

FINAL REPORT

CITY OF MERCED MUNICIPAL SERVICE REVIEW

Prepared for:

Merced County Local Agency Formation Commission

Prepared by:

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EPS #12125





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Note: A version of this report titled "Administrative Draft" was approved by LAFCO on July 22, 2004. No changes have been made to this version other than updating the report's title to "Final Report" and revising table and figure labels.

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I. INTRODUCTION & SUMMARY

This Report presents the findings and conclusions along with underlying research of the Municipal Service Review for the City of Merced. Creation of a Municipal Service Review (MSR) for cities and special districts is a new responsibility of the Local Agency Formation Commission. This Municipal Service Review addresses the City of Merced, including the State-mandated data and analysis and linking this to local organizational issues facing the City. In general these organizational issues involve the City's proposed annexation of unincorporated territory into the City, along with coordination with the County of Merced and various special districts over land use and services in the City's Sphere of Influence and adjacent areas.

BACKGROUND AND PURPOSE

In 1997, the State Legislature convened a special commission to study and make recommendations about how to accommodate California's rapidly accelerating growth. The Commission on Local Governance for the 21st Century focused on empowering the already existing County Local Agency Formation Commissions (LAFCOs), established in 1985 by the Cortese-Knox Local Government Reorganization Act. The Commission's final report, [*Growth Within Bounds*](#), recommended various changes to local land use laws and LAFCO statutes to allow LAFCOs more influence in shaping California's growth. Assembly Speaker Robert Hertzberg encompassed the recommendations of the Commission in Assembly Bill 2838, which passed into the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. The new law endows LAFCO with both more responsibilities and more influence to direct growth in California.

One of the major new responsibilities of LAFCO conferred by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 is to determine the most feasible patterns of growth in their region by conducting comprehensive, regional studies of municipal services (MSRs). These service reviews must be conducted every five years in conjunction with reviews of city Spheres of Influence (SOIs), which generally represent the region's 20-year growth boundary. According to Government Code Section 56425, municipal service agencies must update their SOIs every five years to plan for orderly future outward growth. Section 56430 requires MSRs to be conducted previous to or in conjunction with the sphere reviews to ensure that services can be provided to areas with potential for annexation. In the service review, LAFCO must address at least the following nine issues:

- (1) Infrastructure needs or deficiencies
- (2) Growth and population projections for the affected area
- (3) Financing constraints and opportunities
- (4) Cost avoidance opportunities
- (5) Opportunities for rate restructuring
- (6) Opportunities for shared facilities

- (7) Government structure options, including advantages and disadvantages or consolidation or reorganization of service providers
- (8) Evaluation of management efficiencies
- (9) Local accountability and governance

AB 2838 went into effect in January 1, 2001, so all LAFCOs must finish their first MSRs within five years, by January 1, 2006. Service reviews require written determinations in each category listed above. The written determinations must be based on factual information gathered during the research phase of the service reviews, and must be presented to the public for a review period. Furthermore, active participation is encouraged through the use of public workshops and hearings held by LAFCO.

APPROACH AND METHODOLOGY

Economic & Planning Systems, Inc. (EPS) has been retained under contract to LAFCO to conduct the MSRs for the six cities in Merced County. EPS first requested a range of data from each City regarding municipal services, and prepared an initial draft Report. The initial draft Report was reviewed by LAFCO staff. After LAFCO review and resulting modifications the report was reviewed by the City and subsequently published for public comment. The Report format presents unique "Reorganization Issues" up front and provides details of each service later in the report. The nine State-mandated issue areas are reviewed for each service category examined in the Report.

CITY OF MERCED GOVERNANCE

The City of Merced, incorporated in 1889, is a charter city that operates under the Council-Manager form of government. The City Council consists of a mayor and six council members elected from the City at large. The mayor serves for a term of two years and council members for terms of four years, each limited to two terms. The City Council appoints the City Manager, the City Clerk, the City Attorney, and the Finance Officer who may be removed with at least four votes of the City Council (five votes for the City Manager). All other officers and department heads of the City are appointed by the city manager. The City Council meets regularly twice a month and more frequently as needed.

The City government consists of the following 10 departments:

- Finance
- City Attorney
- Development Services (includes Engineering, Inspection Services, Planning, Permitting and Housing)
- Fire
- Information Services
- Parks/Community Services
- Police

- Public Works/Operations
- Redevelopment/Economic Development
- Support Services

The City also operates a municipal airport. The Airport Superintendent reports to the Assistant City Manager.

CITY OF MERCED'S REORGANIZATION ISSUES

1. UC Merced Annexation poses service challenges for City

A CEQA-related legal action surrounding the extension of sewer and water services to the University Campus site by the City of Merced has recently been resolved in the City's favor. Given the fact that the Campus site is within the City's SOI, under terms of a service agreement, the City may annex the University Campus in the future at its discretion. Such annexation would require annexation of territory between the existing City limit and the Campus site, an area characterized by rural residential development. The key Service Review Criteria related to this issue include "infrastructure needs and deficiencies" and "growth and population projections":

- As documented below, the City has the ability to expand its sewer and water capacity to meet the service demands of the University. The transmission lines currently under construction are sized to meet the demand of the Campus at buildout. Expansion of municipal water capacity will require investment in a new well constructed on the Campus. Increased sewage treatment demand from the Campus alone will not require the expansion of the existing treatment plant located south of the City, though the combined growth of the Campus and the surrounding community may require expansion and augmentation of the City's sanitation system.
- Growth issues would include the increase in City size due to the annexation of the Campus and the impact upon the intervening territory that would need to be annexed along with the Campus. Similar to other rural residential areas that become parts of cities there is the potential for substantial increases in population and development density in these areas beyond that which was previously planned or anticipated.

2. UC Merced Community Plan area governance has not been determined

Annexation of the Campus site raises questions regarding the disposition of the "University Community," a 2,000-acre area located directly south of the Campus that is being planned by the County for a new community supporting the University Campus. The Draft University Community Plan and related Draft EIR have assumed that development of this area would occur under the County's jurisdiction and be provided services through a newly created multipurpose special district (a Community Services

District). The key Service Review Criteria related to this issue include “Financial constraints and opportunities,” “opportunities for shared facilities,” “Government structure options” and “Local accountability and governance.” However, annexation of this area into the City is also considered an alternative.

- The Campus community requires a full range of urban infrastructure in order for development to proceed. The cost of providing such infrastructure may be prohibitive. Analysis conducted to date as a part of the Community Plan has indicated this financial problem.
- An opportunity exists for the City, the County, and the University to share facilities and their related costs. Given the anticipated expense for basic infrastructure including roads, sewer and water facilities, public safety, schools, parks and recreation and other community facilities, a shared approach may in fact be essential to assuring adequate and cost-effective facilities.
- A key to the implementation of the Community Plan will be the establishment of a governance structure. It is assumed that more analysis of options available will occur during preparation of the required Specific Plans. The Community Plan, as mentioned above, assumes that the County, in cooperation with landowners, would create a new multipurpose special district to provide a range of infrastructure and services in the area. LAFCO will be the lead agency in the creation of any governance structure for the University Community.
- In the long term the University Community, which is projected to have a population of more than 30,000 persons, will need local governance and accountability. The County Board of Supervisors along with any locally elected members of the proposed special district would provide accountability and governance as the community develops; however, municipal status, either through annexation to the City of Merced or incorporation, may be necessary to improve accountability.

