AMERICAN RIVER
FLOOD CONTROL DISTRICT

MUNICIPAL SERVICE REVIEW and
SPHERE OF INFLUENCE UPDATE

April 2, 2003

Prepared By:

Sacramento Local Agency Formation Commission
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EXECUTIVE SUMMARY

RECOMMENDATION

I recommend that the Sacramento Local Agency Formation Commission adopt the following findings and determinations:

1. The American River Flood Control District provides efficient, comprehensive flood control services to the residents and visitors of the Sacramento area and does so in a highly professional and cost-effective manner.

2. American River Flood Control District collaborates with surrounding flood control agencies and local jurisdictions, ensuring coordination of programs and services. Proactive communications between American River Flood Control District, Reclamation District 1000, the City and County of Sacramento, and the Sacramento Area Flood Control Agency, has prevented redundancy of services in many instances.

3. American River Flood Control District's involvement with local, state and federal agencies to reduce, prevent and control levee failure benefits not only Sacramento County but adjacent communities not serviced by the American River Flood Control District.

4. The Sphere of Influence of the American River Flood Control District is amended to include those areas outside its jurisdiction in which it currently provides contract levee maintenance services or is anticipated to provide such services in the near future [areas near Mayhew Road/Folsom Boulevard and Robla Creek South].

5. Municipal Service Review Determinations:

    a. Regarding infrastructure needs or deficiencies, the Commission determines the District currently the necessary infrastructure in place to provide flood protection. However, modifications to the basic infrastructure are needed to improve the level of flood protection as appropriate for an urban area commensurate with flood risk. SAFCA is leading the region's effort to secure greater levels of flood protection through additional infrastructure improvements. However, future changes in climate or significant future storms may require further modifications to the flood control system to provide an adequate level of flood protection. The extent of any such

modifications cannot be determined at this time. The level of flood protection is based on reducing risk related to significant events; not eliminating risk in its entirety.

b. Regarding growth, population and employment projections for the affected area, the Commission determines the District is capable of providing service that includes the growth and population projections for the affected territory for the next five years.

c. Regarding financing constraints and opportunities, the Commission determines that the District has no serious financing constraints for current levels of service. Future increase to the existing assessment is subject to the provisions of Proposition 218 which would require a vote of the property owners within the boundary of the District.

d. Regarding cost avoidance opportunities, the Commission determines that the District uses its best efforts to take advantage of all reasonable cost avoidance opportunities.

e. Regarding opportunities for rate restructuring, the Commission determines that the District's benefit assessment method of financing is reasonable for flood control and that a fee for service rate structure would not be practical.

f. Regarding opportunities for shared facilities, the Commission determines that the District shares facilities with other agencies and continually reviews new opportunities to do so.

g. Regarding government structure options, including advantages and disadvantages of consolidation or reorganization of service providers, the Commission determines that the District provides services to a specific geographic area that serves a portion of the City of Sacramento and a portion of the unincorporated area of the County of Sacramento. This service does not overlap other providers nor is there a service gap in relation to similar providers.

There could be opportunities and advantages to the dissolution of the American River Flood Control District and the assumption of levee maintenance and operations, in addition to drainage services, by the City of Sacramento and the County of Sacramento within their respective jurisdictions (or the creation of a single flood control agency that serves the entire urbanized Sacramento area).

The primary advantage of the City of Sacramento and the County of Sacramento assuming levee maintenance within their respective jurisdictions is based on the ability of the City and County of Sacramento to reallocate man (and woman)-power, as well as financial resources, during flood emergencies.

These agencies have a higher capacity than American River Flood Control District to increase personnel under 24-hour emergency flood threat conditions. American River Flood Control District has limited resources and must contract for additional personnel under emergency flood threat conditions. However, the District has demonstrated it has a coordinated plan to respond in an emergency which includes drawing resources from both the City and County of Sacramento as well as using outside construction contractors until such time as the Corps of Engineers is requested to assume control of the flood fight, if necessary.

At this time, the Commission believes that the opportunities are outweighed by the disadvantages of dissolving the American River Flood Control District for two reasons. First, unlike other municipal services, floodwaters do not recognize political boundaries. Flood protection is best provided on a watershed or system-wide basis. For instance, in the case of the American River Flood Control District, a failure of a levee in the City of Sacramento could flood properties in the County and vice-versa. Special districts, like American River Flood Control District, were created specifically to address problems like flooding that do not respect political boundaries. Second, the virtue of special districts is that they can focus on a single mission, whereas general governments, by definition, provide a wide array of services.

A flood in American River Flood Control District's service area could result in loss of life, property damages in the billions of dollars, and severe economic disruption in the region. Given the importance of flood protection to this region, it is important to have a special district whose only focus is to operate and maintain the levees at the highest standard. The task of protecting Sacramento from flooding is made more difficult by the fact that many other major watersheds in the United States (e.g., those in the Midwest) have significant lead times to mobilize for a major flood to raise and/or strengthen levees. By contrast, Sacramento would have less than a day to respond to a flood threat. This short response time places a premium on the preventative maintenance work that ARFCD performs during the non-flood season and which the California Department of Water Resources has consistently rated as "outstanding."

h. Regarding evaluation of management efficiencies, the Commission determines the District operates with a high degree of efficiency and professional cooperation with other agencies.

i. Regarding local accountability and governance, the Commission determines that the District Board of Trustees represents an adequate level of special district accountability and governance and has taken steps recently to improve public outreach and foster public participation through newsletter and

neighborhood meetings and will soon be adding a website to disseminate information to the public.

6. The American River Flood Control District should enter into a Memorandum of Understanding with the City of Sacramento regarding the roles and responsibilities of each agency when the City activates its Department of Utilities Operation Center (DOC). The DOC is activated when the Sacramento is at 25 feet at the "I" Street bridge prior to the activation of the Joint City/County Emergency Operations Center.

Introduction

The Cortese-Knox-Hertzberg Local Government Reorganization (CKH) Act of 2000 requires that each Local Agency Formation Commission (LAFCo) prepare Municipal Service Reviews and update Spheres of Influence for all cities and independent special districts within its jurisdiction.

A Sphere of Influence is defined by Government Code 56425 as:

> A plan for the probable physical boundary and service area of a local agency or municipality.

A Municipal Service Review is defined by Government Code Section 56430 as:

> A means of identifying and evaluating public services.

A Municipal Service Review may be conducted prior to, or in conjunction with, the update of a Sphere of Influence.

SPHERE OF INFLUENCE

Purpose

In order to carry out its purposes and responsibilities for planning and shaping logical and orderly development as well as the coordination of local governmental agencies so as to most advantageously provide for the present and future needs of the County and its communities, the Sacramento Local Agency Formation Commission must develop and determine the Sphere of Influence of each local governmental agency within the County.

Requirements

When adopting, amending or updating a Sphere of Influence, the Commission shall, according to Government Code, do all of the following:

(1) Require districts to file written statements specifying the functions or classes of services provided.

(2) Establish the nature, location and extent of any functions or classes of services provided by the districts.

In determining the Sphere of Influence of each local agency, the Commission shall consider and prepare determinations with respect to each of the following:

(1) The present and planned land uses in the area, including agricultural and open space lands.

(2) The present and probable need for public facilities and services in the area.

(3) The present capacity of public facilities and adequacy of public services that the agency provides, or is authorized to provide.

(4) The existence of any social or economic communities of interest in the area if the Commission determines they are relevant.

MUNICIPAL SERVICE REVIEW

Requirements

The Commission shall include a written statement of its determinations with respect to each of the following:

(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 of consolidation or reorganization of service provision.

(8) Evaluation of management efficiencies.

(9) Local accountability and governance.

