximately 2.2 af of water per acre annually.

Plumas Lake areas would increase by about 27,500 af, causing local groundwater levels in that area to decline. The estimated annual recharge rate of the entire groundwater subbasin is 14,000-28,000 af, with an average rate of 17,000 af from 1983-2002.⁶⁰ There may also be impacts on the groundwater supplies from a loss of percolation on former farmland when urbanization brings more extensively paved surfaces. The IRWMP concludes that “this may result in increased pressure on the local groundwater system unless strategies to deliver treated surface water to these areas are implemented. In addition, the urbanization may reduce local groundwater recharge, causing further strain on the local groundwater system.”⁶¹

Whether and to what extent this could cause groundwater overdraft in the western portion of the groundwater subbasin is unknown. It would depend on the extent to which the subbasin is recharged by future surface water deliveries to WWD, and the extent of confinement in the subbasin, among other factors. Further study of the groundwater subbasin would be needed to determine how the western portion would be affected.

The net impact of such development on the groundwater subbasin may be illustrated with an example from a smaller area. Two development projects have been proposed or planned in the Brophy Water District service area: Woodbury and Chippewa. Combined, these projects would bring 7,719 housing units to 2,001 acres. BWD reported that 1,500 of that acreage is presently irrigated with surface water, and the remainder is not irrigated. In this case, there would be a net reduction of 7,050 af in surface water used and a net increase of 6,750-8,550 af in groundwater use. If the remaining 500 acreage is presently irrigated with groundwater, the development would bring a net increase of 4,375-6,200 af in groundwater use.

Policy and Planning Implications

Urbanization could result in increased pressure on the local groundwater system unless strategies to deliver treated surface water to urbanizing areas are implemented. Urbanization may reduce local groundwater recharge and strain the local groundwater system.

Reserving surface water supplies exclusively for agricultural uses and requiring urban development to rely only on groundwater is not a viable approach in the long-term for southern Yuba County as it could lead to groundwater overdraft under a build-out development scenario. If not addressed, requirements for water supply assessments for new development would effectively limit future development to the groundwater basin’s safe annual yield.

To address this problem, surface water use and associated treatment facilities may be needed by urban development. Both SYWD and BWD expressed concerns about the impact of future urbanization on groundwater supplies, on which these irrigation districts would rely during future droughts. BWD reported that it is open to considering policy solutions to this issue; its preliminary solution would be to develop water storage facilities and an agreement to convey surface water to

⁶⁰ HDR and Surface Water Resources, Inc., 2007, pp. 6-34 and 6-39.

⁶¹ GEI Consultants, *Yuba County Integrated Regional Water Management Plan*, 2008, p. 4-32.

LCWD.⁶² SYWD reported that its preferred policy solution is for YCWA to develop a treatment facility and convey treated surface water to the affected urban purveyors.⁶³

Many irrigation water providers are precluded from distributing surface water to urbanized areas without YCWA approval.⁶⁴ YCWA has historically served only irrigation uses, and is skeptical that it would have adequate water supplies to serve additional member units. Its long-standing drought rationing agreements with irrigation providers would have to be renegotiated if surface water is supplied to domestic water providers due to the need to prioritize human use over irrigation in a time of scarcity.⁶⁵ Certain irrigation providers in south Yuba County may also prefer to detach urbanizing areas rather than share governance with urban users.

Comprehensive analysis of demand, not only for imported water but also for local sources, is a recommended practice. Comparison of projected demand growth to both regional and local demographic and economic forecasts also helps ensure responsible planning of adequate water for future growth. Validation of local groundwater demand projections with safe yields is another best practice.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

In the context of water service, infrastructure needs signify water supply, treatment, conveyance and distribution infrastructure that do not provide adequate capacity to accommodate current or projected demand for service for the region as a whole or for sub-regions.

FACILITY NEEDS

Beale AFB

Beale AFB infrastructure needs include ongoing remediation of contaminated groundwater and remediation of gasoline in the residential area. Central Valley RWQCB is lead agency for groundwater cleanup. The AFB water treatment plant is relatively new and in good condition, but water mains are older and in fair condition. Future needs may include water main rehabilitation or replacement. Corrosion of piping in the distribution system may be increasing copper levels in drinking water. The base is rehabilitating infrastructure in its residential housing area.

⁶² Interview with Don Staas, BWD Director, and Bill Baggett, BWD Secretary, March 15, 2007.

⁶³ Correspondence from Paul Minasian, SYWD Secretary, May 19, 2008.

⁶⁴ Exceptions are BVID, CFWD, NID, NYWD, and Plumas MWC; these agencies would not require YCWA approval. CFWD and Plumas MWC water rights do not presently authorize any municipal uses.

⁶⁵ Minimal human water uses are generally accepted to be 65-70 gpcd.

Camptonville CSD

The CSD is considering improvements to the facility to address high mineral content in the groundwater. The District identified a need for additional water storage for fires, times of high summer demand, and dry years.

City of Wheatland

The City of Wheatland upgraded its water system in 2003 with well improvements, water main replacements, metering of all connections, construction of a ground-level storage tank and booster pumps, and installation of the SCADA system. According to the General Plan, the upgraded system is sufficient to service the existing city limits (as defined in 2005) at build-out. Subsequently annexed areas, including the proposed developments of Jones Ranch and Heritage Oaks, are required to provide a well, storage tank, a water line loop, and SCADA connection. Any additional annexed territories are required to provide plans for all necessary water system improvements prior to development. The plans are reviewed for consistency with the Master Water Plan. All funds for water system expansion are provided by the developers, and the extended system is accepted as part of the city water system upon completion to specifications.

The 2005 water master plan projected that it will cost \$36.8 million for water system improvements—new water lines, storage tanks, wells with standby power, and SCADA system—to accommodate growth and development to build-out of the City’s SOI area west of Jasper Lane and south of Dry Creek, excluding the existing city limits. In addition to several miles of new water lines, the new system will require 18 new wells with 800 gpm capacity and standby power and four storage tanks each with 1.5 million gallon capacity, booster pumps and standby power. The timeline for construction of the new water system infrastructure is dependent upon development in the area.

Linda CWD

Linda CWD does not maintain water storage reserves. Currently, all needs are met exclusively by well pumping capacity. The UWMP identified a need for storage capacity and/or additional pumping capacity to meet maximum daily demands of future growth. LCWD will need to expand its system to accommodate future growth, and has established a water connection fee to finance growth-related infrastructure needs.

The aquifer serving the District has not undergone analysis to determine the safe or firm yield water supply. The District is considering conjunctive use of surface or recycled water. In 1984, the District entered into a service contract with YCWA to purchase up to 5,000 af annually in Yuba River surface water; however, construction of associated infrastructure—the Long Bar Canal project—has not occurred. The District would need to finance a point of diversion and water treatment facilities to make use of surface water. The contract expires in 2016.⁶⁶

Nevada Irrigation District

NID facilities serving Yuba County include a water treatment plant and a limited canal system—no reservoirs, storage tanks or hydroelectric plants.

⁶⁶ Contract between YCWA and LCWD, Dec. 13, 1984.

The Smartville Water Treatment Plant was built in 1976 and rebuilt in 1994. It provides domestic water to 44 connections north of SR 20. The plant has a capacity of 77,000 gallons per day which can serve up to 53 connections. The plant cannot be expanded at its current site. There are no plans to replace the treatment plant at this time. Once capacity is absorbed, treated water can be delivered to the area from Lake Wildwood, but raw water supply to the Lake Wildwood Treatment Plant is also near capacity. NID estimated in 2004 it would cost approximately \$2.8 million to develop such a pipeline, at least a portion of which would be financed by future development in Smartville. Such a pipeline could serve not only Smartville but also those along the pipeline, indicating perhaps NID would finance a portion of the capital costs.

With the exception of a new portable generator for the water pumps to be purchased in 2007, no capital improvements were anticipated at the plant. The length and condition of the treated water distribution system was not reported, however, the District noted that portions of the system are old and have leaks that require occasional patching. The District reported that some of the PVC pipelines are adequate for the current needs of the system but may need to be replaced with steel in the near future.

Earthen canals provide raw water for irrigation in the RCO area. Farm Canal, Ousley Canal, Town Canal, and Meade Canal total approximately 12 miles. Overall, the Meade Canal was described as being in good condition and accessible for maintenance, with the exception of a segment which was reported as having low freeboard, according to the Raw Water Master Plan.

North Yuba Water District

The District reported that the earthen canal and ditch system has a significant distribution loss rate of approximately 60 percent. SFWPA will transfer ownership of the Upper Forbestown Ditch to NYWD effective January 1, 2011. The District plans to pipe the canal system after additional revenues are received in 2010. The District plans to replace the lower 3.5 miles of the Forbestown Ditch with a pipeline for conveyance of both NYWD's and SFWPA's water. The Forbestown Pipeline Project will cost an estimated \$4.7 million. The project is anticipated to be started in 2012, and completed in 2015.

Water from the treatment plant flows into five storage tanks located in Brownsville (300,000 gal.), Rackerby (100,000 gal.), Challenge (100,000 gal.), Forbestown (100,000 gal.), and one at the plant (500,000 gal.), with a combined storage capacity of 1.1 mg. The District reported that the Rackerby, Challenge, and Forbestown tanks are in poor condition, undersized and need to be replaced for a total cost of \$3-5 million. The District's highest priority is to replace the redwood tank in Challenge with a 1 million-gallon steel tank. Most likely, this will be completed after 2010.

A majority of the distribution system is undersized and in poor condition, as reported by the District. In 2005, the California DPH noted a lack of preventative maintenance on the distribution system, specifically valves and air relief/vacuum relief valves.

Olivehurst PUD

According to the capital improvement plan, there are several thousand feet of steel water main in need of replacement in this system. The District has not yet identified a timeline for replacement, but anticipates doing so in the next capital improvement plan after 2010. Other needs include the replacement of 1) four-inch mains that do not meet the required fire flows, 2) the galvanized

material on each of the connections which is prone to rotting, 3) sections of main with pinholes, and 4) iron service saddles with bronze saddles to prevent rotting.

OPUD will need to expand its system to accommodate future growth, and has established a water connection fee to finance growth-related infrastructure needs.

Other infrastructure needs include the replacement of approximately 1,000 manual-read meters installed in 1975 in old Olivehurst that are beyond their useful life and are therefore not being read. Existing meters are required by the state to be read by 2010. The remaining connections that are not yet metered must be metered by 2025 to remain in compliance with state regulations.

The aquifer serving the District has not undergone analysis to determine the safe or firm yield water supply. In 1984, the District entered into a service contract with YCWA to purchase up to 2,700 af annually in Yuba River surface water; however, construction of associated infrastructure—the Long Bar Canal project—has not occurred. The District would need to finance a point of diversion and water treatment facilities to make use of surface water. The contract expires in 2016. The District reported that it would likely be less expensive to develop recycled water supplies rather than diverting and treating surface water. According to the IRWMP, development of an OPUD recycled water distribution system would cost approximately \$2.4 million.

River Highlands Community Services District

RHCSO key water infrastructure includes five wells (three are operated), a 285,000 gallon water tank, a pump and one mile of pipelines. In the summer of 2006, there were water shortages due to a pump failure. This issue was resolved; however, the District identified a need for two more reserve tanks to mitigate future water shortages.

None of the connections are presently metered, and will need to be metered in the future. Knowledge of infrastructure needs and deficiencies is limited, because RHCSO did not respond to LAFCO requests for information relating to its water system.

YCWA

Key infrastructure includes the dams, reservoirs and tunnels that control the Yuba River and the South Yuba Canal for distribution of surface water to south Yuba County. Infrastructure needs include:

- A new canal is needed to deliver surface water to Wheatland Water District to address a groundwater pumping depression, increased groundwater salinity, and degraded water quality.
- A new fish screen is needed at the head of the South Canal.

Other YCWA needs include funding for a land subsidence monitoring program. Minimal subsidence monitoring has been done in Yuba County. YCWA requested DWR grant funding in

2007 to initiate a land subsidence monitoring program. YCWA is implementing the Yuba River Accord, and had estimated the cost of implementing the Accord at \$5 million.⁶⁷

Irrigation Providers

The following WWD infrastructure needs were identified:

- Surface water is needed to reduce groundwater overdraft and increasing salinity.
- The YCWA Main Canal and Bechtel Canal need widening and cleaning, the Brophy canal will be relocated west of its current location.
- Eight miles of earthen canal need to be constructed to serve the area.
- WWD needs to develop a local distribution system.

BVID needs pipeline infrastructure to extend raw water service to unserved portions of its boundary area.⁶⁸ Some pipelines have reached maximum capacity and cannot maintain adequate pressure. Open ditches have a high rate of distribution loss, and may be a safety hazard. BVID is conducting a grant-funded project to capture tailwater and reuse it on rice fields. The planned Spring Valley development needs water treatment and conveyance infrastructure, which would be developer-funded. BVID identified a need for three agricultural production wells to supply warmer water during the critical rice germination period, to reduce Yuba River diversions and to provide additional supplies during drought years.

The other irrigation providers indicated they had no infrastructure needs or deficiencies.

SERVICE ADEQUACY

This section reviews indicators of service adequacy, primarily among providers of domestic water.

SYSTEM INSPECTIONS

The California Department of Public Health (DPH) is responsible for the enforcement of the federal and California Safe Drinking Water Acts and the operational permitting and regulatory oversight of public water systems. The Yuba County Department of Environmental Health (DEH) is responsible for regulatory oversight of small water systems. The domestic water providers are

⁶⁷ *Yuba County Integrated Regional Water Management Plan*, Feb. 2008, Project WS-1.

⁶⁸ The Peoria/Ellis pipeline is a planned 100,000 linear-foot pipeline with a capacity of 5,000 gpm; the estimated cost was \$1.4 million in 2006 dollars. The pipeline will deliver water to a previously unserved area in the northeast part of the District. The Peoria/Ellis pipeline began construction in 2007, and 10,000 feet had been constructed as of February 2008. The District has been installing pipelines to unserved areas and replacing open ditches with pipelines since the mid-1980s. The District's goal is to develop the infrastructure needed to deliver water to unserved, irrigable areas. With respect to potential pipelines other than Peoria/Ellis, BVID had no plans in place and had not yet designated additional pipeline at the time this report was drafted.

subject to inspections by these agencies. Each of the domestic water providers is inspected by the respective regulatory agency periodically. Most systems are inspected by the State DPH. Smaller systems—River Highlands CSD and Camptonville CSD—are inspected by DEH. Inspection standards and reporting differ, with the DPH reports more comprehensive than DEH inspection reports.

The 2007 Beale AFB inspector found the system was clean and well-planned. The base operates an advanced system, and was in compliance with its permit. Eight deficiencies were found.

The most recent inspection of the Cal Water system serving the City of Marysville found no deficiencies, remarked that the number of complaints was low considering the size of the system, and described system operators as professional, proactive and knowledgeable, and the system as neat and tidy. The 2007 inspection raised a “significant concern” about the potential for contamination due to the proximity of the aging sewer system to wells.

The Camptonville CSD system was described as in good working condition by a 2007 DEH inspection. There were no deficiencies.

The DPH inspector described the City of Wheatland’s system overall as in excellent condition. The 2007 inspection noted the City is fortunate to have such high-quality groundwater that does not require treatment. Three deficiencies were found. The City needs to prepare a vulnerability assessment of its system, and improve security at well-houses.

LCWD “appears to be doing a great job operating and maintaining the water system,” the DPH inspector noted, although it had three deficiencies. The deficiencies involved the need to conduct additional water testing.

NYWD was last inspected in 2005 when its previous manager was on leave; there were three new board members and a new operator. The overall appraisal found shortfalls, such as a weak preventative maintenance program, outdated operations plan, lack of a master plan, and an understaffed operation. The DPH inspector found the District out of compliance with its permit and found five deficiencies. Notably, the operator lacked the appropriate certification, and the District had not distributed the prior year consumer confidence report.

OPUD receives separate inspections on its Olivehurst and Plumas Lake systems. The most recent Olivehurst inspection in 2006 found the system generally in good working order, but more than average deficiencies, which “may be partially attributed to the District’s lack of staffing to handle the growing infrastructure.” There were 12 new deficiencies and prior deficiencies that had not yet been corrected. DPH reported that the number of deficiencies identified in the OPUD systems were above average by comparison with other water providers.⁶⁹ The most recent Plumas Lake inspection in 2007 found the District had “room for operational and managerial improvement,” and recommended hiring additional personnel. There were six new deficiencies, and an uncorrected prior deficiency. The report noted that consumers had escalated complaints to the regulatory agency due to poor response on the part of the District to the complaints.

⁶⁹ Interview with Richard Hinrichs, Department of Public Health, Valley District Engineer, June 24, 2008.

The latest RHCSO inspection in 2006 found the system in good working condition, but found deficiencies. Notably, there was no emergency notification plan or water main disinfection program, and chemical monitoring was not being conducted.

DRINKING WATER QUALITY

Drinking Water Standards

There are a number of threats to drinking water: Improperly disposed chemicals, animal wastes, pesticides, human wastes, wastes injected deep underground, and naturally occurring substances can all contaminate drinking water. Likewise, drinking water that is not properly treated or disinfected, or which travels through an improperly maintained distribution system, may also pose a health risk.

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of Americans' drinking water. The law requires many actions to protect drinking water and its sources—rivers, lakes, reservoirs, springs and groundwater wells—and applies to public water systems serving 25 or more people. EPA drinking water standards are developed as a Maximum Contaminant Level (MCL) for each chemical or microbe. The MCL is the concentration that is not anticipated to produce adverse health effects after a lifetime of exposure, based upon toxicity data and risk assessment principles. National Primary Drinking Water Regulations (NPDWRs or primary standards) are legally enforceable standards that limit the levels of contaminants in drinking water supplied by public water systems. Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply.

The California DPH implements the SDWA in California. DPH requires public water systems to perform routine monitoring for regulated contaminants. To meet water quality standards and comply with regulations, a water system with a contaminant exceeding an MCL must notify the public and remove the source from service or initiate a process and schedule to install treatment for removing the contaminant. Health violations occur when the contaminant amount exceeds the safety standard (MCL) or when water is not treated properly. In California, compliance is usually determined at the wellhead or the surface water intake. Monitoring violations involve failure to conduct or to report in a timely fashion the results of required monitoring.

Federal and state regulations on maximum contaminant levels in drinking water have evolved and expanded since 1977. Relatively new requirements faced by California water providers include limits on disinfection byproducts and a gasoline additive (MTBE), and tighter standards for arsenic, cyanide, uranium, and various organic contaminants.

Drinking Water Adequacy

There are a number of threats to drinking water: Improperly disposed chemicals, animal wastes, pesticides, human wastes, wastes injected deep underground, and naturally occurring substances can all contaminate drinking water. Likewise, drinking water that is not properly treated or disinfected, or which travels through an improperly maintained distribution system, may also pose a health risk.

Table 4-12: Drinking Water Violations, 1993-2006

Drinking Water System	Health Violations		Monitoring Violations	
	#	Type	#	Type
Beale Air Force Base	1	Coliform mcl exceeded 1997	1	Nitrate monitoring 2000
Cal Water - Marysville	0	No violations	0	No violations
Camptonville CSD	0	No violations	0	No violations
City of Wheatland	2	Coliform mcl exceeded Sept-Oct 1997	2	Nitrate monitoring 2000-1; Lead and copper sampling 1993-2003
Linda CWD	0	No violations	1	Nitrate monitoring 2003
Nevada Irrigation District Smartville	1	Treatment technique 1993-97	0	No violations
North Yuba Water District	0	No violations	1	Nitrate monitoring 2002
Olivehurst PUD	4	Coliform 2006, Iron 1996-2001, Manganese 1996-2001	6	Coliform monitoring 2005-6, nitrate monitoring 2003-4
River Highlands CSD	4	Coliform mcl exceeded 1996, 1997, 1998, 2005	0	No violations

Source: US Environmental Protection Agency, Safe Drinking Water Information System

Health and monitoring violations since 1993 for drinking water providers in the area are listed in Table 4-12. None of the providers had recent treatment technique violations; NID had 1993-97 violations in this category at its Smartville water treatment plant. By comparison, the annual average nationally is that 1.3 percent of systems reported a treatment technique violation. OPUD and RHCS D were the only providers with recent health violations. RHCS D has had repeated coliform mcl exceedances in drinking water, most recently in 2005. OPUD exceeded the coliform mcl in 2006. On average, 5.3 percent of water systems report an mcl violation each year. Monitoring violations are more common; 18 percent of water systems report a monitoring violation each year. OPUD had recent coliform monitoring violations. Five of the providers had nitrate monitoring violations within the last decade.

Potential vulnerabilities in drinking water sources are evaluated by California DPH. Critical vulnerability scores (15 or higher) for the drinking water providers are shown in Table 4-13.

Table 4-13: Source Water Vulnerabilities

Water System	Wells	Source	Vulnerabilities
Beale AFB	9	Groundwater	Military installations
Cal Water - Marysville	7	Groundwater	Gas stations, injection wells, known contaminant plumes, underground storage tanks, agricultural drainage, septic systems, sewer collection systems, unauthorized dumping, dry cleaners, metals
Camptonville CSD	<i>No vulnerability assessment is available</i>		
City of Wheatland ¹	6	Groundwater	Auto repair shop, machine shop, gas station, septic systems, grazing
Linda CWD ²	6	Groundwater	Auto repair shop, gas station, sewer collection systems
Nevada Irrigation District	1	Surface	Wastewater treatment plant discharges, historic mining operations, grazing, car washes
North Yuba Water District	1	Surface	Mining operations, septic, dredging, illegal dumping, lagoon, managed forests, pesticide, recent burn areas, utility stations
Olivehurst PUD ³	8	Groundwater	Airport, military installation, known contaminant plumes, sewer collection system, septic systems, wastewater treatment plant, gas stations, underground storage tanks, junk yards, railroad yard
River Highlands CSD ⁴	2	Groundwater	Wastewater treatment plant discharges, sewer collection system, lagoon
Source: California Department of Health Services, Drinking Water Source Assessment and Protection Program			
Notes: (1) Only 1 of 6 City of Wheatland wells had vulnerability ratings of 15 or more.			
(2) Only 4 of 6 LCWD wells had vulnerability ratings of 15 or more.			
(3) Only 6 of 8 OPUD wells had vulnerability ratings of 15 or more.			
(4) Only 1 of 2 River Highlands CSD wells had vulnerability ratings of 15 or more.			

WATER RESERVES

Urban water suppliers are expected to address catastrophic disruptions of water supplies with plans reviewing the vulnerability of source and delivery and distribution systems to events such as regional power outages and system failures.

Beale AFB has two above-ground storage tanks in the AFB family housing area with a total capacity of 1.5 million gallons. Total storage capacity of the entire base is five mg with a minimum of 3.9 mg always maintained. This is enough to meet three days of average demand levels on the base.

Cal Water has storage capacity of 0.8 mg for its Marysville system. By comparison, peak day demand is 5.3 mg.

Camptonville CSD has storage capacity of 60,000 gallons, enough to meet approximately four-fifths of a day of peak demand. The District reported that additional water storage is needed for fires, high summer demand and dry years, and that the CSD has recently been considering its storage needs and options.

Wheatland storage tanks provide 743,000 gallons in storage capacity—one 66,000 gallon capacity elevated tank and one 667,000 gallon capacity ground level tank. Storage would accommodate one day of average demand in case of supply disruption. The City indicated a need for more storage in the event of two simultaneous fires. The City aims to have enough above-ground storage for one day of peak demand and a 20 percent reserve.

LCWD has no water storage facilities. The District has enough source capacity to meet peak demand, and storage is not required by DPH at this time. The District did not identify any storage needs.

NID has no reservoirs or storage tanks in its Smartville service area.

NYWD has 1.1 mg of storage tank capacity located at tanks in Brownsville (0.3 mg), Challenge (0.1 mg), Forbestown (0.1 mg), and Rackerby (0.1 mg), and at the water treatment plant (0.5 mg). The tanks in Challenge, Forbestown and Rackerby are in poor condition and need to be replaced at a cost of \$1.6 million per tank. The District's storage capacity could accommodate up to one day of peak demand in the system as a whole.

OPUD has 2.6 mg of storage capacity in the Olivehurst area and 2.5 mg of storage in the Plumas Lake area. This would accommodate 0.4 and 0.8 days of peak demand in the two areas, respectively. The District did not identify any storage needs.

River Highlands CSD has a 285,000 gallon water tank for emergency purposes. The District did not report its demand levels, so it is unknown how many days of demand the stored water would accommodate in the event of supply disruption. However, RHCS D has experienced a number of supply disruptions in recent years due to well failures, a pump failure, and electrical outages. The District indicated it needs two additional reserve tanks for future water shortages.

WATER PRESSURE

Urban water systems must maintain adequate pressure in order to provide adequate fire flow. The County Fire Marshall uses State fire flow requirements included in Appendix III-A of the 2000 Uniform Fire Code, which identifies fire flow requirements based on building area, construction type and occupancy. There are no other requirements for water pressure, although customers expect adequate pressure for typical uses.

All domestic water providers reported that adequate water pressure is maintained within their service areas. Beale AFB reported adequate water pressure for fire flow in the residential housing area of the base. River Highlands CSD did not provide this information. Both the City of Wheatland and CCSD reported that additional storage capacity is needed to ensure plentiful water for fire-fighting purposes.

MANAGEMENT

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital needs, conduct advance planning for future growth, and make best efforts to comply with regulatory requirements.

Table 4-14: Water Agency Management Practices

	Domestic						Irrigation							
	Wheatland	CCSD	LCWD	NYWD	OPUD	RHCSD	BWD	BVID	CFWID	CID	RWD	SYWD	WWD	YCWA
Evaluate employees annually	A	N	I	A	A	N	N	I	N	A	A	N	N	N
Prepare timely budget	A	A	A	A	A	I	N	A	A	I	I	A	N	A
Periodic financial audits	A	A	A	A	A	I	A	A	A	A	A	I	N	A
Current financial records	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Evaluate rates	A	A	A	I	A	A	A	A	I	A	A	I	-	A
Capital planning	I	N	I	N	A	N	N	I	N	N	N	N	N	I
Advance growth planning	A	N	I	N	I	N	N	I	N	N	N	N	N	A
Compliance Efforts	A	A	A	I	I	I	-	-	-	-	-	-	-	-
Note: A = Practiced adequately, I= Practiced but improvement needed, N= Not practiced, - = Not Applicable														

An evaluation of the adequacy of management practices is shown in Table 4-14. The first four indicators are self-explanatory. Adequate evaluation of rates and fees means updating water rates and development impact fees since 2003. Adequate capital planning would involve a multi-year capital improvement plan (or comparable planning effort) for capital replacement and, if relevant, expansion. Advance growth planning is adequate when it discloses existing capacity and anticipated needs throughout the existing service area and SOI. Efforts to comply with regulatory requirements are measured by the occurrence of any health violations since 2003 as reported by the EPA.

Of the 14 providers, Wheatland, LCWD, NYWD, OPUD, BVID and YCWA are professionally staffed and managed by full-time personnel. The professionally staffed agencies generally demonstrate best management practices. The other irrigation districts rely on board members, board members' farm workers and contract services to perform their functions; consequently, many of the management practices are less exercised.

Wheatland, NYWD, OPUD, CID and RWD evaluate employees at least annually. LCWD reported that it has performed employee evaluations in the past, but they have not been performed in the last few years. BVID evaluates its employees prior to advancement; however, as most of the staff is at the highest pay level, evaluations rarely occur. None of the other agencies conduct staff evaluations.

With respect to financial management, a majority of the providers reported completing annual budgets, with the exception of BWD and WWD. RHCSD, CID and RWD had not yet adopted a

budget after the beginning of their fiscal or calendar years. Of the providers, 11 annually produce audited financial statements. SYWD reported completing annual audits; however, the District did not provide a copy of the most recently completed audit. RHCS D provided a copy of its FY 05-06 audit; however, prior audits were intermittent and not performed on a regular basis. All of the providers were able to provide up-to-date financial records.

A majority of the providers have updated their rates within the last five years, with the exception of SYWD and NYWD, both of which last updated their water rates in 2002. CFWID did not report when its water rates had last been updated.

Only OPUD had an adopted capital improvement plan. Wheatland, LCWD, BVID and YCWA lack formal capital improvement plans; although, capital improvement needs are addressed in many of the master plan documents, in the development impact fee studies and on an annual basis in the budgets. All of the other agencies have not adopted a capital improvement plans and did not indicate a plan to produce one in the near future.

Wheatland and YCWA are the only providers that have completed comprehensive advanced growth planning to date. Other providers in areas of growth or proposed growth (LCWD, OPUD and BVID) have initiated planning in some capacity; although the planning documents are not comprehensive and do not include all of the agencies' SOI. BVID, while currently only providing irrigation and wholesale domestic water services, was approached by a developer to provide water to a proposed subdivision. The developer has subsequently funded a water supply study, which will be a tool for future planning for the District. All other providers have not completed any planning for future growth, as many of the irrigation providers are in rural areas with little or no growth or consider new development out of the purview of their activities. These irrigation providers could look to BVID for growth planning practices, and may be able to benefit from developers funding district planning to address growth impacts on the irrigation providers and possible options or solutions.

Of the domestic water providers, only OPUD and RHCS D have had health violations since 2003, as discussed previously. NYWD was found by inspectors not to be operating within the confines of its permit, as discussed earlier in this section.

LOCAL ACCOUNTABILITY AND GOVERNANCE

Table 4-15: Water Agency Accountability and Governance Measures

	Domestic						Irrigation							
	Wheatland	CCSD	LCWD	NYWD	OPUD	RHCSD	BWD	BVID	CFWID	CID	RWD	SYWD	WWD	YCWA
Contested election since 1994	✓	×	✓	✓	✓	×	×	✓	×	×	×	×	×	✓
Constituent outreach activities	✓	✓	✓	✓	✓	✓	×	✓	×	✓	×	×	×	✓
MSR Disclosure	✓	✓	✓	✓	✓	○	✓	✓	✓	✓	✓	✓	✓	✓
✓ = Occurred or adequately practiced, ○ = needs improvement, × = Did not occur or not practiced														

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency's activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 4-15.

Six of the 14 agencies have had contested elections in the last 15 years, demonstrating a general public interest in the agencies' activities and services. All other providers had little interest in participation on the agency's governing body and lacked constituent interest; consequently there have been no contested elections and the governing body members have been appointed by the Board of Supervisors.

All agencies prepare and post meeting agendas and make minutes available as required. Additional outreach efforts include websites, newsletters, updates enclosed with bills, articles in community newspapers, public advisory committees, and annual land owner meetings. Wheatland, RHCSD, OPUD, BVID and YCWA maintain websites where public documents can be posted. Wheatland, OPUD, and YCWA distribute regular newsletters or contribute to the community newspapers. LCWD informs and updates customers through letter enclosed in regular bills. Of the irrigation providers, only BVID and CID reported constituent outreach efforts. BVID created an advisory committee consisting of nine volunteers from various locations throughout the District to promote communication between the District and constituents regarding the Spring Valley development. CID holds an annual land owner meeting covering issues of interest.

Each of the agencies demonstrated accountability in its disclosure of information and cooperation with LAFCO, with the exception of RHCSD. RHCSD demonstrated a lack of accountability in the LAFCO MSR process by failing to respond to questions submitted by the consultant; RHCSD did provide certain documents, a tour of the wastewater site and a general interview with District counsel. All other providers disclosed a majority of the information that was requested by LAFCO relating to water service. RWD failed to provide the water rates, a copy of the groundwater management plan and the length of the distribution system. SYWD did not provide a copy of its most recent audited financial statement.

SHARED FACILITIES

FACILITY SHARING

YCWA practices extensive facility sharing. Water destined for a variety of agencies flows through YCWA facilities. As described earlier in this chapter, YCWA provides water transfers and drought supplies to other water providers outside the region with its water rights and facilities. YCWA relies on the Englebright Dam, maintained by the U.S. Army Corps of Engineers, and collaborates with PG&E on hydroelectric power operations at the base of that dam. YCWA operates and maintains the South Yuba Canal on behalf of its member units. Under the Lower Yuba River Accord, the State and USBR will purchase surplus surface water from YCWA.

The North Yuba Canal (also known as the Cordua/Hallwood Canal) diverts water from the Yuba River at the Daguerre Point Dam, which then flows through the Hallwood Irrigation Company service area and into the CID boundaries. CID then diverts the necessary water from the canal to its distribution ditches. The remaining water in the canal flows to RWD's three delivery points for use. RWD reimburses CID for conveyance services.

CID and HIC jointly maintain a fish screen at the Yuba River diversion point.

BVID is a participant in the Yuba Accord. By contract, the District permits PG&E to use the District's Yuba River water rights water for generation purposes before the District diverts it for consumptive purposes.

SFWPA diverts the water from the South Feather River at its Little Grass Valley Reservoir and transported through the SFWPA system for power generation, and then transmitted through SFWPA's Forbestown Ditch. NYWD and SFWPA jointly own water right licenses on the South Fork of the Feather River for diversion, storage and use of water for hydroelectric generation. SFWPA is the owner and operator of the associated South Feather Power Project, the water rights licenses are held jointly to assure NYWD of the sharing of net revenues from hydroelectric power sales.

SYWD, DCMWC and Brophy Water District share use of YCWA's South Yuba Canal facilities for delivery of surface water. WWD will also share certain of those facilities once the canal system is extended to its service area by 2010. YCWA and WWD are constructing a 10-mile canal to convey water south from the Bechtel Lateral to Dry Creek. The planned capacity is 217-240 cfs.⁷⁰

CFWID practices facility sharing in that it relies on the diversion dam and reservoir owned and maintained by South Sutter Water District (SSWD). The reservoir was originally built and owned by CFWID in the 1920s. CFWID transferred the Camp Far West Reservoir to SSWD in 1957, and pays an annual fee to SSWD for reservoir maintenance.

⁷⁰ Yuba County Water Agency and Wheatland Water District, *Specifications For Yuba-Wheatland Canal Project Canal And Lateral Work*, March 24, 2008

REGIONAL COLLABORATION

YCWA is the lead agency for regional water management and groundwater management planning in Yuba County. Future groundwater pumping and conjunctive use projects would be implemented by YCWA and its member units to provide water transfers to areas outside Yuba County.

The water providers collaborated in developing the Yuba County Multi-Hazard Mitigation Plan, which was adopted by the providers in 2007 and 2008.

LCWD, Marysville and Yuba City each received a grant to assess the potential of regional wastewater treatment for recycled water.

Future groundwater pumping and conjunctive use projects would be implemented by YCWA and its member units to provide water transfers to areas outside Yuba County.

Wheatland identified a possible regional collaboration opportunity with YCWA to import surface water for conjunctive use.

LCWD and OPUD maintain agreements with YCWA for 5,000 and 2,700 af, respectively, of annual surface water from the Yuba River. However, use of the surface water would require the districts to develop an alternate diversion site. Should the districts choose to begin conjunctive use, further cooperation with YCWA is an option for regional collaboration.

Another opportunity is for urban providers to collaborate by hiring a water conservation coordinator for the Marysville, Linda and Olivehurst areas. In addition, LCWD has received a grant to assess the potential of a regional wastewater treatment plant in conjunction with the City of Marysville and Yuba City, which may be used for recycled water.

FINANCING

The financial ability of agencies to provide services is affected by available financing sources. This section identifies the revenue sources currently available to the service providers, provides a comparison of water rates, and assesses the financial ability of agencies to provide services.

FINANCING CONSTRAINTS

The boards of each of the public sector water providers are responsible for establishing service charges. Service charges are restricted to the amount needed to recover the costs of providing water service. The water rates and rate structures are not subject to regulation by other agencies. The agencies can and often do increase rates annually. Generally, there is no voter approval requirement for rate increases or for the issuance of water revenue bonds.

Similarly, connection fees for the public sector water providers are established by the respective boards to recover the costs of extending infrastructure and capacity to new development. The fees must be reasonable and may not be used to subsidize operating costs.

Water providers must maintain an enterprise fund for the water utility separate from other funds, and may not use water utility revenues to finance unrelated governmental activities. Local agencies providing water services are required to maintain separate enterprise funds to ensure that water-related finances are not commingled with the finances of other enterprises.

DOMESTIC PROVIDERS

Financing Sources

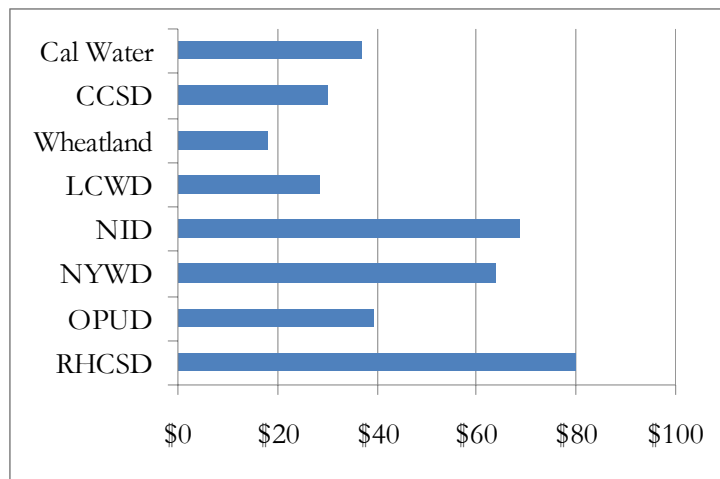
The primary financing source for domestic water providers is water rates paid by water users. Other financing sources include interest revenue and property taxes. Capital financing sources include connection fees, grants, loans and bonds.

Camptonville CSD and NYWD both receive property tax revenues that support their water operations. Property taxes made up 7 and 38 percent respectively of these agencies' revenues in FY 06-07.

Figure 4-16: Domestic Monthly Water Rates, FY 06-07

Water Rates

Domestic water rates have been standardized as monthly charges for residential consumption of 32 hundred cubic feet (ccf) in Figure 4-16. Of the eight domestic water providers, the median domestic water rate in Yuba County is \$38.15 per month for a single family dwelling unit. Domestic water rates are the lowest in Wheatland at \$18.18 per month. RHCS D, NID, and NYWD all charge significantly higher rates than the countywide median, most likely due to their remote locations, small system size, or treatment costs.



With the exception of RHCS D, all of the providers meter deliveries to some degree and charge rates based on metered consumption. Wheatland and NID have structured their water rates to encourage conservation by charging progressively higher rates for higher usage levels. OPUD and Cal Water are in the process of metering all connections; connections that currently have meters are charged based on usage.

Connection Fees

Connection fees are in the range of \$3-6,000 in the MSR area for domestic service in FY 06-07. The lowest fee of \$2,958 per dwelling unit is charged by OPUD in its Plumas South service area. Wheatland charged \$3,507, NYWD charged \$4,300, and LCWD charged \$5,840. OPUD charged \$5,122 in its Olivehurst and North Arboga areas.

Financial Ability to Provide Services

The domestic water providers’ financial ability to provide services is constrained by property owner preferences on water rates and cost structures. For the most part, the providers have managed to provide services, and have demonstrated financial ability to provide services. The adequacy of service was discussed in the prior section.

NYWD faces financing constraints to providing adequate services at the present time, and reports being unable to finance capital improvement needs until 2010 when it begins to receive power generation revenue from SFWPA. At that time, NYWD will begin receiving \$0.7 million annually and eventually approximately \$10 million annually in power revenue; by comparison, the District’s revenues were \$0.8 million in FY 05-06.

IRRIGATION PROVIDERS

Financing Sources

The primary financing source for water providers is water rates paid by water users.

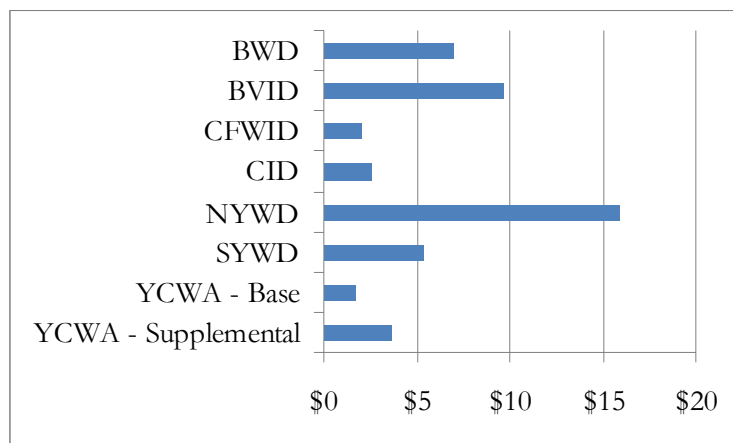
YCWA relies primarily on power sales, but also on reimbursements, interest, water sales, grants, property taxes and recreation charges. Water sales generate only four percent of revenue. YCWA has received grant funding to produce its groundwater management plan, and has received additional state grant funding to initiate a land subsidence monitoring program. Canal operations and maintenance charges are paid by the southern Yuba irrigation providers to YCWA for ditch tender and related services. YCWA plans to use water transfer proceeds to finance conjunctive use programs.

Among the irrigation providers, another common financing source is interest revenue. The districts receive other revenue as well. BVID receives substantial revenue from power sales, and also receives water transfer proceeds, assessments, recreation fees, and grants. CID receives service canal operations and maintenance charges from RWD for services. SYWD receives stand-by fees charged of all property owners regardless of whether they purchase surface water. WWD relies presently on minimal interest revenues, and plans to implement water rates once water service is initiated.

Water Rates

Irrigation water rates vary substantially based on water source. Irrigation usage is not typically metered, charges are typically based on assumed or historical consumption for the particular crop type. For comparison purposes, raw water rates have been standardized based on af of water usage. The median countywide rate per af of irrigation water is \$4.53, excluding

Figure 4-17: Irrigation Water Rates (per af), FY 07-08



NID. NYWD, BVID and BWD have irrigation water rates significantly over the countywide median. RWD did not provide its rates.

YCWA charges its member units \$1.68 per af for base contractual deliveries, and \$3.68 per af for supplemental supplies. YCWA adjusts its rates every five years for changes in inflation. For transfers outside the County, YCWA charges \$50-125 per af, depending on hydrological conditions.

NID charges Smartville residents an out-of-District premium. NID users in the Smartville area pay \$447 per af; by comparison, raw water users within NID bounds pay \$44 per af. The railroad commission order compelling NID to continue water service to the area requires it to charge reasonable rates.

Certain districts charge special rates. CID charges those property owners who did not receive water prior to 1980 rates that are double those paid by property owners who were within the District bounds in 1980 and assisted in construction of the distribution ditches. SYWD charges standby fees for property owners not purchasing water.

Among irrigation providers, only BVID, NYWD, YCWA and NID monitor usage levels of their raw water customers. Raw water use by grower is not metered in BWD, CFWID, CID, SYWD and DCMWC service areas.

Connection Fees

BWD assessed landowners to fund development of the canal infrastructure, and now charges new connections for the cost as well as \$110 per acre. BVID charges \$2,950 for new irrigation connections, of which \$550 is due prior to connection and the remainder may be financed through monthly payments including interest.

CFWID, CID and SYWD require new users to pay the cost of connecting to the system. RWD does not charge people for connecting to the system.

Financial Ability to Provide Services

The irrigation districts' financial ability to provide services is constrained by landowner preferences on water rates and cost structures. For the most part, the districts have managed to provide adequate service levels, and have demonstrated financial ability to provide services.

NYWD faces financing constraints to providing adequate services at the present time, and reports being unable to finance capital improvement needs until 2010 when it begins to receive power generation revenue from SFWPA.

When planned development occurs within the service areas of BWD, SYWD, DCMWC and WWD, growers would be faced with increasing costs associated with canal maintenance or financing if urban development is detached from the districts and no longer contributing toward such costs. A concern of southern irrigation districts in urbanizing areas is that canal operation and maintenance costs will be distributed over a smaller base if urbanizing areas detach. In such an event, financing options would involve increasing water rates or collecting mitigation fees.

GOVERNANCE ALTERNATIVES

This section discusses issues and problems with respect to the current organization of water service in Yuba County and, in light of anticipated growth, with its future organization. It identifies alternatives to the current government structure of service providers.

Public policy issues identified in the MSR process include the following:

- Groundwater supplies: urbanization in southern Yuba County could increase groundwater use beyond the safe yield of the subbasin. Irrigation providers rely on the groundwater basin during dry periods. Urban users have traditionally used groundwater resources. YCWA does not presently serve surface water to urban uses, and is skeptical it would have adequate water supplies to do so.
- Irrigation district boundaries and service functions: irrigation providers in south Yuba County do not wish to share governance with urban water users. SYWD and WWD are precluded by contracts with YCWA from sharing water with urban users without YCWA approval. As urbanization occurs within their service areas, the districts are concerned about increased maintenance costs being borne by the remaining growers.
- River Highlands: RHCS D serves a small 84-unit development, is financially constrained, has a checkered record of compliance with drinking water standards, and demonstrated a lack of accountability. A professionally managed, accountable local agency serving the Smartville vicinity would be an improvement.
- NID: NID serves surface water to domestic customers in the Smartville area. During the winter months, much of the surface water is wastewater effluent treated at tertiary standards. Rates for raw water users in the Smartville area are substantially higher than rates charged within NID bounds. Smartville water users may not participate in District elections. A professionally managed, accountable local agency serving the Smartville vicinity could help monitor NID activities in Smartville for compliance with the Railroad Commission Order.

IRRIGATION DISTRICTS – DETACHING GROWTH AREAS

SYWD and WWD reported that they intend to detach urbanizing areas due to concerns about the complexity of serving urban uses, and concerns about the control that urban voters might have in the future over irrigation water decisions. The districts are also concerned that remaining growers would pay higher per acre costs for canal operation and maintenance. SYWD is contemplating detachment charges to defray such costs. The irrigation districts' concerns over increased canal maintenance costs could be resolved if surface water is provided to urban users (for treatment), and related maintenance costs for conveyance facilities are partly defrayed by urban water providers.

To ensure adequate water supplies for future growth, careful consideration should be given to the potential need for the boundaries of urban water districts to overlap these irrigation districts for purposes of surface water delivery. The irrigation districts, who also rely on the groundwater basin, particularly during drought years, should give careful consideration to groundwater impacts before initiating detachments.

IRRIGATION DISTRICTS – SERVING URBAN AREAS

As growth and urbanization occur in the future, BVID, BWD, SYWD and/or WWD may wish to wholesale surface water to urban water providers within their boundaries.

Indeed BVID has wholesaled to a small subdivision since the 1960s, and is contemplating doing so for the proposed Spring Valley project. In order to extend surface water wholesaling to urban purveyors within their boundaries, the other irrigation districts would need to obtain both LAFCO approval and amendments to either water rights permits or contracts with YCWA.⁷¹

The YCWA contracts with BWD and SYWD stipulate that they may convert existing contractual commitments for surface water to urban providers if there is a 20 percent decrease in irrigable acres between the contract date and expiration date. Proposed and planned development in SYWD bounds would decrease agricultural acreage in the SYWD boundary area by 18 percent, and in the BWD area by 14 percent. The BWD and SYWD contracts expire in 2016 and these contracts contain renewal terms; these districts may negotiate new terms to accommodate municipal demand. The WWD contract with YCWA allows for YCWA to provide surface water to urban uses if it should choose.

The BVID contract with YCWA does not preclude municipal water uses. To use its own water rights, BVID would need to amend its water rights with SWRCB to establish the appropriate place of use and purpose for consistency with serving growth areas. BVID is contemplating in 2008 whether it might wish to provide water treatment and distribution services to the proposed Spring Valley development.

YCWA – SERVING URBAN AREAS

Another government structure option is for YCWA and urban retail water suppliers to enter into water supply contracts for supplying surface water to urban areas. A diversified water portfolio including both surface and groundwater would help boost drought and emergency preparedness in urban areas.

LCWD and OPUD reported agreements with YCWA for supplemental surface water, but have not exercised this option.⁷² The City of Wheatland reported that it has had discussions with YCWA on this matter. YCWA is skeptical it would have adequate water supplies to wholesale to new member units unless any existing member units should reduce water deliveries (freeing up supplies) or serve an urban service area that grows within its bounds.⁷³ Another obstacle identified by YCWA is concern that water supplies would not be available for year-round water service; YCWA serves irrigation providers on a six-month delivery pattern presently.

⁷¹ Government Code §56824.12 requires districts to obtain LAFCO approval before extending new or different functions or types of services within their boundaries. New services refer to services that are authorized in the principal act and that the district was not already providing at the end of 2000.

⁷² The LCWD contract would require the District to develop an alternative diversion site for conveyance of the water. The contracts originally anticipated the Long Bar Canal project would be built, which was not. The contracts expire in 2016.

⁷³ Correspondence from YCWA counsel, Paul Bartkiewicz, July 11, 2008.

If such obstacles could be surmounted, it may be preferable for YCWA to supply an urban service provider at the wholesale level instead of allowing irrigation providers to distribute surface water to urban providers. There are incompatibilities between urban and irrigation infrastructure needs and resistance among irrigation users to sharing governance with urban users. YCWA is a professionally managed organization that conducts management and planning activities; such activities are limited among the irrigation providers.

Urban water providers should make efforts to help YCWA successfully transition from serving rural areas to serving both rural and urban users. Urban water providers need to recognize how urban water service would impact existing irrigation retailers, particularly in terms of drought supplies, and how a transition would impact YCWA management resources. Expansion of the YCWA management staff would appear to be needed to accommodate such a transition.

Expanded YCWA programs, including conjunctive use, groundwater monitoring and analysis, and land subsidence monitoring, are desirable. Urban areas benefiting from such programs should contribute toward the costs. Land use authorities may wish to enhance YCWA resources for its water management functions that benefit urban areas. A relatively low-cost approach would be to fund a part-time grants coordinator position to generate funding for urban water planning.

The Lower Yuba River Accord EIR relies on growth projections from 2000, and lacks recent or updated information on development plans. Prudent water planning, particularly in a high-growth area, requires knowledge of land use plans. The City of Wheatland should make efforts to provide timely updates on land use and development plans to YCWA to help ensure that water planning efforts are accounting for future growth. YCWA should make efforts to notify Wheatland of water management and planning documents that fail to account for anticipated growth in the area.

URBAN PURVEYOR ANNEXATION

There are presently areas where proposed and planned development is located that are not within the bounds or SOI of an urban water provider. In particular, there are development plans to the east of LCWD and OPUD, and to the north and west of Wheatland. Including such territory within the SOI of the urban purveyor would signal that annexation at a future date is likely.

ANNEXATION OF SERVICE AREAS OUTSIDE BOUNDS

Annexation of extraterritorial service areas is an option that would promote logical boundaries. Since 2001, service providers have been required by law to obtain LAFCO approval to serve territory outside their boundaries.⁷⁴

There are several water purveyors presently serving territory outside their boundary:

- BVID serves 12 irrigation connections located outside of its bounds to the northeast near Old Marysville Road.

⁷⁴ Government Code §56133. The requirement does not apply to contracts for raw water transfers or sale of surplus water for agricultural purposes.

- CID serves raw water to seven parcels (approximately 480 acres) outside its boundary, three of which are located within the District’s adopted SOI.
- SYWD serves raw water to a property outside its bounds located between Rancho Road and SR 65.
- NID serves domestic and raw water in the Smartville vicinity of Yuba County under Railroad Commission Order (RCO) 15926. This area is not within NID bounds, but is within the District’s SOI. In 1996, the District approved annexation policies for Railroad Commission Order lands which state the intent of the District to continue service to the RCO area. However “annexation of lands will not be allowed under the terms of this RCO Order No. 15926.”⁷⁵

BVID-NYWD REORGANIZATION

The bounds of BVID and NYWD overlap in a 2,821-acre area. BVID provides irrigation water service, while NYWD provides both irrigation and domestic water service. Both providers face conveyance capacity constraints, and neither serves surface water to its entire boundary area.

NYWD reported that properties in the overlap area are not necessarily receiving water service from either provider. A portion of property taxes in the affected area is distributed to NYWD; BVID does not receive property taxes.

RIVER HIGHLANDS CSD DISSOLUTION

RHCSD serves a small 84-unit development, is financially constrained, has a checkered record of compliance with drinking water standards, and demonstrated a lack of accountability.

A professionally managed special district could improve accountability and service standards in this area. A government structure option is to create a new special district in the Smartville area to be responsible for a variety of services. RHCSD could be dissolved, with its various contracts and obligations transferring to such a successor agency. Most likely, the successor would be structured as a community services district or a county service area. Zones would be established so that certain costs would be paid by the beneficiaries of the particular services. The successor agency would assume responsibility for serving the Gold Village community. It would also be desirable for the successor agency to monitor NID activities in Smartville for compliance with the Railroad Commission Order. This option is discussed further under fire and cemetery services, as a successor agency could take responsibility for these services as well.

⁷⁵ NID, *Annexation Policy for Railroad Commission Order Lands*, 1996, p. 3.

5. FLOOD CONTROL & DRAINAGE

This chapter reviews flood control and drainage services in Yuba County, including how these services are provided by the special districts, cities and other providers not under LAFCO jurisdiction. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing. Government structure options are identified for local agencies under LAFCO jurisdiction.

OVERVIEW

This section provides an overview of the flood control and drainage service providers as well as the regulatory context.

SERVICE PROVIDERS

Flood Control

Several federal, state and local agencies have responsibilities for different aspects of operations and maintenance of flood control facilities.

State and Federal Agencies

Several federal and state agencies have flood control and related responsibilities. For the most part, these responsibilities relate to levees that are part of the joint federal-state Sacramento River Flood Control Project (SRFCP). Levees within the SRFCP system are called “project levees.” Levees along the Feather, Yuba and Bear Rivers and Dry Creek are project levees, as are certain levees along the Western Pacific Interceptor Canal.

The U.S. Army Corps of Engineers (Corps) designed and constructed the Sacramento River Flood Control Project, and establishes standards for maintaining project levees. It establishes construction standards and flood control guidelines. The Corps is responsible for conducting certification of project levees. During flood operations, the Corps monitors the operation of New Bullards Bar Reservoir and Oroville Reservoir.

The Federal Emergency Management Agency (FEMA) defines which geographic areas are within floodplains and flood hazard areas, and which are required to purchase flood insurance. FEMA is also responsible for financing flood disaster recovery efforts. FEMA is organized as part of the federal Department of Homeland Security.

California Department of Water Resources (DWR) owns 1,600 miles of project levees in California and directly maintains 152 levee miles, with local reclamation districts maintaining the remainder. DWR operates Oroville Dam, the primary Feather River flood control structure.

The Yuba County Office of Emergency Services (OES) is the local agency responsible for coordinating disaster activities for catastrophic emergencies affecting Yuba County. OES provides planning, training and coordination to local agencies throughout the county.

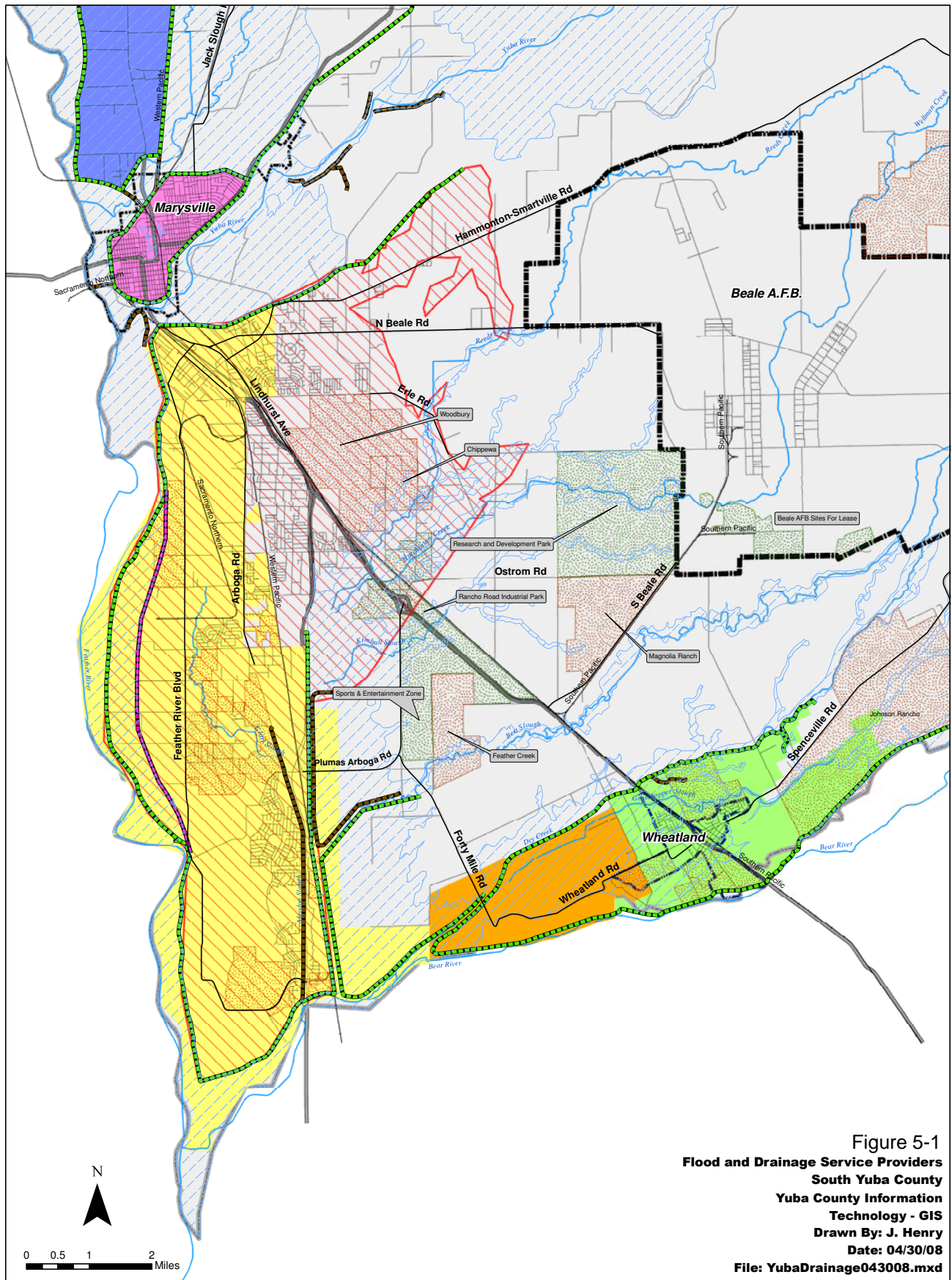


Figure 5-1
Flood and Drainage Service Providers
 South Yuba County
 Yuba County Information
 Technology - GIS
 Drawn By: J. Henry
 Date: 04/30/08
 File: YubaDrainage043008.mxd

Legend

- City Of Marysville
- City Of Wheatland
- Marysville Levee District
- Reclamation District 784
- Reclamation District 817
- Reclamation District 2103
- Reclamation District 10
- Economic Development Areas
- Planned and Proposed Subdivisions
- Projected Post-Improvement Floodplain*
- Lands Benefited By TRLIA Program
- Levee
- DWR Project Levees
- Planned Setback Levee

* Source: MBK Engineers



DRAFT

Local Agencies

Yuba County Water Agency (YCWA) provides flood control services through its activities associated with controlling Yuba River flows. Levee maintenance is the responsibility of a levee district and four reclamation districts, as shown on Figure 5-1. Unless otherwise indicated, maintenance of non-project levees, such as those along the western bank of Algodon Canal, the north bank of Best Slough, and the east bank of the WPIC north of Best Slough, is the responsibility of the landowners.

Table 5-2: Flood and Drainage Local Providers

Service Provider	Flood Control	Drainage	Service Provider	Flood Control	Drainage
Cities & Independent Special Districts			County-Dependent Districts (continued)		
Yuba County Water Agency	●		CSA 43 (Brownsville)		○
Marysville Levee District	●		CSA 44 (Dobbins)		○
Reclamation District #10	●		CSA 45 (Oregon House)		○
Reclamation District #784	●	●	CSA 46 (Smartville)		○
Reclamation District #817	Δ	●	CSA 48 (Olivehurst)		○
Reclamation District #2103	Δ		CSA 52 (East Linda)		Δ
City of Marysville		●	CSA 53 (Oregon House)		○
City of Wheatland		●	CSA 54 (Oregon House)		○
Major Non-LAFCo Providers			CSA 55 (Browns Valley)		○
Beale Air Force Base		●	CSA 59 (Oregon House)		○
Three Rivers Levee Improvement Authority	●		CSA 60 (Browns Valley)		○
Yuba County		●	CSA 61 (Browns Valley)		○
County-Dependent Districts			CSA 63 (Browns Valley)		○
CSA 4 (Brownsville)		○	CSA 66 (Olivehurst and Plumas Lake)	\$	Δ
CSA 14 (Camp Far West and Smartville)		○	CSA 69 (Olivehurst and Plumas Lake)		Δ
CSA 36 (Browns Valley)		○	Key: ● <i>service provided by agency staff</i> Δ <i>provided by agency staff and contract provider</i> ○ <i>indicates service provided directly by contract provider</i> \$ <i>indicates levee maintenance financing mechanism</i>		
CSA 37 (Browns Valley)		○			
CSA 38 (Browns Valley)		○			
CSA 39 (Loma Rica)		○			
CSA 40 (Loma Rica)		○			

YCWA was formed in 1959 by special legislation to control Yuba River flows. YCWA is not responsible for maintaining levees and flood control channels. Its Yuba River Development Project—a series of dams and tunnels completed in 1970 to attempt to control Yuba River flows—provides flood control, power generation, water supply, and instream flows for fisheries and recreation. YCWA’s New Bullards Bar Reservoir, which has a storage capacity of 966,000 acre-feet (af), is the primary reservoir in the basin for regulation of storm runoff and snowmelt. YCWA reserves at least 170,000 af of storage space from September 16 to May 31 each year for flood control purposes, in accordance with U.S. Army Corps of Engineers rules. YCWA has also provided funding for levee improvements and conducted flood control studies.

The Marysville Levee District (MLD) was formed in 1876 to fund and maintain levees protecting the City of Marysville. MLD maintains 11.3 miles of project levees—3.0 miles on the

north bank of the Yuba River, 1.3 miles along the east bank of the Feather River and 3.3 miles on the south bank of Simmerly (Jack) Slough. MLD also maintains a levee spur which extends approximately 3.9 miles northeast of the City to provide protection for an evacuation route along SR 20. Most of the levees in Marysville existed prior to the SRFCP.

Reclamation District No. 10 (RD 10) was formed in 1913 to construct and maintain levees along the Feather River, north of the City of Marysville. RD 10 maintains approximately 22 miles of project levees—11.2 miles along the east bank of the Feather River, 3.0 miles along the southern bank of Honcut Creek, and 7.7 miles along north bank of Simmerly Slough and the west side of the Western Pacific Railroad.

Reclamation District No. 784 (RD 784) was formed in 1908 to provide drainage and protection from flood waters in the Linda, Olivehurst and Plumas areas. RD 784 maintains 35 miles of project levees—12.9 along the east bank of the Feather River, 9.9 on the Western Pacific Interceptor Canal (WPIC), 0.8 on Best Slough, 4.7 on the Bear River, 0.3 on the north shore of Dry Creek, and 6.1 miles along the south bank of the Yuba River. Of these, 4.0 miles of levees are located outside District bounds along the south banks of the Yuba River and Best Slough. The District conducts internal drainage in the Linda and Plumas Lake areas, although the internal drainage responsibility may be transferred to Yuba County in the future.

Reclamation District No. 817 (RD 817) was formed in 1910 to maintain levees west of the City of Wheatland. RD 817 provides levee maintenance and internal drainage services. The District maintains 8.9 miles of project levees, 3.9 miles of which are along the north (right) bank of the Bear River, 3.8 miles along the south (left) bank of Dry Creek, and 1.3 miles along the north (right) bank of Dry Creek.⁷⁶ Internal drainage flows through Grasshopper Slough.

Reclamation District No. 2103 (RD 2103) was formed in 1964 to maintain levees protecting the City of Wheatland. The Central Valley Flood Protection Board originally attempted to place responsibility for these levees on RD 817. When that failed, a state maintenance area was proposed. Landowners formed the District due to the lower cost of a locally operated district compared with a state maintenance area. RD 2103 maintains 9.8 miles of project levees, with approximately 5.0 miles of Bear River levees and 4.8 miles of Dry Creek levees. RD 2103 also maintains approximately two miles of levees along the San Joaquin drainage canal east of the Wheatland city limits; the canal flows from south to north and discharges into Dry Creek.

County Service Area (CSA) 66 provides pass-through financing for a variety of services, including levee maintenance in portions of RD 784, through annual assessments. The CSA 66 boundary is non-contiguous, located within the Plumas Lake Specific Plan area and the North Arboga Study Area.

The Three Rivers Levee Improvement Authority (TRLIA) is a JPA formed by RD 784 and Yuba County in 2004 to finance and construct levee improvements. TRLIA has completed improvement on levees along the Yuba and Bear Rivers, and the Western Pacific Interceptor Canal, and plans to complete Feather River improvements in 2009 to achieve 200-year flood protection.

⁷⁶ Levee mileage is from 2007 DWR levee maintenance inspection reports.

Drainage

Various agencies play a role in internal drainage and regulation of runoff and associated water quality issues.

The Central Valley Regional Water Quality Control Board (RWQCB) regulates stormwater runoff pollution and monitors requirements under the National Pollutant Discharge Elimination System (NPDES).

Yuba County, the City of Marysville, the City of Wheatland, RD 784, and Beale AFB are responsible for the operation and maintenance of local runoff collection, conveyance and discharge systems. The County and cities play roles in the regulation of certain private dischargers. Twenty-two CSAs provide drainage maintenance services along private roads. Drainage infrastructure maintained by the CSAs consists of roadside ditches that are directed to natural drainage channels.

REGULATORY CONTEXT

Flood Control

FEMA administers the National Flood Insurance Program, which enables property owners to purchase flood insurance. FEMA identifies flood hazard areas by producing maps showing flood, flood hazard and floodway boundaries. Several areas of flood hazards are commonly identified on these maps. FEMA designates floodways where encroachment is prohibited to ensure that flood waters drain effectively. The special flood hazard area or high-risk area is defined as any land that would be inundated by a flood having a one percent chance of occurring in any given year (also referred to as the 100-year flood or base flood). FEMA's designation of flood hazard areas in Yuba County is in flux. For the most part, the official Flood Insurance Rate Maps (FIRMs) covering Yuba County were developed by FEMA in 1982. FEMA has approved dozens of Letters of Map Revision (LOMRs) as levee and drainage improvements have been made and evaluated, effectively changing the FIRMs.⁷⁷ FEMA prepared the 1982 FIRM under the assumption that levees provide 100-year flood protection, but now requires that levees be certified.⁷⁸ FEMA is modernizing FIRMs covering Yuba County, with updated FIRMs scheduled to become effective in the Fall of 2009. To the extent that improvements to Feather and Bear River levees are not certified by that time, the County may request FEMA update the maps through the LOMR process.

The Central Valley Flood Protection Board (formerly known as the State Reclamation Board) enforces standards for the construction, maintenance, and protection of flood control facilities in the Central Valley. The board must approve any activity that may affect "project works," to ensure that the activity maintains the integrity and safety of flood control project levees and floodways and is consistent with the flood control plans adopted by the board and the California Legislature. Project works include levees, bank protection projects, weirs, pumping plants, floodways, and any other related flood control works or rights-of-way that have been constructed using state or federal funds. The board has police powers relating to encroachment on levees, and issues permits for levee construction and use. The board restricted the number of building permits that could be

⁷⁷ Mallen, 2008.

⁷⁸ Current rules for mapping areas protected by levees were codified in Federal Regulation (44 CFR 65.10) in 1986.

issued in the Plumas Lake area in 2005 and 2006, but removed its cap on building permits in 2006 to ensure that funds could be raised for needed levee repairs.

DWR is responsible for levee inspection and rates the reclamation districts' maintenance activities. If maintenance is inadequate, DWR may form a maintenance area, conduct the maintenance directly and charge property owners for associated costs. There are no such maintenance areas presently in Yuba County. The levees along the south bank of the Yuba were formerly in State Maintenance Area 8, which was formed in 1954 and subsequently dissolved in 1974.⁷⁹ Levee maintenance standards have become more rigorous with new ratings implemented in 2007. Its vegetation clearance criterion is open visibility and access; the State and the Corps reported they are working on an effective strategy in 2008 regarding levee vegetation.⁸⁰

The California Department of Fish and Game (DFG) regulates diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources. For example, certain vegetation clearance activities of the reclamation districts must be approved by DFG.

Runoff

To reduce pollution in watersheds, the Clean Water Act directed the states to establish Total Maximum Daily Loads of pollutants. The TMDLs require monitoring of pollutant levels and remedial actions that will prevent contaminants from exceeding maximum allowable levels. TMDLs present numerical targets for water quality pollutant levels in impaired water bodies. To date, a diazinon TMDL on the Feather River is the only established TMDL in Yuba County.⁸¹

Central Valley RWQCB is responsible for water quality control plans (basin plans), water quality objectives and regulating stormwater runoff pollution. Cities and industries known to contribute to stormwater runoff pollution are regulated by National Pollution Discharge Elimination System (NPDES) permits and waste discharge requirements issued by RWQCB.⁸² Stormwater NPDES permits are issued to protect water quality from non-point source discharges, such as road runoff or construction sites. RWQCB issues individual NPDES permits to cities and counties with population of 100,000 or more, and has issued a general permit to smaller jurisdictions that either a) meet the EPA definition of urbanized areas, or b) are designated as regulated areas by RWQCB in light of high population growth, population density, growth potential, and/or discharge levels. The City of Marysville and Yuba County are regulated entities; whereas, the City of Wheatland has not been designated as a regulated entity.⁸³

⁷⁹ State Reclamation Board, *Resolution 74-12*, adopted June 28, 1974.

⁸⁰ Interview with Scott Rice, FloodSafe, May 2008; interview with Jim Eckman, DWR, May 2008.

⁸¹ Diazinon is a pesticide that jeopardizes aquatic life and is harmful to humans. As of December 31, 2004, it is unlawful to sell diazinon outdoor, non-agricultural products in the U.S. However, it is still legal to use diazinon products, and some diazinon products are still legally sold.

⁸² RWQCB also regulates point sources of pollution, such as wastewater treatment plants, under separate NPDES permits, which are discussed in Chapter 6

⁸³ State Water Resources Control Board, *Water Quality Order No. 2003-0005: Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (General Permit)*, adopted 2003.

SERVICE DEMAND

FLOOD CONTROL

The need for flood protection services is primarily affected by topography, precipitation, development in low-lying areas, and the integrity and capacity of levees and other flood control structures. Approximately 45 percent of the average annual runoff volume from the Feather, Yuba and Bear River watersheds occurs in the rain- and flood-producing months of December through March; about 35 percent of the runoff is generated in the snowmelt months of April through June.⁸⁴ Flood-producing storms are generally of relatively short duration (two to five days).

Due to elevation and topography, most of the Beale AFB, Camp Far West, Smartville, and other foothill communities are outside the 100-year flood hazard area. Existing levees protect nearly all of the urban areas in the County in addition to the rural area north of Marysville that is surrounded by levees maintained by RD 10. For the most part, low-lying areas of the Valley not protected by levees are within the official 100-year flood hazard area.

The likely flood hazard areas have been in flux in recent years. In the aftermath of Hurricane Katrina, there has been significant evaluation of flood hazard areas and levees, which would place additional territory in flood hazard areas. Since then, there has been substantial capital investment, with improvements in most levees protecting urban areas in the County completed or scheduled for completion in 2009. A projection of the flood hazard areas upon completion of planned improvements, which is shown in Figure 5-1, was provided to LAFCO by the primary flood engineering consultant to the various districts conducting levee improvements.⁸⁵ The projected flood hazard areas include farmland in the Hallwood (RD 10) area north of Marysville, a portion of the SR-70 northern evacuation route from Marysville, the area between SR-65 and Forty Mile Road, the Dry Creek (RD 817) area west of Wheatland, and the area north of Wheatland and south of Dry Creek (RD 2103). The actual flood hazard areas will become official in 2009.

Future flood control needs in urban areas in California will increase as a result of recent legislation (SB 5) that requires 200-year flood protection. After 2015, development will not be allowed without 200-year flood protection in areas with more than 10,000 people. This requirement affects the City of Marysville and unincorporated Valley areas, and will likely affect the City of Wheatland. By 2025, existing communities will be required to have 200-year flood protection. Flood control and hazard mitigation planning will also be substantially affected by evolving needs related to climate change.

⁸⁴ GEI Consultants, *Yuba County Integrated Regional Water Management Plan*, 2008, p. 4-11.

⁸⁵ Ric Reinhardt of MBK Engineers provided source maps depicting the projected floodplain, and reviewed and confirmed the map depiction on Figure 5-1 of the projected post-improvement floodplain represents a high-level approximation of future flood hazard areas.

Feather River

The Feather River flows for 200 miles from an elevation of nearly 10,000 feet in the Sierra Nevada to an elevation of less than 100 feet near its confluence with the Sacramento River.⁸⁶ The drainage of the watershed is 3,607 square miles upstream of Yuba County at Oroville where a dam and reservoir, which were built in 1967 and are operated by DWR, offer some control of river flows. An additional 2,620 square miles drain through Honcut Creek, the Yuba River, and the Bear River and discharge into the Feather River in Yuba County.

Portions of western Yuba County within RD 10 located north of the City of Marysville may be flooded under inundation rights held by DWR associated with its Oroville Dam facility. Similarly, portions of the area located south of the SR-65 and SR-70 junction are farmlands located on inundation easements. Floodways along rivers and creeks are subject to inundation and encroachment there is prohibited.

The Marysville, Linda and Plumas Lake areas are most vulnerable to flooding on the Feather River. When the Feather River floods, it can constrain drainage in the Yuba and Bear River watersheds and create backflow conditions, as occurred in 1955; hence, the entire low-lying portion of the Valley may be affected by Feather River flood conditions. The known flood history includes floods in 1805, 1825-6, 1846-7, 1861, 1881, 1890, 1907, and 1909.⁸⁷ More recent records of flood events include the following:

- 1937: Failure of a Feather River east bank levee affected the rural area north of Marysville and failure of a Feather River east bank levee farther south affected the Plumas Lake area.
- 1940: Failures on the eastern Western Pacific Interceptor Canal (WPIC) levee and Bear River levee occurred.
- 1955: Tropical storms caused widespread flooding. The Feather River backed up into the Western Pacific Interceptor Canal, the Bear River and Dry Creek. Over 30,000 people were evacuated and approximately 40 people died. The “great flood” inspired the Legislature to form YCWA.
- 1986: Another major storm event resulted in a levee failure in RD 784.
- 1997: A trio of subtropical storms poured more than 30 inches of rain onto already saturated watersheds. Failure of a Feather River levee segment in the Arboga community resulted in flooding of 16,000 acres in the Plumas Lake, Arboga, Linda and Olivehurst communities and caused more than \$350 million in property damage.⁸⁸

⁸⁶ GEI Consultants, *Yuba County Integrated Regional Water Management Plan*, 2008, p. 4-10.

⁸⁷ Yuba County Office of Emergency Services, *Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan*, 2007, pp. 4-54; MBK Engineers, Bookman-Edmonston, MHM Engineers, and Kleinfelder, *Draft Final Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan: Comprehensive Flood Study*, 2006.

⁸⁸ Yuba County Office of Emergency Services, *Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan*, 2007, section 4.

Yuba River

The Yuba River basin drains approximately 1,339 square miles of the western Sierra Nevada slope, including portions of Sierra, Placer, Yuba, and Nevada Counties, before flowing into the Feather River.⁸⁹ New Bullards Bar Reservoir, which YCWA has operated since 1970, is the primary facility that regulates flood runoff within the basin. The reservoir has a total capacity of 966,000 af, of which 170,000 af is dedicated to flood control during peak flood season.

Portions of the area located south of the SR-65 and SR-70 junction are farmlands located on inundation easements. Floodways along rivers and creeks are subject to inundation and encroachment there is prohibited.

The Marysville, Linda and Olivehurst communities are most vulnerable to flooding on the Yuba River. The known flood history includes floods in 1805, 1825-6, 1846-7, 1861, 1881, 1890, 1907, and 1909. More recent records of flood events include the following:

- 1950: The Yuba River broke through its banks at Hammonton in the Goldfields area and flooded 43,000 acres in southern Yuba County, including the communities of Linda, Olivehurst and Arboga.
- 1986: Failure of a Yuba River levee (located east of the SR-70 E Street bridge) caused extensive flooding on 7,000 acres in Linda and Olivehurst. The State paid \$450 million to flood victims for damages and losses caused by the levee failure.

Bear River and Dry Creek

The Bear River drainage basin area totals about 550 square miles and joins the Feather River about 15 miles south of the City of Marysville. The Bear River is a single channel affected by backflow conditions generated at its confluence with the Feather River. In other words, flood events affecting the Feather River can and have affected the Bear River watershed.

Although downtown Wheatland is located on a ridge, low-lying areas around Wheatland are vulnerable to Bear River and Dry Creek flooding. A large storm over the Bear River watershed could potentially flood the downtown Wheatland area. According to RD 817 and 2103 board members, verbal histories indicate a Bear River levee break in the mid-1920s. The unprotected northern side of Dry Creek experienced flooding in 1986, 1997, 2001, and most extensively in 2005, according to RD 817. Known flood events in the Wheatland vicinity include the following:

- 1903: Wheatland flooded, with downtown areas covered with two feet of water, and the water level reaching 10 feet in southern Wheatland.
- 1940: The north Bear River levee and the east WPIC levee (maintained by RD 784) failed.
- 1955: The Feather River backed up into Bear River, Dry Creek and the WPIC.

⁸⁹ GEI Consultants, *Yuba County Integrated Regional Water Management Plan*, 2008, p. 4-3.

- 1997: A Dry Creek levee broke, and portions of Wheatland were evacuated.⁹⁰

DRAINAGE

Drainage needs are primarily affected by precipitation, urban development, downstream flood conditions, the capacity of drainage facilities, pollution, and evolving regulatory standards. Drainage needs and conditions are also affected by regional flows that originate outside the MSR area.

In low-lying areas, rainwater percolation is already limited by the high groundwater elevation. Urban development expands impervious surfaces—paved streets, sidewalks, driveways, building footprints and parking lots—and decreases rainwater absorption into soil. As development proceeds, new pollutant sources are introduced and pollution levels increase. The runoff leaving a developed area may be much greater in volume, velocity and/or pollutant load than pre-development runoff from that area unless mitigating drainage facilities are installed.

Urban runoff—and water quality impacts related to stormwater and urban runoff—can be reduced by the introduction of proper watershed management and planning techniques and the use of materials, such as permeable asphalt, open space preserves, infiltration basins, soil erosion control, monitoring of development plans and projects, and public education. As areas urbanize, cities and counties often need to conduct more extensive stormwater planning and implementation of best management practices. As lands are proposed for development, detailed drainage studies are done to determine development impacts and proposed mitigation. In most cases the development interests usually pay for these mitigation measures through direct construction or impact fees.