3. Vernal pools could prevent some growth within the City’s SOI

Portions of the City’s SOI located along its northernmost extension include lands where environmentally sensitive “vernal pools” exist that contain a range of threatened and endangered plant and animal species. These vernal pools are regulated by the federal government. Any destruction (taking) of this unique habitat requires a federal permit. The key Service Review Criterion related to this issue includes “Growth and population projections”.

- The scale of the resources in this area may render urban development of the area as originally planned by the City infeasible.

- The majority of the 10,000-acre area included in the northeast extension of the City's SOI contains lands under habitat conservation easements which are not available to urban development.

4. Campus Parkway Project may create pressure for development outside SOI

A pending decision on the alignment of a major new arterial road running north-south on the east side of the City could create urban expansion pressures in conflict with current City General Plan policies. With the final selection of an alignment of the Campus Parkway by 2005, there will be pressures to expand urban development east of the current City General Plan and SOI boundaries. Among the issues that will be raised is the expansion of urban services through a rural residential area of one-acre lots east of McKee Avenue. This would involve "jumping over" a traditional buffer which the City had used to help protect prime agricultural lands lying east of the City. As an alternative, the County may consider proposals to expand the rural residential areas toward the Campus Parkway which could indirectly impact City services and have ramifications for future City growth directions.

5. Franklin County Water District may not have sufficient capacity to serve future growth.

The Franklin County Water District has a capacity of 0.6 mg/d for 1,725 customers. The sewer facility is operating at 80 percent of capacity serving 1,385 customers leaving an additional 340 units to be served. The district has begun the process of determining what facilities and financing will be required to obtain a permit from the Regional Water Quality Control Board (RWQCB) to treat up to 1.0 mg/d. The Meadowbrook Water Company currently has four wells in operation with a combined capacity of 4,400 gallons per minute (gp/m). They are currently using 2,300 gp/m and could serve an additional 1,000 customers. These issues will be addressed directly in the MSR for the District.

KEY MUNICIPAL SERVICE ISSUES

- 1. Public Safety services will need to be expanded in concert with population growth, placing pressure on the City's General Fund.**
- 2. The City's storm drain system will be required to plan for a "100-year storm" by 2015, when population is projected to reach 100,000.**
- 3. The City's reliance on groundwater for domestic service has placed strain on the groundwater supply. The City's plan to recharge its groundwater supply through imports from the Merced River intends to accommodate growth through 2020, though wells may have to dig deeper in case of water shortages.**
- 4. Projected growth in wastewater generation from new development will likely require the construction of a new treatment facility or expansion of the existing one by 2006.**

II. SUMMARY OF SERVICE ISSUES AND TRENDS

GROWTH AND DEVELOPMENT

The largest upcoming change to the City of Merced will be the new University of California, slated for opening in 2005. The Campus will be located northeast of the City, approximately two miles east of current City limits. However, the City has been experiencing rapid growth in the last several years based on lower home prices for people employed in the northern San Joaquin Valley and greater Bay Area.

Merced and its environs have historically been an agricultural community, with the City of Merced providing a variety of services for the agricultural economy surrounding it. In the past few decades, however, the economy of Merced has diversified and now covers the full range of economic activities, from light manufacturing to services.

Merced currently has a population of 67,610, and 22,568 households.¹ As shown on **Table 1**, the City of Merced is expected to grow to a total population of 115,346 by 2025. The population of the City may shift somewhat once the University of California at Merced is completed. Aside from the new UC Merced community, the population growth will consist mainly of planned subdivisions on the edges of the current City, especially to the north where suitable land has already been annexed. Office and retail development will likely accompany this growth. **Figure 1** (see last page) shows the City's General Plan Map and SOI.

FISCAL CONDITIONS

Like other cities in the state of California, Merced has faced a challenging fiscal environment in recent years. Although property tax revenues have continued to increase in response to increases in real estate prices, especially residential units, the State's fiscal difficulties have flowed down to Merced in a number of ways. This challenge has been alleviated somewhat by the implementation by the City of a Community Facilities District to provide funds for services for new development, including police, fire, parks and community services.

The next year presents a number of uncertainties regarding state revenues. The Governor has proposed a bond issue to cover the state deficit which would be accompanied by what is known as the "triple flip," in which the state would retain sales tax revenues while returning to municipalities some of the property tax revenue withheld under the Education Revenue Augmentation Fund program. While in theory this exchange holds the municipalities harmless, in practice it is not yet certain that this is perfectly achievable. Furthermore, even if the City ends up with the same number of

¹ Department of Finance; E-5 City/County Population and Housing Estimates 1/1/2003.

Table 1
City of Merced Projected Population Growth
Merced Service Reviews

Year	Population	Growth	Total Housing Units (1)	New Housing Units Required
2000	70,544		22,808	
2005	81,263	15%	26,273	3,466
2010	92,014	13%	29,749	3,476
2015	100,706	9%	32,559	2,810
2020	108,505	8%	35,081	2,522
2025	115,346	6%	37,293	2,212

(1) Assumes 3.093 persons per household, the current average in the City of Merced calculated by Dept. of Finance, E-5

Source: Merced County Association of Governments, www.mcag.ca.us

dollars in property tax revenue that it would have received in sales tax, the money will arrive semiannually instead of monthly, which will at the very least present cash flow challenges that will have to be addressed.

The City has taken a number of steps recently to ensure that sufficient revenue will be available to provide essential services to residents. During fiscal year (FY) 2002-2003, the City Council approved rate increases for all City-provided utilities, including water, wastewater and refuse collection. In addition to these services, the City provided separated green waste and curbside recycling programs, fully funded from enterprise sources. The City continues to grow, and will need to increase its service capacity to serve new areas.

SERVICES

As shown on **Table 2**, Merced provides a wide range of municipal services to the population within its city limits. The Report focuses on the critical services provided by the City and therefore does not include all City services.²

² In the current report, for example, parks and recreation services and refuse services are not examined. These services are typically paid for by fees and the level of service is calibrated to those fees. However, it should be noted that the City of Merced provides more than \$1 million of General Fund revenue annually to subsidize recreation programs in the community in order to allow citizens who otherwise would be able to afford the service. As additional demand from development or growth appears, those services are provided through expanded City facilities or private contractors.

**Table 2
Municipal Service Providers for the City of Merced
Merced Service Reviews**

Municipal Service	Service Provider
General Government	
Governing Board	City Council
Manager	City of Merced
Attorney	City Attorney
Finance/Clerk/Administrative Services	City of Merced
Public Protection	
Traffic Control/Accident Investigation	City of Merced
Law Enforcement	City of Merced
Fire Protection	City of Merced
Animal Control	City of Merced
Land Use and Planning	
Regulation & Planning	City of Merced
Building Inspection	City of Merced
City Engineering	City of Merced
Community Services	
Local Parks/Recreation Facilities	City of Merced
Library	County of Merced (1)
Public Works	
Roads, Local Drainage, Bridges, Signals	City of Merced
Domestic Water	City of Merced
Wastewater Treatment/Disposal	City of Merced
Solid Waste Management/Disposal	City of Merced
Flood Control	City of Merced
Street Lighting	City of Merced
Street Tree Maintenance	City of Merced
Public Education	
	Merced City School District and Merced Union
K-12 Grade Levels	High School District
College	Community College and University of California
Other Services	
Electricity	Pacific Gas & Electric and MID
Gas	Pacific Gas & Electric
Cable Television	Comcast
Public Transit	Transit Joint Powers Authority (2)

(1) Although the County of Merced provides library service, the Main Branch Library in Merced is funded in part by an annual allocation of funds from Merced Redevelopment Project Area No.2. Furthermore, City residents pay property taxes to the County for library operations.