DISTRICT SUMMARY PROFILE

District:	**AMERICAN RIVER FLOOD CONTROL DISTRICT**
Location:	165 Commerce Circle, Suite D Sacramento, California 95815 (916) 929-4006

General Manager/ Engineer: Paul T. Devereux

Staffing:	Nine. 9 Funded Positions (8 currently filled)
Service Area:	The District includes areas of North Sacramento and the City of Sacramento, south to Sutterville Road and 14th Avenue; County of Sacramento south of American River to Folsom Boulevard and Mayhew Road. The District is divided into three benefit zones based upon geographic location in the District.
Sphere of Influence:	Coterminous with current District boundary.
Acres:	23,235 Acres
Population:	Estimated at 400,000 by Corps of Engineers
Land Use:	Suburban/ Urban, consisting of residential, commercial, industrial, and open space along the American River Parkway.
Date of Formation:	May 28, 1927
Enabling Act:	American River Flood Control District Act, Act 320. [Uncodified. Applies only to American River Flood Control District.]
Governing Body:	Five Member Elected Board of Trustees with Four-year staggered terms.
District Services:	Authorized: Flood Control and Levee Maintenance Unauthorized: Drainage
Latent Powers:	None
Total Budget:	$1.5 million (FY 2002-2003)

Primary Revenue Source:	Benefit Assessments of Landowners, subject to Proposition 218. Average annual assessment fees for single family residential properties in Zone 1, $12; Zone 2, $24; Zone 3, $25.
District Fiscal Health:	Adequate level of service is currently being provided.

Introduction to Agencies Involved in Flood Control

U.S. Army Corps of Engineers is the Federal agency responsible for feasibility studies, design and construction of major flood control projects and emergency response. The Corps typically designs and constructs major flood control projects, which must be authorized by Congress. The Federal government provides between 50% and 75% of the project's costs. The Corps provides general oversight of the operation and maintenance of the completed projects and will provide emergency flood fight response during a declared disaster if requested by the State. The Corps also provides emergency repairs to damaged facilities under Public Law 84-99.

The California State Reclamation Board oversees flood control activities in the Central Valley. It serves as the local sponsor to the Corps of Engineers on Federal flood control projects, cost shares in the projects, holds title or easements to the lands underlying the project and inspects the operation and maintenance of the facilities by the local flood control and reclamation districts. The Reclamation Board is the regulatory authority over any proposed activities which could affect the flood control system.

The State Department of Water Resources provides staff to the Reclamation Board, assists local flood control districts particularly during flood events, monitors river and reservoir levels and operates the State Flood Center. In addition, the Department is responsible for operation and maintenance of a number of levees in the Central Valley through State Maintenance Areas as well as a number of dams and reservoirs. The Department also has a significant role in water supply.

State Maintenance Areas are formed by the California State Department of Water Resources for the purpose of providing maintenance on levees for flood control when local agencies fail in their responsibilities. Maintenance districts are formed under the provisions of Section 12878 of the California Water Code. Maintenance work is provided by the State Department of Water Resources. The boundaries of a maintenance area are determined by study of level of benefit. Properties are assessed and landowners are billed for levee maintenance by the California State Department of Water Resources. The assessment for each property is determined by the benefit to properties based upon the amount of protection needed rather than on assessed valuation (or ad valorem).

Maintenance Areas are exempt, or beyond the purview, of Local Agency Formation Commissions. If landowners wish to reactivate a reclamation district that has been placed within a Maintenance Area by the State Department of Water Resources, and they

are willing to assume financial and other obligations of levee maintenance, the State will consider their request.

However, if landowners wish to assume financial control and other obligations for levee maintenance and wish to form a reclamation district, flood control district, or reorganize one or more of these districts, the district formation/ reorganization is a matter of LAFCo purview and the district formation/ reorganization is a LAFCo process.

The Sacramento Area Flood Control Agency (SAFCA) is a joint powers authority representing the City and County of Sacramento, a portion of Sutter County, American River Flood Control District, and Reclamation District 1000. SAFCA's main function is as a planning and financing agency for regional flood control projects. It provides the local legal assurances and the local cost share to the State Reclamation Board on Federal flood control projects. However, due to the inability to get a regional flood control project authorized by Congress, SAFCA undertook the design and construction of significant levee improvements during the early and mid-1990's and is seeking reimbursement from the Federal and State governments.

American River Flood Control District, Reclamation District 1000, and State Maintenance Area No. 9 are the agencies that provide for the operation and maintenance of the flood control system in Sacramento. These entities perform the ongoing maintenance on the levees, patrol during floods and provide the initial flood fight efforts should a problem arise. The American River Flood Control District was formed in 1927 under special legislation. The special legislation that created the American River Flood Control District (Stats. 1927, Chapter 808, as amended) applies only to American River Flood Control District.[1] For this reason, it is not found in the general sections of the California Water Code, which contain laws of general applicability to water districts. Instead, the legislation that governs the District's operations can be found in the appendix to the Water Code, which contains uncodified laws. State Maintenance Area No. 9 is under the direction of the State Department of Water Resources and maintains the Sacramento River levee south of downtown Sacramento. Typically State Maintenance Areas are formed when a local flood control district does not perform its duties properly or is financially unable to provide these services. Funds to maintain the levees are generated by a State assessment on properties in the district.

The City of Sacramento and the County of Sacramento primarily operate and maintain the local drainage systems comprised of storm drains, culverts, pumping stations and channels with levees. These jurisdictions pump water into the levee systems. In addition, the City and County operate and maintain local levees as well as portions of the Sacramento and American River levee systems that are located outside the boundaries of the American River Flood Control District.

[1] American River Flood Control District Act, Act 320. (1927)

Overview of the History and Purpose of Flood Control Districts

Because of the importance of flood control, especially in the Central Valley, cities and counties throughout the State generally do not provide flood control services. The existing State structure, again, especially in the Central Valley, typically provides flood control by means of independent flood control districts and/or reclamation districts. These districts quite often do not conform to political boundaries (for instance, the City of West Sacramento is served by three reclamation districts and a maintenance area). The rationale for such special purpose districts is that they are able to provide a high degree of focus on public safety for areas that are subject to flooding. General governments, whether cities or counties, typically include both lands subject to flooding and lands that are unlikely to be flooded. By focusing on lands subject to flooding, special districts are able to provide a more targeted public service and impose the costs of that service only on those benefited.

American River Flood Control District Mission

The American River Flood Control District operates and maintains approximately 40 miles of levee along the American River, a small stretch of the Sacramento River, Arcade Creek, Dry Creek, Magpie Creek, and Natomas East Main Drain Canal (now known as Steelhead Creek). The District's primary responsibilities are to operate and maintain the levee system within its jurisdiction. As part of these responsibilities, the District monitors the levees during floods for boils, seepage, or other signs of distress and initiate a flood fight should there be a problem.

Maintaining the levees is a year round endeavor. During the winter and early spring, in addition to patrolling the levees, crews trim vegetation that would impair visibility of boils, seepage and other signs of levee distress. District personnel also control weed growth by herbicide application and mow weeds to prevent fire hazards. During the summer, crews operate a rodent abatement program and repair areas that have been damaged by rodents or by erosion from previous rain. Crews maintain levee access, levee crowns, and stock pile emergency flood materials, as needed, in preparation for the next flood season.

Service Area

The American River Flood Control District is an independent special district located in the central portion of the City of Sacramento. A portion of the District is also located in the unincorporated area of Sacramento County. The boundaries of the District generally follow the floodplain of the American River as identified at the time of District formation in 1927. The territory within the District boundary is characterized by flat and gently rolling land in the central portion of the City of Sacramento. The District provides flood protection to a specific geographic area.