Table 5-3: Impaired Water Bodies and TMDLs

Water Body	Pollutant or Stressor	Potential Sources	Affected Area	TMDL Date ¹
Bear River, Lower	Diazinon	Agriculture	21 miles	2008
Bear River, Upper	Mercury	Resource Extraction	10 miles	2011
Camp Far West Reservoir	Mercury	Resource Extraction	1,945 acres	2011
Deer Creek	pH	Internal Nutrient Cycling (primarily lakes)	4.3 miles	2011
Englebright Lake	Mercury	Abandoned Mines	754 Acres	2012
Feather River, Lower	Chlorpyrifos	Source Unknown	42 Miles	2019
	Group A Pesticides	Agriculture	42 Miles	2011
	Mercury	Abandoned Mines	42 Miles	2009
	Unknown Toxicity	Source Unknown	42 Miles	2019
	Diazinon	Agriculture	42 Miles	2003
Jack Slough	Diazinon	Agriculture	14 Miles	2008

Source: Central Valley RWQCB, Oct. 25, 2006.
 Note: (1) Italicized dates indicate proposed TMDL target date.

Regulatory standards are evolving. To reduce pollution in watersheds, the Clean Water Act directed the states to establish Total Maximum Daily Loads (TMDL) of pollutants. The TMDLs

⁹⁰ The specific location of the Dry Creek south bank levee break was PLM 0.3.

require monitoring of pollutant levels and development of remedial actions that will prevent contaminants from exceeding maximum allowable levels. TMDLs present numerical targets for water quality pollutant levels in impaired water bodies. To date, a diazinon TMDL on the Feather River is the only established TMDL in Yuba County. The RWQCB plans to propose TMDLs in the future on impaired water bodies. The Bear River, Camp Far West Reservoir, Deer Creek, Englebright Lake, the Feather River, and Jack Slough are impaired water bodies, as defined by Clean Water Act section 303(d) and shown in Table 5-3.⁹¹

INFRASTRUCTURE NEEDS OR DEFICIENCIES

FLOOD CONTROL

The primary facilities for controlling flood damage are levees along the flood channels and reservoirs that provide flood storage.

Table 5-4: Flood Control Infrastructure

Facility	Provider	Size	Protected Area	Yr Built
Oroville Dam & Reservoir	DWR	3,538,000 af	Feather River floodplain	1967
New Bullards Bar Reservoir	YCWA	966,000 af	Yuba River floodplain	1969
Honcut Creek levee	RD 10	3.0 miles	North of Marysville	1900s
Feather River levee	RD 10	11.2 miles	North of Marysville	1900s
Jack & Simmerly Slough levees (north)	RD 10	7.7 miles	North of Marysville	1900s
Feather River levee	MLD	1.3 miles	City of Marysville	1868-1907
Jack & Simmerly Slough levees (south)	MLD	3.3 miles	City of Marysville	1875-1907
Yuba River levee	MLD	3.0 miles	City of Marysville	1862-1907
Yuba River levee spur	MLD	3.9 miles	SR-20 evacuation route	NP
Yuba River levee	RD 784	6.1 miles	Linda, Olivehurst, Arboga, Brophy	NP
Feather River levee	RD 784	12.9 miles	Plumas Lake, Arboga, Linda, Olivehurst	NP
Bear River levee	RD 784	4.7 miles	Plumas Lake, South Yuba	1908-27
Dry Creek levee (north)	RD 784	0.3 miles	South Yuba	1935-39
W. Pacific Interceptor Canal (west)	RD 784	6.3 miles	Plumas Lake, Arboga	NP
W. Pacific Interceptor Canal (east)	RD 784	3.6 miles	South Yuba	NP
Best Slough levee (south)	RD 784	0.8 miles	South Yuba	NP
Bear River levee	RD 817	3.9 miles	West of Wheatland	1908-27
Dry Creek levee (north)	RD 817	1.3 miles	West of Wheatland	1935-39
Dry Creek levee (south)	RD 817	3.8 miles	West of Wheatland	1935-39
Bear River levee	RD 2103	5.0 miles	City of Wheatland	1908-27
Dry Creek levee (south)	RD 2103	4.8 miles	City of Wheatland	1935-39
San Joaquin drainage canal levees	RD 2103	2.0 miles	City of Wheatland	1935-39

Sources: DWR, local agency interviews

⁹¹ Central Valley RWQCB, 2006.

DWR is in the midst of a new and more in-depth levee integrity evaluation process. DWR levee evaluations are presently focused on urban areas. The Corps is conducting an evaluation of the Yuba River Basin, with a geotechnical evaluation of the ring levees protecting the City of Marysville due for release by the end of 2008. No targeted investigations in rural areas, which include the Wheatland area and the area north of Marysville, are scheduled;⁹² borings will be conducted in rural areas in the future. That information will help engineers develop more detailed alternatives. Levee integrity information will be more comprehensive in future MSR reports as a result of these efforts.

Feather River

The three main forks of the Feather River drain into Lake Oroville, where releases into the lower river are controlled by Oroville Dam. Flows below Oroville are also regulated by Thermalito Diversion Dam, located five miles downstream of Oroville Dam. Flood control releases from Oroville Dam may be as high as 150,000 cfs, and vary depending on downstream flows and constraints. To affect Oroville operations, Honcut Creek flow would have to exceed 30,000 cfs or Yuba River flow would exceed 120,000 cfs at the respective confluences with the Feather River. The design flow of the Feather River is 210,000 cubic feet per second (cfs) north of Marysville and 300,000 south of its confluence with the Yuba River.⁹³ During peak flood season (mid-October through March), the storage capacity reserved for flood control is 375,000-750,000 af depending on precipitation. Peak flow on the Feather River near Gridley in the January 1997 flood event was 163,000 cfs.⁹⁴

The Feather River levees in Yuba County were originally constructed of silts, sands, dirt and gravel at least a century ago, and were not constructed to modern engineering and design standards. Feather River levees are maintained by RD 784, MLD and RD 10.

Breaks in the Feather River levee maintained by RD 784 have resulted in flooding in 1937, 1955 and 1997. Geotechnical evaluations show that this reach does not meet the FEMA base flood certification criteria for underseepage. To ensure protection of the area from further flood events, TRLIA is conducting a four-phase project to achieve a 200-year level of flood protection along the Feather, Yuba and Bear rivers as well as the Western Pacific Interceptor Canal. TRLIA initiated Feather east levee repairs in 2007, including slurry walls, slope flattening, stability berms, and a 5.2-mile setback levee. The upper and lower portion repairs of the Feather levee will complete in 2008. The center portion of the levee will be replaced by the setback levee and will initiate construction in 2008 and complete in 2009.

The Marysville levee along the Feather River was originally built between 1868 and 1907 and was subsequently raised five times with dredge tailings, gravel and earth fill until 1956. Prior to the formation of MLD, the City was inundated on several occasions, including 1861 and 1874, which lead to considerable damage and loss of lives. While significant flood events have occurred in the area surrounding the City of Marysville since 1876, there have been no recorded failures of the levees maintained by MLD. The District is not within a 100-year flood plain. FEMA has not yet

⁹² Interview with Scott Rice, FloodSafe, May 2008.

⁹³ California Department of Water Resources, *Flood Channel Design Flows*, 1985.

⁹⁴ MBK Engineers, *Hydraulic and Hydrologic Analysis of the Three Rivers Levee Improvement Authority's Phase 2 Project*, July 2005, Table 3.

updated the floodplain in the City of Marysville. The levees most likely offer 100-year flood protection at this time. The Corps' Yuba Basin Project established a 300-year flood protection goal for Marysville; levee improvements are planned. Preliminary DWR boring results indicate that the City is nearing 200-year flood protection. After DWR completes its geotechnical analysis program, design will be required for identified problems with repair projects to follow.

North of Marysville, RD 10 levees were originally constructed in the early 1900s by farmers in the area. Subsequent improvements have been made on an as-needed basis. The levees are composed of a combination of loam and sand; however, the exact composition is unknown. There has been one recorded failure of RD 10-maintained levees in 1937; during a high-water event in 2006, approximately 150 feet of the levee along Simmerly Slough eroded and was repaired. The District identified the following levee needs and deficiencies: mitigation of occasional under seepage during high-water events, additional gravel on levee crowns to maintain safe levee patrols during high water, and grading of the levee sides. A majority of RD 10 lies outside a 100-year flood plain based on official FEMA maps; however, the flood protection afforded by the levees will be updated in 2009 when DWR conducts a geotechnical analysis of RD 10 levees. The RD 10 levees would not be certified until geotechnical information is available to FEMA; no plan has been established to date to gather this information. A geotechnical evaluation would cost approximately \$2.3 million.

Yuba River

The Yuba River system drains approximately 1,300 square miles of the western slope of the Sierra Nevada. This area encompasses parts of Sierra, Placer, Yuba, and Nevada counties. Flows in the lower Yuba River are regulated by Englebright Dam and Daguerre Point Dam. The design flow of the Yuba River is 120,000-180,000 cfs depending on Feather River flow.⁹⁵ The peak flow near Marysville in the January 1997 flood event was 161,000 cfs.⁹⁶ The average flow (1970-2005) varies from 1,070 cfs in October to 4,330 cfs in February.⁹⁷

New Bullards Bar Reservoir is operated by YCWA, and is the primary infrastructure available for upstream flood control of Yuba River flows, in addition to uses described in Chapter 4. YCWA described the facility as in good condition. Increased outlet capacity would allow YCWA to release water more effectively at the onset of an extreme flood, such as the 1997 flood, and free up space in the reservoir for regulating the peak flow. The New Colgate Powerhouse is subject to back-up conditions during flood events which requires shutdown of the powerhouse and constrains early release of flood flows. A capital project to depress the tailwater would prevent tailwater from interfering with turbine operation, allow continued turbine operation during high flows, and reduce peak flood flows downstream. YCWA is implementing a forecast coordinated operations project (F-CO) project to improve the effectiveness of flood control operations by enhancing flood forecasting (through river gauging stations and simulation models) and more effectively coordinating releases from Oroville and New Bullards Bar reservoirs. The F-CO project is primarily grant-funded.

⁹⁵ California Department of Water Resources, *Flood Channel Design Flows*, 1985.

⁹⁶ MBK Engineers, *Hydraulic and Hydrologic Analysis of the Three Rivers Levee Improvement Authority's Phase 2 Project*, July 2005, Table 3.

⁹⁷ EDAW, *Draft Environmental Impact Report for the Feather River Levee Repair Project*, August 2006, Table 5.3-1.

TRLIA constructed slurry walls along the Yuba south bank levee in 2004 and 2006. A landside seepage berm completed construction in 2006 as well. A 1.9-mile segment of the south Yuba levee (downstream of Simpson Lane) was certified by the Corps to 100-year standards in May 2007⁹⁸. TRLIA is evaluating the Yuba south levee reliability upstream of Simpson Land. If needed, TRLIA plans to take all actions, in cooperation with state and federal entities, to provide at least a 200-year level of protection along this remaining reach of urban levee.

MLD identified the need for improvements to a three-mile section of the Yuba-River levee from Simpson Lane to North Levee Road, which currently consists of a sand cap and some sand pockets. The levee needs to be widened with clay or a slurry wall installed. The DWR levee evaluation, when complete in late 2008, will indicate those areas requiring additional work to meet the 100-year or 200-year levels of protection. The District is exploring funding options with various Federal, State and local agencies.

Bear River Levees

The Bear River originates on the west side of the Sierra Nevadas in the vicinity of Emigrant Gap, and flows southwest 65 miles to its confluence with the Feather River (at mile 12), draining portions of Nevada, Placer, Sutter and Yuba counties. The design flow of the Bear River is 40,000 cfs below the WPIC and 30,000 cfs above.⁹⁹ Peak flow on the Bear River near Wheatland in the January 1997 flood event was 34,900 cfs.¹⁰⁰

Bear River levees were originally constructed of silts, sands, dirt and gravel at least a century ago, and were not constructed to modern engineering and design standards. Levee construction is a continual process, and repairs and construction continue to this day. These levees are maintained by RD 817, 2103 and 784.

TRLIA constructed a two-mile setback levee on the Bear River, constructed a tie-in for the Bear River setback levee with the Feather levee, reconstructed the upper Bear levee at the confluence with the WPIC, and raised the crowns on the lower Bear River and WPIC levees in 2006. The Corps certified the northern Bear River and western WPIC levees to 100-year standards.

RD 2103 is rehabilitating a five-mile segment that stretches from just east of SR-65 (near the San Joaquin canal) to approximately 13,000 feet west of SR-65. The segment was rehabilitated from 1998 to 2002, but under-seepage was later found. Developers funded the evaluation and design. A combination of developer, City of Wheatland loans and state bond funds are financing the \$14.75 million construction cost. About 30 percent of the work was completed in 2007, with the remainder to be completed in 2008.

RD 817 reported that a $\frac{3}{4}$ mile segment located just west of Baxter Road was built on sand, and needs to be replaced and possibly relocated. A thorough evaluation has not yet been conducted and

⁹⁸ The U.S. Army Corps of Engineers only certifies levees for 100-year protection, as this is the federal standard. This does not preclude the levees from being certified by DWR for 200-year protection.

⁹⁹ California Department of Water Resources, *Flood Channel Design Flows*, 1985.

¹⁰⁰ MBK Engineers, *Hydraulic and Hydrologic Analysis of the Three Rivers Levee Improvement Authority's Phase 2 Project*, July 2005, Table 3.

funding has not been identified. RD 817 may conduct this work in the third phase of a joint project with RD 2103 in collaboration with the City of Wheatland.

Both RD 817 and 2103 reported that gravel needs to be added to levee crowns and that levees need to be faced (i.e., given a gentle slope and planted with vegetation) to prevent erosion, particularly on the Bear River where rapid river flow erodes the levees more quickly.

Dry Creek Levees

Dry Creek drains into the Bear River. The design flow of the Dry Creek is 9,000 cfs.¹⁰¹ Peak flow in January 1997 was not available.

Dry Creek levees were originally constructed in the 1930s, and were not constructed to modern engineering and design standards. Levee construction is a continual process, and repairs and construction continue to this day. These levees are maintained by RD 817, 2103 and 784.

The southern Dry Creek levee has freeboard and geotechnical deficiencies, and needs to be raised by approximately three feet. RD 2103 plans to conduct this work as part of the second phase of its levee improvement program, with RD 817 work in the third phase. The work would be conducted to achieve 200-year flood protection. A thorough evaluation has not yet been conducted and funding has not been identified.

Western Pacific Interceptor Canal

The Western Pacific Interceptor Canal (WPIC) was constructed as part of the SRFCP, and was designed and constructed by the U.S. Army Corps of Engineers (Corps) in the late 1930s to convey flood waters to the Bear River. The WPIC runs north-south on the east side of SR 70 from approximately two miles south of the SR 70/SR 65 interchange to the Bear River.

Flood waters had historically flowed from the east into the area. Flows originate primarily in Reeds and Hutchinson Creeks and Best Slough; agricultural runoff contributes flows as well.¹⁰² Flows into the WPIC also include the OPUD WWTP, which discharges on average 2.4 cfs during dry weather and up to 12 cfs during peak flows. The only RD 784 flows entering the WPIC are from Pump No. 4 (most of which are discharged elsewhere through Lateral No. 15).¹⁰³ Bear River flood flows can reach an elevation that prevents free drainage of the WPIC. Under these conditions, WPIC is unable to drain into the Bear River, and occasionally have been high enough to enter Olivehurst.¹⁰⁴

The design flow of the WPIC is 10,000 cfs,¹⁰⁵ although this is expected to be reduced to 7,600 cfs.¹⁰⁶ Peak flow in January 1997 was not available; the State does not monitor WPIC flows except

¹⁰¹ California Department of Water Resources, *Flood Channel Design Flows*, 1985.

¹⁰² EDAW, *Draft Environmental Impact Report for the Feather River Levee Repair Project*, August 2006, p. 5.3-11.

¹⁰³ Correspondence from RD 784 Engineer, Sean Minard, June 20, 2008.

¹⁰⁴ MHM Engineers, *South Yuba Drainage Master Plan*, September 1981, p. 5.

¹⁰⁵ California Department of Water Resources, *Flood Channel Design Flows*, 1985.

during peak events. Dry weather flow was measured as zero at the OPUD WWTP site, 43 cfs downstream of Reeds Creek, and 67 cfs downstream of Best Slough.¹⁰⁷

The State is directly responsible for operating the WPIC channel. RD 784 is responsible for operations and maintenance of WPIC project levees.

TRLIA constructed two slurry cutoff walls along the upper WPIC levee and a landslide toe ditch along the lower WPIC levee, and the Olivehurst detention basin in 2006. The Corps subsequently certified the western bank of the WPIC to 100-year standards.

The eastern levee of the Western Pacific Interceptor Canal (downstream of Best Slough) and the southern levee at Best Slough are both project levees under RD 784 maintenance responsibility. These levees protect agricultural areas, and are not required to provide urban protection levels. Infrastructure needs along these segments are unknown.

Past studies have provided contradictory indications of WPIC needs. A Yuba County Drainage Commission (subsequently disbanded) recommended improvements in 1969 to the State Reclamation Board, and suggested the WPIC be closed. The Board, in turn, recommended the Corps rechannel the Bear River, clean Clark Slough and Reeds Creek, and study the WPIC hydraulics. The Corps recommended intercepting Bingham Canal, and carrying it to Reeds Creek, but financing proved to be a challenge. A 1980 Corps study found that peak flows had been overestimated in prior studies, and that the project was not feasible as a result. A 1981 study by the County found that the WPIC functioned poorly, and had a very slight grade and some constrictions affecting its usefulness.¹⁰⁸ A 1992 study, however, found the drainage was in fairly good condition.¹⁰⁹

A ranch owner, Frances Hofman, reported increased drainage through her property during the winter and spring, and an inability to drain her property into the WPIC. Hofman contends that the flow results from upstream development is not adequately mitigated by Yuba County,¹¹⁰ and that the WPIC appears to be adversely impacted by developments creating stormwater run-off down Reeds and Hutchinson Creeks.¹¹¹ During peak flows when detention basins are at capacity, stormwater discharges to the WPIC, and Hofman reports an inability to pump discharges on her property into the WPIC.¹¹² Hofman Ranch is located in a low-lying area east of the WPIC; properties in this area

¹⁰⁶ MBK Engineers, *Bear, WPIC and Yuba Levees: Addendum to Supplement to Standard Operation and Maintenance Manual*, January 4, 2008, p. 6.

¹⁰⁷ CH2MHILL, *Draft Environmental Impact Report: Olivehurst Public Utility District Wastewater Treatment Plant Expansion and Upgrade Project*, April 2004, p. 3-10. Flow measurements were taken on November 19, 2003.

¹⁰⁸ MHM Engineers, *South Yuba Drainage Master Plan*, September 1981, pp. 5.-10.

¹⁰⁹ MHM Engineers, *Revised South Yuba Drainage Master Plan*, 1992, p. 20.

¹¹⁰ Correspondence from Frances E. Hofman to Yuba LAFCO Executive Officer, John Benoit, July 7, 2008.

¹¹¹ Correspondence from the Hofman counsel, Thomas W. Eres, to Yuba LAFCO Executive Officer, John Benoit, July 7, 2008.

¹¹² *Ibid.*

are subject to flowage easements (i.e., inundation rights) acquired by the State approximately 70 years ago.¹¹³

Countering Hofman's hypothesis is the fact that upstream development projects have installed detention basins to mitigate downstream flows to historic levels.¹¹⁴ Yuba County requires development to mitigate downstream drainage impacts that contain increased flows. Typically, this involves the developer contributing toward detention basins that store peak flows, and thereby slow the drainage of peak flows. Similarly, no evidence was found that lack of channel maintenance by the State might have decreased capacity; RD 784 reported that is not aware of any problems with WPIC maintenance or cleaning.¹¹⁵

WPIC capacity concerns were neither substantiated nor disproved by available data. Due to a lack of data, it could not be determined that peak flows have indeed increased or that peak flow increases were caused by upstream development.

Other Facilities

RD 2103 reported that San Joaquin Drainage canal levees have freeboard and geotechnical deficiencies (not sloped properly), and need to be raised by approximately three feet on both sides of the canal.

DRAINAGE

Marysville

Marysville runoff is drained via three discharge points through the ring levee. Two of these discharge over the levee only by pumping. The third discharge point is associated with Ellis Lake, which is essentially a large detention pond. Ellis Lake discharges primarily by gravity flow through the levee and requires pumping during high water events outside of the levee ring. In the future, Marysville may consider a larger pumping capacity and relying more on pumping for removing interior runoff. Other problems include some storm drains that are undersized and damaged curb and gutter on some streets to direct runoff to drainage inlets. Needs are to replace aging pump motors, replace undersized storm drains, and construct and repair curb and gutters.¹¹⁶

Wheatland

Wheatland runoff is drained via channels, culverts, a detention basin and a pump station (west of SR-65). Existing capacity in culverts and portions of Grasshopper Slough is inadequate to convey 100-year flows. The City is implementing regional detention basins to provide capacity to convey

¹¹³ Correspondence from Central Valley Flood Protection Board Supervising Engineer, Dan S. Fua, to Yuba LAFCO consultant, June 19, 2008.

¹¹⁴ Correspondence from RD 784 Engineer, Sean Minard, June 20, 2008.

¹¹⁵ Correspondence from RD 784 General Manager, Daniel Fisher, June 26, 2008.

¹¹⁶ MBK Engineers, Bookman-Edmonston, MHM Engineers, and Kleinfelder, *Draft Final Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan: Comprehensive Flood Study*, 2006.

peak drainage flows. The City requires new development to install drainage infrastructure, specifically channels, culverts and storm drains, to limit post-development flows to existing conditions.¹¹⁷ In some areas where new systems are installed, treatment facilities may be used at the detention facilities. RD 817 expressed concern about potential for growth-induced runoff flows from Wheatland through Grasshopper Slough, and impacts on orchard trees.

A 2005 City of Wheatland plans identified existing drainage conditions and inadequacies, including facilities handling flows originating in agricultural areas outside City bounds.¹¹⁸ The planning area encompasses the City's existing SOI and includes territory down-gradient (west) of the City. The plan is a tool to ensure that future development does not worsen conditions.¹¹⁹ It describes existing conditions, assesses infrastructure adequacy under existing conditions, and recommends improvements, including developer-funded regional detention basins to reduce flows.

Olivehurst and Southwest Yuba

In the unincorporated areas, the County drainage system consists of roads with drainage systems, catch basins, water basins, detention basins, constructed wetland, artificial channels, aqueducts, curbs, gutters, ditches, sumps, pumping stations, storm drain inlets, and storm drains. The County has begun a program to log and map the location of all facilities, which is expected to be completed by July 2008. No drainage needs were reported by the County for areas outside of the southwest portion of the County.

During severe storm events, the southwest portion of the County experiences drainage overflow as water backs up into the Feather River, Bear River and finally the WPIC. In Olivehurst, runoff collects in yards where the home pads are too low and water ponds when it rains. In order to eliminate the ponding, pad grading, street improvements and culvert upgrades will be necessary.¹²⁰ In addition, drainage ditches become clogged due to debris build-up. The County identified a need to establish a master underground drainage system in Linda and Olivehurst to replace the open road-side swales, which are prone to clogging by debris and eliminate ponding. Improvements to County drainage infrastructure are developer driven and funded.

Yuba County prepared a drainage master plan for southwest Yuba County in 1981 and updated the plan in 1992. More recently, the County planned the South Olivehurst Detention Basin in 1998, and updated the plan in 2005.¹²¹ The 1992 planning area covers a watershed area of about 10,000 acres south of the Yuba River and east of RD 784.¹²² The 1992 plan had identified improvements to

¹¹⁷ Wheatland General Plan Update, *Draft Drainage Report For Internal Drainage*, 2005.

¹¹⁸ Civil Engineering Solutions, Inc., *Wheatland General Plan Update: Draft Drainage Report for Internal Drainage*, Nov. 2005.

¹¹⁹ MBK Engineers, Bookman-Edmonston, MHM Engineers, and Kleinfelder, *Draft Final Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan: Comprehensive Flood Study*, 2006, p. 74.

¹²⁰ Interview with Paul Brunner, Executive Director, TRLIA, October 29, 2007.

¹²¹ MHM Engineers, *Basis of Design Report: South Olivehurst Detention Basin and Storm Water Pumping Project, Hazard Mitigation Grant Program*, prepared September 1998 and revised August 2005.

¹²² MHM Engineers, *Revised South Yuba Drainage Master Plan*, 1992.

eliminate stormwater runoff from the east Linda area into Olivehurst, and to protect developing areas in east Linda. Existing (1992) conditions included localized flooding on the Linda Drain, periodic inundation in Olivehurst, and Bear River backflow through the WPIC when the Bear River rises above the WPIC level.¹²³ The plan developed several key features needed to obtain 100-year flood protection, including the Olivehurst Interceptor Canal, Olivehurst Detention Basin, Eastside Interceptor Canal, and the County Regional Detention Basin. Most of the key improvements have been constructed, except the Eastside Interceptor Canal. The Olivehurst Interceptor was constructed in 1999 to divert Clark Slough and Linda Drain water from Olivehurst and the Clark Lateral to Reeds Creek. The Olivehurst detention basin, constructed by TRRIA in 2006, has alleviated some pressure on the system by limiting Bear River backup from entering Olivehurst via the Clark Lateral.

Plumas Lake and Linda

RD 784 maintains major drainage channels, most detention basins, and pumping stations. Water drains from the county-owned infrastructure in subdivisions into district-owned channels and detention basins, and is finally pumped over the levees into the Feather and Bear rivers and the WPIC. Drainage infrastructure maintained by RD 784 includes 43 miles of internal drainage ditches, nine pumping stations, and five detention basins. TRRIA has constructed an additional three detention basins with a combined capacity of 590 acre-feet, which are to be transferred to RD 784 upon completion and certification. The County has begun preliminary discussions with RD 784 to evaluate how its drainage responsibilities can be expedited in a cost-effective manner.

RD 784 prepared a drainage master plan in 2002 to protect property owners from damage from new development and meet requirements of the Plumas Lake Specific Plan that a comprehensive drainage plan be developed.¹²⁴ The planning area was defined as the RD 784 watershed, which extends from the community of Linda to the north, the Feather River to the west, the Bear River to the south, and the WPIC to the east.¹²⁵ The plan analyzed existing flows, modeled future flows from planned development, and assessed infrastructure adequacy under existing and future conditions. In the Plumas Lake area, the plan found that existing flows exceeded drainage channel capacity, and recommended two detention basins, channel widening and pump station improvements.¹²⁶ In the north-central portion of the District, the plan identified existing ponding problems; to mitigate development impacts, detentions basins and lateral widening were recommended. In “Basin C” (including the Linda community, the airport, and the area between Algodon Slough and the WPIC), the plan identified existing ponding at pump stations, and a lack of Algodon Canal capacity south of Linda. For this area, the plan recommended a 600-af regional detention basin (located in a low-lying area between Broadway Street and Algodon Road), increased pump station capacity, and widening of Algodon Canal.¹²⁷

¹²³ Ibid., p. 20.

¹²⁴ Mead & Hunt, *Reclamation District 784 Master Drainage Plan*, September 2002.

¹²⁵ Ibid., Figure 1-2. The planning area excludes the Olivehurst community, which is located outside District bounds.

¹²⁶ Ibid., pp. 5-9, 5-11 and 5-12.

¹²⁷ Ibid., Chapter 7.

Beale AFB

Beale AFB runoff is surface-drained to inlets, concrete-lined ditches and open grass-lined swales and ditches. In the housing area, stormwater drains to Dry Creek. There is presently no stormwater collection system in the housing area, and many housing units have water infiltration problems. Approximately 20 percent of housing units have significant drainage problems. Drainage swales and inlets have been constructed around many units to attempt to mitigate effects on foundations, but these are of limited effectiveness. Beale AFB plans to replace or renovate most of its housing units by 2012. Otherwise, no major storm drainage problems have been reported on base.¹²⁸

SERVICE ADEQUACY

FLOOD PROTECTION

The unincorporated Arboga, Linda, Olivehurst, and Plumas Lake areas do not lie within the 100-year floodplain, according to official FEMA maps. FEMA has not yet officially updated the floodplain in most of these areas; preliminary maps show areas behind the Feather River levee in the floodplain. TRLIA is conducting a four-phase project to achieve 200-year flood protection along the Feather, Yuba and Bear rivers as well as the western WPIC levee by 2009.

The City of Marysville does not lie within the 100-year floodplain, according to official FEMA maps. FEMA has not yet updated the floodplain in the City of Marysville. The levees most likely offer 100-year flood protection at this time. The Corps' Yuba Basin Project established a 300-year flood protection goal for Marysville; levee improvements are planned. Preliminary DWR boring results indicate that the City is nearing 200-year flood protection; afterwards, design will be required for identified problems with repair projects to follow.

In the Wheatland area, future flood control standards will be to provide 200-year flood protection. The City's policy is to require flood control improvements before development occurs in areas without adequate flood protection. RD 2103 is actively rehabilitating Bear River levees to achieve that standard by 2008. An informal funding mechanism has been established with the City of Wheatland through developer fees. RD 2103 aims to bring Dry Creek and San Joaquin Drainage Canal levees to the 200-year flood protection standard, but the project is not yet funded and has not been fully evaluated.

Most of the RD 817 boundary area lies within a 100-year floodplain, although some of the territory north of Dry Creek is in a 500-year floodplain. The third phase of the Wheatland area levee improvement project would provide 200-year flood protection to the area south of Dry Creek; however, RD 817 board members are skeptical that such protection is necessary in this agricultural area, the project is unfunded and detailed evaluation has not been conducted.

The southeast portion of the RD 784 boundary is a mostly agricultural area and lies within the 100-year floodplain. The remainder of the RD 784 area is projected to meet flood protection standards once TRLIA completes the fourth phase of its improvement project by 2009.

¹²⁸ Beale Air Force Base, *Beale AFB Housing Community Plan*, 2007, p. 2.5-1

LEEVE MAINTENANCE

DWR inspects maintenance practices and observable project levee conditions twice annually.¹²⁹ A spring inspection is conducted as a preliminary indicator, and a fall inspection prior to the onset of the flood season determines the rating for levee maintenance practices.

Table 5-5: Levee Maintenance Ratings, 2007

Provider	Levee	Rating	Issues
RD 10	Honcut Creek (south)	U	Animal control
RD 10	Feather River levee	U	Animal control, vegetation
RD 10	Jack & Simmerly Slough (north)	U	Crown, vegetation
MLD	Feather River levee	A	
MLD	Jack & Simmerly Slough (south)	A	
MLD	Yuba River (north)	MA	Vegetation
RD 784	Yuba River (south)	U	Erosion, vegetation, encroachments
RD 784	Yuba River (south)	A	
RD 784	Dry Creek levee (north)	A	
RD 784	Feather River levee	A	
RD 784	Bear River levee	A	
RD 784	W. Pacific Interceptor Canal (west)	A	
RD 784	W. Pacific Interceptor Canal (east)	U	Erosion, vegetation, crown, encroachments
RD 817	Bear River levee	U	Slope stability, trim trees
RD 817	Dry Creek levee (north)	U	Vegetation, crown, trim trees, metal pipe
RD 817	Dry Creek levee (south)	U	Crown, encroachments, trim trees
RD 2103	Bear River levee	A	
RD 2103	Dry Creek levee (south)	A	

Note: A = Acceptable, MA = Minimally acceptable, U = Unacceptable
Source: DWR Division of Flood Management, Flood Project Inspection Section

DWR implemented a more rigorous evaluation process in 2007. 64 providers were rated unacceptable in 2007, whereas only four were rated unacceptable in 2006.¹³⁰ DWR now rates each levee segment as acceptable, minimally acceptable or unacceptable by the following categories: vegetation, crown surface, erosion, slope stability, animal control, tree trimming, and encroachment. If 90 percent or more of levees (based on length) are acceptably maintained in all categories, the levee maintenance is rated as acceptable overall. Unacceptable maintenance occurs when 5 percent or more of the levee length is unacceptably maintained in any category, or 20 percent or more is minimally acceptable. Providers with 80 to 90 percent of levees maintained at minimally acceptable levels are rated overall as minimally acceptable. As this was the first year of implementation of the new rating system, DWR may refine its rating system in the coming years. It is unknown precisely how the new levee maintenance ratings will impact levee certification, as no levees have yet been certified since the new standards were released. The Corps reported in 2008 that it is evaluating the

¹²⁹ Inspectors have experience with levee maintenance, but are not engineers and do not conduct geotechnical evaluations of levee integrity. Please refer to the infrastructure needs section of this chapter for information on geotechnical evaluations.

¹³⁰ Interview with Jim Eckman, Chief, Flood Project Inspection Section, DWR Division of Flood Management, May 1, 2008.

2007 state maintenance ratings and will conduct its own evaluations of selected districts as funding allows; urban districts will likely be emphasized.¹³¹

RD 10 levee overall maintenance has been rated as compliant with federal and state standards from 1996 to 2004. In 2005, District maintenance was rated as needing improvement on rodent control. The 2006 inspection rated the District as marginally satisfactory in vegetation control and crown surfacing on a portion of the Simerly Slough levee. In 2007, RD 10 was rated unacceptable due to vegetation, animal control and encroachments on its levees.

MLD overall levee maintenance has been rated as compliant with federal and state standards from 1996 to 2005. 2006 inspections rated the District as satisfactory in most areas, with the exception of a section of levee along the Yuba River that was rated unsatisfactory due to vegetation control issues. In 2007, MLD was rated minimally acceptable due to vegetation on the Yuba River levee. Maintenance was rated acceptable in 2007 on the District's Feather River and Simerly Slough levees. Non-project levees are not inspected by DWR.

RD 784 levee maintenance has been rated compliant each year from 1996 to 2006. In 2007, RD 784 levee maintenance was rated minimally acceptable due to erosion, vegetation, crown, and encroachment issues on its eastern WPIC levee and a segment of the Yuba River levee north of Simpson Lane. The eastern WPIC levee protects a rural area; whereas, the upper Yuba River levee protects both urban and rural areas. Maintenance was rated acceptable in 2007 on the District's Feather River, Bear River, Dry Creek, western WPIC, and the segment of its Yuba River levee south of Simpson Lane.

RD 817 levee overall maintenance has been rated as compliant with federal and state standards from 2001 to 2005. Earlier overall maintenance ratings were non-compliant (1999-2000) and in need of improvement (1996 and 1998). The 2006 inspection rated the District as satisfactory in most categories; vegetation control was marginally satisfactory and unsatisfactory in areas, and rodent control was marginally satisfactory on portions of Dry Creek. In 2007, RD 817 was rated unacceptable due to slope stability, crown, vegetation, tree-trimming, encroachments, and the presence of a metal pipe on its levees.

RD 2103 overall levee maintenance has been rated as compliant with federal and state standards from 1997 to 2006, and needing improvement in 1996 in repairing cracks, erosion and caving on its Bear River levee.¹³² In 2007, RD 2103 maintenance was rated acceptable.

Service challenges reported by reclamation districts include meeting state standards without adequate financing, meeting conflicting regulatory objectives (e.g., DWR standards for tree removal conflict with DFG habitat protection standards), and vandalism-related gate maintenance needs.

¹³¹ Interview with Paige Caldwell, U.S. Army Corps of Engineers, May 19, 2008.

¹³² California DWR, 2006.

NPDES COMPLIANCE

In urban areas, counties and cities must develop stormwater plans and implement best management practices (BMPs). In non-urban areas, NPDES stormwater requirements only affect general industry and new construction. BMPs include program elements, such as stenciling, public education, monitoring and inspections of facilities, and “good housekeeping” practices at municipal facilities. Counties and cities must show that they are implementing BMPs to the maximum extent practicable in urban areas.

Yuba County and the City of Marysville are subject to the requirement. Yuba County and the City of Marysville prepared stormwater management plans in 2004. The 2004 plans identified goals and implementation schedules for the BMPs, as required by the NPDES permit.¹³³ The agencies have established a complaint hotline, labeled storm drain inlets, identified problem areas, and conducted cleanup of debris and vehicles along the Yuba River.¹³⁴

According to the permit, the County and Marysville must implement best management practices to achieve the six minimum control measures—to improve 1) public education, 2) public participation, 3) illicit discharge detection, 4) construction site stormwater runoff control, 5) post construction stormwater management, and 6) pollution prevention for municipal operations. The 2004 plan anticipated that all measures would be implemented by July 2008. The County reported that it plans to implement all measures on the timeline, although it had not fully implemented any of the six measures as of March 2008.

Beale AFB has implemented street sweeping, pretreatment of runoff and sewer discharges (oil/water separators), and public education relating to pollutant disposal.

The City of Wheatland and the reclamation districts are not required to implement BMPs. The City has implemented BMPs, such as regular street sweeping and public education.

MANAGEMENT

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital needs, and conduct advance planning for future growth.

An evaluation of the adequacy of management practices is shown in Table 5-6. The first four indicators are self-explanatory.

Adequate evaluation of rates means updating assessments with reasonable frequency. Adequate capital planning involves a multi-year capital improvement plan or comparable planning effort for

¹³³ *City Of Marysville Storm Water Management Program, 2004.*

¹³⁴ County of Yuba and City of Marysville, *Annual Report: General Permit for the Discharger of Storm Water from Small Municipal Separate Storm Sewer Systems, FY 05-06.*

flood control and drainage capital replacement and, if relevant, expansion. Advance growth planning is adequate when an agency discloses existing capacity and anticipated needs throughout the existing service area and SOI. Regulatory compliance is when levee providers' maintenance is rated acceptable by DWR, or when stormwater providers comply with NPDES requirements.

Table 5-6: Flood and Drainage Management Practices

The County, the cities of Marysville and Wheatland, YCWA, MLD, and RD 784 are professionally managed and staffed. The County, the cities and YCWA demonstrated attention to efficient and cost-effective operations based on interviews regarding their management practices.

TRLIA has evaluated flood control infrastructure needs and costs, and implemented multi-year capital improvement planning on behalf of its members, RD 784 and the County. RD 784 has conducted drainage planning, but has not implemented multi-year drainage improvement planning. The County and the City of Wheatland have evaluated flood control and drainage infrastructure needs and costs, but have not implemented multi-year drainage improvement planning. Both have implemented development impact fees for flood control and drainage, but neither has developed a funding source for drainage and stormwater operating costs. The County has imposed a \$25 per home assessment in new-growth portions of RD 784 for levee maintenance. The City of Marysville has implemented capital improvement planning, but drainage needs have not been fully evaluated or funded. Wheatland has planned for growth in a portion of its existing SOI, while Marysville has not planned for growth in its existing SOI.

	MLD	RD #10	RD #784	RD #817	RD #2103	Marysville	Wheatland	County	YCWA
Evaluate employees annually	A	-	N	-	-	A	A	A	N
Prepare timely budget	A	A	A	N	A	A	A	A	A
Periodic financial audits	A	N	A	N	A	A	A	A	A
Current financial records	A	A	I	A	A	A	A	A	A
Evaluate rates	I	N	I	N	I	N	I	I	-
Capital planning	I	N	I	N	I	I	I	I	A
Advance growth planning	N	N	I	N	I	N	A	A	I
Regulatory compliance	I	I	I	I	A	I	I	I	A
A = Practiced adequately, I= Practiced but improvement needed, N= Not practiced, and - = Not relevant									

RDs 10, 817 and 2103 are staffed by board members, their farm workers and volunteers. These districts rely on outside contractors for engineering, legal and accounting services. Neither RD 10 nor 817 conducts financial audits, although RD 2103 does conduct regular financial audits. With the exception of RD 784, all provided current financial information. These districts operate in an extremely resource-constrained fashion with no professional staff. Management practices are minimal given the limited scope of the operations. RD 10 and 817 do not conduct capital planning or advance growth planning. RD 2103 reported that it plans to conduct a thorough evaluation of its budget needs to transition to an urban district as development moves forward, and to explore assessment increases and/or formation of new assessment districts to ensure that revenues meet urban maintenance standards.¹³⁵

Levee maintenance activities were rated unacceptable at RD 10 and 817 in 2007 by DWR, implying that assessments may not be adequate to recoup the costs of providing appropriate service

¹³⁵ RD 2103, *Audited Financial Statements*, FY 06-07, p. 6.

levels. RD 10 evaluated assessments needed to finance a full-time maintenance supervisor and storage needs, and reported in 2007 that it planned to conduct a rate increase election in 2008. MLD last updated its assessments 20 years ago, but reported it plans to evaluate rates in 2008.

The County and the City of Marysville have not yet fully implemented minimum stormwater control measures, but plan to do so by the end of FY 07-08.

LOCAL ACCOUNTABILITY AND GOVERNANCE

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency’s activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 5-7.

Five of the nine agencies have had contested elections in the last 15 years. None of the four reclamation districts have had contested elections and governing body members are generally appointed by the Board of Supervisors. MLD elections have been contested, but voter turnout rates relatively low.

Table 5-7: Flood and Drainage Agency Accountability Measures

All agencies prepare and post meeting agendas and make minutes available as required. Additional outreach efforts include websites, newsletters, articles in community newspapers and public workshops. The cities, the County and YCWA maintain websites where public documents can be posted.

	MLD	RD #10	RD #784	RD #817	RD #2103	Marysville	Wheatland	County	YCWA
Contested election since 1994	✓	×	×	×	×	✓	✓	✓	✓
Constituent outreach activities	×	✓	✓	×	✓	✓	✓	✓	✓
MSR Disclosure	✓	✓	✓	✓	✓	✓	✓	✓	✓
Note: ✓ = Occurred or adequately practiced, × = Did not occur or not practiced									

The City of Marysville updates constituents through regular press releases, mailed notices and updates, and its website. The City of Wheatland updates constituents through regular press releases, email and mail notices and updates, and project-specific public workshops. Yuba County updates constituents through regular calendar updates and announcements on the website. YCWA updates constituents through its website where news releases and ongoing project information are available; its community outreach activities include press releases and public meetings on flood control issues. RD 10 conducts quarterly community outreach meetings. RD 784 participates in public workshops sponsored by other agencies. RD 2103 posts news in a community newsletter. MLD and RD 817 reported that they do not conduct constituent outreach activities other than by word of mouth. For specifics on the governing body, constituent outreach efforts and public involvement, refer to the respective chapter in Appendix A.

Each of the agencies demonstrated accountability in its disclosure of information and cooperation with LAFCO.

SHARED FACILITIES

The service providers have collaborated on recent flood hazard and water management planning through participation in the Multi-Hazard Mitigation Plan, which was coordinated by Yuba County OES, and the Integrated Regional Water Management Plan, which was coordinated by YCWA. Yuba County and RD 784 collaborate on the planning and financing of capital improvements through participation in TRLIA. The City of Marysville and Yuba County collaborate on stormwater management planning.

The reclamation districts share responsibility for maintaining levees along the same water bodies. However, the districts do not share facilities and did not identify facility-sharing opportunities.

RD 817 and 2103 retain the same professional legal counsel and accountant through contractual arrangements. The districts share the same consulting engineer. RD 817 and 2103 have collaborated on plans for a three-phase levee improvement project in the Wheatland area aimed at bringing 200-year flood protection to the area. The City of Wheatland is imposing development requirements such that developers must help finance the levee improvements. RD 2103 is managing the funds and taking a lead role in the project.

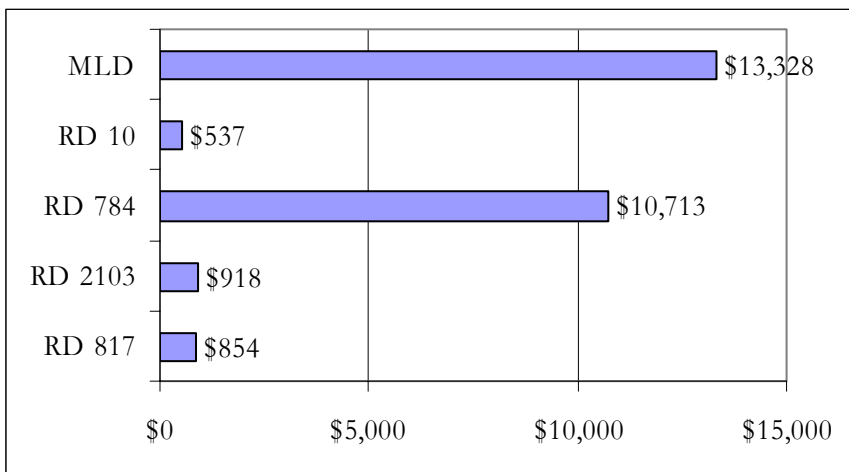
FINANCING

The financial ability of agencies to provide services is affected by available financing sources and financing constraints. This section discusses the major financing constraints faced by reclamation service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

OPERATING COSTS

Figure 5-8: Operating Costs per Levee Mile, FY 05-06

The levee and reclamation districts' operating costs varied from a low of \$537 per levee mile in RD 10 to a high of \$13,328 per mile in MLD in FY 05-06, as shown in Figure 5-8.¹³⁶ RD 784 receives substantially more revenue than other reclamation district, in part, due to more extensive development and assessed



¹³⁶ For comparability, the RD 784 operating costs per levee mile exclude internal drainage costs, which are approximately 50 percent of costs. The MLD operating costs per levee mile exclude maintenance on the spur levee, because maintenance expense there is minimal compared with typical levees. The spur levee is simply an elevated road that serves as an evacuation route.

values within that district.¹³⁷ MLD spent \$13,328 per levee mile.

RD 10, 817 and 2103 had relatively low expenditures in FY 05-06. In RD 10, 817 and 2103, property owners prefer to minimize operating costs by relying on board members, their farm workers and volunteers.

Although official standards for levee maintenance costs are not available, certain “rules of thumb” developed by levee engineers indicate urban district costs per levee miles of \$18,000 and \$9,000 for rural districts.¹³⁸ For districts like RD 784 with internal drainage responsibilities, a cost of approximately \$27,000 per levee mile would be adequate.

FINANCING SERVICES

Levee Maintenance

Assessments, property taxes and interest income are the primary funding sources for levee maintenance activities.

RD 784 relies primarily on assessments to fund services. Assessments generated 65 percent of operating revenues in FY 05-06, and interest income generated 28 percent. In FY 06-07, RD 784 also began receiving assessment revenue from CSA 66 pass-through funds. CSA 66 levied assessments of \$299-482 per home in FY 05-06, with \$25 of that amount passed through to RD 784. The CSA 66 assessment is charged in portions of Plumas Lake and Arboga that lie within RD 784 bounds, in addition to some land north of McGowan in Olivehurst that lies outside RD 784 bounds.

RD 2103 and MLD rely on a combination of assessments, property taxes and interest income. Assessments generated 66 percent of RD 2103 revenue, and 55 percent of MLD revenue. Property taxes generated 21 and 31 percent, respectively. MLD last updated its assessments 20 years ago, but reported it plans to evaluate rates in 2008.

RD 10 and 817 rely primarily on property taxes to fund services. RD 817 does not levy assessments. Both districts rely secondarily on interest income generated from their fund balances. RD 10 evaluated assessments needed to finance a full-time maintenance supervisor and storage needs, and approved its first assessment in 2008.

Reclamation districts may impose or increase assessments with voter approval. Also, YCWA has funded some flood control planning work in the past. YCWA is expected to receive increased revenue as a result of future water transfers, and may have additional resources in future years. Urban development would help enhance the funding base for reclamation districts by offering developer fees and increased property tax revenues.

¹³⁷ Unlike the other levee maintenance service providers, RD 784 provides extensive internal drainage services. Internal drainage costs were estimated at 50 percent of the District’s costs (interview with District Engineer Ric Reinhardt, 2008).

¹³⁸ MBK Engineers, Bookman-Edmonston, MHM Engineers, and Kleinfelder, *Draft Final Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan: Comprehensive Flood Study*, 2006, p. 66. “Rules of thumb” for maintenance costs per levee mile were based on analysis by MBK Engineers of RD 1000 budget and maintenance activities.

Operations are financially constrained by limited boundary areas, voter approval requirements for assessments and, in RD 2103 and particularly RD 817 and 10, relatively low densities and limited property tax bases.

Drainage

Drainage operating costs are funded by property taxes, assessments and general fund revenues. The City of Wheatland funds operation and maintenance of drainage primarily through general fund revenue; assessments levied through a lighting and landscape district fund a detention basin (Wheatland Ranch) and drainage canal (Park Place).¹³⁹

Traditionally, stormwater programs are financed by general funds and assessments. New and evolving requirements have increased the scope of municipal responsibility in this area without additional funding. In addition to specific permit issues, a key concern of many cities and counties throughout the state has been that the MS4 permit requirements are essentially an unfunded mandate. Proposition 218 limits agencies' ability to impose and increase assessments.

Funding for stormwater programs is inadequate. Current requirements for property owner and/or voter approval for collection of additional fees to support the additional operation, monitoring and reporting requirements of a non-point source water quality program have made it difficult for jurisdictions to provide funding. Proposition 218 currently places substantive and procedural rules relating to levying assessments on real property as well as reiterating Proposition 13's requirement for two-thirds voter approval for special taxes. In 2005, Assembly Members Harman, Jones and Mullin introduced Assembly Constitutional Amendment Number 13 (ACA 13). ACA 13 aims to define storm water programs as a utility, thereby exempting it from the property owner approval requirements of Proposition 218. ACA 13 has not yet passed.

CAPITAL FINANCING

Levee Improvements

Capital funds for levee improvements have been raised from state bond-funded grants, developers and loans. There are competitive processes for state bond funds, and there are limits on developer contributions, particularly given the 2006-8 housing market softening.

Capital financing for levees and improvements in the RD 784 service area and East Linda has been provided through TRLIA, a JPA formed by RD 784 and the County. The first three phases of TRLIA's four-phase capital improvement plan were completed with developer fees, Proposition 13 funds, a YCWA loan, and grants from FEMA (\$5 million) and DFG (\$7 million). Proposition 13, which was adopted in 2000, provided bond funds for flood control projects statewide, of which \$63 million were granted to TRLIA. Developers in the Plumas Lake, Arboga and East Linda areas contributed under developer funding agreements through 2006. The County imposed development impact fees for TRLIA improvements in 2006; the fee is \$84,678 per acre in the Plumas Lake zone and \$11,690 per acre in the East Linda zone.¹⁴⁰

¹³⁹ *City of Wheatland General Plan Update: Environmental Impact Report*, July 2006, p. 4.8-7.

¹⁴⁰ *Yuba County Public Works Developers Fee Summary (Residential)*, 2008.

The fourth phase of the TRLIA levee improvement project underway—construction of a six-mile Feather River setback levee and a slurry cutoff wall along Yuba River levee—is projected to cost \$191 million. TRLIA is funding the fourth phase primarily with Proposition 1E funds (\$138 million) from the State. Proposition 1E, which was passed by California voters in 2006, authorized \$4.1 billion in bond funds for flood control projects. Other phase-four funding sources are a \$47 million loan assumed partly by the County and partly by YCWA, \$5 million in developer contributions, and \$1.4 million from RD 784.

Financing for levee capital improvements in RD 2103 has been provided by state bond funds, developers and a loan from the City of Wheatland sewer fund. RD 2103 received half of the \$14.75 million funding for improving Bear River levees to 200-year flood levels from early levee funding through Proposition 1E. In order to proceed with levee repairs in 2008, the City of Wheatland loaned \$2 million from its sewer fund to finance loans to developers so they may pay their share of levee improvement costs.

Drainage

Yuba County and the City of Wheatland impose development impact fees on new development to recoup the costs of extending drainage infrastructure capacity to serve those developments. In addition, developers are required to install on-site drainage facilities at their own cost. The City of Marysville has financed drainage capital improvements with grant and sewer funds.

Yuba County levies a drainage impact fee of \$990 per dwelling unit in the Edgewater and South Yuba drainage areas and \$406 in the Hallwood drainage area.¹⁴¹ In the South Yuba drainage area, which includes some development portions of Linda and Olivehurst and undeveloped land that is planned for development, existing canals already overflow during periods of heavy rain and would not accommodate stormwater flows from new development.¹⁴² Needed improvements in the South Yuba area, including construction of the Olivehurst Interceptor, Eastside Interceptor and detention pond, and improvements to the Linda Drain and Reed's Creek ditch, were estimated to cost \$11.5 million in 2004. In the Hallwood drainage area, which extends from SR-20 to the Yuba River, the fee finances area-wide drainage improvements.

The City of Wheatland is financing nine storm drainage capital projects required to construct the network of pipes and small drainage channels envisioned in its General Plan. The City's drainage capital needs are expected to cost \$79 million. These needs are being financed by a development impact fee of up to \$7,257 per dwelling unit.¹⁴³ The City requires development to install drainage facilities, including pump systems and pipes, and/or pay the impact fee based on their demand and use of the drainage system.¹⁴⁴

¹⁴¹ Ibid.

¹⁴² Yuba County, *Impact Fee Update Report*, 2004, section 10

¹⁴³ *Development Impact Fee Calculation and Nexus Report for the City of Wheatland*, 2007.

¹⁴⁴ *City of Wheatland General Plan Update: Environmental Impact Report*, 2006, p. 4.8-7.

The City of Marysville has not imposed development impact fees. The City has most recently financed drainage improvements with sewer and Community Development Block Grant funds.¹⁴⁵

FINANCIAL ABILITY

MLD and the four reclamation districts' financial ability to provide services is constrained by available revenues and legal limitations on revenue increases. In isolated areas with rural or otherwise sparse development, financing sources are not adequate to improve levees to urban standards.

MLD has a nearly acceptable levee maintenance record. The District has not updated its assessments in 20 years, and is overdue for a rate study and increase. The results of 2008 levee borings will impact future capital financing needs, and may require the District to increase assessments and/or develop new funding sources. The District's resources were short of guidelines for expenditures per levee mile.

RD 784 has an unacceptable maintenance record on some levees protecting agricultural areas. The District has a relatively ample overall budget per levee mile maintained compared with other Yuba County providers, but is significantly below urban funding standards.¹⁴⁶ The District maintains improvements that extend beyond its boundary area; East Linda properties benefit from the District's maintenance activities but do not pay assessments to the District. RD 784 relies on a patchwork of funding sources, and would benefit from evaluation of its funding approach. Current financing sources do not appear to be adequate to address needs for internal drainage facilities, particularly in low-lying portions of the Olivehurst area; the District and the County are both considering financing options to improve drainage in such areas. The District's resources were short of guidelines for expenditures per levee mile.

RD 2103 has achieved an acceptable levee maintenance record in spite of relatively low assessments. The District's approach to funding operating expenses—relying on board members and volunteers—is not a sustainable long-term practice. As development and urbanization proceed, the District will require a funding source for paid staff to manage and conduct maintenance. The District reported in 2007 that it plans to conduct a financial evaluation of assessment needs for ensuring adequate funding to meet urban levee maintenance standards.

RD 10 and 817 have unacceptable levee maintenance records. The districts subsist on property tax revenues, and have not imposed assessments. RD 10 is evaluating imposition of assessments to increase service levels, with YCWA funding for the related study. RD 817 should evaluate assessments.

Funding mechanisms have been established for growth-related capital needs, but need to be developed for drainage improvements to existing development. The County and the cities of Marysville and Wheatland have not developed funding mechanisms for drainage and stormwater operational costs.

¹⁴⁵ City of Marysville, *Five-Year Capital Improvement Plan*, 2004.

¹⁴⁶ MBK Engineers, Bookman-Edmonston, MHM Engineers, and Kleinfelder, *Draft Final Yuba County Multi-Jurisdictional Multi-Hazard Mitigation Plan: Comprehensive Flood Study*, 2006.

GOVERNANCE ALTERNATIVES

This section discusses issues and problems with respect to the current organization of flood control and reclamation service in Yuba County and, in light of anticipated growth, with its future organization. It identifies alternatives to the current government structure of service providers, including annexation of territory benefited by levee improvements to RD 784, 817 and 2103, as well as potential for consolidation of reclamation districts serving urban areas.

RD 784 ANNEXATION

The RD 784 boundary area does not accurately reflect the benefit area. Eastern portions of the Linda and Olivehurst communities receive flood protection from the Yuba River south bank levees and other improvements, but are located outside the bounds of RD 784. Annexation of the benefit area to RD 784 is an option.

TRLIA constructed improvements benefiting the area in 2006. The benefit area is depicted on Figure 5-1. TRLIA is considering the placement of an associated assessment on the ballot for voter approval, although a precise definition of the area for the proposed assessment was not available at the time the MSR was prepared.

At a 2008 board meeting, RD 784 determined that it supports SOI expansion to include the East Linda area (formerly part of State Maintenance Area 8) where RD 784 maintains the south Yuba River levee (from the Simpson Lane vicinity to the Goldfields). The State and Federal governments have increased demands for maintenance without providing additional funding. The purpose of annexation is to ensure adequate financing for maintenance and ongoing certification.¹⁴⁷

RD 784 DETACHMENT

At a recent board meeting, RD 784 determined that it no longer wishes to maintain project levees east of the WPIC (from Bear River to Dry Creek), the south Dry Creek levee segment and the north Dry Creek levee segment, and wants LAFCO to reduce its SOI.¹⁴⁸

Detachment of territory east of the WPIC from RD 784 is an option. The protected area is agricultural and associated revenues do not presently cover the costs of maintaining levees in the area to state and federal standards. If detached, the State would bear responsibility for levee maintenance in this agricultural area. The State could then form a maintenance area whereby local landowners would bear the cost of levee maintenance or could reconsider the SRFCP (“project”) status of such levees.

There are no State flowage easements for lands north of Dry Creek and east of the WPIC; however, it is unclear why such easements would be required if the State should choose to transform this into a maintenance area.

¹⁴⁷ Correspondence from RD 784 Engineer, Sean Minard, June 20, 2008.

¹⁴⁸ Correspondence from RD 784 Engineer, Sean Minard, June 20, 2008.

RD 817 REORGANIZATION

The RD 817 boundary area does not accurately reflect the benefit area. A segment of the Dry Creek levee west of Oakley Lane is outside the District's bounds, although it is maintained by the District. This area should be officially annexed.

There is also a small area north of Dry Creek within the RD 817 boundary. RD 817 voluntarily accepted transfer from RD 784 of responsibility for maintaining that levee although the revenue from the benefit area appears to be inadequate for the service provided. A portion of the land within bounds on the north side of Dry Creek does not appear to receive any levee protection. One option is to detach some or all of the territory north of Dry Creek from RD 817. Establishing flood protection service level and needs in this area and cost-benefit analysis would be critical in considering this option.

Future DWR levee borings and FEMA evaluations of the area would help with analysis of this policy question.

CONSOLIDATION

Reclamation district consolidation is a government structure option. Three districts maintain adjacent segments of levees along the Bear River and Dry Creek. The districts generally provide adequate service, although RD 817 maintenance was rated unacceptable in 2007.

Wheatland is rapidly urbanizing with proposed and planned developments covering its existing sphere of influence. The City is expected to annex substantial territory in the next 20 years as adjacent areas urbanize. As urban development expands, the need for a greater level of flood protection and professionally managed service providers increases. RD 817 and, to a lesser degree RD 2103, are run in a low-cost fashion by rural interests without staff, and may not be optimal urban service providers.

A major obstacle to reclamation district consolidation relates to the liability associated with levee maintenance responsibilities. Service providers, such as the City of Marysville, the City of Wheatland, Yuba County and YCWA, are professionally staffed, but may be hesitant to accept such liabilities and are, therefore, unlikely to accept responsibility by becoming successor agencies.

An obstacle to consolidation is the rural, agricultural preference for lower assessments and service levels and the urban need for professionally staffed entities and higher service levels. RD 2103 encompasses the City of Wheatland; farmers in the District have been selling options to developers and the area will potentially urbanize. RD 817 remains agricultural, and takes a lower-cost approach to levee maintenance. The districts do not share the same goals in terms of flood protection levels. Although the districts do collaborate, it does not appear that RD 817 would welcome consolidation, particularly if it means assessment increases. A successful consolidation approach would likely need to develop assessment financing that would allow agricultural uses to pay based on need and benefit.

In more urbanized counties, flood control providers are often consolidated. Formation of a consolidated flood control district is another option.

Alternatively, the reclamation districts could pursue functional consolidation by creating a regional maintenance program to pool resources to hire staff to maintain the levees in Yuba County. This approach would offer professional staff with appropriate equipment that could be shared in levee maintenance across the County. This would result in increased costs in reclamation districts that presently rely on board members and volunteers for maintenance work.

6. WASTEWATER

This chapter reviews wastewater services in Yuba County, including how these services are provided by cities, special districts and other providers not under LAFCO jurisdiction. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing. Government structure options are identified for local agencies under LAFCO jurisdiction.

Wastewater is the water that drains from sinks, showers, washers, and toilets. Wastewater also includes water used for some outdoor purposes, such as draining chlorinated pool water, commercial car washes and industrial processes. Underground sanitary sewer pipelines carry sewage to a wastewater treatment plant, where it is treated, sanitized and discharged. The chapter focuses on those agencies collecting, treating and disposing wastewater. Private septic systems are not the focus, but are included to provide comprehensive coverage of service areas and local policies.

PROVIDER OVERVIEW

This section provides an overview of wastewater providers, service areas and unserved areas where septic systems are used in Yuba County. For a map of providers and wastewater facilities, see Figure 4-1.

SERVICE PROVIDERS

City of Marysville

Marysville provides wastewater collection, treatment, and disposal services to 5,244 connections within the city limits. The City owns and operates a wastewater treatment plant and owns, inspects, cleans and repairs sewer collection structures in the service area such as pipes, manholes and lift stations. Preventative maintenance services include closed-circuit television inspection of sewer lines and regular system flushes. A portion of treated effluent is used as recycled water for irrigation of an orchard and soccer fields. Recycled water is available in limited areas. The City is the only wastewater provider in the County under LAFCO jurisdiction that currently provides recycled water for irrigation purposes.

City of Wheatland

Wheatland provides wastewater collection, treatment, and disposal services to 1,051 connections. The City owns and operates a wastewater treatment plant and inspects, cleans and repairs all sewer collection structures in the service area. Preventative maintenance services include closed-circuit television inspection of sewer lines and regular system flushes. The City provides wastewater services to all structures within the City limits, with the exception of four residences that were recently annexed into the City and are currently on septic systems. These residences are expected to connect to the City sewer system as sewer lines are extended to the parcels. Service is not provided outside city limits.

Linda County Water District

Linda County Water District (LCWD) provides wastewater collection, treatment, and disposal services to 3,360 connections. LCWD encompasses the community of Linda just south of the City of Marysville along SR 70 and serves the developing area of the East Linda Specific Plan. Connections are primarily residential with limited light commercial and no significant industrial uses. The District owns and operates a wastewater treatment plant and sewer collection infrastructure in the service area. The District provides all wastewater service within the District bounds. There are no septic systems inside the District's boundaries. No services are provided outside District bounds.

Olivehurst Public Utilities District

Olivehurst Public Utilities District (OPUD) provides wastewater collection, treatment, and disposal services to 5,221 connections, all within district bounds. The District's bounds encompass the communities of Olivehurst and Plumas Lake. The District owns and operates a wastewater treatment plant and sewer collection infrastructure in the service area. The District relies on outside contractors for collection system repairs involving digging up pipes, SCADA technology support and engineering studies.

River Highlands Community Service District

River Highlands Community Service District (RHCS D) provides wastewater collection, treatment and disposal services to 84 residences. Wastewater services are only provided within the district bounds to residences in the unincorporated subdivision of Gold Village in Smartville.

Due to the failure of the District's wastewater treatment plant (WWTP) in October 2006 and subsequent failure of the District to comply with Regional Water Quality Control Board (RWQCB) orders, the Deputy County Administrator of the County Office of Emergency Services was appointed as the receiver of the District by the State Superior Court, until May 2009, for wastewater purposes. The Deputy County Administrator is responsible for overseeing, approving and implementing the cleanup and abatement, bringing the new treatment plant into compliance with state and federal laws, and capital financing oversight.

Providers Not Regulated by LAFCO

Beale AFB

Beale AFB provides wastewater collection, treatment and disposal services to all facilities on the Base, including the flightline, housing, and cantonment areas. Wastewater services are not provided outside of the Base's boundaries. Beale AFB has solicited bids from private and public entities in 2008 for leasing its WWTP and adjacent lands. Although non-LAFCO regulated providers are not the focus of this chapter, in order to provide a comprehensive overview of sewer service in the MSR area, information regarding Beale AFB service is included where available.

Yuba County Entertainment

Yuba County Entertainment (YCE) owns, operates and maintains a private treatment and disposal system, which serves the Sleep Train Amphitheatre. YCE began providing wastewater services in 2000 when the amphitheatre completed construction and opened. YCE is hoping to expand its operations to a motorplex and possibly a casino, all located in the Sports and

Entertainment Zone with the amphitheatre. The treatment plant treats effluent to the primary level.¹⁴⁹

Septic systems

Areas that do not lie within the service areas of these providers do not receive central wastewater treatment services, but rather rely on septic systems. Septic systems are located on individual properties, provide treatment of wastewater, collect sludge, and discharge effluent into a leach field. Property owners are responsible for septic system maintenance and sludge disposal. Septic systems are allowed in most areas of the County only if there is no nearby public sewer system. Generally, a public sewer system is considered available if a sewer system or a building connection to a sewer system is within 200 feet of the building, in accordance with Section 713.4 of the Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials.

Septic systems do not remove pollutants to the extent wastewater treatment plants do. If septic systems are not properly designed, sewage may surface creating odors and health risks. Public health concerns include seepage into groundwater and surface water. Septic system maintenance and failure carry relatively high and potentially unexpected costs which may be unaffordable to some low-income residents.¹⁵⁰

The communities of Brophy, Camp Far West, and Smartville, as well as all of the communities north of the Yuba River are reliant on septic systems. There are approximately 9,000 septic systems throughout the County.¹⁵¹

SWRCB is in the process of developing new septic system regulations, which may greatly impact the cost of maintaining a private septic system. These new regulations are discussed further in the Service Adequacy section.

SERVICE DEMAND

This section provides various indicators of service demand, such as water demand, the number of service connections, and projected demand. Please refer to Chapter 3 for population, growth projections and growth strategies.

DEMAND DRIVERS

Wastewater demand is affected primarily by growth in residential population and commercial development, and secondarily by factors such as water usage and conservation efforts.

Many of the water demand drivers discussed in Chapter 4 are also wastewater demand drivers during dry periods. During dry weather, wastewater flows are less than potable water consumed.

¹⁴⁹ Correspondance with Brendan Kenny, CVRWQCB, Compliance and Enforcement Officer, May 1, 2008.

¹⁵⁰ EDAW, 2005.

¹⁵¹ Authors' estimate based on estimated households in the County less the number of wastewater connections.

Water used for outdoor purposes, such as landscape, irrigation, firefighting, street cleaning, and residential car washing, does not flow into the wastewater system.¹⁵²

The increased use of water-efficient plumbing fixtures reduces wastewater flows. Ultra-low flush toilets (ULFTs) use only about one-quarter as much water as older models. Washing machine replacement is also effective in reducing wastewater flows. Conventional washers discharge about 42 gallons of water per load compared with 26 gallons for new, frontloading washers.

Wastewater flow includes not only discharges from residences, businesses, institutions, and industrial establishments, but also infiltration and inflow. Infiltration refers to groundwater that seeps into sewer pipes through cracks, pipe joints and other system leaks. Inflow refers to rainwater that enters the sewer system from sources such as yard and patio drains, roof gutter downspouts, uncapped cleanouts, pond or pool overflow drains, footing drains, cross-connections with storm drains, and even holes in manhole covers.¹⁵³ Infiltration and inflow tend to affect older sewer systems to a greater degree and are highest during or right after heavy rain. They are the primary factors driving peak flows through the wastewater system and a major consideration in capacity planning and costs.

Organic loading levels affect the wastewater treatment process. Organic loading originates from toilets and kitchen sink disposals and is the amount of organic matter in the wastewater.

In addition to organic pollutants, wastewater entering a treatment plant may contain metals, nutrients, sediment, bacteria, and viruses. Toxic substances used in the home—motor oil, paint, household cleaners, and pesticides—or substances released by industries also make their way into sanitary sewers. Industries and commercial enterprises may produce high-strength wastewater or wastewater containing pollutants that could upset treatment processes.

SERVICE CONNECTIONS

Table 6-1: Wastewater Service Connections, 2007

There are a total of 15,364 separate sewer connections in the County, excluding those connections served by Beale AFB, as shown in Table 6-1. Of these, 94 percent were residential; commercial, industrial and institutional users accounted for six percent of sewer connections. There are few industrial connections throughout the County.

Agency	Total	Residential	Commercial/ Industrial
Marysville	5,244	4,750	494
Wheatland	1,051	996	55
LCWD	3,764	3,611	153
OPUD	5,221	5,050	171
RHCSD	84	84	0

¹⁵² Although some drains in outdoor stairwells and yards connect to the wastewater system, most water used for outdoor purposes flows into the stormwater system.

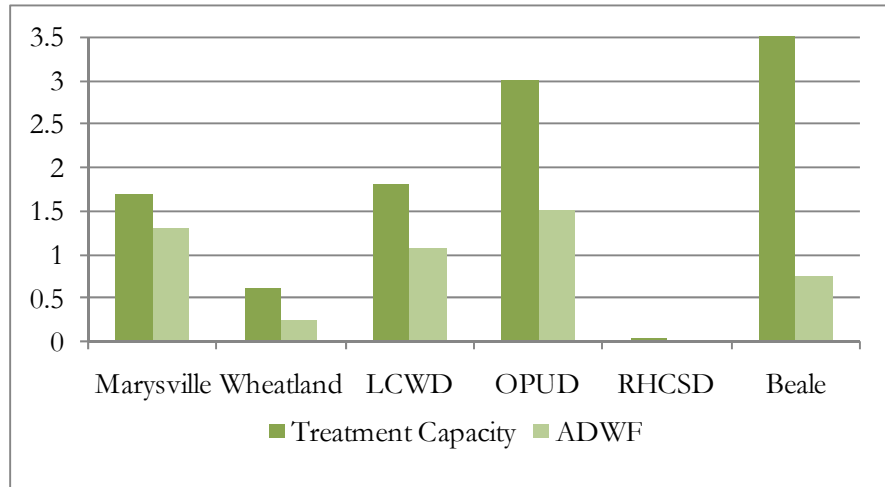
¹⁵³ A sewer cleanout is a pipe rising from the underground sewer line to the ground surface with a removable cap; it is used to access the sewer line to clear blockages.

Marysville and OPUD serve the largest number of connections. Although OPUD’s service area is significantly larger than the City’s, the City serves a compact and built-out area. Commercial, industrial and institutional users are concentrated in Marysville.

WASTEWATER FLOWS

Figure 6-2: Wastewater Flow and Plant Capacity (mgd), 2007

Each wastewater treatment plant has permitted capacity as determined by the RWQCB. Permitted capacity is typically defined as average dry weather flow (ADWF). As shown in Figure 6-2, all of the wastewater providers are within the permitted capacity of their treatment plants according to ADWF. OPUD and Beale



have the greatest remaining additional capacity of 1.5 and 4.2 mgd respectively. Peak wet weather flow in excess of the ADWF permitted capacity does not indicate that the agency is exceeding permitted conditions. Peak effluent flows may be stored and treated as the flow diminishes.

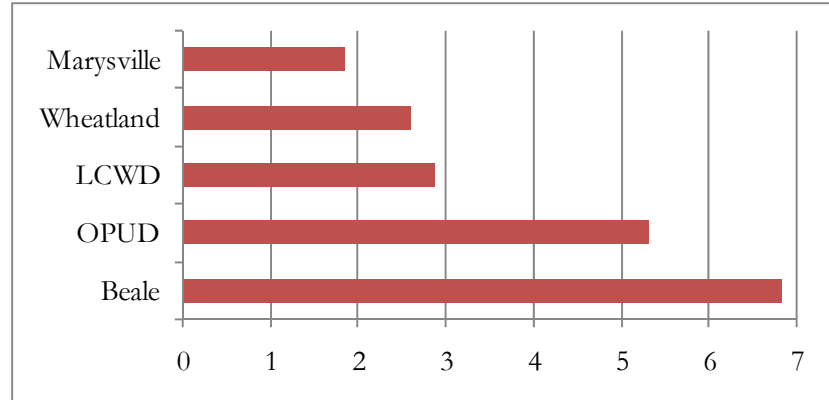
The flow at Marysville is constricted more by the capacity of its percolation ponds where the treated effluent is discharged than its treatment plant capacity; however, the Marysville ADWF of 1.3 mgd is within the 1.7 mgd capacity of the ponds. Occasionally, peak wet weather flow exceeds 1.7 mgd; however the ponds are managed to handle the temporary excess flow such that the ponds meet freeboard requirements. During periods of dry weather some ponds are removed from service and used to address any wet weather flow.¹⁵⁴

Wheatland currently operates well within the permitted capacity of the plant; however, the remaining capacity has been allocated to build-out of the City limits—excluding the planned Jones Ranch and Heritage Oaks developments. The two developments will require an additional 0.38 mgd ADWF of capacity.

¹⁵⁴ Interview with Dave Lamon, City of Marysville, 5/20/08.

Figure 6-3: Wastewater Peaking Factors, 2007Peaking Factor

Wastewater flows depend not only on discharges from wastewater users, but also on the condition of the wastewater collection system and weather conditions due to infiltration and inflow (discussed in the demand driver section).



The peaking factor is the ratio of peak day wet weather flows to average dry weather flows. The Marysville collection system appears to be in the best condition, with a peaking factor of less than two. Peaking factors between two and three, such as Wheatland and LCWD, indicate moderate problems with infiltration and inflow.

Peaking factors higher than three, such as OPUD and Beale, indicate more serious problems with the integrity of the wastewater collection system. Of the wastewater agencies, OPUD and Beale have the highest peaking factors and most significant infiltration and inflow problems. OPUD reported an aged collection system in the old Olivehurst area, and plans to conduct a detailed inspection in FY 08-09. Beale AFB has an ADWF of 0.76 mgd.¹⁵⁵ The peak flow was 5.18 mgd in January 1997. During heavy rainfall, inflow into the collection system often inundates the system and can cause overflows. The AFB has significant inflow problems, which are caused by damaged manholes, sewer lines damaged by root intrusion, cracked pipes, and cross-connections to drainage channels. Beale AFB plans to finance wastewater collection system improvements through a private lease arrangement and bond issuance projected for mid-2008.

RHCSO did not report its PWWF; however, the planned new facility is expected to accommodate a peaking factor of 2.5.

PROJECTED DEMAND

Wastewater flow will increase over time with population and economic growth. The County population is projected to grow by 4.5 times, should all planned and proposed developments be built-out, as discussed in Chapter 3. A majority of the growth is planned or proposed within or adjacent to the City of Wheatland, LCWD and OPUD service areas and SOIs.

Due to infrastructure constraints on Marysville growth, there are no significant planned or proposed developments within the City's limits and primary sphere. Development projects consist primarily of infill. Wastewater flow is not expected to increase significantly due to growth in the short-term. In the long-term, the City indicated there is potential for approximately 8,000 new

¹⁵⁵ Central Valley RWQCB, Order No. 2004-0045, pp. 1-2.

residential units in its primary SOI, which would generate between 2.3 and 3.1 mgd in additional demand or a total of 3.7 to 4.5 mgd at build-out of the city limits and the City's primary SOI.¹⁵⁶

Wheatland anticipates needing 5.04 mgd in capacity for ADWF at build-out of the city limits and the portion of the City's SOI west of Jasper Lane and south of Dry Creek. Anticipated demand for the Johnson Rancho development, within the City's SOI, was not included in the City's projections. The Johnson Rancho development would likely increase daily flow by an additional 3.2 to 4.2 mgd.¹⁵⁷

The projected demand within LCWD's SOI at build-out of the East Linda Specific Plan (2.1 – 2.7 mgd)¹⁵⁸ and the community of Linda (1.4 mgd)¹⁵⁹ is approximately 3.4 to 4.0 mgd. Marysville is considering transferring its wastewater for treatment at the LCWD WWTP, which would add another 1.4 mgd for the city limits¹⁶⁰ and 2.3 to 3.1 mgd for the City's primary SOI. The total build-out flow would be between 6.8 and 8.1 mgd, which is significantly lower than the maximum capacity of the District's WWTP site of 15 mgd.

Projected demand within OPUD's SOI at build-out of the Plumas Lake Specific Plan (5.0 - 6.5 mgd),¹⁶¹ North Arboga Study Area (1.2 - 1.45 mgd), in addition to Olivehurst existing demand (0.9 mgd),¹⁶² is approximately 7.1 - 8.8 mgd ADWF. The WWTP site can accommodate expansion up to 8.0 mgd.¹⁶³ Projected demand at build-out of the existing service area, PLSP and NASA is comparable to or possibly greater than the maximum capacity of the current WWTP site.¹⁶⁴ Similarly, the Hearing Report for the new WWTP indicates that the facility will have the capacity to serve up to 13,334 EDU's after completion of the two expansion phases,¹⁶⁵ which is not sufficient capacity to serve the constructed and proposed 14,247 residential units and 1,052 acres of non-residential development in the PLSP and NASA areas, in addition to the present customers in the community of Olivehurst. OPUD has indicated that neighboring vacant property could be acquired

¹⁵⁶ The lower estimate is based on the assumption of 300 gallons per dwelling unit daily. The higher estimate is based on the assumption of 400 gallons per day per unit.

¹⁵⁷ The lower estimate is based on the assumption of 300 gallons per dwelling unit daily. The higher estimate is based on the assumption of 400 gallons per day per unit.

¹⁵⁸ The lower estimate is based on the assumption of 300 gallons per dwelling unit daily. The higher estimate is based on the assumption of 400 gallons per day per unit.

¹⁵⁹ 2006 LCWD WWTP flow less the approximate flow of the East Linda Specific Plan that has been constructed to date.

¹⁶⁰ Annual average flow within city limits in 2006.

¹⁶¹ The lower estimate is based on the assumption of 300 gallons per dwelling unit daily. The source for the higher estimate is Yuba County's 1992 Plumas Lake Specific Plan (p. 73), which assumes 400 gallons per dwelling unit daily.

¹⁶² Based on OPUD flow in 1992, as reported in the Plumas Lake Specific Plan, p. 72.

¹⁶³ Interview with Tim Shaw, General Manager, OPUD, February 6, 2008.

¹⁶⁴ Projected demand at build-out excludes the following proposed and planned developments, portions of which are located within OPUD's existing SOI: Woodbury, Terra Linda and Rancho Road.

¹⁶⁵ OPUD, *Hearing Report – OPUD Wastewater Treatment Facility*, 2005, p. 10.

for further expansion of the plant beyond the current footprint capacity of 8 mgd. The WWTP EIR identifies four adjacent properties that could be acquired for future expansion.¹⁶⁶ OPUD was unable to provide the maximum plant expansion size upon land acquisition, but indicated that it could likely serve the combined projected demand of LCWD, Marysville and OPUD of between 14 and 17 mgd.