(2) The Transit JPA consists of five members from the Merced County Board of Supervisors, and one member from each of the six incorporated cities within Merced County.

POLICE

The police force will need to be dramatically increased and two new police stations may need to be built for Merced to maintain its current level of service in areas of growth.

DESCRIPTION

The Merced Police Department (MPD) has 81 sworn officers in three districts. North Station, Central Station and South Station serve Merced's residents at a ratio of 1.27 officers per 1,000 citizens.

Of MPD's police officers, 44 percent have more than 10 years experience in the streets of Merced. Police officers serve on one of many divisions: patrol, investigations, traffic and parking, crime scene response, street crime, gang suppression, SWAT, hostage negotiations, bicycle patrol, canine unit, mounted patrol, animal control, school resource, gang intervention, bomb unit, and color guard. The Department also sponsors various community involvement programs such as the domestic violence response team, KOPS for kids, and an Explorers scout program for youth.

In the MPD Annual Report 2002, the Police Chief reported on recent technological upgrades to the department's communication system: Mobile computer Terminals which allow for access of information from patrol vehicles, Personal Computing Network Stations for support personnel, and a new voice messaging system. Additionally, the Department has upgraded equipment, both weapons and radios, for Officers through Federal Block Grant Programs.

Population in the five years from 1997 to 2002 grew by about 2,500. In that time, the Police Department added one sworn Officer, and experienced an 11 percent drop in major crimes. Incidents of rape (-25 percent) and burglary (-30 percent) decreased the most in this time period. However, incidents of vehicle theft (18 percent) and aggravated assault (11 percent) increased. Relative to statewide statistics, only motor vehicle theft increased more in Merced than the statewide average increase. The number of arrests made over the five year periods has remained fairly stable, at nearly 5,000 adult misdemeanor arrests, about 1,500 adult felony arrests, and around 2,000 juvenile arrests.

Vehicle accidents in Merced increased between 1997 and 2002. Injury accidents increased 29 percent, from 458 in 1997 to 591 in 2002, and noninjury accidents increased 25 percent, from 886 in 1997 to 1,109 in 2002. Increasing vehicle accidents are likely a result of increased population and more congested roads.

The first-year cost for an Officer is \$132,302.96, less than half of which is his/her salary of \$50,912.68.³ The cost each additional year decreases to \$84,857.96, because the Officer is already equipped with his/her necessary safety equipment, including a car, gun, vest, and other expensive protection and safety gear.

Officers are typically called over 5,000 times each month for various needs. Of these calls, 42 percent are in the Central Station area, while the North and South Stations receive 34 and 24 percent of the calls, respectively. Patrol Officers are assigned to one of the three stations in order to know their patrol area more intimately and to familiarize themselves with the area's residents. Officers in the patrol division are assigned to one of three watch shifts and rotate every four months. Each Officer in the Investigation Unit is responsible for 500 to 600 cases per year, ranging from homicides to auto burglaries. Dispatch received and handled over 50,000 calls for service in 2002, including calls to 911, police, fire, and ambulance requests.

DETERMINATIONS

1. INFRASTRUCTURE NEEDS AND DEFICIENCIES

According to the City's adopted Public Facilities Plan, future expansion will require the acquisition or construction of two new police stations, probably in the East and North sections of the City, where most growth is expected. The estimated cost for the full expansion is \$9,522,600, broken up into Facilities (\$7,522,200), Vehicles (\$1,731,700) and Equipment (\$268,700). Approximately \$2,380,700 will be spent within the next five years, and the same amount again in the following five years. An estimated \$4,761,200 will be spent within the next 11 to 20 years.⁴ In providing comments on this report, the City indicated that these new stations are not absolutely necessary to accommodate future growth.

2. GROWTH AND POPULATION PROJECTIONS

The City of Merced's Public Facilities Financing Plan details the future needs for Police service, which will be generated exclusively by new growth. The Police Department aims to maintain a service level of 1.32 sworn officers, 0.53 nonsworn employees and 0.32 volunteers per 1,000 Merced residents. This will require the addition of 62 sworn Officers by 2020, plus 23 nonsworn employees, 15 unpaid volunteers, 47 new vehicles, new radio and computer systems, 26,090 square feet of office space, and 7,202 square feet of property/evidence warehouse space.

³ This includes the cots of a new patrol car; however, the City does not provide a separate police vehicle for each officer. Rather, police patrol vehicles are shared by officers.

⁴ City of Merced Public Facilities Financing Plan: Police Protection

3. FINANCING CONSTRAINTS AND OPPORTUNITIES

The great majority of the Police Department's \$13,081,194 (FY 2002-2003 Final Budgeted) operating revenues is from the City's General Fund. Parking enforcement revenues amounted to \$279,196 in FY 2002-2003. In addition, the City has formed a Community Facilities District that will provide operating revenues related to new development.⁵ The majority of operating expenditures is spent on personnel and supplies and services.

Potential financing sources for future Police department improvements include development impact fees and federal and state programs.

Recommended development impact fee updates in July 2003 called for an increase in police impact fees to \$620 for single-family homes, \$543 for multifamily homes, \$554 for institutional facilities, \$485 for retail/commercial space, \$554 for office space, and \$215 for industrial development.⁶ Development impact fees are expected to contribute \$7,738,000 towards the 20-year development costs.⁷

Federal and State programs are expected to contribute \$750,000 to the 20-year development costs.⁸

4. COST AVOIDANCE OPPORTUNITIES

The expenditures of the City of Merced per officer are roughly in line with expenditures for similar jurisdictions in other parts of California, so no obvious opportunities exist to avoid costs without reducing the level of service.

The City has indicated that its police and public works department continue to work together to reduce the number of traffic accidents that require police response.

5. OPPORTUNITIES FOR RATE RESTRUCTURING

Development impact fees have already been raised to cover future costs of the expansion of police service to serve new development. These impact fees include an inflationary component that will rise in the future roughly in line with costs.

⁵ The City reports that the Community Facilities District will provide approximately \$420 per home annually to fund public safety services.

⁶ Option A, Public Facilities Task Force Recommendation, Development Impact Fees by Category

⁷ Table 1: Projects, Costs and Funding Sources, City of Merced Public Facilities Financing Plan Revision, July 2003

⁸ Table 1: Projects, Costs and Funding Sources, City of Merced Public Facilities Financing Plan Revision, July 2003

6. OPPORTUNITIES FOR SHARED FACILITIES

Many police activities overlap with fire activities, including radio needs, the dispatch center, and emergency notification capability. The police dispatchers receive and direct calls from multiple sources, including 911, police, fire and ambulance calls.