Benefit Zones

There are three benefit zones within the American River Flood Control District. The District includes North Sacramento and the City of Sacramento south to Sutterville Road and 14th Avenue and portions of the unincorporated area of the County of Sacramento on the American River near Folsom Boulevard and Mayhew Road. Average annual assessments for a single family residence: Zone 1, $12; Zone 2, $24; Zone 3, $25.

Levee Problems

Levees can fail for a number of reasons, including: (1) seepage through the surface of the levee; (2) seepage below the levee surface, leading to landside boils;[2] (3) erosion caused by swift moving flood water along the river side, and (4) overtopping the levee when its capacity is exceeded.

Levee Construction

Major flood control projects including new levees are typically designed and constructed by the U.S. Army Corp of Engineers. The State Reclamation Board is the local sponsor for these projects in the Central Valley and provides a cost share. The Sacramento Area Flood Control Agency is responsible for funding the local share for these major flood control improvements. As noted above, however, SAFCA undertook the modifications to the existing levee system and construction of new levees in the north area during the early and mid 1990's. Upon completion of these new levees, SAFCA contracted with the District to operate and maintain them.

Flood Emergency Preparedness

As part of the American River Flood Control District's preparedness for flood emergencies, the District has purchased and stockpiled essential flood response materials, including 10,000 sandbags; tons of large rock (rip rap) which have been strategically placed throughout the District; rolls of visquine; lights for night operations and other ancillary materials. The District has also incrementally modernized its equipment fleet to help respond to flood emergencies, including the purchase of a front end loader to go along with small tractors and a number of pick-up trucks. The District currently owns two dump trucks and would contract for others as needed.

The American River Flood Control District also has mutual aid agreements with the City and County of Sacramento to provide supplemental staff during floods for round-the-clock levee patrols. In addition, the District has signed agreements with several local contractors who are ready to respond 24-hours a day, 7 days a week, with trained personnel, equipment, and material (such as rock, aggregate base, sand and fill dirt) if a levee is threatened. Relying on these agreements, both with the City and County and

[2] A landside boil is caused by water seeping under a levee and forcing its way to the surface on the landside of the levee. The water bubbles or "boils" on the surface, hence the name. The water may begin to carry levee material (dirt and sand) with it eventually leading to a levee failure if not addressed.

with local contractors, allows the District to provide services with a high level of reliability very efficiently. The District has a flood emergency reserve fund which is estimated to be able to sustain a major flood fight for several days. After these funds are exhausted, the District would turn to the State and Federal government (Corps of Engineers) for assistance.

Registered Voters: 85,469

Population: Estimated at 400,000 by Corps of Engineers.

Governance

Five Trustees are elected in the November general election. Each Trustee serves a four year term. Terms are staggered. The Board of Trustees of the American River Flood Control District meets on the second Friday of each month at 11:00 A.M. at the District Office, 165 Commerce Circle, Suite D, Sacramento. Board members are paid a stipend of $95 per meeting; travel policy allows total reimbursement for expenses incurred in District travel. In recent years, no travel claims have been submitted by Board members.

Board of Trustees	Term of Office
Karolyn W. Simon, President	2006
Clyde W. Macdonald, Vice President	2006
Bettina C. Redway, Secretary	2006
Virginia G. Moose, Treasurer	2004
Brian F. Holloway	2004

Protection Provided (Potential Loss):

There are approximately 400,000 persons, 5,000 businesses and 1,200 public buildings within the American River Flood Control District. The Corps of Engineers estimates that over $7 billion in potential property damage could result should the levee system fail. [3]

Flood Control History and Overview

City of Sacramento Flood History

Sacramento residents, officials and levee workers have long battled floodwaters from the Sacramento and the American Rivers. In the 1850's despite warnings, settlers opted to stay near the rivers for water supply, food source and transportation needs.

[3] State of California, Department of Water Resources, Division of Flood Management, Flood Management 1999 Inspection Report, Flood Control Project Maintenance Repair, June 2000.

Major floods occurred in Sacramento in 1850 and 1862, resulting in an effort by the City officials to straighten the American River and in raising many of the western City streets by as much as ten feet. Devastating floods occurred again in 1907 and 1909, leading to the design of a comprehensive Sacramento River Flood Control System including levees on the lower American River. Again, in 1950, floodwaters from the American River covered the area now known as Campus Commons.

The first major upgrade to the original levee system occurred in the 1950's with the construction of Folsom Dam and the extension of the levees further upstream. These improvements provided protection during a major flood in 1955. At the time of their construction, the engineers thought they would provide protection against a flood so large it had just one chance in five hundred of occurring in any given year. However, since the construction of Folsom Dam, there have been five storms that are larger than any that had occurred in the prior period of record. The flood protection system was put to the test again in 1986 and led to renewed efforts to reduce the flood risk in Sacramento. After 1986, the flood control system was estimated to provide less than 100-year flood protection. Again in 1997, a flood equal to the 1986 event roared down the American River Canyon into Folsom Lake and through the American River levees protecting Sacramento. Folsom Dam and the downstream levees were able to handle the high water without flooding along the American River in Sacramento in part because the brunt of the storm passed to the north. A number of other locations in Northern California experienced severe flooding as a result of levee breaks causing significant damage and some loss of life.

Sacramento River Flood Control Project

The Sacramento River Flood Control Project is a Federal flood control project operated and maintained under the California State Department of Water Resources. It was authorized by Congress in 1917, and subsequent supplemental authorizations (e.g., Sacramento River Major and Minor Tributaries, American River Levees, etc.), have added components to the Sacramento River Flood Control Project over the years. The San Joaquin River Flood Control System consists of a number of separate federally authorized flood control projects, most of which have been built since the 1940's (e.g., Merced and Fresno County Steam Groups, Lower San Joaquin River, and federal projects and State designated floodways on virtually all the Sierra rivers draining into the San Joaquin Valley and the Tulare Lake Basin). The two major river flood control systems have combined totals of approximately 1,600 miles of federal project levees, 1,200 miles of designated floodways (148,000 acres), several thousand acres of project channels, and 55 other major flood control works (such as overflow weirs, flood relief structures, outfall gates, and the Sutter Bypass pumping plants).

The Federal government, acting through the U.S. Army Corps of Engineers, designed and constructed many of these federal levees and other flood control works; some then-existing levees were also incorporated into the Sacramento and San Joaquin flood control systems by federal statute. The State generally provides lands, easements, and rights-of-way when necessary for project construction. An exception to this process is the Lower

San Joaquin River Flood Control Project which was designed and constructed to federal standards by the State (substituting physical works for acquisition of more costly flowage easements required for the authorized federal project).

Local public entities within both river systems have the responsibility, liability, and duty to maintain and operate the levees and other flood control works on a day-to-day basis in accordance with guidelines provided in the U.S. Army Corps of Engineers' Standard Operations and Maintenance Manual (and each applicable supplement for individual project units). The only flood control features on which operation and maintenance is **not performed** by local entities are those Sacramento River Flood Control Project works charged to the Department of Water Resources under Water Code Section 8361, and those Sacramento River Flood Control Project levees within maintenance areas that are maintained by the Department of Water Resources, with local beneficiaries paying the costs, under Water Code Section 12878.