There are no proposed developments within the RHCSO bounds. The Yuba Highlands development is within the District’s SOI; however the development was defeated by a ballot measure in February 2008. The developer plans to make a revised proposal for the development.¹⁶⁷ The original proposal of over 5,101 residential units, over 20 acres of commercial areas, and 64 acres of business park, would create 1.53 to 1.7 mgd in wastewater flow.¹⁶⁸

The Estom Yumeka Maidu Tribe has proposed a 170-room casino within the Sports and Entertainment Zone to be served by an expansion of the amphitheatre’s treatment plant. The casino EIR reports that the projected wastewater flow from the facility will be approximately 0.14 mgd on the weekends. The projected casino wastewater flow in addition to the amphitheater’s average flow of 0.05 mgd would total 0.19 mgd, which exceeds the amphitheatre’s current capacity of approximately 0.17 mgd. The casino EIR suggests that the YCE facility be expanded to a capacity of 0.325 mgd to accommodate projected weekend flows at the casino.¹⁶⁹

Table 6-4: Projected Wastewater Flow by Development

There are several proposed subdivisions and economic development areas, which are not currently within a wastewater provider’s service area or SOI. With the exception of the Terra Linda and Yuba Highlands developments, all of the unserved proposed subdivisions and economic development areas are located in the Brophy area along SRs 70 and 65 and along the eastern boundary of Beale AFB. As shown in Table 6-4, the developments will generate a total of approximately 15.4 to 18.3 mgd in wastewater flow at build-out.

Proposed Development	MGD ¹
Woodbury	2.4 - 3.1
Chippewa	0.6 - 0.7
Feather Creek	0.9 - 1.2
Magnolia Ranch	1.9 - 2.4
Terra Linda	0.6 - 0.8
Yuba Highlands	1.7 - 2.2
Sports/Entertainment Zone	1.9 - 2.0
Rancho Road Industrial Park	0.9 - 1.0
Research and Development Park	4.6 - 5.0

Notes:
 (1) The lower estimate is based on the assumptions of 300 gpd/EDU for low and medium density residential development, 225 gpd/EDU for high density development and 1850 gpd/acre for commercial or industrial development. The high estimate is based on the assumption of 400 gpd/EDU for low and medium density residential development, 300 gpd/EDU for high density and 2000 gpd/acre for commercial or industrial development.

DEMAND MANAGEMENT STRATEGIES

Demand management strategies include sewer infiltration and inflow control, industrial

¹⁶⁶ CH2MHILL, *Draft OPUD WWTP Expansion and Upgrade Project EIR*, April 2004, p. 3-65.

¹⁶⁷ The developer had not released a revised Yuba Highlands development plan as of July 2008. Opponents of development in Yuba Highlands indicated that the preferred land use for the area is one at “reasonable grazing densities,” and that a new development plan for the area would have to be “significantly smaller” in size than originally proposed.

¹⁶⁸ The source for the lower estimate is the Yuba County, Yuba Highlands Draft Area Plan, 2006 (p. 72). The higher estimate is based on the assumption of 300 gallons per dwelling unit daily.

¹⁶⁹ U.S. Department of the Interior, 2008, pp. 2-14.

pretreatment and recycling, and water conservation.

Service providers can reduce infiltration and inflow with capital improvements, such as pipeline rehabilitation, manhole cover replacement, and root eradication.¹⁷⁰ They can also address sources on private property, such as broken service lines, uncapped cleanouts and exterior drains, through public education, incentives and regulatory strategies.

Communities use various techniques to prohibit discharge of unwanted pollutants or to reduce the quantity and strength of wastewater discharged to sewers. These techniques include 1) permit limitations on the strength and contaminant levels of industrial and commercial wastewater; 2) increased rates or surcharges on high-strength wastes; and 3) incentives or requirements for water recycling and reuse within the industrial or commercial operation.

Water conservation measures are effective for reducing average wastewater flows, but have less impact on peak flows, which are usually strongly influenced by infiltration and inflow contributions. Water conservation has little or no impact on organic loading to the treatment plant.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

This section outlines infrastructure needs and deficiencies of the individual agencies. For specifics on each of the jurisdiction's treatment plants and collection systems, refer to the agency's chapter in Appendix A.

CITY OF MARYSVILLE

Key infrastructure includes the wastewater treatment plant, percolation/evaporation disposal ponds and 38 miles of sewer pipe lines.

The WWTP, which is located just north of the Yuba River, provides secondary treatment to most wastewater and tertiary treatment to a portion. The plant has a design capacity of 3.5 mgd (secondary) and 0.8 mgd (tertiary). The RWQCB permits the City to discharge up to 1.7 mgd in ADWF into the evaporation/percolation ponds.

The evaporation/percolation ponds are currently the limiting component on plant capacity. To increase plant capacity the City would need to expand pond capacity. The off-site percolation ponds are not protected from a 100-year flood event, which the RWQCB required by April 2006. The City failed to comply with this requirement. The City submitted a feasibility study to RWQCB in June 2007, outlining the two preferred options to protect the percolation ponds—a regional WWTP with LCWD or modification of the City's plant to directly discharge to the river. The City is further developing both of these options.

The collection system includes 38 miles of sewer pipe lines, three lift stations, and three lift basins. Portions of the pipelines were originally installed in the early 1900s and need ongoing pipe

¹⁷⁰ Per the EPA *Collection System O&M Fact Sheet: Trenchless Sewer Rehabilitation from 1999*, roots can compromise collection systems and lead to an increase in infiltration and inflow. Consequently, root eradication would likely decrease infiltration and inflow.

repair and replacement. A majority of the collection system is in good condition, with approximately five percent in fair condition. Infrastructure needs include replacement of several rear-lot line sewer mains and the sewer line along Twelfth Street and J Street. Sewer mains, particularly those along rear lot lines, are often shallow, prone to root problems, and difficult to access for maintenance. The City plans to rehabilitate some rear-lot line mains and replace the Twelfth Street main in FY 10-11 for \$450,000.

The City and LCWD are evaluating the alternative of the City discharging into the LCWD system in the future once LCWD has upgraded its WWTP. Implementing such an alternative would require a connection to be constructed between the two systems.

CITY OF WHEATLAND

Key infrastructure includes the wastewater treatment plant, three percolation/evaporation ponds, 55 miles of sewer pipe lines, and five lift stations.

The WWTP has a capacity of 0.62 mgd (ADWF) at secondary treatment standards. The City described the plant as being in good condition. In 2003, the City Engineer identified the following WWTP infrastructure needs which have not been rectified to date: additional sludge drying beds and a second clarifier, installation of a grit chamber and debris removal device, and relocation of the existing percolation ponds from inside the Bear River flood area.

The City is working to comply with anticipated discharge requirements and expand sewer treatment capacity for proposed developments. The Wastewater Treatment Facilities Master Plan has recommended that a new membrane bio-reactor plant, with a 3.82 mgd capacity, be built to accommodate the existing city and anticipated growth and the effluent be treated to standards allowing the facility to directly discharge into the Bear River or Dry Creek. The existing treatment plant would be decommissioned once the new plant is operational. The City Council has decided to move forward on the recommended plant. The timeline for construction is contingent upon construction funding through arrangements with developers. As of December 2007, the City had collected \$6.2 million from developers towards the plant planning and construction. According to the master plan, the plant will be built in two phases of 1.91 mgd each as demanded by capacity and as funding allows. The plant is projected to cost a total \$47 million for construction of the 3.82 mgd plant and an additional \$1.4 million annually for operation and management.¹⁷¹ A site for construction had not been determined, as of the drafting of this report; however, a potential site was identified along Dairy Road, north of the City. Expansion of this treatment plant will be necessary to accommodate the projected City and SOI build-out wastewater flow of 8.2 mgd, discussed previously in the Projected Demand section.

A majority of the sewer collection gravity system predates 1962. The City Engineer identified several sewer line deficiencies in 2003. Since that time, a majority of the deficiencies have been remedied; a \$4 million USDA Rural Development loan financed replacement of old sewer mains and deteriorated manholes. Remaining deficiencies include upgrades to the C Street lift station, such as standby power and automatic transfer switches.

¹⁷¹ City of Wheatland, *Wastewater Treatment Facilities Master Plan*, 2004, p. E-3.

LINDA COUNTY WATER DISTRICT

Key infrastructure includes the wastewater treatment plant, seven percolation/evaporation ponds, 40 miles of sewer pipe lines, and eight lift stations.

The WWTP has a facility design flow of 1.8 mgd (ADWF) at secondary treatment standards. The plant was built in 1960 with significant upgrades in 1996 and 2002. Treated effluent is pumped into seven percolation/evaporation ponds and dried sludge is disposed of at a local landfill. The 2006 Preliminary Design Report (PDR) for the WWTP expansion outlines infrastructure needs and deficiencies at the existing plant, which include 1) an undersized and difficult-to-operate headworks, 2) influent pump stations that have exceeded their useful life, 3) an ineffective biotrickling filter, and 4) lack of capacity for additional clarification systems and pump stations.

In addition, the percolation ponds are located within the floodplain in Sutter County on the east side of the Feather River. The ponds have been inundated three times during periods of high river flow in 1986, 1995 and 1997, and treated wastewater was subsequently discharged into the river. According to RWQCB, during periods of high river flow the ponds are not accessible and the District is unable to safely monitor the ponds.¹⁷² The District hopes to rectify this situation by upgrading to tertiary treatment and discharging to the Feather River.

Plans for plant expansion are underway to accommodate rapid growth. The RWQCB has approved an application to expand the WWTP to a capacity of up to 5.0 mgd and upgrade to a new tertiary treatment system. The Preliminary Design Report projects it will cost approximately \$50 million for construction and \$1 million annually for operation and maintenance. The timing of construction of the new facility will depend greatly on funding availability.

The District identified the collection system (pipes) as being in good condition overall; although, the peaking factor indicates some challenges with I/I. Two pumps are reaching design capacity and will need to be retrofitted with larger pumps by 2013.

OLIVEHURST PUBLIC UTILITY DISTRICT

Key wastewater infrastructure includes a wastewater treatment plant, a pond, drying beds, 51 miles of sewer pipes greater than eight inches in diameter, and pump stations.

The WWTP was recently expanded to 3.0 mgd and improved to tertiary treatment in 2006. The plant discharges treated effluent to the Clark Lateral, which carries the effluent to the Western Pacific Interceptor Canal and into the Bear River. As a result of the recent improvements on the WWTP, it is in good condition and no needs or deficiencies were identified. The District plans to accommodate future development with further plant expansions. Under the District's NPDES permit, the District is permitted to expand the plant a second time to a capacity of 5.1 mgd ADWF. The District reported that it plans to initiate the one-year expansion project once development needs warrant it. The District does not anticipate beginning the expansion until after 2012.

¹⁷² Central Valley RWQCB, Order No. 2006-0096, p. 22.

The District indicated that the collection system is aged and undersized in some areas in old Olivehurst and is in need of improvement or replacement. The system was not well-designed for the flat terrain, and has an infiltration and inflow problem. In November 2007, the OPUD Board of Directors directed that studies to determine appropriate remediation of its wastewater collection system be initiated. Specific needs will be documented once OPUD completes a baseline CCTV assessment of the old Olivehurst collection system in FY 08-09. OPUD has budgeted \$0.3 million annually for capital replacement. OPUD needs emergency backup generators for lift stations, and plans to buy them in FY 07-08.

RIVER HIGHLANDS COMMUNITY SERVICE DISTRICT

Key infrastructure includes a wastewater treatment plant with an average dry weather flow capacity of 0.026 million gallons and less than one mile of sewer mains.

Prior to the failure of the WWTP, wastewater was treated to a secondary level, discharged into a storage pond, and then used to irrigate 7.5 acres of land. A crack in the aeration tank at the WWTP in October 2006 caused a failure of the wastewater treatment system, and raw sewage was treated with chlorine tablets and discharged into the pond. To “oversee, approve and implement the cleanup and abatement,” the State Superior Court appointed the Deputy County Administrator of the County Office of Emergency Services as the receiver of the District, until May 2009, in regards to wastewater services.¹⁷³ In addition, the court ordered that the County oversee repairs of the new wastewater facility to bring it into compliance with state and federal laws.¹⁷⁴

An interim facility was leased for \$15,000 a month from MicroMedia Filtration until November 2007. The operators decided to discontinue operations at that time. In lieu of a temporary facility, the District transported effluent to the OPUD WWTP for \$30,000 per month. The District contracted Process Water Technology to install and operate a new interim facility for \$4,700 monthly. The new interim facility began operation in April 2008. The treated effluent is discharged into the pond and used for irrigation similar to the old treatment plant.

Plans for the new permanent facility had not been specified at the time this report was drafted; although the County reported that the new plant would have the same capacity as the old plant. The District hopes to use the recycled water from the plant for irrigation of the park and other landscaping. The County will base plans for the new plant on the proposals received. Construction of the new permanent plant is expected to cost \$1,500,000.¹⁷⁵ A loan has been received from SWRCB for \$1 million. The County was in the process of applying for additional funds from the USDA as of April 2008.

¹⁷³ California Superior Court, Case No. CVCV 07-0000130, p. 2.

¹⁷⁴ Ibid.

¹⁷⁵ RHCSA, Correspondence to YCWA, 12/5/07.

BEALE AFB

The Beale AFB WWTP that was built in 1942 provides treatment at secondary levels. Numerous infrastructure needs have been identified at the WWTP, which requires upgrades and/or replacement by 2009.¹⁷⁶ No significant capital improvements have been made to the plant in the past five years; however, the base reports that it is working on plans for repairs to the plant.

The wastewater collection system is aged, with much of the system built in the 1950s and 1960s.¹⁷⁷ The AFB has significant inflow problems, which are caused by damaged manholes, sewer lines damaged by root intrusion, cracked pipes, and cross-connections to drainage channels.¹⁷⁸ During heavy rainfall, inflow into the collection system often inundates the system and can cause overflows.¹⁷⁹ The Base reported that it is in the process of correcting these problems.

UNSERVED URBANIZING AREAS

There are several planned and proposed developments located between SR 70 and Beale AFB and north of South Beale and Dairy Roads, including the Woodbury, Chippewa, Feather Creek and Magnolia Ranch subdivisions, and three economic development areas including the Sports and Entertainment Zone, the Rancho Road Industrial Park and the area currently zoned for a Research and Development Park. This territory currently has no designated wastewater provider and lacks the wastewater infrastructure necessary for significant development. In addition, the Terra Linda and Yuba Highlands developments are not within a wastewater service provider's service area. All of these developments have a total of approximately 22,500 proposed dwelling units. Developers are looking to neighboring wastewater agencies to provide service to the area. A major infrastructure need for the area is a regionalized wastewater treatment plant to serve potential development. Beale AFB and the City of Wheatland have indicated interest in a regional solution to this problem.

Beale AFB has released a request for qualifications for proposals by private and municipal entities to lease the wastewater treatment plant location along with two other sites on the base. The leasing entity would operate the facility and be responsible for keeping the facility within RWQCB requirements. Beale hopes that the WWTP could be used to provide wastewater service to areas southwest of the Base, in addition to handling base flow.

The Sleep Train Amphitheatre in the Sports and Entertainment Zone (SEZ) is served by a single wastewater treatment plant operated by Yuba County Entertainment. The facility has a capacity of 0.17 mgd, of which approximately 53,000 gallons per day is used by the amphitheatre. The Estom Yumeka Maidu Tribe has proposed a 170-room casino within the SEZ to be served by an expansion

¹⁷⁶ URS Group., 2002, pp. 3-6 through 3-10.

¹⁷⁷ U.S. Army Corps of Engineers, 1999, p. 77.

¹⁷⁸ URS Group, Inc., 2002, pp. 3-2, 3-4.

¹⁷⁹ URS Group, Inc., 2002, p. 1-2.

of the amphitheatre's treatment plant. The casino EIR suggests that the YCE facility be expanded to a capacity of 0.325 mgd to accommodate projected weekend flows at the casino.¹⁸⁰

SERVICE ADEQUACY

To assess infrastructure deficiencies and needs, it is necessary to analyze the adequacy of the facilities and related services in meeting the needs of the populace. Adequacy can be gauged by various factors including regulatory compliance, treatment effectiveness, sewer overflows and collection system integrity.

REGULATORY OVERVIEW

In 1972, the U.S. Congress passed the Federal Water Control Pollution Act. Referred to as the Clean Water Act, the law established water quality standards to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The law included the mandate for a permit system known as the National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants into surface waters. The Clean Water Act authorized the EPA to set water quality standards for all contaminants in surface waters. The standards specify maximum contaminant levels (MCLs) for treated wastewater prior to discharge.

That same year, the California Legislature amended the Porter-Cologne Water Quality Control Act of 1969 to allow the State Water Resources Control Board (SWRCB) to assume the responsibilities prescribed in the Clean Water Act. This signified that SWRCB and its nine regional control boards would regulate federal and state water quality standards, as well as operate the federal permit process for discharging pollutants into open waters. NPDES permits establish specific discharge limits, and monitoring and reporting requirements, and may also require facilities to undertake special measures to protect the environment from harmful pollutants.

The Clean Water Act requires that all point source wastewater dischargers obtain and comply with an NPDES permit. NPDES permits regulate discharges from publicly-owned wastewater treatment facilities, other wastewater treatment facilities, industrial facilities, concentrated animal feeding operations, aquaculture, and other "point source" dischargers.

Legislation (A.B. 885) was passed in 2000 requiring SWRCB to adopt regulations for the permitting and operation of septic systems. It stipulates that each regional water quality control board must incorporate SWRCB regulations or standards into the appropriate regional water quality control plans. SWRCB released draft septic regulations in March 2007. The implementation of these regulations in 2008 would require all septic systems statewide to meet equal permitting and operation standards. The proposed regulations include required system inspections, restrictions on septic systems within proximity to impaired water bodies, and development of performance standards and enforcement actions.

The State Water Resources Control Board adopted new policies in December 2004 requiring wastewater collection providers to report sanitary sewer overflows and to prepare and implement

¹⁸⁰ U.S. Department of the Interior, 2008, p. 2-14.

Sewer System Management Plans (SSMPs).¹⁸¹ SSMP requirements are modeled on proposed federal capacity, management, operations, and maintenance plans. The SSMP policy requires dischargers to provide adequate capacity in the sewer collection system, take feasible steps to stop sewer overflows, identify and prioritize system deficiencies, and develop a plan for disposal of grease, among other requirements. Final SSMP implementation deadlines are determined by the size of the population served. Marysville, LCWD and OPUD must complete implementation by August 2, 2009. Wheatland must complete implementation by May 2, 2010, and RHCS D must implement the plan by August 2, 2010. In addition, wastewater providers must now report sanitary sewer overflows greater than 100 gallons to the RWQCB, must keep internal records of overflows of less than 100 gallons, and must produce an annual report on overflows. Overflows from laterals on private property, if caused by an owner, are not required to be reported.

REGULATORY COMPLIANCE STATUS

RWQCB enforces the Clean Water Act, NPDES permit conditions and other requirements of wastewater providers. The Board may levy fines or order the provider to take specific actions to comply with water quality regulations. The Board posts online actions it has taken since 2002.

Table 6-5: Wastewater Compliance Status, 2008

Of the six wastewater providers, three (Marysville, RHCS D, and Beale) are operating under cease and desist orders,¹⁸² and three agencies (Marysville, Wheatland and LCWD) maintain percolation ponds within 100-year flood zones, which are to be moved or protected to come into compliance with RWQCB current or anticipated requirements.

	Date Issued		Compliance Date		
	WDR Permit	NPDES Permit	Time Schedule	Cease and Desist	Cleanup and Abatement
Marysville	3/16/2001			Apr-06	
Wheatland	1/30/1991				
LCWD		9/22/2006	Sep-11		
OPUD		7/9/2004		Nov-07	
RHCS D		6/7/2002		Apr-07	Dec-06
Beale		4/23/2004		Apr-09	

City of Marysville

RWQCB issued a Cease and Desist Order in 2004, due to failure by Marysville to meet waste discharge requirements outlined in the permit, including failure to provide 100-year flood protection to the ponds, a nonoperational TTU, insufficient flow meters to determine pipeline leakages under the Yuba River, and insufficient lining of the sludge drying beds. RWQCB issued an Administrative Civil Liability Complaint in 2005, for failure to comply and the City was fined \$15,000. The City had complied with all portions of the Cease and Desist Order, with the exception of flood protection for the ponds, as of the drafting of this report.¹⁸³ The City submitted a feasibility study to RWQCB in June 2007, outlining the two preferred options to protect the percolation ponds—a regional WWTP

¹⁸¹ SWRCB, Resolution Number 2004-0080.

¹⁸² There is a Cease and Desist order issued for OPUD; however, the District is in full compliance according to RWQCB.

¹⁸³ Interview with Dave Lamon, City Services Director, City of Marysville, April 1, 2008.

with LCWD or modification of the City's plant to directly discharge to the river. The recommended option has not yet been determined. The City anticipates coming into compliance with percolation pond protection requirements by 2012, whether it chooses to send effluent to LCWD or modify its plant for surface water discharge.

City of Wheatland

In 2005, heavy precipitation caused the Bear River water level to rise and overflow into the percolation ponds. The overflow resulted in an effluent discharge into the river, which is not approved in the City's existing permit. As a result, RWQCB issued a Notice of Violation of the City's waste discharge requirements, which required the City to provide a report by June 2006 containing 1) progress of the levee repair, 2) status of the infiltration beds, 3) documentation supporting the claim that the discharge was due to a storm event with a frequency greater than 100 years, 4) the interim measures that will be implemented to prevent a reoccurrence of a similar discharge, prior to the completion of the new sewage plant, 5) a timeline for completion of the new plant. RWQCB reported that the City is in full compliance with the requirements outlined in the Notice of Violation.¹⁸⁴ RWQCB commented that it will not allow the existing percolation ponds unless they are raised or otherwise receive 100-year flood protection. In addition, there is likely a hydraulic connection between the percolation ponds and the Bear River, which is the equivalent of a direct discharge into the river.¹⁸⁵ A direct discharge into the river would require tertiary treatment standards under a NPDES permit. Currently, the City is permitted to discharge only into the percolation ponds. The waste discharge requirements were last updated in 1991. RWQCB has not taken further regulatory action since the Notice of Violation. Wheatland is working to comply with anticipated requirements of an upcoming permit update. The City hopes to address all new requirements by constructing a new wastewater treatment facility.

Linda County Water District

LCWD's percolation ponds were constructed in 1960, 1971 and 1975 and are located within the floodplain in Sutter County on the east side of the Feather River. The soil in the floodplain is alluvial deposits, which allows the treated effluent to seep into the underlying soil. The ponds have been inundated three times during periods of high river flow in 1986, 1995 and 1997, and treated wastewater was subsequently discharged into the river. According to RWQCB, during periods of high river flow the ponds are not accessible and the District is unable to safely monitor the ponds.¹⁸⁶ In addition, RWQCB has indicated there is likely a hydraulic connection between the percolation ponds and the Feather River, which is the equivalent of a point discharge of waste to surface water—requiring regulation under an NPDES permit. The District has received an NPDES permit for planned plant improvements. In addition to the permit, RWQCB issued a Time Schedule Order, which requires compliance with all NPDES permit requirements by 2011.

¹⁸⁴ Interview with Brendan Kenny, CVRWQCB, Compliance Unit, July 16, 2008.

¹⁸⁵ City of Wheatland, *Wastewater Treatment Facilities Master Plan*, 2004, p. 4-2.

¹⁸⁶ Central Valley RWQCB, Order No. 2006-0096, p. 22.

Olivehurst Public Utilities District

OPUD has attained full compliance with the NPDES permit, according to RWQCB. OPUD has been operating under a Cease and Desist Order (Order No. R5-2004-0095), as the previous treatment plant could not meet effluent limitations in the new NPDES permit (Order No. R5-2004-0094) for, among others, aluminum, iron, manganese, nitrates, and nitrites. The Cease and Desist Order outlined requirements to minimize exceedances of the effluent limitations prior to coming into compliance as a result of the construction of the expanded and updated plant. According to the Cease and Desist Order, the District was required to achieve full compliance with NPDES effluent limitations by November 30, 2007. RWQCB indicated in March 2008 that it anticipated rescinding the Cease and Desist order in the near future. In October 2007, the District was cited by the RWQCB for 45 violations of effluent limitations in 2006, which occurred during expansion of the WWTP. The District may face fines as a result of these violations.

River Highlands CSD

A crack in RHCS D's aeration tank in October 2006 caused a failure of the wastewater treatment system, and raw sewage was treated with chlorine tablets and discharged into the pond. RWQCB inspected the facility and found that it was "poorly operated and maintained" and there were violations of the NPDES permit and Cease and Desist Order from 2002. On November 17, 2006, RWQCB issued a Cleanup and Abatement order requiring the District to cease irrigating the land with improperly treated wastewater, prevent all discharges to surface waters, properly dispose of the untreated wastewater already in the pond, and come into compliance with specified requirements of the NPDES permit. However, the District failed to comply, and RWQCB adopted a resolution to refer the violations to the Attorney General on March 15, 2007. No subsequent orders regarding RHCS D have been adopted.

Beale AFB

The AFB faces regulatory requirements to upgrade its treatment processes. Beale is required to upgrade its WWTP to tertiary treatment levels by April 2009 to ensure public health and safe use for downstream recreation and food crop irrigation.¹⁸⁷ The issue is complicated by the need to treat byproducts from remediation of groundwater contamination, limits on wet weather discharges to the irrigation field and relatively high peak wet weather flows. A constructed wetland approach may also be considered to provide broad-based treatment flexibility as regulatory requirements become stricter.¹⁸⁸ Beale AFB is currently subject to a cease and desist order issued by RWQCB in April 2004. The compliance action addresses WWTP discharges in violation of the effluent limitations for methylene blue active substances, iron, oil and grease, total petroleum hydrocarbons, aluminum, nitrate, and nitrite.¹⁸⁹ The AFB submitted a pollution prevention plan, as required. By April 2009, it must achieve full compliance. To enhance treatment levels, Beale AFB faces the options of upgrading or replacing the existing WWTP, and discharging to future wastewater treatment facilities planned by neighboring service providers, such as the City of Wheatland. An AFB consultant estimated the cost of upgrading the WWTP at \$18 million. Beale AFB has expanded its land-based

¹⁸⁷ Central Valley RWQCB, Order No. 2004-0046, pp. 18, 25, 36.

¹⁸⁸ URS Group., 2002, p. 3-12.

¹⁸⁹ Central Valley RWQCB, Order No. 2004-0046.

discharge application and no longer needs an NPDES permit for discharge into Hutchinson Creek for its operations.

TREATMENT EFFECTIVENESS

Wastewater treatment providers are required to comply with effluent quality standards under the waste discharge requirements determined by RWQCB. The providers were asked how many days in 2006 they were out of compliance with effluent quality requirements.

The American Water Works Association (AWWA) conducts an annual benchmarking study, called QualServe, of water and wastewater performance indicators on behalf of subscribers. This measure is included in the benchmarking study. QualServe 2003 subscribers had a median treatment effectiveness rate of 99.5 percent, meaning that treatment did not meet requirements on two of 365 days.

Three agencies, the cities of Marysville and Wheatland and OPUD, all reported 100 percent treatment effectiveness in 2006. LCWD had a treatment effectiveness rate of 95 percent in the same year, slightly below the median rate reported by AWWA.

RHCSD failed to report the number of days out of compliance with effluent quality requirements. However, due to the failure of the WWTP in 2006, which resulted in the discharge of untreated wastewater, the District's treatment effectiveness rate was well below the QualServe median.

SEWER OVERFLOWS

Sewer overflows are discharges from sewer pipes, pumps and manholes. Reduction, if not prevention, of the size and number of sewer overflows is the key objective of new SWRCB policy.

Table 6-6: Sewer System Overflows, 2006

	Overflows	Rate ¹
Marysville	3	8
Wheatland	0	0
LCWD	6	15
OPUD ²	4	8
RHCSD	NP	NP
Notes:		
(1) Sewer overflows (excluding those caused by customers) per 100 miles of collection piping.		
(2) OPUD reported overflows for 2007.		

The agencies were asked to report the number of overflows in 2006 related to limitations or problems with the collection system under the control of the agency, and to exclude overflows caused by limitations/problems with customer-controlled piping/facilities. Thus defined, overflows reflect the capacity and condition of collection system piping and the effectiveness of routine maintenance. The sewer overflow rate is calculated as the number of overflows per 100 miles of collection piping.

LCWD had the highest rate of sewer system overflows among the providers with 15 overflows per 100 miles of collection system. By comparison, Wheatland reported that no sewer overflows occurred in 2006; therefore, the sewer overflow rate is zero per 100 miles of piping. RHCSD did not report the number of sewer overflows that occurred in 2006.

Since September 2007, all of the agencies in Yuba have been required to report sewer system overflows to the State Water Resources Control Board (SWRCB). Between September 2007 and April 2008, there had been seven reported incidents in Yuba County—six in the City of Marysville and one in OPUD's collection system.

COLLECTION SYSTEM INTEGRITY

There are several measures of the integrity of the wastewater collection system, including peaking factors, efforts to address infiltration and inflow (I/I), and inspection practices.

Infiltration and Inflow

As previously discussed in the service demand section, a peaking factor indicates of the extent of I/I in a collection system. Marysville, Wheatland and LCWD have relatively low peaking factors, which implies that I/I is not a significant concern within those systems. Of those three systems, the providers had little knowledge of the exact location or extent of I/I problems and had not yet developed the necessary corrective measures. Marysville plans to assess I/I over the 2007-08 and 2008-09 wet weather cycles and complete a study on the issue in 2009. Wheatland and LCWD did not report intentions to complete a similar study.

OPUD indicated I/I issues in the older portion of the District's system. In the old Olivehurst area, there are high peak flows related to poor original design of the collection system, flat terrain, and limitations of the drainage system. Stormwater has backed up into residents' yards throughout Olivehurst for years. OPUD suspects residents drain their yards by pulling the lids on their sewer clean-outs. Specific needs will be documented once OPUD completes a baseline CCTV assessment of the old Olivehurst collection system in FY 08-09.

RHCSD did not report I/I problems. As the District did not provide ADWF and PWWF, a peaking factor could not be calculated and the extent of infiltration and inflow is unknown. The new WWTP will be designed for a peaking factor of 2.5.

Beale's peaking factor of 6.8 indicates significant inflow problems, which are caused by damaged manholes, sewer lines damaged by root intrusion, cracked pipes, and cross-connections to drainage channels.¹⁹⁰ During heavy rainfall, inflow into the collection system often inundates the system and can cause overflows.¹⁹¹ Beale plans to finance related improvements in mid-2008.

Inspection Practices

The EPA recommends closed circuit television (CCTV) inspection of sewer lines as the most cost-efficient and effective inspection approach.¹⁹² Nationwide, the average wastewater provider conducts CCTV inspection of seven percent of its system annually and cleans 30 percent of the system annually, according to a study by the American Society of Civil Engineers. Collection system problems tend to be concentrated in older areas; it is most important to inspect lines more than 20 years old. Yuba wastewater providers reported the following inspection practices:

- Marysville performs visual and CCTV inspections on problematic sewer lines about 5-10 times a year. The City does not perform regular inspections.

¹⁹⁰ URS Group, Inc., 2002, pp. 3-2, 3-4.

¹⁹¹ Ibid, p. 1-2.

¹⁹² U.S. EPA, 1999, p. 5.

- Wheatland performs visual inspections annually. In 2006, cameras were used to perform an inspection of the entire system.
- LCWD annually performs visual inspection on approximately 20 percent of the collection system. Lift stations are inspected three times a week. Areas identified as particularly susceptible to problems are inspected quarterly. The District is planning to purchase smoke testing equipment in 2008 to identify infiltration and inflow problems. LCWD has not implemented CCTV assessment.
- OPUD retains an outside service to spot-check problem areas. In the Spring of 2008, OPUD plans to begin a baseline CCTV assessment of the old Olivehurst collection system. The CCTV baseline is anticipated to be completed by FY 08-09. OPUD recently purchased and received delivery of a new VAC truck with CCTV inspection capabilities. After completing the baseline assessment, OPUD plans to conduct CCTV assessment on 20 percent of its system annually.
- RHCS and Beale did not report collection system inspection practices.

MANAGEMENT

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, conduct advance planning for future growth, and make best efforts to meet regulatory requirements.

Table 6-7: Wastewater Provider Management Practices

An evaluation of the adequacy of management practices is shown in Table 6-7. The first four indicators are self-explanatory. Adequate evaluation of rates and fees means updating wastewater rates and development impact fees with reasonable frequency. Adequate capital planning would involve a multi-year capital improvement plan (or comparable planning effort) for capital replacement and, if relevant, expansion. Advance growth planning is adequate when it discloses existing capacity and anticipated needs throughout the existing service area and SOI. Agencies not operating under a Cease and Desist Order or Cleanup and Abatement order have made best efforts to meet

	Wheatland	Marysville	LCWD	OPUD	RHCS
Evaluate employees annually	A	A	I	A	N
Prepare timely budget	A	A	A	A	I
Periodic financial audits	A	A	A	A	I
Current financial records	A	A	A	A	A
Evaluate rates	A	I	A	A	A
Capital planning	I	A	I	A	N
Advance growth planning	A	N	I	I	N
Compliance Efforts	A	I	A	A	I
Note: A = Practiced adequately, I= Practiced but improvement needed, N= Not practiced					

regulatory requirements.¹⁹³

Of the five agencies under LAFCO jurisdiction, four are professionally staffed and managed by full-time personnel. RHCS D is staffed by a part-time general manager and a secretary and relies heavily on district board members for support services such as bookkeeping and correspondence.

Of the five providers, only Wheatland, Marysville, and OPUD perform regular formal employee evaluations. LCWD reported that it has performed employee evaluations in the past, but they have not been performed in the last few years. RHCS D reported that informal employee evaluations are handled at monthly meetings.

All of the agencies perform regular financial audits and prepare timely budgets, and with the exception of RHCS D. All of the agencies were able to provide current financial records. All of the agency's reported updating the rates in 2006 or 2007, with the exception of Marysville, which has not updated wastewater rates since 1999.

Wheatland was the only provider to plan for projected wastewater needs for its SOI. While both LCWD and OPUD provided planning documents with future projections and probable needs to meet those projections, the documents did not provide a comprehensive overview of projected demand for the entirety of the respective agency's existing SOI. Marysville and RHCS D have not performed planning for planned or proposed growth within their SOIs.

By way of compliance efforts, both Marysville and RHCS D are operating under Cease and Desist Orders. Both agencies are in the process of attempting to come into compliance with these orders.

For specifics on the management practices of each agency, refer to the agency's respective chapter in Appendix A.

LOCAL ACCOUNTABILITY AND GOVERNANCE

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency's activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 6-8.

¹⁹³ Agencies operating under a Cease and Desist Order issued simultaneously with a newly issued WDR or NPDES permit are excluded.

Table 6-8: Wastewater Provider Accountability and Governance Measures

Each of the agencies held contested elections in 2006, with the exception of RHCS D. RHCS D has had a lack of constituent interest and consequently no contested elections in the history of the District. Participation in local government elections is an indicator of the level of interest by constituents and the extent of customer outreach to educate the public. Involvement in governing body elections has been comparable to or above countywide voter turnout in the two cities and slightly below countywide turnout in LCWD and OPUD.

	Wheatland	Marysville	LCWD	OPUD	RHCS D
Contested election since 1994	✓	✓	✓	✓	×
Constituent outreach activities	✓	✓	✓	✓	✓
MSR Disclosure	✓	✓	✓	✓	○
Note: ✓ = Occurred or adequately practiced, ○ = needs improvement, × = Did not occur or not practiced					

All agencies prepare and post meeting agendas and minutes as required. Of the providers, only Marysville broadcasts governing body meetings on cable television. Marysville, Wheatland, OPUD and RHCS D maintain websites where documents and announcements are available to the public. Other constituent outreach activities include distribution of newsletters and contributions to newspapers by Wheatland and OPUD, as well as updates in LCWD customer bills.

The wastewater service providers disclosed a majority of the information that was requested by LAFCO relating to wastewater service. All providers cooperated with LAFCO requests for interviews. All providers responded to requests for information and relevant documentation, with the exception of RHCS D. RHCS D failed to respond to several requests for wastewater related information; specifically, the District was unable to provide information regarding wastewater flows, inspection practices, sewer overflows, and service complaints. Marysville, Wheatland, LCWD, and OPUD demonstrated full accountability in their disclosure of information and cooperation with LAFCO.

For specifics on the governing body, constituent outreach efforts and public involvement, refer to the respective Appendix A chapter.

SHARED FACILITIES

STATUS

The wastewater providers were not practicing facility sharing at the time this report was drafted. However, wastewater treatment may be a future facility sharing opportunity. There are several options for regional wastewater treatment plants to serve the southeast and southwest portions of the County.

OPPORTUNITIES

Wheatland is in the process of planning for a new WWTP. The location of the proposed plant has not yet been identified, but a potential site is north of the City along Dairy Road, which would improve accessibility. The City has had informal discussions with Beale AFB regarding the

possibility of sharing the new treatment plant. The City reported that there are no known impediments to flow from the Base to the location of the proposed plant on Dairy Road.

Beale faces regulatory requirements to upgrade its treatment processes. Beale is required to upgrade its WWTP to tertiary treatment levels by April 2009 to ensure public health and safe use for downstream recreation and food crop irrigation. To enhance treatment levels, Beale AFB faces the options of upgrading or replacing the existing WWTP, and discharging to future wastewater treatment facilities planned by neighboring service providers, such as the City of Wheatland. Beale AFB is considering options to discontinue direct operation and maintenance of the treatment plant by base personnel. AFB has released a request for qualifications for proposals by private and municipal entities to lease the wastewater treatment plant location along with two other sites on the base. Proposals are due at the end of May 2008. The treatment plant currently has the capacity to serve a portion of the neighboring areas. In addition, the land has space for potential facility expansion.

The City of Marysville, LCWD and Yuba City are assessing the potential of a regional wastewater treatment and water recycling plant. Recycled water would be used for landscape and agricultural irrigation. An analysis, commissioned by the three agencies of the various options, recommends the pumping of effluent from the City of Marysville to the Linda WWTP as the most cost effective alternative, and possibly the pumping of wastewater from Yuba City to Linda WWTP in the long-term.¹⁹⁴

Marysville is considering pumping all effluent to LCWD to comply with regulatory constraints on the City's percolation ponds. In addition, OPUD has proposed the use of its plant as a regional wastewater treatment plant to be used by neighboring providers such as LCWD and Marysville. OPUD's WWTP is approximately 3.5 miles further than the LCWD plant from the Marysville plant, which may lead to greater costs to Marysville. Marysville indicated that it would choose the most cost effective solution to resolve its percolation pond issues.

There is potential for regional collaboration of this type in the southeast portion of the County as well. Jurisdictions could benefit from economies of scale and reduced demand on water supply as a result of water recycling.

A potential equipment and personnel sharing opportunity may be the sharing of CCTV and trained personnel between the various providers. CCTV equipment is a significant investment. By sharing the equipment, agencies could reduce costs.

¹⁹⁴ Interview with Dave Lamon, City Services Director, City of Marysville, November 8, 2007.

FINANCING

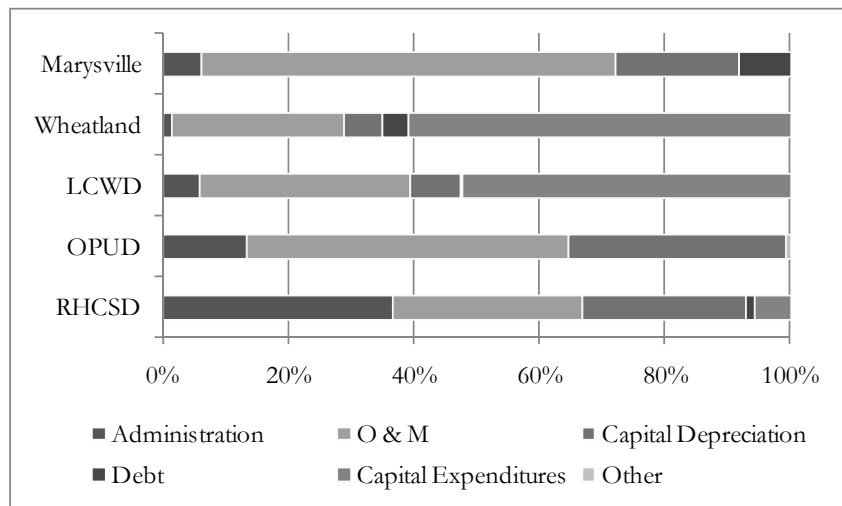
Service-related financing constraints and opportunities are discussed in this section. The scope includes revenue sources, financing constraints, rates and connection fees. The section identifies financing and rate restructuring opportunities. Finally, it assesses the financial ability of agencies to provide services.

Service Costs

Wastewater service costs vary between providers due to differences in services provided, treatment methods, service areas, infrastructure age, maintenance efforts and capital financing approaches.

Generally, sewer enterprise expenditures have been categorized as administrative, operations and maintenance, capital expenditure, capital depreciation, debt and other.

Figure 6-9: Wastewater Costs by Type, FY 05-06



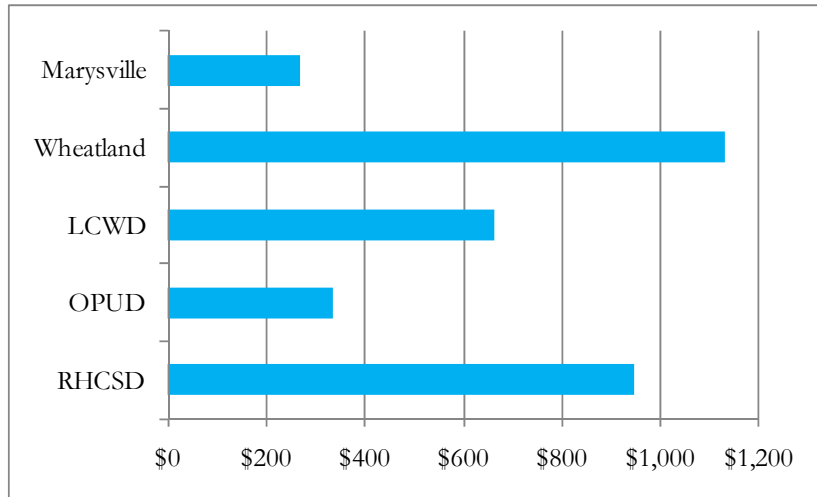
As shown in Figure 6-9, capital expenditure is the most significant of these cost categories for Wheatland and LCWD. These expenditures may not be indicative of an average year, because the City received loans for significant system improvements and LCWD made major capital outlays on the extending its collection system. Marysville and OPUD did not report the amount expended on capital expenditures during FY 05-06.

Operations and maintenance (O&M) is the most significant of these cost categories for Marysville and OPUD, constituting 66 and 51 percent of all expenditures respectively.

Capital depreciation accounted for 17 percent of expenditures by all agencies. Capital depreciation is the expense associated with the wearing out, breaking down, or technological obsolescence of physical capital, such as sewer pipes, treatment plants and pumping stations. OPUD had particularly high capital depreciation costs compared to the other jurisdictions, comprising 35 percent of expenditures.

Figure 6-10: Wastewater Costs per Account, FY 05-06

Figure 6-10 shows wastewater provider costs per connection. Wheatland had the highest cost per account of \$1,131. Due to Wheatland’s significant capital expenditures on deferred maintenance during the fiscal year, costs may appear greater than other years. Marysville and OPUD had the lowest costs per account; however, the costs reported by both agencies do not include capital expenditures.

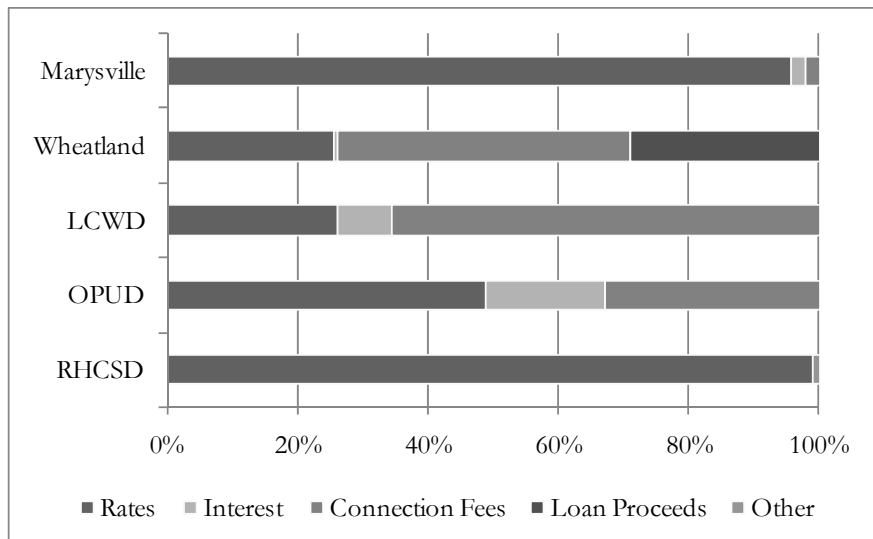


If capital expenditures are excluded, RHCS D has the highest cost per account of \$894 and Wheatland has the second highest cost per account of \$444.

FINANCING SOURCES

Figure 6-11: Wastewater Financing Sources, FY 05-06

Sewer charges, connection fees and development impact fees are the primary financing sources for wastewater enterprises in the MSR area, as shown in Figure 6-11. Sewer service charges and connection fees constituted 86 percent of all wastewater enterprise revenues throughout the County. LCWD received 66 percent of all revenues from connection and mitigation fees—the highest percentage of connection fee income among the wastewater providers.



Other revenue sources were interest, loan proceeds in Wheatland and miscellaneous revenue in RHCS D. Wheatland received 29 percent of its revenue from a loan from the Rural Community Assistance Corporation (RCAC) for sewer system repairs and improvements. The City received additional loan funds from RCAC and the U.S. Department of Agriculture in FY 06-07 totaling \$4.4 million for major system repairs.

Rate Comparison

Compared with other municipal services, there are relatively few financing constraints for wastewater enterprises. Generally, agencies may establish service charges on a cost-of-service basis and are not required to obtain voter approval for rate increases or restructuring. The boards of each of the public sector sewer providers are responsible for establishing service charges. Service charges are restricted to the amount needed to recover the costs of providing sewer service. The sewer rates and rate structures are not subject to regulation by other agencies. The agencies can and often do increase rates annually.

Table 6-12: Wastewater Residential Rates, FY 07-08

Each provider charges a fixed monthly flat rate according to the type of connection. Based on a comparison of rates charged to single family residences, OPUD charges the median countywide rate of \$24.00 per month, which is comparable the statewide median of \$25.00. All of the agency's reported updating the rates in 2006 or 2007, with the exception of Marysville, which has

Agency	Single Family Unit Rate	Last Updated
Marysville	\$13.04	1999
Wheatland	41.53	2006
LCWD	18.50	2006
OPUD	24.00	2007
RHCSD	120.00	2007

not updated wastewater rates since 1999. Correspondingly, Marysville charges the lowest rate of the five providers. Due to RHCSD's recent challenges with the wastewater system, the District updated its rate to \$120 in 2007, which is significantly higher than the county and statewide median rates.

Rate restructuring opportunities include prospects to promote conservation and increase service charges. All providers could promote water conservation by charging sewer rates on the basis of sewer flow (as measured by water flow) for both residential and non-residential customers. Examples of providers outside of Yuba County charging sewer rates based on sewer flow include the cities of Hayward and Livermore. All providers in Yuba County charge flat rates, regardless of flow.

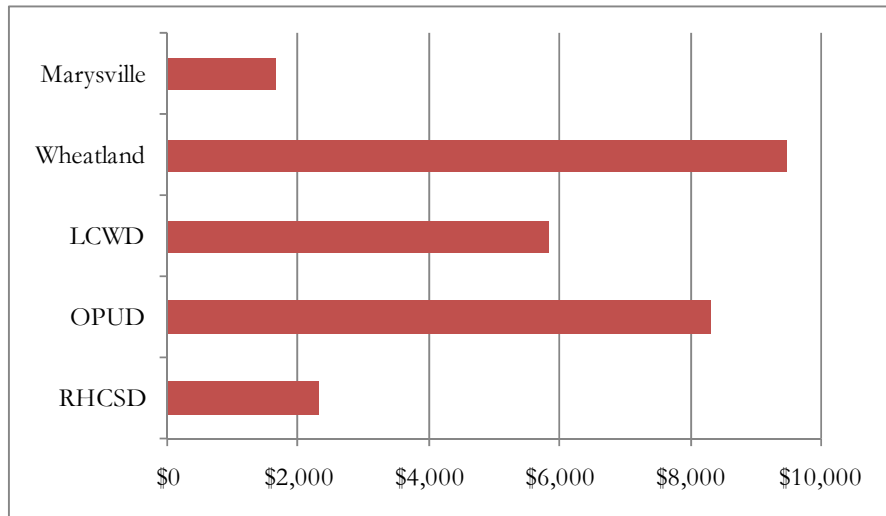
Connection Fees

There is no voter approval requirement for connection fees or for the issuance of sewer revenue bonds. Connection fees for the public sector sewer providers are established by the respective boards to recover the costs of extending infrastructure and capacity to new development. The fees must be reasonable and may not be used to subsidize operating costs.

In Yuba County there are multiple configurations for connection and mitigation fees and a wide range of rates charged by each provider. In FY 07-08, connection and development impact fees combined ranged from \$1,650 in Marysville to \$5,899 in Wheatland. Marysville charges a connection fee based on the type of connection, but does not charge an additional development impact fee to mitigate impact on the sewer system.

Figure 6-13: Wastewater Connection and Mitigation Fees, FY 07-08

Wheatland charges a minimal connection fee based on number of units for residential developments and square footage for non-residential developments. The fee is set to recover the cost of time and materials expended by the Public Works department if the developer does not complete the connection. As the connection fee is dependent upon personnel



time and materials, the City could not provide an estimate of the fee charged. The City does charge a development impact fee, which was updated in 2007. For a single family residence, the City charges \$1,386 for sewer collection facilities and \$8,100 for wastewater treatment facilities, totaling \$5,899.

FINANCIAL ABILITY

All providers’ financial ability to provide services is constrained by available revenues and legal limitations on revenue increases.

OPUD has financed a significant treatment plant expansion and retained rates below the statewide median. OPUD has the financial ability to provide adequate financial services presently and in the near future.

Wheatland, Marysville and LCWD have had the financial ability to provide adequate wastewater services to customers; however, each provider is currently in need of considerable funding to finance major capital needs. LCWD has recently financed major collection system extensions; however, plans for the treatment plant expansion and improvement are constrained by a need for sufficient financing. Wheatland and Marysville will require significant funding in order to come into compliance with regulatory requirements regarding their percolation ponds. Of the \$47 million that Wheatland anticipates needing for its new treatment plant, the City had collected approximately \$6 million as of December 2007.

RHCS D has drawn down its reserves as a result of the treatment plant failure in 2006. Since that time, the District has been paying high monthly payments to transport effluent to another provider or an interim facility. The District is struggling to get funding for a new facility. RHCS D does not have the financial ability to provide adequate wastewater services.

GOVERNANCE ALTERNATIVES

Government structure options identified in Chapter 4—annexations to the City of Wheatland and dissolution of RHCS—are relevant to wastewater service. Other options include a regional wastewater facility, transfer of wastewater treatment services from Marysville to LCWD, and arrangement of the agencies' service areas to provide service to currently unserved areas with proposed developments.

REGIONAL FACILITIES

There are several opportunities for regional treatment facilities to increase operational efficiencies and increase leverage of funding for new or improved facilities. Opportunities for regional facilities were discussed in depth in the Facility Sharing section. The following options were proposed by the wastewater providers:

- The City of Wheatland proposes to develop a regional wastewater facility to serve the City and its SOI, in addition to Beale AFB, proposed subdivisions without designated wastewater providers, including Magnolia Ranch, Feather Creek and possibly the Enterprise Rancheria casino.
- Beale AFB has initiated plans to lease its wastewater treatment plant to a private or municipal entity. The leaser would run the plant with the possibility of serving neighboring proposed subdivisions with excess capacity, such as Magnolia Ranch and the Research and Development Park. The AFB has released a request for qualifications for proposals to lease the wastewater treatment plant location along with two other sites on the base. Proposals are due at the end of May 2008.
- The City of Marysville, LCWD and Yuba City are assessing the potential of a regional wastewater treatment and water recycling plant. Recycled water would be used for landscape and agricultural irrigation. The pumping of effluent from the City of Marysville to the Linda WWTP was identified as the most cost effective alternative. In addition to the benefits of the conservation of water derived from a water recycling plant, Marysville is considering pumping all effluent to LCWD's wastewater treatment plant to comply with regulatory constraints on the City's percolation ponds. This plant could also benefit from and promote development in the East Linda area where LCWD is planning to serve.
- OPUD has proposed a regional wastewater treatment plant at its WWTP location. The District reported that it is open to serving LCWD and Marysville flows. While the current site cannot accommodate LCWD, Marysville, and projected flows from developments inside OPUD's SOI, the District has indicated that it can acquire additional land for further expansion.

ALIGNMENT OF BOUNDARIES IN UNDESIGNATED AREAS

There are as many as 35,675 housing units planned for areas not presently within any wastewater providers' boundary area. Of these, 14,730 units are planned for areas within the City of Wheatland's existing SOI. There are several planned and proposed developments located between SR 70 and Beale AFB and north of South Beale and Dairy Roads where there is no wastewater provider and lacks the wastewater infrastructure necessary for significant development. Developers are looking to neighboring wastewater agencies to provide service to the area. An option to provide service to this area is a regional facility like those by Wheatland and Beale AFB. Another option is service by a neighboring provider.

The following is an illustrative snapshot of developments under discussion in 2007 and 2008. Due to current economic uncertainties, some of these development plans may not be pursued in the near term. Regardless of progression in the coming months, the proposals entail growth strategies formulated under a healthy economy and may indicate future growth patterns once it has returned.

- **Magnolia Ranch:** The development is located southwest of Beale AFB. Wheatland has proposed expanding its sphere to include the development within its future service area. The Beale AFB wastewater treatment plant may also be an option to wastewater service for the subdivision. No other providers have indicated interest in expanding their service areas to include Magnolia Ranch.
- **Feather Creek:** The development is located south of SR 65 and Rancho Road, adjacent to the Sport and Entertainment Zone. Wheatland has proposed expanding its sphere to include the development within its future service area. In addition, OPUD has proposed expanding its SOI to include the proposed development.
- **Woodbury:** The development is adjacent to the LCWD and OPUD service areas and partially within the OPUD SOI. LCWD has proposed annexing and serving the development in its entirety. OPUD has proposed annexing and serving a majority of the development with the exception of the northeast corner. Estimates of WWTP capacity indicate that LCWD has the capability to expand its plant to a size sufficient to serve the projected population. OPUD would also require an expansion of its treatment plant beyond the current site capacity to have the capacity to serve the development in addition to the projected flow within its current SOI.
- **Chippewa:** The development is located adjacent to the OPUD service area south of the Woodbury proposed development. Both LCWD and OPUD have proposed serving the development, as any infrastructure that is extended to serve the Woodbury development, may also be used for Chippewa, if pipeline capacity is properly planned. Similar to the Woodbury development, LCWD's existing site would require expansion to serve the area, and OPUD's treatment plant would require expansion beyond the site's current footprint capacity to serve the area.
- **Terra Linda:** The development is located partially within OPUD's SOI, adjacent to the LCWD WWTP. OPUD and LCWD have both proposed serving the development. Estimates of WWTP capacity indicate that LCWD has the capability to expand its plant to a size sufficient to serve the projected population. In addition, LCWD reported that flows

from the development would gravity flow to its treatment plant. OPUD reports that it could serve the development with acquisition of additional property and expansion of its WWTP.

- Yuba Highlands: The development is located northeast of Beale AFB within RHCSO's SOI. The proposal for the Yuba Highlands Area Plan outlines a plan for a new facility to be owned and operated by RHCSO. RHCSO has indicated an interest in providing wastewater services to the development; however, the District lacks the management capacity to construct and maintain a new facility, as long as it is in receivership with the County and lacks an operating permanent WWTP within its current service area. No other providers have proposed expanding their service area to include the development.

7. FIRE & EMS SERVICES

This chapter reviews the fire and paramedic services provided by local agencies in Yuba County. The chapter reviews how these services are provided by the cities, special districts, state and federal agencies and private entities. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing. Government structure options are identified for local agencies under LAFCO jurisdiction.

PROVIDER OVERVIEW

This section provides an overview of the various fire and emergency medical service (EMS) providers. The focus of the fire review is the 11 local agencies under LAFCO jurisdiction with fire and EMS responsibilities, as shown in Table 7-1.¹⁹⁵ The boundary areas of each of the fire providers are shown on Figures 7-2 and 7-3. Some fire stations are staffed by paid, sworn personnel 24 hours daily, while others are operated by unpaid volunteers or call firefighters who drive from their homes or jobs to incidents. Several of the fire providers in Yuba County operate under a hybrid approach.

Table 7-1: Fire Provider Overview

Responsible Agency	Service Provider		Stations	Sworn Staffing	
	Fire & EMS	Dispatch		Paid per Shift ¹	Volunteers & Call
Staffed 24 hours daily					
City of Marysville	CALFIRE	Marysville PD	1	3.3	15
District 10 - Hallwood CSD	Marysville	Sheriff	1	shared with Marysville	
Linda FPD	LFPD	Sheriff	3	5	21
Olivehurst PUD	OPUD	Sheriff	1	3.5	20
CALFIRE ²	CALFIRE	CALFIRE	2.5	18	45
Loma Rica-Browns Valley CSD ²	CALFIRE	CALFIRE	1.5	shared with CALFIRE	
Staffed daytime on weekdays only					
City of Wheatland	WFA	Sheriff	1	2	32
Plumas Brophy FPD	WFA	Sheriff	2	shared with Wheatland	
Smartville FPD	SFPD	CALFIRE	1	1	9
All-Volunteer					
Camptonville CSD	CCSD	CALFIRE	2	0	10
Dobbins-Oregon House FPD	DOHFPD	CALFIRE	3	0	20
Foothill FPD	FFPD	CALFIRE	2	0	25
Notes:					
(1) Paid staffing for those agencies that only provide daytime staffing on weekdays excludes weekend and evening staffing when there are no paid staff at the stations.					
(2) CALFIRE and Loma Rica-Browns Valley CSD share ownership of a fire station.					

¹⁹⁵ In Table 7-1, paid staffing represents only those personnel physically located at the fire station; whereas, the “volunteers and call” category includes those responding from offsite locations.

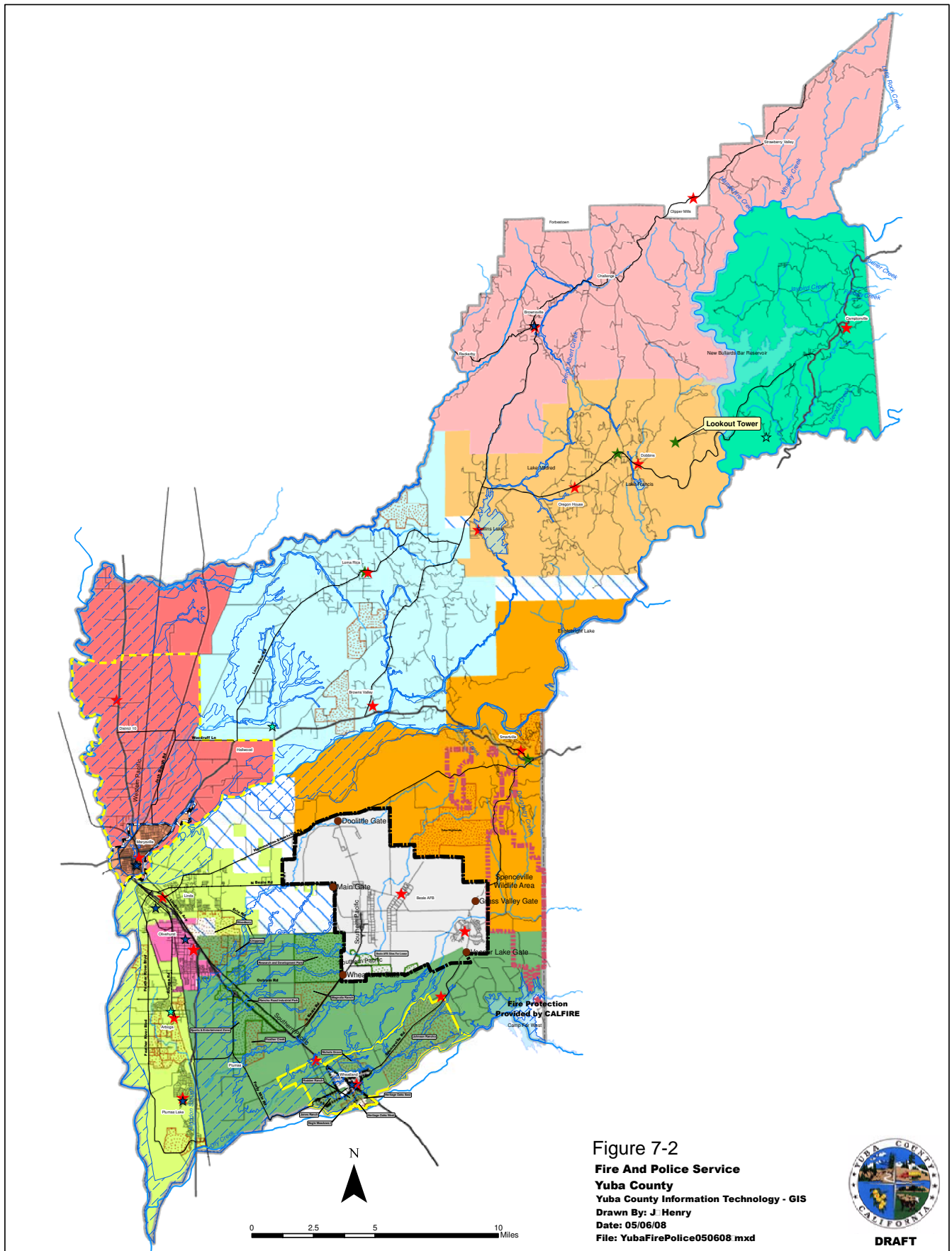


Figure 7-2
Fire And Police Service
Yuba County
 Yuba County Information Technology - GIS
 Drawn By: J. Henry
 Date: 05/06/08
 File: YubaFirePolice050608 mxd

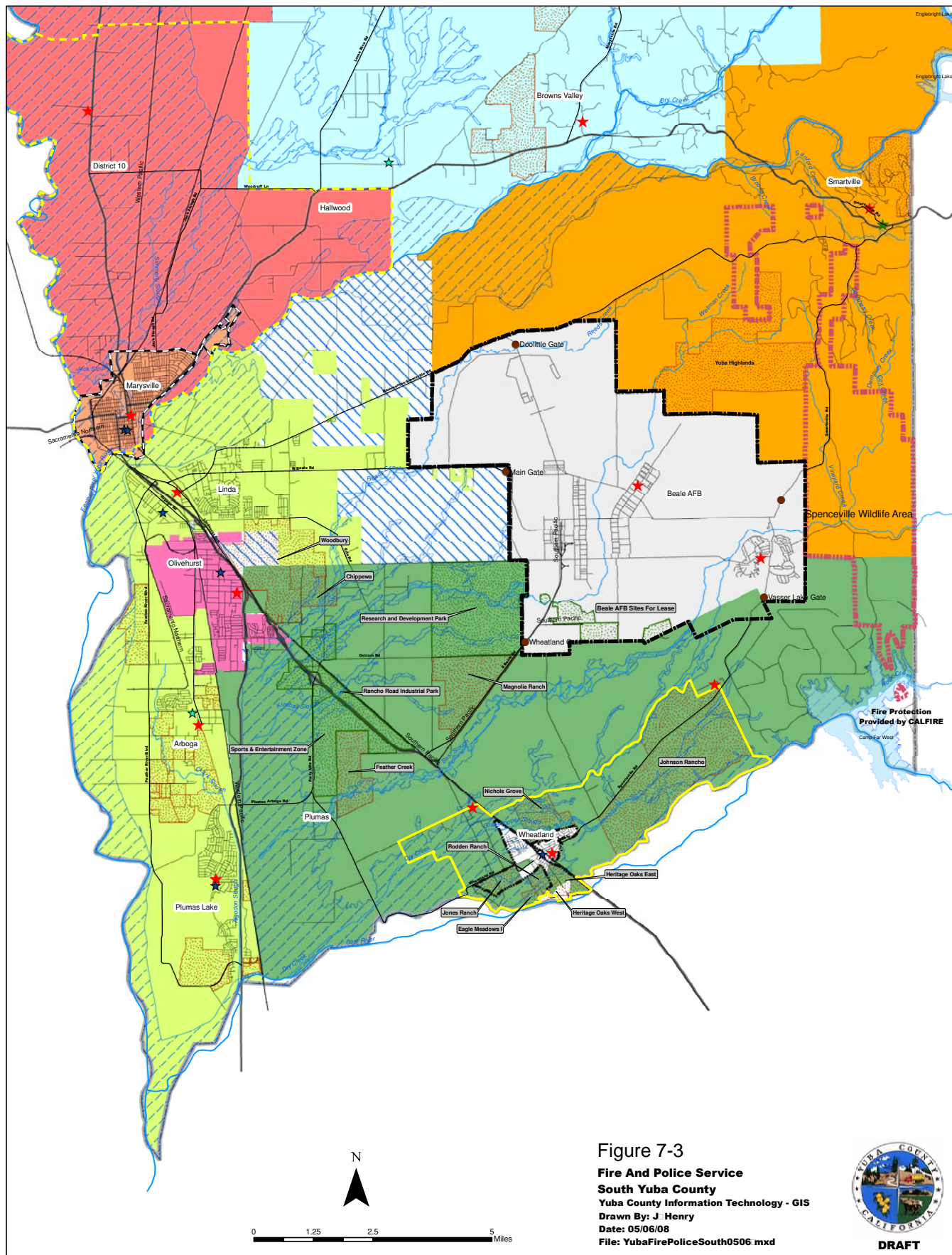


DRAFT

Legend

- | | | | |
|--|-------------------------------------|---|--|
| City Of Marysville (Contract with CDF) | Fire Stations | Foothill Fire Protection District | Olivehurst Public Utility District - Fire Service Area |
| City Of Marysville Primary Sphere of influence | CALFIRE Station | Linda Fire Protection District | Loma Rica Browns Valley Community Service District |
| City Of Wheatland | Proposed Fire Station | Plumas Brophy Fire Protection District | Economic Development Areas |
| City Of Wheatland Sphere Of Influence | Smartville Fire Protection District | Hallwood CSD (Contract with Marysville) | Planned and Proposed Subdivisions |
| Police Stations | Camptonville CSD | Dobbins Oregon House Fire Protection District | No Designated Provider |
| | | | Projected Post-Improvement Floodplain* |

* Source: MBK Engineers



Legend

- City Of Marysville (Contract with CDF)
- City of Marysville Primary Sphere of influence
- City Of Wheatland
- City of Wheatland Sphere Of Influence
- Fire Station
- CALFIRE Station
- Proposed Station
- Police Stations
- Smartville Fire Protection District
- Linda Fire Protection District
- Plumas Brophy Fire District
- Olivehurst Public Utility District - Fire Service Area
- Loma Rica Browns Valley Community Service District
- Hallwood CSD (Contract with Marysville)
- Economic Development Areas
- Planned and Proposed Subdivisions
- No Designated Provider
- Projected Post-Improvement Floodplain*

* Source: MBK Engineers

PROVIDERS WITH STATIONS STAFFED CONTINUOUSLY

City of Marysville

Marysville Fire Department (MFD) provides fire-related services. Since 1997, all City fire services have been provided through a contract with the California Department of Forestry and Fire Protection (CALFIRE). CALFIRE Battalion 19 staffs administrative services and operations on a reimbursable basis. The City owns and maintains all fire facilities and equipment directly.

CALFIRE provides fire suppression and prevention, BLS for medical emergencies, rescue, hazardous materials response, arson and fire investigation, education services, fire prevention inspection, plan checking, and code development. In the fire chief's capacity as the City's fire marshal, the chief is responsible for checking all new building plans to ensure compliance with the fire code, in addition to conducting inspections of new business sites upon opening and annual inspections of existing businesses. The Marysville FD provides specialized hazardous material (hazmat) response to the state Office of Emergency Services in Region 3, as well as Yuba and Nevada counties and the City of Wheatland by agreement.

District 10-Hallwood Community Services District

District 10-Hallwood Community Services District (D10-HCSD) provides fire and medical related services through a contract with the City of Marysville, which is operated by CALFIRE through a contract with the City. According to the District's contract with the City, the MFD provides fire suppression, basic life support, fire investigation, fire prevention and fire inspection services to the area. Services excluded from the contract are hazardous materials response and weed abatement. Hazardous materials response is provided by MFD under a separate contract with the County for all county territory. All vehicles and equipment are owned by the City of Marysville. The District occasionally purchases new vehicles, which are then donated to the City to maintain and insure. District call firefighters augment the CALFIRE full-time firefighters.

Linda Fire Protection District

Linda Fire Protection District (LFPD) provides fire suppression (structural, vehicle, and vegetation fires) and prevention, BLS for medical emergencies, rescue, hazardous materials response, fire inspection, education, and burning permit services. The District is staffed by 15 full-time staff and supplemented by 21 on-call firefighters.

The District's primary prevention strategy is the weed abatement program which is aimed at minimizing brush fires. Each year personnel inspect parcels within District boundaries and notify property owners of the need to rid the property of noxious weeds. In addition, the District offers fire prevention and safety instruction in local schools and a hazardous materials awareness program, and participates in a task force with various Yuba County departments which addresses blighted, neglected and hazardous properties.

The LFPD Chief checks fire plans for new development prior to construction. Initial fire safety inspections are completed on all new commercial facilities, and random inspections are performed thereafter. The District also ensures that residential care facilities comply with code to provide adult and childcare services.

Olivehurst Public Utilities District

Olivehurst Public Utilities District (OPUD) provides fire prevention and suppression (structural, vehicle, and vegetation fires), BLS for medical emergencies, rescue, hazardous materials response, fire investigation, education, and burning permit services. Fire prevention services include pre-fire planning, public education, and school and business inspections. Education programs offered by the District include tours for pre-school children and the Fire Explorer program designed to keep teenagers out of gangs. The District also participates in the Yuba County Code Enforcement Team, which mitigates uninhabitable properties and has established an arson investigation team. All services are provided by five to six full-time firefighters and 20 call firefighters.

OPUD staffs its station during daytime hours with two full-time firefighters; in the evenings, one full-time firefighter and three call firefighters are based at the station. OPUD protects approximately 3,500 residential structures, 11 multi-family apartment complexes, 10 schools, the airport, and approximately 70 commercial businesses, among others.¹⁹⁶

California Department of Forestry and Fire Protection

CALFIRE provides fire prevention, suppression, and fire related law enforcement for timberlands, wildlands and urban forests in the State Responsibility Area (SRA). CALFIRE also responds to other types of emergencies, including structure fires, vehicle accidents, medical aids, swift water rescues, search and rescues, hazardous material spills, train wrecks, and natural disasters. The SRA portions of the County are served by two CALFIRE battalions. Battalion 14 serves the SRA in the communities of Smartville and Camp Far West. Battalion 16 serves the SRA in the communities of Loma Rica and Dobbins.

Under contract, CALFIRE also provides fire suppression, fire prevention and emergency medical response to Loma Rica-Browns Valley CSD and the City of Marysville, dispatching services for the foothill fire protection districts (Camptonville CSD, Foothill FPD, Dobbins-Oregon House FPD, Smartville FPD, and Loma Rica-Browns Valley CSD), and personnel for the County Fire Protection Planner position.

Loma Rica-Browns Valley Community Services District

Loma Rica-Browns Valley Community Services District (LRBVCS D) provides fire suppression (structural, vehicle, and vegetation fires) and prevention, BLS for medical emergencies, rescue, hazardous materials response, education, and burning permit services. All services are provided through a contract with CALFIRE. During non-fire season (typically from October to May) the District reimburses CALFIRE to maintain two firefighters at Station 61, in excess of the 40 hours per week funded by the State, to maintain round-the-clock coverage. During fire season, CALFIRE staffs the station free of charge. Services are provided by five full-time CALFIRE staff and augmented by eight on-call firefighters.

¹⁹⁶ OPUD, *Development Impact Fee Study*, 2007, p. 7.

Beale Air Force Base

The Beale AFB Fire Department provides fire suppression, prevention and emergency medical services within the base boundaries; ambulance transport services are provided by Bi-County Ambulance Co. The base has two fire stations—one located in the airfield area and another in the housing area. Personnel are trained in fire suppression for structures, air craft, hazardous materials, vehicles, and vegetation. All personnel receive Red Cross certification in standard first aid and CPR. The fire department has expertise in aircraft fire suppression.

PROVIDERS WITH DAYTIME STAFFED STATIONS

City of Wheatland

Since January 2006, the City of Wheatland has provided fire-related and emergency medical services through the Wheatland Fire Authority (WFA), a joint powers authority (JPA) of the City of Wheatland and PBFDP.¹⁹⁷ The JPA directly employs staff, including the chief, full-time fire fighter and 32 call firefighters formerly employed directly by the City and PBFDP prior to the 2006 JPA agreement. WFA occupies, uses and maintains all fire facilities and equipment, but the City and PBFDP retain ownership of facilities and equipment owned at the time WFA was formed. New equipment and facilities acquired by WFA are the property of the Authority.

WFA provides fire suppression and prevention, Basic Life Support (BLS) for medical emergencies, rescue, fire inspection, education services, and standby safety and emergency medical at local high school football games. Fire suppression and protection services include structural, vehicle and vegetation fires. WFA provides BLS until Bi-County Ambulance, a privately owned ambulance company, arrives to perform Advanced Life Support and provide ambulance transport services. WFA has technical expertise in confined space, low and high angle, and trench rescues. Educational services include fire prevention and CPR instruction in local schools and a hazardous materials awareness program.

Onsite full-time staffing during business hours is provided by a chief and a paid firefighter, who staff the City of Wheatland station and two PBFDP stations on a rotating schedule. All other personnel are WFA call firefighters who provide on-call support.

Plumas Brophy Fire Protection District

Plumas Brophy Fire Protection District (PBFDP) was formed as an independent special district in 1951 to provide fire protection services to the area south of Erle Road and east of the Western Pacific Railroad. The District has expanded to encompass 80 square miles south of Beale AFB from SR 70 east to the Yuba-Nevada county line. In 2006, PBFDP began providing fire and EMS service to the unincorporated community of Camp Far West through WFA.

WFA provides the same services to the District as those provided to Wheatland.

¹⁹⁷ Joint powers authorities (JPAs) are not special districts, as defined in the Cortese-Knox-Hertzberg Act, and are not directly subject to LAFCO regulation. However, LAFCO regulates the boundaries and authorized services of both member agencies, who remain ultimately responsible for ensuring that fire protection services are provided within their respective jurisdictions. As discussed in Chapter 2, local agencies directly under LAFCO jurisdiction are the focus of the review. LAFCO is required by law to review each agency under its purview, and to update each agency's separate and distinct sphere of influence upon completion of the MSR.

Smartville Fire Protection District

Smartville Fire Protection District (SFPD) is the primary provider of fire and EMS service in the unincorporated community of Smartville. The District encompasses approximately 71 square miles. SFPD provides fire suppression and prevention, Basic Life Support (BLS) for medical emergencies, fire inspection, and maintenance of the Rosebar Schoolhouse as a community facility. Onsite full-time staffing during daytime hours is provided by one sworn firefighter. All other personnel are call firefighters who provide on-call support.¹⁹⁸

Fire suppression services include structural and vehicle fires and support to CALFIRE for vegetation fires in the State Responsibility Area, which encompasses the entire district. Assistance to CALFIRE is provided primarily during wildfire season—May through October.

PROVIDERS WITH UNSTAFFED STATIONS

Camptonville Community Services District

Camptonville Community Services District (CCSD) provides fire suppression (structural, vehicle and vegetation fires), fire prevention, BLS for medical emergencies, rescue, hazardous materials response, and education services. The District is staffed entirely by on-call firefighters.

The District's boundaries overlap with the CALFIRE State Responsibility Area in some areas and the Federal Responsibility Area in the national forest in the remaining territory. CALFIRE and the U.S Forest Service have jurisdiction for any wildland fires in the area. The District generally provides initial wildland fire response and then supports the agency with jurisdiction during fire season.

Dobbins-Oregon House Fire Protection District

Dobbins-Oregon House Fire Protection District (DOHFPD) provides fire suppression (structural, vehicle, and vegetation fires), fire prevention, BLS for medical emergencies, rescue, hazardous materials response, and education services. The District is staffed entirely by on-call firefighters.

Much like CCSD and Foothill Fire Protection District, the DOHFPD boundaries overlap with the CALFIRE State Responsibility Area in most areas and the Federal Responsibility Area in the national forest in the remaining territory. The District generally provides initial wildland fire response and then supports the agency with jurisdiction during fire season.

Fire prevention services include a chipping program sponsored in conjunction with the Fire Safe Council through Proposition 40 funds. Homeowners in fire prone areas clear vegetation within 100 feet of their residence, and the vegetation is chipped free of charge.

¹⁹⁸ Due to the recent resignation of the Smartville FPD fire chief and another part-time paid firefighter, CALFIRE has allocated a staff person at the CALFIRE Smartville station to serve as an interim officer at all service calls. CALFIRE is not being reimbursed for this service. SFPD call firefighters continue to respond to all incidents. The change in staffing does not substantively affect service configuration as described in Appendix A.

Foothill Fire Protection District

Foothill Fire Protection District (FFPD) provides fire suppression (structural, vehicle, and vegetation fires), BLS for medical emergencies, rescue, initial hazardous materials response, and education services. The District relies entirely on volunteer firefighters for all fire-related services. The volunteers are not reimbursed for time or expenses.

FFPD's boundaries overlap with the CALFIRE State Responsibility Area in some portions and the Federal Responsibility Area in the national forest in the remaining territory in upper elevation areas. The District generally provides initial wildland fire response and then supports the agency with jurisdiction.

OTHER PROVIDERS

The U.S. Forest Service (USFS) provides fire prevention, fire suppression, within national forest land in Yuba County. The Tahoe and Plumas National Forests reach into Yuba County, together covering over 56,000 acres in the County.¹⁹⁹ USFS relies on a team of paid staff. Staffing is augmented during fire season.

Plumas National Forest is divided into three ranger districts: Mt Hough, Feather River, and Beckwourth. Ranger stations are located in the cities of Blairsden, Oroville and Quincy, respectively. The Plumas Forest Headquarters is located in the City of Quincy. Tahoe National Forest is divided into four ranger districts, which are located in Truckee, Foresthill, Sierraville, and Camptonville. The headquarters is located in Nevada City.

¹⁹⁹ Yuba County General Plan Public Services and Utilities Element, 1994, p. 13-19.

MUTUAL AND AUTOMATIC AID

Most of the fire and EMS providers primarily serve their own jurisdictions. Given the critical need for rapid response, however, there are extensive mutual aid efforts that cross jurisdictional boundaries. Mutual aid refers to reciprocal service provided under a mutual aid agreement, a pre-arranged plan and contract between agencies for reciprocal assistance upon request by the first-response agency. In addition, the jurisdictions rely on automatic aid primarily for coverage of areas with street access limitations and freeways. Automatic aid refers to reciprocal service provided under an automatic aid agreement, a prearranged plan or contract between agencies for an automatic response for service with no need for a request to be made. Table 7-4 summarizes the automatic and mutual aid agreements for each jurisdiction. The automatic aid agreements shown in the table are for responses to areas within a district’s boundaries. All agencies are required to provide mutual aid in times of extreme disaster as part of the California Governor’s Office of Emergency Services Master Mutual Aid Agreement.