When economically viable, the City provides parking citation processing and administrative adjudication services to other agencies.⁹

7. GOVERNMENT STRUCTURE OPTIONS

The Police Department currently serves the entire City of Merced, and will serve areas that are annexed into the City. The City has not indicated that any police services are provided outside City limits.

8. EVALUATION OF MANAGEMENT EFFICIENCIES

The Police Department publishes an annual report. Current management efficiencies appear reasonable.

9. LOCAL ACCOUNTABILITY AND GOVERNANCE

The police department appears reasonably accountable and no changes to governance are pending or proposed at this time.

⁹ City of Merced Budget 7-32

FIRE

The Merced Fire Department has plans for four new fire stations within the next five to ten years to provide for planned growth. Fire Station #55 in northeast Merced at the intersection of Parsons and Silverado has top priority. Funds for the construction of these facilities will come from development impact fees.

DESCRIPTION

Fire protection and emergency rescue service is provided to the citizens of the City of Merced by the Merced Fire Department (MFD). MFD consists of a staff of 54 in several fire stations. MFD serves residential, commercial and industrial structures.

MFD responds to emergency situations including structural fires, wildfires, medical emergencies and hazardous materials incidents. MFD strives to reach calls in four to six minutes citywide,¹⁰ with maximum priority given to high-density and three-or-more-story buildings. In 2002, almost all response times were six minutes or less.¹¹

With a growing population and expanding urban area, MFD needs additional fire stations, equipment, and staff to serve projected growth. In addition, water service in new areas will have to be designed to accommodate "fire flow," an estimation of demand on the water system to fight fires. To date the City of Merced has included this requirement in its water system designs.

DETERMINATIONS

1. INFRASTRUCTURE NEEDS AND DEFICIENCIES

Four new fire stations are proposed in the City's 2003 Public Facilities Financing Plan. The estimated 20-year cost for these improvements is \$8,968,000. Of this amount, \$780,000 will come from general funds, \$450,000 from land sales, and \$7,738,000 from the City's impact development fees.

Fire Station # 53 is to be relocated within six to ten years to a site near Highway 59 and Olive to serve new development in the western central part of the City, north of Bear Creek. The nearest existing fire station to this area (Loughborough) cannot provide acceptable service to the new development projected for the area. It will be a 4,000- to 6,000-square foot residential-type satellite facility on one acre, and will house four to six firefighters and two pieces of fire apparatus (fire trucks). The cost for the design and

¹⁰ City of Merced budget 7-5

¹¹ Response Time Recap 1/1/02 to 12/31/02, from MFD

construction of the facility and the apparatus is estimated at \$1.5 million, and potential funding sources include development impact fees and land sales. The annexations of Fahrens Park, Bellevue Ranch and nearby industrial development and the development of Merced College Station #56 will all come prior to Fire Station #53.

Fire Station #54 is to be relocated within six to ten years near Gerard and Coffee to serve new development in Southeast Merced. It will be a 4,000- to 6,000-square foot residential-type satellite facility on one acre, and will house four to six firefighters and two pieces of fire apparatus (fire trucks). The cost for the design and construction of the facility is estimated at \$1,047,000, and potential funding sources include development impact fees and land sales. The completion of Fire Station #55 and the development of the Weaver area and Eastern Industrial Park will come prior to Fire Station #54.

Fire Station #55 is to be built within five years at Parsons and Silverado Avenues to serve demand due to 35 percent new development in the northeast section of the City. It will be a 6,000- to 7,000-square foot sub-station, and will house four to six firefighters on a front line engine and a reserve fire apparatus. The cost for the design and construction of the new station is estimated at \$1.2 million, and potential funding sources include development impact fees and general funds. Funding is available for construction as soon as operating funds are identified. Approximately 50 percent of the need to Fire Station #55 is based on growth, so 50 percent of operating costs will likely come from the Mello-Roos Community Facilities District for services. The completion of Fire Station #55 is the top priority to serve development in Northeast Merced near the UC Campus.

Fire Station #56 is to be built within six to ten years at Merced College to serve north central Merced and provide backup manpower and equipment to Fire Stations #53, #55, #57, and #58. It will be a 15,000-square foot commercial-type facility on 2.5 acres, and will house administrative staff, 6 to 9 firefighters, training operations, and 4 to 6 pieces of fire apparatus, 2 to 3 of which will be new. The cost for the design and construction of the facility and the apparatus is estimated at \$3,721,000, and potential funding sources include development impact fees and a development agreement with Bellevue Ranch. The construction of the facility depends on growth in the area, including the Bellevue Ranch development.

Also needed are improved dispatch and communication systems. "Homeland" security service delivery may require upgraded inter-agency communication, secondary and secure communications, and encrypted or adaptable radio systems in the future.

Current construction plans for fire stations and other facilities appear to meet the needs of planned growth.

2. GROWTH AND POPULATION PROJECTIONS

Population growth and new development that will require the expansion of fire services is expected in the western central part of the City, north of Bear Creek, in Southeast Merced, and at Merced College in north central Merced. Additionally, the northeast section of the City will experience about 35 percent new growth in an already developed area. These developments are contemplated in the new station plans detailed above.

3. FINANCING CONSTRAINTS & OPPORTUNITIES

MFD's operating revenue sources for FY 2003-2004 includes expected state (\$121,515) and federal (\$182,000) grants, special fire department services (\$82,398), fire prevention charges (\$39,000), an interdepartmental transfer of \$100,533 from the water system, and \$6,247,939 from the general fund, plus funds from various other sources for a total of \$6,929,920.¹²

Much of the revenue for MFD's Capital Improvement Plan (CIP) will come from development impact fees. The proposed single-family residential fee is \$547, multifamily residential is \$479, institutional is \$488, retail/commercial is \$427, office/commercial is \$488, and industrial is \$190.¹³

F.I.R.E Act funding is being pursued to address the dispatch and communication needs of the Department.

A state grant is being requested to fund the upgrading of the City and County disaster and emergency operational plans, a priority due to the establishment of the state Homeland Security Department.

4. COST AVOIDANCE OPPORTUNITIES

MFD is instituting a fire prevention education "Safety House" trailer. Prevention of fires and emergencies will lower MFD's operating expenses.

No further cost avoidance opportunities have been identified at this time.

5. OPPORTUNITIES FOR RATE RESTRUCTURING

The fire department does not charge customers for services other than special services, such as weed and lot cleaning and fire prevention charges.

¹² City of Merced Budget

¹³ Public Facilities Financing Plan and Fee Update, July 2003

6. OPPORTUNITIES FOR SHARED FACILITIES

MFD is party to a County-wide agreement to cooperate in regional emergencies as part of the Standardized Emergency Management System, a project of the California Office of Emergency Services. Also, changes in the County's Fire Department and the development of UC Merced may require special contracting of MFD services.

7. GOVERNMENT STRUCTURE OPTIONS

No changes to government structure have been identified at this time.

8. EVALUATION OF MANAGEMENT EFFICIENCIES

Operating expenditures in FY 2002-2003 were \$6,420,343, the great majority of which went to personnel expenses.

From the general fire fund, \$260,000 will be contributed in FY 2003-2004 to Capital Improvements. The MFD Capital Improvement Funds currently include funding for improvements to Station #51 and the new Station #55. Combined expenses for these two funds in FY 2002-2003 were \$1,491,938.¹⁴

MFD publishes a Strategic Plan every five years. The last was published in 2002, and describes ongoing objectives and one-year, two-year, two-to-five-year, and five-plus-year objectives.