The California State Department of Water Resources, under the authority of Water Code Sections 8360, 8370 and 8371, inspects the maintenance of the Sacramento River Flood Control Project levees performed by the responsible agencies, and reports to the U.S. Army Corps of Engineers on a regular basis regarding the status of levee maintenance accomplished under the provisions of Title 33, Code of Federal Regulations, Section 208.10. While there are no specific water code provisions directing the Department of Water Resources to inspect and report on maintenance of the San Joaquin River Flood Control System, the Department of Water Resources has performed inspections and provided reports for many years as a matter of practice.[4]

The inspections verify, for both river systems, that local agencies are performing their legal and statutory responsibilities pursuant to Water Code Sections 12642 and 12657, and are meeting their legal obligations under assurance agreements with the State, to operate and maintain their flood control projects "on any stream flowing into, or in, the Sacramento Valley or the San Joaquin Valley." **The State inspects and reports only on the status of maintenance practices and on observable levee conditions resulting from those practices; the state does not conduct field studies to assess the internal structural integrity of the levees or their foundations.**

Levee History and Capacity

Sacramento River Levee

The 33-mile long levee portion of the Sacramento River system, which protects the Sacramento County and City area, extends from one mile south of Verona at the northwest corner of the Natomas Basin on the northern edge of Sacramento to the town of Freeport, along the southerly border of the City of Sacramento. This leveed channel is designed to carry flood flows of about 110,000 cfs (a cubic foot is approximately the size of a basketball). A major contributor to the flows in this channel is the Natomas Cross

[4] Consistent with Title 33, Code of Federal Regulations.

Canal, which diverts the runoff from a large watershed in western Placer and southern Sutter Counties around the Natomas Basin and into the Sacramento River at Verona.

In the early 1900s, bypasses were built into the system to act as pressure release points in times of too much water. Low dams called "weirs," located at strategic locations, spill excess flows when the river holds too much water. The spilled water is allowed to flood many miles of undeveloped farmland in the bypass, taking pressure off the swollen river and conveying floodwaters safely past urban centers to the San Francisco Bay.

There are two weirs and two bypasses in Sacramento's flood control system. The Fremont Weir is an ungated low dam located at the confluence of the Sacramento and Feather Rivers and the Sutter Bypass, just upstream from Verona. It serves to divert flood flows from these waterways into the Yolo Bypass, thus reducing the flood stages in the Sacramento River channel. The Yolo Bypass is a large leveed channel extending from the Freemont Weir south to Cache Slough. During a flood, 80 percent of the water from the Sacramento River is conveyed through the Yolo Bypass.

The Sacramento Weir is a gated low dam along the west bank of the Sacramento River about three miles upstream from its confluence with the American River. When flood stages in the Sacramento River at the "I" Street Bridge reach 27.5 feet msl (corresponding to a flow of 98,000 cfs), the weir gates are manually opened and flows are diverted into the Sacramento Bypass. The Sacramento Bypass is a leveed channel extending from the west bank of the Sacramento River to the east bank of the Yolo Bypass just north of the City of West Sacramento. Its purpose is to convey the entire excess flow in the Sacramento River/ American River channel to the Yolo Bypass so as to maintain the flow in the Sacramento River, upstream and downstream of the mouth of the American River, at essentially the same level. In a large flood, about 15 percent of the American River flow actually moves up the Sacramento River and into the Sacramento Bypass.

American River Levee System

The leveed portions of the Lower American River (LAR) channel extend from the Sacramento River about half way up to Lake Natoma, an afterbay below Folsom Dam which allows dam operators to coordinate power generation and flows into the LAR channel during normal reservoir operations. Confined by high ground along its upper reach, the LAR channel is leveed along its north and south banks for about 13 miles from the Sacramento River to the easterly end of Arden Way in Carmichael on the north and just upstream from the Mayhew Drain on the south. Both the south levee and the north levee downstream of Cal Expo are units of the Sacramento River Flood Control Project. The south levee was upgraded to Corps Flood Control Project Standards in 1948; the north levee in 1955. These levees were designed to control flows of up to 180,000 cfs with a levee top approximately three feet above the water level for safety purposes (this is known as "freeboard). Their design heights were determined when there was no confinement of flows along the north bank upstream of Cal Expo and agricultural lands in the area, now known as "Campus Commons," provided over bank storage during large

floods in the watershed. This overbank storage was eliminated by the north levee upstream of Cal Expo which significantly narrowed the floodway, particularly in the river reach adjacent to Sacramento State University. This north upstream levee was constructed in conjunction with Folsom Dam in 1955. The levee was designed to contain sustained releases of 115,000 cfs from Folsom Dam with at least five feet of freeboard and short term releases up to 152,000 cfs with three feet of freeboard.

Role of Sacramento Area Flood Control Agency
(Construction of Major Capital Improvements)

The Sacramento Area Flood Control Agency (SAFCA),[5] established in October 1989, is a joint powers agency. It consists of five parent agencies. The member agencies are:

City of Sacramento
County of Sacramento
County of Sutter
Reclamation District No. 1000
American River Flood Control District

The boundaries of the Agency are coterminous with those of its member agencies excepting: (1) the portion of Sacramento County lying within the boundaries of the incorporated cities of Folsom, Galt and Isleton; and (2) the portion of Sutter County lying to the north of the Natomas Cross Canal and King's Slough.

The Sacramento Area Flood Control Agency Board of Directors consists of thirteen members, appointed by each represented member agency. The Sacramento Area Flood Control Agency's long term goal is to provide the Sacramento region with as much flood control protection as appropriate for a populated metropolitan area.

The powers of the Sacramento Area Flood Control Agency have been augmented by the California State Legislature through adoption of the Sacramento Area Flood Control Agency Act that enables SAFCA to coordinate a regional effort to finance, construct and maintain facilities to ensure a reasonable and prudent level of flood protection, as determined by the Agency, in developed and urbanizing areas which are designated for residential, commercial, or industrial use, and to provide local assurances for participation in cost sharing for federal flood control projects.

Agencies Responsible for Levee Operation and Maintenance Within Sacramento County

There are five local agencies in Sacramento County that operate and maintain levees along both the American and Sacramento Rivers. Levee maintenance and service is currently provided by the American River Flood Control District, Reclamation District

[5] Butch Hodgkins, Director. Office location: 1070 Seventh Street, Seventh Floor, Sacramento, CA.

#1000, District Maintenance Area No. 9, the City of Sacramento and the County of Sacramento. These levees are maintained in accordance with federal and state standards.

Level of Service and Standards

The State of California, Department of Water Resources, Division of Flood Management issues an annual Inspection Report on the status of maintenance of flood control levees, channels, and other major public works operated under cooperative arrangements between federal, state, and local public entities.

The state inspects flood control facilities constructed by the U.S. Army Corps of Engineers to ensure that local flood protection is continuously maintained in such a manner and operated at such times and for such periods in order to obtain maximum benefits, as stated in the Code of Federal Regulations.

State Levee Maintenance Rating Criteria

The process of rating the condition of levee maintenance on any given levee represents a subjective assessment by California Department of Water Resources, Flood Project, Inspection Section, personnel based on field evaluations. The level of maintenance observed at the time of inspection is relative to federally prescribed maintenance guidelines and state guidelines for vegetation on oversized levees. Maintenance levels are determined according to the criteria of the following rating scale.

Outstanding:	Maintenance conforms with federal and state guidelines.
Good:	Maintenance varies slightly from federal and state guidelines.
Fair:	Maintenance varies considerably from federal and state guidelines.
Poor:	Maintenance varies extensively from federal and state guidelines.

A rating of "Poor" does not necessarily imply that the structural integrity of the flood control facility is in jeopardy. Similarly, an "Outstanding" rating is not intended to provide certification that the facility is free from structural defect.

When applying the ratings described above, a number of factors pertaining to maintenance are considered. The following criteria are extracted from Title 33, Code of Federal Regulations, except for the reference within item 4 to the State Reclamation Board's "Vegetation Guide." The California Department of Water Resources rates each of the following categories separately as well as rates a district for its overall maintenance program.