Table 7-4: Primary, Automatic Aid and Mutual Aid Providers, 2008

Agency	Automatic Aid Agreements (Responses into the Districts' boundaries)	Mutual Aid Providers
City of Marysville	LFPD (SR 70 and Simpson Lane and E Street Bridge)	Beale AFB, LFPD, LRBVCSD, OPUD, Sutter County, WFA, Yuba City FD
City of Wheatland	OPUD (Summerfield complex—off of McGowen Pkwy. on Mage Ave.), LFPD (SR 70 from Plumas-Arboga Rd. to McGowen Overpass) ¹	Beale AFB, CALFIRE, LFPD, OPUD, Sutter County
Camptonville CSD	None	CALFIRE, DOHFPD, Downieville FPD, North San Juan FPD, Pike FPD, USFS
District 10-Hallwood CSD	LFPD (all areas)	Beale AFB, Butte County, CALFIRE, LFPD, LRBVCSD, OPUD, Sutter County, WFA, Yuba City FD
Dobbins-Oregon House FPD	None	CALFIRE, CCSD, FFPD, LRBVCSD, SFPD, USFS
Foothill FPD	None	CALFIRE, DOHFD, LRBVCSD, USFS
Linda FPD	OPUD (Linda Mall and Yuba College), SFPD (western portion of the Goldfields and Hammonton Smartville Road), Marsville (E Street and Simpson Street bridges)	Beale AFB, CALFIRE, OPUD, MFD, SFPD, Sutter County, WFA, Yuba City FD
Loma Rica-Browns Valley CSD	DOHFPD (Eastern portion of the District near Collins Lake)	Butte County Fire, CALFIRE, DOHFPD, D10HCSD, SFPD
Olivehurst PUD	LFPD (Yuba County Airport and industrial tract)	Beale AFB, LFPD, MFD, WFA, Yuba City FD
Plumas Brophy FPD	OPUD (Summerfield complex—off of McGowen Pkwy. on Mage Ave.), LFPD (SR 70 from Plumas-Arboga Rd. to McGowen Overpass)	Beale AFB, CALFIRE, LFPD, OPUD, Sutter County
Smartville FPD	Penn Valley FPD (Englebright Lake and SR 20 to Red Ln.), LFPD (western portion of the Goldfields)	Beale AFB, CALFIRE, LFPD, LRBVCSD, OPUD, Penn Valley FPD, WFA
Note (1) Automatic aid agreements are with the Wheatland Fire Authority which apply to the City and PBFPD.		

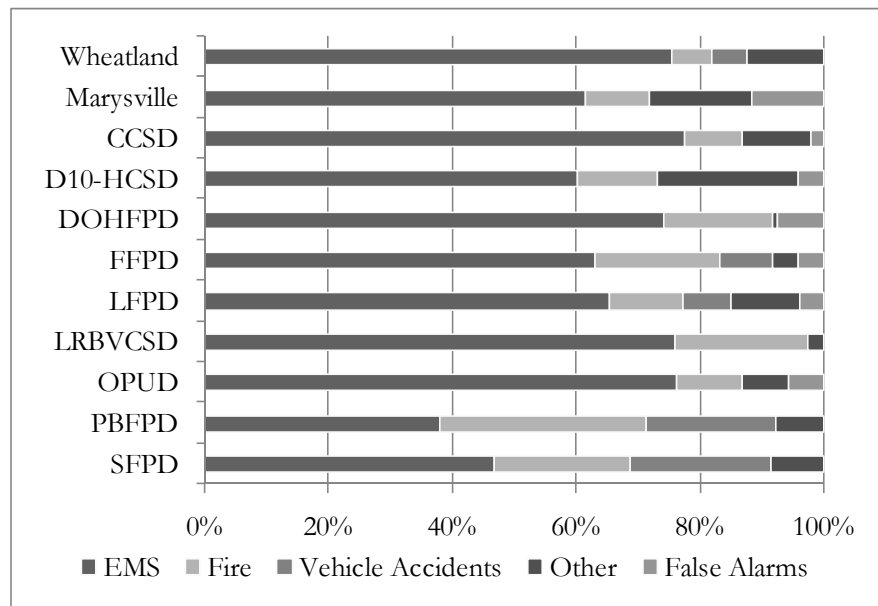
SERVICE DEMAND

Service providers reported responding to a total of 9,054 calls for service in the County in 2006, excluding calls within Beale AFB.²⁰⁰ In other words, there were approximately 25 service calls throughout the County on an average day. A majority of the calls (69 percent) were medical emergencies and vehicle accidents. Fire departments throughout the County provide first-response service to EMS calls, and typically arrive at the scene to assist the victim prior to arrival of an ambulance. Calls for fire-related events (structure, vehicle and wildland) accounted for 14 percent of the incident volume. Public assists, hazardous materials response and miscellaneous emergency and non-emergency service calls comprised 11 percent of all calls and false alarms consisted of at least five percent.²⁰¹

Figure 7-5: Fire Department Service Calls, 2006

The volume and type of service demand may vary between jurisdictions based on the population’s age and access to primary health care, visitor counts, freeway miles and risk of wildland fires within the agency’s boundaries.

CCSD had the highest percentage of calls for EMS service at 79 percent, as shown in Figure 7-5. This high ratio of EMS calls is most likely attributable to the District’s remote nature



combined with a lack of access to nearby medical facilities, as well as recreation activities at Bullards Bar Reservoir. Other agencies with a high percentage of EMS service calls included Wheatland, LRBVCSD, OPUD and DOHFPD. CALFIRE and PBFDP had significantly lower ratios of EMS calls compared to the county wide average of 64 percent, at 42 and 38 percent respectively.

PBFDP had the highest percentage of fire service calls (structure, vehicle and wildland) at 33 percent of calls. By comparison the countywide ratio of fire service calls was 14 percent. Rural districts in the foothills with extensive wildland areas and a greater wildfire hazard tended to have a higher percentage of fire-related calls, for example CALFIRE (29 percent), SFPD (22 percent), LRBVCSD (21 percent) and FFPD (20 percent).

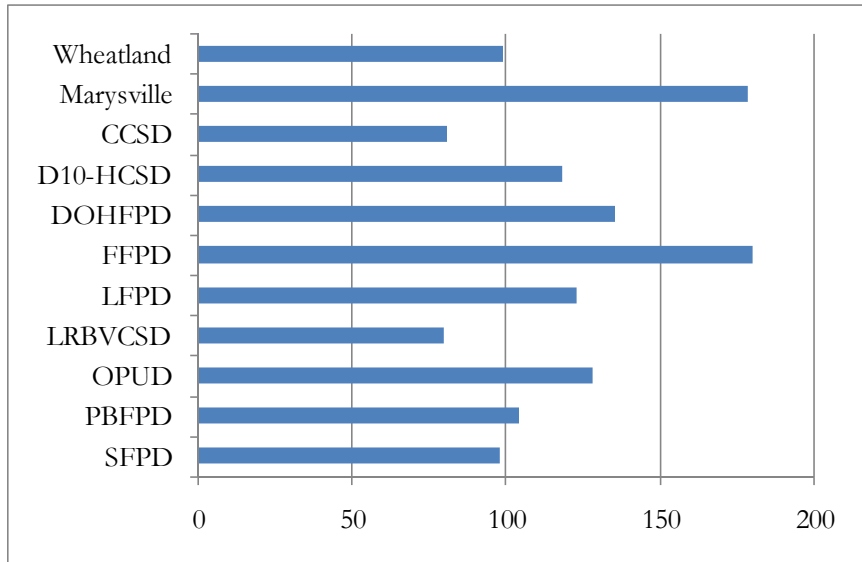
²⁰⁰ The number of calls for service may be slightly overstated, as more than a single jurisdiction may respond to a single service call due to automatic aid agreements or confusion in undesignated areas.

²⁰¹ False alarms were not reported by SFPD, PBFDP, City of Wheatland, LRBVCSD, FFPD, or CALFIRE.

Figure 7-6: Service Calls per Capita (1,000), 2006

Districts countywide averaged 128 service calls per 1,000 residents. The number of service calls per 1,000 residents ranged from 72 within the SRA served by CALFIRE to 180 within FFPD’s service area.

The high number of service calls by FFPD is most likely due to the District serving the Clippermills community outside district bounds.



The eastern and northeastern areas of Yuba County have a high to very high fuel hazard ranking for wildland fires, according to CALFIRE. The hazardous fuels ranking system is based on models of rate of spread, fireline intensity, heat per unit area and other fire characteristics. Heavy brush and heavy forest fuel types received a ranking of very high fuel hazard, while moderate brush with a mixture of pine and grass fuel types generally received a ranking of high fuel hazard.²⁰² Territory within all of the foothill fire districts (CCSD, DOHFPD, FFPD, LRBVCSD, PBFDP, and SFPD) has been classified as high to very high on the fuel hazard scale.

The wildland interface areas—where structures and development meet or intermingle with undeveloped wildland or vegetative fuel—are expanding as more people are building homes in such areas.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

DISPATCH AND COMMUNICATIONS CONNECTIVITY

Emergency 911 calls are initially routed to a Public Safety Answering Point (PSAP)—a facility equipped and staffed to receive 911 calls, and may only be transferred one time. For all calls from landlines in Yuba County the PSAP is the Yuba County Sheriff’s Department. The first-response dispatcher immediately determines whether a 911 call is related to a police, fire or medical emergency. Fire and medical 911 calls are routed to the appropriate fire/EMS dispatcher. Fire departments in the foothills of Yuba County (CALFIRE, CCSD, DOHFPD, FFPD, LRBVCSD, and SFPD) are dispatched by CALFIRE, while most valley fire service providers (LFPD, OPUD and WFA) are dispatched directly by the Sheriff. The Marysville FD is dispatched by Marysville PD. CALFIRE provides emergency medical dispatch (EMD), when necessary, for all providers.

²⁰² CALFIRE, 2006, p. 19.

Dispatch for fire and medical calls is increasingly becoming regionalized and specialized, with most of the Yuba County fire departments either involved in the Yuba County Rural Fire Joint Powers Agency with dispatching provided by CALFIRE or receiving contract dispatching services from the Yuba County Sheriff's office. This increased regionalization and specialization is motivated by the following factors:

- Constituents increasingly expect emergency medical dispatching (EMD), which involves over-the-phone medical procedure instructions to the 911 caller and requires specialized staff;
- Paramedics increasingly rely on EMD, which also involves preparing the paramedic en-route for the type of medical emergency and procedures;
- Dispatch technology and protocols have become increasingly complex;
- Modern technology has enabled better measurement and regulatory oversight of fire department (FD) response times, and increased pressure for FDs to meet response time guidelines;
- FDs need standard communication protocols due to their reliance on mutual aid; and
- There are clear economies of scale in providing modern fire and medical dispatch services.

Emergency 911 calls from cellular phones are routed to the California Highway Patrol in Chico. CHP relays the call to Yuba County Sheriff, and dispatching follows the protocol discussed above. The California 911 Manual mandates that 911 calls be transferred no more than one time, except 911 calls from cellular phones. New cellular phone technology with global positioning (GPS) identifying the precise location of the cellular phone will allow for direct routing of cellular 911 calls to the first-response dispatcher. The Federal Communications Commission (FCC) mandated that cell phone vendors enable cell phones to be located when they dial 911 by 2006. Wireless providers have chosen to either update handsets with GPS capabilities or modify the cell phone network.

The jurisdictions indicated that dispatching of calls from cell phones is particularly inefficient due to multiple transfers, length of time the caller spends on hold and lack of location information. Response times are further delayed when callers that are unfamiliar with the area are unable to describe rural locations to the dispatch personnel. All new cell phones are now equipped with GPS; however, it will take a few years for all old phones to be replaced by phones with GPS capability and/or construction of specialized cell phone towers. As of August 2007, the Yuba County Sheriff's office was not yet able to take calls which identify a caller's latitude and longitude. In order to request this service from the wireless provider, the Sheriff's dispatch unit will require an equipment upgrade.²⁰³

²⁰³ California Department of General Services, 2007.

FACILITY AND EQUIPMENT CONDITIONS

There are currently 21 fire stations in use in the County in addition to two fire stations on Beale AFB. Table 7-7 summarizes the station locations, conditions and staffing levels of each agency with the exception of Beale AFB.

The fire districts provided an assessment of each facility's condition and deficiencies. Of the 21 fire stations shown in the table, 16 are classified as in either good or excellent condition by their agencies and the remaining six are in fair condition. None of the stations were classified as poor condition. Functional equipment such as engines, water tenders and protective gear is equally as important as a serviceable station. A majority of the providers reported benefiting from grants or additional funding to purchase new vehicles in recent years. The agencies reported critical equipment needs and deficiencies. Of the providers, eight reported apparatus needs due to age and wear of the current vehicles.

The following station and equipment deficiencies and needs were identified by the agencies:

- Marysville: The station requires a new roof, and exhaust system, upgraded lighting, and a new driveway. The City plans to make \$385,000 in improvements on the fire station between 2007 and 2012. There are five vehicles over 20 years old that are in need of replacement—the ladder truck, the structure engine, the water tender, and both wildland engines.
- Wheatland: The City anticipates building a new station with space for administration, training, six vehicles, and dorms for 10 firefighters. The new facility is expected to be completed by 2010. To accommodate future growth, two new stations (in addition to the new headquarters) and a training facility are recommended in the City's Master Facilities Plan. To provide enough capacity in the event of a simultaneous residential and commercial fire, the City needs an additional 200,000 gallons in fire flow capacity.²⁰⁴
- CALFIRE: At the Smartville Station, the apparatus bay and office are to be replaced by the end of FY 08-09. The driveways are also in need of replacement at the Smartville and Dobbins stations.
- CCSD: Station 1 requires completion of the electrical system, installation of dry wall, improved plumbing, landscaping, and minor improvements in the bathroom. The District plans to open Station 2 on Moonshine Road. The station building has been acquired; the District needs another engine to begin operations out of the station.
- D10-HCSD: Station 2 is a private residence where the District has been storing an engine. The District reported that the facility meets the needs of the District to reduce ISO ratings. D10-HCSD intends to reduce fire insurance costs for residents and has begun the process of constructing and equipping an additional fire station to improve the District's ISO rating. Service within the District would benefit from a new water tender and an additional engine.

²⁰⁴ City of Wheatland General Plan, 2006, pp. 5-27.

- **DOHFPD:** The District is in the process of building a new Station 1 to replace this facility as District headquarters. Station 1 currently lacks a training facility and adequate storage space for the vehicles. The new station will have five bays, two offices, a training facility, and storage space for equipment, supplies and records. Station 2 lacks restroom facilities. The District reported a need for a new rescue engine.
- **FFPD:** The District identified a need for additional equipment storage space at Station 1 and a phone line and heater at Station 2. The expansion of Station 1 is expected to be completed in 2008.
- **LFPD:** LFPD anticipates replacing Station 2 within the next two to five years; the District has purchased property on Plumas Arboga Road. The construction timeline will depend on the rate of development. District management is considering building a training tower at the future site of Station 2.
- **LRBVCS D:** Station 62 needs septic and well improvements; however, the station sits on 0.5 acres which does not provide enough space for the needed improvements. The District also identified a need for an additional fire station in the northeast portion of the District, a new water tender and a new Type-1 fire engine.
- **OPUD:** The fire department identified a need to replace the current facility in the next five years. The new facility will house all necessary apparatus, offices, living quarters, training space, and a law enforcement substation.
- **PBFPD:** Station 1 needs to be replaced due to increased service demand and limited storage capacity—the Station is unable to store modern apparatuses. The District noted that 75 percent of the vehicles and equipment need to be replaced due to old age.

Table 7-7: Fire Station Condition, Staffing and Apparatus

Station	Location	Condition	Staff per Shift	Apparatus
City of Marysville				
Marysville Fire Station	107 Ninth St.	Fair	1 Battallion Chief (on site 1/3 of time) 1 Captain 2 Apparatus Engineers	4 Engines 1 Truck 1 Hazmat Unit 1 Squad 1 Water Tender
City of Wheatland				
Wheatland Fire Station	313 Main St.	Good	1 Chief (daytime) 1 Firefighter (daytime)	3 Engines
California Department of Forestry and Fire Protection				
Smartville Station	8839 SR 20	Fair to Excellent	1 Captain 1 Engineer 4-6 Firefighters	2 Engines 1 Utility Vehicle
Dobbins Station	9946 Marysville Rd.	Good	1 Captain 1 Engineer 4-6 Firefighters	2 Engines 1 Bulldozer 1 Utility Vehicle
Loma Rica Station	11485 Loma Rica Rd.	Excellent	1 Captain 2-4 Firefighters	1 Engine

Continued

Station	Location	Condition	Staff per Shift	Apparatus
Camptonville Community Services District				
Station 1	Mill St.	Fair	Unstaffed	3 Engines 1 Rescue Truck
Station 2	Moonshine Rd.	Fair	Unstaffed	None
District 10-Hallwood Community Services District				
Station 2	9562 SR 70	Good	Unstaffed	1 Engine
Dobbins-Oregon House Fire Protection District				
Station 1	9150 Marysville Rd.	Good	Unstaffed	1 Rescue Vehicle 1 Water Tender 2 Engines
Station 2	14358 Merriam Rd.	Good	Unstaffed	1 Water Tender 2 Engines
Station 3	Collins Lake Resort	Good	Unstaffed	1 Chief's Unit 1 Fire Engine
Foothill Fire Protection District				
Station 1	16796 Willow Glen Rd.	Good	Unstaffed	4 Engines 1 Water Tender
Station 2	12139 La Porte Rd.	Fair	Unstaffed	2 Engines
Linda Fire Protection District				
Station 1	1286 Scales Ave.	Good	1 Captain 1 Firefighter (Chief and Asst. Chief Mon. to Fri. 8 am to 5 pm and on call.)	3 Command Vehicles 4 Engines 1 Water Tender 1 Rescue Squad
Station 2	1595 Broadway Rd.	Good	Unstaffed	2 Engines
Station 3	1765 River Oaks Blvd.	Excellent	1 Driver/Engineer 1 Firefighter	4 Engines
Loma Rica-Browns Valley Community Services District				
Station 61	11485 Loma Rica Rd.	Excellent	See CALFIRE Loma Rica Station	2 Engines 1 Quick Attack
Station 62	9471 Browns Valley School Rd.	Good	Unstaffed	1 Engine 1 Water Tender 1 Air Trailer
Olivehurst Public Utilities District				
OPUD Fire Station	1962 9th Ave.	Fair	Three during daytime hours (including a chief), four during evening hours.	5 Engines 1 Truck 1 Chief's Unit 1 Utility Vehicle 1 Air Trailer 1 MCI
Plumas Brophy Fire Protection District				
Station 1	4514 Dairy Rd.	Fair	See Wheatland	4 Engines 1 Tender
Station 2	2499 Eric Ln.	Good	See Wheatland	2 Engines 1 Tender
Smartville Fire Protection District				
Station 41	8459 Blue Gravel Rd.	Good	1 Chief or Engineer (daytime)	1 Engine 1 Squad

- SFPD: In order to provide 24-hour staffing, the current station needs kitchen, shower, laundry, and sleeping facilities. The District reported a need for an additional station in the western portion of the District on Hammonton-Smartville Road, to maintain acceptable response times. The District reports that plans for the station are in progress. In addition, the District needs a new water tender.

SERVICE ADEQUACY

Fire and emergency medical service adequacy measures include response times, ISO ratings, and coverage adequacy.

STANDARDS

For fire and paramedic service, there are service standards relating to response times, dispatch times, staffing, and water flow. Particularly in cases involving patients who have stopped breathing or are suffering from heart attacks, the chances of survival improve when the patient receives medical care quickly. Similarly, a quick fire suppression response can potentially prevent a structure fire from reaching the “flashover” point at which very rapid fire spreading occurs—generally in less than 10 minutes.²⁰⁵

The guideline established by the National Fire Protection Association²⁰⁶ (NFPA) for fire response times is six minutes at least 90 percent of the time, with response time measured from the 911-call time to the arrival time of the first-responder at the scene.²⁰⁷ The fire response time guideline established by the Center for Public Safety Excellence (formerly the Commission on Fire Accreditation International) is 5 minutes 50 seconds at least 90 percent of the time.²⁰⁸

Fire providers in Yuba County provide first-response to emergency medical calls and basic life support (BLS) prior to Bi-County Ambulance arriving on the scene to provide advanced life support (ALS) and ambulance transport. The BLS medical response time guideline established by the California EMS Agency is five minutes in urban areas, 15 minutes in suburban or rural areas, and as quickly as possible in wilderness areas. Territory west of Jasper Lane, including the City of Wheatland, and west of the Western Pacific Railroad and south of Woodruff Lane is classified as suburban or rural. Marysville, the populated areas of Beale AFB, Linda, and Olivehurst are considered urban. The remainder of the County is considered wilderness.²⁰⁹

California EMS guidelines for ALS first-response are eight minutes in urban areas and 20 minutes in suburban areas. The Sierra-Sacramento Valley EMS Agency has established ALS and

²⁰⁵ NFPA Standard 1710, 2004.

²⁰⁶ The National Fire Protection Association is a non-profit association of fire chiefs, firefighters, manufacturers and consultants.

²⁰⁷ Guideline for a full structure fire is response within ten minutes by a 12-15 person response team at least 90 percent of the time.

²⁰⁸ Commission on Fire Accreditation International, 2000.

²⁰⁹ Response zones as defined by Sierra-Sacramento Valley EMS in July 2007.

ambulance transport response time criteria specific to Yuba County for the private provider—Bi-County Ambulance.²¹⁰

Response time guidelines are shown in Table 7-8.

Table 7-8: Fire and Medical Response Time Standards (minutes)

Agency Providing Guideline	Dispatch	Fire	Full Structure Fire	Basic Life Support	Advanced Life Support	Ambulance Transport
National Fire Protection Association	1:00	6	10	6	10	
Center for Public Safety Excellence	0:50	5:50		5:50		
CA EMS Agency						
Urban/Metro				5:00	8	8
Suburban/Rural				15	20	20
Wilderness				AQAP	AQAP	AQAP
Sierra Sacramento Valley EMS						
Urban/Metro (Marysville, Beale)					8	8
Linda/Olivehurst					10	10
Suburban/Rural (Wheatland, Plumas Lake, Brophy, Hallwood)					20	20
Wilderness (Camp Far West, the Foothills)					AQAP	AQAP
Note						
(1) AQAP means as quickly as possible.						

NFPA recommends a 60-second standard for dispatch time, the time between the placement of the 911 call and the notification of the emergency responders. The Center for Public Safety Excellence recommends a 50-second benchmark for dispatch time.

For structure fires, NFPA recommends that the response team include 14 personnel—a commander, five water supply line operators, a two-person search and rescue team, a two-person ventilation team, a two-person initial rapid intervention crew, and two support people. The NFPA guidelines require fire departments to establish overall staffing levels to meet response time standards, and to consider the hazard to human life, firefighter safety, potential property loss, and the firefighting approach. NFPA recommends that each engine, ladder or truck company be staffed by four on-duty firefighters, and that at least four firefighters (two in and two out), each with protective clothing and respiratory protection, be on scene to initiate fire-fighting inside a structure. The Occupational Safety and Health Administration standard requires that when two firefighters enter a structure fire, two will remain on the outside to assist in rescue activities.²¹¹

For emergency medical response with advanced life support needs, NFPA recommends the response team include two paramedics and two basic-level emergency medical technicians. For structure fires, NFPA recommends the availability of an uninterrupted water supply for 30 minutes with enough pressure to apply at least 400 gallons of water per minute.

²¹⁰ Sierra-Sacramento Valley EMS, 2006.

²¹¹ 29 CFR 1910.134.

RESPONSE TIMES

Response times reflect the time elapsed between the dispatch of personnel and the arrival of the first responder on the scene. As such, response times do not include the time required to transport a victim to the hospital. The response times reported include the dispatching time of fire personnel.

Figure 7-9 shows the jurisdictions' 2006 median response times, 90th percentile response times (response time achieved for 90 percent of all service calls). LRBVCSD did not provide response times. DOHFPD provided response times from the time of exiting the station to the scene of the call; these response times could not be used for comparison purposes. CCSD did not provide a 90th percentile response time.

Figure 7-9: Fire Provider Median and 90th Percentile Response Times (minutes), 2006

All of the fire providers that provided response times reported 90th percentile response times within California EMS BLS guidelines.

CCSD reported the longest median response time of 20 minutes. Due to the expansive size of the districts, rough terrain in some areas, and reliance on call firefighters, the foothill fire departments all greatly exceeded NFPA and CPSE

fire response guidelines. In fact, the only two jurisdictions that responded within the six-minute NFPA guideline 90 percent of the time were the cities of Wheatland and Marysville. The agencies are working on improving their response times through improved GPS systems and by increasing the number of paid firefighter positions.

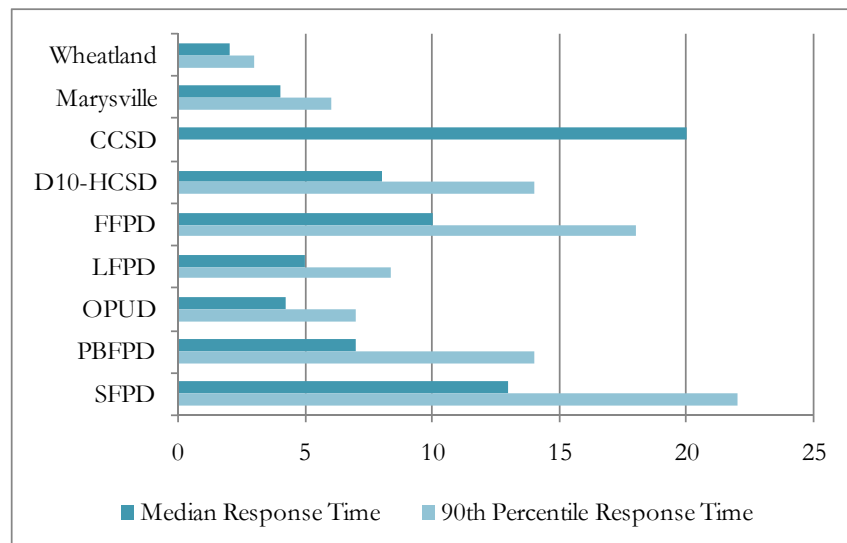


Table 7-10: Bi-County Ambulance Response Times, 2006

In 2006, Bi-County Ambulance did not meet the response time standards imposed by the Sierra-Sacramento Valley EMSA program policy at Beale AFB. According to the standards, the response times must be under eight minutes 90 percent of the time. In 2006, the actual response time was 15 minutes 90 percent of the time. The response time standard for

Area	Response Time
Beale AFB	15 minutes 90% of the time
Camptonville	38 minutes 90% of the time
Dobbins-Oregon House	29 minutes 90% of the time
Foothill	35 minutes 90% of the time
Linda	9 minutes 90 % of the time
Loma Rica	11 minutes 90% of the time
Marysville	6 minutes 90% of the time
Olivehurst	8 minutes 90% of the time
Smartville	17 minutes 90% of the time
Wheatland	15 minutes 90% of the time

Source: Sierra-Sacramento Valley EMS Agency

rural areas, including the City of Wheatland, the Wheatland vicinity, Hallwood, and Plumas Lake, is 20 minutes 90 percent of the time, which Bi-County Ambulance achieved in all rural communities in 2006. The response time standard for wilderness areas, including all areas to the north and east of the Beale AFB, such as Camptonville, Smartville, and Loma Rica, is as soon as possible.

The agencies described areas where prompt response is challenging due to lengthier travel time or access issues. A majority of the response time challenges were reported by the foothill fire districts. Common challenges reported were lack of road access, rough terrain, and size of service area. Wheatland, Marysville, CALFIRE, LFPD and OPUD all reported that there are no areas within their service areas that pose a particular challenge to providing service. Difficult-to-serve areas are listed in Table 7-11.

Table 7-11: Difficult-to-Serve Areas

Agency	Area	Reason
CCSD	The entire District bounds.	Snow covered roads during winter storms.
D10-HCSD	Northern portion of the District, near the Yuba-Butte county line.	Distance from the Marysville and District stations.
DOHFPD	Eastern portion of the District.	Rough terrain with no road access.
FFPD	Northwestern portion of the District	Small winding roads with difficult access.
LRBVCS	Township Rd. and the southwest portion of the District	Township Rd. is difficult to access due to gravel, and the southwestern area lacks road access.
PBFPD	SR 70 and eastern portion of Camp Far West near the Yuba-Nevada county line	Response time challenges due to the size of the district.
SFPD	Northeast portion of the District near Englebright Lake.	Private roads, rough terrain and locked gates.

ISO CLASSIFICATION

Table 7-12: Fire District ISO Rating

The Insurance Service Office (ISO), an advisory organization, classifies fire service in communities from 1 to 10, indicating the general adequacy of coverage. Communities with the best systems for water distribution, fire department facilities, equipment and personnel and fire alarms and communications receive a rating of 1. A Public Protection Classification (PPC) rating has a direct bearing on the cost of property insurance for every home and building in a community.²¹² The PPC ratings of each of the jurisdictions are shown in Table 7-12.²¹³

Of the jurisdictions, OPUD has the highest classification. A majority of the rural districts have no water distribution systems, lack paid staffing and have higher response times, as demonstrated

Agency	Class
Wheatland	6
Marysville	4
CALFIRE	None
CCSD	9/10
D10-HCSD	9/10
DOHFPD	8
FFPD	6/9
LFPD	4/8
LRBVCS	5/8
OPUD	3
PBFPD	6/9
SFPD	9/10

²¹² The ISO classification affects fire insurance for both residential and commercial properties. Generally, property owners in communities with a lower PPC rating pay a lower fire insurance premium than property owners in communities with a higher PPC rating.

²¹³ In the case of split classifications, the first class generally applies to properties within five miles of a station and 1,000 feet of a hydrant. The second class applies to areas within five miles of a station but beyond 1,000 feet of a hydrant.

by the low classifications of 9/10.

COVERAGE ADEQUACY

In urban areas, fire stations must be located strategically within five minutes driving distance from potential victims. In rural areas, fire stations must be located strategically within 15 minutes driving distance. The driving distance is affected not only by service area size, but also by congestion, topography, and street layouts.

The service area size for each fire station varies significantly between FDs. The most compact service areas are served by fire stations in Wheatland (1.5 square miles), Marysville (3.7) and OPUD (4.1). The providers with the largest service areas per station are Smartville, D10-HCSD, FFPD and LRBVCSD, of which three are developing new stations.

The providers rely on varying staffing configurations to provide services. The staffing configurations range from urban service levels in Marysville with 24-hour staffing by 3.3 firefighters²¹⁴ to the foothill agencies (CCSD, DOHFPD, and FFPD) which rely entirely on volunteer and call firefighters that are paid a minimal stipend per service call. Marysville (D10-HCSD), CALFIRE, LFPD, LRBVCSD and OPUD are the only jurisdictions that have stations staffed at all times. Wheatland, PBFDP and SFPD staff their stations during daytime, and rely on volunteer and call firefighters at night. Due to these varying staffing configurations, comparison of staffing levels across jurisdictions is a challenge.

Figure 7-13: Urban Fire Staffing per 1,000 Residents

Staffing levels of agencies in urban and urbanizing areas are shown in Figure 7-13.²¹⁵ California cities have a staffing level of 1.2 paid staff per 1,000 residents on average.²¹⁶ The median among the urban providers in Yuba County is 0.7 per 1,000 residents.

In a mature urban area the staffing configuration is typically four paid firefighters per station at all times.



²¹⁴ The battalion chief is physically located at the Marysville station on one of three shifts, and is located at other CALFIRE stations in the area on two of the three shifts.

²¹⁵ Staffing levels represent total staff, not the number on duty at any given time. Paid staff are full-time equivalents; however call and volunteer firefighters do not represent full-time equivalents, as several jurisdictions could not provide hours worked by them. Marysville staffing was adjusted to reflect that nine percent of service calls are to its contract service area in Hallwood. Wheatland and PBFDP paid staffing reflects the portion of time when paid staff are located at the respective stations; call and volunteer firefighters were not allocated by station and are identical for Wheatland and PBFDP. OPUD call firefighters scheduled to serve on site are included on a full-time equivalent basis in the paid staff shown in Figure 7-12. LRBVCSD paid staffing level is 1.4 per 1,000 residents due to its contract with CALFIRE; this is not comparable, as CALFIRE staff may be engaged in their primary responsibility of brush firefighting during fire season.

²¹⁶ Calculated based on reported staffing levels in the State Controller’s Office Cities Report, FY 04-05.

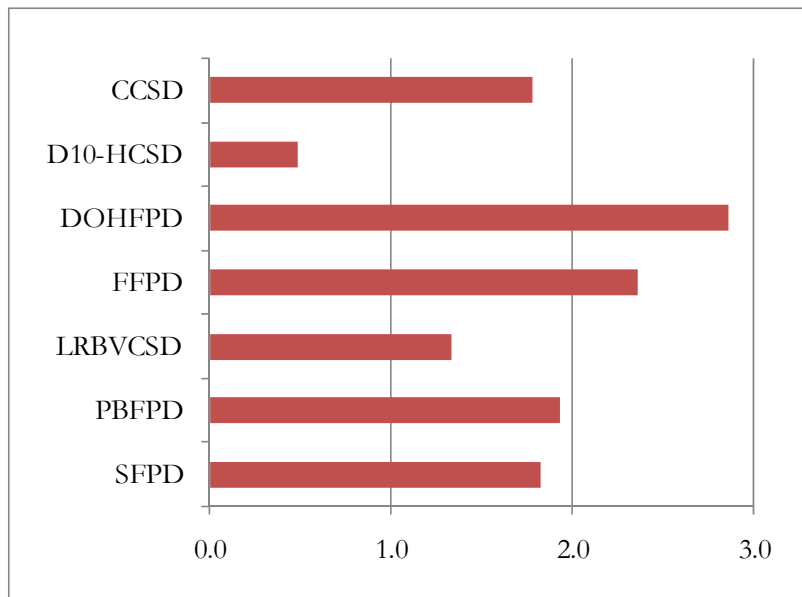
None of the jurisdictions in Yuba County has yet achieved this standard. Marysville is the only provider in Yuba County that is close to achieving this staffing level, with 3.3 firefighters per shift. Other urban areas are in varying states of moving toward that service level. OPUD has two paid firefighters during the daytime hours and one in the evening hours. The evening shift is augmented by three call firefighters that sleep at the station based on a rotating schedule. This staffing configuration allows the district to increase its service level while minimizing costs. The less urban areas rely more on call firefighters to provide service. Consequently, the agencies maintain a greater number of call staff to ensure availability of firefighters, which leads to higher sworn staffing ratios compared to the providers in urban areas with less reliance on call staff.

To determine the extent to which the provider relies on call and volunteer firefighters for services, the jurisdictions were asked to provide the number of hours contributed by call and volunteer firefighters for service calls. Of the providers in Table 7-12, Wheatland/PBFPD, LFPD and OPUD were able to provide an approximation of the hours contributed by call staff in 2007. Based on an average work year of 2,080 hours, OPUD relies most heavily on call firefighters who constituted 0.6 call firefighter FTEs per 1,000 population. Wheatland and PBFPD call firefighters contributed 0.2 FTEs per 1,000, while LFPD call firefighters consisted of 0.1 FTEs per 1,000.

Wheatland, Marysville and OPUD have compact urban service areas, and consequently, relatively high overall staffing levels of 137, 60, and 63 staff per 10 square miles respectively.²¹⁷ LFPD, although urban, has a more expansive service area and a staffing level of 8 sworn staff per 10 square miles. The level of total sworn staff, including call and volunteer firefighters, ranges from 1.7 per 1,000 residents in Marysville and 1.6 in LFPD to 15 sworn staff per 1,000 in CCSD. Of the jurisdictions with paid staff, the paid staffing level ranges from 0.24 paid staff per 1,000 in PBFPD to 1.44 per 1,000 residents at LRBVCSD.

Figure 7-14: Firefighters per 10 Square Miles in Rural Areas

Rural providers serve expansive territory, ranging from 56 to 106 square miles, with limited resources. These providers tend to have lower firefighter ratios per 10 square miles by comparison with urban providers. Coverage ratios range from 0.6 firefighters per 10 square miles in D10-HCSD to 2.9 in DOHFPD, as shown in Figure 7-14. Similar to the urban providers, the agencies that have full-time paid staff, including D10-HCSD, and LRBVCSD, have the lowest staffing ratios.



The number of firefighters

²¹⁷ Coverage ratios calculated based on the number of full-time and call firefighters divided by square mileage served by the provider.

covering particular areas is an approximate indicator of coverage adequacy. The providers' call and volunteer firefighters may have differing availability. A district with more firefighters could have fewer resources if availability is limited. Of the rural providers, FFPD, LRBVCSD and PBFPD were able to provide work hours contributed in 2007 for the call and volunteer firefighters in their districts. Based on an average work year of 2,080 hours, the hours worked by the call and volunteer firefighters during responses to service calls constituted 0.7 FTEs per 1,000 residents in FFPD, 0.2 in PBFPD and 0.1 in LRBVCSD.

MANAGEMENT

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital needs, and conduct advance planning for future growth.

An evaluation of the adequacy of management practices is shown in Table 7-15. The first four indicators are self-explanatory. Adequate evaluation of rates and fees means updating fire assessments and development impact fees with reasonable frequency. Adequate capital planning would involve a multi-year capital improvement plan (or comparable planning effort) for capital replacement and, if relevant, expansion. Advance growth planning is adequate when it discloses existing capacity and anticipated needs throughout the existing service area and SOI.

Table 7-15: Fire Agency Management Practices

Eight of the 11 providers evaluate employees at least annually. DOHFPD exceeded this standard by reportedly evaluating all call firefighters quarterly. CCSD and FFPD reported that staff are not evaluated regularly, as the firefighting staff consists entirely of volunteer and call firefighters. LRBVCSD reported that evaluations are completed on an as needed basis.

	Wheatland	Marysville	CCSD	D10-HCSD	DOHFPD	FFPD	LFPPD	LRBVCSD	OPUD	PBFPD	SFPD
Evaluate employees annually	A	A	N	A	A	N	A	I	A	A	A
Prepare timely budget	A	A	A	A	A	A	A	A	A	A	A
Periodic financial audits	A	A	A	A	I	I	A	A	A	N	I
Current financial records	A	A	A	A	I	I	A	A	A	A	I
Evaluate rates	A	-	N	A	A	N	A	A	A	I	N
Capital planning	I	A	N	I	A	I	I	A	A	I	N
Advance growth planning	A	N	N	N	N	N	A	A	A	N	N
Note: A = Practiced adequately, I= Practiced but improvement needed, N= Not practiced											

All of the providers prepare timely budgets. With the exception of PBFPD and SFPD, all of the providers reported performing financial audits on an annual basis. A majority of the jurisdictions that reported performing annual audits provided up-to-date financial audits for FY 05-06; however, DOHFPD and FFPD had not completed audits since FY 04-05 but reported being in the process of completing those audits. SFPD reported intermittent audits on a non-regular basis; the District had last completed an audit for FY 02-03. PBFPD does not complete regular financial audits, periodic or otherwise.

A majority of the providers were able to provide up-to-date financial information for FY 05-06 or FY 06-07, with the exception of DOHFPD, FFPD, and SFPD. DOHFPD was unable to report the District’s fund balance for either year. FFPD provided financial information for FY 04-05, and SFPD was unable to provide a breakdown of revenues more recent than FY 02-03.

A majority of the providers have updated their special benefit assessment and/or development impact fees since 2004. Regarding assessments, SFPD and FFPD voters approved the current assessment schedules in 1992; the FFPD assessment is not adjusted for inflation. SFPD did not report the current assessment level nor if it is adjusted for inflation. The date that the CCSD assessment was originally adopted was not reported; however, the District has the lowest assessment fee of all of the jurisdictions, and the District’s governing body reported a need to update the assessment schedule. Of the seven jurisdictions that levy development impact fees, five have updated their fees since 2004. PBFPD and FFPD adopted the current fee schedules in 1992. PBFPD and FFPD reported that they are in the process of increasing these fees. Marysville does not levy a fire-related assessment nor a development impact fee.

A majority of the agencies have not prepared a formal capital improvement plan, with the exception of Marysville, DOHFPD, LRBVCSD and OPUD. While they do not have formally adopted capital improvement plans, Wheatland, D10-HCSD, FFPD, LFPD, and PBFPD have development impact fee studies outlining capital and funding needs. In addition, Wheatland and LFPD have developed master plans and specific need plans for communities that further outline capital needs. Wheatland reported that it is in the process of developing a capital improvement plan.

Seven of the 11 providers have not conducted advanced growth planning for their service areas and SOIs; however, the foothill providers have minimal need for growth planning as the area has not experienced significant growth.

LOCAL ACCOUNTABILITY AND GOVERNANCE

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency’s activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 7-16.

Table 7-16: Fire Agency Accountability and Governance Measures

Six of the eleven agencies have had contested elections in the last 15 years. CCSD, D10-HCSD, DOHFPD, FFPD, and PBFPD have not had contested elections and governing body members are generally appointed by the Board of Supervisors.

	Wheatland	Marysville	CCSD	D10-HCSD	DOHFPD	FFPD	LFPD	LRBVCSD	OPUD	PBFPD	SFPD
Contested election since 1994	✓	✓	×	×	×	×	✓	✓	✓	×	✓
Constituent outreach activities	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	✓
MSR Disclosure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Note: ✓ = Occurred or adequately practiced, × = Did not occur or not practiced											

All agencies prepare and post meeting agendas and make minutes available as required. Additional outreach efforts include websites, newsletters, articles in community newspapers and educational activities in the community and at schools. Marysville, Wheatland, LRBVCSD and OPUD maintain websites where public documents can be posted. Wheatland, CCSD, FFPD, LRBVCSD, OPUD and SFPD distribute regular newsletters or contribute to the community newspapers. LFPD employees conduct fire prevention and safety briefings and provide station tours for elementary school students. LFPD and PBFDP provide public safety education to schools within the districts. D10-HCSD did not report any customer outreach activities. For specifics on the governing body, constituent outreach efforts and public involvement, refer to the respective chapter in Appendix A.

Each of the agencies demonstrated accountability in its disclosure of information and cooperation with LAFCO. The fire and EMS service providers disclosed the majority of information that was requested by LAFCO relating to fire and EMS service. All agencies provided information on calls for service, ISO ratings, service complaints, staffing, costs, facilities, growth and service challenges and regional collaboration. Each agency was able to provide calls for service by type with the exception of false alarms. DOHFPD and LRBVCSD were unable to provide the requested response times.

SHARED FACILITIES

FACILITY SHARING STATUS

Fire and EMS providers throughout the County rely on each other for mutual and automatic aid assistance to optimize response times and engage in sharing of fire station space with other organizations. Jurisdictions rely on the County Sheriff or CALFIRE for dispatching.

Every fire service jurisdiction is a co-owner of the Yuba County Mobile Incident Command Vehicle in conjunction with the County and the Cities of Wheatland and Marysville, through their participation in the Yuba County Fire Chiefs Association.²¹⁸ The command vehicle is a mobile command post, communications/dispatch center and emergency operations center for large emergency events. The vehicle was purchased in 2005 through a multi-agency California Homeland Security grant. The participating agencies enter into an annual memorandum of understanding to provide funds for maintenance of the vehicle.

The City of Wheatland and PBFDP are partners in the Wheatland Fire Authority, a joint powers authority formed to provide fire protection and EMS related services to the City and District. Wheatland's station is currently only used for fire department purposes. The station is shared with PBFDP through the JPA. The new fire station is planned for joint use with the Wheatland Police Department. PBFDP shares Station 1 with organizations in need of meeting space, including Reclamation District 2103, Wheatland Water District, and the cub scouts. The District trains jointly with the City although there is no training facility presently.

²¹⁸ Yuba County is the holder of the vehicle insurance policy and therefore the legal owner of the vehicle; however, the agencies jointly applied for the grant funds.

LFPD's Station 2 was built by the District on property owned by Reclamation District 784 and leased to LFPD through a 99-year lease. The District leases space to the Yuba County Sheriff's Office in Station 3 for use as a substation. CHP has a substation at Station 1 through an informal arrangement between the two agencies. In addition, one apparatus bay in Station 3 is used to store the multi-jurisdictional Yuba County Mobile Incident Command Vehicle.

OPUD does not currently practice facility sharing, but plans to provide space for the Sheriff's Office for a law enforcement substation in the proposed replacement station.

SFPD invites other organizations to use its station as a meeting area. California Highway Patrol makes use of the station, in addition to the church restoration group, River Highlands CSD, 4-H, and the County for elections.

CALFIRE shares the Loma Rica station with LRBVCSD. LRBVCSD funded the office and two engine bays and CALFIRE funded two additional engine bays.

D10-HCSD practices facility sharing through the City of Marysville.

DOHFPD stores a self-contained breathing apparatus fill station for use by other districts. There are plans for the Sheriff's Department to have a substation at the new Station 1 once it is completed. FFPD leases space in Station 1 to the Yuba County Sheriff's Office.

OPPORTUNITIES

Marysville opens its training facilities to other jurisdictions upon request. Yuba College uses the facilities for fire academy classes. CALFIRE and the Yuba County Sheriff have also made use of the training room. Marysville FD is considering using Yuba County for dispatch services to enhance interoperability as all valley fire departments would then be dispatched by the same entity and mutual aid partners would have improved access to frequencies.

CCSD's station was designed to house a Yuba County Sheriff substation. The District is open to sharing with the Sheriff in the future.

In the future, D10-HCSD is in negotiations to house an additional station at Cordua Irrigation District facilities.

LFPD is interested in the development of a shared Fire and Police Academy training facility at Yuba College. LFPD plans to discuss the possibility of a substation at the new Station 2 with the Sheriff's Office.

PBFPD reported that it is considering a joint-use facility with Linda FPD in the proposed Woodbury development.

There is an opportunity to develop shared training facilities with neighboring jurisdictions. In addition to mandatory training standards of the California State Fire Marshall, the California EMS Authority and OSHA, there are numerous NFPA guidelines for training that include fire fighting in urban and wildland settings, fire safety, handling hazardous materials, and incident management.

Although the various fire and EMS providers often rely on colleges, the California Fire Academy, and other outside programs for basic training, each of the providers conducts training in-house and occasionally in conjunction with other agencies to meet the various requirements and guidelines. Few of the fire providers in Yuba maintain training staff and training facilities. As discussed in the section on “Infrastructure Needs and Deficiencies”, several jurisdictions reported deficiencies in or lack of training facilities.

Regionalized training and sharing of training facilities would be a more cost-effective approach to training. A regionalized approach to training would reduce costs for training staff due to duplication of effort in meeting numerous training requirements and guidelines and due to duplication of training facilities. A regionalized approach could be accomplished through contract service or JPA formation.

REGIONAL COLLABORATION

In addition to mutual and automatic aid agreements, regional collaboration efforts benefit participating agencies by pooling resources, minimizing costs and improving safety and efficiency.

The City of Wheatland and PBFDP collaborate extensively through WFA, a JPA that is essentially a functional consolidation of the two agencies’ fire services. Prior to JPA formation in 2006, the two agencies had boundary and service conflicts. Now they share financial and staffing resources which has proved to be cost-effective, according to WFA.

The most broad-based regional collaboration effort is the Yuba County Multi-Hazard Mitigation Plan—a countywide effort to assess the risk and cost of potential disasters and develop plans to mitigate the risk and/or impact of those disasters. Wheatland, Marysville, CCSD, D10-HCSD, DOHFPD, FFPD, LFPD, LRBVCSD, OPUD, PBFDP, and SFPD were contributors to the Multi-Hazard Mitigation Plan, and have supplied jurisdiction information and facility locations for use in the document. Participating agencies benefit from reduction of risk of a disaster and efficient and organized response to future disasters which will increase safety for responders.

CALFIRE, CCSD, DOHFPD, FFPD, LRBVCSD, and SFPD are stakeholders in the Yuba County Watershed Protection and Fire Safe Council, which strives to reduce the occurrence and impact of wildland fires. The Council provides public education on fire risks and mitigation measures, promotes fire-resistant structures and landscaping, sponsors fire safe zones around buildings, and manages fuel reduction projects.

In addition, CALFIRE, D10-HCSD, DOHFPD, FFPD, LRBVCSD, and SFPD are members of the Yuba County Rural Fire Joint Powers Agency, which developed and maintains the emergency communication system throughout the Yuba County foothills. All member agencies operate on the same frequency, allowing for improved communication and dispatching of automatic and mutual aid providers.

FINANCING

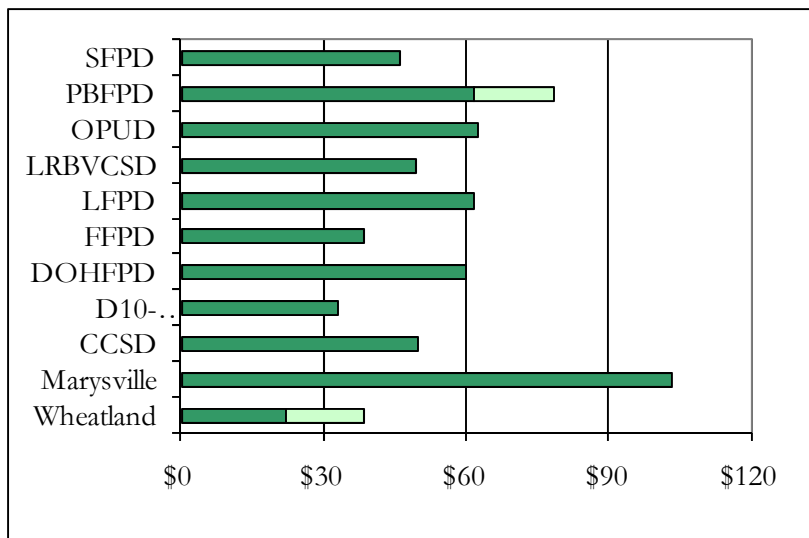
The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing constraints faced by fire service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

OPERATING COSTS

Operating expenditures per capita for each of the providers are shown in Figure 7-17.

The median California city spent \$116 per capita on fire operating expenditures; whereas, the median among neighboring cities was \$103 per capita.²¹⁹ Marysville’s costs are comparable to neighboring cities. Although an agency may have attained financing at urban levels by comparison with other urban providers, that does not necessarily mean that services are provided efficiently and effectively.

Figure 7-17: Fire Operating Expenditures per Capita, FY 05-06



Wheatland’s costs were relatively low compared to neighboring cities, because the City relies primarily on call firefighters and shares costs with PBFPD. Its per capita costs in FY 05-06 were comparable to those in Live Oak, which operates a mostly volunteer department. If the recent assessment were included (depicted in light green in Figure 7-17), Wheatland’s costs per capita are comparable to several of the rural fire districts.

Among the fire districts in Yuba County, the median operating cost per capita was \$50 in FY 05-06. If the recently imposed assessment were included, PBFPD’s operating costs are the highest on a per capita basis among the fire districts. D10-HCSD expenses per capita were the lowest in FY 05-06; however, its costs subsequently doubled in FY 06-07 when its contract service provider adjusted its fee to reflect past cost inflation. LFPD reported that it anticipates a significant increase in operating expenditures per capita from \$62 in FY 05-06 to almost \$86 per capita in FY 07-08.²²⁰

²¹⁹ Authors’ estimates based on FY 04-05 State Controllers Office data on fire operating costs among 13 neighboring cities: Chico, Paradise, Oroville, Gridley, Biggs, Roseville, Rocklin, Lincoln, Auburn, Grass Valley, Nevada City, Yuba City, and Live Oak.

²²⁰ Based on the District’s FY 07-08 operational budget.

FINANCING OPERATIONS

Fire service providers rely on a variety of revenue sources to fund fire department operating costs, primarily property taxes, benefit assessments, Proposition 172 funds and contributions from city general funds.

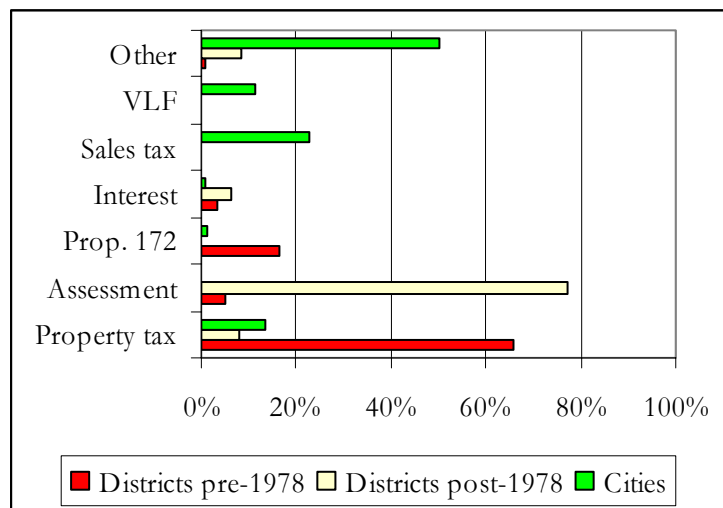
Fire funding sources differ markedly among older fire districts, more recently formed fire districts and cities. Among older fire districts formed before 1978 when property tax limits were imposed, property taxes and Proposition 172 funds are the primary sources of funding for operations. Among newer fire districts, assessments are the primary revenue source. Among cities, general fund financing sources—sales tax, vehicle license fees and property taxes—tend to be the primary sources of fire funding.

Figure 7-18: Funding Sources as Percent of Operating Revenues, FY 05-06

The most significant financing constraints for fire and EMS services are legal requirements that limit property taxes and require voter approval of new taxes and tax increases.

Property Taxes

Property taxes are the single most important source of revenues for fire districts in Yuba County, making up 54 percent of operating revenues on average. As a funding source, property taxes are constrained by statewide initiatives that have been passed by voters over the years.



Proposition 13, which California voters approved in 1978, limits the ad valorem property tax rate, limits growth of the assessed value of property, and requires voter approval of certain local taxes. Generally, this measure fixes the ad valorem tax at one percent of value, except for taxes to repay certain voter approved bonded indebtedness. In response to the adoption of Proposition 13, the Legislature enacted Assembly Bill 8 (AB 8) in 1979 to establish property tax allocation formulas. Generally, AB 8 allocates property tax revenue to the local agencies within each tax rate area based on the proportion each agency received during the three fiscal years preceding adoption of Proposition 13. This allocation formula benefits local agencies which had relatively high tax rates at the time Proposition 13 was enacted.

Proposition 98, which California voters approved in 1988, requires the State to maintain a minimum level of school funding. In 1992 and 1993, the Legislature began shifting billions of local property taxes to schools in response to State budget deficits. Local property taxes were diverted from local governments into the Educational Revenue Augmentation Fund (ERAF) and transferred to school districts and community college districts to reduce the amount paid by the State general fund. Local agencies throughout the State lost significant property tax revenue due to this shift.

Districts formed after 1978 do not receive substantial property tax.

Proposition 172

Proposition 172 was enacted to help offset property tax revenue losses of cities and counties that were shifted to the ERAF for schools in 1992. Proposition 172, enacted in 1993, provides the revenue of a half-cent sales tax to counties and cities for public safety purposes, including police, fire, district attorneys, corrections and lifeguards. Proposition 172 also requires cities and counties to continue providing public safety funding at or above the amount provided in FY 92-93.²²¹

Yuba County received \$2.8 million in Proposition 172 funds in FY 06-07, of which it shares 15 percent with fire districts that existed prior to 1978 (Proposition 13).²²² Fire districts in Yuba County that existed prior to 1978, are allocated a share of 15 percent of the total transferred to the County based on the relative number of emergency calls responded to by each district in the prior fiscal year. Revenues are allocated to cities based on their proportionate share of net property tax losses from ERAF. The City of Marysville received \$109,238 in Proposition 172 funds in FY 06-07, and the City of Wheatland received \$8,000 in funds.

Assessments

All of the fire providers, except the City of Marysville and LFPD, have imposed voter-approved special benefit assessments on parcels or dwelling units to fund services.

Table 7-19: Fire Assessments, FY 06-07

LRBVCS D has the highest assessment of \$0.06 per building square foot or \$120 for a 2,000-square foot home. CCSD has the lowest assessment of \$13 per home. The assessment was not structured to adjust automatically with inflation, and has lost spending power over the years.

The Wheatland Fire Authority (WFA) recently imposed an assessment of \$45 per home, after receiving approval from two-thirds of property owners in 2006. The WFA assessment applies to homes both in the City of Wheatland and PBFDP. It increases annually with inflation. The assessment yields \$100,000 in annual revenue, which has allowed Wheatland to increase its service level by hiring a full-time fire chief.

LFPD and OPUD receive annual assessment revenues of up to \$90 per home through county service areas (CSAs) from properties in new growth areas where development has occurred since 2004. In such areas, CSA assessments are imposed to fund fire protection, and a variety of other services, such as levee, street and park maintenance, and may be approved by a developer before homes are sold.

Agency	FY 06-07 ¹	Adjusted for inflation
Wheatland	\$45	X
Marysville	0	
CCSD	13	
D10-HCS D	55	X
DOHFPD	35	X
FFPD	64	X
LFPD	0	X
LRBVCS D	120	
OPUD	39	X
PBFDP	45	X
SFPD	NP	
Note: (1) Assessment calculated for a parcel with a 2,000 square foot home.		

²²¹ The maintenance of effort provision for local public safety spending requires cities and counties to fund public safety at the 1992-93 levels, adjusted annually by a cost-of-living factor commencing with the 1994-95 fiscal year.

²²² Yuba County Board of Supervisors, Resolution 1994-41.

Associated revenues are collected and disbursed by the County. LFPD has not imposed its own assessment, but OPUD assesses properties in the Olivehurst area for fire costs.

General Funds

Many cities finance fire and EMS services through general fund revenue, which includes property taxes, motor vehicle in-lieu funds, sales and use taxes, and franchise fees. The City of Marysville finances its entire fire budget through its general fund. Fire and EMS expenditures absorbed 16 percent of the City of Marysville’s general fund resources in FY 06-07. Before imposing an assessment in 2006, the City of Wheatland financed its \$85,000 share of the WFA budget with its general fund revenues.

Proposition 218, which California voters approved in 1996, requires voter- or property owner-approval of increased local taxes, assessments, and property-related fees. Majority voter approval is required for imposing or increasing general taxes such as business license or utility taxes. The requirement does not apply to user fees, development impact fees and Mello-Roos districts. The cities may impose a utility users tax or increase the transient occupancy tax or business license tax, subject to economic competition considerations and voter approval. Another financing opportunity is economic development, which enhances sales tax revenues.

CAPITAL FINANCING

Fire service providers rely primarily on development impact fees for financing new facilities. Other capital financing approaches include the use of reserve funds, grant-funded capital purchases (FFPD), and borrowing through bond markets (LFPD).

Development Impact Fees

The County, cities, special districts, school districts, and private utilities impose development impact fees on new construction for purposes of defraying the cost of putting in place public infrastructure and services to support new development.

Table 7-20: Fire Development Impact Fees

Development impact fees generally depend upon land use, fire flow to the structure and installation of sprinklers. For example, a residential structure in the PBFDP bounds served by adequate fire flow and installed with sprinklers would be charged \$0.26 per square foot. Based on a home size of 2,000 square feet, a new home in the District would pay approximately \$520 in fire mitigation fees. Of the agencies that collect development impact fees, FFPD collects the least,²²³ while Wheatland collects the most, as shown in Table 7-20.

Agency	FY 06-07 ¹
Wheatland	\$1,155
FFPD	280
DOHFPD	NP
LFPD	950
LRBVCS	1,000
OPUD	1,080
PBFDP	520
Note:	
(1) Assessment calculated for a parcel with a 2,000 square foot home with sprinklers.	

Marysville, CCSD, FFPD, D10-HCS and SFPD have not adopted development impact fees. To impose development impact

²²³ FFPD last updated its development impact fee in 1992. The District reported that it was in the process of updating the fee as of April 2008.

fees, a jurisdiction must justify the fees as an offset to the impact of future development on facilities. The fees must be committed within five years to the projects for which they were collected, and the city or county must keep separate funds for each development impact fee.

Yuba County has experienced significant growth in the last five years. As growth occurs there will be a greater demand placed on public infrastructure and services. In order to recover the costs associated with growing jurisdictions should consider imposing or updating development impact fees.

Table 7-21: California Fire Development Impact Fees, 2006

Of the seven jurisdictions that levy development impact fees, five have updated their fees since 2004. PBFPD and FFPD adopted the current fee schedules in 1992. PBFPD and FFPD reported that they are in the process of increasing these fees.

The fire development impact fees for jurisdictions throughout California in 2006 are shown in Table 7-21. Of the 39 jurisdictions identified, 17 levy a development impact fee specifically for fire services. The median development impact fee of the 17 cities shown is \$387, which is less than the fee levied by every Yuba fire agency.

County	Jurisdiction	DIF
El Dorado	El Dorado Co.	\$1,800
Orange	Brea	1,388
San Joaquin	Ripon	1,248
Santa Clara	Gilroy	1,240
Santa Barbara	Santa Maria	1,013
San Luis Obispo	Paso Robles	746
Sacramento	Elk Grove	462
San Bernadino	Rialto	390
San Joaquin	Lodi	387
Santa Barbara	Carpinteria	380
Alameda	Fremont	321
Fresno	Clovis	321
Solano	Vacaville	265
San Bernadino	Redlands	254
Ventura	Santa Paula	247
San Bernadino	Highland	165
Shasta	Redding	129

Source: Duncan Associates, 2006

FINANCIAL ABILITY

All providers’ financial ability to provide services is constrained by available revenues and legal limitations on revenue increases.

In rural districts, relatively low densities do not yield adequate revenues to transition from unstaffed to staffed stations. CCSD, DOHFPD and FFPD lack resources for paid staffing of their fire stations. Service levels are minimal.

In Wheatland, Plumas-Brophy and Smartville, fire service levels have been constrained by financing. Fire stations are not staffed in the evenings, and have been staffed by only one person in the daytime. A newly imposed assessment allowed WFA to double its paid staffing level in FY 07-08. Two staff are now responsible for manning three stations during daytime hours.

LFPD, OPUD and LRBVCSD have managed to finance fire stations that are manned on a 24-hour basis. Although service levels are higher than in other parts of the County, financing is not adequate to fund the urban service levels that may be expected by proposed and planned development.

Marysville is presently financing urban service levels, but needs to establish financing mechanisms to accommodate the growth it intends to attract to its primary SOI area.

GOVERNANCE ALTERNATIVES

This section discusses issues and problems with respect to the current organization of fire service in Yuba County and, in light of anticipated growth, with its future organization. It identifies alternatives to the current government structure of fire service providers, including annexation of undesignated areas to fire districts, alignment of PBFPD's bounds with Wheatland's future SOI, fire district consolidation, cons of SFPD, alignment of the FFPD, LFPD and OPUD bounds to optimal service areas, and formation of a JPA between OPUD, LFPD and WFA. Annexations to Wheatland were discussed in Chapter 4.

ANNEXATION OF UNDESIGNATED AREAS

There are five separate areas that are not within the bounds of any fire district, where property taxes are not presently allocated toward the costs of fire protection. Refer to Figure 7-2 at the beginning of this chapter for an illustration of the undesignated areas. Establishing logical boundaries for fire protection would enhance public safety by clearly establishing which first responder should be dispatched to such areas and by ensuring that a portion of property taxes paid in such areas is allocated to fire providers.

In the area west of the Goldfields, both LFPD and SFPD respond to service calls. LFPD typically arrives earlier than SFPD and would be the optimal service provider to the area. In addition, LFPD is the only provider to the undesignated area west of Beale along Erle Road. LFPD indicated that it is amenable to serving both areas.

Both OPUD and LFPD provide service to the area adjacent to SR 65 and south of Erle Road, just north of Bernice Ave. Both agencies indicated interest in annexing the area to their fire service areas. The OPUD station is located nearest to the undesignated area; however, access to the area is limited from the OPUD station due to the railroad tracks, which can only be crossed at two points at Erle or McGowan roads. LFPD reported that it can respond at the same time or before OPUD to the area. OPUD indicated that there may be up to a one-minute response delay to the area if a train is coming through, otherwise it can arrive at the same time as LFPD.

North of Englebright Lake, along the southern boundary of DOHFDP, there is a six square mile area that does not have a designated fire provider. The undesignated area lies between DOHFDP and SFPD. DOHFDP reported that it provides service to the territory and has easier access and shorter response times to the area than SFPD.

Just to the west of Collins Lake, between the DOHFDP and LRBVCSD service areas, there is an area that lacks a designated fire protection provider. This area includes a portion of Marysville Road at the intersection of Collins Lake Road, which is the primary access point to Collins Lake and the recreation area. DOHFDP maintains the nearest station to the area with the easiest access to provide fire services.

ANNEXATION TO FOOTHILL FPD

Annexation of the community of Clippermills in Butte County to Foothill FPD is an alternative.

Foothill FPD is currently providing service outside its bounds to the Clippermills community. The community was originally served by the Clippermills Volunteer Fire Department; however, the department disbanded in 2002 due to lack of volunteers. FFPD now leases the former Clippermills station (Station 2), and provides automatic aid to the community, which consists of approximately 200 to 250 parcels.²²⁴ The station is located on La Porte Road, which also passes through to the Strawberry Valley portion of the District. Hence, the station is also used to provide service within District bounds.

FFPD does not receive reimbursement for calls in Butte County. The District regularly arrives at service calls in the area before Butte County Fire Department and would like to be the primary dispatch to the Clippermills area.²²⁵ The District indicated that it anticipates that the Clippermills community would be willing to pay assessments to fund associated Foothill FPD costs, meaning that annexation could occur even if Butte County is unwilling to transfer associated property tax revenues to Foothill FPD.

DETACHMENT FROM PLUMAS-BROPHY FPD

Detachment of territory from Plumas-Brophy FPD is a governance option. Illogical and overlapping fire provider boundaries have evolved in this area in recent years, in part due to allocation of fire protection financial resources.

The District, which was formed in 1951, historically had a unique service area that did not overlap neighboring fire providers. Up until 2006, territory was regularly detached from the district when it was annexed to the City of Wheatland. The turning point in this practice arose when three sizeable annexations to the City of Wheatland were proposed. Ultimately, those were processed without detaching territory from the District, although the City retained primary responsibility for fire protection in the recently annexed areas.²²⁶ Just before the annexations were approved, the City and District formed WFA, a JPA for fire service. Under the new JPA, both jurisdictions benefit financially from their overlapping boundaries. The District receives a more favorable property tax allocation than Wheatland would receive if the area were detached from the District. Under the JPA, the District receives increased Prop. 172 funds, which are allocated to it based on all WFA service calls, including those outside its bounds. The City does not receive Proposition 172 funds under the County's agreement with the older fire districts, but due to the joint funding of WFA benefits nonetheless from the arrangement.

The City's existing SOI (i.e., probable future boundary) is substantially smaller than the Plumas-Brophy FPD boundary area. The City has proposed an SOI that would encompass much, but not all, of the Plumas-Brophy FPD area. Assuming that the City and County successfully negotiate appropriate financial terms, there would be no further need for overlapping, illogical fire provider boundaries in this area. As Wheatland urbanizes and annexes territory, it could then be detached from Plumas Brophy FPD. Aligning the Plumas Brophy FPD bounds with the City of Wheatland's

²²⁴ The cost to lease Station 2 is \$1.

²²⁵ Interview with Chief Cunningham, FFPD, October 11, 2007.

²²⁶ LAFCO Resolutions 2006-0013, 2006-0014, and 2006-0015.

long-term SOI would help ensure that PBFPD is not left with a small, inefficient boundary area after future urbanization of the area. The primary barrier to such detachments relates to fire financing mechanisms that currently flow through PBFPD; however, this issue may be resolved by the City and the County as they negotiate terms for a City of Wheatland SOI expansion.

The District's northwest boundary area historically covered rural lands that are adjacent to LFPD and OPUD. Recent urbanization in the Summerfield subdivision adjacent to OPUD was not detached from PBFPD in spite of being annexed in 2003 to OPUD, receiving fire protection service from OPUD, and paying fire assessments to OPUD.²²⁷ Property taxes in this area continue to be allocated to PBFPD. OPUD reported that it can respond more quickly to this area than PBFPD.

The northwestern portion of Plumas-Brophy FPD, which is outside the City's proposed SOI, contains several proposed residential developments and economic development sites. The affected developers and particularly future residents in this area are expected to prefer the response times and staffing resources offered by an established urban fire provider. These areas are located closer to Linda FPD and OPUD stations than to WFA stations. There is limited proposed development between Wheatland's current SOI and Erle Road, indicating that extension of urban fire service levels to this area is more likely to be achieved from Linda FPD or OPUD. In addition, the PBFPD boundary extends north to Erle Road, bisecting proposed urban developments. Although PBFPD has proposed to serve this area from a future joint use facility shared with Linda FPD, such an arrangement would not appear to promote operational efficiencies or accountability for community service needs.

SOUTH YUBA FIRE CONSOLIDATION

Consolidated service is an option for urbanized and urbanizing territory in the Brophy, Linda, Olivehurst and Plumas Lake areas.

The current organization of fire providers offers urban fire service levels in Marysville, hybrid urban-rural service levels in the urban pockets of Linda, Olivehurst, Plumas Lake and Wheatland and in the suburban Browns Valley and Smartville areas, and rural service levels in the foothill and agricultural communities. As southern Yuba County urbanizes in the coming years, new residents and businesses will expect urban fire service levels, specifically fire stations that are located within a five-minute drive of the urban portions of their service areas and staffed 24 hours daily by four or more personnel. Financing urban fire service levels will be a challenge, and will likely require new financing mechanisms. Smart growth, which involves development of areas adjacent to existing urban areas, would help in funding services by offering higher densities which, in turn, offer more efficient fire service areas and increased tax and assessment revenues.

Given the challenges that southern Yuba County will face in financing urban service levels, it is important to consider how fire district boundary changes or consolidation could ease service providers' transition during the coming years of growth. In particular, the present organization of Linda FPD, OPUD and Plumas-Brophy FPD is not well-oriented toward serving the area as it urbanizes in the future. The Linda FPD service area has evolved over the years to become an

²²⁷ LAFCO Resolution 2004-0032 and Agreement regarding provision of fire protection services by OPUD within boundaries of PBFPD, March 26, 2004.

inverted L-shaped area, which is not an efficient design for fire service provision. The OPUD fire service area is compact and urban, which makes it easy to serve, but the location of the OPUD service area contributes to the inefficiency of the Linda FPD service area. The Plumas-Brophy FPD service area may be logical for serving existing rural development; however, the mostly on-call district is not a logical service provider to new growth areas situated adjacent to Linda FPD and OPUD. Plumas-Brophy FPD extends so far to the north (on its west side) that it also contributes to the inefficiency of the Linda FPD service area.

As cities and counties experience increased growth and develop from agricultural to more urban territory, fire providers often choose to consolidate to provide more cost-effective service. Among other Central Valley counties, many have consolidated fire districts to some degree or are considering consolidation in the future.

Generally, consolidation of fire providers promotes efficiency, professionalism and public safety. The primary benefit of consolidation is economies of scale, which may be achieved in several areas. Larger fire providers can more efficiently coordinate deployment of fire personnel when multiple incidents occur simultaneously or large incidents occur, as they control staffing at a greater number of adjacent fire stations. Larger providers also can more easily afford expensive and evolving dispatch technologies; hence consolidation is often appealing to improve dispatch processes and to offer emergency medical dispatch (i.e., instructions to the 911 caller to assist a victim while paramedics are in transit to the scene). Combining space and administrative personnel may reduce overhead costs and more efficiently distribute facilities. This may apply to training and communication facilities, as well as fire stations. Newly consolidated districts reported observing cost savings from reduced management personnel and insurance costs.²²⁸ Combining resources may allow districts to sell surplus vehicles, reducing the overall age of fleet.

Consolidated service is an option for urbanizing territory west and north of the Wheatland SOI. Options for consolidation in the northern and southeast portions of the County are limited for several reasons.

- Wheatland anticipates growing to become a mid-sized city and wishes to continue providing direct fire service. PBFDP has already formed a JPA with the City for fire service.
- The City of Marysville is generally isolated from other providers by the levees that surround and protect the City. Access into or out of the City is limited to seven points along the levees, however the City is considering consolidation with the valley fire providers as a possible cost reduction strategy to fire service.
- The foothill fire providers have not indicated interest in consolidation. The northern area is inhibited by rough terrain and a lack of road access, which tends to define the boundaries between the districts. In addition, the northern territory of the County lacks adequate density to finance urban service levels. A majority of the districts rely on minimal benefit assessments and donations to provide services.

²²⁸ Marin LAFCO, 2004.

OPUD reported that it would consider a proposal for consolidation to enhance public safety should OPUD be able to retain its independent nature and accountability to constituents by overseeing the consolidation, and if it could ensure continued low ISO ratings and retention of firefighting resources for the Olivehurst area. The LFPD board has not formally considered consolidation, but reported many of the same concerns as OPUD. In addition, the District emphasized the need to ensure adequate funding for a consolidated fire service, due to the differences in property tax allocation among the jurisdictions. Specifically, LFPD would like to prevent the use of revenue attained within the District to provide a higher level of fire service in other areas.

Another option for consolidated fire services may be a county fire authority. The fire authority would be a dependent district of the County and governed by the board of supervisors. The new fire authority would benefit from management practices of an established agency, minimizing challenges during transition.

The extent of the services provided by the fire authority would be dependent on the needs of the member agencies. County fire authorities in some cases participate only in planning activities such as financing and development coordination, while others provide extensive services from fire protection to planning and inspections.

FINE-TUNING BOUNDARIES

Due to proximity, LFPD is called upon to provide automatic aid to PBFPD for the portion of SR 70 between McGowan Parkway and the Plumas-Arboga Overpass and a portion of Plumas-Arboga Road adjacent to district bounds. LFPD is interested in annexing these areas to district bounds. OPUD also indicated interest in serving the area, citing fast response times and easy access to the area.

OPUD reported that it is frequently called upon to provide service within the PBFPD boundaries, due to proximity to the area south of McGowan Parkway, east of Rancho Road and south along SR 65 to Forty Mile Road. OPUD has proposed annexing these areas to district bounds.

SMARTVILLE CONSOLIDATION

Smartville FPD is open to consolidation with other southern Yuba fire providers to achieve economies of scale. However, the Smartville area does not have adequate density to finance urban service levels, and is geographically separated from other southern Yuba fire providers by the Goldfields, Beale AFB and Spenceville Wildlife Recreation Area. Groundwater supplies in the Smartville area would not support growth at such a density for the area to be compatible with fire service providers in the valley. Unless surface water should become available to this area, it is unlikely to do so. Smartville FPD is the only service provider in the foothill areas to have been formed before Proposition 13 was adopted; as a result, the District enjoys a greater variety and nature of funding sources than neighboring foothill providers, all of which were formed in the 1980s. For these reasons, it is unlikely that Smartville FPD would consolidate in the foreseeable future with other fire providers.

SFPD response times are relatively long due to its large service area, low density and reliance on one station. Consolidation with urban providers is not an option, because the Smartville area does not have adequate density to finance urban service levels, and is geographically separated from other southern Yuba fire providers by the Goldfields and Beale AFB. However, consolidation of SFPD with other service providers in the Smartville area is an option.

The District indicated to LAFCO that it is open to considering consolidation with RHCSO after the wastewater plant failure and related problems are resolved. Obstacles to consolidation with RHCSO are not only RHCSO operational and accountability deficiencies but also incompatibilities between the RHCSO and SFPD service areas. The MSR identified operational deficiencies at Smartville Cemetery District as well. The Smartville area would benefit from a multi-purpose district providing water, wastewater, cemetery and fire services.

A government structure option is to create a new special district in the Smartville area to be responsible for a variety of services. Most likely, the successor would be structured as a community services district or a public utility district. A limited service SOI could be established to limit water and wastewater services to urban areas, and avoid growth-inducing effects outside planned development areas. Zones would be established so that certain costs would be paid by the beneficiaries of the particular services. This option is discussed further under water, wastewater and cemetery services, as a successor agency could take responsibility for these services as well. A professionally managed, accountable local agency serving the Smartville vicinity would be an improvement. Including fire service within its scope would help ensure good governance and accountability.

FORMATION OF A JPA

In lieu of, or as a step towards, a consolidated fire district, an option may be formation of a JPA between the valley fire agencies in areas of growth and potential growth. The benefits of a JPA may include greater coordination of responses, new stations, and staffing resources in the newly developing areas that are bisected by the agencies' boundaries. Such a JPA would likely involve the providers in the areas of greatest development in the County, including LFPD, OPUD, PBFPD and Wheatland (WFA).

8. LAW ENFORCEMENT

This chapter discusses the provision of police services in Yuba County by the State, County, cities, and federal agencies.²²⁹ The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing.

PROVIDER OVERVIEW

This section provides an overview of police services and providers in Yuba County and explains how the various police services are delivered and shared by the agencies.

POLICE SERVICES

Although patrol is the most visible service, law enforcement agencies provide a host of other public safety services including dispatch, crime lab, bomb squad, SWAT, canine, search and rescue, temporary and long-term holding, training, animal shelter, and unique patrol services.

Patrol services are provided by officers traveling by vehicle, bicycle, horse, boat, helicopter and on foot.

Dispatch services include receiving 911 calls and notifying response units through emergency communication systems. Police dispatchers typically answer 911 calls related to both police and fire emergencies. For fire and medical emergencies, some police dispatchers may directly perform the dispatching while others may route calls to a dispatch center specialized in handling fire and medical emergencies.

Crime laboratories provide analysis of latent fingerprints, questioned documents, firearms, controlled substances, toxicology, trace evidence, and DNA, and may provide crime scene evidence-gathering services. While some crime laboratories provide all of these services, other laboratories may provide only limited, frequently-used services such as latent fingerprints analysis and photographic work.

Bomb squad services typically are provided by explosives experts, bomb-sniffing dogs and their handlers. Experts are needed to identify and defuse explosives with the assistance of dogs trained to detect and locate different types of explosives.

Special weapons and tactics (SWAT) services are special response teams that handle complex, high-risk crimes and confrontations. SWAT teams provide not only traditional counter-sniper services, but also respond to hostage taking, barricaded suspects, and terrorist acts. SWAT teams may also serve high-risk warrants and protect dignitaries. SWAT team members are typically trained in special weapons as well as verbal tactics. Trained hostage negotiators are frequently an integral component of SWAT teams.

²²⁹ The term “police” is used for the sake of brevity to refer to services provided by municipal law enforcement agencies, including police departments as well as the County Sheriff.

Canine units may be specially oriented toward drug detection, bomb detection, finding missing persons, or protecting police officers.

Search and rescue services involve finding people who may be missing, lost, buried by debris, or trapped in dangerous situations on trails or cliffs. Search and rescue teams are typically coordinated by law enforcement agencies in collaboration with fire departments.