9. LOCAL ACCOUNTABILITY AND GOVERNANCE

The fire department appears reasonably accountable and no changes to governance are pending or proposed at this time.

¹⁴ City of Merced Budget

STORM DRAINAGE

It is acknowledged that once Merced's population reaches 100,000, state and federal mandates require major planning efforts to serve new growth.

DESCRIPTION

Storm Water Quality is regulated by Phase I of the US EPA Program and by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. Phase II of NPDES, initiated in 1999, requires public education and outreach regarding storm water impacts, public participation and involvement in the preparation of the Storm Water Management Plan, detection and elimination of illegal discharge, construction of storm water runoff control for sites one acre or larger, post-construction storm water management for new development and redevelopment, and pollution prevention for municipal operations. The Merced Streams Group Project, a collaborative effort with the County and US Army Corps of Engineers, addresses regional flooding.

The Storm Drainage Master Plan does not address regional flood control issues such as Bear Creek and Black Rascal Creek and tributaries, which run through the City of Merced, or storm drainage requirements of the UC Merced campus.

The City of Merced consists of 11 primary local watersheds, labeled A-K in the SDMP. These watersheds are located within the City's Specific Urban Development Plan area of approximately 31 square miles. Approximately 50 percent of the study area remains undeveloped, but is planned for future residential and commercial/industrial uses.

Existing city drainage facilities include 32 miles of underground storm drain lines, detention ponds, underground storage pipes, 40 storm pump stations, and open channels. These channels are both natural channels and various Merced Irrigation District canals and laterals. The City has three major systems south of Bear Creek and numerous smaller storm drain systems that serve small developed areas within local sub-basins. The systems within the downtown area have less capacity than the remaining systems.

DETERMINATIONS

1. INFRASTRUCTURE NEEDS AND DEFICIENCIES

The City's Public Facilities Financing Plan identifies \$17,750,000 in Capital Improvement costs through 2020, and estimates a possible total cost of \$99 million beyond 20 years. Once the population of Merced reaches 100,000, the City will be required by state and federal mandates to provide drainage for a "100-Year Storm," as determined by the Master Storm Drainage System Plan. This will involve a system of lines and basins and

treatment facilities to accommodate new growth. The plan, which will be required before City population reaches 100,000, will cost \$750,000 within the next 5 to 10 years. Within 6 to 10 years, \$2,750,000 is expected to be spent on design, while \$15 million in construction will wait until the following 11 to 20 years. Funds will be generated through fees for service.

2. GROWTH AND POPULATION PROJECTIONS

According to the Merced County Association of Governments projections, the population of Merced is expected to exceed 100,000 by the year 2015. This will be the deadline for complying with state and federal mandates to plan drainage for a "100-Year Storm."

3. FINANCING CONSTRAINTS & OPPORTUNITIES

The City's storm drain system requires only one half-time employee. Revenue is exclusively from the refuse enterprise fund, and was \$1,075,043 in FY 2002-2003.¹⁵ Expenditures in FY 2002-2003 were dominated by Capital Improvements (\$671,316).

4. COST AVOIDANCE OPPORTUNITIES

No cost avoidance opportunities have been identified at this time.

5. OPPORTUNITIES FOR RATE RESTRUCTURING

Funds for major Capital Improvement projects will come out of fees charged for services. These fees are adjusted annually to account for increases in costs.

6. OPPORTUNITIES FOR SHARED FACILITIES

The City of Merced's storm drainage system incorporates the use of various MID canals and laterals, including the El Capitan Lateral; the Zentner Lateral, which discharges into Harley Slough; the Hartley Lateral, which discharges into Miles Creek near Tyler Road and Vassar Avenue; the Doane Lateral, which collects runoff from largely agricultural land and discharges into Miles Creek south of Vassar Avenue and Highway 99; and the Farmdale Lateral near Mission Avenue and Alfarata Blvd.¹⁶

¹⁵ City of Merced budget 8-60

¹⁶ City of Merced Storm Drain Master Plan, April 19, 2002. P. 6-9, 17.

7. GOVERNMENT STRUCTURE OPTIONS

No changes to the government structure of Merced's storm drainage system are pending or proposed.

8. EVALUATION OF MANAGEMENT EFFICIENCIES

Previous storm drainage studies include: 1956 Storm Drain Plan, 1983 Merced County Critical Area Flooding and Drainage Plan, 2000 City of Merced Airport Storm Drainage Master Plan, and 2001 City of Merced Storm Drain Master Plan, Prototype Watershed Study. The system appears to be managed reasonably and responsibly.

9. LOCAL ACCOUNTABILITY AND GOVERNANCE

The storm drainage system appears reasonably accountable and no changes to governance are pending or proposed at this time.

WATER

With 100 percent of its potable water coming from groundwater extraction, Merced has been required to address groundwater contamination and recharge issues.

DESCRIPTION

The City of Merced pumps, treats, and delivers potable groundwater to city residents, while the Merced Irrigation District (MID) provides irrigation water from surface and groundwater sources to a large portion of eastern Merced County south of the Merced River.

The City's water supply is exclusively groundwater from the Merced Groundwater Basin, which lies within the larger San Joaquin Hydrologic Basin. Groundwater supplies the full capacity of 46,500 gallons per minute (gpm), or 67 million gallons a day (mgd).¹⁷ The City's extraction and distribution system consists of 18 active wells (in 2001), four elevated storage tanks, one pressure zone, and approximately 500 miles of piping. The Water Department has 21.6 full-time City staff.

The City serves approximately 16,081 connections, of which only 4,898 are metered. Maximum day demand in 2000 was 36.5 mgd, much less than total well production capacity of 67 mgd. Thus, even on the maximum water use day, 30.5 mgd remains to serve additional demand.

Unaccounted-for water is difficult to measure with so many connections unmetered; the City assumes approximately 10 percent unaccounted-for water. Estimated water use per single-family household is 825 gallons per day (gpd); for multifamily residential, 325 gpd per household; and for commercial/industrial, 350 gpd per employee.

The City's groundwater supply has dropped 50 feet since 1971 at an average of 1.7 feet per year, and is in a general overdraft condition.¹⁸ Groundwater is recharged by a combination of deep percolation of agriculture irrigation, seepage from MID canals, and precipitation.¹⁹ As agriculture irrigation demands decrease, the amount of water through MID's canals will decrease. This will decrease the amount of water that seeps out of the canals and recharges the groundwater supply. This seepage accounts for a large part of the Basin's groundwater recharge, and with less seepage, groundwater recharge will occur even more slowly.

¹⁷ Urban Water Management Plan, p. 2-4

¹⁸ Urban Water Management Plan 2001

¹⁹ Merced Groundwater Basin Groundwater Management Plan, 1997

The quality and extraction of the potable water supplied by the City is regulated by the state's Department of Water Resources, the U.S. EPA, the Safe Drinking Water Act, and the California Water Code.

Water quality continues to be a concern as more water contaminants are identified and more water quality regulations are set. Of major concern are two insecticides, DBCP and EDB; two organic solvents, TCE and PCE; and inorganics including iron, manganese, and nitrate. Proposed maximum contaminant levels for other contaminants such as radon, arsenic and chromium VI, which are known to be present in some wells, will affect the City.²⁰ The treatment of water to reduce or eliminate the presence of these contaminants in the City's water supply will be costly.