A. Readiness for Flood Emergency

Each maintaining district shall have an organized plan to combat a flood situation effectively. This should include the appointment of one individual to supervise and execute the plan, stockpiling of standard flood-fighting equipment and

materials, and access to portable radios and/or cellular phones for communication during patrolling or a flood emergency.

B. Adequate Levee Section and Grade

Each maintaining district shall perform the work necessary to maintain levee-side slopes, grade, and crown width to meet the standards for its particular levee system.[6] Levee design standards are determined according to crown width, land slope, water slope, freeboard and patrol road width.

C. Presence of Encroachments

Each maintaining district must prevent and attempt to remove any structures on, additions to, or alterations of the levee unless authorized by permit from The State Reclamation Board. Failure of the local agency to control unauthorized encroachments may threaten the integrity of the levee.

D. Control of Wild Vegetative Growth

Each maintaining district shall have a program to selectively control vegetation on the levee slopes and in rock revetments. This is needed to provide visibility for inspection and patrolling and to prevent interference with flood-fighting activities. Some vegetation on "oversized" levees is permitted in accordance with The Reclamation Board's Interim Guide for Vegetation on Flood Control Levees. An "oversized" levee is a levee with a cross section having a crown width exceeding 20 feet or with side slopes flatter than 2 feet to 1 foot on the landward slope and 3 feet to 1 foot on the waterward slope.

E. Rodent Control

Each maintaining district shall have a rodent control program. Diligent efforts to eradicate burrowing animals are a necessity, even though eliminating them from an infested levee is difficult. Control of these animals must be pursued frequently and persistently to assure safety of the levee during flood periods. Rodent dens and runways should be opened up and thoroughly compacted as they are backfilled.

F. Repair Cracks, Erosion, and Caving

Each maintaining district shall repair cracks, current or wave-wash erosion, caving or other structural problems. Repair of these problems becomes critical because, unless repaired, these problems can rapidly become worse and could

[6] Crown widths for federal project levees within the Sacramento-San Joaquin Valley Flood Control system are described as (1) less than 20 feet; (2) 20 to 30 feet; (3) 30 feet or more. State Department of Water Resources, Division of Flood Management, 1999 Inspection Report, Flood Control Project Maintenance Repair, June 2000.

threaten the levee's integrity. Failure to repair a problem of this type could lead to levee failure.

G. Repair of Access Gates

All gates shall be maintained and repaired to provide easy access for authorized people when necessary and to control unauthorized access.

H. Condition of Rock Revetment

Each maintaining district shall make all repairs to scour, wash, settlement, or failure of any portion of rock revetments. Rock revetments have been installed at locations where stream-flow conditions or wave wash exposure indicate the need for such protection. Early detection and prompt repair will result in a minimum of effort and cost to restore the revetment.

I. Condition of Levee Crown

Each maintaining district must keep crown roadways shaped and graded to provide proper drainage. Each district must also repair ruts and add gravel where necessary ensure a serviceable road under flood fight conditions.

J. Control of Livestock Grazing

Each maintaining district shall control stock grazing on levee slopes in such a manner as to permit normal maintenance activities and to minimize damage. Any levee slope damage must be repaired in a timely manner. Controlled livestock grazing may be used as a vegetation management tool.

K. Condition of Pipes and Appurtenances

Each maintaining district must examine all structures situated through, in, or on the levee for stability and structural soundness at least once a year. All component parts must be examined for effectiveness of operation and reliability before the start of each flood season. New structures should be installed or older structures repaired only in accordance with adopted Reclamation Board standards and under the supervision of qualified Reclamation Board personnel. Defective structures must be repaired, replaced, or removed immediately.

American River Flood Control District Levee Maintenance Rating

The American River Flood Control District has received a rating of outstanding on levee maintenance inspections each year during the last ten years and has received a rating of outstanding for its overall cumulative maintenance program in 1999 for all of the criteria cited above. A review of District records indicates that it has received "outstanding"

ratings by the Department of Water Resources (DWR) well beyond the last ten years. In addition, no other flood control or reclamation district has received a higher rating.

Drainage Facilities

The American River Flood Control District no longer provides drainage services to the area within its district boundary. When built, the levees within the District's territory blocked the natural drainage of lands within the District into the American River. As urbanization increased, so did the amount of drainage water that needed to be pumped into the River. Pumping stations and drainage services (construction, operation and maintenance) within the District's boundaries are now provided by the City and County of Sacramento. The District has no responsibilities for internal drainage. The District is solely responsible for levee maintenance. However, the District cooperates with the City and County of Sacramento, Reclamation District No. 1000 and the Sacramento Area Flood Control Agency on levee maintenance related issues. There is no overlap or gap in service delivery at this time. The District is an active partner in the overall integrated flood control system.

Other Service Providers

There are a number of special districts and agencies within the City and County of Sacramento that provide municipal services within the boundaries of the American River Flood Control District. No other agency provides the service (levee maintenance) provided by the American River Flood Control District.

Financing and Method of Assessment

The American River Flood Control District's primary revenue source is benefit assessment, i.e., properties are assessed based on benefits received. This typically is accomplished by a licensed professional engineer's report that places a value on the benefit from which the assessment is made. The District Board of Trustees must adopt and approve the assessment annually. The assessment amounts billed to the property owners have not been increased since the mid-1990's. Assessments that predate Proposition 218 are exempt from voter approval until increased or extended.

The District currently is divided into three zones of benefit. The allocation of costs which must be spread among the properties in each zone is based on the linear levee mileage protecting that zone. Thus, the maintenance costs spread to each zone are directly proportional to the amount of levee protecting that zone.

Proposition 218 was approved by the electorate in 1996. This measure set forth requirements to be followed before local jurisdictions can raise taxes, or assessments, for either the operation or capital improvements of a governmental agency. Assessments are amounts collected on the property tax roll to recover the cost of capital improvements or services that specifically benefit the property. This type of assessment requires approval of the property owners in a mailed ballot election. In general, a simple majority vote of

property owners is required, however, votes are weighted by the amount each owner is to pay. Assessments may be used for either capital improvements or on-going operations. Assessment rates may be tied to the Consumer Price Index to adjust for inflation or based on an annual basis. Since the passage of Proposition 218, any increase in District assessment requires hearings and voter approval.

Grand Jury Investigation (FY 1996-1997)

The American River Flood Control District was investigated by the Sacramento County Grand Jury during FY 1996-97 for inappropriate management practices. The Grand Jury made the following conclusions and recommendations related to the complaint that was filed.

Grand Jury Findings:

1. The Board of Trustees and management provided only minimal oversight and supervision of the operation of the District.

2. Management failed to operate the District in a business-like manner which would include adequate safeguards for District property and supplies, written policies and procedures, as well as verifiable time reporting.

3. The practice of allowing all employees to be paid the same amount of overtime hours based on the "estimated" time it took to fabricate a metal gate pursuant to an agreement with SAFCA, rather than actual hours worked by each employee on the fabrication is inappropriate.

4. Management and the Board of Trustees failed to comply with rules and laws that apply to special districts, and failed to obtain assistance to avoid these problems and similar problems that might occur in the future.

The Grand Jury recommended:

1. Complete, adopt and distribute an employee manual.

2. Develop and implement inventory control measures.

3. Develop and implement a verifiable time keeping/ management system.

4. Board members and management should attend at least a two day seminar on the management of special districts.

Compliance by District

As required, the District responded to the Grand Jury's Report. The District agreed in part to the Grand Jury's findings consistent with a previous internal investigation

conducted by the District's management. Revisions to the District's policies and procedures, similar to those recommended by the Grand Jury, were already in progress at the time of the investigation. Other findings of the Grand Jury were disputed by the District in writing. Information was provided to support the District's position. In the end, a number of policies and controls have been implemented to insure the District is operated in a business-like manner. Since the investigation, the District has completed a comprehensive employee manual (recently updated); implemented a strict purchasing policy with independent controls; developed an inventory control plan; instituted employee time sheets; and increased oversight by District management. In addition, District personnel attend management, safety, and personnel training workshops offered through the Association of California Water Agencies, California Special District Association and others. The District believes it has substantially complied with the Grand Jury's recommendations.