Temporary holding services involve pre-arraignment incarceration of arrestees, and typically involve jailing for less than 72 hours. Long-term holding services involve incarceration of arraigned suspects. Most law enforcement agencies have some type of temporary holding facilities, but few have long-term facilities.

Animal control services are often provided by law enforcement agencies, and involve capturing, sheltering and disposing of lost animals.

SERVICE PROVIDERS

The law enforcement service configuration within Yuba County is shown in Table 8-1. Refer to Figure 7-2, in Chapter 7 for a map of the providers’ service areas and facility locations.

Table 8-1: Police Service Matrix

City of Marysville

The Marysville Police Department (MPD) is the primary provider of police services within the City’s bounds. MPD provides law enforcement in the form of uniformed patrol and investigative services, canine services, traffic and parking enforcement, crime prevention, animal control services, dispatch, police support on the high school campus, and permit regulation for taxis, burglar alarms and massage therapists. MPD relies on the Yuba County Sheriff for temporary and long-term holding facilities, animal holding, and search and rescue services.

	Marysville	Wheatland	Unincorporated
Patrol	Marysville	Wheatland	Sheriff
Dispatch	Marysville	Sheriff	Sheriff
Crime Lab	DOJ	DOJ	DOJ
SWAT ¹	Metro SWAT	Metro SWAT	Sheriff
Bomb Squad ²	Beale AFB	Beale AFB	Beale AFB
Canine	Marysville	Sheriff	Sheriff
Search & Rescue	Sheriff	Sheriff	Sheriff
Temporary Holding	Sheriff	Sheriff	Sheriff
Long-Term Holding	Sheriff	Sheriff	Sheriff
Training	Yuba College	Yuba College	Yuba College
Animal Shelter	Sheriff	Sheriff	Sheriff

Notes:
 (1) The Metro SWAT team is comprised of MPD and the Yuba City Police Department.
 (2) Yuba County Sheriff reported that Beale AFB provides ordinance disposal but may not render civilian ordinances safe unless it poses an imminent threat. Sacramento County Sheriff provided bomb disposal service for the most recent incident in the County. Placer and Butte County Sheriff Departments also have bomb disposal units

City of Wheatland

The Wheatland Police Department (WPD) is the primary provider of police services within the City’s bounds. The Wheatland PD provides uniformed patrol, investigative services, traffic enforcement, special patrol services for school and public events, select animal control services, and administrative services. Wheatland PD relies on Yuba County for temporary and long-term holding facilities, dispatch, search and rescue, animal shelter facilities, animal control services, and canine services.

Yuba County Sheriff's Department

The Yuba County Sheriff's Department (YCSD) provides police protection services, including law enforcement (traffic enforcement, criminal investigations, marine enforcement, narcotics enforcement), search and rescue, crisis negotiation, emergency dispatch, temporary and long-term holding, and animal care services in the unincorporated areas of the County. The Department provides more specialized services as well, including a canine unit and various volunteer programs. In addition, YCSD provides support to other public safety agencies by providing dispatching services free of charge to valley fire districts and to WPD for the minimal charge of \$500 a month. YCSD provides animal control services within Wheatland City bounds in exchange for licensing fees. Countywide services provided by the Sheriff, but not included in the scope of the MSR project, include corrections, civil (i.e., subpoenas and evictions), court bailiff and coroner duties.

California Highway Patrol

CHP provides traffic control, investigation, and law enforcement related to vehicles on state highways, freeways and unincorporated roads. The CHP has primary jurisdiction on roads used for hazardous material transport.

County Service Area 70

County Service Area 70 is a dependent district governed by the Yuba County Board of Supervisors. Its purpose is to provide a financing mechanism for supplemental law enforcement services through assessments on developed property. This CSA is administered by the Yuba County Sheriff's Office and includes the entire unincorporated area; however, only new subdivisions completed since the formation of the CSA in the southwest portion of the County were being assessed as of April 2008.

Beale AFB

Beale AFB directly provides police protection and traffic enforcement on the base. Like other air force facilities, police protection is provided by the Air Force Security Forces. The 9th Security Forces Squadron maintains base security by providing weapons system security, air base defense, and antiterrorism defense. The squadron also provides professional police services for base residents and traffic control services for 17,000 registered vehicles.²³⁰ Military working dog teams are trained and certified to detect illicit drugs and explosives. Base personnel provide explosives assistance off of the Base throughout the County. The Base does not provide other law enforcement services outside of the Base territory.

SERVICE DEMAND

This section provides indicators of service demand such as crimes, arrests and calls for service.

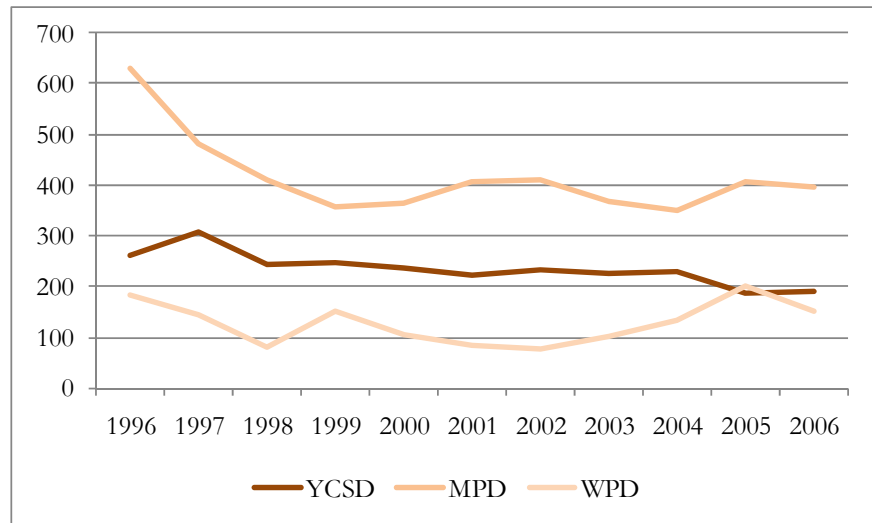
²³⁰ Beale Air Force Base, "9th Security Forces Squadron Factsheet," 2007.

CRIME LEVELS

The Uniform Crime Reporting (UCR) Program provides nationally standardized criminal statistics for use in law enforcement. In California, this program is administered by the Department of Justice (DOJ). Reported crimes are classified by UCR definitions designed to eliminate differences among the various service providers. The crimes, selected because of “seriousness, frequency of occurrence, and the likelihood of being reported to the police,” are homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft over \$400, motor vehicle theft, and arson. DOJ categorizes these crimes as either violent (homicide, forcible rape, aggravated assault, and robbery) or property (burglary, motor vehicle theft, and larceny-theft over \$400) crimes.²³¹

Figure 8-2: Crime Rate (per 10,000 residents), 1996-2006

The crime rate reflects the ratio of violent and serious property crimes per capita, and is expressed as crimes per 10,000 population. Crime levels for MPD, WPD and YCSD have shown differing patterns over the last 10 years, as can be seen in Figure 8-2. By comparison, the statewide crime rate was 282 in 2006, having declined significantly in the 1990s and increased somewhat during the 2000s.



Similar to the statewide trend, Marysville experienced a significant decline in crime between 1996 and 1999, from 632 crimes per 10,000 residents to 355. Since then, crime has increased to 397 crimes per 10,000 residents in 2006.

Wheatland’s recent growth has strongly influenced its crime rate. Residents increased by approximately 50 percent, between 2002 and 2005, to 3,466 people; similarly, crime grew significantly between 2004 and 2005, from 135 to 199 crimes per 10,000 residents. However, in 2006, the City experienced a decline in the crime rate to 152.

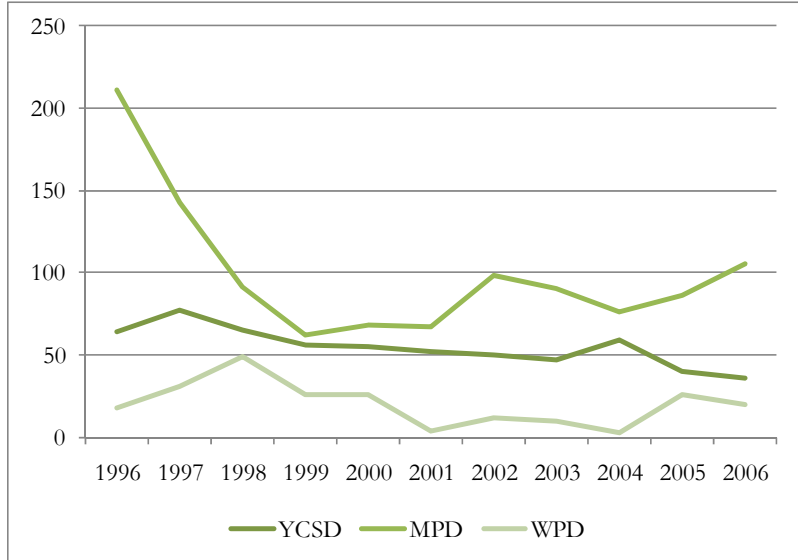
Crime rates have generally fallen in the unincorporated areas of Yuba County. The aggregated property and violent crime rate per 10,000 residents decreased from 307 in 1997 to 187 in 2006. In 2005, the County aggregated crime rate dipped below the Wheatland rate for the first time in 10 years.

²³¹ Criminal Justice Statistics Center, 2004, p. 2.

Until recently, Yuba County had a higher overall serious crime rate than neighboring Butte, Nevada and Sutter counties. In 2005, Yuba’s crime rate dropped and is now comparable with Butte and Sutter counties.

Figure 8-3: Violent Crime Rate (per 10,000 residents), 1996-2006

Violent crimes are more prevalent in Marysville, as shown in Figure 8-3. Since 1996, Marysville has consistently had a higher violent crime rate than the remainder of the County; although, similar to the aggregated crime rate discussed previously, the City’s violent crime rate has declined significantly between 1996 and 1999, and was 106 violent crimes per 10,000 residents in 2006.



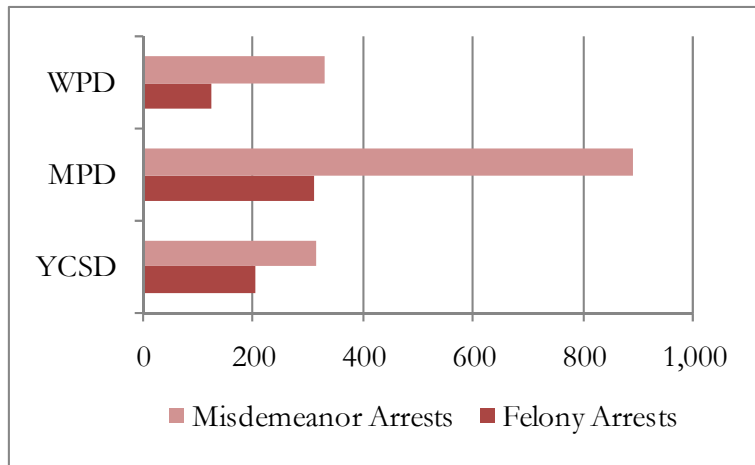
Certain types of crimes are more prevalent in the unincorporated areas, such as arson. The rate of arson in the unincorporated areas has been continually higher when compared to the two cities between 1996 and 2006. Two arsons have occurred in Wheatland since 1996; while the County has experienced between 18 and 30 offenses every year. Marysville has had zero to five arsons per year during that same time period.

The rate of arson in the unincorporated areas has been continually higher when compared to the two cities between 1996 and 2006. Two arsons have occurred in Wheatland since 1996; while the County has experienced between 18 and 30 offenses every year. Marysville has had zero to five arsons per year during that same time period.

ARRESTS

Figure 8-4: Arrest Rates (per 10,000 residents), 2006

Misdemeanor and felony arrests play a major role in law enforcement and may be an indicator of police workload. While the number of arrests will be dependent on the service level provided by the agency, the number of arrests also indicates the rate of serious crimes within a jurisdiction and the need for law enforcement services.

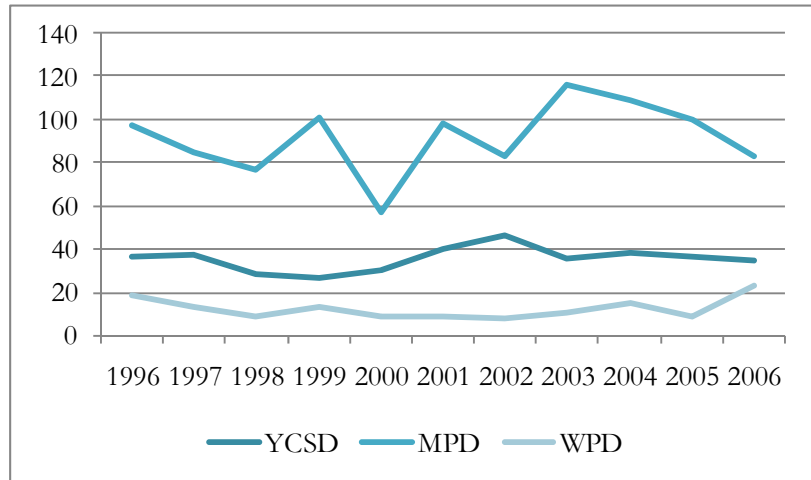


Between 1996 and 2006, arrest rates generally increased by WPD and YCSA. During the same time period, arrest rates by MPD have slightly declined. As seen in Figure 8-4, each of the agencies has significantly more misdemeanor arrests than felony arrests. The arrest rates are similar to the crime rate discussed previously. MPD has the highest crime rate, and correspondingly, the highest rate of misdemeanor (889) and felony (312) arrests per 10,000 residents. However, contrary to the crime

rates, WPD has a higher misdemeanor arrest rate than YCSD. YCSD historically had a higher misdemeanor arrest rate than WPD until 2006, when WPD surpassed YCSD.

Figure 8-5: Drug-related Felony Arrest Rates (per 10,000 residents), 1996-2006

Methamphetamine production and sales and more recently heroin sales are concerns throughout Yuba County.²³² Both MPD and YCSD are members of Net-5, a task force dedicated to enhanced drug enforcement in the Yuba-Sutter area. Drug-related felony arrest rates are relatively higher by these two agencies in comparison to Wheatland, as shown in Figure 8-5.



CALLS FOR SERVICE

The police workload involves responding to 911 calls, burglar alarms and non-emergency calls, in addition to patrol activities. Most service calls are not emergency responses, and most do not involve a crime.

Table 8-6: Police Calls for Service (per 1,000 residents), 2006

Service calls reflect a community’s need for emergency and non-emergency services. 911 calls from land lines in Wheatland and unincorporated areas are routed to YCSD, while calls from cellular phones are initially routed to the CHP then transferred to the Sheriff if required. Once the Sheriff determines a call requires police response, it directly dispatches YCSD or WPD personnel. All 911 calls from landlines and most cellular phones within Marysville are routed directly to MPD dispatch.

	Total Calls
MPD	1,496
WPD	761
YCSD	613

MPD calls for service between 2004 and 2005 increased from 17,412 to 20,132. However, in 2006, the number of calls for service to MPD declined by over five percent from 2005—indicating a general decline in demand for service. MPD has a significantly higher rate of service calls of 1,496 calls per 1,000 residents by comparison with WPD and YCSD.

The City of Wheatland has experienced recent demographic and economic growth; consequently, the police department faced an increasing number of service calls between 2000 and 2006, from 522 to 761 calls per 1,000 residents. WPD did not provide a breakdown of 911 and non-emergency service calls received.

²³² Young, “Heroin Popularity Shooting up in Y-S Area,” March, 26, 2008.

In 2006, YCSD received 32,202 service calls, representing 629 calls per 1,000 residents. Non-emergencies accounted for two-thirds of calls, while 911 emergency calls made from land lines accounted for almost one-third of demand.²³³

Demand management strategies including false alarm fees, 911 call response fees, and public outreach could be used to reduce the number of unnecessary service calls and related costs.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

In the context of police service, infrastructure needs signify facilities that do not provide adequate capacity to accommodate current or projected demand for service for the region as a whole or for the jurisdictions within the region. The police departments provided the facility age and an assessment of each facility's condition and deficiencies. The facility locations and condition are shown in Table 8-7.

Table 8-7: Law Enforcement Facilities

Station	Location	Condition	Built/Acquired	Marked Vehicles
City of Marysville				
Marysville Police Station	316 6th St.	Fair	1940s	10
City of Wheatland				
Wheatland Police Station	413 Second St	Poor	1980	5
Yuba County Sheriff's Department				
Yuba County Courthouse Sheriff's Department	215 5th St.	Good	1964	78
West Linda Substation	Feather River Blvd.	Good	NP	
Plumas Lake Substation	1765 River Oaks Blvd.	Excellent	2007	
Brownsville Substation	16796 Willow Glen Rd.	Good	1988	
District 10 Substation	Woodruff Ln.	Good	NP	
Animal Care Services Office	5245 Feather River Blvd.	Excellent	2005	

City of Marysville

MPD operates out of the City Hall located downtown on Sixth Street. The station was built in the 1930s as part of a federal project and was dedicated in 1939. The station originally housed jail facilities, which were converted to office space in the 1960's. There have been no other major upgrades or renovations. The station is in fair condition and requires new carpeting, paint and bullet proof glass. MPD identified a need for additional space for all staff areas and locker rooms. There are no plans for significant upgrades or expansions in the City's CIP planning horizon.

Vehicles used to provide police services include a pick-up truck, 12 Crown Victoria patrol cars, two watch commander vehicles, five unmarked cars, two motorcycles, and the Yuba County Command Post. Due to budgeting constraints, MPD purchased used patrol cars from CHP. Each vehicle is equipped with a removable laptop for officers to write reports and download at the headquarters upon return to the station. MPD reported a need to replace all 12 patrol vehicles, all of which have in excess of 100,000 miles.

²³³ The County does not include calls from cellular phones in its number of service calls, as they are initially answered by CHP.

City of Wheatland

WPD provides service from a single facility located downtown on Second Street. The station is comprised of two trailers—one used for administration and the other for storage purposes. The administration trailer is a double-wide trailer that was installed in 1983 as a temporary facility. The second trailer is used for storage purposes, but is now full. In FY 07-08, the interior of the station was repainted, and new carpet and lockers installed. The City has a regular maintenance with an outside contractor. The City reported that the station is in fair condition and did not identify any current major infrastructure needs.²³⁴ The current facility will fail to meet community needs sometime between 2012 and 2015, according to the City.

The General Plan identifies that this facility is inadequate for future needs. Financing constraints have prevented the building of a new facility. In addition, the police station location is too small to accommodate construction of a new facility.

The Master Facilities Plan outlines plans for a 17,600 square foot station that will provide space for 44 law enforcement officers. The facility will include space for administration, patrol, investigation, records, traffic control, analytical and support staff, evidence storage, report writing, training, meetings, lockers, and showers. The station will likely be near the current station, although a site has not been identified. The total expected capital construction cost is \$8.4 million. The City has not yet begun construction, site acquisition, or developed a timeline for the new facility.

Yuba County Sheriff's Department

Sheriff facilities used to provide police services include the Yuba County Courthouse Sheriff's Office (which houses the Department headquarters, administration offices, dispatch, jail, and coroner office), four substations and the animal care services office. All personnel work out of the headquarters. Community substations are used by staff to take breaks and write reports and promote accessibility of the Sheriff's Office. Some substations are used for equipment storage.

A new animal care services office was completed in 2005 in west Linda which replaced a 50-year old building. The new facilities offer 12 quarantine kennels and 24 general population kennels for dogs, four horse corrals that may also be used for other livestock, and 67 cages for cats and small dogs.

Vehicles used to provide police services, include 78 patrol cars, three patrol boats, four quad runners, and the Yuba County Command Post. Patrol cars were recently equipped with Mobile Data Browsers (MDBs), which allows officers to send criminal reports electronically and access the County network, California Law Enforcement Telecommunication System (CLETS) information and mapping software. In addition, the patrol vehicles have been outfitted with GPS locators, which allow dispatchers and other in-field deputies to know where vehicles are located.

Infrastructure needs identified by the Sheriff's Office include a new station headquarters. In 2004, the Department recognized that the current facility would not meet the County's long-term projected growth trends and started reviewing expansion options. The Department is evaluating the

²³⁴ Interview with Mike McCrary, Police Chief, 5/20/08.

feasibility of building a new facility but has not yet brought forward a proposal for Board consideration.

SERVICE ADEQUACY

STANDARDS

The Commission on Accreditation for Law Enforcement Agencies (CALEA) is a national organization that functions as an independent accrediting authority. Law enforcement agencies may voluntarily choose to apply for CALEA accreditation. CALEA offers an accreditation program as well as a law enforcement recognition program in which the agency is required to meet a more modest list of standards. CALEA law enforcement accreditation does not require the law enforcement agency to meet specific benchmarks in terms of response time, staffing levels or crime clearance rates. CALEA accreditation requires the police service provider to pass inspection and to meet dozens of requirements such as annual documented performance evaluation of each employee, investigation of all complaints against the agency and its employees, and annual review of allocation and distribution of personnel. None of the service providers in the County are accredited by CALEA.

The California Peace Officers Association (CPOA) has developed sample law enforcement agency policies on use of force, use of safety belts, review of complaints about personnel, fitness for duty evaluations, and law enforcement values. For example, the sample policy on conducting reviews states, “it should be standard practice for all law enforcement agencies to conduct comprehensive and thorough investigations into any allegation of misconduct or substandard service, whether such allegations are from citizen complaints or internally generated.” Hence, policies relating to ethics and evaluation standards are readily available to law enforcement agencies.

The law enforcement agencies in Yuba investigate all complaints, maintain use of force and seat belt policies, and conduct fitness for duty evaluations. Hence, the MPD, WPD and YCSD abide by CPOA standards.

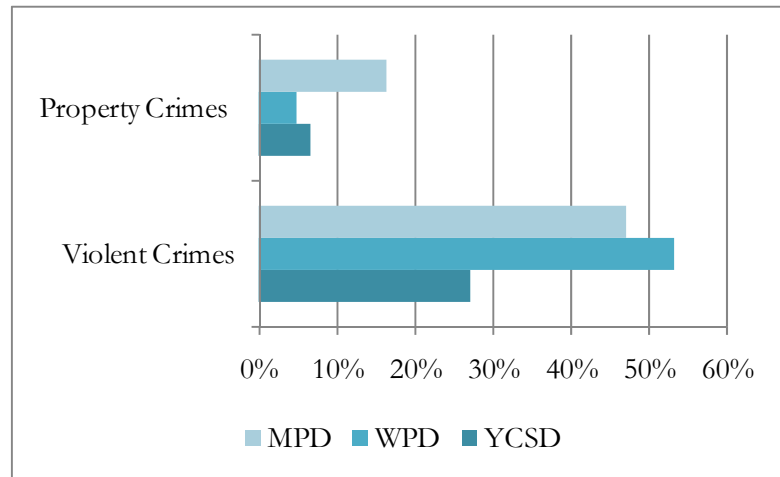
CRIME CLEARANCE RATES

The effectiveness of a law enforcement agency can be gauged by many factors, including crime clearance rates or the portion of crimes that are solved. There are no standards or guidelines on the proportion of crimes that should be cleared.

Cleared crimes refer to offenses for which at least one person was arrested, charged with the offense, and turned over to the appropriate court for prosecution. A crime is also considered cleared by exceptional means if the offender dies, the victim refuses to cooperate or extradition is denied.

Figure 8-8: Violent and Property Crime Clearance Rates, 2000-6

Figure 8-8 depicts the clearance rates of all violent and property offenses, which is calculated as the average rate between 2000 and 2006. Larceny-theft over \$400 was recently added to the property crime category in California, and clearance rates by value are not yet available. As a result, all larceny-thefts are included in the property crime clearance rates shown.



MPD has a clearance rate of 16 percent of property crimes, which is the highest among the three providers. Both WPD and YCSD clear less than 10 percent of property crimes. WPD has a relatively high clearance rate (53 percent) of violent crimes, compared to MPD (47 percent) and YCSD (27 percent). By comparison, sheriff departments in neighboring counties (Butte, Nevada, Sacramento, and Sutter) cleared between 38 and 57 percent of violent crimes and five and 10 percent of property crimes. Since 2006, YCSD has hired two additional detectives, for a total of eight detectives, and anticipates that clearance rates will improve as a result of these additional resources.

RESPONSE TIMES

Although police response times for serious crimes in progress are an important indicator of service adequacy, there are not clear standards as to what that response time should be. Police response times were traditionally used to measure effectiveness. However, more recent research indicates that response time does not have a significant effect on crime-solving, because most crimes are “cold” crimes and victims do not tend to call police immediately after the crime is committed. The modern approach to response time—differential response—is to ensure quick response to serious crimes (Priority 1) in progress, when there are opportunities to save a victim and/or to apprehend the criminal, and to inform lower-priority callers (Priority 2 through 6) that response time may be lengthy. In 2006, the Yuba County Sheriff’s Department defined Priority 1 incidents as those calls which 1) are an immediate threat to life, 2) a violent criminal act is in progress or just occurred and there is a likelihood of suspect apprehension, 3) suspects are still in the area or have just left the scene, 4) potential violence or imminent danger exists, or 5) a citizen’s arrest has occurred and the suspect is resisting. Experiments indicate that differential response leads to both citizen and officer satisfaction.²³⁵ Response times are dependent on the agency’s staffing level and size of the jurisdiction served.

MPD had an average response time of four minutes and 40 seconds to all service calls in 2006. MPD was unable to provide the response times for Priority 1 calls separately.

²³⁵ Walker and Katz, 2002.

WPD's average response time to Priority 1 calls, as defined by YCSD, was three minutes and 36 seconds in 2006. The response time is particularly fast due to the small size of the City; however, response times can be affected by traffic congestion on SR 65.

YCSD reported an average Priority 1 response time of eight minutes and 59 seconds countywide. The agency noted that the dispatcher has not been able to override the coding for call priority ratings until recently, and calls that may allow delayed responses are included in the Priority 1 response times, which may result in an inflated average response time.

STAFFING

The number of sworn officers per capita is a traditional indicator of service level. There are no established State or national standards for police staffing levels. The average California city has 1.5 paid sworn officers per 1,000 residents.²³⁶

MPD services are provided by a full-time chief, one captain, five sergeants, 15 full-time police officers, 20 reserves, 14 non-sworn employees and 13 volunteers. With this staffing level, the Department provides 24-hour services. There are on average three full-time officers on duty for 12-hour shifts at any given time. Law enforcement services are provided by sworn officers who patrol two beats (east and west) around the City on an ongoing basis. Reserves provide volunteer on-call support, usually covering about 20 percent of all routine beat assignments. MPD had a ratio of 3.5 sworn staff (full-time officers and reserves) per 1,000 residents, which was the highest ratio of sworn staff among the three providers.

WPD sworn personnel consists of a full-time chief, and seven full-time police officers. The City did not have reserve officers, as of May 2008. There were three unbudgeted reserve positions in FY 07-08. With this staffing level the Department is able to provide 24-hour services to the City. At all times, there is one full-time officer on duty for 10 to 12 hour shifts. WPD had a ratio of just over two sworn staff (full-time officers) per 1,000 people in 2008.

YCSD has 185 total staff with 72 sworn officers and 20 reserves. Law enforcement services are provided by deputy sheriffs who patrol four beats around the County on an ongoing basis. Approximately 52 deputies are assigned to the four beats, with seven deputies on-duty at any given time. Reserve officers provide additional on-call support to patrol units and other operations, and are compensated at minimum wage. The Department can also rely on the Sheriff's Posse—a group of citizen volunteers—for help in search and rescue missions. In 2007, the sworn staff ratio per resident countywide was 1.8 sworn officers and reserves per 1,000 residents.

WPD and YCSD reported staffing challenges, particularly due to lack of funding and growth and development leading to increased demand. At build-out, it is projected that Wheatland will need an additional 39 officers to maintain the same response capabilities that are provided now.

Through the CSA 70 financing mechanism, the County is funding additional staff in the areas with increased demand—primarily in the southwest area of the County. In the first fiscal year, the

²³⁶ Authors' calculations based on FY 03-04 police staffing levels reported by cities to the State Controller's Office and population estimates from the California Department of Finance.

County was able to partially fund one additional officer. CSA 70 is discussed further in the Financing section.

TRAINING

The California Commission on Peace Officer Standards and Training (POST) has developed standards for the testing and selection of police officer applicants as well as the training of police officers, dispatchers and detectives. All three jurisdictions reported meeting POST standards. All of the providers require POST academy training prior to the date of hire.

MPD staff attends various POST courses covering topics such as field training, interview and interrogation, instructional technology, firearms and defensive tactics, and assertive supervision. Staff attended a total of 2,224 hours of POST courses in 2006—averaging 52 training hours per employee.

WPD provides limited training for officers including the initial field training program, roll call and briefing training. In addition, the officers participate in the State POST training program.

YCSD provides regular training classes to all sworn officers on topics including firearms, CLETS and chemical agents, as well as others. New deputies are assigned to the Field Training Program for 16 weeks of training in addition to the 644 hours received at an academy. YCSD has also provided training to WPD, in the past, in firearms, tasers, defensive tactics, batons and CLETS at no expense to the City. Wheatland reported that it was collaborating with Marysville PD on range training events.

MANAGEMENT

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, and conduct advance planning for future growth.

Table 8-9: Police Agency Management Practices

An evaluation of the adequacy of management practices is shown in Table 8-9. The first four indicators are self-explanatory. Adequate evaluation of rates and fees means updating assessments and development impact fees with reasonable frequency. Adequate capital planning would involve a multi-year capital improvement plan (or comparable planning effort) for capital replacement and, if relevant, expansion. Advance growth planning is adequate when it discloses existing capacity and anticipated needs throughout the existing service area and SOI.

All three agencies are professionally managed and generally follow best management practices. Marysville

	Wheatland	Marysville	Yuba County
Evaluate employees annually	A	A	A
Prepare timely budget	A	A	A
Periodic financial audits	A	A	A
Current financial records	A	A	A
Evaluate rates	A	I	A
Capital planning	I	A	I
Advance growth planning	A	N	A
Note: A = Practiced adequately, I= Practiced but improvement needed, N= Not practiced			

has no assessments and development impact fees, and consequently, has not evaluated or updated its rates. Both Wheatland and Yuba County lack formal capital improvement plans; although, capital improvement needs are addressed in many of the master plan documents, in the development impact fee studies and on an annual basis in the budgets. Wheatland recently updated its general plan which plans for the western portion of the City's SOI. The County is in the process of updating its general plan, which is anticipated to include comprehensive growth planning for the County. Marysville has not adopted a plan for the area north of the City limits within its SOI.

LOCAL ACCOUNTABILITY AND GOVERNANCE

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency's activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 8-10.

Table 8-10: Police Agency Accountability and Governance Measures

All agencies hold open elections for their governing bodies, prepare and post meeting agendas and minutes, and have accessible staff and elected officials. The two cities and the County most recently had contested elections in 2006.

All agencies prepare and post meeting agendas and make minutes available as required. None of the agencies have made efforts to broadcast meetings on the web. All three of the agencies maintain websites where public documents are posted. Additional outreach efforts include newsletters and press releases to the local newspaper by Wheatland and Marysville. For specifics on the governing body, constituent outreach efforts and public involvement, refer to the agency's respective chapter in Appendix A.

	Wheatland	Marysville	Yuba County
Contested election since 1994	✓	✓	✓
Constituent outreach activities	✓	✓	✓
MSR Disclosure	✓	✓	✓
Note: ✓ = Occurred or adequately practiced, × = Did not occur or not practiced			

The police service providers disclosed the majority of information that was requested by LAFCO relating to law enforcement service. With few exceptions, Marysville, Wheatland and the County responded fully to LAFCO's questionnaire about their police services. All agencies provided information on calls for service, response times, arrests, service complaints, staffing, costs, facilities, growth, service challenges, and regional collaboration. MPD was not able to provide a breakdown of the response times by priority type. WPD did not provide a breakdown of the type of service calls received. Each of the agencies demonstrated accountability in its disclosure of information and cooperation with LAFCO.

SHARED FACILITIES

FACILITY SHARING STATUS

The facility which houses the MPD station is also used by the City public works and planning departments. The station is shared with the Parent Exchange Network, which uses the facility as a safe place to exchange custody of children. The station is open for meetings of the Yuba County parole and probation department and other regional task forces.

WPD does not practice facility sharing with other agencies or organizations at its current station.

YCSO is currently sharing its headquarters with the County Superior Court, the District Attorney's Office and the Probation Department. MPD and WPD rely on the County for temporary and long-term holding facilities. In addition, WPD makes use of the County's subsidized dispatch services and animal shelter for minimal compensation, as well as the YCSO firing range free of charge. YCSO has substations in the Linda FPD Plumas Lake and FFPD Brownsville fire stations, and shares the District 10 Substation with CHP.

Every law enforcement agency is a co-owner of the Yuba County Mobile Incident Command Vehicle in conjunction with the County and the Cities of Wheatland and Marysville, through their participation in the Yuba County Fire Chiefs Association.²³⁷ The command vehicle is a mobile command post, communications/dispatch center and emergency operations center for large emergency events. The vehicle was purchased in 2005 through a multi-agency California Homeland Security grant. The participating agencies enter into an annual memorandum of understanding to provide funds for maintenance of the vehicle.

OPPORTUNITIES

The police departments identified further opportunities for facility sharing. YCSO is considering additional substations in a community center in Dobbins-Oregon House. WPD hopes to provide office space in the proposed headquarters for county, state and federal agencies that serve the area, such as YCSO and the Probation Department. MPD did not identify other opportunities for facility sharing.

REGIONAL COLLABORATION

The law enforcement agencies in the County are collaborating in a number of areas through contract service arrangements, mutual aid, JPAs, and regional task forces. The departments cited these regional collaboration efforts as offering services that they could not otherwise afford and as examples of management efficiencies.

MPD reported that officers participate in a number of regional task forces, which benefit the City by providing additional special enforcement support when needed, including the Narcotic

²³⁷ Yuba County is the holder of the vehicle insurance policy and therefore the legal owner of the vehicle; however, the agencies jointly applied for the grant funds.

Enforcement Team (NET-5), the Yuba-Sutter Anti-Gang Enforcement Team (YSAGE), the Violent Gangs, Fugitive and Sexual Predators (VGFSP), Safe Streets Task Force, the Multi-Agency Terrorism Task Force (TTF), the Yuba-Sutter Stolen Vehicle Special Enforcement Team (VSET), North State Area Gang Enforcement Team (NSAGE), Yuba County Sexual Assault Response Team (SART), Yuba County Child Death Review Team; the Yuba County Elder Abuse Coalition, the Yuba County Tobacco Coalition, Alcoholic Beverage Control Task Force, the Avoid the 9 DUI Campaign lead by the Marysville Police Department, and the Yuba County Multi-Disciplinary Interview Center.

WPD reported that staff participated in YSAGE, the Sexual Assault Response Team lead by the Yuba County District Attorney's Office, the Underage Drinking Task Force lead by the Department of Alcoholic Beverage Control, the Child Abuser Vertical Prosecution Project lead by the Yuba County District Attorney's Office, the Avoid the 9 DUI Campaign lead by the Marysville Police Department, and the Yuba Sutter Substance Abuse Steering Committee.

YCSD is a member of the NET-5 joint narcotics task force with Marysville PD, Yuba City PD, Sutter County SD, CHP, and the State Bureau of Narcotics Enforcement. YCSD is also a member of YSAGE and the Yuba-Sutter Vehicle Theft Suppression Enforcement Team. The Department recently received a grant to assemble a sexual assault task force and is in the planning stages with the Butte, Sutter and Colusa Sheriff's departments.

FINANCING

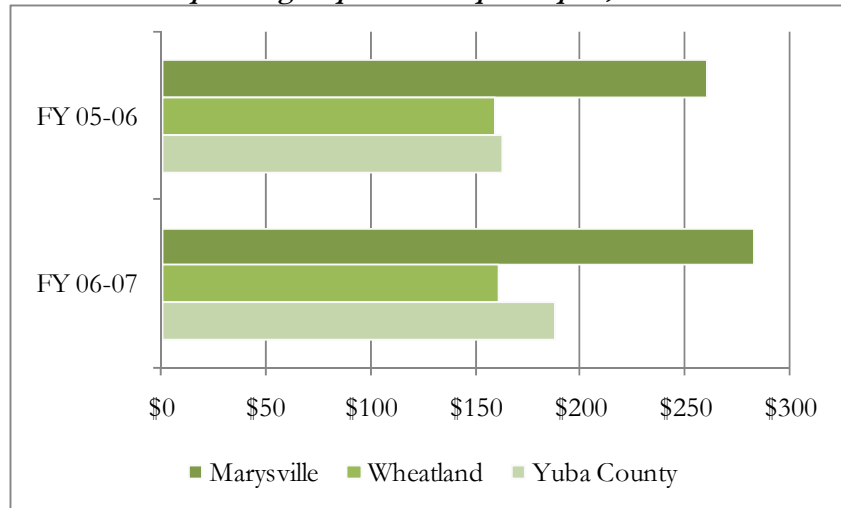
The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing constraints faced by law enforcement service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

OPERATING COSTS

The level of police expenditures per capita is an indicator of efficiency. However, local conditions and circumstances, such as the size of the patrolled service area and the provision of traffic enforcement services, affect the amount and type of expenditures needed to serve a particular jurisdiction.

Figure 8-11: Law Enforcement Operating Expenditures per Capita, FYs 05-06 & 06-07

The median cost of operating a police department in neighboring cities was \$215 per capita.²³⁸ Marysville was the only provider in Yuba which exceeded that expenditure ratio, spending \$260 per capita.



Wheatland's costs were relatively low compared to Marysville and the County, because the City relies heavily on reserves to maintain service levels.

Wheatland spent \$159 per capita in FY 05-06 and \$160 per capita in FY 06-07. By comparison, the County spent \$163 and \$187 in FYs 05-06 and 06-07 respectively.

The cost of providing law enforcement services increased significantly for MPD (10 percent) and YCSD (17 percent) in FY 06-07 and only minimally for WPD (three percent).

FINANCING OPERATIONS

The primary financing source for law enforcement costs is general fund revenues. Other law enforcement financing sources include federal and state grants, Proposition 172 funds, state funds for rural Sheriffs (AB 443), and assessments. Fees and other miscellaneous sources generate a relatively small portion of revenues; such sources include contract service fees, parking citations, and funds from seizure of criminals' assets.

General Funds

Law enforcement services are commonly financed through general fund revenue, which includes property taxes, motor vehicle in-lieu funds, sales and use taxes, and franchise fees. General fund financing sources and limitations were discussed in Chapter 7.

²³⁸ Author's estimates based on FY 04-05 State Controller's Office data on municipal costs among 11 cities in Butte, Nevada, Placer and Sutter counties.

The County funds approximately 72 percent of its Sheriff law enforcement costs from general fund resources.²³⁹ Both of the cities fund a majority of the law enforcement activities through the general fund. Police services constituted 45 percent of Marysville's general fund expenditures and 52 percent of Wheatland's general fund expenditures in FY 06-07.

Proposition 172

Proposition 172 was enacted to help offset property tax revenue losses of cities and counties that were shifted to the ERAF for schools in 1992. Proposition 172, enacted in 1993, provides the revenue of a half-cent sales tax to counties and cities for public safety purposes, including police, fire, district attorneys, corrections and lifeguards. Proposition 172 also requires cities and counties to continue providing public safety funding at or above the amount provided in FY 92-93.²⁴⁰

Yuba County received \$2.8 million in Proposition 172 funds in FY 06-07, of which \$2.5 million was available for funding law enforcement. The City of Marysville received \$109,238 in Proposition 172 funds in FY 06-07, and the City of Wheatland received \$8,000 in funds.

AB 443

AB 443 funds defrayed approximately six percent of County law enforcement costs in FY 06-07. The cities do not receive any revenue from this source.

On August 27, 2001, the Governor signed into law AB 443, appropriating \$18.5 million in state funds for rural and small County sheriff's departments. The funds must be used to enhance law enforcement efforts in the County. This funding source is somewhat vulnerable to State budget cuts. After being discontinued in FY 03-04, funding was reinstated in FY 04-05.

Assessments

County Service Area (CSA) 70 is a financing mechanism to provide enhanced law enforcement services by the County. Property owners of land developed subsequent to the formation of CSA 70 in 2004, throughout the unincorporated areas of the County, are assessed \$143.80 per parcel for ongoing costs of law enforcement services to those areas.²⁴¹ The assessment increases annually with inflation. The funds are to be used for extended law enforcement, as defined by the Yuba County application resolution to LAFCO.²⁴² The County intends for the funds to be used jointly by the Sheriff's Department, District Attorney's Office and Probation Department.²⁴³

²³⁹ Author's estimates based on analysis of FY 06-07 actuals, as reported in the Yuba County FY 07-08 budget.

²⁴⁰ The maintenance of effort provision for local public safety spending requires cities and counties to fund public safety at the 1992-93 levels, adjusted annually by a cost-of-living factor commencing with the 1994-95 fiscal year.

²⁴¹ Property owners in zone of benefit A (the eastern portion of the Edgewater development) pay \$83.23.

²⁴² Yuba County Resolution No. 2004-87.

²⁴³ Interview with Randy Margo, Yuba County, 9/5/07.

The CSA received the first assessment payment in January 2007. The CSA received a total of \$67,398 in FY 06-07. In FY 06-07, a total of \$66,000 was transferred from the CSA account to the public safety general fund. The funds were used entirely to supplement the salary of a patrol officer in the new subdivisions in the southwest portion of the County.

Grant Funds

Each agency qualifies for entitlement grants. The following two main entitlement grant programs provide just over \$339,000 in annual law enforcement funding to MPD, WPD and YCSD.

The State Citizens' Option for Public Safety entitlement grants are allocated to local law enforcement agencies based on population. These grants may be used for hiring officers. The minimum grant is \$100,000 per jurisdiction. In FY 06-07, MPD and WPD each received \$100,000 and YCSD received \$104,648 in funding from this source.

The federal Local Law Enforcement Block Grant is allocated based on incidence of Part I crimes to law enforcement agencies, and may be used for hiring officers, paying overtime, training or equipment purchases. YCSD is the only agency eligible for this grant in the County. In FY 02-03 and 03-04 the County received \$18,200 and \$24,100 respectively. The County did not receive any funds in FY 05-06, but received \$34,700 in FY 06-07.

Contract Service Fees

The Sheriff is the only law enforcement agency that generates fees for contract services in the County. The jail division provides contract service to multiple agencies, including Immigration and Customs Enforcement and the cities of Wheatland and Marysville,²⁴⁴ to generate revenue for the County. YCWA hires the Sheriff to provide additional boat service at the Camp Far West Reservoir. In addition, the Sheriff's Animal Control Department provides shelter services to Wheatland²⁴⁵ and Beale AFB for a fee.

Regulatory Fees

Regulatory fees are designed to discourage certain behavior such as parking in handicapped spots or setting off false alarms. Some of the primary regulatory fees for police service are parking and moving violation citations and false alarm fees.

Jurisdictions have opportunities to restructure user fees and regulatory fees. However, there are limits to the increases that may be enacted. In order to raise user fees, the jurisdiction must document that the fee recoups only the costs of providing the fee-related service. In setting regulatory fees such as false alarm fees, the jurisdiction may impose fees that include the costs of inspection, investigation, enforcement and administration.

²⁴⁴ YCSD holding facilities are utilized by Marysville PD and Wheatland PD free of charge, unless the agencies' three-year average of non-felony bookings is exceeded, in which case the County can charge a jail access fee for each booking according to Government Code §29551.

²⁴⁵ Some animal control services are provided by YCSD within the City of Wheatland, including animal capture and animal shelter services. These services are provided according to an agreement entered into in 2000 between the two parties. YCSD retains all animal licensing fees collected within the City as reimbursement for services.

- Towed Vehicle Fee: Charge an administrative fee to cover the cost of handling impounded vehicles.
- DUI Cost Recovery: Recover emergency response costs for DUI incidents. Government Code § 53150 et seq. authorizes fees of up to \$1,000 per incident.
- Abandoned Vehicle Charges: Impose a fee for abandoned vehicles.
- False Alarm Fees: Charge for multiple responses to false alarms at the same location.

CAPITAL FINANCING

The cities and County rely primarily on development impact fees to finance new law enforcement facilities. Other capital financing approaches include the use of reserve funds, grant-funded capital purchases, and borrowing through bond markets.

Development Impact Fees

Counties, cities, special districts, school districts, and private utilities impose development impact fees on new construction for purposes of defraying the cost of putting in place public infrastructure and services to support the new development. For development impact fees, the jurisdiction must justify the fees as an offset to the future impact that development will have on facilities. The fees must be committed within five years to the projects for which they were collected, and the city or county must keep separate funds for each development impact fee.

Table 8-12: Law Enforcement Development Impact Fees, 2006

Both the County and Wheatland levy police-related development impact fees. Marysville has not adopted development impact fees. The County collects \$78.05 per additional resident or employee created by new development, which is equivalent to \$234.15 for a household of three individuals.²⁴⁶ The County's development impact fees were most recently updated in 2006. The City updated its fees in 2007, and now charges \$797 per residential unit for law enforcement facilities.

The law enforcement development impact fees for jurisdictions throughout California in 2006 are shown in Table 8-12. Of the 39 jurisdictions identified, 15 levy a development impact fee specifically for law enforcement services.²⁴⁷ The median development impact fee of the

County	Jurisdiction	DIF
Napa	St. Helena	\$3,520
Santa Clara	Gilroy	2,890
Santa Barbara	Santa Maria	1,003
San Joaquin	Ripon	811
Sacramento	Elk Grove	719
Yolo	Davis	672
Santa Cruz	Scotts Valley	662
San Bernadino	Redlands	655
Solano	Vacaville	590
San Bernadino	Rialto	422
San Joaquin	Lodi	396
Ventura	Santa Paula	312
Orange	Brea	133
Fresno	Clovis	100
San Bernadino	Highland	34

Source: Duncan Associates, 2006

²⁴⁶ The average household size in Yuba County was 2.95 in 2007, according to the Department of Finance.

²⁴⁷ Fees are calculated for a single-family unit of 2,000 square feet on a 10,000 square foot lot at a density of four units per acre with a value of \$200,000.

15 cities shown is \$655, which higher than the Yuba County fee and lower than the Wheatland fee.

FINANCIAL ABILITY

Each of the three service providers offers adequate service levels based on response times and staffing levels.

Based on crime clearance rates, it appears that more resources could be allocated to solving violent crimes in the unincorporated areas and property crimes in the City of Wheatland.

The providers have managed to deliver adequate services to date in spite of unfunded infrastructure needs. Marysville is reliant on used police vehicles. Wheatland's police are crowded into old trailer facilities. And the Sheriff indicated a new headquarters facility is needed to accommodate future growth. As Wheatland and the County impose development impact fees, it is expected that future growth will finance growth-related facility needs.

Yuba County and Wheatland spend less than average on law enforcement operating costs per capita, compared with the state as a whole and with neighboring cities. Marysville marshals more resources than the state and regional averages, but also has a higher crime rate and higher arrest rates than in the unincorporated areas and Wheatland.

In Wheatland, law enforcement service levels have been constrained by financing. The City relies heavily on reserves officers for staffing and had previously eliminated two police officer positions due to funding shortfalls; however, the City reinstated those two positions and hired new officers for the positions in FY 07-08.²⁴⁸

GOVERNANCE ALTERNATIVES

There are no potential major changes in law enforcement provision in the County.

²⁴⁸ *City of Wheatland Budget FY 2007-08*, p. 2.

9. STREETS

This chapter focuses on street service—the construction, design, operation and maintenance of roads, bridges, traffic signals, and street lights. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing.

PROVIDER OVERVIEW

This section provides an overview of street services and providers in Yuba County and explains how the various services are delivered and shared by the agencies. For a detailed profile of each individual agency, please refer to Appendix A.

Table 9-1: Street Service Providers

SERVICE PROVIDERS

Cities

The City of Marysville is responsible for maintenance of 59 miles of public roads within its jurisdiction. The City provides maintenance services for streets, street lights and traffic signals. Street sweeping is performed by contract with Yuba-Sutter Disposal. The 5th Street bridge is jointly maintained by the City of Marysville, Yuba County, the City of Yuba City, and Sutter County.

The major thoroughfares in the City of Marysville are SR 20 and 70. SR 20 generally runs east-west, connecting with Yuba City via the Feather River Bridge in the west, across Yuba County to the community of Smartville in the east, and into Nevada County. SR 70 runs north-south through the City, connecting to Oroville in the north and Sacramento in the south. The street system within Marysville consists of the north-south collector roads of Ramirez Street, Hall Street, Covillaud Street, and H Street. East-west collectors within the city are 22nd Street, East 10th Street and 14th Street. The remainder of the streets within the City are local roads.

The City of Wheatland is responsible for maintenance of nine miles of public roads within its jurisdiction. The City provides street maintenance and street sweeping services directly, while contracting for street lighting service with Pacific Gas and Electric (PG&E). The street system within the City consists of the arterial streets of Main Street and Spenceville Road, the collectors of

Service Provider	Streets				
	Maintenance	Lighting	Sweeping	Traffic Signals	Bridges
Cities					
City of Marysville	●	●	○	●	△
City of Wheatland	●	○	●	●	
Special Districts					
County Service Areas	△	○	○		
Major Non-LAFCO Providers					
Yuba County	△		○	△	△
Caltrans	●			●	●
Beale Air Force Base	●				
Key: ● indicates service provided currently by agency staff ○ indicates service provided directly by contract with another service provider △ indicates service provided by agency staff and by contract with another provider					

McDevitt Drive, Evergreen Drive, Nichols Road, and First Street/Wheatland Road, and various local roads. State Route 65, which runs through the City along D Street, is maintained by Caltrans. There are no bridges, and there is one signalized intersection in the City.

Special Districts

There are 37 County Service Areas (CSAs) that actively provide road-related services in Yuba County. CSAs serve as a financing mechanism to provide for enhanced services in a specific area. Road services provided by CSAs include local road construction and maintenance, street lighting and street sweeping. The majority of CSAs provide road-related services to privately maintained roadway facilities in rural areas; however, CSAs 52, 66 and 69 provide services to publicly maintained roadway facilities in the communities of Linda, Olivehurst and Plumas Lake. Street services provided by CSAs are to roadways and related drainage infrastructure only; there are no bridges, tunnels, signalized intersections or other major structures maintained by any of the CSAs. Individual CSAs are profiled in Appendix A. For a map showing all CSAs in Yuba, refer to Figure 9-2.

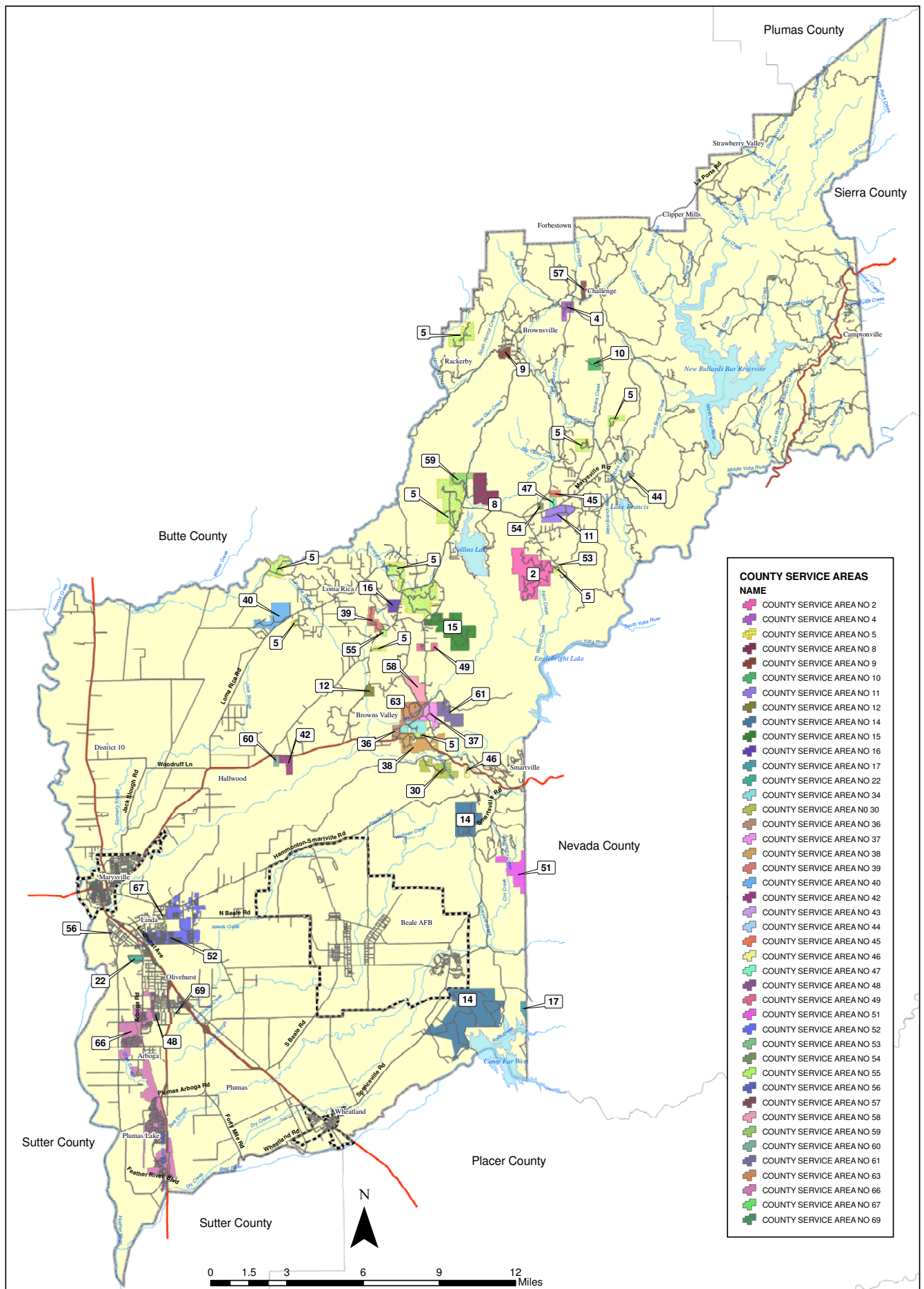
NON-LAFCO REGULATED PROVIDERS

Yuba County is responsible for the maintenance of 644 centerline miles of public roads and 92 bridges. Of the 644 miles of public roads, over 60 percent are classified as urban and rural local roads, 32 percent as classified as urban and rural collector roads, and approximately seven percent are classified as urban and rural arterial roads. The County directly provides street services, including overlays, chip seals, micropaving, patching, ditch grading, street rehabilitation, and street sweeping. Slurry sealing of roads is performed by private contract. There are seven signalized intersections and 130 street lights maintained by the County.

The cities of Marysville and Wheatland, and Yuba County participate in regional planning through the Sacramento Area Council of Governments (SACOG). SACOG is an association of governments made up of six counties and 22 cities in the Sacramento region. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues.

Caltrans is responsible for the planning, design, construction, maintenance and operation of the state highway system (and the Interstate Highway System in California), and is the state's overall manager of interregional transportation services. District 3 is the operating arm of Caltrans for the 11-county Sacramento area. District 3 is responsible for maintenance of 64 centerline miles of streets in Yuba County, including 12 miles of highways, four miles of urban arterials and 48 miles of rural roads.

Beale AFB is responsible for maintenance of roads located on the base, and the County is responsible for maintaining roads leading to the base. The AFB is responsible for maintaining an unknown number of street miles, and operates five security gates.



COUNTY SERVICE AREAS	
NAME	
[Color]	COUNTY SERVICE AREA NO 2
[Color]	COUNTY SERVICE AREA NO 4
[Color]	COUNTY SERVICE AREA NO 5
[Color]	COUNTY SERVICE AREA NO 8
[Color]	COUNTY SERVICE AREA NO 9
[Color]	COUNTY SERVICE AREA NO 10
[Color]	COUNTY SERVICE AREA NO 11
[Color]	COUNTY SERVICE AREA NO 12
[Color]	COUNTY SERVICE AREA NO 14
[Color]	COUNTY SERVICE AREA NO 15
[Color]	COUNTY SERVICE AREA NO 16
[Color]	COUNTY SERVICE AREA NO 17
[Color]	COUNTY SERVICE AREA NO 22
[Color]	COUNTY SERVICE AREA NO 34
[Color]	COUNTY SERVICE AREA NO 30
[Color]	COUNTY SERVICE AREA NO 36
[Color]	COUNTY SERVICE AREA NO 37
[Color]	COUNTY SERVICE AREA NO 38
[Color]	COUNTY SERVICE AREA NO 39
[Color]	COUNTY SERVICE AREA NO 40
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[Color]	COUNTY SERVICE AREA NO 61
[Color]	COUNTY SERVICE AREA NO 63
[Color]	COUNTY SERVICE AREA NO 66
[Color]	COUNTY SERVICE AREA NO 67
[Color]	COUNTY SERVICE AREA NO 69

Legend	
[Yellow Box]	County Boundary
[Dashed Line]	Municipal Boundary
[Blue Box]	Lakes
[Black Line]	Roadways
[Blue Line]	Rivers

Figure 9-2 County Service Areas

Yuba County Information Technology - GIS
 Drawn By: J. Henry
 Date: 05/06/08
 File: ALL_CSAS0506.mxd



CIRCULATION DESCRIPTION

State Routes 20, 49, 65, and 70 serve as the major thoroughfares in the County. SRs 65 and 70 provide north-south circulation in the southern and western portions of the County, providing service to residents of Marysville, Wheatland and the unincorporated areas of Linda, Olivehurst and Plumas Lake, in addition to regional commuters from neighboring counties. SR 20 provides east-west circulation through the central portion of the County, from the Yuba-Sutter county line in Marysville to the Yuba-Nevada county line in Smartville. SR 49 provides north-south circulation in the northern portion of the County, from the Yuba-Nevada county line to the Yuba-Sierra county line, through the community of Camptonville.

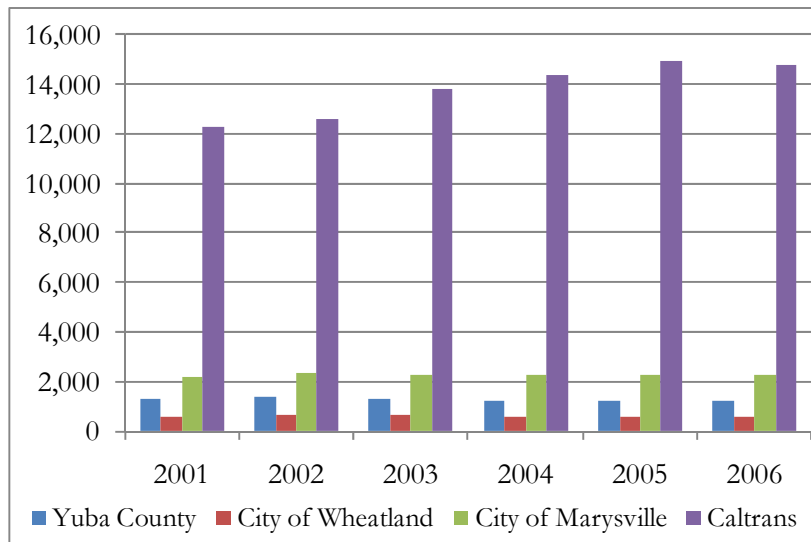
Yuba County is also served by various arterial, collector and local roads. Some of the major arterial and collector roads include North Beale Road, Erle Road, McGowan Parkway, Feather River Boulevard, Forty Mile Road, and Hammonton-Smartville Road in the southern portion of the County, and Marysville Road, Loma Rica Road and Willow Glen Road in the northern portion of the County.

SERVICE DEMAND

Street service demand is affected by population and job concentrations, the availability and desirability of public transit, gas prices, and other factors such as the locations of child care, schools, stores and other common stops. Pavement depreciation rates also affect service needs, and are primarily influenced by the volume of traffic, particularly truck traffic, preventative maintenance and weather. A number of factors have affected travel behavior in Yuba County in recent years, the most dramatic of which being the amount of residential development in the County. Chapter 3 provides the residential population and job base, projected population and job growth rates, and a description of growth areas for each provider.

Figure 9-3: Daily Vehicle Miles of Travel per Street Mile, 2001-6

Daily vehicle miles of travel (DVMT) per street mile is an estimate of the volume of traffic on roadways within a jurisdiction. By far, the greatest volume of demand is placed on the state highways in the County. Caltrans estimates over 14,800 DVMT per street mile on the state highways in Yuba County in 2006, compared to 1,200 DVMT per street mile on the roads located in unincorporated Yuba County, 542 DVMT per street mile on the roads maintained by the City of



Wheatland, and 2,300 DVMT per street mile on the roads maintained by the City of Marysville, as shown in Figure 9-3.²⁴⁹

Traffic volume increased by 21 percent for the state highway system in Yuba County, seven percent for unincorporated Yuba County, and six percent for the City of Marysville over the period 2001-6, whereas it decreased by two percent for the City of Wheatland. Yuba County placed 54 miles of streets into service over this period; as a result, its DVMT per street mile actually declined by two percent. Over the same period, traffic volume increased by eight percent for California as a whole.

From 1995 to 2005, total DVMT increased at an average annual growth rate of two percent for Yuba County as a whole.²⁵⁰ SACOG projects that total DVMT for Yuba County will continue to increase at an average annual rate of 1.9 percent until 2035. The projected population growth for the County along with the increase in traffic that comes with it is a crucial demand driver for street services in Yuba County.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

In the context of streets, infrastructure needs signify facilities that do not provide adequate capacity to accommodate current or projected demand for service for the region as a whole or for jurisdictions within the County.

PUBLIC ROADS

Deferred Maintenance

The City of Marysville reported that 7.5 miles of roadway are in need of rehabilitation, representing 13 percent of all roadway maintained by the City. In FY 05-06 the City of Marysville rehabilitated 1.6 miles of roadway, or nearly three percent of the total roadway maintained by the City.

The City of Wheatland reported that three-quarters of its streets need some level of rehabilitation or major maintenance activities. As the majority of the City's road system has not been overlaid or reconstructed since 1960, there is a significant backlog of deferred maintenance. The City has established a priority list of streets for rehabilitation or major maintenance activities, and the plan will be implemented as funding becomes available.

The County reported that 320 miles of roads in the unincorporated areas need rehabilitation, amounting to nearly half of all County-maintained roads. In FY 05-06 the County rehabilitated 4.4 miles of roadway, representing nearly 0.7 percent of the total roadway maintained by the County.

²⁴⁹ Caltrans, *Public Road Data 2001-06*, Table 6.

²⁵⁰ SACOG, *Draft Final Metropolitan Transportation Plan for 2035*, 2008.

Congestion

Traffic congestion is measured based on the daily number of vehicle hours of delay due to congestion. Levels of service (LOS) on streets and highways is rated on a scale of A-F, where E means significant delays, unstable traffic flow, and rapidly fluctuating speeds and flow rates and F means considerable delay with forced traffic flow and speeds dropping to zero. Levels of service of E and F are considered poor.

The City of Marysville reported that no City-maintained streets operate at LOS “E” or “F.” Segments of SR 20 and SR 70 through the City operate at LOS “E” and “F” under peak conditions, including SR 70 from 1st Street to 10th Street and SR 20 from Sutter Street to I Street, but these segments are maintained by Caltrans.²⁵¹ The City reports that it does not have an adopted LOS policy, but does attempt to alleviate congestion to the extent possible on the roadway segments maintained by the City. The City reports that it is unable to directly address congestion on the state highways through the City that are maintained by Caltrans.

All road segments maintained by the City of Wheatland operate at LOS “A” with the exception of Spenceville Road (west of Cyrus Dam Road) which operates at LOS “B.” The City has adopted LOS “C” as the minimum standard for acceptable traffic operations at signalized intersections and on roadway segments within the City. SR 65, maintained by Caltrans, operated at LOS “F” on all five roadway segments studied in the City General Plan.²⁵² The Yuba County General Plan Update Background Report determined SR 65 to operate at LOS “D” through the City of Wheatland.²⁵³

All County-maintained roads operate at LOS “C” or better, with the exception of the Simpson Lane Bridge across the Yuba River, which operates at LOS “D.” LOS “C” has been adopted by the County as the minimum standard for traffic flow during peak hours. The County indicated that it does not anticipate any major corridors or intersections to be at LOS “E” or “F” at build-out, as developers are required to provide development impact fees and mitigations to maintain LOS “C” or higher.

Infrastructure Needs

The City of Marysville did not identify any new street infrastructure planned or currently under construction, as the City is enclosed by levees and is entirely built out. Infrastructure needs for the City pertain to the backlog of deferred roadway maintenance. Upcoming infrastructure improvements by the City include the reconstruction of Rideout Way from Hall Street to Covillaud Street by FY 08-09, the reconstruction of 3rd Street from E Street to J Street and the reconstruction of Huston Street from Gengler Way to Johnson Street by FY 10-11, and the reconstruction of Del Pero Street, Edwards Street and Foust Street between East 22nd Street and Johnson Way by FY 11-12.

²⁵¹ Yuba County General Plan Update Background Report, *Transportation and Circulation*, 2007.

²⁵² City of Wheatland General Plan, 2006, p. 2-8.

²⁵³ Yuba County General Plan Update Background Report, *Transportation and Circulation*, 2007.

A long-range infrastructure improvement planned by the City of Marysville is the rebuilding and widening of the 5th Street bridge to six lanes across the Feather River to Yuba City. The bridge rebuilding and widening is estimated to cost in excess of \$70 million and be completed by 2018.

Recent infrastructure projects identified by the City of Wheatland include the handicapped ramp installation and repaving of 4th Street, and the installation of traffic signals at Main Street and SR 65 and First Street and SR 65. All of these projects were planned to be completed by FY 07-08. Rehabilitation of the existing street network within the City also remains a need. The City recently completed the repaving of C Street from Fourth to Mesa Street. Proposition 1B funds totaling \$190,000 will be used to complete the repaving of multiple sections of roads by the end of 2008, including 1st, 2nd, 3rd, 4th, and Main Streets from SR 65 to E Street and 3rd and 2nd Streets from SR 65 to the railroad tracks. The streets to be prioritized for the remaining \$200,000 in Proposition 1B funds had not yet been determined as of the drafting of this report.

A long-range infrastructure need for the City is the SR 65 bypass that would connect to the proposed Lincoln bypass, although the project is not expected to be completed until 2025. Plans call for a four-lane grade-separated highway to reroute traffic from downtown Wheatland. The bypass is not currently funded, with the majority of funding expected to come from development impact fees collected by the City and County.

An SR 65 bypass study is currently being prepared to analyze the feasibility of various highway realignments in conjunction with development in and around the City, as of March 2008. The total cost of the bypass is estimated at \$264 million. The first phase of the bypass will include an interim arterial road in the location of the final bypass and improvements to the existing SR 65, estimated to cost \$40 million. There was not yet a time frame set for the first phase of the bypass, as of the drafting of this report.

Between 2007 and 2011 the County plans to conduct street capital improvement projects spanning 85 miles of roadway, at an estimated cost of nearly \$86 million. Major projects planned during this time frame include the Yuba River Parkway (discussed below), construction of two new intersections, a two-lane road and the alignment, and widening and reconstruction of Smartville Road.²⁵⁴

Caltrans has plans for various projects aimed to increase capacity on SR 20 and SR 70. On SR 20, Caltrans plans to add passing lanes on both eastbound and westbound sides from Loma Rica Road to Kibbe Road (\$3.4 million), and to widen and add left turn lanes from Marysville Road to Sicard Flat Road (\$7.5 million) and from Parks Bar to Hammonton Smartville Road (\$8.9 million). Improvements to SR 20 are estimated to be completed by 2017. On SR 70, Caltrans plans \$200 million in improvements from 2008-13, including widening to four lanes from the Bear River bridge to SR 99 (\$151 million) and adding passing lanes and shoulders north of Marysville (\$48 million). Caltrans also plans to widen the SR 70 overpass at McGowan Parkway and install a new traffic signal by 2032 (\$9.2 million).

Beale AFB has indicated that traffic to and from the base is an issue, and that roads connecting the base to SR 20 are in need of repairs.

²⁵⁴ Yuba County Transportation Master Plan: 2007-2011.

Yuba River Parkway

A long-range infrastructure need for the County is the construction of the Yuba River Parkway, to serve as the Marysville bypass. The construction of a Marysville bypass had long been planned by Caltrans; however, due to Caltrans' lack of funding the County has decided to undertake a variation of the project. Whereas the Caltrans bypass was intended to be a high-speed four-lane elevated freeway extension terminating in Oroville, the Yuba River Parkway is intended to be a four-lane local road with signalized intersections at major cross streets that will terminate at SR 20, east of the City of Marysville.

The Yuba River Parkway is planned to extend from the SR 65/70 interchange near the community of Olivehurst, north through the western portion of the proposed Woodbury development and through the center portion of The Orchard development, to North Beale Road. From North Beale Road, the roadway will extend north to Hammonton Smartville Road and follow one of three possible corridors identified by the County. Corridor A, the easterly alignment, follows the north side of the south Yuba River levee to the west side of the Goldfields, where it proceeds north and terminates at SR 20 near Woodruff Lane and Loma Rica Road. Corridor B, the middle alignment, proceeds north until the south levee, where it proceeds in a northwesterly direction through Dantoni Orchards and ties into SR 20 near Plantz Road. Corridor C, the westerly alignment, proceeds north until the south levee, where it proceeds in a northwesterly direction through Dantoni Orchards, and passes through the "Hog Farm" gap in the Yuba-Sutter Landfill before connecting to SR 20. As of May 2008 the County reported that corridor B had been selected as the final corridor for the Yuba River Parkway route.

Construction of the Yuba River Parkway will be phased in over a period of at least 10 years, with the cost of construction estimated to range from \$80 to \$95 million. An initial phase of the Yuba River Parkway is scheduled to begin construction in 2008 to add two lanes of roadway from The Orchard development to North Beale Road, and in 2009 to extend the two lanes from North Beale Road to Hammonton Smartville Road (totaling \$4 million for both segments).

PRIVATELY MAINTAINED ROADS

Local agencies are responsible only for those roads constructed and designed to their standards and accepted into the public road system. Yuba County provides maintenance to privately maintained roads as a service reimbursed by homeowner assessments to a County Service Area (CSA). Privately maintained CSA roads typically do not meet County design standards in regards to paved width, paving, right-of-way width, grade, drainage, handicapped access, and/or sidewalk improvements. Privately maintained CSA roads are accessible to the public, however, maintenance is funded by the local homeowners, not the County. Table 9-4 shows infrastructure needs identified for CSAs in the County.

Table 9-4: CSA Road Infrastructure Needs

Provider	Infrastructure Needs or Deficiencies
CSA 2	CSA roads need to be paved
CSA 4	CSA roads need to be paved
CSA 14	Maintenance of chipseal needed on Hokan Ln., Walsh Ln. and Creek Wy. Maintenance of gravel needed on Kapaka Ln. and Clyde Wy.

BRIDGES

There are a total of 92 bridges maintained by Yuba County, eight of which have been identified for rehabilitation or replacement from 2007-11, at a total cost of \$9 million. The Deep Ravine Bridge at Timbuctoo Road is currently scheduled for replacement by 2009, as it has been deemed structurally deficient by Caltrans.²⁵⁵ The project, estimated to cost \$2 million is eligible for Highway Bridge Replacement and Rehabilitation funds through the Federal Highway Administration.²⁵⁶

The City of Marysville maintains the 14th Street underpass and jointly maintains the 5th Street Bridge across the Feather River along with Yuba County, Yuba City and Sutter County. The City of Marysville identified the rehabilitation or replacement of the 5th Street Bridge as a long-range infrastructure need.

There are no bridges located within the City of Wheatland.

STREET LIGHTS AND TRAFFIC SIGNALS

The City of Marysville provides maintenance to 1,176 street lights within the City, and five signalized intersections.

Street lights within the City of Wheatland are owned and maintained by Pacific Gas and Electric. There is one signalized intersections within the City, located at First Street and SR 65, and another planned to be installed at the intersection of Main Street and SR 65.

Yuba County provides maintenance to 130 street lights and seven signalized intersections.

SERVICE ADEQUACY

The condition of street pavement is evaluated by local agencies using a Pavement Management System (PMS), which regularly evaluates pavement condition and establishes a cost-effective maintenance strategy. Each segment of pavement is rated for distress (i.e., cracks and potholes) and the extent and severity of distress.

The PMS data is summarized in a composite index called the Pavement Condition Index (PCI), reflecting the weighted average condition of all road segments for which an agency bears maintenance responsibility. A PCI of 75 or more is considered to be very good condition, PCI of 60-74 is good condition, PCI of 45-59 is fair condition, and PCI below 45 is poor condition. The City of Marysville reported a PCI of 80, Yuba County reported a PCI of 45 and the City of Wheatland reported that it does not have a PMS, but anticipates having one in place by the end of 2008.

²⁵⁵ Caltrans, *Local Agency Bridge List*, 2007.

²⁵⁶ Yuba County Transportation Master Plan: 2007-2011.

The life cycle of pavement in good condition can be extended through preventative maintenance by applying a thin layer of asphalt mixture, better known as slurry sealing or seal-coating. When pavement is in fair condition—with moderate potholes and cracks—it can be treated with one- to two-inch thick overlays. Pavement with minor structural distress—with significant cracks—often requires rehabilitation involving grinding of portions of the existing street and application of a thick overlay. Pavement with major structural distress—with extensive cracks—often requires reconstruction involving removal and replacement of the street segment.

Pavement management studies have shown it is more cost effective to maintain pavement in good condition over its useful life than to let it deteriorate to the point that it requires a major overlay or reconstruction. Deferring maintenance can increase long-term maintenance costs as much as four times greater than a consistent preventative maintenance strategy, according to the Transportation Research Board. Street reconstruction is typically needed once asphalt is 20-35 years old, with the asphalt lifespan depending on the use of preventative maintenance efforts.

The backlog of deferred street maintenance is a significant issue in Yuba County, as the City of Wheatland has not performed any major roadwork since 1960, and Yuba County reports that 320 miles of streets throughout the County are in need of rehabilitation. The City of Marysville has fared comparatively better in keeping up with street maintenance, but still reports rehabilitation needs on 13 percent of roads maintained by the City. Both the City of Wheatland and Yuba County report that providing adequate funding for street maintenance is a significant service challenge.

MANAGEMENT

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, and conduct advance planning for future growth.

Table 9-5: Street Agency Management Practices

An evaluation of the adequacy of management practices is shown in Table 9-5. The first four indicators are self-explanatory. Adequate evaluation of rates and fees means updating assessments and development impact fees with reasonable frequency. Adequate capital planning would involve a multi-year capital improvement plan (or comparable planning effort) for capital replacement and, if relevant, expansion. Advance growth planning is adequate when it discloses existing capacity and anticipated needs throughout the existing service area and SOI.

The City of Marysville, the City of Wheatland and Yuba County are professionally managed and generally follow best management practices.

	Marysville	Wheatland	Yuba County	CSAs
Evaluate employees annually	A	A	A	A
Prepare timely budget	A	A	A	N
Periodic financial audits	A	A	A	N
Current financial records	A	A	A	A
Evaluate rates	I	A	A	I
Capital planning	A	I	A	N
Advance growth planning	N	A	A	N
Note: A = Practiced adequately I= Practiced but improvement needed N= Not practiced				

CSAs are professionally managed, but do not prepare budgets or conduct financial audits. Marysville has no development impact fees, and consequently, has not evaluated or updated its rates. The majority of CSAs in Yuba County do not have assessments that increase with inflation, and assessments are not evaluated or updated regularly. Yuba County conducts capital improvement planning for street purposes in its Transportation Master Plan. Wheatland and the CSAs lack formal capital improvement plans; although, capital improvement needs for Wheatland are addressed in the general plan, in the development impact fee studies and on an annual basis in the budget. Wheatland recently updated its general plan which plans for the western portion of the City's SOI. The County is in the process of updating its general plan, which is anticipated to include comprehensive growth planning for the County. Marysville has not adopted a plan for the area north of the City limits within its SOI.

Table 9-6: Street Service Response Time

The service providers reported both agency policy, if any, and average response times for street damage repair, shown in Table 9-6. Response time is defined as the time elapsed between receipt of the service call and completion of repairs.

Provider	Street Damage	
	Policy	Average
City of Marysville	No Policy	Not Tracked
City of Wheatland	2 Days	1-2 Days
Yuba County	No Policy	Not Tracked
CSA	3-4 Weeks	3-4 Weeks

LOCAL ACCOUNTABILITY AND GOVERNANCE

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency's activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 9-7.

Table 9-7: Street Agency Accountability and Governance Measures

All agencies hold open elections for their governing bodies, prepare and post meeting agendas and minutes, and have accessible staff and elected officials. The two cities and the County most recently had contested elections in 2006. The Board of Supervisors serves as the governing body for CSAs and most recently had a contested election in 2006.

All agencies prepare and post meeting agendas and make minutes available as required. None of the agencies have made efforts to broadcast meetings on the web. Marysville, Wheatland and the County maintain websites where public documents are posted. Additional outreach efforts include newsletters and press releases to the local newspaper by Wheatland and Marysville. The Public Works Department does not conduct constituent outreach activities regarding the CSAs. For specifics on the governing body, constituent outreach efforts and public involvement, refer to the agency's respective chapter in Appendix A.

	Marysville	Wheatland	Yuba County	CSAs
Contested election since 1994	✓	✓	✓	✓
Constituent outreach activities	✓	✓	✓	×
MSR Disclosure	✓	✓	✓	✓
Note: ✓ = Occurred or adequately practiced, × = Did not occur or not practiced				

The street service providers disclosed the majority of information that was requested by LAFCO relating to street services. With few exceptions, Marysville, Wheatland and the County responded fully to LAFCO's questionnaire about their street services. The Yuba County Public Works Department did not respond fully to LAFCO's questions regarding assessments and various questions regarding services provided by the CSAs, as of the drafting of this report.

SHARED FACILITIES

FACILITY SHARING STATUS

The City of Marysville engages in facility sharing with Yuba-Sutter Transit, as it helps the City to maintain street areas adjacent to heavily used bus stops.

The City of Wheatland and Yuba County did not identify any facility sharing related to street services. In the past the County has shared chip coating equipment with Nevada County.

Road maintenance CSAs share facilities by being staffed and managed by the Yuba County Public Works Department. There is one CSA coordinator and three administrative staff that handle road-related CSAs. The administrative staff manages the accounting process for all CSAs, with the CSA coordinator managing all other aspects of CSA maintenance.

OPPORTUNITIES

The cities of Marysville and Wheatland did not identify any opportunities for facility sharing related to street services.

The County identified a potential opportunity for facility sharing with Butte County by sharing road striping equipment.

REGIONAL COLLABORATION

The cities of Marysville and Wheatland, and Yuba County participate in regional planning through SACOG. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues.

Yuba County, along with the cities of Marysville and Wheatland, have discussed the creation of a regional traffic impact fee to account for the proportional impact of new development on regional transportation infrastructure. Discussions between the jurisdictions are still in the early phases as of the drafting of this report, and a timetable for their implementation has not been set.