DETERMINATIONS

1. INFRASTRUCTURE NEEDS AND DEFICIENCIES

Major infrastructure plans included in the City's CIP include new wells to accommodate both existing demand and predicted growth. Two new wells to accommodate future growth are slated for funding before 2006. Additional water wells will be needed to serve future areas of development at about the rate of one new well per one square mile.²¹ Additionally, infrastructure work is required on existing wells or well sites, where PCE contamination or inadequate capacity for fire or emergency needs exists.

According to the City Engineer, the total number of new wells required to serve projected growth into 2030 is no more than 15 new wells.²² The estimated cost of each well is \$950,000, based on the City's experience. More stringent water quality regulations will most likely mandate radon and arsenic removing equipment, raising the capital cost of each well by more than \$2 million.²³ Addition of interconnecting pipelines would cost \$1.4 million per well.²⁴

Ongoing projects include the expansion of an automated meter-reading program and repairing, replacing or recalibrating commercial water meters as needed. Various water mains will be repaired or replaced.

Altogether, the City has approved \$7.7 million in Capital Improvements for FY 2003-2004. About half of this amount is designated for specific projects in the CIP while the remaining half is available for projects to be determined.²⁵

²⁰ Merced Water Supply Plan, August 1995, CH2MHill, p. 6-5

²¹ City CIP p 26

²² Information from James Marshall, Merced City Manager.

²³ Merced Water Supply Plan, August 1995, CH2MHill, p. 6-4

²⁴ Merced Water Supply Plan, August 1995, CH2MHill, p 6-5

²⁵ City CIP p 25

2. GROWTH AND POPULATION PROJECTIONS

The *Merced Vision 2015 General Plan* describes growth area boundaries, alternately known as the specific urban development plan (SUDP) boundary and the urban expansion area. The City's growth and its future provision of water service are confined within these bounds.

According to the City Engineer, water demands by 2020, including those of the UC Campus, are expected to double, from an annual average of 19.8 mgd (22,212 acre-feet) in 2000 to 36.8 mgd (41,209 acre-feet) in 2020.²⁶ Although the City's groundwater supply is currently in an overdraft condition, the City's 1995 Water Supply Plan and 2001 Update envision maintaining ground water levels at 1999 levels by recharging the groundwater basin with imported surface water from the Merced River. The 30,000 acre-feet/year safe yield of the groundwater supply is expected to be sufficiently increased through groundwater recharge by 2020.²⁷ However, the continuing decline of groundwater levels over time may result in the need for the City to drill deeper wells.²⁸

While urban water demands will rise within the next 20 years, agricultural water needs are expected to drop. The 1995 Merced Water Supply Plan predicted a 200,000 acre-feet per year, or 12 percent, decrease in applied agriculture water demands by 2030. However, instream flow requirements and other environmental uses of MID water are likely to increase by about three to four times. Though MID will be directly affected by the drop in agricultural irrigation demand and the increase in environmental demand, the City of Merced will be affected indirectly because less seepage through MID canals may result in slower groundwater basin recharge.

3. FINANCING CONSTRAINTS AND OPPORTUNITIES

Merced's water system has an approved FY 2003-2004 budget of \$13,521,982, which includes \$7.7 million in Capital Improvement costs.²⁹ The great majority of this year's funds come from the issuance of debt and from the water system enterprise fund.

The construction of water and sewer lines to connect the UC Merced Campus is being funded by a loan from the State Infrastructure Bank and will be repaid solely by the University.³⁰

²⁶ Urban Water Management Plan p 3-6

²⁷ Urban Water Management Plan p 4-6

²⁸ Urban Water Management Plan p 4-7

²⁹ City Budget p 8-45.

³⁰ City of Merced Budget p 8-91

4. COST AVOIDANCE OPPORTUNITIES

The City of Merced is currently not a signatory of the California Urban Water Conservation Council's Memorandum of Understanding, which defines water conservation best management practices. However, the City does have its own water conservation program that includes public education, a school education program, outdoor watering restrictions and alternate watering schedules, and required metering of all new services since 1992.

Of Merced's 14,483 single-family homes, 11,183 have unmetered connections. Water conservation efforts are impossible without a measure of how much water is currently being used. Metering all of Merced's household connections would allow for a more effective water conservation campaign. State legislation is currently pending which would require all flat-rated services to be metered. The cost of metering in Merced would be approximately \$7 million, to be borne by consumers.³¹

The FY 2003-2004 Budget proposes changing the rate structure for water provision to public parks and public schools. Both are significant consumers of water but are "flat rated," meaning they don't pay for the amount of water they use. The City recommends that schools and parks install meters and be charged for the actual amount of water used.

5. OPPORTUNITIES FOR RATE RESTRUCTURING

According to a statewide survey by Black & Veatch, the City of Merced charges an average monthly service charge of \$18.33, well below the statewide average of \$30.33. However, Merced's rates are just above the average monthly rate in the San Joaquin Valley of \$17.64.³²

6. OPPORTUNITIES FOR SHARED FACILITIES

The Urban Water Management Plan recommendation number four suggests providing surface water from MID for the parks and the community college rather than the City's domestic supply.

Also, recommendation number five suggests partnering with other utilities and seeking funding opportunities to implement further water conservation BMPs.

³¹ City of Merced Budget, p. 4

³² Black & Veatch California Water Charge Survey

7. GOVERNMENT STRUCTURE OPTIONS

No changes to the government structure of Merced's water department are pending or proposed.

8. EVALUATION OF MANAGEMENT EFFICIENCIES

With \$13.5 million in operating costs for FY 2003-2004 (including Capital Improvement costs)³³ and 16,081 connections, the City of Merced provides water at a cost of \$841 per household.

A jointly funded three-phase Merced Water Supply Plan, written in 1995, identifies urban, agricultural and environmental water needs through the year 2030 and the facilities needed for a safe and reliable water supply. Additionally, an Urban Water Management Plan written in October 2001 fulfills the requirement of the California Water Code's Urban Water Management Planning Act, serving as a long-term water supply plan for the City.

9. LOCAL ACCOUNTABILITY AND GOVERNANCE

Merced's water provision service appears reasonable. No changes to governance are pending or proposed.

³³ City of Merced Budget p 8-45

SANITATION

With its existing capacity, the City's sewage treatment plant should be sufficient at least through 2006, even with new sewage flows from UC Merced. Beyond 2006, however, treatment capacity will need to be increased to allow for full-buildout of the UC Merced campus and Merced's SUPD. Along with an expansion in capacity will come major transmission infrastructure requirements.

DESCRIPTION

Sanitation service is provided by the City of Merced. Water quality is governed by the California Water Code, which requires that the City implement its regional water quality control plan, the *Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin* (Basin Plan). One of the two highest priorities of the Basin Plan is its *Wastewater Reuse Policy*, which encourages the reuse of wastewater where practicable (e.g., crop irrigation, landscape irrigation, and wetland restoration). However, another high priority is the Plan's antidegradation directives, stating that any discharge of waste to high quality waters must prevent pollution or nuisance and must maintain a high quality of water beneficial to the region's population. A high priority of the Tulare Lake Basin Plan, which governs the southern portion of the Central Valley Region, is the consolidation of wastewater management rather than a proliferation of small treatment plants in small communities, which lack adequate resources to properly manage, treat, and dispose of wastewater in urban environments. Though the Tulare Lake Basin Plan does not apply to the City of Merced, the same concerns about scattered wastewater treatment in small communities exist. Thus, these three concerns, water reuse, antidegradation, and consolidation, govern the next steps for the City of Merced's wastewater treatment and disposal services.