District Budget Information (FY 2002-2003)

The District's approved budget for FY 2002-03 is $1,503,625.

Appropriated by category:

Operations and Maintenance	$1,288,625
Capital Outlay	90,000
Emergency Repair	-0-
Flood Fight	125,000
Total Estimated Costs	$1,503,625

Income by Source:

Benefit Assessments	$1,300,000
Interest	101,625
O & M Agreements	92,000
Miscellaneous	10,000
Total Estimated Income	$1,503,625

Year End Estimated Fund Balances:

O & M / Administration	$ 653,856
Capital Outlay	942,813
Flood Fight	1,072,361
Emergency Repair	960,720
Total Estimated Fund Balance	$3,629,750

Approximately forty-seven percent (47%) of the annual operating budget is expended on labor. The effect of labor costs and capital outlay results in a maintenance cost of approximately $37,500 per mile of levee per year.

Infrastructure Needs and Requirements

In general, the American River Flood Control District is not responsible for the construction of or major modifications to the levees. Major flood control projects are funded by the Federal, State and regional flood control agencies (SAFCA). However, there have been times in the recent past where the District contributed towards major Federal and State projects in order for the work to move forward in a timely manner. The District is responsible for daily maintenance, small capital improvements, normal levee repairs, emergency flood response and emergency levee repairs. With completion of the slurry wall work to reduce levee seepage, the most significant threat to the levees (besides overtopping) is erosion from swift moving water during floods. Over the past two decades, there has been an increase in erosive damage to the river banks which eventually begins to erode the levee cross section. At that time, major repairs are necessary to insure the integrity of the levee. Such repairs have proven to be very costly and require extensive mitigation under state and federal endangered species law. The District has shared in the cost of these bank and levee protection projects. It is anticipated the erosion will become worse in the future as new outlets to be constructed at Folsom Dam will lead to higher flows being released more often to maintain an increased storage capacity in the reservoir during large storm events. Addressing these more frequent and more erosive flows may require the purchase of additional rights-of-way and the removal of existing encroachments and other structures.

It also is unclear how changing weather patterns or global warming will affect rainfall patterns and floods. Experts are predicting there will be larger floods as the warming climate will result in less snowfall and more rainfall. This trend would result in more water passing through Folsom Dam and the downstream levees. A result will be the requirement for more vigilance to be exercised and, potentially, more impacts to the levee system due to erosion.

Municipal Service Review and Sphere of Influence Analysis

Sphere of Influence Factors

The Present and Planned Land Uses within the Service Area

Most of the territory within the boundary of the American River Flood Control District is urbanized with a mix of residential, commercial, industrial and open space uses. These uses are largely built out and not likely to change significantly in the foreseeable future. In the long run, as developable land becomes more scarce, it is likely that the density and intensity of land use within the District may increase. Therefore, the need for flood protection will not diminish but will become more important.

The Present and Probable Need for Public Facilities and Services in the Area

The need for flood protection and the maintenance of levees by American River Flood Control District within the area served is critical and will not change. Flood protection is required to protect residents and property now and in the future. At this time there are no other cost-effective alternatives to levees available for the provision of continued flood protection. The existing levee and flood control system must be constantly monitored, maintained and improved.

The Present Capacity of Public Facilities and Adequacy of Public Services That the Agency Provides or is Authorized to Provide

Currently, the Army Corps of Engineers, in coordination with the State Reclamation Board and SAFCA, is constructing improvements which will improve the reliability of the regional levee system. There are several components to the improvement of this system. SAFCA's stated goal is to create a system to provide at least 200 year flood protection. However, constructing improvements to the structural integrity of a levee does not remove the need for vigilance in monitoring levees and the need for continued maintenance of levees within the flood control system. This need is typically met by reclamation districts or flood control districts such as the American River Flood Control District which specialize in this service.

Based on state inspection reports, the current level of monitoring and maintaining levees provided by the American River Flood Control District is rated as excellent. The District has received an Outstanding rating for the past ten years.

The Existence of Social or Economic Communities of Interest in the Area if the Commission Determines Their Relevancy

To determine the existence of social and economic communities of interest requires that the Commission determine that an adequate level of flood protection services be provided to the territory within the service area. It is in the best interests of the residents and businesses within the service area that their assessment(s) be used to the best degree possible for levee maintenance and public safety. The American River Flood Control District protects a relatively small defined geographic area that would flood in the event of a levee failure. These properties are directly impacted. In addition, this area protects a significant regional economic and social system. It is the core of state government, employment and commerce for the entire Sacramento region. Therefore, it directly benefits a much larger area and population.

Core Policy Issue

Is the American River Flood Control District maintaining the levees to appropriate standards in a fiscally responsible manner? Does the District have a reasonable plan and appropriate reserve funds to deal with a flood emergency?

During the preparation of this report, staff for the City of Sacramento were contacted for their views on the services provided by American River Flood Control District. City staff indicates that the American River Flood Control District has adequate resources to operate and maintain the levee system under normal conditions. However, City staff believe the District may be stretched to its limits during periods of potential flood situations. City staff cites the fact that the District lacks adequate personnel, resources and equipment to operate on a 24-hour a day, seven days a week, basis to patrol levees and sandbag boils that may occur during flood fights. These types of emergencies do not occur every year. Consequently, it is not cost effective for the District to staff up to meet infrequent emergency situations. During emergency situations, the American River Flood Control District must contract out for increased resources. These extraordinary costs are funded from District Reserve Funds. It should also be noted the City's resources are typically being deployed to deal with infrastructure, drainage or other utility problems.

The City of Sacramento previously indicated that it is able to provide assistance to the American River Flood Control District during emergency conditions because it has several hundred employees as well as equipment that can be reallocated to support emergency situations. The City of Sacramento also assists in staffing the Emergency Operations Center.[7] The Emergency Operations Center typically receives calls and reports from the public that are related to levee conditions and problem areas.

These comments by City staff pose the key policy question for the Commission as to **whether the District is performing its functions of levee maintenance and initial responder to flood emergencies in a cost effective and efficient manner?**

Based on the semi-annual inspection by the California Department of Water Resources, the District has been doing an outstanding job in maintaining the levees. The annual assessments on properties in the District are modest and affordable and have not been raised since the mid-1990's. In the meantime, the District has been able to build up reserve funds for a flood emergency, emergency repairs and capital improvements. It is anticipated the District will no longer have surplus revenues to build the reserve funds in the near future. Rising labor, insurance, and other inflationary costs will result in expenditures matching revenues. If the assessments are not increased as these costs continue to rise, the District may have to use some of its reserves to fund the normal operation and maintenance activities. The District has indicated its intent to increase the assessment, as necessary, when this point is reached. However, based on current law, any increase would have to be approved by the property owners before it could be implemented.

[7] The Joint City and County of Sacramento Emergency Operations Center is activated during periods that may give rise to natural disasters, such as flooding, that may impact the entire region. The City and County of Sacramento take the lead in making joint decisions and have the ability to allocate resources in the best interests of public protection.

Emergency Flood Response and Repairs

It appears the District does have a reasonable plan and a reserve fund to respond to a flood emergency. During the early stages of a flood, the District would need additional staff to support 24-hour levee patrols. They are currently party to a Mutual Aid Agreement which includes the County and City of Sacramento that allows the District to access the additional levee patrol staff.