FINANCING

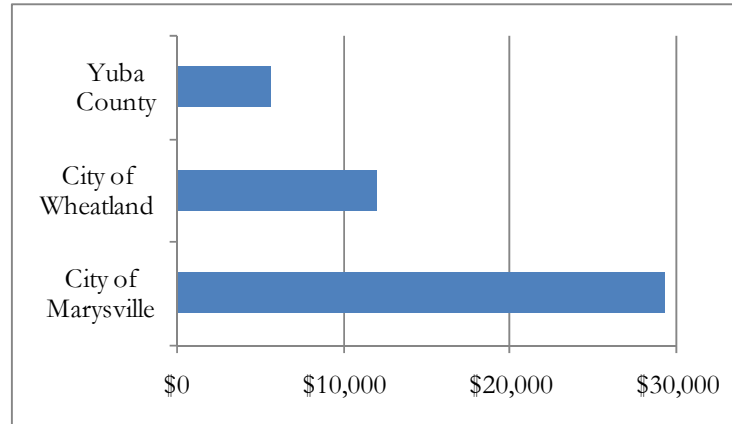
The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing constraints faced by street service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

OPERATING COSTS

As shown in Figure 9-8, the City of Marysville had the highest street maintenance cost per mile of roadway in FY 05-06, at over \$29,000. This high level was due to \$1.7 million spent on street maintenance during the fiscal year.

The City of Wheatland had the second highest street maintenance cost per mile at \$12,000. In FY 05-06, the City spent over \$108,000 on maintenance of its roadway network.

Figure 9-8: Street Maintenance Cost per Mile, FY 05-06



Yuba County spent \$5,600 per street mile on roadway maintenance in FY 05-06, due to its \$3.6 million in maintenance and reconstruction expenditures spent throughout the County.

FINANCING OPERATIONS

The most significant sources for financing of street maintenance services are gas taxes, general fund revenues, and various federal, state and local funds. CSAs are financed through assessments paid by property owners which can be used for both regular maintenance and capital purposes.

Gas Tax

Yuba County residents pay both federal and state excise taxes, in addition to sales taxes on gasoline. The state tax is 18 cents for each gallon of gasoline and diesel fuel (generally referred to as the “gas tax”). The state also collects weight fees on commercial vehicles (trucks) based on the unladen weight of the vehicle.²⁵⁷

State Gas Tax

State gas tax accounts for 13 percent of revenues used by the City of Marysville, 37 percent used by the City of Wheatland and 15 percent used by Yuba County for street purposes.²⁵⁸

The State retains about 65 percent of revenue from the state gas tax, with the remainder distributed to counties and cities for local streets and roads. The California State Constitution (Article XIX) restricts the use of state gasoline tax revenues for certain purposes. These monies may only be used to plan, construct, maintain, and operate public streets and highways; and to plan, construct, and maintain mass transit tracks and related fixed facilities (such as stations). The gasoline

²⁵⁷ The federal gas tax is 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel. The federal gas tax is a funding source for various federal funding programs described in this section.

²⁵⁸ Street funding calculations are based on the California State Controller, *Streets and Roads Annual Report*, Fiscal Year 2005-06. FY 05-06 data were the most recent available at the time this report was prepared.

tax revenues cannot be used to operate or maintain mass transit systems or to purchase or maintain rolling stock (trains, buses, or ferries).

There are four formulas used to distribute state gas tax funds to California cities.

- §2105 of the California Streets and Highways Code allocates 11.5 percent of revenues in excess of 9 cents per gallon based on population. Funding under this section accounts for 32 percent of gas tax revenues received by the City of Marysville, and 31 percent by the City of Wheatland.
- §2106 allocates revenues equal to 1.04 cents per gallon to cities primarily based on population. Funding under this section accounts for 23 percent of gas tax revenues received by the City of Marysville, and 27 percent by the City of Wheatland.
- §2107 allocates revenues equal to 1.315 cents per gallon primarily based on population, with additional funds allocated to cities with snow removal costs. Funding under this section accounts for 43 percent of gas tax revenues received by the City of Marysville, and 41 percent by the City of Wheatland.
- §2107.5 allocates additional funds based on population to be used exclusively for engineering costs and administrative expenses related to city streets. Funding under this section accounts for one percent of gas tax revenues received by the City of Marysville and the City of Wheatland.

Counties receive most of their gas tax funding under §2104 of the California Streets and Highways Code. Yuba County receives 46 percent of its gas tax funds under §2104. The County receives an additional 39 percent of its gas tax funds under §2105, based on population. The remaining 15 percent is distributed under §2106, based mostly on the number of registered vehicles in the County.

State gas tax revenues are limited by the tax rate charged. The rate has remained unchanged since the late 1990s, with the inflation-adjusted revenues declining over the time period despite growth in the volume of gasoline purchases.

General Fund Revenues

General fund revenues constitute 25 percent of revenues used for street and road purposes in the City of Marysville, four percent used by the City of Wheatland and less than one percent used by Yuba County. General fund revenues are local agencies' discretionary funds, most often used to pay for public safety services and discretionary programs.

Gasoline Sales Tax

The State Legislature enacted the Traffic Congestion Relief Program (TCRP) in 2000, which created a six-year plan for funding street capital projects from ongoing revenues from the sales tax on gasoline as well as a one-time contribution from the State general fund. Implementation was delayed due to the State budget crisis, but some funding has been distributed. A subsequent ballot measure—Proposition 42—has permanently designated a portion of transportation sales taxes for local street purposes.

TCRP primarily funds statutorily-defined construction projects, including the overlay of Ramirez Road, La Porte Road and Marysville Road scheduled for completion from 2007-11.

In addition, TCRP funds local street and road improvements. A portion of the TCRP funds are allocated to counties based on the number of registered vehicles and public road miles, and a portion is allocated to cities based on population. These local funds must be used for street or road maintenance or reconstruction. Cities and counties are required to maintain their existing commitment of general funds for street or road work in order to remain eligible for allocation of the specified funds. In order to receive any allocation of the specified funds, the city or county must annually expend from its general funds for street or road purposes an amount not less than the annual average of expenditures from its general funds during FY 96-97, FY 97-98, and FY 98-99. In FY 05-06, three percent of revenue for street purposes came from TCRP funds for the City of Marysville, eight percent for the City of Wheatland and five percent for Yuba County.

In March 2002, voters passed Proposition 42, which permanently extended the transfer of gasoline sales tax revenues to the Transportation Investment Fund and dedicated the revenues to various transportation programs. The funds can be allocated back to the general fund by a two-thirds vote of the Legislature. The Legislature has suspended the requirement in the last several years due to the State budget crisis.

Because of loans to the State general fund and Proposition 42 suspensions, TCRP funding has been delayed. Local agencies received \$400 million statewide in FY 00-01 for deferred maintenance, and received allocations in FY 01-02, 02-03 and 05-06. The Legislature suspended Proposition 42 funding in FY 03-04 and 04-05, but the State agreed to repay these funds in the future. In November 2006, California voters passed proposition 1A, which amended the State Constitution to limit the ability of the Legislature to suspend the transfer of gasoline sales tax revenues from the general fund to transportation, and required all past suspensions to be repaid by June 30, 2016.

Also in November 2006, voters passed proposition 1B, which allowed the state to sell \$19.9 billion in general obligation bonds for state and local transportation improvement projects. Yuba County will receive \$3.878 million over the next ten years for maintenance and rehabilitation of local streets and roads. The funding is to be front-loaded, with two-thirds being allocated in the first five years.²⁵⁹

Measure D

In November 2004, Yuba County voters approved a 15-cent per ton fee on all aggregate and asphalt concrete produced in the County. Revenue is collected by the County and used for road-related improvements, especially pertaining to the rehabilitation of truck routes.²⁶⁰

²⁵⁹ Yuba County Transportation Master Plan: 2007-2011.

²⁶⁰ Ibid.

Assessments

CSAs are primarily financed through assessments paid by property owners within the CSA. In addition to the regular assessments paid by all homeowners with the CSA, some homeowners pay additional assessments to fund extended services if they live within a zone of benefit. Of the CSAs that provide street maintenance, CSAs 52 and 66 have zones of benefit that fund extended services such as fire protection, park maintenance and reclamation. The assessment within the zone of benefit of CSA 52 is an additional \$233 per parcel. Assessments within the zones of benefit of CSA 66 range from approximately \$300 to \$480 per parcel. Table 9-9 shows the assessment amounts provided by the Department of Public Works for various CSAs in the southern portion of Yuba County. The assessment amounts for CSAs north of the Yuba River were not provided by the County.

Table 9-9: CSA Assessments

	Unimproved Property	Improved Property
CSA 14	\$100	\$200
CSA 17	\$182	\$250
CSA 22	NP	\$220
CSA 30	\$60	\$240
CSA 48	\$60	NP
CSA 52	\$23	\$148
CSA 69	NP	\$235

Street-related assessments are subject to majority property owner approval requirements for imposition of new assessments and for fairness and equity in the assessments. Assessments in place prior to November 1996 did not require voter approval to be imposed. However, any increase in assessments requires approval by the voters.

Neither the Cities of Marysville and Wheatland, nor Yuba County, receive revenue for street and road purposes through assessments.

CAPITAL FINANCING

Capital project financing sources include development impact fees, state and federal funds. These funds are for the purpose of constructing capacity increasing projects, such as road widening or traffic signals, in order to maintain an acceptable level of service.

Development Impact Fees

Development impact fees account for 51 percent of revenue for street purposes for the City of Wheatland and 55 percent for Yuba County. The City of Marysville does not have development impact fees for street purposes, although the City has been in discussions with Yuba County and Wheatland to establish a regional traffic impact fee.²⁶¹

The City of Wheatland imposes traffic impact fees of \$6,350 per detached dwelling and \$4,239 per attached dwelling for improvements on external streets to accommodate increased use. Additionally the City imposes a regional bypass project fee of \$3,077 per detached dwelling and \$2,055 per attached dwelling to fund the Wheatland bypass project.

²⁶¹ For comparison purposes, Yuba City (in Butte County) has traffic impact fees of \$14,117 per single family dwelling unit, and \$10,900 per attached dwelling unit.

The County has development fees in place to mitigate the cumulative impacts of land development projects on the local transportation system. The per-unit traffic impact fees for development are \$2,756 for single family residential and \$1,929 for multi-family residential units. Non-residential fees are \$11,023 per 1,000 square feet of commercial, and \$4,133 per 1,000 square feet of industrial development.²⁶² Road impact fees ranging from \$5,000 to \$11,000 per unit are collected in the Plumas Lake Specific Plan area, the North Arboga Study Area and the East Linda Specific Plan area pursuant to nexus studies which allocate the costs of needed road improvements to the new developments. The County projects revenues of \$48 million from development impact fees from 2007-11.²⁶³

Enacting a regional traffic impact fee has been discussed by jurisdictions in the area, but as of May 2008 an agreement had not been reached.

State Revenues

Revenues from the State (other than gas tax and TCRP) constitute 24 percent of revenues used for street purposes for Yuba County. Such revenues include State Transportation Improvement Program (STIP) and the Transportation Investment Fund, among others. The City of Marysville and the City of Wheatland did not receive state funding other than gas tax and TCRP in FY 05-06.

State Transportation Improvement Program

The STIP is the primary state program for construction of new transportation projects. The STIP has traditionally been a funding program primarily directed to projects on the state highway system—interstate highways, U.S. highways, and state routes—although it includes additional funding. Funding comes primarily from the State Highway Account and federal funds. Funding is programmed every two years for a four-year planning horizon. Caltrans is allocated 25 percent of the funds for interregional transportation improvements, and the remaining 75 percent is allocated by regional transportation planning agencies (the Sacramento Area Council of Governments, in the case of Yuba County).

Local agencies nominate street projects for funding consideration. Each region submits its list of recommended projects to the California Transportation Commission (CTC) by mid-December in odd years. After holding public hearings, the CTC adopts the STIP plan by April 1 in even years. The CTC does not nominate projects, but acts as an arbiter of proposals made by Caltrans and regional transportation agencies.

The Yuba County Transportation Master Plan calls for \$11.5 million in funding for Yuba County transit projects under the 2008 STIP, the most significant project being the construction of a new interchange at Plumas Lake Boulevard.²⁶⁴

²⁶² Yuba County, *Impact Fee Update Report*, 2004.

²⁶³ Yuba County Transportation Master Plan: 2007-2011.

²⁶⁴ *Ibid.*

Federal Revenues

Revenues from the federal government constitute 58 percent of revenues for street purposes for the City of Marysville and one percent for Yuba County. The City of Wheatland did not receive revenues from the federal government for street maintenance in FY 05-06.

Major Federal Highway Administration funding programs include the Regional Surface Transportation Program (RSTP), Congestion Mitigation and Air Quality Improvement Program (CMAQ), and Highway Bridge Replacement and Rehabilitation (HBRR) Program. RSTP funds can be used for a variety of purposes, including safety projects, road overlays, bicycle and pedestrian projects, and bridge projects. Yuba County plans to overlay more than 13 miles of roadway from 2007-11, using \$2.65 million in RSTP funds.

A funding source for repair of the roads to and from Beale AFB is through the Public Lands Highways Program, a discretionary program that funds projects to improve access to and within federal lands. The Yuba County Transportation Master Plan 2007-2011 states that the County has received \$3 million through this program to improve access roads to Beale since 2003, and projects another \$3 million from 2007-11.

Federal Gas Tax

Federal gas tax revenues have been earmarked for roadway spending since 1956 when the Federal-Aid Highway Act of 1956 established the Highway Trust Fund and stipulated that 100 percent of the gas tax be deposited into the fund. From 1956 to 1982, the Highway Trust Fund was used solely to finance expenditures from the federal highway program.

Since 1982, a portion of Highway Trust Fund (HTF) revenues have been allocated to mass transit. Of the current gasoline tax of 18.3 cents per gallon, 2.86 cents per gallon is allocated to the Mass Transit Account. Today, the tax on gasoline is still the principal source of revenue for the Highway Trust Fund, and the HTF is the principal source of funding for Federal-Aid surface transportation programs.²⁶⁵

FINANCIAL ABILITY

All providers' financial ability to provide services is constrained by available revenues and legal limitations on revenue increases. The City of Wheatland and Yuba County both have a significant backlog of deferred maintenance due to funding shortages. Both Wheatland and Yuba County reported that the most significant service challenge to the provision of street maintenance is providing adequate funding for necessary maintenance and improvements.

Deferred maintenance may reduce costs in the short-term, but costs increase in the long-term. Yuba County reports that it would take a one-time expenditure of \$25 million to bring one-fifth of its roadway network up to a PCI of 70 from the current PCI of 45.²⁶⁶

²⁶⁵ Puentes and Prince, 2003, p. 3.

²⁶⁶ Yuba County Transportation Master Plan: 2007-2011.

Local agencies can reduce street repair costs through preventative maintenance. Cost-benefit analysis on pavement indicates preventative maintenance extends the useful life of pavement, decreasing the frequency of costly capital improvements, such as rehabilitation and reconstruction. However, local agencies' ability to conduct preventative maintenance is limited by financing constraints.

GOVERNANCE ALTERNATIVES

The MSR identified six CSAs that do not provide service and have not been dissolved by LAFCO.

CSA 47

CSA 47 is a 66-acre tract of land located in the community of Oregon House, at the intersection of Marysville Road and Concord Trail. The CSA was formed in 1991 to provide to provide maintenance for road and drainage facilities.²⁶⁷ There have been no annexations to the CSA following its formation, and no amendments to the SOI following its adoption.

CSA 49

CSA 49 is a 109-acre tract of land located in the community of Browns Valley, along Township Road. The CSA was formed in 1992 to provide maintenance for road and drainage facilities to a proposed development.²⁶⁸ There was an annexation and SOI amendment to the CSA in 1993, however, the annexation area was non-contiguous to the existing CSA boundary. The Public Works Department reports that it receives no assessments from the area and that the CSA provides no services.

CSA 51

CSA 51 is a 525-acre tract of land located approximately three miles south of the community of Smartville, along the Yuba-Nevada County line, south of Daugherty Road. The CSA was formed in 1992 to provide funding for road maintenance and drainage for a proposed 13-lot subdivision.²⁶⁹ LAFCO has a certificate of completion for the formation of the CSA, however there is no BOE record for this agency. There have been no annexations to the CSA following its formation, and no amendments to the SOI following its adoption. The proposed development associated with the area was not built, and the CSA never became active. Although inactive, the CSA has not been formally dissolved.

²⁶⁷ LAFCO resolution 1991-4.

²⁶⁸ LAFCO resolution 1992-2.

²⁶⁹ LAFCO resolution 1992-14.

CSA 56

CSA 56 is a seven-acre tract of land located east of Riverside Drive, southwest of Alicia Avenue and northwest of Feather River Boulevard in the community of Linda. The CSA was formed in 1994 to provide street and drainage maintenance, and landscaping and lighting services.²⁷⁰ There have been no annexations to the CSA following its formation, and no amendments to the SOI following its adoption.

CSA 57

CSA 57 is a 124-acre tract of land located in the community of Challenge, at the intersection of La Porte Road and Whispering Pines Way. The CSA was formed in 1994 to provide maintenance of road and drainage facilities, and of a water delivery system for fire suppression purposes.²⁷¹ There have been no annexations to the CSA following its formation, and no amendments to the SOI following its adoption.

CSA 58

CSA 58 is a 338-acre tract of land located approximately three miles east of the community of Browns Valley, in the vicinity of the intersection of Peoria Road and Township Road. The CSA was formed in 1994 to provide to provide maintenance of road and drainage facilities and a fire suppression water distribution system.²⁷² There have been no annexations to the CSA following its formation, and no amendments to the SOI following its adoption.

²⁷⁰ LAFCO resolution 1993-14.

²⁷¹ LAFCO resolution 1993-16.

²⁷² LAFCO resolution 1994-06.

10. PARKS AND RECREATION

This chapter reviews the parks and recreation services in Yuba County. The chapter reviews how these services are provided by the cities, special districts, state and federal agencies and private entities. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing. Government structure options are identified for local agencies under LAFCO jurisdiction.

PROVIDER OVERVIEW

This section provides an overview of the park maintenance and recreation service providers and service areas in Yuba County. For a detailed profile of each individual agency, please refer to Appendix A.

SERVICE PROVIDERS

The seven agencies under LAFCO jurisdiction engaged in park and/or recreation services in the County are the City of Marysville, the City of Wheatland, Olivehurst Public Utilities District, River Highlands CSD, Browns Valley Irrigation District, Yuba County Water Agency, and County Service Areas 52, 66 and 69. South Feather Water and Power Agency, also under LAFCO jurisdiction, provides recreational areas, but its facilities are not located within Yuba County. Table 10-1 gives an overview of basic services.

Table 10-1: Park Services Overview

The City of Marysville maintains and operates city-owned public parks. City public works staff directly provides park maintenance services. The City does not directly provide recreation services; however, it supports several programs that are offered and maintained through other entities in cooperation with the City on the City parklands. These include the off-highway vehicle park, Yuba Sutter Youth Soccer League, Little League, and the BMX track.

Agency	Parkland	Rec. Programming	Camping	Boating
Marysville	✓			✓
OPUD	✓	✓		
Wheatland	✓			
RHCSD	✓			
County	✓			
YWCA			✓	✓
BVID			✓	✓

The City of Wheatland maintains and operates city-owned parks. The City provides park maintenance directly with the exception of pest control services, for which it contracts with a private provider. A new community center, owned and operated by the City, recently opened in May 2007. Recreational services within the City of Wheatland are provided by the Wheatland Volunteer Recreation Association.

OPUD maintains and operates district-owned public parks and recreation centers. District staff directly provide park maintenance services. The District provides recreation services in the form of swimming lessons, facility rentals, and space at the Youth Center. OPUD employs 1.6 FTEs who provide swimming lessons at its community pool. Space at the Youth Center is available to

community groups interested in providing youth-oriented programs. In 2008, cheerleader training was the only recreation program offered at the center.

River Highlands CSD owns park space within the District bounds in Gold Village. The District does not provide any recreational programs or facilities. The park area is currently undeveloped and not maintained.

Browns Valley Irrigation District (BVID) and Yuba County Water Agency (YCWA) provide recreational space at agency-owned reservoirs and lakes. BVID owns Collins Lake; all maintenance and operations of the recreation area at Collins Lake are provided through a contract with a private vendor. YCWA owns Bullards Bar Reservoir and Lake Francis. A private vendor at Bullards Bar Reservoir operates and maintains the marina facilities, while YCWA maintains the general facility in conjunction with USFS. A non-profit agency operates facilities at Lake Francis.

County Service Areas (CSA) 52, 66 and 69 are financing mechanisms for park maintenance in unincorporated areas. CSA 52 funds the maintenance of two County-owned parks—POW-MIA Park and Purple Heart Park in the East Linda area. CSAs 66 and 69 fund park maintenance in new growth areas within the OPUD park service area. Special benefit assessments are levied on the developed parcels and collected by the County and distributed. For more on these CSAs, see the section of this chapter on financing and Appendix A, Chapter 42.

Last of the agencies under LAFCO's jurisdiction, the Yuba County Resource Conservation District (YCRCD) may provide recreation areas in the future. The RCD assists local landowners in providing stewardship of natural resources. As part of this effort, the RCD has identified several projects located along the Yuba River that provide the opportunity to protect and preserve the natural resources while also providing additional recreational and public access opportunities to the Yuba River.

Non-LAFCO Providers

Yuba County maintains and operates county-owned parks. Maintenance services are provided primarily by the County Public Works Department. Maintenance of select parks is provided through contracts with private providers. The County does not provide recreation services and does not own recreational facilities, regional parks, golf courses or community centers.

The U.S. Forest Service manages the Tahoe and Plumas National Forests in the northeast portion of the County. Both forests offer hiking, camping, winter sports, and fishing.

The U.S. Army Corps of Engineers owns Lake Englebright on the Yuba-Nevada county line. The lake has a surface area of 815 acres with a shoreline of 24 miles (half of which is in Yuba County). There is a full-service marina with launch ramps, 100 developed boat-in campsites, water craft rentals and picnicking areas. The Corps operates and charges for the boat launches and campgrounds; a private firm provides other services (e.g. rentals, concessions).

The California Department of Fish and Game maintains and operates two wildlife areas in the County. Daugherty Hill Wildlife Area covers 2,520 acres and is located 17 miles east of Marysville. The area's main species include deer, wild turkey, valley quail, and coyote. Spenceville Wildlife Area covers 11,448 acres and is located on the Nevada County line; two-thirds of the area is located in Yuba County, while the remainder is in Nevada County. This area's main species include wild

turkey, valley quail, and various water fowl. There are camping facilities at Spenceville, and fishing is allowed at the several bodies of water.

There are also several private-sector parks and recreation providers in the County, including recreation facilities at Camp Far West and Sycamore Ranch RV Park and Campground.

SERVICE DEMAND

This section provides an overview of park and recreation use, a general discussion of factors affecting service demand, and future needs for park and recreation service.

TRACKING DEMAND

Knowledge of how, when and where people use parks is essential to guide managers in directing staff time, funding and many other decisions. Tracking visitation and program use has advantages in terms of justifying funding, helping managers assess operational success, and in guiding performance improvement.

Most local agencies do not track the number of park visitors or the recreation usage. A Trust for Public Land study of the nation's 50 largest cities found only 11 conducted park user surveys and that almost none of the largest municipal park departments make an effort to count users beyond those that can be easily tallied through fee-paying services or gated facilities, such as swimming pools.²⁷³ It is relatively easy to count park users if they come primarily by car. Counting pedestrians coming freely into a park system from multiple entrances and engaging in a multitude of activities spread across thousands of acres is a challenge for many agencies. In free, multiple-entry parks, visitation estimates may be based on a count of users within the park at a particular point in time or with resident surveys. Another approach to counting city park users involves determining the percentage of park visitors who use restrooms and then installing equipment which counts the number of times toilets are flushed. A related approach involves estimating park usage from the volume of trash disposed in the park.

Most of the park service providers in Yuba County under LAFCO jurisdiction do not track the number of park visitors. OPUD tracks attendance at its swimming pool: there were 8,226 visits in 2007. BVID's concessionaire tracks usage of Collins Lake recreational facilities: in 2006, there were 113,439 overnight uses and 36,107 daytime uses. At locations like these facilities, where recreation fees are paid, tracking usage is relatively easy.

DEMAND DRIVERS

Park demand and usage varies based on age, income level and race, according to scholarly research.²⁷⁴ Older persons are somewhat less likely than younger persons to visit parks, to express interest in natural landscapes, to participate in group activities, or to express willingness to volunteer.

²⁷³ Trust for Public Land, 2006.

²⁷⁴ Summary of scholarly research from Elmendorf, et al., 2005.

As income increases, frequency of park visitation increases and people are more likely to perceive parks as beneficial. Increasing income is negatively associated with importance ratings for the presence of recreational facilities, traditional park landscapes, and ethnic concerns. Although respondents with less education are more likely than their more highly educated counterparts to view recreational facilities and traditional park landscapes as important attributes, educational level is not statistically related to park participation and attitudes.

Research suggests that park and recreation services sponsored by local governments are perceived to contribute to personal health by a broad cross-section of users, and are used in ways that have considerable physical activity and stress reduction value. Those who use local parks and participate in recreation programs and services appear to be in disproportionately better health than those who are not users. Park users are also less likely to be obese than the general population.²⁷⁵

PROJECTED DEMAND

Change in park demand is measured through population growth. As the population continues to grow, park demand will increase. However, the aging of the population is expected to partially offset the growth in residents. Localized demand changes will depend on development.

The City of Wheatland reports that it requires 89.5 additional acres of parkland in order to serve residents at build-out.²⁷⁶ (This calculation assumes three acres of parkland are adequate per 1,000 residents.)

Marysville's expansion of parkland and population is limited by a lack of vacant land. There is minimal developable land remaining to increase park acreage or service demand (i.e., population).

The County reports that an additional 155 acres needs to be acquired.²⁷⁷ Planned and proposed developments are concentrated in the southern territory of the County due to its proximity to the Sacramento metropolitan area; demand will likely increase most in these areas.

Chapter 3 provides the residential population and job base in each agency, projected population and job growth rates, and a description of growth strategies and areas.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

In the context of park and recreation service, infrastructure needs signify facilities that do not provide adequate capacity to accommodate current or projected demand for services. This section reviews existing park facilities, facilities' conditions and needs, and planned improvements.

²⁷⁵ Ho, et al., 2003.

²⁷⁶ City of Wheatland Development Impact Fee Calculation and Nexus Report, 2007, p. 105.

²⁷⁷ Yuba County General Plan, 1996, p. 3-4.

PARKS

There are various types of parks in Yuba County, which range from mini-parks, used for limited service needs, to large community parks, designed for large group functions, and a large regional park.

Table 10-2: Park Facilities Overview

Marysville

Agency	Total Park Acreage	Local Parks	Rec. Facilities
Marysville	263.4	15	0
OPUD	41.1	13	1
Wheatland	27.1	4	1
RHCS D	1.8	1	0
County	150.9	8	0

The City of Marysville has the most parkland acreage of providers under LAFCO jurisdiction, as shown in Table 10-2. Nearly 75 percent of the City’s parkland acreage is a single facility, the Riverfront Complex, as shown in Table 10-3. This acreage count excludes the Plumas Lake Golf Course, which the City owns and leases to a private vendor for both private and public use.

All of Marysville’s 15 park facilities are reported to be in good or excellent condition. The key service challenge for the City is financings; no recreation programs are offered due to funding limitations. The City’s FY 06-07 budget includes capital improvement projects for eight of the 15 parks. The Marysville capital improvement plan, developed in 2004, describes several planned park projects to be completed by 2009, including installation of cushioning material around tot play equipment, benches, additional drainage, and new playground equipment for several park sites. The 2007-2012 CIP includes a new restroom facility at Riverfront Park (\$120,000) scheduled for completion in FY 07-08, and the installation of new City of Marysville concrete park signs in various locations (\$25,000) by FY 08-09. A total of \$465,000 (\$364,000 from CDBG and \$101,000 from Proposition 12 and 40 funds) was allocated over two years to rehabilitate Ellis Lake by repairing the cobblestone bank and fixing the sidewalk. Ellis Lake also received funds for fountain repairs and replacement of existing bridges on North Ellis Lake Island.

Wheatland

Wheatland maintains four city parks and a new community center, which opened in May 2007. The City’s facilities cover 27.1 acres, although only 10.6 are developed parkland. Wheatland reports that all of its park facilities are in excellent condition. The agency did not identify any service challenges related to the maintenance of park facilities.

Long-term parkland acquisition and infrastructure improvement plans in the City are projected to cost over \$44 million. The City’s planned facilities include an additional 62 acres of community parks in the Jones Ranch, Heritage Oaks Estates West and Heritage Oaks Estates East subdivisions. In addition, the City anticipates acquiring approximately 90 acres of land for use as neighborhood, community and sports parks. The City’s recent General Plan Policy Document includes a policy to initiate the financing, design, and development of a City-owned community park adjacent to the new Civic Center site (Policy 6.A.1).

Olivehurst PUD

OPUD's parkland infrastructure includes 13 public parks, a youth center, and a swimming pool over 41.1 acres. A majority of OPUD's parks were described as being in good or excellent condition. Two parks need drainage work and one park needs an automated sprinkler system.

The District is planning for 133 acres of new parkland from planned and proposed residential developments within its bounds, over 50 acres of which will be community parks. The Plumas Lake Specific Plan identifies four possible community park locations and numerous neighborhood parks. New parks will be constructed by developers and transferred to OPUD for maintenance once completed to specifications.

River Highlands CSD

River Highlands CSD has one neighborhood park of 1.8 acres. The park has no landscaping, recreational equipment or facilities; it is open space.

The District is not planning any new park areas.

Non-LAFCO

Yuba County maintains eight parks over 150.9 acres, 124 acres of which are developed parkland. The County's parks are an average of 18.9 acres in size. The main service challenge for the County is financing parkland maintenance.

Four of the County's parks are identified as being in fair condition; the other four are in good to excellent condition. Friendship Park (fair condition) is in need of a new master plan to guide future redevelopment of the site. This master plan should address access from the west side of the site, redevelopment of the sports fields. Fernwood park (fair condition) has limited access and visibility; the facility needs an extended internal trail system and a formal entrance to the park on Grove Avenue. Shad Pad (fair condition) is leased to a motocross vendor.²⁷⁸ Improvements are also recommended at Hammons Grove Regional Park despite its reported excellent condition. The facility needs a developed river access point.

The County is currently planning three new parks in the East Linda Specific Plan area, including a five-acre school site with a park. In the Spring Valley Specific Plan area, the County is planning a town center park, an equestrian center, and two additional community parks. Yuba County government will take on the operations and maintenance of the parks developed under specific plans. The County's Park Master Plan identifies a need for a large regional park (50 or more acres) in the southern portion of the County. In addition, the Plan recommends an extensive regional trail network across the County. All recommended County and regional efforts in the Plan were estimated to cost between \$23.8 and \$29.8 million.²⁷⁹ Areas lacking in parkland area include Dobbins, Oregon House, Camptonville, Smartville, and Loma Rica.²⁸⁰

²⁷⁸ Yuba County, California Parks Master Plan Appendix B, 2008, p. B-7.

²⁷⁹ Yuba County, California Parks Master Plan, 2008, p. 64.

²⁸⁰ Yuba County, California Parks Master Plan Appendix B, 2008.

Table 10-3: Park Facilities by Agency

Facility	Location	Condition	Year Built	Acres
City of Marysville				263.4
Riverfront Park Complex	Bizz Johnson Dr. adjacent to the Feather River	Good	Redone mid 1980s	193.0
Ellis Lake	Between 9th, B, 14th and D streets	Good	Pre-1950	37.2
East Lake	Yuba St between 14th and 17th St.	Good	Pre-1950	9.4
Yuba Park	Yuba St. and E 10th St.	Good	Pre-1950	3.0
Gavin Park	Johnson Ave. and Val Dr.	Good	1980s	2.7
Washington Square	10th and E St.	Good	Pre-1950	2.5
Basin Park	Hall St. between E 17th and Harris St	Good	Pre-1950	2.4
Bryant Field	14th and C St.	Good	1996	2.1
Miner Park	Between Swezy and Sampson streets and E 14th and E 15th streets	Good	Pre-1950	2.1
Motor Park	14th and G St.	Good	Pre-1950	2.1
Triplett Park	Rideout Way and Covillaud St.	Good	Pre-1950	2.1
Veterans Park	5th St. between G and H streets	Good	Pre-1950	2.0
Plaza Park	1st and D St.	Good	Pre-1950	1.2
Stephen J. Field (Circle) Park	Rideout Way between Greeley Dr. & Boulton Way	Good	Pre-1950	1.1
3rd and D Streets Mini-Park	3rd and D St.	Excellent	2005	0.5
City of Wheatland				27.2
Park Place Park	McDevitt and Spruce	Excellent	2001	17.9
Wheatland Ranch Park	Wheatland Ranch subdivision	Excellent	2001	4.9
Nichols/C Street Park	E of SR 65 between C St. and Union Pacific	Excellent	NP	3.9
Front St./Tomita Park	Next to the Union Pacific tracks, west side of Front Street	Excellent	NP	0.4
Community Center	101 C St.	Excellent	2007	NA
OPUD				41.1
Eufay Wood Sr. Park	Rio Del Oro Subdivision	Excellent	2007	11.5
Olivehurst Community Park	Powerline Road between 9th and 10th Ave.	Fair	1950s	7.0
Veterans Park	Plumas Lake Cobblestone	Excellent	2007	4.6
Tahiti Village Park	Biglow Dr. & Maplehurst St.	Good	1960s	3.0
Bill Pinkerton Park	Hidden Creek & Knight Ferry	Excellent	2007	2.8
Lindhurst Memorial Park	McGowan Pwy & Olivehurst Ave.	Good	1994	2.7
Rolling Hills Park	Wilcox Ranch Rd. & Lidenmeir Dr.	Excellent	2004	2.5
Donald Brown Park	Zanes Dr. and Dark Horse Dr.	Excellent	2007	2.4
Orchard Glen Park	Bridgeport Way & Golden Gate Dr.	Excellent	2004	1.3
River Glen Park	Olivehurst Ave.	Excellent	2006	1.1
River Park	Missour Bar and Canyon Creek	Excellent	2004	1.0
Johnson Park	Evelyn Drive	Good	1980s	0.8
Chestnut Park	Chestnut Road	Good	1982	0.5
Youth Center	1960 9th Ave.	Good	1980	NA
Swimming Pool	Powerline Road between 9th and 10th Ave.	Good	1959	NA
River Highlands PUD				1.8
Golden Park	Gold Village	NA	NA	1.8
Yuba County				150.9
Hammon Grove Park	5560 Hwy 20	Excellent	NP	43.6
Ponderosa Park	17103 Ponderosa Way, Brownsville	Good	NP	37.6
Friendship Park (West Linda Park)	5660 Alicia Ave.	Fair	NP	22.2
Shad Pad	Shad Road	Fair	NP	16.0
Star Bend Boat Launch	2034 Feather River Blvd.	Fair	NP	9.2
POW-MIA Park	Edgewater Circle at Oakwood Dr.	Excellent	2007	7.8
Fernwood Park (East Linda Park)	5871 Grove Ave.	Fair	NP	7.7
Purple Heart Park	West Side of Rupert Ave.	Good	NP	6.8

RECREATION AREAS

Table 10-4 presents recreation areas in the County, including significant amenities.

Table 10-4: Recreation Area Facilities by Agency

Area	Agency	Location	Significant Amenities	
Collins Lake	BVID	7530 Collins Lake Rd Oregon House, CA 95962	Campsites Boat launch Boat rentals	RV Hook-ups Marina General Store
Bullards Bar	YCWA	12571 Marysville Road Dobbins, CA 95935	Campsites Boat rentals Trails	Boat launch (2) General Store Houseboat rentals
Francis Lake	YCWA	South of Dobbins		
Daugherty Hill Wildlife Area	DFG	Northeast of Brown's Valley	Hunting	Wildlife Viewing
Spenceville Wildlife Area	DRG	South of Smartville	Hunting Fishing	Campsites Wildlife Viewing
Tahoe National Park	USFS	Northeast Yuba County	Campsites	Trails
Plumas Natinal Park	USFS	Northeast Yuba County	Campsites	Trails

Browns Valley Irrigation District

Recreational services are provided at Collins Lake by a private contractor. The District identified the facilities as being in good condition with no infrastructure needs or deficiencies.

The concessionaire has plans to expand the recreation area.

Yuba County Water Agency

YCWA provides water-based recreation services at New Bullards Bar Reservoir and Lake Francis.

YCWA operates Bullards Bar Reservoir in conjunction with the Tahoe National Forest Service. A private vendor rents watercrafts. Over 90 campsites are available at three campgrounds; there is also limited camping on the shoreline and group camping space. At Lake Francis, recreation opportunities include fishing, camping, hiking and boating. YCWA prohibits the use of any gasoline powered motor on Lake Francis. Lake Francis Resort is operated by a non-profit organization providing services to foster children.

All YCWA facilities are reported to be in good condition.

YCWA is exploring additional recreational opportunities along the Lower Yuba River, with possible recreation associated with levee setback projects.

Yuba County Resource Conservation District

YCRCD does not currently offer own any recreation areas, but the District is looking to improve and expand recreational opportunities along the Lower Yuba River and other waterways in the County. Specifically, the District is planning to develop sections of the Lower Yuba River near

Marysville. The project would provide pedestrian access to the river, improve wildlife habitat, and remove concrete and debris from along the Yuba River corridor to provide a safe place for outdoor recreation.²⁸¹ The Integrated Regional Water Management Plan estimates the project to cost \$150,000 with a \$15,000 local match; the status of the project is “ready to proceed/ongoing.”²⁸²

SERVICE ADEQUACY

In order to assess infrastructure deficiencies and needs, it is necessary to analyze the adequacy of the facilities and related services in meeting the needs of the populace. Adequacy can be gauged by park acreage per 1,000 residents.

STANDARDS

For developer park dedication requirements (i.e., “Quimby” fees), California statute sets a benchmark of three to five acres per 1,000 residents.²⁸³ Cities with a policy of as much as five acres per 1,000 residents in their General Plans may impose that requirement on developers. Otherwise cities may require developers to dedicate or finance up to three acres of parkland per 1,000 residents.

Marysville has a standard of 10 acres per 1,000 residents. The City’s standard per 1,000 residents for a regional park is five acres, for community parks is 2.5 acres, and for neighborhood parks is 2.5 acres. The City classifies these parks by size and function.²⁸⁴

Wheatland’s recent general plan policy document includes a policy for the City to strive to achieve five acres per 1,000 residents, broken down to two acres of regional parkland, one acre of community parkland, and two acres of neighborhood parkland (Policy 6.A.3). Policy 6.A.5 clarifies that this standard may be met through any combination or joint development of public facilities, private recreational facilities, and school facilities.²⁸⁵

Yuba County has a standard of five acres per 1,000 residents.

The National Recreation and Park Association (NRPA) suggests that municipalities decide upon their own set of standards, but nonetheless recommends that a municipal park system be composed of at least 6.25 to 10.5 acres of developed open space per 1,000 residents.²⁸⁶

²⁸¹ Yuba County Integrated Regional Water Management Plan, 2008, p. 6-54.

²⁸² Ibid, Table 7-1.

²⁸³ Government Code §66477(a)(2).

²⁸⁴ City of Marysville General Plan, 1985.

²⁸⁵ City of Wheatland General Plan Policy Document, 2006, pp. 6-2 to 6-5.

²⁸⁶ The 1983 NRPA standard was 10 acres of park space per 1,000 inhabitants.

PARK ACREAGE

Table 10-5: Developed Parkland per 1,000 Residents

Marysville has 20.7 developed acres per 1,000 residents, as shown in Table 10-5. This is more than double its overall parkland standard. The City has one regional park, providing 15.2 acres per 1,000 residents. The City also has one community park, providing 2.9 acres per 1,000. Neighborhood parks are defined in the City’s general plan as being between five to 20 acres, in which case there are 0.74 neighborhood park acres per 1,000 residents. Including all parks over one acre, the maximum size for a mini-park, this classification increases to 2.57.²⁸⁷ Depending on the inclusion of small neighborhood parks, then, the City meets or exceeds all of its park acreage standards.

Agency	Developed Acres per 1,000 Residents
Marysville	20.7
Wheatland	3.0
OPUD	3.3
Yuba County	2.9
RHCSD	0.0

There are 3.0 developed park acres per 1,000 residents in Wheatland, two acres below the standard. Given the City’s policy, however, private providers and schools’ park facilities could make up the difference. Further, all of the City’s parks are neighborhood parks, so Wheatland exceeds its standard for this park type without other providers included.

Yuba County has 2.9 acres per 1,000 residents. To meet its standard of five acres, the County requires an additional 87 developed park acres for a total of 211. If the County developed its remaining undeveloped parkland it would still require an additional 60 acres.

OPUD meets the Quimby standard of three acres per 1,000 residents, at 3.3 acres. The District would require an additional 20.2 acres to meet the County standard.

MANAGEMENT

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, and conduct advance planning for future growth.

An evaluation of the adequacy of management practices is shown in Table 10-6. The first four indicators are self-explanatory. Adequate evaluation of rates and fees means updating user fees and development impact fees with reasonable frequency. Adequate capital planning would involve a multi-year capital improvement plan (or comparable planning effort) for capital replacement and, if relevant, expansion. Capital planning documents regarding park and recreation services could include a parks master plan, a parks capital improvement plan, and a general plan element. Advance growth planning is adequate when it discloses existing capacity and anticipated needs throughout the existing service area and SOI.

²⁸⁷ The park standards do not include a category for parks between one and five acres in size, as is the case for 11 of the City’s 15 parks.

Table 10-6: Parks and Recreation Agency Management Practices

No provider has all capital planning documents, but most have made planning efforts through one or two such documents. Marysville has a capital improvement plan including parks (with a horizon through FY 08-09) as well as a general plan from 1985 that includes an open space element. The City does not have a parks master plan, although its General Plan incorporates policies for maintaining and expanding parks for current residents and future growth. Wheatland addresses its parkland policies in a 2006 General Plan Policy Document, which indicates an intention to draft a parks master plan (Policy 6.A.14) in FY 06-07. The City does not have a capital improvement plan. OPUD has a parks master plan that concentrates on new developments in its bounds. Yuba County has a countywide parks master plan.

	Wheatland	Marysville	OPUD	RHCSD	County
Evaluate employees annually	A	A	A	I	A
Prepare timely budget	A	A	A	A	A
Periodic financial audits	A	A	A	I	A
Current financial records	A	A	A	I	A
Evaluate rates	A	-	A	-	A
Capital planning	A	A	A	N	A
Advance growth planning	A	A	A	N	A
A = Practiced adequately, I= Practiced but improvement needed, N= Not practiced					

RHCSD’s management practices could be improved in several areas. RHCSD’s Board closely monitors the productivity of the staff and provides feedback at regular board meetings, but does not perform formal employee evaluations. The District does have a policy to have its financial statements annually audited by an independent auditor, but an audit had not been completed for FY 05-06 as of May 2007. As the District is not currently offering developed parkland, it is not performing park-related capital planning.

Further details on management practices of individual agencies can be found in Appendix A.

LOCAL ACCOUNTABILITY AND GOVERNANCE

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency’s activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 10-7.

Each of the park and recreation service providers under LAFCO’s purview are to hold open elections for governing body seats. Marysville, Wheatland, and OPUD have had contested elections in recent years, with voter turn-outs upward of 53 percent. RHCSD’s board member positions, however, have been uncontested; members are appointed by the Board. RHCSD has one vacant seat as of the drafting of this report.

Table 10-7: Park and Recreation Agency Accountability and Governance Measures

All agencies prepare and post meeting agendas and make minutes available as required. All agencies post meeting materials on their websites. Additional outreach efforts include newsletters and press releases to the local newspaper by Wheatland and Marysville.

	Wheatland	Marysville	OPUD	RHCSD	County
Contested election since 1994	✓	✓	✓	×	✓
Constituent outreach activities	✓	✓	✓	✓	✓
MSR Disclosure	✓	✓	✓	✓	✓
Notes: ✓ = Occurred or adequately practiced, × = Did not occur or not practiced					

RHCSD partially cooperated with the MSR process by providing information at the initial interview and financial information, but the District failed to answer further requests for information.

SHARED FACILITIES

SHARED FACILITIES

OPUD is the only provider currently sharing facilities. The District has a joint use agreement with Cobblestone Elementary for the use of Veterans Park. The District owns the park and the school uses and maintains it during school hours. The District has similar plans for three additional parks located adjacent to schools.

OPPORTUNITIES

Wheatland is in the process of developing shared-facility plans with the high school and elementary school districts. Marysville also recognizes sharing facilities with schools as an opportunity, but has not established any plans to do so.

REGIONAL COLLABORATION

The County reports that it has scheduled meetings to discuss a regional jurisdiction with administrators of other jurisdictions: OPUD, City of Marysville, Yuba City, Sutter County, and City of Wheatland. Control of existing regional parks would be turned over to the regional authority for continued maintenance and management of these facilities. The development of new regional parks and recreation facilities would also be handled through the regional authority. OPUD indicated that while it supports efforts for a regional administration of parks focused on coordinating demands for facilities, the District does not support regionalized maintenance of park facilities. Planning and discussion for the regional jurisdiction are in the preliminary stage and no timeline has been established for formation of such an agency.

FINANCING

The financial ability of agencies to provide services is affected by available financing sources and financing constraints. This section discusses operating costs, the financing of operations and capital, as well as the overall financial ability of agencies to provide services.

OPERATING COSTS

Park and recreation service costs vary between providers due to different service configurations, services offered, infrastructure age, and capital financing approaches. Park maintenance costs per acre, as shown in Table 10-8, are calculated using the agency’s maintenance budget and the total park acreage.

Marysville spent a total of \$319,101 on parks in FY 05-06. Of this amount, 32 percent was for maintenance expenses and 68 percent was for personnel costs. Wheatland spent a total of \$40,313 on parks in FY 05-06; 27 percent was for maintenance and 73 percent was for personnel.

Table 10-8: Maintenance Costs per Acre, FY 05-06

The Cities of Marysville and Wheatland spend \$1,269 and \$1,129 per developed parkland acre on maintenance costs in FY 05-06.

Agency	Maintenance Cost per Acre
Marysville	\$1,269
Wheatland	\$1,129
Unincorporated	
CSA 52	\$1,272
OPUD	\$3,939
County	\$339

In the unincorporated areas, park maintenance funding is plentiful in the OPUD service area and CSA 52 where assessments for park maintenance are structured. However, in the remainder of the unincorporated areas, funding for park maintenance is less ample at \$339 per developed acre.

FINANCING OPERATIONS

Park and recreation operations are financed through general fund revenues, assessments and user fees.

Assessments

Special benefit assessments imposed through County Service Areas are an important source of funding for park operations in the new-growth unincorporated areas. CSA 52 funds weekly maintenance service at two County-owned parks in the East Linda area. CSAs 66 and 69 contributed the entire park operating budget for OPUD, in addition to park development funding. OPUD is allocated \$127 per parcel of the CSA 66 assessment imposed in new growth areas in the Plumas Lake area. CSA assessments raised \$241,000 in revenue for OPUD in FY 05-06; by comparison, OPUD spent \$199,000 on park operations and development that year.

User Fees

Typically, California jurisdictions finance some or all of the costs of recreation programming through user fees. Considerations relating to income level and the impact of recreation programming on crime reduction in a community are often important factors in determining the

extent to which recreation costs are underwritten by a jurisdiction. In order to levy or raise user fees, the jurisdiction must document that the fee recoups only the cost of providing the fee-related service.

The County does not charge park user fees. OPUD does not charge user fees for park use, but does charge fees for pool use and other recreation programming. Most of Marysville’s parks and sport facilities are available for use by residents and non-residents without fees, however, some park facilities and venues are available for rent. Marysville funds capital improvements through concession sales paid into a parks and recreation capital fund. Wheatland charges a community center rental fee, which is higher for non-residents than residents.

CAPITAL FINANCING

Development impact fees, grants and bonded debt are common sources for capital financing.

Development Impact Fees

Park development impact fees include park facility fees and park in-lieu fees. Park development impact fees are levied on new developments and renovations. Park facility fees can be used for park land acquisition, park and recreation facility construction, and renovation of existing facilities. Park in-lieu fees (“Quimby fees”) are levied on new developments for the acquisition of new parkland. Developers may donate land to the county or city, or pay an in-lieu fee instead.

Table 10-9: Park Development Impact Fees, Selected Jurisdictions, 2006

The County charges a public facilities fee of \$74 per new dwelling unit to cover the cost of park equipment.²⁸⁸ In addition, there are park impact fees charges, which vary by geographic area; fee credits and/or reimbursements are available to developers who fund eligible improvements. In the East Linda Specific Plan area, the County charges a fee of \$3,956 per dwelling unit to finance park acquisitions and development. In the Edgewater area, the fee is \$1,096. In the Plumas Lake Specific Plan area, the fee of \$5,121 is collected on behalf of OPUD for park development.

County	Jurisdiction	DIF
El Dorado	El Dorado County	\$6,449
Fresno	Clovis	2,381
Kern	Bakersfield	1,510
Placer	Rocklin	2,696
Sacramento	Citrus Heights	1,079
Sacramento	Elk Grove	4,213
Sacramento	Sacramento	1,707
Shasta	Redding	2,967
Solano	Vacaville	3,639
Yolo	Davis	4,056

Source: Duncan Associates

The City of Wheatland charges a combined development impact fee and in-lieu fee on residential structures for parkland facilities development based on the number of dwelling units—\$5,516 for a single family dwelling unit.

The City of Marysville does not presently impose development impact fees, but would be expected to develop a fee structure to finance park development in its primary SOI area.

²⁸⁸ Yuba County, *Public Works Developers Fee Summary*, Feb. 6, 2008.

Neighboring Yuba City charges \$9,320 per dwelling unit in park and recreation development impact fees. The city finances a service level of 10 acres per 1,000 residents, along with community centers and aquatic centers.²⁸⁹

A recent study of development impact fees found that 33 of 39 sampled California jurisdictions levy park development impact and/or in-lieu fees. Among the Central Valley and other jurisdictions sampled, the median charged \$2,832 in 2006. Table 10-9 compares the park development impact fees and in-lieu fees charged by various providers for the average new single family home in the State.

Grants

Many local jurisdictions in California rely on state and county grants to acquire and improve local park facilities. In recent years, California has passed two statewide bond measures for funding parks and open space projects. The Proposition 40 funding program has several elements including a grant based on a per capita allocation, a matching grant and several competitive grant programs.

State Propositions 12 and 40—adopted in 2000 and 2002, respectively—provided funding for park capital investments. Future State funding for parks will be available as a result of the Safe Drinking Water Bond Act, approved by California voters in 2006; competitive grants for local and regional parks are funded at \$400 million statewide.

The County's park master plan contemplates using a portion of the County's unexpended Proposition 40 funds to finance local park development in the foothill areas.

River Highlands CSD was the recipient of the Roberti-Z'berg Harris Urban Open Space and Recreational Need Basis Competitive Grant from the California Department of Parks and Recreation in 2002. The \$120,000-grant was to be used for park improvements such as a new irrigation system, landscaping and sports facilities, but the District did not accept the funds because it does not have sufficient maintenance funding.

Wheatland received \$219,544 in park grants from the state to purchase and install playground equipment for various parks in 2003. In FY 05-06, Wheatland received \$78,536 from the State through a per-capita block grant program.

FINANCIAL ABILITY

All providers' financial ability to provide services is constrained by available revenues and legal limitations on revenue increases.

In the unincorporated areas, financing mechanisms have been structured to fund development of new parks to accommodate growth, and to maintain parks in the new growth areas. Financing is not presently adequate to develop new parks and renovate existing parks in existing communities, and there is no financing mechanism in place to develop and maintain regional parks. However, the County's 2008 park master plan proposes a ballot measure be considered to finance regional park

²⁸⁹ Yuba City, *Update of the AB 1600 Fee Justification Study*, 2006.

development and maintenance as well as local park improvements through a landscape and lighting district maintenance assessment of approximately \$50 per parcel.

Wheatland has established financing mechanisms to fund development of new local parks to accommodate growth, but has not structured financing mechanism for development and maintenance of regional parks. The City's parks are in good to excellent condition, indicating that there are no major problems with deferred maintenance at its existing parks. The City does not offer recreation programming directly, but could finance recreation services through a combination of user fees and assessments.

Marysville has not established financing mechanisms to fund development of new local or regional parks to accommodate growth. The City's parks are in good to excellent condition, indicating that there are no major problems with deferred maintenance at its existing parks. The City does not offer recreation programming directly, but could finance recreation services through a combination of user fees and assessments.

OPUD has ample financial ability to provide local park services through development impact fees and CSA assessments. With the exception of its Olivehurst Park, the District's parks are in good to excellent condition, indicating that there are no major problems with deferred maintenance at its existing parks. OPUD offers limited recreation programming, and could finance additional recreation services through a combination of user fees and general funds.

River Highlands CSD does not have adequate financial ability to provide park services, as demonstrated by the agency's decision not to accept grant funds to develop the CSD's park.

GOVERNMENT STRUCTURE OPTIONS

The MSR identifies government structure options, advantages and disadvantages, and evaluation issues, but does not make recommendation about these options. The Commission or the affected agencies may or may not initiate studies on these options in the future, although LAFCO is required to update the agencies' SOIs by January 1, 2008.

Park providers in Yuba and Sutter counties have initiated discussions of a regional park district. Discussions are in the early stages, and it has not yet been determined the type of governance structure the jurisdictions are advocating. Options include a joint powers agreement funded and administered by all participating agencies or a special district formed by LAFCO dedicated to park and recreation services. Per the County's Parks Master Plan, the new regional park and recreation authority could take on all regional-scale projects within Yuba County. Control of existing regional parks, including those owned by County government and the City of Marysville, could be turned over to the regional authority in order to share the support for these facilities across the region, which will benefit from having these amenities.

No other governance alternatives were identified.

11. MISCELLANEOUS SERVICES

This chapter reviews cemetery, library, mosquito and vector control, resource conservation, and solid waste services in Yuba County, including how these services are provided by the special districts, cities and other providers not under LAFCO jurisdiction. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, service adequacy, and financing. Government structure options are identified for local agencies under LAFCO jurisdiction.

CEMETERIES

OVERVIEW

Regulatory Framework

The principal act that governs the districts is the Public Cemetery District Law.²⁹⁰ The principal act authorizes districts to own, operate, improve, and maintain cemeteries, provide interment services within its boundaries, and to sell interment accessories and replacement objects (e.g., burial vaults, liners, and flower vases). Although districts may require and regulate monuments or markers, districts are precluded from selling them. Districts are also restricted from acquiring or constructing mausoleums constructed prior to 1937. The principal act requires districts to maintain cemeteries owned by the district.²⁹¹

The law allows districts to inter non-residents under certain circumstances.²⁹² Non-residents eligible for interment are described in California Health and Safety Code §9061, and include:

- former residents,
- current and former taxpayers,²⁹³
- family members of residents and former residents,²⁹⁴
- family members of those already buried in the cemetery,
- those without other cemetery alternatives within 15 miles of their residence, and

²⁹⁰ California Health and Safety Code §9000-9093.

²⁹¹ California Health and Safety Code §9040.

²⁹² Non-residents eligible for interment are described in California Health and Safety Code §9061, and include former residents, current and former taxpayers, family members of residents and former residents, family members of those already buried in the cemetery, those without other cemetery alternatives within 15 miles of their residence, and those who died while serving in the military.

²⁹³ Former taxpayers must have paid property taxes on property located in the district for continuous period of at least five years, a portion of which time period shall have occurred within the 10 years immediately before the person's death.

²⁹⁴ Family members as defined in §9002(e) are “a spouse by marriage or otherwise, child or stepchild, by natural birth or adoption, parent, brother, sister, half-brother, half-sister, parent-in-law, brother-in-law, sister-in-law, nephew, niece, aunt, uncle, first cousin, or any person denoted by the prefix ‘grand’ or ‘great,’ or the spouse of any of these persons.”

- those who died while serving in the military.

In accordance with Health and Safety Code §9065, all special districts must create an endowment account for the perpetual care and maintenance of the cemeteries. The districts are required to collect a minimum endowment care fee for each interment right sold.²⁹⁵ The principal of the endowment fund may only be used for investment purposes. Any income from those investments may be used for care of cemeteries owned by the district.

Service Providers

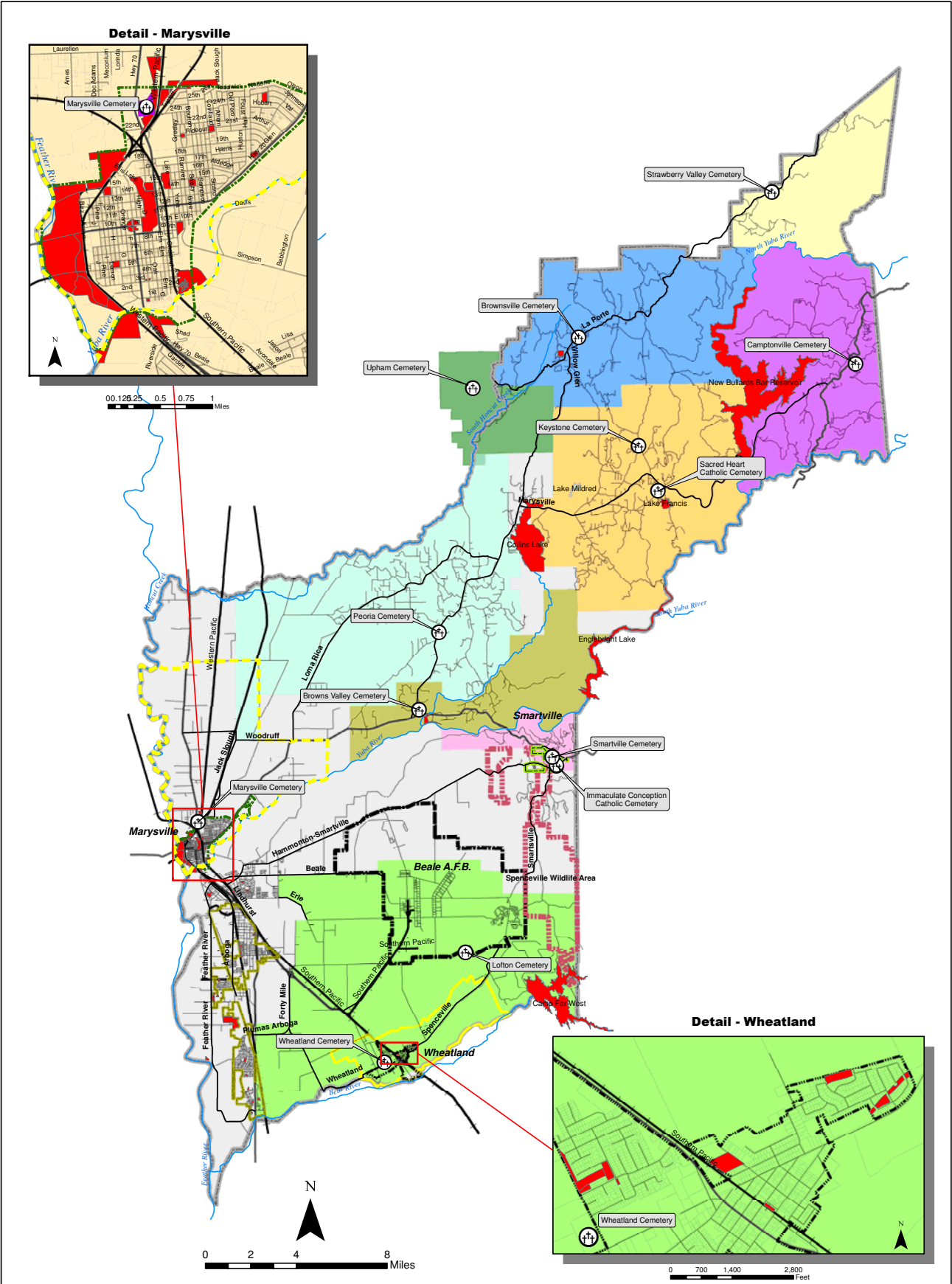
Cemetery services in the County are provided by eight public cemetery districts and one community services district, as shown in Table 11-1. The Camptonville Cemetery District is inactive; maintenance and operations of the Camptonville Cemetery is provided by Camptonville CSD.

The Marysville City Cemetery has not been active since the last burials took place in the late 1920’s, and is now a registered historic site. No new burials take place at this facility. Maintenance of the Marysville City Cemetery is provided by the City of Marysville, as the Marysville Cemetery District is inactive.

Table 11-1: Cemetery Provider Overview

Agency Name	Facilities Maintained	Communities Within District Bounds
Browns Valley Cemetery District	Browns Valley Cemetery	Browns Valley
Brownsville Cemetery District	Brownsville Cemetery	Brownsville, Challenge, Rackerby
Camptonville CSD	Camptonville Cemetery	Camptonville
Keystone Cemetery District	Keystone Cemetery	Dobbins
Peoria Cemetery District	Peoria Cemetery	Browns Valley
Smartville Cemetery District	Smartville Masonic Cemetery, Immaculate Conception Catholic Cemetery, McGanney Cemetery (Private)	Smartville, Timbuctoo
Strawberry Valley Cemetery District	Strawberry Valley Cemetery	Strawberry Valley
Upham Cemetery District	Upham Cemetery	Bangor (Butte Co.)
Wheatland Cemetery District	Wheatland Cemetery, Lofton Cemetery	Wheatland, Plumas, Camp Far West, Beale AFB

²⁹⁵ The minimum endowment care fee as defined in Health and Safety Code §8738 is \$2.25 a square foot for each grave. \$35 for each niche, \$110 for each crypt; provided, however, that for companion crypts, there shall be deposited \$110 for the first crypt and \$55 for each additional crypt.



Legend

- | | | |
|---|---|--|
| Wheatland Cemetery District | Keystone Cemetery District | Olivehurst Public Utility District |
| Smartville Cemetery District | Upham Cemetery District | Spenceville Wildlife Area |
| Marysville Cemetery District | Camptonville Cemetery District | City Of Wheatland |
| Peoria Cemetery District | Brownsville Cemetery District | City Of Wheatland Sphere Of Influence |
| Browns Valley Cemetery District | † Cemeteries | City Of Marysville |
| Strawberry Valley Cemetery District | Park Facilities | Marysville - Primary Sphere Of Influence |
| | | River Highlands Community Service District |

**Figure 11-2 Parks and Cemeteries
Yuba County**

**Yuba County
Information Technology - GIS
Drawn By: J. Henry
Date: 05/14/08
File: YubaParksCem0514.mxd**



Cemetery services are also provided by various religious organizations and private enterprise throughout the County. For a map of public cemetery providers in Yuba County, see Figure 11-2.

The nine public cemetery district providers are independent special districts responsible for improving, expanding, and operating cemeteries within district bounds. Other burial services, such as opening and closing graves, lowering caskets, and setting headstones, are typically provided by the mortuary of the customer's choice. Of the cemetery districts in Yuba County, only one—the Brownsville Cemetery District—offers these services directly. For maps of cemetery providers refer to Appendix B.

Browns Valley Cemetery District

The Browns Valley Cemetery District (BVCD) provides cemetery operations and maintenance services to the community of Browns Valley at the Browns Valley Cemetery. The boundaries of BVCD extend west from Englebright Lake to the intersection of Spring Valley Road with SR 20, and north of the Yuba River to include the community of Browns Valley, as shown on Map B-4. The District has a boundary area of approximately 30 square miles.

Brownsville Cemetery District

The Brownsville Cemetery District (BCD) provides cemetery maintenance, operations and interment services to the communities of Brownsville and Challenge at the Brownsville Cemetery. Interment services provided by the District include the opening and closing of graves, lowering of caskets and setting of headstones.

The boundaries of BCD extend west of New Bullards Bar Reservoir and the North Fork of the Yuba River to the Yuba-Butte county line, as shown on Map B-6. The District has a boundary area of approximately 57 square miles.

Camptonville Community Services District

The Camptonville Cemetery District is an inactive district that was formed to provide cemetery services to the community of Camptonville at the Camptonville Cemetery. Cemetery services (operations and maintenance) have been taken over by the Camptonville Community Services District (CCSD), although LAFCO has not approved CCSD cemetery services to date. The boundaries of CCCD consist of an approximately 56 square mile area bounded by the North and Middle Forks of the Yuba River and the Yuba-Nevada county line, east of the New Bullards Bar Reservoir, as shown on Map B-9.

Keystone Cemetery District

The Keystone Cemetery District (KCD) provides cemetery operations and maintenance services to the communities of Dobbins and Oregon House at the Keystone Cemetery. The boundaries of KCD extend west of New Bullards Bar Reservoir and the North Fork of the Yuba River to the Collins Lake area in the east, as shown on Map B-14. The southern boundary of the District reaches the confluence of the South Fork of the Yuba River and Englebright Lake, along the Yuba-Nevada County line. The District has a boundary area of approximately 72 square miles.

Peoria Cemetery District

The Peoria Cemetery District (PCD) provides cemetery operations and maintenance services to the communities of Loma Rica and Browns Valley at the Peoria Cemetery. The boundaries of PCD

extend from the vicinity of Lake Collins in the northeast to the District 10-Hallwood area in the southeast, and south from the Yuba-Butte county line to just north of the community of Browns Valley, as shown on Map B-23. The District has a boundary area of approximately 85 square miles.

Smartville Cemetery District

Smartville Cemetery District (SCD) provides cemetery operation and maintenance, cremation setting services, and interment accessories. The District provides maintenance services to the Smartville Masonic Cemetery, the Immaculate Conception Catholic Cemetery, both of which are owned by the District. The agency also provides maintenance for the privately owned McGanney Cemetery, which abuts the Catholic Cemetery.

The District serves the Smartville and Timbuctoo communities within its bounds. The boundary area extends north to the Yuba River, west along Hammonton Road, south to Hammonton-Smartville Road, and east to the Yuba-Nevada county line. SCD has a boundary area of eight square miles.

Strawberry Valley Cemetery District

The Strawberry Valley Cemetery District (SVCD) provides cemetery maintenance and interment services to the community of Strawberry Valley in Yuba County, and outside of its bounds to the community of Clipper Mills in Butte County. The District reports that it considers residents of Clipper Mills as residents of the District because the Strawberry Valley Cemetery has historically served the residents of that area.

The boundaries of SVCD extend north from the North Fork of the Yuba River and are bounded by the Counties of Butte, Plumas and Sierra, as shown on Map B-35. The District has a boundary area of approximately 29 square miles.

Upham Cemetery District

The Upham Cemetery District (UCD) is located in both Butte and Yuba Counties, with Butte being the principal county. On the Yuba side, UCD is located south of the community of Rackerby, and west of the community of Brownsville, as shown on Map B-37. UCD provides cemetery maintenance services in Butte County to the community of Bangor.

The District reports that it also provides services to the community of Rackerby, outside of its bounds, because the community of Rackerby has historically been served by Upham Cemetery. UCD considers residents of Rackerby to be non-residents of the District, but are allowed burial at Upham Cemetery provided that the non-resident fee is paid.

Wheatland Cemetery District

Wheatland Cemetery District (WCD) provides cemetery operation and maintenance and sales and staking of interment plots. The boundary area extends north to North Beale Road, west beyond Old Forty Mile Road, south to the Yuba-Sutter and Yuba-Placer county lines, and east to the Yuba-Nevada county line, as shown on Map B-38. The City of Wheatland, the Camp Far West community and the southern portion of Beale AFB are within WCD bounds. WCD has a boundary area of 105 square miles.

Non-LAFCO Agencies

There are two private providers of cemetery service in Yuba County, which residents may choose in-lieu of a public cemetery. Sierra View Memorial Park is an active private cemetery located in the community of Olivehurst. The cemetery is open to any person regardless of residence. The Catholic Church has two cemeteries in the County which are restricted to individuals of the Catholic faith.

There are also private and family cemeteries within Yuba County; however, these cemeteries are not open to the public for burials and are maintained for family use and historical significance.

SERVICE DEMAND

Demand Drivers

Demand for burial services is dependent upon the number of deaths among those who wish to be buried in the community and the availability of alternatives to public cemetery providers.

Death rates are generally stable across time. Between 1990 and 2004, death rates in California and Yuba showed no significant changes. During that time Yuba County had a median death rate of 83 per 10,000 individuals countywide, which was higher than the statewide median rate of 69.

Alternatives to the public cemetery districts are Sierra View Memorial Park, and cemeteries with religious affiliations or private cemeteries in the surrounding counties. A lack of alternatives results in greater demand for public cemetery services.

Burials

Table 11-3: Annual Burials, 2002-7

The number of burials performed annually is indicative of the demand for cemetery services in each district. Table 11-3 shows the number of burials in various public cemetery districts from 2002-7. BVCD and CCSD are not included in the table because the districts did not provide the number of burials by year. BVCD estimates that 10 to 15 burials have taken place at the cemetery from 2004-7 and CCSD estimates that a total of four burials have taken place from 2004-7. BCD did not provide any estimate of the number of recent burials.

	2002	2003	2004	2005	2006	2007
KCD	NR	NR	7	8	10	10
PCD	NR	NR	9	19	8	12
SCD ¹	NP	NP	1	1	6	NR
SVCD	NR	2	2	0	2	1
UCD	5	4	11	5	4	3
WCD ²	22	19	19	24	12	NR
Notes:						
(1) Burials in 2006 for WCD are burials completed by November 1, 2006.						
(2) SCD burials for 2004 and 2005 based on gravestone records on the Yuba Roots website. Burials for 2006 are based on a district estimate.						
NR: Not requested from agency						
NP: Not provided by agency						

On the basis of burials per 1,000 district residents, KCD averaged approximately four burials per 1,000 residents from 2004-7, with PCD averaging slightly more than three over the same time span. SCD averaged just fewer than five in 2004 and 2005, and significantly more than that in 2006. SVCD averaged over 12 burials per 1,000 district residents from 2003-7 due to the small population

of the district. UCD averaged six burials per 1,000 residents from 2002-7, and WCD averaged about two from 2002-6.

Projected Demand

There are numerous planned and proposed development projects within Yuba County. As the developments are approved and constructed, demand for cemetery space is anticipated to rise.

WCD boundaries encompass proposed developments that include over 26,000 proposed units which would increase the District's population by approximately 74,000 residents at build-out. If the District's burial rate remains constant, this increase in population would result in 147 additional burials per year.

The planned Spring Valley development is located primarily within PCD bounds, with the southern portion extending into BVCD bounds. The County adopted a specific plan for the area in 1992, which can accommodate up to 3,500 dwelling units at build-out. This would amount to a total increase in population of about 10,000 residents.

Also located within the bounds of PCD is the Quail Valley Estates development. The development area, located on 1,500 acres, is proposed to contain 300 dwelling units at build-out. The development will increase the Districts population by approximately 850 residents at build-out, amounting to an additional three burials per year.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

Browns Valley Cemetery District

The Browns Valley Cemetery is located on Browns Valley School Road, in the community of Browns Valley. The District did not indicate the remaining capacity or acreage of the cemetery. The District reports that the cemetery is in good condition. The District identified the need for a storage shed at the cemetery, as it currently uses an old mausoleum for equipment storage. The LAFCO site visit did not identify any maintenance needs or infrastructure deficiencies.

Brownsville Cemetery District

The Brownsville Cemetery is located on La Porte Road, in the community of Brownsville. The District did not indicate the remaining capacity or acreage of the cemetery. The District reports that the cemetery is in good condition. The District's key infrastructure consists of a paved and covered pavilion area and a storage shed/cargo container.

In terms of infrastructure needs, the District reports that it is in need of a new sprinkler system. The existing sprinkler system was installed in the 1950s and requires continual maintenance and repairs. Other issues identified by the District are the lack of a water and power source at the on-site storage shed, and the lack of a power source at the covered pavilion. The District would like to have these features installed in these areas, but has not done so due to financing constraints.

The LAFCO site visit did not identify any major maintenance needs or infrastructure deficiencies.

Camptonville Community Services District

The Camptonville Cemetery is located at the east end of Spencer Street and Cleveland Avenue in the community of Camptonville. The earliest burial in the area has been traced back to 1854, just after the establishment of the community of Camptonville. A former cemetery maintenance worker estimated that the cemetery had approximately 500 years of space at a rate of two to three interments per year.

The District's infrastructure consists of the cemetery facility, and related maintenance equipment including a lawn mower, a tree trimmer and a weed eater. The District identified that the maintenance equipment is old and in need of replacement. The District also expressed a desire to construct a facility for the interment of cremains. The LAFCO site visit identified broken and cracked headstones and structural deficiencies in a curbed plot.

Keystone Cemetery District

The Keystone Cemetery is located on Indiana Ranch Road in the community of Dobbins. The earliest known burial in the Keystone Cemetery is from 1853. Of the total 1,574 full burial sites, 935 are occupied, 206 are reserved and 433 are open for purchase. Infrastructure includes an office, a shop building for maintenance and repair activities, two storage sheds, a paved and covered pavilion area with benches, a paved roadway, and an irrigation system. The District reports that the cemetery is in good condition.

Planned infrastructure improvements include paving a small gravel parking area and the installation of a handicapped accessible outhouse. As an infrastructure need, the cemetery manager expressed the desire to build a new shop building on higher terrain, as the current shop floods with mud during heavy rain. The LAFCO site visit did not identify any maintenance needs or infrastructure deficiencies.

Marysville City Cemetery

The Marysville City Cemetery is located in northern Marysville on SR 70, within the Feather River floodplain. It was established in the 1850's, and is a registered historic site. The cemetery has not been active since the last burials took place in the late 1920's.

The City of Marysville owns and operates the Marysville City Cemetery. The City's public works staff mows and weeds the cemetery and provides irrigation and lighting maintenance as needed. No infrastructure needs were identified by the City of Marysville; however, the Cemetery has suffered from high water and vandalism and is in fair condition, according to the LAFCO site visit. There are several plots with broken headstones and piles of collapsed brickwork throughout the cemetery.

Peoria Cemetery District

The Peoria Cemetery (also called Peoria Memorial Park) is located on Marysville Road in the community of Browns Valley. The earliest known burial in Peoria Cemetery is from 1867, although the District has other records that show burials as early as 1807. The District reports that the cemetery is currently two-thirds full, with approximately 1,100 plots occupied, 1,023 plots reserved and approximately 1,200 plots available for purchase. The District reports that the cemetery is in good condition.

The District's key infrastructure includes the 3.5-acre cemetery facility, 1.5 acres of undeveloped land adjacent to the cemetery, and a tool shed. No major infrastructure needs or deficiencies were identified by the District. The LAFCO site visit identified the paving of a road within the cemetery as a possible infrastructure need.

Smartville Cemetery District

The Smartville Masonic Cemetery is on Smartville Road. Currently, the cemetery is estimated to be half full and in fair condition. The District identified problems with ground squirrels, lack of water service and squatters. The LAFCO site visit identified vegetation control deficiencies and broken headstones, apparently related to financing constraints.

The Immaculate Conception Catholic Cemetery, on McGanney Lane, was acquired by the district in 1968 from the Roman Catholic Bishop of Sacramento. The cemetery contains 1.5 acres. The District was unable to provide an estimate of the percentage of land occupied. The District identified problems with vandalism, gravestone robberies and loss of structural integrity of some concrete covered lots. The LAFCO site visit identified accessibility and vegetation control deficiencies, broken headstones, and decaying burial sites.

Strawberry Valley Cemetery District

The Strawberry Valley Cemetery is located on La Porte Road in the community of Strawberry Valley. The District reported that the earliest burial occurred in 1851, and that there are approximately 160 occupied plots and 200 unoccupied plots.

The District identified the need for a covered pavilion area at the cemetery. The LAFCO site visit was unable to identify any infrastructure or maintenance needs because of the depth of snow on the ground at the time of the visit.

Upham Cemetery District

The Upham Cemetery is located on Upham Road in the community of Bangor in Butte County. The cemetery facility consists of a three-acre plot, two acres of which are developed. The District reports that there are approximately 2,000 available plots, and that the cemetery is in good condition.

The District's key infrastructure consists of a well and pump, a restroom building and septic system, a storage building, and miscellaneous irrigation infrastructure. Future infrastructure needs identified by the District include the installation of a drip irrigation system, building a covered pavilion area for cemetery services, paving a road to the back gate for hearse access, and installing a vault inside the storage building to house cemetery records. The LAFCO site visit did not identify any maintenance needs or infrastructure deficiencies.

Wheatland Cemetery District

Wheatland Cemetery, on Wheatland Road, was created in 1871. The cemetery is still active and currently 2,177 plots are occupied or purchased. The cemetery encompasses 13 acres of developed cemetery land and 12 acres of undeveloped land for expansion. Facilities at the cemetery include an equipment shed and office space. The cemetery has been well maintained and is in good condition. The District identified a need for a new roof on the shed. The LAFCO site visit identified no other deficiencies.

Lofton Cemetery is located past the end of Ostrom Road, just south of Beale AFB. The Cemetery is approximately three acres and is about half occupied. According to the District, the cemetery is in fair condition. The District identified a need for maintenance to repair lifting sidewalks and concrete.

SERVICE ADEQUACY

Cemetery Maintenance

Table 11-4: Cemetery Maintenance Schedule

Of the 10 public cemetery service providers in Yuba County, six provide cemetery maintenance services on a year-round basis. All year-round service providers report that services are significantly scaled back during the fall and winter months.

Maintenance Schedule	
Browns Valley Cemetery District	Year-round
Brownsville Cemetery District	Year-round
Camptonville CSD	Once a year
City of Marysville	Year-round
Keystone Cemetery District	Year-round
Peoria Cemetery District	Year-round
Smartville Cemetery District	2-3 times per year
Strawberry Valley Cemetery District	Once a year
Upham Cemetery District	3 times per year
Wheatland Cemetery District	Year-round

SCD and UCD perform maintenance two to three times per year, typically before Memorial Day, Independence Day or Veteran’s Day. Districts providing maintenance only once a year, such as CCSD and SVCD, do so before Memorial Day. All cemetery districts report relying on volunteer efforts for clean-up in addition to paid workers.

Management

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital needs, and conduct advance planning for future growth.

An evaluation of the adequacy of management practices is shown in Table 11-5. The first four indicators are self-explanatory. Adequate evaluation of rates means updating fees with reasonable frequency. Adequate capital planning involves a multi-year capital improvement plan or comparable planning effort for cemetery needs and, if relevant, expansion. Compliance is the degree to which cemetery providers conduct operations in accordance with their principal act.

Table 11-5: Cemetery Management Practices

All cemetery service providers in Yuba County evaluate employees on an annual basis and prepare timely budgets. The only cemetery district to provide a recent audited financial statement was PCD; most cemetery districts have not had their financial statements audited within the last two to three years due to the high cost. Despite this fact, only BVCD, BCD, SCD and SVCD were unable to provide current financial records.