The City of Merced collects and treats wastewater at its Wastewater Treatment Facility (WWTF) under a permit issued by the NPDES. The discharge is governed by Waste Discharge Requirements Order No. 94-167 (NPDES Permit No. CA 0079219), adopted by the City Council on June 24, 1994.

Wastewater is currently collected from throughout the City from city residents, businesses, and eight significant industrial users, including metal finishers, soft drink bottlers, food processors, dry cleaners, and a large magazine publishing facility. The industrial users contribute about 0.6 mgd of wastewater to Merced's total of 7.8 mgd. Peak flows can reach 13 mgd during heavy rain.³⁴ Wastewater is collected in 215 miles of collection pipeline and transferred to the WWTF.

³⁴ North Merced Sewer Master Plan, Eco:Logic, Dec 2002, ES-3.

The WWTF has a design capacity of 10 mgd, or about 11,200 acre-feet per year (ac-ft/yr), and treats water to secondary standards. Due to certain NPDES permit and Regional Water Quality Board restrictions, however, actual treatment capacity has been more limited.

Dried sludge is disposed of on 600 City-owned acres of farmland as a soil amendment. There is some concern that toxicity of wastewater can contaminate and degrade groundwater, from which Merced derives its drinking water.

The WWTP discharges the majority of its combined industrial and domestic treated wastewater into Hartley Slough, three-fourths of a mile south of the facility. The Hartley Slough then enters Owens Creek, which eventually joins the San Joaquin River.

The City owns and operates a 580-acre industrial wastewater disposal site south of WWTF that receives industrial wastewater from a tomato sauce manufacturing plant during the tomato harvest season. Approximately 815 acre-feet of effluent irrigates fodder crops grown on the City-owned land.

Additional supplies of treated effluent irrigate nearly all the water needs of the City's Wildlife Management Area (WMA), a 385-acre preserve established in 1978 to mitigate the permanent loss of wetland habitat due to the industrial wastewater disposal site. The marsh habitat is maintained by the continuous discharge of about 25 to 30 percent of WWTF effluent to the WMA (about 1.2 mgd or 1,300 ac-ft/yr). The WMA is managed for public use by the California Department of Fish and Game.

The remainder of treated effluent irrigates nearly all of Merced's cropland and wetland areas. These reclamation activities save 7,525 acre-feet of groundwater annually.

DETERMINATIONS

1. INFRASTRUCTURE NEEDS AND DEFICIENCIES

Ongoing WWTF modifications (Phase III modifications) to satisfy both its NPDES Permit requirements and its Cease and Desist Order and to increase capacity to 10 mgd should be completed by May 31, 2004.³⁵ With a capacity of 10 mgd, the existing treatment plant should be sufficient at least through 2006, even with new sewage flows from UC Merced.

Beyond 2006, however, treatment capacity will need to be increased to allow for full-buildout of the UC Merced campus and Merced's SUDP. Merced's Public Facilities Financing Plan calls for \$35 million to upgrade and expand the existing WWTF to 15 mgd, which is expected to serve demand for 20 to 25 years.³⁶

³⁵ City of Merced budget

³⁶ City of Merced Public Facilities Financing Plan

Aside from treatment, the construction of water and sewer lines to serve the UC Merced site will be funded by an \$8.5 million loan from the State Infrastructure Bank and repaid by the University of California.³⁷ The "G" Street sewer trunk line will be extended to the Campus to transfer wastewater to the WWTF.

Construction of sewer collection components to accommodate new development other than the University is expected to cost \$28.5 million over the next 20 years.³⁸

Additionally, existing sewer mains need to be repaired or replaced, and manholes need to be built.

2. GROWTH AND POPULATION PROJECTIONS³⁹

Merced has committed to extending sewer service in the near future to the UC Merced Phase I Campus area, with the agreement that UC Merced would be required to pre-treat substances, such as those from UC laboratories that might negatively affect water quality, before such wastewater reaches the City's treatment facilities. Other "Future study areas" outside the City that have been evaluated for future city services include Golf and Lake Road developments, the East County area between the City's current SUDP and the future UC campus community, and the UC Campus Community itself. The City has not committed to serving these other areas but has included them in their studies of future wastewater flows.

The WWTP current treatment capacity of 10 mgd is expected to serve population growth through 2006, including demand from the UC Merced Campus, which is expected to begin discharging wastewater in 2004. Sewage flow in 2005-2006 from the campus is expected to be 0.19 mgd, based on a student population of 2,009 and faculty/staff population of 745 (Draft EIR UC Long Range Development Plan).⁴⁰

Full development of Merced's SUDP is expected to increase average flows from an existing 7.8 mgd today to 17.1 mgd per day in 2015.

Total potential flow from the area within the SOI, including expected annexations of the UC Merced Campus area and two other study areas, Eastern County and Gold and Lake Road Developments, is estimated at 20.75 mgd (average) and 31.12 mgd (peak).

Furthermore, additional flow will be generated from the expected Campus Community, outside the proposed expansion of the SOI, resulting in a grand total of 23.60 mgd (average) and 35.40 mgd (peak) at complete buildout.

³⁷ Merced Budget. P 8-91 and 3-94

³⁸ City of Merced Public Facilities Financing Plan

³⁹ Future flows from North Merced Sewer Master Plan, Eco:Logic, 2002

⁴⁰ Initial Study #02-38

3. FINANCING CONSTRAINTS & OPPORTUNITIES

Total revenue from the Wastewater System fund is \$19.3 million. The total consists of \$7.3 in wastewater charges and an \$11.6 million loan. With \$6.2 million in Capital Projects and \$2.8 million in debt service, the fund balance is \$4.8 million.⁴¹

Two additional funds, the Wastewater Treatment Line and Wastewater Treatment Plant funds, are set up to collect fees from new development to fund future expansion of infrastructure.

Additionally, the City has four assessment districts, Fahren's Park, 16th Street, Liberty Park, and North Merced Sewer Improvement Districts.

4. COST AVOIDANCE OPPORTUNITIES

One proposal for accommodating North Merced's future growth is to build a satellite collection and treatment facility. Based on analysis in the North Merced Sewer Master Plan, however, the cost of a satellite treatment facility would not be offset by the savings in irrigation and potable water costs.⁴² Additionally, the preference for consolidation of wastewater treatment discourages the construction of a satellite plant. Consulting engineers therefore recommended that Merced's existing wastewater treatment facilities be expanded and modified to accommodate the full development of the SUDP and flows from UC Merced. Expansion would require the addition of an extension to the existing main sewer trunk line, which currently terminates at G Street and Cottonwood Creek. A 27-inch sewer line is proposed to be laid along G Street until it reaches Bellevue, where a perpendicular 24-inch sewer line will be laid along Bellevue from G Street to Lake Road.⁴³ Expansion of existing facilities was found to be much less expensive than the construction of an entirely new satellite system, which would require expensive tertiary-level treatment to be used for agricultural, gold course, and residential irrigation.