Construction inspectors from the County assigned to this duty participate in an annual flood fight training class with District staff. Additional staff from the City of Sacramento has likewise been assigned to assist the District as requested. The City personnel also receive the same flood training on a regular basis. The District's General Manager has coordinated his needs with management staff at the City and County including a list of specific personnel who would be assigned to assist the District for levee patrols.

In addition, throughout a flood, the District maintains regular communication with both the State Flood Center and the City/County Emergency Operations Center. Through the State Flood Center (and information on the Department of Water Resources website), the District provides updates on the conditions of the levees and receives information as to the reservoir levels and anticipated releases. The District can also seek technical assistance on handling levee problems. The State Flood Center also has representatives from the National Weather Service, U.S. Bureau of Reclamation and U.S. Army Corps of Engineers available to provide information and assistance. The City/County Emergency Operations Center coordinates the local emergency response. The District provides regular updates on the conditions of the levees and observed river levels. The District can also ask for assistance such as traffic or crowd control or other emergency response from the police, sheriff or fire departments. The local Emergency Operation Center (EOC) would also be where decisions on evacuations are made based on information provided by the District and others.

Should a problem be identified on the levees, the District would use resources from the City or County to monitor specific locations as necessary. If the problem requires action such as reinforcing the levee by placing dirt, sandbagging a boil or armoring a levee slope with rock and visquine the District has flood emergency response agreements executed with several local contractors. These agreements provide for an immediate response 24-hours a day, seven days a week. The companies currently under contract all have extensive experience in providing similar emergency flood services in the past. Determinations on the appropriate action would be made by the District Engineer with input from local levee experts, the State Flood Fight Specialist and engineers from the U.S. Army Corps of Engineers. Full time monitoring and record keeping would be done by County construction inspectors.

In anticipation of such a flood emergency, the District has established a Flood Fight reserve fund. Currently the fund has approximately $1 million which the District staff estimates is sufficient for a two to three day flood fight. Should the emergency extend beyond this time, a request would be made to the U.S. Army Corps of Engineers, through

the State Flood Center, for assistance. The request for assistance would simultaneously be made through the local Operational Area to the State Office of Emergency Services as required by the State Emergency Management System (SEMS). Based on experience during previous major floods, it is unlikely that significant resources other than staff or technical assistance would be provided to the District by the City, County or State. During the flood fights throughout northern California in 1997 and the flood fight on the Sacramento River in 1986 the local District conducted the initial response and eventually had the Corps of Engineers assume responsibility for the flood fight. The District's agreements with the local contractors anticipates this potential and allows for a seamless transition in a flood emergency.

In summary, the District has presented a reasonable, credible and coordinated plan based on past experience to deal with a flood emergency. Communications with both the State and local emergency coordinators is maintained to allow for a coordinated response. Under these circumstances, consolidation with the City would not result in any real cost savings.

Governance Considerations

River and stream management can be very complex because there are a number of competing community goals that must be balanced. First and foremost is probably the development of adequate flood protection facilities and the concerns of flood management. Next is the impact of recreational uses, vegetation management and wild life habitat preservation, public safety, adjacent land use, and public access to trails. For example, there are numerous entities involved in the American River Parkway Plan and the recently adopted River Corridor Management Plan. The entities include SAFCA, City of Sacramento, County of Sacramento, State of California, American River Flood Control District, environmental groups, neighborhood coalitions as well as many other stakeholders.

The purpose of the 2001 River Corridor Management Plan[8] is to provide an integrated approach to resource management to improve consistency of agency practices for floodway management, habitat preservation, fishery enhancement and recreational management.

In addition, the American River Corridor is regulated by Federal and State laws as well as local ordinances. As a result, there are conflicting goals and objectives for flood protection, recreation and environmental issues between stakeholder groups. For example, flood protection requires the need to create a more effective floodway in the lower American River. A floodway that can handle higher flood flows brings into question the clearing of vegetation, design and placement of numerous recreational structures, developed trails, roads and infrastructure within the American River Flood Plain. These different goals and objectives illustrate the overlapping issues that are tied

[8] The River Corridor Management Plan was a collaborative effort by members of the Lower American River Task Force and other American River Parkway stakeholders.

to repair and maintenance costs and shows the complexity of managing and coordinating resources along rivers.

In recognition of the diversified interests, there is a need to create a coordinated and collaborative approach among stakeholders to finding solutions between competing interests in a multifaceted jurisdictional setting. The River Corridor Management Plan represents a successful approach to bring these interests to the table and work in a cooperative manner.

The River Corridor Management Plan considered many previous plans including:

1. American River Parkway Plan (1985)
2. City of Sacramento Parks Master Plan 2000 [Not Adopted]
3. County of Sacramento Department of Parks and Recreation Interpretation Plan
4. Cal Expo Flood Management Plan (1987)
5. Sacramento Area Flood Control Agency Floodway Management Plan (1998)
6. American River Parkway Financial Needs Study (2000)
7. Richards Boulevard Area Plan and Facility Element (1994)
8. Sacramento County In-Line Skating Task Force
9. City-County Office of Metropolitan Water Planning
10. Folsom Lake State Recreation Area General Plan (October 1978)
11. Article 3, Parkway Corridor Combining Zone, County of Sacramento Zoning Code 235.30 (1999)

Alternatives/ Options to Governance Structure For American River Flood Control District

As with all Special District functions, there are a number of potential governance options that might be considered. However, there are a number of complex and diverse issues related to flood control including environmental, recreational, economic, equity, and public safety that must be considered. Based on staff's review of these issues there does not appear to be any reason or justification to recommend changing the District's governance and it is our opinion that the current system of governance be maintained at the present time.

First, the consequences of a major flood in Sacramento are catastrophic in terms of the potential for loss of life, property damage, and impacts on the region's (and the State's) economy. Over 400,000 residents live in the American River floodplain and the estimated damages from a flood are in excess of $7 billion. It is therefore reasonable and prudent to have an agency whose sole focus is maintenance of the flood control system and preparation for a flood. The American River Flood Control District has served this community for the past 75-years without a levee failure. Based on our review of their

facilities, staff and funding sources they are poised to continue to provide these services well into the future.

It also appears that a separate, independent Flood Control Board may be able to act more independently by imposing higher standards, and greater quality control related to above or below ground river crossings or other types of encroachments that impact potential river flows.

Other governance options that might be considered include dissolution of the District with its responsibilities being absorbed in the City and County general governments. The City and County of Sacramento could combine levee maintenance and drainage operations into one operation within each of their respective jurisdictions. These services are similar and functionally compatible. Subsequently, resources could be allocated and reallocated to the highest priority for levee maintenance and flood protection. The City and County of Sacramento have resources (personnel and finances) that can be deployed during emergencies which special districts characteristically do not have. However, at the current time they do not have excess resources and would presumably have to increase their staffing to absorb the additional responsibilities and therefore there is little opportunity for cost savings.

As described previously, there are some drawbacks to splitting the duties between these respective governments. First, the levees protecting Sacramento are a contiguous cohesive system and should be maintained and operated as such on a consistent basis. Splitting the levees could lead to differences in levee operation and maintenance standards. It would also result in properties in the City being protected by levees maintained in the County and vice-versa. The current system of a single entity maintaining the contiguous levee system provides the best assurance of consistency in the operation and maintenance of the system. Also, since the City and County have a variety of responsibilities, resources might be diverted from levee maintenance tasks in favor of more pressing issues. Most urban areas in California have dedicated single focus flood control districts including Los Angeles, San Diego, Orange County, Alameda, Marin, Contra Costa, Fresno and Santa Clara. As described above, the consequences of a levee failure are too great not to have a group with a single focus.