	BVCD	BCD	CCSD	KCD	Marysville	PCD	SCD	SVCD	UCD	WCD
Evaluate employees annually	A	A	A	A	A	A	A	A	A	A
Prepare timely budget	A	A	A	A	A	A	A	A	A	A
Periodic financial audits	I	I	A	I	A	A	I	I	I	I
Current financial records	N	N	A	A	A	A	N	N	A	A
Evaluate rates	A	A	I	A	-	I	A	I	A	A
Capital planning	N	N	N	N	N	N	N	N	A	N
Compliance	A	A	N	A	-	I	A	I	I	A
Note: A = Practiced adequately, I= Practiced but improvement needed, N= Not practiced, and - = Not relevant										

Most cemetery service providers evaluate rates regularly and charge appropriate fees.²⁹⁶ CCSD reports that it does not have an endowment fee, which is required by Health and Safety Code §9065. PCD and CCSD do not have a non-resident fee, which is required by Health and Safety Code §9068.²⁹⁷ The endowment fee charged by SVCD of \$50 is not sufficient per Health and Safety Code §9065, which requires an endowment care fee of \$2.25 per plot square foot.²⁹⁸ Marysville does not evaluate rates because it is not actively providing burial services.

No cemetery service providers in Yuba County conduct formal capital planning for cemetery needs, with the exception of UCD.

CCSD is not in compliance with its principal act because it is not authorized to provide cemetery service. In 1993, the Board of Supervisors authorized the CCSD board to serve as the Board of Trustees for the Camptonville Cemetery District, with the two districts to be operated as separate special districts.²⁹⁹ CCSD has ceased operating the cemetery district as a separate entity and now provides cemetery services through CCSD, as Board actions are taken at CSD meetings and cemetery finances are included in the CCSD general fund. CCSD has not been authorized by LAFCO to provide cemetery services pursuant to Government Code §61106, and cemetery service

²⁹⁶ In general, fees charged by public cemetery districts in Yuba County are much lower than fees charged at private facilities. By comparison, burial plots at the private Sierra View Cemetery range from \$650 to \$2,900, with an endowment fee of \$85. Plots for cremation are from \$250 to \$9,000, with the same endowment care fee. See the financing section of Appendix A for a breakdown of fees charged by the public cemetery districts.

²⁹⁷ According to the Health and Safety Code §9068, the nonresident fee shall be set “at an amount that at least equals the amount of fees charged to residents or taxpayers and shall include a nonresident fee of at least 15 percent of that amount.”

²⁹⁸ This would amount to an endowment fee of \$90 for a 40 square-foot plot, or \$112.50 for a 50 square-foot plot.

²⁹⁹ BOS Minutes, 6/29/93, pg. 301.

is not a grandfathered power of the CSD.³⁰⁰ In order to provide cemetery service, CCSD must first gain LAFCO approval.

PCD is generally in compliance; however, Health and Safety Code §9068 requires it to establish a non-resident fee. PCD reported that it was in the process of doing so, as of the drafting of this report.

SVCD and UCD may be non-compliant with legal constraints on the burial of non-residents. SVCD reports that it treats residents of Clippermills as residents of the District, which would be in violation of Health and Safety Code §9061, provided that the non-residents do not meet the eligibility requirements laid out in that section. UCD reports that it provides service to residents of the community of Rackerby, which is within the boundaries of BCD. Similar to SVCD, this would be in violation of the Health and Safety Code if the eligibility requirements of non-residents specified in §9061 are not satisfied. Both districts can legally provide service to these areas if the deceased satisfies the eligibility requirements of a non-district resident, and the non-resident fee is paid.

Local Accountability and Governance

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to: 1) constituent interest in the agency’s activities as indicated by the rate of contested elections, 2) agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure. These measures are shown in Table 11-6.³⁰¹

Table 11-6: Cemetery Accountability and Governance Measures

Cemetery district Trustees are appointed by the Board of Supervisors. All Trustee positions for the cemetery districts are filled, with the exception of SCD which has one vacant position.

	BVCD	BCD	CCSD	KCD	Marysville	PCD	SCD	SVCD	UCD	WCD
Constituent outreach activities	×	×	✓	×	×	×	×	×	×	×
MSR Disclosure	×	×	✓	✓	✓	✓	✓	✓	✓	✓
Note: ✓ = Occurred or adequately practiced, × = Did not occur or not practiced										

Of all cemetery service providers, the only agency that conducts constituent outreach activities is CCSD. CCSD conducts community outreach by posting articles in *The Camptonville Community Courier* two to three times per year, although the District reports that most postings are to do with fire and water service issues. BCD reported that in years past it held a volunteer community clean-up and barbeque event to conduct community outreach, but the event has been discontinued.

³⁰⁰ Grandfathered powers are those provided legally by CSDs at the end of 2005. The principal act did not authorize CSDs to provide cemetery services at that time.

³⁰¹ The rate of contested elections is not shown in Table 11-5 because the board of trustees for a cemetery district is selected by the County Board of Supervisors, as required by the principal act.

For the most part, cemetery service providers participated adequately with LAFCO during the MSR process. All agencies provided responses to an initial request for information, and participated in an interview with a LAFCO representative. BVCD and BCD were the only agencies to not respond to follow-up questions sent by LAFCO.

SHARED FACILITIES

Facility Sharing Status

All cemetery providers coordinate with private mortuaries for services such as the opening and closing of grave sites, and funeral services.

Opportunities

Given the nature of the services provided by the districts, there are limited opportunities for facility sharing. No opportunities for facility sharing were identified by the agencies.

Regional Collaboration

Many cemetery providers collaborate with local community groups and family members for clean-up and maintenance activities, albeit on an informal basis. SCD is hoping to coordinate further volunteer efforts with the County Probation Department by promoting cemetery clean-up as an option for community service time.

Options for regional collaboration include coordination of maintenance efforts. Districts may experience savings by sharing maintenance staff and equipment.

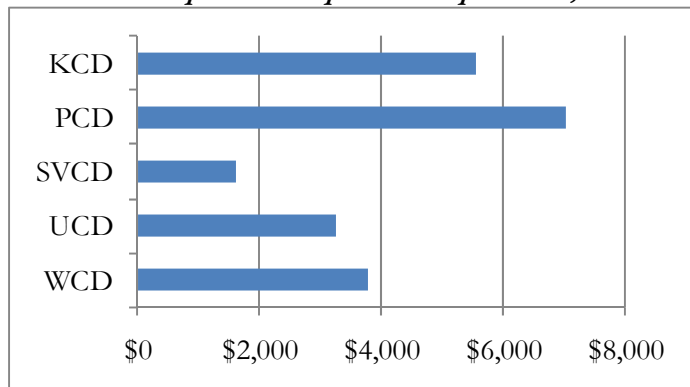
FINANCING

The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing constraints faced by cemetery service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

Operating Costs

Figure 11-7 depicts the level of total expenditures per developed acre of cemetery space in FY 05-06. CCSD and Marysville were not considered because their expenses on cemetery maintenance are not disclosed separately in their financial statements. BVCD, BCD and SCD were not considered because the acreages of the cemeteries maintained were not provided.

Figure 11-7: Expenditures per Developed Acre, FY 05-06



Of the five districts considered, PCD had the highest level of expenditures per developed acre of cemetery space at \$7,000, followed by KCD at \$5,500, WCD at \$3,800, UCD at \$3,300 and SVCD at \$1,600.

Financing Operations

Financing sources for cemetery services include property taxes, fees for burial services, and investment income. The fees for service apply to plot and niche purchases and other interment accessories. These fees, in addition to the property taxes, may be used for cemetery care and district operations. The districts may also use interest income from the endowment care fund for cemetery care.

Health and Safety Code §9065 requires that all cemetery districts establish, operate and maintain an endowment care fund. Fund monies are received through sale of cemetery property and land and must be placed in a trust account for future maintenance of the cemetery.³⁰² The principal must be invested, and only the income from the investment may be used for care, maintenance and embellishment of the cemetery. There are restrictions on how the endowment fund principal may be invested.

All active public cemetery service providers in Yuba County have an endowment care fund set up and maintained by the County.³⁰³

Plot fees for district residents range from no charge at SVCD to \$800 at SCD, with an average fee of \$218. Plot fees for non-residents range from \$175 at UCD to \$1,200 at SCD, with an average fee of \$489.

Because revenues for cemetery purposes are not evident from the financial statements of the City of Marysville and CCSD, they are not included in this section.

Browns Valley Cemetery District

BVCD received \$23,032 in total revenues in FY 05-06. BVCD relies primarily on property taxes, consisting of 89 percent of revenues. The remaining revenues were from interest income (nine percent) and State sources (one percent).

Revenues received for interment services and the endowment care fund balance were not reported by the District.

³⁰² Health and Safety Code §9065 stipulates that a district must deposit “in its endowment care fund at the time of or not later than completion of the initial sale, not less than the following amounts for plots sold or disposed of: (a) Two dollars and twenty-five cents (\$2.25) a square foot for each grave; (b) Thirty-five dollars (\$35) for each niche; or (c) One hundred ten dollars (\$110) for each crypt; provided, however, that for companion crypts, there shall be deposited one hundred ten dollars (\$110) for the first crypt and fifty-five dollars (\$55) for each additional crypt.”

³⁰³ CCSD reported that it does not charge an endowment fee, but there is an endowment fund for Camptonville Cemetery as part of the Camptonville Cemetery District funds with the County. These are County fund numbers 619, 620 and 621, with fund 621 being the endowment care fund.

Brownsville Cemetery District

The District received \$20,724 in total revenues in FY 05-06. BCD relies primarily on property taxes, consisting of 84 percent of revenues. The remaining revenues were from interest income (13 percent) and State sources (3 percent). Expenses in FY 05-06 were \$421.

Revenues received for interment services and the endowment care fund balance were not reported by the District.

Keystone Cemetery District

The District received \$41,103 in total revenues in FY 05-06. KCD relies primarily on property taxes, consisting of 74 percent of revenues. Revenues received for interment services were not reported.

The endowment fund balance at the end of FY 05-06 was not reported; however, the endowment fund balance was \$57,621 as of December 2007.

Peoria Cemetery District

The District received \$26,809 in total revenues in FY 04-05. PCD relies primarily on property taxes, consisting of 89 percent of revenues. There were no revenues from charges for service reported in FY 04-05.

In FY 04-05 PCD earned \$678 from endowment fees and \$300 from interest income, yielding a fund balance of \$16,969 in the endowment care fund.

Smartville Cemetery District

SCD received \$550 in property tax and interest revenues in FY 05-06. Revenue received from service charges was not provided by the District.

At the end of FY 05-06, SCD had an endowment care fund balance of \$6,495.

Strawberry Valley Cemetery District

The District received \$2,873 in total revenues in FY 06-07. SVCD relies primarily on property taxes, consisting of 47 percent of revenues. Charges for service constituted 28 percent of revenues.

In FY 06-07 SVCD earned \$200 from endowment fees, yielding a fund balance of \$1,480. The District earned \$63 in interest on the endowment fund for the year.

Upham Cemetery District

The District received \$11,151 in total revenues in FY 05-06. UCD relies primarily on property taxes, consisting of 66 percent of revenues. UCD is a bi-county district, with approximately 60 percent of the tax revenue coming from Butte County, and 40 percent coming from Yuba County.

The District did not provide the endowment care fund balance and annual contributions for FY 05-06.

Wheatland Cemetery District

WCD received \$98,456 in total revenues in FY 05-06. WCD relies primarily (94 percent) on property taxes. Charges for service constituted three percent of revenues.

At the end of FY 05-06, WCD had earned \$2,200 from endowment fees and had a fund balance of \$88,727. The agency earned \$836 income from interest on the endowment fund.

Capital Financing

Capital needs are financed through the same sources as operations: property taxes, charges for service and interest income.

The most significant financing constraints for cemetery services are legal requirements that limit property taxes and require voter approval of new taxes and tax increases. As property tax recipients, the districts are subject to the constraints on property taxes discussed in Chapter 7.

Financial Ability

All cemetery service providers face significant financing constraints. Securing an affordable accountant for the auditing of financial statements is a major difficulty, and many agencies have not had their financial statements audited in a number of years as a result.

For the City of Marysville, the only available financing source to address capital needs at the inactive, historic cemetery is the general fund; additional financing is needed.

CCSD, SCD, SVCD and UCD report that cemetery services are constrained by a lack of financial resources as a result of a limited tax base. All four providers perform only minimal maintenance throughout the year due to a lack of funds, and require the assistance of community volunteers. In many cases, insufficient financing has led to deficient reserves for significant repairs, as well as inadequate equipment and staff to ensure ongoing maintenance. All cemetery districts report having infrastructure needs that have not been addressed due to a lack of available financing.

GOVERNANCE ALTERNATIVES

Smartville Cemetery District

There are two possible government structure options for the Smartville area, becoming a community services district (CSD) or becoming a public utilities district (PUD). In the case of forming a PUD, cemetery services could not be consolidated as it is not an authorized service for a PUD. For greater detail on both government structure options, see the discussion in the fire and water services chapters of the MSR.

Camptonville Community Services District

In order to legally provide cemetery service, Camptonville CSD must first obtain LAFCO approval. CCSD has not been authorized by LAFCO to provide cemetery services pursuant to Government Code §61106, and cemetery service is not a grandfathered power of the CSD.

Strawberry Valley Cemetery District

SVCD may wish to consider annexation of the Clippermills area in Butte County in order to more fully serve residents of that community.³⁰⁴ As it is now, SVCD can provide burial services to a resident of Clippermills provided that the non-district resident eligibility requirements of Health and Safety Code §9061 are satisfied and a non-resident fee is paid. With annexation of the Clippermills area into SVCD, Clippermills residents would no longer be subject to non-resident restrictions and fees for burial at SVCD.

LIBRARIES

PROVIDER OVERVIEW

The County of Yuba is the only library service provider within the County boundaries. It provides library services to the cities of Marysville and Wheatland and unincorporated territory throughout the County. The Yuba County Library, which has been operating since the early 1900s, is one of the oldest public libraries west of the Mississippi. It currently operates from its City of Marysville facility that was built in 1977. There are no branch libraries, but the County owns a bookmobile that has a rotating schedule to serve Wheatland, Olivehurst, Linda, and the rural foothill communities, such as Browns Valley and Loma Rica, providing three hours of service weekly in each area. The agency is responsible for facility and vehicle maintenance. For a detailed profile of this agency, please refer to Appendix A.

The Yuba County Library's service area encompasses the entirety of the County. Although the agency does not directly provide library service outside the Yuba County bounds, all California residents and people serving in the Armed Forces stationed within the County are allowed to use library services and apply for library cards free of charge.

SERVICE DEMAND

This section provides various indicators of service demand, such as borrowers per capita, circulation per capita, and projected service demand.

Demand Drivers

Library demand is primarily affected by population, English literacy and level of education. The quality and breadth of library collections also affect demand. Population is the primary factor affecting demand through the number of residents using library facilities and through the amount of material being borrowed from the libraries.

Literacy rates affect demand, as illiterate persons are unlikely to attempt to use library facilities. An estimated 21-23 percent of American adults lack the ability or have great difficulty locating information in a short news article. An additional 25-28 percent are "quite limited" and lack an

³⁰⁴ The 2004 Butte LAFCO Cemetery Services MSR indicates that the Clippermills area is not located within a public cemetery district in Butte County.

ability to comprehend long texts.³⁰⁵ Those with the fewest years of education and those who are new to the United States are most likely to have limited literacy skills. A more recent survey conducted in 2003 shows no statistically significant changes in American adult literacy rates since 1992. Twenty-eight percent of Yuba County residents over age 25 did not complete high school as of 2000. A smaller percentage of residents within the two incorporated cities did not complete high school: 26 percent in Marysville and 23 percent in Wheatland.³⁰⁶

Non-English speakers, while literate in other languages, are less likely to borrow English books. Twenty percent of Yuba County residents over age five reported speaking English “not very well” or “not at all” in the 2000 Census. The rates are similar limited to the incorporated areas: 20 percent in Marysville and 22 percent in Wheatland. Only a little over one percent of the Yuba County Library print materials are in languages other than English; however, non-English circulation constitutes eight percent of total circulation in the Yuba County Library.

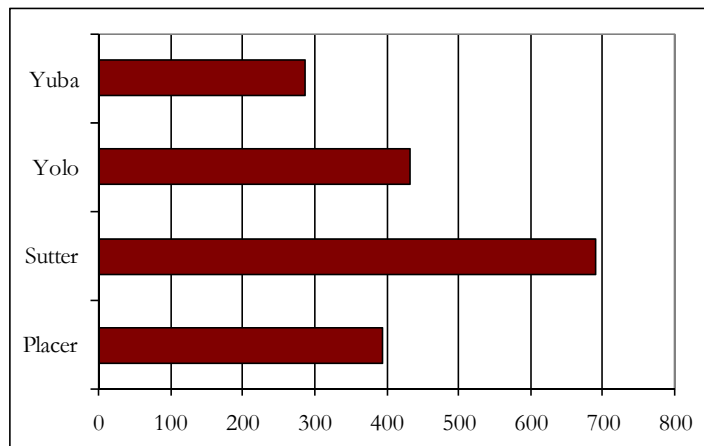
The desirability of library collections also affects demand. Libraries lacking resources to update their collections and technology, or offering limited collections tend to receive less use than libraries with collections that appeal to a significant portion of the population.

Borrowers

Borrowers are defined as the number of individuals with library cards that have been used within the past three years.³⁰⁷

There were nearly 300 borrowers per 1,000 residents countywide in FY 05-06. Compared to other neighboring counties, it is the least number of borrowers per 1,000 residents, as Figure 11-8 shows.

Figure 11-8: Borrowers per 1,000 Residents, FY 05-06



Circulation

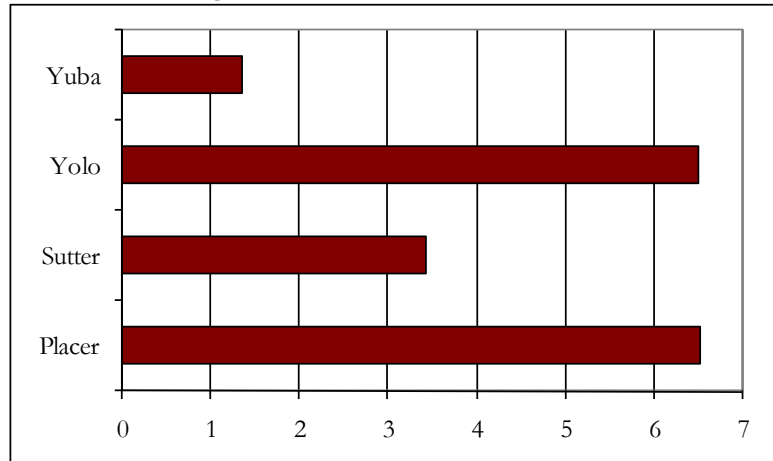
Circulation refers to the amount of material borrowed per library system during the fiscal year. Circulation is related to the number of borrowers as well as the number of materials, other than reference materials, the libraries have in the system.

³⁰⁵ The National Adult Literacy Survey (NALS) is a comprehensive study of adult literacy conducted in 1992 by the Educational Testing Service on behalf of the U.S. Department of Education. The study measured the English literacy skills of a random sample of over 26,000 individuals in the United States aged 16 years and older.

³⁰⁶ Decennial Census: 2000.

³⁰⁷ Data on borrowers and many of the statistics in this chapter are compiled by the California State Library through an annual survey, and are available in the publication *California Library Statistics 2007*. The most recent publication includes data for FY 05-06 and is available online at <http://www.library.ca.gov/lds/docs/StatsPub07.pdf>

Figure 11-9: Circulation per Capita, FY 05-06



Yuba County has an annual circulation of 1.4 items per resident. This rate is low compared to neighboring counties, as shown in Figure 11-9. Yuba’s low circulation rate reflects a relatively low use rate, which may relate to the quality of the collection or to a lower level of demand.

Projected Demand

Library service needs will increase over time with population and economic growth. Yuba County has experienced significant growth and urban development.

If the current library facilities do not change, projected population growth will increase the demand on the library system. The southwest portion of the County and Wheatland will likely experience the greatest increase in demand. The existing Yuba County library facility is challenged to adequately support the existing population and future growth will put a further strain on library resources.

The Yuba County Library is currently considering opportunities for new facilities and technologically innovative approaches to service delivery, as discussed in the next section.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

In the context of library service, infrastructure needs signify facilities that do not provide adequate capacity to accommodate current or projected demand for service for the region as a whole or for areas within the County.

Facility Condition

The principal library system infrastructure involves library buildings, materials and books.

Yuba County maintains and operates one building and one bookmobile. The County reported the condition of the building as fair, and the condition of the vehicle as good.

The library, built in 1977 in the City of Marysville, is described by the County as structurally sound, but not maintained as well as it should have been. It needs new carpet, paint, more landscaping, and irrigation repair or replacement to accommodate ground care.

The bookmobile was attained in 2001. It has a few small dents and scratches and requires routine maintenance. By 2009-10, it will likely be in fair condition and repair needs are expected to increase.

The County identified a need for a library facility in the City of Wheatland and a greater level of service in the Smartville area through an additional facility or bookmobile hours. Addressing the

Wheatland area need, the Yuba County Library has been awarded a \$130,000 grant from the State, funded federally through the Library Services and Technology Act Grant Program, to beta test an automatic library machine. The machine, to be located in the Wheatland Community Center, is a fully-functional, stand-alone library branch, with a storage capacity of up to 500 books. Patrons use their standard library card to check out and return books, with the transactions automatically registered in the central library computer system. The machine is scheduled to be installed and functioning by summer 2008.

SERVICE ADEQUACY

To assess infrastructure deficiencies and needs, it is necessary to analyze the adequacy of the facilities and related services in meeting the needs of the populace. Adequacy can be gauged by various factors including average weekly hours open and the book volumes per capita.

Standards

The Library of California Act created the Library of California in 1999. Under this Act, all Californians are free to use any library service in the State. The Library of California was established to provide equitable access to library materials and information resources for all Californians. The Library of California is under the policy direction of the Library of California Board. There are seven regional library networks to provide the regional services specified in the Library of California Act. The Mountain Valley Library System services Yuba County.

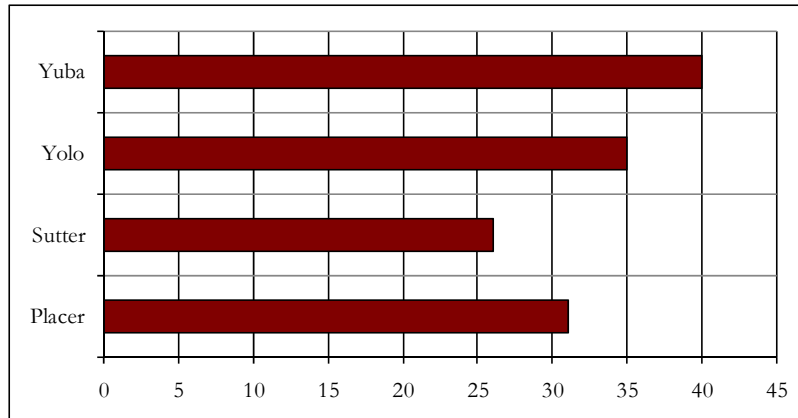
In June 2003, the U.S. Supreme Court decided that libraries are subject to the provisions in the Children's Internet Protection Act (CIPA). Compliance with CIPA is a condition of being accepted for Library Services and Technology Act (LSTA) grants. Academic and special libraries are exempt from CIPA regulations unless applying for a grant in partnership with an agency subject to CIPA regulations. A public library must certify to the Library of California that it has an internet safety policy and a filter in place to qualify for LSTA funds, or the public library must show that it is not using LSTA funds for the purchase of computers used to access the Internet or for the direct costs associated with accessing the Internet.

Weekly Hours

Weekly hours reflect the amount of service the library system provides, and also affects the volume of borrowers and circulation. Libraries open only during normal work and school hours will see fewer borrowers and also less circulation compared with libraries open extended hours.

Figure 11-10: Average Weekly Hours Open

As shown in Figure 11-10, the Yuba County library system is open the longest on average compared to the Placer, Sutter and Yolo County library systems. However, Yuba County operates only one facility while Placer County has 11, Sutter County has five, and Yolo County has seven facilities. Some of the facilities owned by Placer, Sutter and Yolo Counties are open for up to 50 to 67 hours per week.³⁰⁸ Hours of bookmobile operation are not included in these calculations.

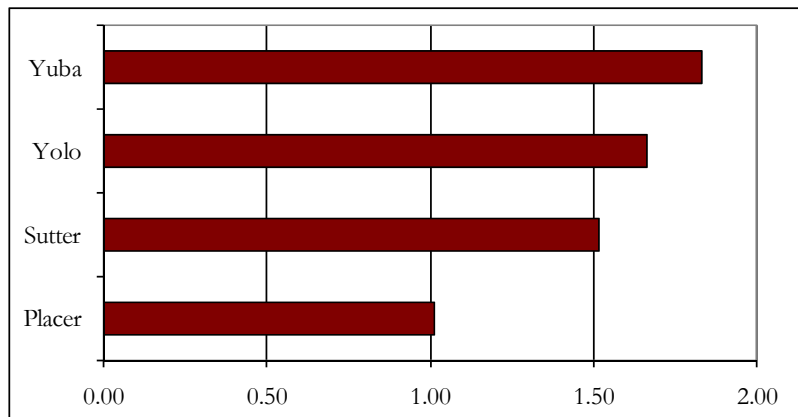


Book Volumes

Figure 11-11: Book Volumes Per Capita, FY 05-06

The number of books in the library system is an indicator of library capacity and service level.

Compared to the neighboring counties, Yuba County had the most book volumes per capita. Placer County library system had the least book volumes per capita (see Figure 11-11).



The book volumes per capita usually acts as an indicator of library service demand. Low book volumes per capita are tied to lower circulation numbers as well as lower numbers of borrowers. If circulation is low, there is less of a need for a large library collection. Conversely, if circulation is high, a large library collection is needed to meet library service demand.

As shown previously in Figure 11-9, Yuba County has the lowest circulation among the neighboring counties. Its book volumes per capita are unusually high for such low circulation. Yuba County has high capacity that is not being used. To compare, Placer County has low capacity, but high circulation. This may be due to the higher number of library facilities in Placer County providing greater access to the library collection than Yuba County. It is more convenient for patrons to use facilities close to their place of residence.

Another explanation for this phenomenon may be the types or quality of books in the Yuba County Library collection. Patrons may not be interested in the books owned by the library. For

³⁰⁸ Facility hours exclude bookmobile service hours.

example, a little over one percent of the Yuba County Library print materials are in languages other than English. However, foreign language speakers make up 20 percent of the County population. Non-English circulation is eight percent, demonstrating a greater need for foreign language books.

Service Challenges

In addition to infrastructure needs, some service challenges were identified. The service provider faces challenges in providing an adequate service level due to financing constraints. A library facility is needed in the City of Wheatland and a greater service level is needed in Smartville area. Limited operational and capital financing resources are available.

Management

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, and conduct advance planning for future growth.

County management conducts employee performance evaluations annually for all employees, and more frequently for probationary employees. The County conducts productivity and workload monitoring by tracking various workload indicators, including library visits. Productivity and workload are considered in County budgeting practices. The County practices benchmarking of development-related fees and regularly compares them with surrounding counties. Library user fees were last updated in 1994.

Local Accountability and Governance

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and transparency of the agency as indicated by cooperation with the MSR process and information disclosure.

The Library Advisory Commission is comprised of an appointed seven member governing body. Five members are representatives of the Yuba County supervisorial districts, one is a Yuba County district supervisor, and one is the representative of the City of Marysville. The governing body meets quarterly. The Commission prepares and posts meeting agendas and makes minutes available as required, but agendas and minutes for every meeting are not available online. Other outreach activities were not reported.

Yuba County cooperated with the MSR process and provided necessary information regarding library service.

SHARED FACILITIES

Facility Sharing Status

Library service providers share facilities as all residents of California may use the library services freely. Library patrons are more likely to go to branches that are more convenient for them.

The Yuba County Library uses a database application in conjunction with Yuba College to track and maintain library resource inventory. The County library is a member of the Mountain-Valley Library System that provides inter-library sharing.

Opportunities

There are facility sharing opportunities related to development of new facilities jointly with school districts. There are also possibilities of using space for library services in the community centers.

FINANCING

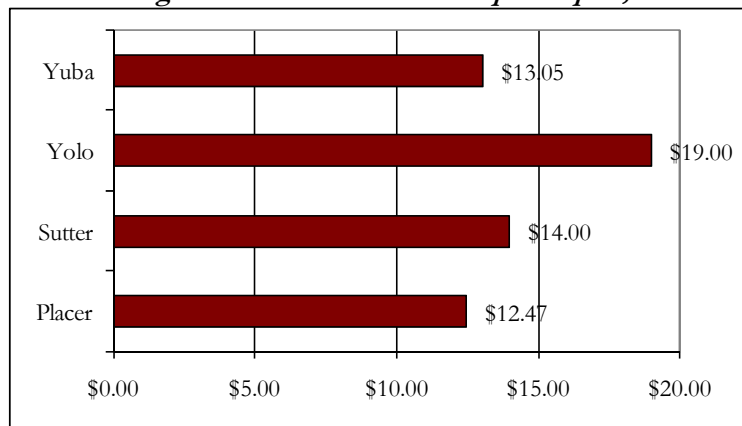
The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing constraints faced by law enforcement service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

Operating Costs

Library service costs per capita are calculated using the agency’s actual library operating expenses in and the resident population in FY 05-06. Yuba County’s costs per capita in this year were just over \$13. The County’s per capita costs are relatively low in comparison to neighboring counties, as shown in Figure 11-12. Placer and Sutter counties have per capita costs within one dollar of Yuba’s costs, while Yolo County has the highest library service costs per capita at \$19.

The County has identified cost avoidance opportunities in the library system through its bookmobile service and the pending automatic library machine in the Wheatland Community Center. Pending the outcome of the automatic library machine beta test, Smartville and Camp Far West could also benefit from the machines. Further state grants may be available after the beta test.

Figure 11-12: Service Costs per Capita, FY 05-06



Financing Operations

General fund revenues and library fees and fines are the primary financing sources for library operations in Yuba County. The Yuba County Library receives a certain amount of funding from the State Public Library Foundation.

Opportunities for rate restructuring are limited due to financing constraints. Restructuring assessments and general fund tax rates is subject to voter approval requirements per Propositions 218 and 13. Proposition 218, which California voters approved in 1996, requires voter or property owner approval of increased local taxes, assessments, and property-related fees. Majority voter approval is required for imposing or increasing general municipal taxes, such as business license or utility taxes. Proposition 218 reiterated the Proposition 13 requirement for two-thirds voter approval of special taxes for which revenues are designated for specific purposes, such as library services. In addition, Proposition 218 added new substantive and procedural steps that must be followed to impose a property-related fee or charge.

Financing opportunities that do not require voter approval include increasing user fees (i.e., library fees and fines) and development impact fees. Increases to these fees are, however, subject to other regulations. In order to raise user fees, the jurisdiction must document that the fee recoups only the cost of providing the fee-related service. There are opportunities for jurisdictions to increase these fees, and many jurisdictions do increase user fees on an annual basis. Updating development impact fees requires the preparation of a development impact fee study. Due to the high cost of such a study, development impact fees are typically increased on an occasional basis rather than annually.

Other financing opportunities include floating lease revenue bonds to finance facilities, and grant funding.

Capital Financing

The County uses grants and development impact fees to finance new facilities. Development impact fees area calculated on per capita basis. Last updated in 2004, the fees were \$135.56 per capita. The development impact fees were initially discounted at less than 100 percent and go up 10 percent each year. These fees can only be used to maintain the existing level of service. There is no State bond money for libraries; however, school districts have access to bond money, which may be a funding source to extend library services. There is a fund balance of development impact fees that could be used toward a joint use facility. This fund balance is limited and cannot finance a separate library branch.

Financial Ability

The County's financial ability to provide library services is constrained by available revenues and legal limitations on revenue increases; limited operational and capital financing resources are available. There are particular challenges to provide adequate service levels in outlying areas. However, the MSR found the County has generally managed to provide adequate service levels within its resource constraints.

GOVERNMENT ALTERNATIVES

The creation of an independent library district to provide an increased service level is an option.

MOSQUITO & VECTOR CONTROL

This section provides an overview of mosquito and vector abatement services in Yuba County. Mosquito and vector abatement refers to the monitoring, control and source reduction of mosquitoes, pests, rodents and other vectors of viral diseases. Additional responsibilities of mosquito control and vector abatement service providers include public education and outreach activities.

PROVIDER OVERVIEW

The Sutter-Yuba Mosquito and Vector Control District (SYMVCD) is the only provider of mosquito and vector control services in Yuba County. The District was formed to control mosquitoes and other animals that carry diseases within Yuba and Sutter counties. Services include the use of chemical, biological and geographical treatments to limit or prevent the reproduction of mosquitoes and other vectors of public health importance.

The District serves all of Sutter County, with the exception of the Sutter Buttes in the northwest, and the valley portion of Yuba County aside from Beale Air Force Base. More specifically, within Yuba County the boundary extends north to the Yuba-Butte county line, west to the Yuba-Sutter county line, south to the Yuba-Sutter and Yuba-Placer county lines, and east to the western region of Loma Rica in the northeast. In the southeast, the District abuts Beale Air Force Base, although it extends into the goldfields north of the base, and into the western region of Camp Far West south of Beale.

Sutter is the principal county, based on assessed valuation, and Sutter LAFCO has jurisdiction over this agency. The principal LAFCO is responsible for preparation of the MSR and SOI of the District. Information on SYMVCD is taken from Sutter LAFCO's 2007 MSR on the District.

SERVICE DEMAND

A major factor influencing service demand is the rapid population growth within the District. The use of irrigation in agriculture and the preservation of wetlands provide the main breeding ground for mosquitoes—stagnant water. As household populations move closer to natural mosquito habitats, the demand for mosquito control increases.³⁰⁹

Another service demand driver is the presence of vectors and vector-borne disease agents within the County and neighboring areas. Although there have been no recent public health advisories for vector-borne diseases in Yuba or Sutter Counties, SYMVCD monitors for vectors and vector-borne viruses known to exist within the area.

³⁰⁹ Sutter County LAFCO, 2007, p. 1.0-1.

SYMVCD receives in excess of 2,000 requests for mosquito control services annually, and plants over 2 million mosquito-eating fish in area ponds and stagnant water bodies per year. Service calls come mainly from homeowners in the District.³¹⁰

Mosquito-Borne Diseases

West Nile Virus is the most concerning mosquito-borne virus. The virus was first detected in the United States in 1999 and has spread through most of the country. The primary transmitter of West Nile to humans is the house mosquito (*Culex pipiens*), but the virus is found in a large variety of species. The house mosquito is commonly found near human habitation and in urban areas. The virus often goes unnoticed in many people who are infected. Those who do exhibit symptoms may experience fever, headache, nausea, and swollen lymph glands. In some cases symptoms are severe, resulting in neurological effects and even death. There were seven human cases of West Nile Virus in Yuba County in 2006 and no cases in 2007.³¹¹

Projected Demand

The number of service requests has increased with the threat of West Nile Virus and with population growth in the District. Further development within the District will continue this trend as the population around agricultural and wetland areas increases.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

In the context of mosquito and vector abatement service, infrastructure needs signify facilities that do not provide adequate capacity to accommodate current or projected demand for service within the District.

Three Sutter County Grand Jury reports indicate that facilities are clean and well maintained.³¹² None of the reports indicate that the facilities will be unable to accommodate current or projected demand for service in the District. The Grand Jury documented that the main SYMVCD facility is well used but neat and orderly, with clean surrounding areas, showing no signs of chemical mishandling or discharges. District vehicles were also reported to be clean and well maintained.³¹³ Vehicles owned and maintained by the district include 29 half-ton pickup trucks, five utility trailers, three all-terrain vehicles, a 1½-ton truck, a half-ton utility vehicle, a tractor, a backhoe, and a forklift.³¹⁴ The District also has two airplanes under contract for aerial spraying.³¹⁵

³¹⁰ Sutter County LAFCO, 2007, p. 1.0-2.

³¹¹ California Department of Health Services, 2006 and 2007.

³¹² Sutter County Grand Jury Reports, 2002-03, 2003-04 and 2005-06.

³¹³ Sutter County Grand Jury Report, 2003-04, p. 68.

³¹⁴ Sutter County LAFCO, 2007, p. 1.0-2.

³¹⁵ Sutter County Grand Jury Report, 2005-06, p. 69.

SERVICE ADEQUACY

There are no present or recent public health advisories concerning mosquito or vector-borne illnesses in the areas served by SYMVCD. SYMVCD, like districts in most other areas of the country, has been successful in reducing the outbreak of illnesses including plague and encephalitis. However, the ability of the agency to provide adequate abatement services is challenged by the presence of the West Nile Virus in the County. The presence of West Nile Virus in Yuba County was the motivation behind the Grand Jury inquiries into SYMVCD. The Grand Jury reports concluded that the District is well prepared to deal with an emergency involving a mosquito-borne disease, and that the preventative and monitoring measures in place by the District are sufficient.³¹⁶ District management and permanent field personnel are certified by the California Department of Health Services.

Management

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, and conduct advance planning for future growth.

The District manager provides general direction over the operations and activities of SYMVCD. The general foreman directs and reviews the continuing operations of the District and reports directly to the manager. Field operations are supervised by field foremen. The District had no internal reorganization in the last three years and is considered to be well-managed, as concluded by three Sutter County Grand Jury reports.³¹⁷

Local Accountability & Governance

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and transparency of the agency as indicated by cooperation with the MSR process and information disclosure.

SYMVCD is governed by a Board of Trustees that consists of seven members. The members are appointed by each of the counties and incorporated cities within district boundaries.³¹⁸ The Board meets on the second Thursday of each month, with meetings accessible to the public. Board meeting agendas are posted outside of the District office as required.

³¹⁶ Sutter County Grand Jury Report, 2003-04, p. 68.

³¹⁷ Sutter County Grand Jury Reports, 2002-03, 2003-04 and 2005-06.

³¹⁸ Yuba LAFCO resolution 1986-35, Exhibit A, p. 2.

The District has a website, but agendas and minutes are not available online. Customer complaints and requests for service can be made online via the agency's website, in person, by email, mail, phone, or fax. The District updates constituents through media (newspapers, radio and television), the District's website and announcements posted at public places.³¹⁹

SHARED FACILITIES

Facility Sharing Status

No current facility sharing practices were reported.

Opportunities

SYMVCD has few opportunities to share facilities with other agencies due to the specialized nature of the District, and the unique health and safety concerns that exist.

Regional Collaboration

The District does regionally collaborate in that it serves both Sutter and Yuba Counties.

FINANCING

The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing constraints faced by law enforcement service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

Operating Costs

The main expenditure category for the District is services and supplies, of which nearly two-thirds is expended on purchasing chemicals. In order to possibly defray these costs, the District may request the California Department of General Services or the purchasing agent of Sutter County (the principal County) to make purchases on its behalf.³²⁰ Purchases made in conjunction with multiple agencies often reduce prices for all agencies involved due to economies of scale.

Financing Operations

The primary source of revenue for SYMVCD is collected annually through the property tax roll, at a rate of two cents for every one dollar of property tax collected. This revenue source accounts for over ninety percent of annual District revenue. Additional District revenue comes from special

³¹⁹ Sutter County LAFCO, 2007, p. 1.0-8.

³²⁰ Sutter County LAFCO, 2007, p. 1.0-5.

assessments, charges for service, rental income, State in-lieu funds, interest earned, and other miscellaneous revenue.³²¹

Opportunities for rate restructuring are limited due to financing constraints. Restructuring assessments and general fund tax rates is subject to voter approval requirements per Propositions 218 and 13. Proposition 218, which California voters approved in 1996, requires voter or property owner approval of increased local taxes, assessments, and property-related fees. Majority voter approval is required for imposing or increasing general municipal taxes, such as business license or utility taxes. Proposition 218 reiterated the Proposition 13 requirement for two-thirds voter approval of special taxes for which revenues are designated for specific purposes, such as library services. In addition, Proposition 218 added new substantive and procedural steps that must be followed to impose a property-related fee or charge.

The District could raise additional revenue through a special parcel tax assessment, pursuant to the provisions of Proposition 218. The District has no plans to propose an increase in special assessments at this time.

The Sutter LAFCO MSR did not review capital financing, or reach conclusions on this agency's financial ability to provide services.

GOVERNMENT STRUCTURE OPTIONS

No government structure options for mosquito and vector abatement services were identified.

RESOURCE CONSERVATION

This section reviews the resource conservation services provided in Yuba County. The chapter reviews how these services are provided and addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, shared facilities, financing, and governance alternatives

PROVIDER OVERVIEW

This section provides an overview of the Yuba County Resource Conservation District (YCRCD). YCRCD is the only resource conservation district in Yuba County. The YCRCD was formed on September 20, 1957, under the original name of the Marysville Soil Conservation District.

The District provides technical, programmatic, and financial assistance to landowners and land managers of private lands in providing conservation of the County's natural resources. Routine district services include development and coordination of watershed protection programs, technical assistance in the application of conservation practices, and community conservation education and outreach programs. All residents and landowners in the District are eligible for assistance, with priority given to those with critical erosion problems and those more immediately able to implement conservation practices. The District does not charge for services.

³²¹ Sutter County LAFCO, 2007, p. 1.0-2.

The District’s primary project is the CALFED Watershed Program, in conjunction with Sutter County RCD, which is funded by grants from California Bay Delta Authority and the California Department of Conservation (DOC).

Other related service providers in Yuba County include the Yuba County Agricultural Commissioner and the California Department of Fish and Game. The Yuba County Agricultural Commissioner seeks to protect the environment, the public and agricultural crops from the potential harmful effects of pesticides, invasive species and significant pests. The California Department of Fish and Game owns and operates the Spenceville Wildlife Management and Recreation Area, where it seeks to maintain animal and plant species and natural communities to ensure their survival and preservation.

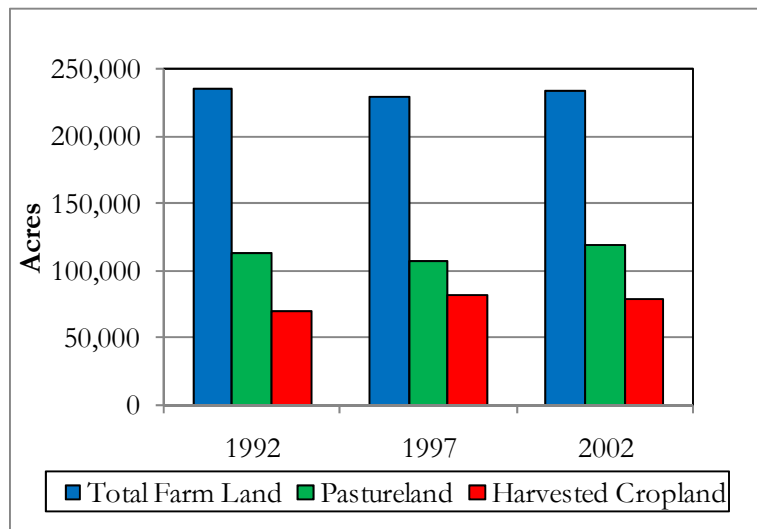
Service Area

The District’s service area is all areas within Yuba County with the exception of the incorporated cities of Marysville and Wheatland (as the city boundaries existed on December 19, 1973). Subsequent annexations to the cities have not had corresponding detachments from the District. Therefore, all land annexed to the two cities after 1973 also lies within the District’s boundaries. The boundary area extends north to the Yuba-Butte county line, west to the Yuba-Sutter county line, south to the Yuba-Sutter and Yuba-Placer county lines, and east to the Yuba-Nevada and Yuba-Sierra county lines, as shown on Map B-2. The District has a boundary area of 625 square miles.

SERVICE DEMAND

Figure 11-13: Yuba County Farm Land, 1992-2002

Over 56 percent of all land in Yuba County is farm land.³²² Pastureland and harvested cropland are the most common types of farm land in the County.³²³ From 1992 to 2002 the total acreage of Yuba County land in farms remained virtually unchanged, while pastureland grew by over five percent and harvested cropland grew by 13 percent, as shown in Figure 11-13. In California as a whole, the amount of total land in farms decreased by nearly five percent, the amount of pastureland decreased by over 13

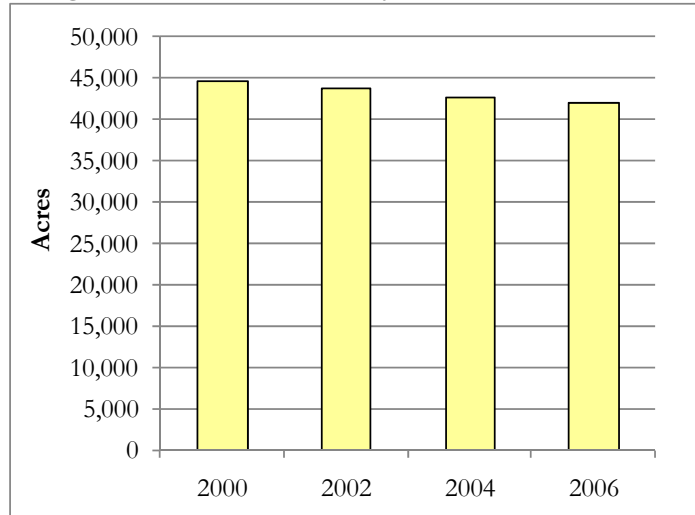


³²² Yuba County Agricultural Crop Report, 2006.

³²³ U.S. Department of Agriculture, National Agricultural Statistics Service, Census of Agriculture 1992, 1997, and 2002.

percent, and the amount of harvested cropland grew by nine percent over the same period.³²⁴

Figure 11-14: Yuba County Prime Farmland, 2000-6



A key measure of farming sustainability in a region is the degree to which prime farmland is being converted to other uses. Prime farmland is land that is most suitable for general intensive agricultural uses, due to its ability to sustain long term production of agricultural crops. An important aim of a resource conservation district is to limit the loss of prime farmland over time, as the conversion of prime farmland limits the productivity and sustainability of farming in the area. The total acreage of prime farmland in Yuba County has decreased by nearly six percent from 2000 to 2006, as shown in Figure 11-14.³²⁵ In California as a whole, the amount of prime farmland decreased by nearly three percent from 2000 to 2004.³²⁶ The conversion of prime farmland to other uses is a significant demand driver for resource conservation services.

Projected Demand

As the amount of farming activity increases so does the demand for resource conservation services, to insure that sustainable farming practices are being used. As the County develops, less land will be available for agricultural purposes and thus demand for the District's services will decline. Refer to Chapter 3 for additional details on the residential population, job base, projected population and job growth rates, and a description of growth areas.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

The YCRCDC does not own or maintain any infrastructure. The District rents office space from the Natural Resources Conservation Service (NRCS), funded by CALFED watershed grant money. The office facilities include a desk, internet and a phone.

The District has expressed a desire to move into its own office in Yuba County. The District is considering buying a historical building in Marysville and restoring it with a grant. It would then use a portion of the space for its district office and rent out the remainder.

³²⁴ The farm land figures do not account for the development that has occurred in the County within the last five years as the most recent Agricultural Census data available as of the drafting of this report covers only through 2002.

³²⁵ California Department of Conservation, Farmland Mapping and Monitoring Program 2000-2006.

³²⁶ Statewide data for 2006 from the Farmland Mapping and Monitoring Program was not available as of the drafting of this report.

SERVICE ADEQUACY

In the last five years, the District has received a District Merit Award from the California Association of Resource Conservation Districts and an award from the DOC for outreach to underserved communities.

Management

While public sector management standards do vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, and conduct advance planning for future growth.

The District employs one full-time employee to manage the watershed program, one clerk to take minutes at meetings, and one part-time bookkeeper. The watershed management coordinator position is funded by a grant from the California Department of Conservation (DOC). The coordinator reports to both the District board and the DOC. The coordinator reports monthly progress at each board meeting and provides quarterly submissions to the DOC which includes a progress report, an invoice, invoice support, NCRS contributions, pay stubs, and a detailed time sheet.

The coordinator does not receive regular performance evaluations from the Board. Productivity is monitored through monthly progress reports to the Board and detailed timesheets submitted to the DOC quarterly. The DOC reviews the quarterly submissions but does not provide an evaluation of the work performed. The District does not evaluate its own performance.

To guide District efforts, the District adopts a five-year plan which identifies goals and a plan of action to realize those goals. The most recently adopted long-range plan was for 2002 through 2006. The District reported that it is currently updating the plan, and a 2007 draft copy has been produced.

According to the District, YCRCDC management practices include triennial financial audits. The most recent financial audit was completed for FY 02-03. No benchmarking practices were identified.

Local Accountability and Governance

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to agency efforts to engage and educate constituents through outreach activities in addition to legally required activities such as agenda posting and public meetings, and transparency of the agency as indicated by cooperation with the MSR process and information disclosure.

YCRCDC has a five-member governing body. Directors are appointed to staggered four-year terms by the Board of Supervisors. The Board meets the first Thursday of every month at 2 p.m. at the Yuba County Agriculture Commissioner's office. The District has a website, but does not post agendas or minutes online. Agendas are posted at the District office, in the newspaper and at the County Board of Supervisors office. Minutes are available at the subsequent meeting.

With regard to customer service, the District reported that it has never received a complaint. Constituent complaints may be submitted through phone calls, email, letters and in-person. Complaints would be reviewed by the Board.

District community outreach efforts include their website, where program documents and contact information are available, and program brochures, which are distributed to inform the public of District services. Other District activities conducted to increase public engagement include recognition of the Conservationist of the Year, an annual student speaking contest and sponsorship of a child for Range Camp.

The District demonstrated partial accountability in its disclosure of information and cooperation with LAFCO. The agency responded to LAFCO's written questionnaires and cooperated with LAFCO map inquiries and document requests. The District failed to respond to additional requests for information.

SHARED FACILITIES

Facility Sharing Status

The District shares its office space with the NRCS, a division of the U.S. Department of Agriculture. This arrangement allows YCRCD to avoid costs, and provides synergies due to the access to NRCS technical expertise. Sutter County RCD is also located at this site.

Opportunities

No opportunities for further facility sharing were identified.

Regional Collaboration

YCRCD is currently collaborating with other conservation agencies (Sutter RCD, Butte RCD, Yuba, Butte and Sutter County Agricultural Commissioners, UC Cooperative Extension, UC Davis, CURES and the Butte/Yuba/Sutter Water Quality Coalition), to implement the Feather TMDL for Orchards. The program is funded by a \$1.1 million grant from the regional water quality control board to evaluate the effectiveness of vegetative filter strips to filter dormant spray runoff. YCRCD provides all outreach and workshops for the program in Yuba County.

YCRCD also collaborates with Sutter RCD through the CALFED Watershed Program. The 2004 grant application outlined the work plan to be completed during the three-year program, which included development of a combined management plan and a water quality monitoring plan, an educational and volunteer clean-up campaign, large scale clean-up events at illegal dumpsites, obtaining funding for technical assistance to landowners, and identifying, assessing and prioritizing areas in the upper watershed that are in need of restoration. The District did not provide information on which proposed projects had been completed within the grant time period that expired in June 2007.

FINANCING

The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing

constraints faced by law enforcement service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

Operating Costs

The District did not provide recent financial documents; specific expenditure information is unknown. The District conserves on expenses by sharing office space with NRCS.

Financing Operations

The District's primary revenue source is from the CALFED Watershed Program grant, a three-year program in the amount of \$144,000, which expired in June 2007. The District expressed a desire to renew the CALFED grant, but did not provide an update of the grant renewal status as of the drafting of this report. The District also receives interest income.

Financing opportunities identified by the District include donations from landowners and developers, contributions from the County of Yuba, and selling advertisements to agriculture-related industry for published annual reports or other promotional materials. An additional financing opportunity would be to charge fees for specific services, a practice performed by other RCDs including Sutter County RCD.

The District does not levy a property tax and does not plan to do so in the future. As the District does not receive property tax revenue or charge for service, there are no opportunities for rate restructuring.

The most significant financing constraint is the availability of grant funding for resource conservation services. Despite this, the District hopes to take over management of the Spenceville Wildlife Area from the Department of Fish and Game. Other grant-based financing opportunities include upcoming grant projects, including a new CALFED watershed project for the Lower Feather River and Honcut Creek watersheds, and a river parkway restoration project in the City of Marysville. If the District undertakes the project of restoring a historic building in Marysville for use as its district office it could raise money by renting out the excess office space.

Capital Financing

Capital financing needs are limited to office space and equipment costs.

Financial Ability

The District did not report its ability to fund services. The most recent financial information available (from FY 02-03) indicates reserves of 350 percent of that year's expenditures.

GOVERNMENT STRUCTURE OPTIONS

In addition to maintaining the status quo, four government structure options were identified and are discussed in this section.

Consolidation with Sutter County RCD

The District reports that it may be interested in consolidating with Sutter County RCD as it has more programming, and consolidation may provide economies of scale. Another benefit of consolidation is that it would allow for greater regional collaboration and planning, and also provide efficiency for funding projects at a regional level.

Countywide Boundary

The second option is to expand the District's boundary area to become countywide. The District is interested in such a change, as it has proposed that its sphere of influence include the entire county. The District has indicated a desire to participate in the river parkway restoration project which is currently outside of the District's boundary, in the City of Marysville. The California Public Resources Code §9152 authorizes other lands besides agricultural lands to be included within the District if necessary for the control of runoff, the prevention or control of soil erosion, the development and distribution of water, land improvement, and for fully accomplishing the purposes for which the district is formed.

The advantage of a countywide boundary for the District is that it already provides services (such as education and outreach programs) that benefit the entire county. The disadvantage of a countywide boundary is that historically the District has primarily engaged in services to rural landowners and locations.

Detach Current City Boundaries

The third government structure option is to update the boundaries of YCRCD to agree with the present boundaries of the cities of Marysville and Wheatland. The current District boundaries reflect the unincorporated areas of the County in 1973, as territory has not been detached from the District as annexations to the cities occurred after that year.

The advantage of detaching the current city boundaries is to conform to LAFCO resolution 1973-5, that the District's boundaries shall be "all of the unincorporated territory of Yuba County." The disadvantage of detaching only the current city boundaries is that it would no longer represent the rural portion of the County, as there are many urbanized areas (e.g. Linda, Olivehurst and Plumas) that are unincorporated.

Detach Urban Areas

The final government structure option is to detach all of the urban areas in the County. This would involve detachment of urban territory in the cities of Marysville and Wheatland, and in the communities of Linda, Olivehurst and Plumas. By detaching such areas, the district boundaries would be consistent with the agricultural and open space areas within the County.

The advantage of detaching the urban areas of the County is to realign the District boundaries with the original rural vision of the RCD, as the current district boundaries no longer reflect the rural portion of the County. The disadvantage of detaching urban areas is that the District serves urban areas, and has expressed a desire to continue doing so. RCD services such as prevention of soil erosion and watershed management benefit urban areas as well.

SOLID WASTE

This chapter reviews the solid waste collection and disposal services provided in Yuba County. The chapter addresses questions relating to growth and population projections, current and future service needs, infrastructure needs, and financing constraints and opportunities. Policy analysis—including shared facilities, cost avoidance, rate issues, government structure options, evaluation of management efficiencies, and local accountability and governance—is focused on service providers under LAFCO’s jurisdiction.

REGULATORY ENVIRONMENT

There are three regulatory bodies relevant to solid waste disposal: the California Integrated Waste Management Board (CIWMB), the Yuba County Department of Environmental Health, and the Regional Water Quality Control Board (RWQCB).

In 1989, the California legislature passed the California Integrated Waste Management Act (AB 939) in an effort to conserve resources and extend landfill capacity. The Act established an unprecedented framework for integrated waste management planning and waste disposal compliance. Based on a 1990 disposal baseline, AB 939 required cities and counties to reduce the amount of solid waste generated in their jurisdictions and disposed in landfills by 25 percent by the year 1995 and by 50 percent by the year 2000.³²⁷ AB 939 also required local governments to prepare comprehensive integrated waste management plans that detail how the waste diversion mandates will be met and to update elements of those plans every five years.

AB 939 established the CIWMB to oversee integrated waste management planning and compliance; CIWMB serves as the permitting and enforcement agency. The Board is responsible for approving permits for waste facilities, approving local agencies’ diversion rates, and enforcing the planning requirements of the law through Local Enforcement Agencies (LEAs).

The LEA for Yuba County is the Yuba County Department of Environmental Health (YCEH). LEAs inspect and investigate solid waste collection, handling, storage and equipment. LEAs may also verify compliance with state and local minimum standards for the protection of the environment and public health. LEA reports are forwarded to CIWMB and the relevant operator upon completion.

Any potential discharge to surface or groundwater is regulated by RWQCB. The owner or operator of any facility that discharges, or proposes to discharge, waste that may affect groundwater quality (including solid waste disposal facilities) must first obtain a waste discharge requirement permit (WDR) from the appropriate RWQCB. A WDR order adopted by RWQCB for an individual facility defines measures to mitigate any potential contamination of the groundwater.

In addition to these two bodies, AB 2948 (enacted in 1986) established procedures for regional hazardous waste planning. Under this regulation, counties were to develop hazardous waste plans and projections by 2000.

³²⁷ A Senate bill passed in 1997 allowed for extensions through 2005 for jurisdictions that made a “good faith effort” to comply.

PROVIDER OVERVIEW

The Regional Waste Management Authority (RWMA) serving Yuba and Sutter counties provides solid waste planning services through a Joint Powers Agreement formed in 1990. The Authority is an agreement between Yuba and Sutter counties as well as the Cities of Live Oak, Marysville, Wheatland and Yuba City to jointly address the provision of waste management services in the area.³²⁸ Each JPA member has a franchise agreement with Yuba-Sutter Disposal, Inc. (YSDI) for residential and commercial solid waste collection, disposal and recycling services; each franchise agreement with YSDI expires in 2011.

YSDI provides residential and commercial solid waste collection, disposal and recycling services. Residential collection is on a weekly basis. The frequency of commercial collection ranges from one to seven days a week, depending on the agreement with the business. YSDI reports that it serves over 30,000 residential customers and 5,000 commercial customers, collecting more than 100,000 tons of materials annually.³²⁹ YSDI provides garbage collection to unincorporated territory in Yuba and Sutter counties, to Beale AFB, and to the cities of Wheatland, Marysville, Live Oak, and Yuba City.³³⁰ Most areas receive recycling and yard waste collection services; portions of Yuba County unincorporated areas do not.

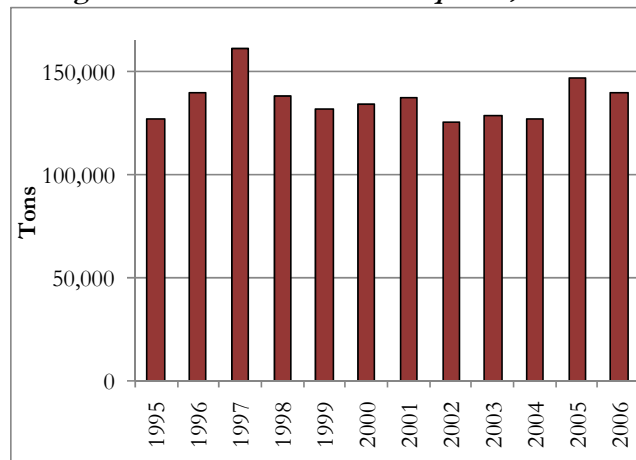
SERVICE DEMAND

This section provides various indicators of service demand, such as solid waste tons disposed and diversion rates.

Solid Waste Disposal

The amount of trash disposed from Yuba and Sutter Counties has increased from 127,289 tons in 1995 to 139,649 in 2006, as shown in Figure 11-15.³³¹ This is an increase of 9.7 percent. (Data was not available for individual counties.) The peak of waste disposed occurred in 1997, when 22,073 tons of refuse were collected during the clean-up from a flood. Also of note is a slight decline in 2002, resulting from the City of Gridley leaving the JPA.

Figure 11-15: Solid Waste Disposed, 1995-2006



³²⁸ The City of Gridley joined the JPA in 1994, but opted out in 2001 to join a different waste management system.

³²⁹ Yuba-Sutter Disposal, Inc., 2007

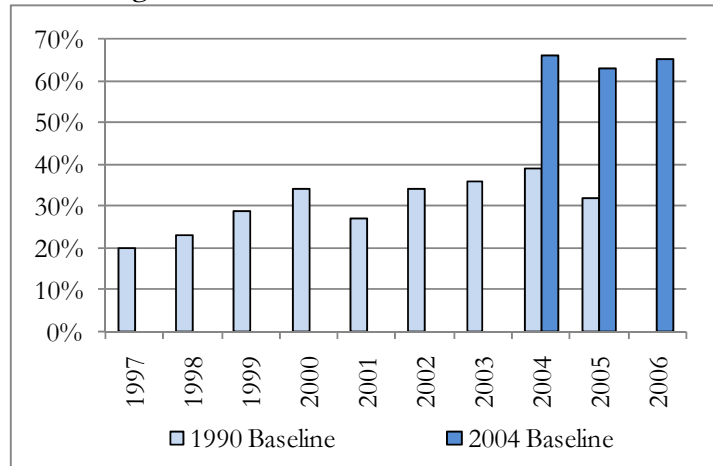
³³⁰ Ibid.

³³¹ CIWMB data represents both Yuba and Sutter Counties, as the RWMA reports at a regional level. The tonnage represents refuse disposed *from* the two counties rather than disposed *in* the two counties. Some refuse from Yuba and Sutter is disposed of in other counties.

Recycling

The amount of trash disposed is not the only indicator of service demand. Recycling is an increasingly important aspect of solid waste service, as the diversion of recyclable materials alleviates impact on landfills.

Figure 11-16: RWMA Diversion Rate, 1997-2006



Solid waste is diverted from disposal through recycling, composting, reduction, and reuse programs. Diversion rates measure the percentage of total waste generated in a jurisdiction that has been diverted from disposal at landfills and transformation facilities. Diversion rates are measured to reflect progress since a baseline year, originally set as 1990, with adjustments made to the waste generated in the base year for subsequent population and economic growth. The diversion rate for the RWMA increased by 12 percent from 1997 to 2005 using the 1990 base-year. In 2004, a new base-year study was conducted by the RWMA. Using the new baseline, much higher diversion rates were recorded for 2004 through 2006: 66, 63, and 65 percent, respectively; however, the 2004 baseline had not been approved by CIWMB as of early 2008.³³² Both baselines are shown in Figure 11-16.

In 2004, a new base-year study was conducted by the RWMA. Using the new baseline, much higher diversion rates were recorded for 2004 through 2006: 66, 63, and 65 percent, respectively; however, the 2004 baseline had not been approved by CIWMB as of early 2008.³³² Both baselines are shown in Figure 11-16.

Projected Demand

Refuse disposal and recycling are directly related to population served. As the population grows, so will these service demands. Please refer to Chapter 3 for the residential population and job base, projected population and job growth rates, and a description of growth areas.

INFRASTRUCTURE NEEDS OR DEFICIENCIES

Principal regional solid waste infrastructure needs involve materials recovery facilities, landfills, and composting facilities. There are a total of five active, public-accessible solid waste facilities in Yuba County: two are transfer and processing facilities, one is a disposal facilities (a landfill), and two are composting facilities.

Transfer and Processing

YSDI’s material recovery facility in Marysville accepts waste from both public and private haulers, including construction/demolition, tires, green materials, and wood waste. Recyclables are sorted out, and the remaining waste is transported to Ostrom Road Landfill. The facility’s

³³² CIWMB, Jurisdiction Diversion Rate Summary, 2007.

maximum permitted through-put is 1,080 tons per day, with a permitted capacity of 1,615 tons. The facility covers seven acres.³³³

The Ponderosa Transfer Station, also owned and operated by YSDI, is a medium-volume transfer/processing facility located in Brownsville. It is open to the public three days per week. All waste is hauled to Ostrom Road Landfill without sorting. Its maximum permitted through-put is 60 tons per day. It covers one acre.³³⁴

Disposal

The Norcal Waste Systems Ostrom Road Landfill was opened in 1995 and is the only active solid waste landfill in Yuba County. The Class II landfill facility is owned and operated by Norcal Waste Systems, Inc. Only select haulers are permitted to use the landfill, including YSDI, Beale AFB, the City of Colusa, and Nevada County. There is no public dumping at the landfill.

The total disposal area is 225 acres, although only 52 acres have been constructed and approved for operation, as of the drafting of this report.³³⁵ The landfill uses a single composite liner within active disposal areas, and will employ a double composite liner within future disposal areas as mandated by the RWQCB waste discharge requirements. A liner is used in order to protect groundwater from contamination. The facility's groundwater monitoring system consists of eight wells that monitor the groundwater, which is located approximately 26 to 55 feet below the surface. Additional monitoring wells are required to be installed as the landfill expands.³³⁶

The Ostrom Road Landfill has a permitted capacity of over 41.8 million cubic yards, with over 97 percent of its capacity remaining. In 2000, the County Board of Supervisors amended the landfill's conditional use permit to allow an increased throughput of up to 3,000 tons per day by 2030, and an increased height of up to 265 feet above ground level by December 2020. The permit amendment was challenged by a citizens group citing the environmental impact report as being inadequate and limited public participation in the process. A Yuba County judge sided with the citizens group, but the ruling was reversed by a state appeals court in November 2001.³³⁷ The estimated closure date of the landfill is December 31, 2066.³³⁸

CIWMB does not indicate that the Ostrom Road Landfill has inadequate capacity to accommodate current or projected demand for service.

³³³ California Integrated Waste Management Board, Facility/Site Summary Details (SWIS), 2008.

³³⁴ Ibid.

³³⁵ Central Valley RWQCB, Order No. R5-2006-0068.

³³⁶ Ibid.

³³⁷ "New landfill rules proposed: State board revises Ostrom Road requirements," *Appeal-Democrat*, 2002.

³³⁸ CIWMB, Solid Waste Information System Database, 2007.

Composting

YSDI Greenwaste Composting, located in Marysville, accepts green waste from the public and from route trucks that collect curbside. The green material is composted per state requirements. The facility's maximum permitted through-put is 400 tons per day and its maximum permitted capacity is 64,000 tons. The finished compost is sold primarily in large quantities, though a small amount is reserved for public purchase.

Akita Enterprises is primarily used by commercial vehicles but is also open to the public. It is located in Olivehurst. The facility accepts green and wood waste, which it grinds and sells as boiler fuel and landscape bark. Compost is not currently produced at the site. Its maximum permitted capacity is five tons per day; its maximum permitted capacity is 1,482 tons.

SERVICE ADEQUACY

Regulatory Compliance

Inspections by the YCEH may result in violations or area of concern. A violation indicates non-compliance with regulations, whereas an area of concern indicates a condition approaching non-compliance.³³⁹

Transfer/Processing

Both transfer/processing facilities are inspected by YCEH monthly. Ponderosa Transfer Station's monthly inspections in 2007 resulted in one violation and one area of concern. In 2008, it had been inspected twice as of the drafting of this report, resulting in one area of concern. YSDI's material recovery facility received 14 violations and 6 areas of concern in 2007. In the first two inspections of 2008, it received one area of concern and two violations. All the 2007 and 2008 violations for this facility were for significant change in design or operation of the facility that is not authorized by the existing permit.

Disposal

The Ostrom Road Landfill is inspected monthly by YCEH. In 2007, there were 20 documented areas of concern and five violations. Three violations were regarding the reporting of disposal site information to the LEA, one was regarding litter control, and one was regarding alternative daily cover. CIWMB's Landfill Facility Compliance Study indicates that from 1998 to 2001 the landfill completed corrective actions to resolve all areas of concern and violations. The CIWMB does not have more recent facility compliance data.

There have been no compliance orders issued by the RWQCB for the Ostrom Road Landfill.

Composting

YSDI Greenwaste Composting is also inspected monthly. In its inspections in 2007, there were six documented areas of concern and one violation for operator compliance with the permit. In the

³³⁹ All inspection outcomes are taken from CIWMB's Facility/Site Inspection Listings as of May 2, 2008.

two inspections in 2008 as of the drafting of this report, the facility earned one violation for physical contaminants.

Akita Enterprises is inspected quarterly. In 2007, it received one documented area of concern and one violation for record inspection. It received a documented area of concern in its one 2008 inspection as of the drafting of this report.

Diversion Rates and Recycling Efforts

In 1989, California passed historic legislation that sought to radically decrease the amount of materials deposited in the state’s landfills. Assembly Bill 939 (A.B. 939) mandates that cities reduce trash delivered to landfills by 50 percent in the year 2000 from 1990 delivery estimates. Under the law, the State can fine a city, county or regional agency \$10,000 a day for failing either to prepare an approved diversion plan or to make a good faith effort to implement such a plan. A Senate bill passed in 1997 offered extensions through 2005 to jurisdictions falling short of the A.B. 939 standards, which have made a “good faith effort” to comply.

Table 11-17: RWMA Recycling Services, 2004

Time extensions were granted for the jurisdictions from 2000 to 2005. The 50 percent diversion requirement was not met in 2004, 2005 or 2006 using the 1990 baseline year; however, after recalculations by the RWMA using 2004 as the base year, RWMA has met the diversion requirements.³⁴⁰ Data from 2004 through 2006 are preliminary, and had not been officially approved by CIWMB as of the drafting of this report. Recycling services offered within the jurisdiction are shown in Table 11-17.

Residential Curbside Recycling	Residential Curbside Greenwaste	Residential Hazardous Waste	Commercial On-Site Recycling	Commercial On-Site Greenwaste	Food Waste Composting
Yes ¹	Yes ¹	Yes	Yes ²	No	No
Source: Regional Waste Management Authority, 2008. Notes: (1) Not available in all Yuba County unincorporated areas. (2) Service is provided if requested, if located on a recycling route, and if there is capacity.					

Local Accountability and Governance

The RWMA is governed by a six-member Board of Directors. Members are appointed from the two counties’ boards of supervisors and the city councils in Live Oak, Marysville, Wheatland and Yuba City.

For a discussion of local accountability and governance as well as management regarding agencies under LAFCO’s purview, see the chapters for the Cities of Marysville and Wheatland and Yuba County in Appendix A.

SHARED FACILITIES

Shared facilities and regional collaboration occur through the RWMA joint powers agreement, formed in 1990. The Authority is an agreement between Yuba City, Live Oak, Marysville, and

³⁴⁰ CIWMB, Jurisdiction Diversion Rate Summary, 2007.

Wheatland along with Yuba and Sutter Counties to jointly address the provision of waste management services in the area.

No further opportunities were identified.

FINANCING

The financial ability of agencies to provide services is affected by available financing sources and financing constraints, as well as management practices. This section discusses the major financing constraints faced by law enforcement service providers and identifies the revenue sources currently available to the service providers. Finally, it assesses the financial ability of agencies to provide services.

Operating Costs

Each member of RWMA has selected YSDI to perform solid waste services through a competitive bidding process.

Franchise fees are fees paid to municipalities for the use of city streets and rights of way. These fees are generally a percentage of the franchisee’s gross service charges. In Yuba, franchise fees are five percent of all collection revenue, including residential, commercial and debris boxes.

For specific costs related to agencies under LAFCO’s purview, please see Appendix A’s chapters on Yuba County, Marysville and Wheatland.

Financing Operations

Table 11-18: Solid Waste Collection Rates

The standard monthly solid waste collection rate for a residential customer in Yuba County is \$22.72 per month. Some customers pay an additional \$2.75 per month, dependent on location.

Service ¹	Monthly Fee
Residential ²	\$22.72 / \$25.47
Senior Residential	\$17.17
Commercial	\$47.41

Source: Yuba Sutter Disposal, Inc, 2008.
 Notes:
 1) Service for standard, 32-gallon carts.
 2) Residential rates vary by area: YSDI charges higher rates harder-to-serve areas.

RWMA programs are financed through an AB 939 fee and a hazardous waste surcharge on all residential, commercial and debris box service. Both are included in solid waste collection rates; the total amount of the fee and surcharge varies depending on the number of residential customers and the level of commercial and debris box service.

The Ostrom Road Landfill relies on tipping fees for financing. A tipping fee (also called a gate fee) is the charge for disposing a given quantity of solid waste at the landfill. The tipping fee for RWMA’s franchised hauler (YSDI) is \$26.86 per ton, with tipping fees negotiated on a case by case basis for other customers. The tipping fees for refuse delivered under a franchise agreement are negotiated annually.

Some cost avoidance benefits are already being achieved as a result of inter-jurisdictional planning and collaboration through RWMA.

Capital Financing

YSDI as a contractor provides all infrastructure needs. For capital financing related to agencies under LAFCO's purview, please see Appendix A's chapters on Yuba County, Marysville and Wheatland.

Financial Ability

For financial ability to provide services related to agencies under LAFCO's purview, please see Appendix A's chapters on Yuba County, Marysville and Wheatland.

GOVERNMENT STRUCTURE OPTIONS

No government structure options relating directly to solid waste were identified.

12. MSR DETERMINATIONS

This chapter sets forth recommended findings with respect to the service-related evaluation categories based upon this review of municipal services for Yuba County.

LAFCO is required to identify governance options; however, LAFCO is not required to initiate changes and, in many cases, is not empowered to initiate these options. LAFCO is required by the State to act on SOI updates. The Commission may choose to recommend governmental reorganizations to particular agencies in the county, using the spheres of influence as the basis for those recommendations (Government Code §56425 (g)).

GENERAL

ADEQUACY OF PUBLIC SERVICES

- While public sector management standards do vary depending on the size and scope of an organization, there are minimum standards. Well-managed organizations evaluate employees annually, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain current financial records, periodically evaluate rates and fees, plan and budget for capital replacement needs, conduct advance planning for future growth, and make best efforts to meet regulatory requirements.
- Most of the professionally managed and staffed agencies implement many of these best management practices. Many of the smaller special districts serving the area are staffed by board members or volunteers, and do not implement such practices.
- LAFCO encourages all local agencies to conduct timely financial record-keeping and make financial information available to the public.

GROWTH AND POPULATION PROJECTIONS

- The County is primarily agricultural with 228,113 acres of farmland. Most of the farmland (142,729 acres) is used for grazing purposes. There were 41,993 acres of prime farmland, 32,372 acres of unique farmland and 11,019 acres of farmland of statewide importance in the County, as of 2006. Since 2000, the total acreage of prime farmland in Yuba County has decreased by nearly six percent as a result of development in the southwestern part of the County.
- Since the 2000 Census, the countywide population has grown by 19 percent, from 60,219 to 71,929 at the beginning of 2008.
- Wheatland showed rapid development from 2002 to 2004. In the unincorporated territory, the southwestern communities of Plumas Lake and Linda experienced rapid residential growth from 2003 to 2005. In spite of the housing market downturn, the unincorporated areas have continued to attract development interest and building permits.

- There are as many as 85 proposed and planned developments in the County. The developments propose a total of 62,470 dwelling units and 1,040 acres of non-residential development. The timing of potential future development is unknown due to the present housing market downturn and forthcoming land use decisions affecting the unincorporated areas.
- There are five centers of planned and proposed development in the County: Plumas Lake, City of Wheatland SOI, East Linda, North Arboga, and the Brophy/South Yuba area northwest of Wheatland along SR 65. Developments have been proposed or planned on 75 percent of land in Plumas Lake, 59 percent in the Wheatland SOI, 47 percent in East Linda, 27 percent in North Arboga, and 15 percent in Brophy/South Yuba.
- The population would grow to 254,483 if proposed and planned development in the MSR area materializes, and higher if further development should occur.
- By contrast, transportation planners at SACOG project population growth consistent with approximately one-third of planned units being developed in the area by 2035. Water planners similarly anticipate substantially less growth.
- Land use planners in high-growth areas should periodically update development plans and growth projections; this could be included in the five-year housing element updates. Increased communication between land use and infrastructure planners is needed to ensure that long-term water and transportation planning accounts for the future needs of the area.
- The jobs-housing balance is relatively low in the unincorporated areas and Wheatland. By prioritizing development projects that would create local jobs, land use authorities may attempt to achieve a more desirable jobs-housing balance.
- To achieve a more desirable jobs-housing balance, land use authorities should prioritize development projects that would create local jobs.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- Municipal service providers are constrained in their capacity to finance services by the inability to increase property taxes, requirements for voter approval for new or increased taxes, and requirements of voter approval for parcel taxes and assessments used to finance services. Municipalities must obtain majority voter approval to increase or impose new general taxes and two-thirds voter approval for special taxes.
- Limitations on property tax rates and increases in taxable property values are financing constraints. Property tax revenues are subject to a formulaic allocation and are vulnerable to State budget needs. Agencies formed since the adoption of Proposition 13 in 1978 often lack adequate property tax financing.
- Financing opportunities that require voter approval include special taxes such as parcel taxes, increases in general taxes such as utility taxes, sales and use taxes, business license taxes, and transient occupancy taxes. Communities may elect to form business improvement districts to finance supplemental services, or Mello-Roos districts to finance development-related

infrastructure extension. Agencies may finance facilities with voter-approved (general obligation) bonded indebtedness.

- Financing opportunities that do not require voter approval include imposition of or increases in fees to more fully recover the costs of providing services, including user fees and development impact fees to recover the actual cost of services provided and infrastructure. Development impact fees and user fees must be based on reasonable costs, and may be imposed and increased without voter approval. Development impact fees may not be used to subsidize operating costs. Agencies may also finance many types of facility improvements through bond instruments that do not require voter approval.
- Water and wastewater rates and rate structures are not subject to regulation by other agencies. Utility providers may increase rates annually, and often do so. Generally, there is no voter approval requirement for rate increases, although notification of utility users is required. Water and wastewater providers must maintain an enterprise fund for the respective utility separate from other funds, and may not use revenues to finance unrelated governmental activities.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- Accountability is best ensured when contested elections are held for governing body seats of local agencies. With contested elections, local voters have the opportunity to ensure accountability among their elected officials.
- The County, the cities, YCWA, BVID, and the fire districts demonstrated a high degree of public participation in elections as well as other forms of citizen participation.
- Interest in governing body membership is relatively low among many of the special districts serving the MSR area, and uncontested elections are common. Cemetery and most irrigation district board members are appointed, which limits accountability. Accountability is constrained by limited interest among citizens in serving on the governing bodies.
- CSA accountability is limited, as there is no formal mechanism for local control or input. The CSAs lack a communication vehicle for constituents to inform the County on issues pertaining to services in the community. The County Public Works Department manages the CSAs, and has not developed a new communication approach after dissolving road committees in the communities. Any CSA property owner may contact the County CSA coordinator for service requests.
- Local agencies that conduct constituent outreach promote accountability and ensure that constituents are informed and not disenfranchised. The County, the cities and the larger special districts make information about their activities available to the public through a variety of sources, including Internet websites, distribution of agenda and related documents, public access to city council and board meetings, mailing information to constituents, and similar methods. Among the smaller districts, public outreach efforts were typically informal, if conducted at all.

- Public agency operations and management should be transparent to the public. Government Code §56378 requires that local and State agencies provide information requested by LAFCOs. LAFCO was unable to obtain needed information from some agencies. LAFCO encourages agencies to develop technical information so they can respond more completely to LAFCO information requests for project proposals and the 2013 MSR. Agencies are encouraged to enhance technical information, such as infrastructure capacity and growth projections, as they prepare master plans or General Plan updates.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

- Elimination of unnecessary local governments or inadequate service providers should be pursued with sensitivity to retaining local accountability.
- Local agencies must obtain LAFCO approval to alter boundaries, to serve territory outside their boundaries and to provide new services.