5. OPPORTUNITIES FOR RATE RESTRUCTURING

According to a statewide study in 2002 by Black and Veatch, the typical monthly wastewater charge for a single-family residence is \$12.03, with a \$1,990 first time connection fee. The rate is a flat fee and is not based on volume of wastewater produced. Merced's monthly wastewater fee is well below the statewide average of \$20.17. Rate increase have already been approved for water and sewer services effective in January 2003, January 2004, January 2005, January 2006, and January 2007.

⁴¹ City of Merced budget 3-98

⁴² North Merced Sewer Master Plan, Eco:Logic, Dec 2002, ES-11

⁴³ Sewer and Water Utility Extension to Northeast Merced and the University of California at Merced Campus. Initial Study #02-38, page 60

6. OPPORTUNITIES FOR SHARED FACILITIES

The only possibility for a shared facility identified at this time would be for the City to take over the sewage disposal system (ponds) from the Franklin County Water District (District) which serves the unincorporated territory between Highway 99 and Santa Fe Drive west of the City. The current District ponds are adjacent to the City's industrial park and a future pond may be constructed within the City's SOI. This option will be examined in the Franklin County Water District MSR.

7. GOVERNMENT STRUCTURE OPTIONS

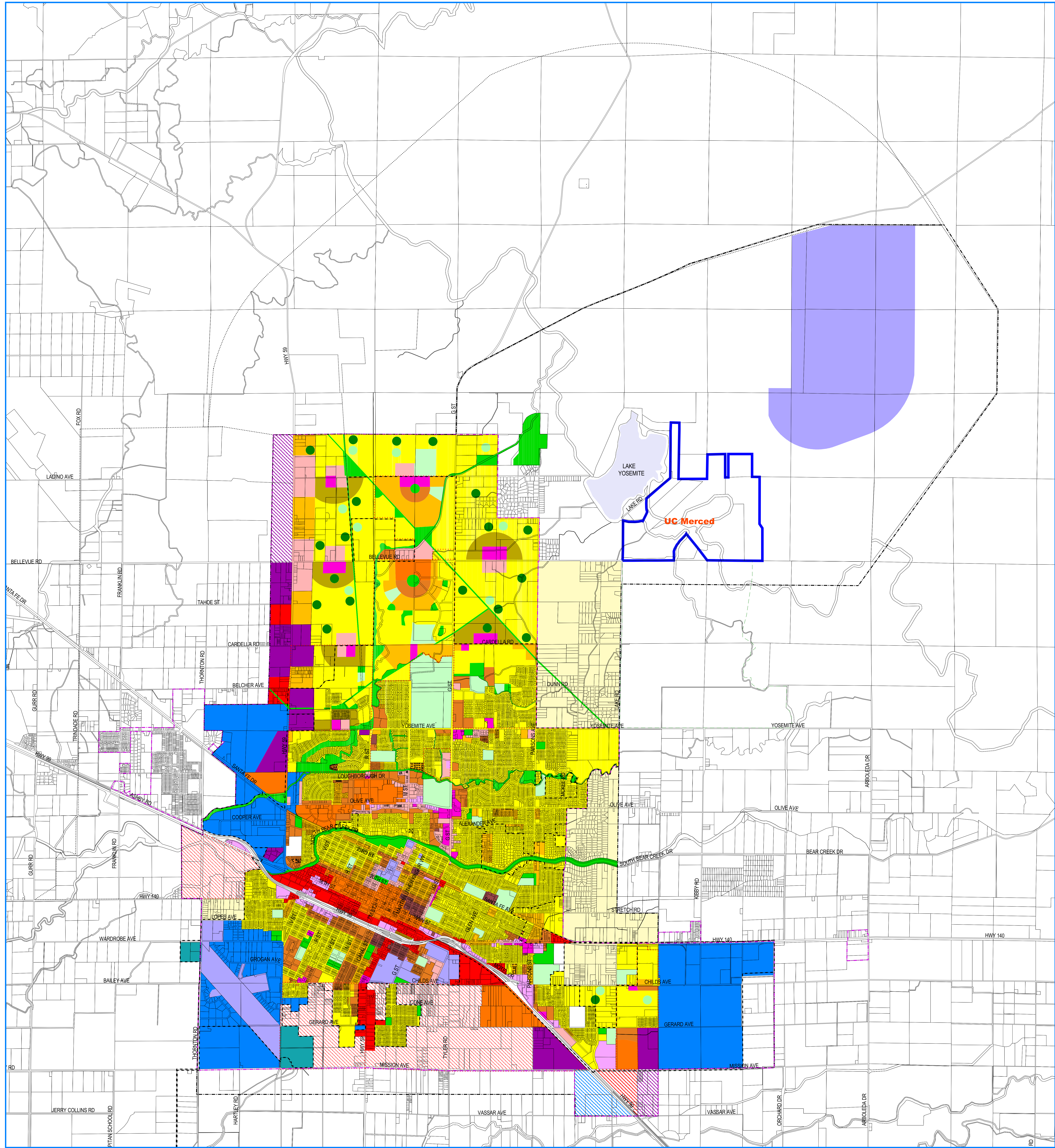
No changes to the City's government structure are pending or proposed.

8. EVALUATION OF MANAGEMENT EFFICIENCIES

The wastewater system has been extensively studied and documented in preparation for the UC Merced development. The Merced Water Reuse Strategic Plan was prepared in October 2001, providing a plan to meet Merced's wastewater treatment requirements through 2030. The North Merced Sewer Master Plan was prepared in December 2002 by Eco:Logic, consulting engineers. It presents various options for viable sewer service in Northern Merced. The anticipated UC Merced Campus and Community were included in the studies.

9. LOCAL ACCOUNTABILITY AND GOVERNANCE

The sewer system appears reasonably accountable and no changes to governance are pending or proposed at this time.



CITY OF MERCED GENERAL PLAN



Prepared by the
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|--|--|--|---|
| <ul style="list-style-type: none"> --- CITY LIMITS AREA OF INFLUENCE - - - - - JOINT UC PLANNING AREA - - - - - SPHERE OF INFLUENCE SPECIFIC PLAN - - - - - SUDP | <ul style="list-style-type: none"> BUSINESS PARK BUSINESS PARK RESERVE THOROUGHFARE COMMERCIAL COMMERCIAL RESERVE GENERAL COMMERCIAL REGIONAL COMMUNITY COMMERCIAL NEIGHBORHOOD COMMERCIAL COMMERCIAL OFFICE | <ul style="list-style-type: none"> SCHOOL FLOATING SCHOOL SITE PUBLIC / GENERAL USE MANUFACTURING INDUSTRIAL INDUSTRIAL RESERVE AGRICULTURAL OPEN SPACE / PARK RECREATION FLOATING PARK SITE | <ul style="list-style-type: none"> VILLAGE RESIDENTIAL LOW DENSITY LOW TO MEDIUM DENSITY HIGH TO MEDIUM DENSITY HIGH DENSITY RURAL RESIDENTIAL MOBILE HOME PARK RESIDENTIAL RESIDENTIAL RESERVE |
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