WATER SERVICES

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- Yuba County agriculture relies primarily on surface water. Historical groundwater overdraft conditions have been reversed in much of south Yuba County by YCWA surface water delivery. Irrigation providers pump groundwater in dry years to accommodate fishery needs. Groundwater substitution needs to be closely monitored to offer adequate groundwater availability for all uses.
- As a water-rich area, Yuba County has adequate water supplies on the whole. Due to relatively low well yields, certain areas lack adequate water supplies and infrastructure capacity for delivery of surface water.
- BVID needs pipeline infrastructure to extend raw water service to unserved portions of its boundary area. The planned Spring Valley development needs water treatment and conveyance infrastructure, which would be developer funded.
- NYWD lacks distribution and conveyance capacity to deliver adequate water to its service area. A pipeline is needed to provide adequate capacity. The distribution system is undersized and in poor condition, and needs to be replaced or rehabilitated.
- NID lacks treatment and upstream canal capacity needed to accommodate even minimal growth in the Smartville area. NID is required by a 1926 Railroad Commission Order to serve this area, but has remaining capacity for only nine domestic connections. Needs include a new water treatment plant site and facility, or alternatively a pipeline from the Lake Wildwood water treatment plant.

- In the long-term, future urban development may need access to treated surface water to ensure adequate and reliable water supply. Due to historic overdraft of the South Yuba Groundwater Basin, there may be inadequate groundwater supplies to serve planned development in the long-term. Actual impacts on the groundwater subbasin would depend greatly on the extent of existing surface and groundwater use on land that would be urbanized in the future.
- YCWA reported that it does not anticipate having water supplies to serve municipal and industrial demands. The cities, the County and the urban water districts should evaluate groundwater adequacy and irrigation practices in their SOIs and future growth areas before the next MSR cycle.
- BVID, LCWD, OPUD and Wheatland will need substantial infrastructure to accommodate planned development, and have conducted associated planning and developed financing mechanisms to accommodate growth needs.
- As a result of groundwater overdraft in the WWD area, well yields are low in the area north of Dry Creek. Surface water supplies are needed and related canal infrastructure is being developed by YCWA.
- Water storage tanks are in poor condition and need to be replaced in three communities—Challenge, Rackerby and Forbestown—to ensure public safety.
- Emergency water supplies are provided in Wheatland, Marysville, OPUD and Beale AFB service areas, but LCWD and Smartville have no emergency water storage facilities.
- Camptonville and Gold Village need additional water storage to ensure adequate water supplies during periods of shortage.
- The City of Wheatland needs additional water reserves for fire flow in the case of multiple simultaneous fire incidents. To accommodate growth, the City has planned for developer-funded water needs in the existing SOI area.
- Beale AFB is actively remediating and monitoring groundwater contamination at various sites. Beale AFB needs to remediate gasoline in the residential area and to rehabilitate or replace older water mains and corroded piping in the distribution system, and is actively rehabilitating infrastructure and housing in the residential area.
- RHCS D serves water to 84 households in the Gold Village community in the Smartville area. The District has faced water delivery challenges relating to low well yields and equipment failure, and water quality challenges related to coliform.

ADEQUACY OF PUBLIC SERVICES

- Enhanced groundwater monitoring and planning is needed to ensure adequate and reliable water supplies are available throughout the area.

- A diversified water portfolio, including both surface and groundwater for future municipal needs, would help boost drought and emergency preparedness in urban areas. Use of surface water may also benefit wastewater providers by reducing salinity, particularly in light of evolving regulatory standards.
- To ensure that urban water needs are anticipated and met, multi-jurisdictional planning and collaboration should determine how future development will be served.
- RHCS D serves a small 84-unit development, is financially constrained, has a checkered record of compliance with drinking water standards and wastewater regulations, and demonstrated a lack of accountability.
- WWD has not begun providing services or conducting financial planning. The District needs to plan and develop a local distribution system to ensure that the water is put to beneficial use and associated water rights are perfected by the 2010 deadline.
- Expanded YCWA programs, including conjunctive use, groundwater monitoring and analysis, and land subsidence monitoring, are desirable.

GROWTH AND POPULATION PROJECTIONS

- Irrigation water demand makes up 91-95 percent of water demand in the MSR area.
- Urban development will tend to reduce overall water needs in southern Yuba County.
- Comprehensive analysis of demand, not only for imported water but also for local sources, is a recommended practice. Comparison of projected demand growth to both regional and local demographic and economic forecasts also helps ensure responsible planning of adequate water for future growth. Validation of local groundwater demand projections with safe yields is another best practice.
- To grow and plan responsibly, an evaluation is needed of the safe annual yield of the groundwater subbasin and current irrigation practices on land that would be urbanized in the future. In the meantime, major water rights holders, particularly BVID and YCWA, should seek to extend permits and to retain water rights likely to be critical to serving the needs of Yuba County as it develops over the long-term.
- Reserving surface water supplies exclusively for agricultural uses and requiring urban development to rely only on groundwater could lead to groundwater overdraft under a build-out development scenario.
- Agencies are encouraged to implement conservation best management practices to promote water use efficiency. Metering water connections reduced demand in Wheatland by 30 percent. OPUD, Cal Water and RHCS D could reduce water use by expediting installation of meters. Increased use of recycled water for landscaping purposes would reduce the amount of potable water used. Requirements that installed landscaping be climate-appropriate and drought-tolerant would reduce water needs.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- For the most part, the water providers demonstrated financial ability to provide adequate services.
- NYWD operates in a severely resource-constrained fashion and charges relatively high rates. The District has substantial infrastructure needs that are presently unfunded; however, the District will be receiving a very sizable increase in revenues in 2010. The District may consider borrowing on the security of those future revenues to begin addressing infrastructure needs more timely.
- There may be opportunities for NID to restructure its rates for service to the Smartville area where users are charged a premium for outside-District service. NID raw water rates are particularly high in the Smartville area.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- Water purveyors practice extensive facility sharing. CFWD relies on water production and conveyance facilities operated by South Sutter Water District. NYWD relies on water production and conveyance facilities operated by South Feather Water and Power Agency. RWD relies on conveyance through Hallwood Irrigation Company and CID canals for distribution, and share responsibility for the fish screen.
- Future facility sharing opportunities include use of YCWA canals by Wheatland to receive surface water for conjunctive use.
- Given a potential need for treated surface water to serve future municipal needs, there are significant policy questions and challenges for agricultural and urban interests in Yuba County to resolve. The water purveyors and land use authorities need to develop a forum for ongoing discussion and resolution of these issues. An ongoing collaborative process would identify further opportunities for shared facilities.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- YCWA, BVID, NYWD, LCWD, OPUD, and Wheatland demonstrated accountability based on the measures of contested elections, constituent outreach efforts and disclosure practices.
- Accountability is more limited in CCSD and smaller irrigation districts where governing body members are appointed and contested elections do not occur.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

- A government structure option is for irrigation districts containing growth areas to provide urban surface water wholesale service, as BVID does. For the most part, the districts would need to gain approval from LAFCO in addition to either YCWA approval or amendment of water rights permits. An alternative is for YCWA to provide wholesale water service to

urban purveyors directly; however, YCWA is skeptical that it would have adequate water supplies to wholesale to new member units.

- Detachment of urbanizing territory from irrigation districts, particularly BWD, SYWD and WWD is an option. The southern irrigation providers do not wish to share governance with urban water users, and are concerned about increased maintenance costs being borne by the remaining growers. However, careful consideration to impacts on groundwater resources should be given before detaching territory.
- Annexation of territory to the City of Wheatland as the City urbanizes is an option. The City is rapidly urbanizing with proposed and planned developments covering its existing sphere of influence. The City is expected to annex substantial territory in the next 20 years as adjacent areas urbanize.
- Reorganization of BVID and NYWD to eliminate the 2,821-acre area where the boundaries of the two districts presently overlap each other is an option.
- Several irrigation water providers presently serve territory outside their bounds. Annexation of such territory to BVID, CID and SYWD are options. Local agencies have been required since 2001 to gain LAFCO approval before extending services outside their boundaries.
- Dissolution of River Highlands CSD is an option. RHCSO could be dissolved, with its various funding sources and obligations transferring to a successor agency.
- Formation of a new community services district responsible for water, wastewater, fire and possibly cemetery services in the Smartville community is an option. There are service and accountability deficiencies at RHCSO and SCD. It would be desirable for the successor agency to monitor NID activities in Smartville for compliance with the Railroad Commission Order, and explore assuming water service directly. Including fire service within the new district's scope would help ensure good governance and accountability.

FLOOD CONTROL & DRAINAGE

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- New Bullards Bar Dam outlet capacity needs to be increased to facilitate earlier releases of water during extreme floods and free up more reservoir capacity to regulate peak flows. New Colgate Powerhouse needs a tailwater depression project to allow for early release of flood flows and reduce peak flows downstream.
- The entire low-lying portion of the Valley may be affected by flood conditions. Existing levees protect nearly all of the urban areas in the County in addition to the rural area north of Marysville that is surrounded by levees maintained by RD 10.

- Marysville levees may afford 100-year flood protection. Further evaluation of underseepage is needed to determine levee capacity and infrastructure needs. The goal of the federal Yuba River Basin project is 300-year flood protection for levees protecting Marysville.
- Geotechnical evaluations have identified underseepage and other deficiencies on the Feather River levee protecting the Linda, Olivehurst, Arboga and Plumas Lake areas, and the Bear River levee protecting Wheatland. Although these levees presently lack capacity to protect the areas from 100-year flood events, levee improvements are underway to provide these areas 200-year flood protection by 2009.
- The southern Dry Creek levee protecting northern Wheatland and the area west of Wheatland is too low, too narrow, has overly steep side slopes, and does not afford 100-year flood protection. The levee will be evaluated by DWR in 2009. Financing would need to be arranged to improve the levee capacity.
- In the Wheatland SOI area, freeboard and geotechnical deficiencies on the San Joaquin Drainage canal levees also need to be addressed by RD 2103 to achieve 200-year flood protection; this project phase needs to be evaluated and funded.
- Certain levees protecting the Linda, Arboga and Plumas Lake areas were recently improved and certified for 100-year flood protection. Specifically, the south Yuba River levee downstream of Simpson Lane, the northern Bear River and western WPIC levees have been certified to date.
- Most of the Beale AFB, Smartville, Browns Valley and foothill areas are outside the flood hazard area due to elevation and topography, and do not require flood control infrastructure.
- Future state and federal efforts to evaluate levees and map flood hazard areas more comprehensively may identify additional flood control infrastructure needs.
- Design capacity of flood channels, such as the WPIC, that are part of the joint federal-state Sacramento River Flood Control Project (SRFCP), are known. The adequacy of those channels should be reviewed in the 2013 MSR cycle, and responsible state and local agencies should make reasonable efforts to develop information on flows in the interim.
- Marysville drainage needs include replacement of undersized storm drains and construction and repair of curbs and gutters.
- In Linda and Olivehurst, a master underground drainage system is needed to eliminate ponding. In Olivehurst, runoff collects in yards where home pads are too low; pad grading, street improvements and culvert upgrades are needed. Hallwood needs elevated roadways under which culverts are installed to provide adequate drainage due to impervious soils.
- Existing capacity in Wheatland's culverts and portions of Grasshopper Slough would not contain 100-year flows for drainage. The City is implementing regional detention basins to provide capacity to convey peak drainage flows. New development must install drainage infrastructure to limit post-development flows to existing conditions.

- Beale AFB lacks a stormwater collection system, and many housing units have water infiltration problems. Beale AFB plans to replace or renovate most of its housing units and associated infrastructure by 2012.

ADEQUACY OF PUBLIC SERVICES

- Levee maintenance services are adequate in Reclamation District 2103, minimally adequate in RD 784 and Marysville Levee District, and unsatisfactory in RD 817 and 10, according to State inspection records.
- RD 10, 817 and 2103 operate in an extremely resource-constrained fashion with minimal management practices. RD 10 and 817 do not conduct capital planning. RD 817 financial information is not prepared in accordance with governmental accounting standards.
- Marysville Levee District provides adequate maintenance, although funding per levee mile is below the urban standard.
- The County and Marysville have not completed implementation of minimum required practices to limit negative water quality impacts of stormwater runoff.
- The County, Wheatland and RD 784 have not implemented multi-year drainage improvement planning.
- The County and the cities are encouraged to require new development to mitigate downstream drainage impacts, and to periodically evaluate the effectiveness of required mitigation measures.

GROWTH AND POPULATION PROJECTIONS

- The need for flood protection services is primarily affected by topography, precipitation, development in low-lying areas, and the integrity and capacity of levees and other flood control structures.
- Future flood control needs will increase as a result of recent legislation (SB 5) that requires 200-year flood protection in urban areas for new development after 2015 and for existing communities after 2025.
- Factors affecting drainage service needs include precipitation, pollution, urban development, and the regulatory environment. As areas urbanize, cities and counties must conduct more extensive stormwater planning and implementation of best management practices. Climate change will substantially affect flood control and hazard mitigation planning.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- Flood control and drainage operations are financially constrained by limited boundary areas, Proposition 218 voter approval requirements for assessments and, in RD 2103 and particularly RD 10 and 817, relatively low densities and limited property tax bases.

- RD 2103 provides acceptable service in spite of relatively low assessments due to effective community volunteerism. As urbanization proceeds, the District will require a funding source for paid staff to conduct maintenance.
- RD 817 has not imposed assessments to fund appropriate service levels. RD 10 imposed an assessment after voter approval in 2008 for the first time, which is expected to improve service levels.
- RD 784 does not maintain to an urban levee standard due to a lack of adequate funding. The District should annex its benefit area to ensure appropriate future funding. The District relies on a patchwork of funding sources, and should evaluate its funding approach comprehensively. The District appears to lack the financial ability to provide internal drainage facilities in low-lying portions of Olivehurst.
- Funding for drainage is inadequate. Funding mechanisms have been established for growth-related capital needs, but need to be developed for drainage improvements to existing development. New and evolving requirements have increased the scope of municipal responsibility for stormwater programming without additional funding.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- All providers have collaborated on recent flood hazard and water management planning.
- Yuba County and RD 784 collaborate on planning and financing of levee capital improvements.
- Wheatland and RD 2103 collaborate on planning and financing of levee capital improvements.
- Yuba County and Marysville collaborate on stormwater management plans and implementation of required stormwater control measures.
- The reclamation districts could create a regional maintenance program to pool resources to maintain levees. This approach would offer professional staff with appropriate equipment that could be shared in levee maintenance and enhance service levels.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- Marysville, Wheatland, YCWA, and Yuba County demonstrated accountability based on the measures of contested elections, constituent outreach efforts and disclosure practices.
- Reclamation districts have little governing body and constituent interest as demonstrated by a lack of contested elections. RDs 10, 784 and 2103 conduct constituent outreach efforts, but RD 817 and MLD do not. Reclamation districts demonstrated accountability by disclosing information to LAFCO.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

- The County and RD 784 have overlapping responsibilities for internal drainage in the RD 784 service area. Their respective roles need to be resolved to serve the public effectively.
- Annexation of the eastern portions of the Linda and Olivehurst communities to RD 784 is an option. These areas benefit from Yuba River south bank levees, but are located outside District bounds and do not presently contribute to maintenance costs.
- Detachment of territory east of the WPIC from RD 784 is an option. The protected area is agricultural and associated revenues do not presently cover the costs of maintaining levees in the area to state and federal standards. If detached, the State would bear responsibility for levee maintenance in this agricultural area. The State could then form a maintenance area whereby local landowners would bear the cost of levee maintenance or could reconsider the SRFCP (“project”) status of such levees.
- Reorganization of RD 817 through annexations and detachments could better align District boundaries with the benefit area.
- Reclamation district consolidation is a government structure option. Three districts maintain adjacent segments of levees along the Bear River and Dry Creek. Conflicting urban and rural preferences on assessments and service levels present an obstacle. Rural property owners prefer lower assessments and urban property owners need 200-year flood protection. Reclamation Districts 817 and 2103 support investigating the feasibility of this option, as well as less formal collaborations, to achieve efficiencies. A successful consolidation approach would likely need to develop assessment financing that would allow agricultural uses to pay based on need and benefit.

WASTEWATER

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- LCWD, OPUD, Wheatland and Beale AFB wastewater flows are presently within the permitted capacity of their treatment systems. Marysville is operating near its permitted disposal capacity at its percolation ponds.
- LCWD, Marysville and Wheatland need to upgrade to tertiary treatment to comply with stricter regulatory requirements that discharge sites—presently percolation ponds—be outside 100-year flood plains. Planned levee improvements will not bring these providers into compliance. Upgrading to tertiary treatment will allow for disposal to surface water, enhance recycled water supplies and assure compliance with evolving regulatory standards.
- OPUD presently has adequate treatment capacity consistent with current regulatory standards due to recent upgrade of its plant to tertiary treatment levels. The collection system is aged and undersized in some areas in old Olivehurst and suffers from an infiltration and inflow problem that OPUD plans to evaluate.

- LCWD, OPUD and Wheatland need additional treatment capacity to serve proposed and planned developments within their spheres. Outside these providers' spheres, there are as many as 18,151 units and 434 non-residential acres of development planned or proposed, in addition to targeted economic development areas.
- OPUD is permitted to expand its capacity; its WWTP site can readily accommodate an 8 mgd WWTP plant expansion. At best, that would serve build-out of the Plumas Lake, North Arboga and Olivehurst areas within its service area and existing SOI. The site itself could be expanded with acquisition of vacant, adjacent lands to serve additional flow.
- The LCWD site is large enough to accommodate a 15 mgd tertiary WWTP. Such a plant could serve flows from the LCWD and Marysville service areas, in addition to potential development in the Marysville primary SOI area and gravity-flows from adjacent proposed development sites. Flows from future development south of Ostrom Road would not flow by gravity to the LCWD site, and would require more costly pumping and force mains.
- Wheatland's existing plant capacity is 0.6 mgd, less than the flows generated by build-out of the existing city limits. The City plans to build a new WWTP to accommodate the existing city and anticipated growth and eliminate use of the percolation ponds. The City would require 8.2 mgd in capacity for flows generated by build-out of its existing sphere. A majority of the City's collection system was renovated in 2007; remaining deficiencies include various needed improvements on the C Street lift station.
- The Beale AFB WWTP has excess capacity. RWQCB requires that the WWTP be upgraded to tertiary treatment levels in order to discharge to Hutchison Creek. Due to the high cost of upgrade and recent downsizing of its missions, the base expanded its land-based discharge application instead. The AFB wishes to lease the WWTP and adjacent sites to another agency or private party who will upgrade and maintain the facility.
- The Marysville percolation ponds have reached capacity and are located within a 100-year flood plain. The City's options for addressing this issue are transferring wastewater to the LCWD WWTP, upgrading the City's plant to directly discharge to the river, or sending effluent to OPUD's WWTP. The City's collection system is in good condition with the exception of several rear-lot line sewer mains and the sewer line along Twelfth and J streets that need replacement.
- The RHCS D WWTP failed in 2006, and a new facility needs to be constructed. The County was appointed as receiver, and plans to build a new plant by the end of 2008.
- If a new development proposal surfaces in the Yuba Highlands area, it would require an additional facility as RHCS D lacks capacity to serve and there are no other adjacent providers.

ADEQUACY OF PUBLIC SERVICES

- LCWD, Marysville and Wheatland must upgrade to tertiary treatment to comply with current or anticipated regulatory requirements. Marysville, RHCS D, and Beale are operating under cease and desist orders.

- RHCSO has severely limited financial and management resources, due to the small size of the service area, and has failed to meet regulatory requirements since 2002, when the 84 Gold Village homes were completed. RHCSO failed to submit required monitoring reports since 2002. A disinfection system failed in 2004, but was not replaced. When the plant failed in 2006, an RWQCB inspection found it to be poorly operated and maintained with various regulatory violations.
- Marysville, Wheatland and OPUD complied with effluent quality standards 100 percent in 2006. LCWD complied 95 percent of the time. RHCSO failed to report the number of days out of compliance with effluent quality requirements.
- Wastewater collection systems in Marysville, Wheatland and LCWD are generally in good condition. The OPUD and Beale collection systems suffer from significant infiltration and inflow problems; both agencies reported plans to rehabilitate these systems.
- LCWD had the highest rate of sewer overflows per 100 miles of collection system in 2006 compared to the other providers. The District needs to improve performance to meet new regulatory standards.

GROWTH AND POPULATION PROJECTIONS

- Demand for wastewater services is affected directly by population and economic growth, water conservation efforts, and groundwater infiltration and inflow.
- Proposed dwelling units in the planned and proposed developments outside of a designated wastewater provider's SOI constitute a total projected wastewater flow of 15.4 mgd.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- LCWD, OPUD, Marysville and Wheatland have structured wastewater rates and connection fees to achieve adequate financing. Each has the financial ability to provide adequate wastewater services to customers.
- Wheatland, Marysville and LCWD need considerable funding to finance WWTP plants or major upgrades. Growth rates and timing will determine the availability of connection fee revenue to finance these capital needs without debt financing. The providers may access bond markets to borrow the needed capital on the security of future revenue.
- OPUD recently financed a significant treatment plant expansion. OPUD has the financial ability to provide adequate financial services presently and in the near future.
- RHCSO has drawn down its reserves as a result of the treatment plant failure in 2006. Since that time, the District has been paying high monthly payments to transport effluent to another provider or an interim facility. The District is struggling to get funding for a new facility, has significantly higher costs per account than the other providers and the highest rate among the other jurisdictions. RHCSO does not have the financial ability to provide adequate wastewater services.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- None of the six wastewater providers in south Yuba County practice facility sharing.
- There is no opportunity at this time for all six to share wastewater facilities, due to RHCS D's remote location. Should OPUD be able to acquire neighboring lands and expand its plant beyond the current site capacity, there is the potential for a regional plant. OPUD reported anticipating enough capacity to serve at least LCWD and Marysville projected flow. Capacity to serve Wheatland and Beale was not reported.
- There are opportunities for facility sharing among groups of the wastewater providers. Marysville and LCWD are actively exploring joint development of a new tertiary treatment plant at the LCWD site. OPUD has expressed interest in acting as a regional wastewater facility to treat flows from Marysville and LCWD.
- Wheatland is actively seeking partners in developing a new tertiary plant to accommodate growth in Wheatland's planning area, reap economies of scale and expedite capital financing. Potential wastewater service consolidation with Wheatland could involve Beale AFB and the proposed casino site. Challenges to consolidation among Wheatland, Beale and the casino include the complexity of negotiating among vastly different jurisdictions, the potential service area extends beyond Wheatland's existing SOI, and the County and the City have not yet negotiated a mutually agreeable future SOI for the City.
- A potential equipment and personnel sharing opportunity may be the sharing of CCTV and trained personnel between the various providers. CCTV equipment is a significant investment. By sharing the equipment, agencies could reduce costs.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- Marysville, Wheatland, LCWD and OPUD demonstrated accountability based on the measures of contested elections, constituent outreach efforts and disclosure practices.
- RHCS D has had little governing body and constituent interest as demonstrated by a lack of contested elections since the formation of the District. In regards to disclosure practices, RHCS D did not respond to LAFCO requests for information regarding wastewater flows, inspection practices, sewer overflows, and service complaints.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

In addition to the previously discussed governance and facility-sharing options, the following governmental structure options were identified for wastewater services.

- Annexation of unserved planned and proposed developments in the Brophy area north of Ostrom Road to LCWD or OPUD.
- Formation of a public utilities district in the Smartville area to provide water and wastewater services to urbanized and urbanizing areas, with consolidation of RHCS D and Smartville FPD into such a district.

- Reorganization such that the Terra Linda development site would be entirely within either LCWD or OPUD. The site presently straddles the providers' boundaries.
- Annexation or out-of-area service agreements for Wheatland to serve planned and proposed developments south of Ostrom Road.

FIRE & EMS SERVICE

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- Marysville offers a relatively high fire service level, but its fire station needs to be rehabilitated and aged apparatus needs replacement.
- Wheatland staffs its stations during daytime hours and relies on call firefighters in the evenings and on weekends. To increase the service level, it needs a new station with dormitory facilities, which is planned. To serve anticipated growth in the City's existing SOI, the City will need two additional stations and a training facility, for which financing will come from development impact fees. The City needs additional fire flow capacity and apparatus.
- CALFIRE staffs its stations with professional full-time staff year round, and augments with additional paid staff during the fire season. The CALFIRE stations have minimal needs; driveways need replacement at two stations and the apparatus bay and office are planned to be replaced at another station.
- CCSD relies entirely on call firefighters and stations are unstaffed. District facilities require significant electrical, dry wall and plumbing improvements. In addition, the District needs another engine to begin operation of a second station.
- While the station within D10-HCSD boundaries is not staffed, the District is able to provide professionally staffed fire service in a rural setting through a contract with Marysville. The District needs an additional fire station to improve the District's ISO rating and would benefit from new vehicles.
- DOHFPD provides rural fire service levels with call firefighters. The District is constructing a new station to replace the current headquarters due to space constraints. Additional district needs include plumbing improvements at a station and a new rescue engine.
- FFPD provides rural fire service levels with volunteer firefighters. Current district facilities are in need of expansion for storage purposes. The District is in the process of completing this expansion. Other station needs include a phone line and heater.
- LFPD provides continual paid-staffing of two of its three stations augmented by call firefighters. The District's facilities currently have sufficient capacity to provide service to current residents. To accommodate new development, LFPD plans to replace one of its stations and construct an additional station in East Linda.

- LRBVCSD provides professional fire service through CALFIRE. To serve existing demand and projected growth, LRBVCSD is planning a new station to serve the northeast portion of the District. Needs at existing stations include septic and well improvements and two new vehicles.
- OPUD provides continual paid-staffing of its station and additional station staffing by call firefighters. While the station is in fair to good condition, the District plans to replace the headquarters to improve efficiency and build an additional station to reduce response times.
- PBFDP staffs its stations part-time during daytime hours and relies on call firefighters in the evenings and on weekends. One of the District's stations lacks storage capacity for modern apparatus, and is in need of replacement. In addition, 75 percent of the District's vehicles and equipment need to be replaced due to old age.
- SFPD staffs its stations with paid staff during daytime hours and relies on call firefighters in the evenings and on weekends. SFPD reported that it needs an additional station in the western portion of the District to provide acceptable response times, and dormitory and related facilities at its existing station in order to provide 24-hour service.
- Regional infrastructure needs include an equipment upgrade for Yuba County Sheriff Dispatch and CALFIRE to identify a caller's location when phoning from a cell phone. Such an upgrade would enhance speed and efficiency of dispatch and response.

ADEQUACY OF PUBLIC SERVICES

- In a mature urban area, the staffing configuration is typically four paid firefighters per station at all times. None of the jurisdictions has yet achieved this standard. Marysville is the only provider in Yuba County that is close to achieving this staffing level.
- OPUD, LFPD and LRBVCSD are in the process of transitioning to an urban service level with stations staffed full-time by paid staff and augmented service by call firefighters.
- Rural providers serve expansive territory with limited resources. Consequently, these providers tend to have lower firefighter staffing levels by area in comparison with urban providers.
- The professionally staffed fire providers, including LFPD, LRBVCSD, Marysville, OPUD, and Wheatland, generally demonstrate best management practices, in regards to financial management, employee management, capital planning, and planning for future growth.
- Due to the expansive size of the districts, rough terrain in some areas, and reliance on call firefighters, the foothill fire departments all greatly exceeded NFPA and CPSE fire response guidelines. In fact, the only two jurisdictions that responded within the NFPA guideline 90 percent of the time were the cities of Wheatland and Marysville, due to their compact size.
- All of the fire providers (Marysville, Wheatland, D10-HCSD, FFPD, LFPD, OPUD, PBFDP, SFPD), that provided response times, reported 90th percentile response times within California EMS BLS guidelines.

- Bi-County Ambulance exceeded response time standards for portions of Beale AFB.

GROWTH AND POPULATION PROJECTIONS

- Service calls for fire and emergency medical providers have been increasing and are expected to continue growing as a result of population growth.
- Growth in demand will be affected by the availability of alternative services like primary care and telephone based service, and demand management practices, such as better fire prevention training, fire code improvements, and building rehabilitation.
- The wildland interface areas—where structures and development meet or intermingle with undeveloped wildland or vegetative fuel—are expanding as more people are building homes in such areas, which will increase demand for effective fire service.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- Marysville is presently financing service levels at nearly the urban standard, but needs to establish financing mechanisms to fund existing fire-related capital needs and to accommodate the growth it intends to attract to its primary SOI area.
- LFPD, OPUD and LRBVCSD have managed to finance fire stations that are manned on a 24-hour basis. Although service levels are higher than in other parts of the County, financing is not adequate to fund the urban service levels that may be expected by planned development.
- In Wheatland, PBFDP and SFPD, fire service levels have been constrained by financing. Fire stations are not staffed in the evenings, and have been staffed by only one person in the daytime. A newly imposed assessment allowed the City and PBFDP to double its paid staffing level in FY 07-08.
- In rural districts, relatively low densities do not yield adequate revenues to transition from unstaffed to staffed stations. CCSD, DOHFPD and FFPD lack resources for paid staffing of their fire stations. Service levels are minimal.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- Fire and EMS providers in Yuba County rely on each other for mutual and automatic aid assistance to optimize response times.
- Jurisdictions throughout the County achieve communication efficiencies by relying on the Sheriff or CALFIRE for dispatching, with the exception of Marysville FD which uses Marysville PD for dispatch.
- The fire and EMS providers in Yuba County practice extensive facility sharing, including jointly operated stations, law enforcement substations in the fire stations, sharing of training facilities and specialized equipment, and sharing of space with other organizations for

meetings. Wheatland and PBFDP jointly finance the Wheatland Fire Authority, a JPA that provides fire service to both agencies' service areas.

- Future opportunities for facility sharing proposed by the providers include the transfer of Marysville FD dispatching to the Yuba County Sheriff's Office to enhance communication between valley fire departments, the sharing of Cordua Irrigation District facilities to house an additional D10-HCSD station, and a joint-use facility between PBFDP and LFPD in the Woodbury development.
- CCSD, DOHFPD, LFPD, and OPUD hope to provide space to the Yuba County Sheriff's Office for additional substations in their facilities.
- Few of the fire providers in Yuba maintain training staff and training facilities. A regionalized approach to training would reduce costs for training staff and training facilities. LFPD is interested in the development of a shared Fire and Police Academy training facility at Yuba College.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- Wheatland, Marysville, LFPD, LRBVCSD, OPUD and SFPD demonstrated accountability based on the measures of contested elections, constituent outreach efforts and disclosure practices.
- Each of the providers fully cooperated with the MSR process and responded to all requests for information. Notably, LRBVCSD and DOHFPD were unable to provide the requested response times due to data tracking practices.
- CCSD, D10-HCSD, DOHFPD, and PBFDP have not had sufficient governing body and constituent interest to hold a contested election at least since 1995.
- All of the providers, with the exception of D10-HCSD, attempt to inform constituents through outreach activities.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

In addition to the previously discussed governance options, the following governmental structure options were identified for fire and EMS services:

- Annexation of areas lacking a designated fire provider to a fire jurisdiction's bounds to increase response efficiency and allocate revenues to the appropriate service provider.
- Annexation of the community of Clippermills in Butte County to Foothill FPD.
- Detachment of PBFDP territory outside the anticipated long-term City of Wheatland SOI is an option. The PBFDP boundary area extends into the southwest portion of the County, bisecting potential development projects that would need urban service levels. Neighboring LFPD and OPUD offer higher service levels than PBFDP, as measured by response times, proximity of existing stations and staffing levels.

- Detachment of PBFPD territory already annexed to the City of Wheatland is an option. A perceived obstacle to detachment—that property tax and Proposition 172 funding for fire services would be reduced—could potentially be surmounted through a tax sharing agreement.
- Consolidated service is an option for urbanized and urbanizing territory in the Brophy, Linda, Olivehurst and Plumas Lake areas. Consolidation of LFPD, OPUD and a portion of PBFPD’s service area would address LFPD’s inefficient fire service area and improve service levels in the urbanizing areas along SRs 70 and 65.
- Fine-tuning boundaries along SRs 70 and 65 is an option. OPUD and LFPD provide automatic aid on a regular basis to areas along these highways and have indicated interest in annexing the territories to their boundaries due to the proximity of their stations and ease of access.
- Consolidation of SFPD is an option. The District is open to considering consolidation with RHCSO after the wastewater plant failure and related problems are resolved. Due to RHCSO operational and accountability deficiencies and incompatibilities between the RHCSO and SFPD service areas, another government structure option is to create a new special district in the area to be responsible for a variety of services.

LAW ENFORCEMENT

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- Due to deficiencies in current facilities, both Wheatland Police Department (WPD) and Yuba County Sheriff’s Department (YCSO) report needing new station headquarters. There were no vehicle or equipment needs identified by the agencies.
- The MPD station requires renovation, and 12 patrol cars need replacement.

ADEQUACY OF PUBLIC SERVICES

- Each of the three service providers offers adequate service levels based on response times to higher-priority incidents and staffing levels.
- Violent crime clearance rates could be improved in the unincorporated areas; the Sheriff reported that future clearance rates are expected to be much improved as a result of recent expansion of its detective department. Property crime clearance rates could be improved in the City of Wheatland.

GROWTH AND POPULATION PROJECTIONS

- As population grows, service providers will need to hire additional officers to maintain or enhance existing service levels.

- In addition to population growth, other factors are expected to affect the need for officers, such as changes in crime rates, traffic congestion and advances in policing strategies and police management among others.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- The providers have managed to deliver adequate services to date in spite of unfunded infrastructure needs.
- Yuba County and Wheatland spend less than average on law enforcement operating costs per capita, compared with the state as a whole and with neighboring cities. Marysville marshals more resources than the state and regional averages, but also has a higher crime rate and higher arrest rates than in the unincorporated areas and Wheatland.
- In Wheatland, law enforcement service levels have been constrained by financing. The City had previously eliminated two police officer positions due to funding shortfalls; however, those positions were reinstated during FY 07-08.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- The law enforcement agencies in the County are collaborating in a number of areas through contract service arrangements, mutual aid, JPAs, and regional task forces. The departments cited these regional collaboration efforts as offering services that they could not otherwise afford.
- Facility sharing practices among the three agencies include joint use of the MPD station by other city departments, community organizations, and regional task forces, the use of the YCSD headquarters by County Superior Court, the District Attorney's Office and the Probation Department, use of the jail and other YCSD facilities by the two cities, and joint-ownership of the Mobile Incident Command Vehicle.
- WPD relies heavily on YCSD for temporary and long-term holding facilities, dispatch facilities, animal shelter facilities, and firing range facilities. MPD relies on YCSD for jail and animal shelter services. These arrangements should be encouraged and augmented where feasible.
- The police departments identified further opportunities for facility sharing. YCSD is considering additional substations in a community center in Dobbins-Oregon House, and WPD hopes to provide office space in the proposed headquarters for county, state and federal agencies that serve the area, such as YCSD and the Probation Department.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- All three of the providers demonstrated accountability by holding contested elections, making efforts to inform constituents and, with few exceptions, fully disclosing all requested information during the MSR process.

- MPD was not able to provide a breakdown of the response times by priority type or service calls in the unincorporated areas. WPD did not provide a breakdown of the type of service calls received.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

- No government structure options were identified for law enforcement services.

STREETS

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- Caltrans maintains SR 20 and 70 through Marysville and SR 65 through Wheatland. SR 70 operates at LOS “F” from 1st Street to 10th Street and SR 20 operates at LOS “E” on the Feather River Bridge (from Sutter Street to I Street), during peak conditions. SR 65 operates between LOS “D” and LOS “F” on all roadway segments through the City of Wheatland during peak conditions.
- Additional highway capacity, particularly on SRs 65 and 70, is needed to accommodate planned development in south Yuba County. Caltrans has plans for various projects aimed to increase capacity, including widening segments of SR 20 by 2017 (\$20 million) and widening and adding passing lanes to segments of SR 70 by 2013 (\$200 million).
- The City of Marysville identified roadway capacity across the Feather River as being a major infrastructure need. The City of Marysville plans to widen the 5th Street bridge to six lanes by 2018 (\$71 million) or add a third bridge across the Feather River to add capacity and relieve congestion. The City reports that 45 percent of traffic entering or leaving Marysville crosses the 5th or 10th Street bridges, and an additional 35 percent does so using the southern portion of SR 70.
- A long-range infrastructure need for Wheatland is the SR 65 bypass, although the project is not expected to be completed until at least 2025. An SR 65 bypass study is currently being prepared to analyze the feasibility of various highway realignments in conjunction with development in and around the City. The total cost of the bypass is estimated at \$264 million, with the majority of funding coming from development impact fees collected by the City and County. The first phase of the bypass will include an interim arterial road in the location of the final bypass and improvements to the existing SR 65, estimated to cost \$40 million. A time frame for the first phase of the bypass has not yet been set.
- A major infrastructure project undertaken by the County is the Yuba River Parkway, to serve as a Marysville bypass. Caltrans had originally planned to construct a Marysville bypass, but plans were discontinued due to a lack of funding. Construction of the Yuba River Parkway will be phased in over a period of at least 10 years, with the cost of construction estimated to range from \$80 to \$95 million. An initial phase of the Yuba River Parkway is scheduled to begin construction in 2008 to add two lanes of roadway from The Orchard development to

North Beale Road, and in 2009 to extend the two lanes from North Beale Road to Hammonton Smartville Road (totaling \$4 million for both segments).

- No County-maintained roads operate at less than LOS “D,” with most operating at LOS “C” or better. Nearly fifty percent of County-maintained roads need some level of rehabilitation. Between 2007 and 2011 the County plans to conduct street capital improvement projects spanning 85 miles of roadway, at an estimated cost of nearly \$86 million.
- Beale AFB reported that roads outside the base lack needed capacity and need improvements.
- There are 92 bridges maintained by Yuba County, eight of which have been identified for rehabilitation or replacement from 2007-11, at a total cost of \$9 million. The Deep Ravine Bridge at Timbuctoo Road is currently scheduled for replacement by 2009, as it has been deemed structurally deficient by Caltrans.
- The City of Marysville does not have an adopted LOS policy, but reports that no City-maintained streets operate at less than LOS “D.” Over seven miles of roadway are in need of rehabilitation in the City of Marysville, representing 13 percent of all roadway maintained by the City.
- All road segments maintained by the City of Wheatland operate at LOS “A” or “B.” Three-quarters of the streets maintained by the City of Wheatland need some level of rehabilitation or major maintenance activities. As the majority of the City’s road system has not been overlaid or reconstructed since 1960, there is a significant backlog of deferred maintenance. The City has established a priority list of streets for rehabilitation or major maintenance activities, and the plan will be implemented as funding becomes available.
- Infrastructure needs identified for CSAs include maintenance of chipseal on Hokan Lane, Walsh Lane and Creek Way and maintenance of gravel on Kapaka Lane and Clyde Way in CSA 14, and the paving of roads in CSA 2 and CSA 4.

ADEQUACY OF PUBLIC SERVICES

- The City of Marysville reported a Pavement Condition Index (PCI) score of 80 and Yuba County reported a PCI of 45. A PCI of 75 or more is considered to be very good condition, PCI of 60-74 is good condition, PCI of 45-59 is fair condition, and PCI below 45 is poor condition.
- The City of Wheatland reported that it does not have a Pavement Management System to generate a PCI score, but anticipates having one in place by the end of 2008.
- Wheatland had on average the shortest response times for street damage repair. The City of Marysville and Yuba County both report that street damage repair time is not tracked and there is no response time policy for street damage.

GROWTH AND POPULATION PROJECTIONS

- Regional transportation planners at SACOG are anticipating that only one-third of planned development in Yuba County will occur by 2035. The County and cities should coordinate with SACOG to ensure that growth projections are consistent.
- To accommodate sizable development projects in Yuba County and Yuba City, land use authorities need to ensure that appropriate highway capacity is being developed.
- Demand growth will be determined by a number of factors, including residential, commercial and industrial growth as well as vehicle ownership, labor force participation rates, growth in suburb-to-suburb commutes, parking availability, gas prices, and the efficiency and desirability of mass transit.
- The most intensive demand—based on daily vehicle miles of travel (DVMT) per street mile—is placed on state highways. Comparatively, Marysville, Wheatland and the County face relatively low traffic volumes.
- SACOG projects that total DVMT for Yuba County will continue to increase at an average annual rate of 1.9 percent until 2035. SACOG growth projections are substantially lower than planned and proposed development projects would indicate.
- Demand management strategies include carpool lanes and incentives, promotion of mass transit through increased efficiency, access and convenience of mass transit options, promotion of alternative means of travel through pedestrian and bicycle improvements, transit-oriented development, and smart growth, as well as whether land use development patterns in the County are designed to allow transportation by transit or other modes.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- To develop freeway capacity to accommodate planned growth in Yuba County and areas accessible through Yuba County will require substantial investments. Local agencies should aggressively pursue regional traffic impact fees.
- All providers' financial ability to provide services is constrained by available revenues and legal limitations on revenue increases. The City of Wheatland and Yuba County both have a significant backlog of deferred maintenance due to funding shortages. Both Wheatland and Yuba County reported that the most significant service challenge to the provision of street maintenance is providing adequate funding for necessary maintenance and improvements.
- Deferred maintenance may reduce costs in the short-term, but costs increase in the long-term. Local agencies can reduce street repair costs through preventative maintenance. However, local agencies' ability to conduct preventative maintenance may be limited by financing constraints. Yuba County reports that it would take a one-time expenditure of \$25 million to bring one-fifth of its roadway network up to a PCI of 70 from the current PCI of 45.

- Street maintenance expenditures per mile, including both maintenance and reconstruction, were approximately \$5,600 for Yuba County, \$12,000 for the City of Wheatland and approximately \$29,000 for the City of Marysville in FY 05-06.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- The City of Marysville engages in facility sharing with Yuba-Sutter Transit, as it helps the City to maintain street areas adjacent to heavily used bus stops. The City of Wheatland and Yuba County did not identify any facility sharing related to street services.
- Road maintenance CSAs share facilities by being staffed and managed by the Yuba County Public Works Department. There is one CSA coordinator and three administrative staff that handle road-related CSAs.
- Yuba County identified a potential opportunity for facility sharing with Butte County by sharing road striping equipment. In the past the County has shared chip coating equipment with Nevada County.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- All public road maintenance service providers demonstrated accountability in that voters regularly have choices among candidates for their governing body members, providers conduct constituent outreach, and providers disclose information to the public.
- The Yuba County Public Works Department did not respond fully to all of LAFCO's questions regarding assessments and services provided by the 44 CSAs.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

- Six CSAs do not provide services and should be dissolved.
- CSA 47 is a 66-acre tract of land located in the community of Oregon House that was formed in 1991 to provide to provide maintenance for road and drainage facilities.
- CSA 49 is a 109-acre tract of land located in the community of Browns Valley that was formed in 1992 to provide maintenance for road and drainage facilities to a proposed development.
- CSA 51 is a 525-acre tract of land located approximately three miles south of the community of Smartville, along the Yuba-Nevada County line, that was formed in 1992 to provide funding for road maintenance and drainage for a proposed 13-lot subdivision.
- CSA 56 is a seven-acre tract of land located in west Linda that was formed in 1994 to provide street and drainage maintenance, and landscaping and lighting services.

- CSA 57 is a 124-acre tract of land located in the community of Challenge that was formed in 1994 to provide maintenance of road and drainage facilities, and of a water delivery system for fire suppression purposes.
- CSA 58 is a 338-acre tract of land located approximately three miles east of the community of Browns Valley that was formed in 1994 to provide to provide maintenance of road and drainage facilities and a fire suppression water distribution system.

PARKS AND RECREATION

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- Existing park service levels are 3 acres per 1,000 residents in unincorporated areas, the OPUD service area and the City of Wheatland, and 21 acres per 1,000 residents in the City of Marysville.
- For the most part, existing parks are in good to excellent condition. There are unmet infrastructure needs and deferred maintenance at existing parks in the Linda and Olivehurst communities.
- Existing unincorporated communities lacking in developed parkland include Dobbins, Oregon House, Camptonville, Smartville, Gold Village, and Loma Rica.
- Future growth and development is required to finance additional park facilities at service levels of 5-10 acres per 1,000 new residents. The County reports that an additional 155 acres need to be acquired. OPUD needs an additional 133 acres. The City of Wheatland has planned 62 acres of community parks for planned growth, and will requires an additional 90 acres of parkland to accommodate anticipate growth of its existing SOI through build-out.
- Regional parks and trail networks are growth-related infrastructure needs for which financing mechanisms and service providers have not yet been developed.

ADEQUACY OF PUBLIC SERVICES

- Existing park service levels are adequate on the whole. Park acreage meets standards in Marysville and OPUD, and would need to be enhanced to meet adopted standards of five acres per 1,000 residents in the growing unincorporated areas and Wheatland. There are unserved communities in the unincorporated areas, and unmet maintenance needs in Linda and Olivehurst.
- The County needs to ensure that ongoing park maintenance is funded.
- Existing recreation programming is inadequate. Recreation opportunities are important crime-reduction strategies, particularly in communities where many adults commute significant distances.

- River Highlands CSD park is undeveloped, and needs an irrigation system, lawn, trees, and recreational equipment.

GROWTH AND POPULATION PROJECTIONS

- Demand for municipal park and recreation services is affected primarily by population growth. Demand is also affected by growth among population segments with higher park visitation rates such as younger and higher-income people.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- General fund revenues are the primary funding stream for park and recreation services for the County, Wheatland and Marysville. Assessments imposed in new growth areas are an important revenue source for OPUD. The County and Wheatland impose assessments on new growth in their service areas, although the affected areas are relatively small.
- Financing for maintenance of existing parks, particularly in the unincorporated areas, needs to be enhanced.
- RHCSO lacks the financial ability to provide park services, as demonstrated by the agency's decision to decline grant funds it was awarded to develop its park.
- Financing opportunities that do not require voter approval include grants, establishing service charges and user fees, increasing non-resident fees for facility rentals, development impact fees, and park in-lieu fees.
- User fees could be used to help finance recreation programming.
- Park development impact fees, in-lieu fees, mitigation fees and grants fund development of new parks and capital needs.
- There is no financing mechanism in place to develop and maintain regional parks. The County is considering a landscape and lighting district benefit assessment to do so. Such an assessment would require voter approval.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- OPUD shares park facilities with a school, and plans to do so with three additional parks. Wheatland is developing shared facility plans with local school districts. Marysville recognizes the opportunity.
- The County identified the opportunity to form a regional park jurisdiction to develop and maintain regional parks and trails, and potentially to help enhance financing for maintenance of local parks. Possible member agencies would be OPUD, the City of Marysville and the City of Wheatland. Planning and discussion for the regional jurisdiction are in the preliminary stage.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- The County, the cities and OPUD demonstrated accountability by holding contested elections, conducting constituent outreach and disclosing information to the public.
- RHCSO did not demonstrate accountability for community service needs, primarily due to lack of interest in governing body service and lack of financing for park services.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

- Formation of a countywide regional park district is an option. Such a district could potentially finance and maintain regional parks, although related financing would require voter approval. Existing regional parks in Marysville and the unincorporated area could potentially be transferred to such a district for maintenance. Given that existing recreation service levels are minimal, such a district may offer economies of scale in developing recreation services in Yuba County. An alternative to special district formation is a joint powers authority dedicated to the regional park mission.

CEMETERIES

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- No capacity issues were identified for any of the public cemetery providers in Yuba County. All cemetery providers have sufficient capacity at present and sufficient room for expansion as future demands necessitate.
- All cemetery providers have infrastructure needs. BVCD needs a storage shed, BCD needs a new sprinkler system, CCSD needs new maintenance equipment, KCD needs a new shop building, PCD needs a road paved, SCD needs replacement of broken headstones and damaged burial sites, SVCD needs a covered pavilion area, UCD needs a covered pavilion area, a drip irrigation system and a paved road, and WCD needs a new roof for a shed. MCD has suffered from high water and vandalism and is in need of maintenance.

ADEQUACY OF PUBLIC SERVICES

- Of the 10 public cemetery service providers in Yuba County, BVCD, BCD, KCD, PCD, WCD and Marysville provide cemetery maintenance services on a year-round basis. Of these six, only KCD and WCD perform routine maintenance on a daily basis. CCSD, SCD, SVCD and UCD provide maintenance services only one to three times per year. Districts that provide services on a year-round basis tend to be those with larger populations and property tax bases, whereas those that provide minimal maintenance tend to be those with smaller populations and less property tax revenue.
- CCSD has not been authorized by LAFCO to provide cemetery services pursuant to Government Code §61106, and cemetery service is not a grandfathered power of the CSD.

- CCSD does not have an endowment fee, which is required by Health and Safety Code §9065.
- CCSD and PCD do not have a non-resident fee, which is required by Health and Safety Code §9068. PCD reported that it was in the process of establishing a non-resident fee as of the drafting of this report.
- SVCD's endowment fee of \$50 is not sufficient per Health and Safety Code §9065, which requires an endowment care fee of \$2.25 per plot square foot.
- SVCD and UCD may be non-compliant with legal constraints on the burial of non-residents from Clippermills (SVCD) and Rackerby (UCD). Both districts can legally provide service to these areas if the deceased satisfies the eligibility requirements of a non-district resident per Health and Safety Code §9061, and the non-resident fee is paid.

GROWTH AND POPULATION PROJECTIONS

- Demand for burial services is dependent upon size of population served, the death rate in the community and the availability of alternatives to publicly operated cemeteries.
- A lack of alternatives to public cemetery districts results in broad demand for public cemetery services. Alternatives are Sierra View Memorial Park, cemeteries with religious affiliation or private cemeteries in the surrounding counties.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- All cemetery service providers face significant financing constraints, and report having infrastructure needs that have not been addressed due to a lack of available financing.
- CCSD, SCD and SVCD have severely limited financial resources to improve existing infrastructure, as a result of a small service area. Insufficient financing has led to deficient reserves for significant repairs, as well as inadequate equipment and staff to ensure ongoing maintenance. All three districts rely primarily on community volunteers to provide services.
- For the City of Marysville, the only available financing source to address cemetery needs is the general fund, and additional financing is needed. The City's public works staff mows and weeds the cemetery and provides irrigation and lighting maintenance as needed; however, the cemetery has suffered from high water and vandalism and is in need of significant maintenance.
- As a financing source, districts may choose to update their fees for plots. Plot fees for district residents are offered at no charge by SVCD and for \$10 by PCD. The highest fee charged for a burial plot for a district resident is \$800 by SCD, with an average fee of \$218 across all providers. Plot fees for non-residents range from \$175 at UCD to \$1,200 at SCD, with an average fee of \$489.

- Securing an affordable accountant for the auditing of financial statements is a major difficulty, and many agencies have not had their financial statements audited in a number of years as a result.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- No cemetery districts reported engaging in facility sharing, and no facility sharing opportunities were identified.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- Cemetery service providers lack accountability in that governing bodies are appointed, voters do not have opportunities to choose among candidates for their governing body members, and most providers do not conduct constituent outreach. However, most of the providers disclose information to the public.
- The only cemetery provider that conducts constituent outreach activities is CCSD by posting articles in *The Camptonville Community Courier* two to three times per year.
- Most cemetery service providers cooperated with LAFCO during the MSR process. BVCD and BCD were the only agencies not to respond to follow-up questions sent by LAFCO.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

The following government structure options were identified during the MSR process:

- There are two possible government structure options for the Smartville area, becoming a community services district (CSD) or becoming a public utilities district (PUD). If a CSD were formed in the Smartville area, the Smartville Cemetery District could be consolidated into it. In the case of forming a PUD, cemetery services could not be consolidated as it is not an authorized service for a PUD.
- In order to legally provide cemetery service, Camptonville CSD must first obtain LAFCO approval. CCSD has not been authorized by LAFCO to provide cemetery services pursuant to Government Code §61106, and cemetery service is not a grandfathered power of the CSD.
- SVCD may wish to consider annexation of the Clippermills area in Butte County in order to more fully serve residents of that community. As it is now, SVCD can provide burial services to a resident of Clippermills provided that the non-district resident eligibility requirements of Health and Safety Code §9061 are satisfied and a non-resident fee is paid. With annexation of the Clippermills area into SVCD, Clippermills residents would no longer be subject to non-resident restrictions and fees for burial at SVCD.
- UCD and BCD have an overlapping SOI in the vicinity of the community of Rackerby. UCD reports that the community of Rackerby has historically been served by the Upham Cemetery, and many Rackerby residents have family buried there, although the area is within

BCD bounds. The community of Rackerby should be consulted as to which district it would like to belong to, and district boundaries and SOIs should be adjusted accordingly.

- BCD identified that many residents of Forbestown in Butte County inquire about services at Brownville Cemetery because they are not located within a public cemetery district in Butte County. BCD identified annexation of the Forbestown area as a possibility.

MISCELLANEOUS

PRESENT AND PLANNED CAPACITY OF PUBLIC FACILITIES AND INFRASTRUCTURE NEEDS

- For library service, Yuba County maintains and operates one library and one bookmobile. The County reported the condition of the library building as fair, and the condition of the vehicle as good. The main library is in need of new carpet, paint, more landscaping, and irrigation repair or replacement to accommodate ground care.
- The County identified a need for a library facility in the City of Wheatland and a greater level of service through an additional facility or bookmobile hours. The County has received a grant to install a book dispenser in the Wheatland Community Center to provide extended access to area residents with limited overhead costs as part of federally funded trial program.
- Sutter-Yuba Mosquito and Vector Control District (SYMVCD) facilities are orderly, clean and well-maintained. No infrastructure needs or deficiencies were identified.
- Yuba County Resource Conservation District (YCRCD) does not own or maintain any infrastructure. The District expressed a desire to move into an office in Yuba County.
- The Norcal Waste Systems Ostrom Road Landfill was opened in 1995 and is the only active solid waste landfill in Yuba County. The landfill has ample capacity; its estimated closure date is December 31, 2066.

ADEQUACY OF PUBLIC SERVICES

- The Yuba County library's hours of operation are the longest on average compared to surrounding county library systems.
- Yuba County had the most book volumes per capita in comparison to surrounding counties.
- Twenty percent of Yuba County residents over age five reported speaking English "not very well;" however, only one percent of the library materials are in languages other than English. Given the high demand for non-English material, there is a lack of material in other languages.

- There have been several documented areas of concern and violations at active solid waste facilities in Yuba County from 2006-8, but no enforcement actions have been taken against any of the facilities.
- Regional Waste Management Authority member agencies are in compliance with landfill diversion requirements for recycling.

GROWTH AND POPULATION PROJECTIONS

- Demand for library services is affected primarily by population, English literacy, level of education, and the quality and breadth of library materials.
- Growth in demand is expected to be greatest in areas with rapid population growth.
- Approximately 28 percent of Yuba County residents and 20 percent of Wheatland residents over age 25 did not complete high school.
- A major factor influencing the demand for mosquito and vector control services is the rapid population growth within the County. The use of irrigation in agriculture and the preservation of wetlands provide the main breeding ground for mosquitoes—stagnant water. As household populations move closer to natural mosquito habitats, the demand for mosquito control increases.
- As development continues in the rural areas of the County the amount of farm land declines, resulting in reduced service demand from agricultural service recipients for resource conservation services.
- Given the urban benefits of water quality education, erosion prevention, proper disposal of manure, and watershed restoration services, urban demand for resource conservation services may expand as a result of countywide growth.
- Population and business growth, the success of recycling programs, and progress in diverting trash from landfills are expected to affect the need for disposal space and facilities as well as other service demands.

FINANCIAL ABILITY OF AGENCIES TO PROVIDE SERVICES

- The County has generally managed to provide adequate library service levels within its resource constraints. The County's financial ability to provide library services is constrained by limited operational and capital financing resources. There are particular challenges to providing adequate service levels in outlying areas.
- Areas of the County that lack library facilities may be efficiently served in the future by unstaffed e-branches such as the machine currently in beta testing at the Wheatland Community Center.

- SYMVCD provides adequate service funded primarily through property taxes. Additional district revenue comes from special assessments, charges for service, rental income, state in-lieu funds, and interest.
- The most significant funding constraint for YCRCD is the availability of grant funding for resource conservation services. YCRCD's primary revenue source is a grant from the CALFED watershed program.
- The Regional Waste Management Authority (RWMA) member jurisdictions are financed through franchise fees from Yuba-Sutter Disposal, Inc. (YSDI). The franchise fee is constrained by garbage collection charges collected by YSDI. The RWMA is financed through an AB 939 fee and a hazardous waste surcharge.

STATUS OF, AND OPPORTUNITIES FOR, SHARED FACILITIES

- The Yuba County Library uses a database application in conjunction with Yuba College to track and maintain library resource inventory. The County library is a member of the Mountain-Valley Library System that provides inter-library sharing.
- There are facility sharing opportunities for library services related to development of new facilities jointly with school districts. There are also possibilities of using space for library services in local community centers.
- YCRCD shares facilities by renting office space through the Natural Resources Conservation Service (NRCS).
- SYMVCD has few opportunities to share facilities with other agencies due to the specialized nature of the District, and the unique health and safety concerns that exist. The District does regionally collaborate in that it serves both Sutter and Yuba Counties.
- For solid waste, shared facilities and regional collaboration occur through the RWMA joint powers agreement, formed in 1990. The Authority is an agreement between Yuba City, Live Oak, Marysville, and Wheatland along with Yuba and Sutter Counties to jointly address the provision of waste management services in the area.

ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

- Miscellaneous service providers demonstrate accountability by conducting constituent outreach activities, and disclosing information to the public. A notable exception is that YCRCD did not provide recent financial documents to LAFCO.
- Miscellaneous service providers' accountability is constrained by limited interest among citizens in serving on the governing bodies. Service providers lack accountability in that governing bodies are appointed, and voters do not have opportunities to choose among candidates for their governing body members.

GOVERNMENTAL STRUCTURE AND OPERATIONAL EFFICIENCIES

- Consolidation of Yuba County Resource Conservation District with Sutter County Resource Conservation District is an option. The District is interested in consolidating with Sutter County RCD as consolidation may provide economies of scale. Another benefit of consolidation is that it would allow for greater regional collaboration and planning, and also provide efficiency for funding projects at a regional level.

13. DEVELOPMENT BY AGENCY

Table 13-1 provides a listing of development projects that were actively proposed or planned during the course of the MSR study (i.e., in 2007 or 2008). This list illustrates the approximate extent and location of possible future growth in the coming years, and should not be interpreted as definitive. During the course of the MSR study, there was a significant slowdown in the housing market; as a result, some of the potential developments were in a state of dormancy by the time the MSR was published. Many of the potential developments have not been approved by the respective land use authority.

Table 13-1: Yuba County Development Projects

Development	Developer	Agency ¹	Acres	Total Dwelling Units	Non-Residential Acres ²
15 E 12th Street	Larjer Inc.	City of Marysville	0.5	12	0.0
325 A Street	Jack Munds	City of Marysville	0.2	6	0.0
Almond Estates	K. Hovnanian Homes	City of Wheatland Reclamation District 2103 Wheatland Cemetery District	42.9	169	0.0
Alpha Group	Alpha Group	Olivehurst Public Utilities District	4.0	19	NR
Alvarado Estates	KOA Ventures	Olivehurst Public Utilities District	2.8	11	NR
Beale Estates	Kelly Bumpus	CSA 52 Linda County Water District Linda Fire Protection District	14.8	59	NR
Bear River	Gerry N. Kamilos	Linda Fire Protection District Reclamation District 784	549.9	2,123	31.1
Bishop Ranch	Concept Studios	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	80.0	255	0.0
Blue Gravel	Blue Mountain Land	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District	8.7	35	NR
Blue Mountain Land	Blue Mountain Land	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District	10.0	44	NR
Butte View Townhouses	William & Toni Vance	Olivehurst Public Utilities District	2.2	20	NR
Chippewa	RAH Development	Brophy Water District Plumas Brophy FPD Wheatland Cemetery District	368.0	1,398	0.0
Cobblestone	KB Homes	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	535.0	1,973	NR
College View	NP	CSA 67 Linda County Water District Linda Fire Protection District	9.2	71	NR
Country Club Estates	JTS Communities	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	577.1	1,681	2.4
Country Club Townhomes	DRC Builders	Linda County Water District Linda Fire Protection District	1.7	42	NR
Creekside Village	Cresleigh Homes	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	44.9	159	NR

Development	Developer	Agency ¹	Acres	Total Dwelling Units	Non-Residential Acres ²
Dantoni Ranch Estates	Reynen & Bardis	CSA 52 Linda County Water District Linda Fire Protection District	44.4	183	NR
Draper Ranch	Draper Ranch Development	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	63.6	565	NR
Draper Ranch South	Draper Ranch Development	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	150.1	444	0.0
Eagle Meadows I	Eagle Meadows Development	City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District	130.3	737	0.0
Eagle Meadows II & III	Eagle Meadows Development	City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District	299.2	1,632	10.0
Eagle Meadows at The Orchard	Eagle Meadows Development	CSA 52 Linda County Water District Linda Fire Protection District	17.5	79	NR
Eastside Ranch Estates	David W. Lanza	CSA 52 Linda County Water District Linda Fire Protection District	61.4	184	NR
Edgewater	Reynen & Bardis	CSA 52 Linda County Water District Linda Fire Protection District Reclamation District 784	389.7	1,358	NR
Enterprise Rancheria Casino	Estom Yumeka Maidu Tribe	Plumas Brophy FPD South Yuba Water District Wheatland Cemetery District	40.0	NA	40.0
Excelsior	Klein Robinson	Smartville Cemetery District Smartville Fire Protection District	880.0	70	11.0
Fairway North	Aldora Enterprises	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	58.0	236	0.0
Fairway West	Aldora Enterprises	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	22.4	44	NR
Farrell Way Townhomes	Dustin Jinks	Linda County Water District Linda Fire Protection District	1.4	23	NR
Feather Creek	Sage Communities	Plumas Brophy FPD South Yuba Water District Wheatland Cemetery District	701.0	2,945	2.0
Feather Glen	Crossroad Homes	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	36.0	141	NR
Feather Glen 2	Ward Farms	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	91.8	383	NR
Feather River Estates	NP	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	75.0	365	0.0
Franks	James & Esther Franks	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	10.8	38	NR
Griffith Avenue	Griffith Development	CSA 52 Linda County Water District Linda Fire Protection District	7.3	22	NR

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Development	Developer	Agency ¹	Acres	Total Dwelling Units	Non-Residential Acres ²
Hansen Ranch Estates	Larry Ellis	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District	13.0	66	NR
Hawes Ranch	KB Home North Bay	CSA 66 Olivehurst Public Utilities District	37.7	183	NR
Heritage Oaks Estates-East	Premier Homes	City of Wheatland Reclamation District 2103 Wheatland Cemetery District	176.1	604	19.1
Heritage Oaks Estates-West	Devalentine Family Partnership	City of Wheatland Reclamation District 2103 Wheatland Cemetery District	59.7	174	NP
Jensen Ranch	Perfect Solution	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District	10.3	44	NR
Jim Raney	Jim Raney	City of Wheatland SOI Plumas Brophy FPD Reclamation District 817 Wheatland Cemetery District	74.0	444	NP
Jim Raney	Jim Raney	City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District	16.9	85	NP
Johnson Rancho	AKT/RiverWest	Camp Far West Irrigation District City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District Wheatland Water District	3,371.0	9,200	300.0
Jones Ranch	Lakemont Communities	City of Wheatland Reclamation District 817 Reclamation District 2103 Wheatland Cemetery District	190.8	552	2.5
Kochler	Wilmar J. Kochler, Jr.	Linda County Water District Linda Fire Protection District	1.2	12	NR
Kumar	Alka & Lucy Kumar	Linda County Water District Linda Fire Protection District	2.4	11	NR
Landmark-Dale	Landmark Development	City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District	57.7	390	NP
Magnolia Ranch	Montna Farms	Plumas Brophy FPD Wheatland Cemetery District Wheatland Water District	1,028.0	5,001	219.8
Maple Estates Townhouses	Byron Maples	Olivehurst Public Utilities District	2.0	27	NR
Marysville Hotel	Feather River Plaza LLC	City of Marysville	0.4	70	0.0
Meadows	Gilbert Retail Holdings LLC	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	124.6	383	NR
Montrose	Woodside Homes	CSA 52 Linda County Water District Linda Fire Protection District	108.1	209	NR
Nichols Grove	Designer Properties	City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District Wheatland Water District	485.0	1,609	11.4

DEVELOPMENT BY AGENCY

Development	Developer	Agency ¹	Acres	Total Dwelling Units	Non-Residential Acres ²
North Point	Lennar Communities	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	67.0	184	NR
Palma D'Or	Omar M. Khairi	CSA 52 Linda County Water District Linda Fire Protection District	4.9	20	NR
Pheasant Point	Tejinder & Maninder Maan	CSA 22 CSA 66 Linda Fire Protection District Reclamation District 784	29.4	119	NR
Quail Valley Estates	Foster Development Group	North Yuba Water District Loma Rica Browns Valley CSD Peoria Cemetery District	1,500.0	300	0.0
Rideout Memorial Hospital	Fremont-Rideout Health Group	City of Marysville	5.0	NA	5.0
Rio Del Oro	Beazer/US Home	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	474.5	1,581	NR
Rio Del Oro Phase 2	Gerry N. Kamilos	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	143.7	317	NR
River Glen	KB Homes	CSA 66 Olivehurst Public Utilities District	67.1	274	NR
River Oaks East	Lennar Renaissance	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	122.3	290	NR
River Oaks North	Lennar Renaissance	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	42.1	107	NR
River Oaks South	Nelson Properties	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	66.0	259	2.7
Riverside Meadows	California Homes	Linda Fire Protection District Olivehurst Public Utilities District CSA 66 Reclamation District 784	206.2	599	NR
Roddan Ranch	Weststar Land Holdings, LLC	City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District	98.7	377	0.0
Ross Ranch	Armada LLC	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	254.5	617	0.0
Sawyer's Landing	Robert B. DeValentine	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	53.8	215	0.0
Sierra Vista	Nor-Cal Investments	CSA 52 Linda County Water District Linda Fire Protection District	28.5	108	NR

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Development	Developer	Agency ¹	Acres	Total Dwelling Units	Non-Residential Acres ²
Spring Valley	Axel Karlshoej	Browns Valley Cemetery District Browns Valley Irrigation District Loma Rica Browns Valley CSD Peoria Cemetery District	2,450.0	3,500	27.5
Staas	NP	CSA 52 Linda County Water District Linda Fire Protection District	19.3	76	NR
Terra Linda	Danna Investment Co. and Scott Family Trust, et al.	Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	450.0	1,787	24.5
The Greens (Plumas Lake Estates)	Yuba Investors and Plumas Lake Joint Ventures	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	30.5	60	0.0
The Orchard	JMC Homes	CSA 52 Linda County Water District Linda Fire Protection District	129.7	527	17.5
Thoroughbred Acres	David W. Lanza	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	110.6	445	0.0
University Estates	Tejinder & Maninder Maan	CSA 52 Linda County Water District Linda Fire Protection District	10.9	49	NR
Wheatland Hop Farm	Premier Homes	Camp Far West Irrigation District City of Wheatland SOI Plumas Brophy FPD Reclamation District 2103 Wheatland Cemetery District	132.0	700	NP
Wheeler Ranch	DR Horton, Forecast Homes and K. Hovnanian	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	795.3	1,142	12.6
Wheeler Ranch North	Foothill Partners	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	19.1	101	NR
White Cedar	Bellecci & Associates	Linda County Water District Linda Fire Protection District Reclamation District 784	15.6	100	NR
Woodbury	Reynen & Bardis	Brophy Water District Linda Fire Protection District Olivehurst Public Utilities District Plumas Brophy FPD	1,633.0	6,321	217.6
Woodside Village	Cresleigh Homes	CSA 66 Linda Fire Protection District Olivehurst Public Utilities District Reclamation District 784	159.7	603	NR
Yuba County Office of Education		City of Marysville	0.3	2	0.0
Yuba Highlands ³	Gary Gallelli	Smartville Fire Protection District	2,900.0	5,100	84.0

Notes:

(1) Developments with no city listed are located outside of city SOI areas. Agencies that span a majority of the County (YCWA, RCD, CSA 70, etc.) are not included.

(2) Non-residential acres exclude parks and open space.

(3) The Yuba Highlands development plan was voted down by Yuba County voters on 2/5/08. The developer has indicated that he intends to revise the development plan and continue to pursue developing the area.

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DATA SOURCES

Agency-specific data: responses to LAFCO Requests for Information, budgets, Comprehensive Annual Financial Reports, Capital Improvement Plans, General Plans, official statements, and miscellaneous plans

Agricultural data: Agricultural Census; California Department of Conservation; Yuba County Agricultural Commissioner.

Bond ratings: Moody's; Standard and Poor's

Business and employment data: Dun and Bradstreet; County Business Patterns; Quarterly Census of Employment and Wages; California State Board of Equalization.

Crime statistics and clearance rates: California Department of Justice

Demographic data: U.S. Bureau of the Census; Department of Finance

Jobs and population projections: Sacramento Area Council of Governments; Department of Finance,

Library statistics: California State Librarian

Long-Term Debt: California State Controller; MuniStatements; Moody's; Standard and Poor's; Comprehensive Annual Financial Reports

Revenue: California State Controller; Yuba County Auditor/Controller; Comprehensive Annual Financial Reports

Solid Waste data: California Integrated Waste Management Board

Wastewater data: California Regional Water Quality Control Board; U.S. Environmental Protection Agency; Governor's Office of Emergency Services

Water data: U.S. Environmental Protection Agency; California Department of Health Services; Department of Water Resources, Yuba County Water Agency

INTERVIEWS AND CORRESPONDENCE

Agency	Name/Title
Brophy Water District	Bill Baggett, Secretary
Brophy Water District	Don Staas, Director
Browns Valley Cemetery District	Norma Escheman, Secretary
Brownsville Cemetery District	Norma Escheman, Secretary
Butte LAFCO	Steve Lucas, Executive Officer
CA Association of Resource Conservation Districts	Tacy Curry, Executive Manager
California Board of Equalization	Ralph Davis, Tax Area Services
California Department of Forestry and Fire Protection	John Mohauf, Engineer
California Department of Public Health	Richard Hinrichs, District Manager
California Department of Water Resources	James Eckman, Chief of Flood Protection Inspection Section
California Department of Water Resources	Jeff Fong, Division of Engineering Real Estate Branch
California Department of Water Resources	Jeremy Arrich, Division of Planning and Local Assistance
California Department of Water Resources	Scott Rice, Regional Coordinator
California Water Services Company	Lee Seidel, District Manager
Camp Far West Irrigation District	Julia Beaman, Secretary
Camp Far West Irrigation District	William Waggerhauser, Board Member
Camptonville Community Service District	Skip Ness, Board Member
Central Valley Regional Water Quality Control Board	Barry Hilton, Engineer
Central Valley Regional Water Quality Control Board	Bill Marshall, Surface Water Runoff Section Chief
Central Valley Regional Water Quality Control Board	Patricia Leary, Enforcement Coordinator
Central Valley Regional Water Quality Control Board	Rich Muhl, Environmental Scientist Stormwater Unit
City of Marysville	Carolyn Johnson, Administrative Assistant
City of Marysville	Catharine Dykes
City of Marysville	David Lamon, City Services Director
City of Marysville	Gary Price, City Planner
City of Marysville	Joe Hernandez, Previous Fire Chief
City of Marysville	John Osbourn, Police Sergeant
City of Marysville	Kelly Minser, Police Dispatcher
City of Marysville	Stephen Casey, City Manager
City of Wheatland	Eric Veerkamp, Raney Planning & Management
City of Wheatland	Larry Panteloglew, Public Works Director
City of Wheatland	Stephen Wright, City Manager
City of Wheatland	Tim Raney, Raney Planning & Management
City of Wheatland	Wes Peters, Finance Director
Cordua Irrigation District	Charlie Mathews, Board Member
CSA 14	Bob Berg, former Road Committee chairman (Camp Far West)
CSA 14	Don Johnson, former Road Committee chairman (Smartville)
District 10 - Hallwood Community Services District	Mary Hall, Secretary
Dobbins-Oregon House FPD	Pete Hammontre, Chair
Dry Creek Mutual Water Company	Darryl Stineman, Secretary
Dry Creek Mutual Water Company	Joe Conant
Dry Creek Mutual Water Company	John Gilbert (Jack), President
FEMA – Region 9	Eric Simmons, Engineer
FEMA – Region 9	Gregor Blackburn, Region Chief
Foothill Fire Protection District	Rick Cunningham, Chief
Governor's Office of Emergency Services	Nellie Lee Barber, Emergency Services Coordinator
Governor's Office of Planning and Research	Ned McKinley, Beale JLUS Analyst
Hallwood Irrigation Company	Scott Springer, President
Keystone Cemetery District	Jim White, Manager

Agency	Name/Title
Linda County Water District	Doug Lofton, General Manager
Linda County Water District	Wendi Jellsey, Secretary/Office Manager
Linda Fire Protection District	Rich Webb, Chief
Loma Rica-Browns Valley CSD	Silvio Poggi, Vice Chair
Marysville Levee District	Frank Miller, General Manager
MBK Engineers	Ric Reinhardt, Prinicipal
MHM Engineering	Sean Minard
National Resources Conservation Service	Linden Brooks, Area Conservationist
Nevada Irrigation District	Don Wight, Water Operations Manager
Nevada Irrigation District	Lisa Francis Tassone, Board Secretary
Nevada LAFCO	S.R. Jones, Executive Officer
North Yuba Water District	Bill Suppa, General Manager
OPUD	Carl Cozad, Operations Manager
OPUD	Cindy Van Meter, District Clerk
OPUD	Gregory Axline, WWTF Chief Plant Operator
OPUD	Jeffrey Meith, District Counsel
OPUD	John Tilotsin, Engineer
OPUD	Stephen Hart, Chief
OPUD	Tim Shaw, General Manager
Peoria Cemetery District	Dolores McGuire, Board Secretary
Placer LAFCO	Kristina Berry, Executive Officer
Plumas Brophy Fire Protection District	Art Pacquette, Manager
Plumas Brophy Fire Protection District	Darryl Stineman, Chief
Plumas Mutual Water Company	Dick Onyett
Reclamation District #10	Tom Schultz, Board Member
Reclamation District #2103	Darryl Stineman, Board Member
Reclamation District #2103	Dean Webb, Chair
Reclamation District #2103	Ric Reinhardt, MBK Engineers
Reclamation District #2103	Scott Shapiro, Counsel
Reclamation District #784	Richard Webb, Chair
Reclamation District #817	Joe Conant, Board Member
Reclamation District #817	John Gilbert, Chair
Reclamation District #817	Ric Reinhardt, MBK Engineers
River Highlands Community Services District	Brett Malech, Chair
River Highlands Community Services District	Dau Luc, District Accountant
River Highlands Community Services District	Ken Stedman, President and Chairman, MicroMedia Filtration
River Highlands Community Services District	Mark Zamora, General Manager
River Highlands Community Services District	Robert Brunckhorst, former Board member
River Highlands Community Services District	Scott Brown, Counsel
Sierra-Sacramento Valley EMS Agency	Kristy Harlan, Contract Compliance Manager
Sierra-Sacramento Valley EMS Agency	Linda Combs, Special Projects Administrator
Sierra-Sacramento Valley EMS Agency	Vickie Pinette, Director
Smartville Cemetery District	Dennis Beam, Staff
Smartville Cemetery District	Leanna Beam, Board Member
Smartville Cemetery District	Walter Shackelford, Director
Smartville Fire Protection District	Jack Underwood, Board Member
Smartville Fire Protection District	John Waskiewicz, Chair
Smartville Fire Protection District	Mark Zamora, Board Member
South Feather Water and Power Agency	Mike Glaze, General Manager

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Agency	Name/Title
South Yuba Water District	Paul Minasian, Acting Secretary and Counsel
State Water Resources Control Board	Jarma Bennett, CIWQS Public Reports Administrator
Strawberry Valley Cemetery District	Mary Lauck, Secretary
Sutter County Resource Conservation District	Ryan Bonea, Manager
Sutter LAFCO	Doug Libby, Planner
Three Rivers Levee Improvement Authority	Paul Brunner, Executive Director
Three Rivers Levee Improvement Authority	Ric Reinhardt, MBK Engineers
TLA Engineering & Planning	Tom Fossum, Senior Engineer
U.S. Air Force	Judith Tepperman, Asset Manager
U.S. Air Force, Beale	Ed Ahsam, Deputy Base Civil Engineer
U.S. Air Force, Beale	Harl Sanderson, Deputy for Installation Support
U.S. Army Corps of Engineers, Sacramento District	Meegan Nagy, Emergency Manager
U.S. Army Corps of Engineers, Sacramento District	Paige Caldwell, Staff
Upham Cemetery District	Eric Manley, Manager
Upham Cemetery District	Marvin Larson, Secretary
Wheatland Cemetery District	Holly Welch, Manager
Wheatland Water District	Doug Waltz, Chair
Wheatland Water District	Marilyn Waltz, Secretary
Yuba County Administrator's Office	Robert Bendorf, County Administrator
Yuba County Administrator's Office	Randy Margo, Assistant County Administrator
Yuba County Agricultural Commissioner's Office	Erle Storm
Yuba County Assessor's Office	Bruce Schroder, Draftsman
Yuba County Assessor's Office	David Brown, Assessor
Yuba County Auditor/Controller	Al Dehr, Assistant Auditor/Controller
Yuba County Auditor/Controller	Carol Witherow
Yuba County Board of Supervisors	Donna Stottlemeyer, Clerk
Yuba County Department of Planning	Ed Palmeri, Assistant Planning Director
Yuba County Department of Planning	Wendy Hartman, Director of Planning
Yuba County Department of Public Works	Chris Starkey, Engineering Technician II
Yuba County Department of Public Works	Dawn Wells, Fiscal Analyst
Yuba County Department of Public Works	Gary T. Lippincott, Surveyor
Yuba County Department of Public Works	Kathy Gregg, Engineering Tech
Yuba County Department of Public Works	Kevin Mallen, Director of Community Development
Yuba County Department of Public Works	Mike Lee, Director of Public Works
Yuba County Department of Public Works	Perminder Bains, CSA Coordinator
Yuba County Department of Public Works	Ryan McNally, Parks and Landscape Coordinator
Yuba County Department of Public Works	Van Boeck, Principal Engineer
Yuba County Library	Loren McRory, Director
Yuba County Office of Emergency Services	Aaron Ward, Deputy Administrator
Yuba County Resource Conservation District	Leslie Morgan, Manager
Yuba County Sheriff's Office	Captain Alan Long, Support Services Division
Yuba County Sheriff's Office	Debra Lewis, Animal Care Services Supervisor
Yuba County Sheriff's Office	Jerry Read, Undersheriff
Yuba County Sheriff's Office	Michelle Manning
Yuba County Water Agency	Curt Aikens, General Manager
Yuba County Water Agency	Page Hensley, Assistant Manager
Yuba County Water Agency	Scott Maytac, Assistant Manager
Yuba-Sutter Regional Waste Management Authority	Keith Martin, Executive Director
Yuba-Sutter Transit Authority	Keith Martin, Transit Manager