A second option, following from the issues raised above, would be to form a single urban flood control agency to operate and maintain the system. SAFCA currently provides such an umbrella framework for planning and financing regional flood control projects (capital improvements), but has no direct operation and maintenance capabilities. At the current time, SAFCA's focus is securing authorization and implementation of a series of flood control projects in the region including levee improvements on the American River; modifications to the outlet works at Folsom Dam; levee seepage issues along the Sacramento River both in Natomas and the Pocket areas; improvements to the creeks in South Sacramento; bank protection work along the American River; system improvements on the Sacramento River and Yolo By-pass; permanent re-operation of Folsom Reservoir and a proposed project to raise the height of Folsom Dam. They do not have the resources or time to begin to assume any operation and maintenance functions.

In addition, several of the proposed flood control projects are at critical junctures and to divert any effort from SAFCA's primary function at this time would be counter productive to Sacramento's goal of achieving at least 200-year flood protection. **When the improvements are completed and the system capable of providing a consistent level of flood protection throughout the community, it may be appropriate to re-visit the issue of a regional governance structure for maintenance including appropriate elected representation.** Currently, the proposed improvements will not be constructed and operable until at least 2010. During the interim, flood control agencies should develop a formal communication process to ensure that adequate flood protection is provided to the Sacramento urbanized region.

REFERENCES

1. American River Flood Control District. Paul Devereux, District Engineer/ Manager.

2. Sacramento Area Flood Control Agency (SAFCA). Butch Hodgkins, Director, Tim Washburn, Agency Counsel.

3. City of Sacramento. Gary Reents, Director, Department of Utilities.

4. American River Flood Control District Act, Act 320. (1927)

5. State of California, Department of Water Resources, Division of Flood Management, Flood Management 1999 Inspection Report, Flood Control Project Maintenance Repair, June 2000.

6. Grand Jury Report (FY 1996-97).

A P P E N D I X

AMERICAN RIVER FLOOD CONTROL DISTRICT RESPONSE TO QUESTIONS FROM OPR GUIDELINES

I. Infrastructure Needs and Deficiencies

1. Government restructure options to enhance and/or eliminate identified infrastructure needs and/or deficiencies.

   Currently, the flood control infrastructure needs and deficiencies in the level of flood protection are being addressed by a concerted effort of the Federal, State and local flood control interests (SAFCA). The American River Flood Control District has adequate reserves to initiate a flood fight to protect the levee system during a significant flood. However, should the flood continue for an extended period or significant levee damage result, it may be necessary to request assistance from the State and Federal government. The levees are undergoing rehabilitation and improvement through capital projects administered by the Army Corps of Engineers. The District continues to provide maintenance to the levees before, during and after construction.

2. Expansion of services to eliminate duplicate infrastructure construction by other agencies.

   There is no duplicate infrastructure constructed by other agencies. The American River Flood Control District operates and maintains levees that are constructed by other agencies.

3. Condition of infrastructure and the availability of financial resources to make necessary changes.

   The condition of the levees within the American River Flood Control District has been significantly improved in the past several years. SAFCA, the State Reclamation Board and the U.S. Army Corps of Engineers are currently making major improvements to the existing levee system to strengthen the core with a slurry wall to reduce water seepage when high flows are sustained for long periods of time. SAFCA is providing the local cost share for these improvements through a Capital Assessment District which was overwhelmingly approved by the property owners in a Proposition 218 election several years ago. In terms of maintenance of levees, the American River Flood Control District has received an

"Outstanding" rating in its maintenance activities by the State Department of Water Resources.

4. Level of service and condition of infrastructure in light of revenue and operating constraints.

   It is anticipated the District will no longer have surplus revenues to build the reserve funds in the near future. Rising labor, insurance, and other inflationary costs will result in expenditures matching revenues. If the assessments are not increased as these costs continue to rise, the District may have to use some of its reserves to fund the normal operation and maintenance activities. The District has indicated its intent to increase the assessment, as necessary, when this point is reached. However, based on current law, any increase would have to be approved by the property owners before it could be implemented.

5. Infrastructure capabilities to accommodate future development with flexible contingency plans.

   No new infrastructure is required to accommodate existing or new development within the area served by the American River Flood Control District. The infrastructure is undergoing upgrading, as previously discussed, in order to improve levees, provide a higher level of flood protection and reduce risk to the communities in the District boundaries.

6. Reserve capacity for properties not served within current boundaries and estimate of properties within current boundaries not eligible for service.

   Not applicable.

7. Provisions for adequate service for properties not currently being served within current boundaries.

   Not applicable.

8. Location of existing and/or planned facilities.

   Not applicable.

9. Location of existing and/or planned infrastructure in relation to affordable housing programs.

   Not applicable.

10. Compliance with environmental and safety standards.

Proposed projects undergo appropriate environmental review prior to approval by the District except during an emergency. The District has a safety program which is in compliance with all labor laws. In addition, the District is a member of the Joint Powers Insurance Authority (JPIA) offered through the Association of California Water Agencies (ACWA). The ACWA-JPIA also offers numerous training sessions which the District staff use on a regular basis.

11. Applicable permit status (i.e., CEQA, etc.).

The District files an annual Notice of Exemption for its routine operation and maintenance activities. Specific projects, including capital improvement projects, are subject to environmental review under CEQA. The major projects currently under construction by the Corps of Engineers have been reviewed and certified under both NEPA and CEQA.

12. Consistency with service and/or capital improvement plans and local and regional land use plans/ policies.

The services provided by the American River Flood Control District are necessary to protect a developed area from flooding. The District services provided to protect the levee system benefit not only current development but also new development. The District is party to the Lower American River Task Force which was formed about 10 years ago to provide a comprehensive framework to evaluate the status of the American River Parkway and review projects which may impact this resource.

II. Growth and Population Projections for the Affected Area

1. Projected growth in and around the agency's service areas.

The area within the District boundary is currently urbanized. Projected population growth is not expected to be significant. Future land use changes could affect population growth if land use changes increase residential densities.

2. Historic and expected land use absorption trends.

Not applicable.

3. Estimate of future service needs.

The future service needs are not likely to be reduced and may, in fact, increase. An improved levee system may be required to increase the level of flood protection and address the impacts of future climate changes mentioned previously. The goal of the American River Flood Control District is to cooperate

with others in securing projects to reduce the flood risk to an acceptable level. Currently the goal is a project providing at least 200-year flood protection. Flood risk will never be completely eliminated, therefore, the District must ensure the levees are ready for each flood season.

The level of flood protection is dictated by federal, state and local community standards. It is calculated based on historical rainfall records. Generally, flood protection is rated in terms of the risk of flooding in any given year based on historical rainfall. For example, a typical standard used by the Federal Emergency Management Agency for flood insurance purposes is one hundred year flood protection (or a 1% risk). This means there is a 1% chance a flood of this magnitude or greater will occur in any given year. However, this level of protection can change if future rains exceed the historical average. This was the case for Sacramento where Folsom Dam and the downstream levees were designed based on rainfall records from the first half of this century. Since its construction in the 1950's, there have been five floods greater than any that had occurred in the first half century. This led to a significant downgrading in the level of flood protection provided by the American River system. If this trend continues due to climate changes, the improvements being constructed today may also be downgraded in the future in terms of the protection they provide Sacramento.

4. Impact of land use plans and growth patterns on service demands.

Changing land use plans and new growth will not change the expected level of service. Higher densities and land uses are likely to spread the costs of providing services to more receivers of the benefit, thereby reducing the average unit cost of levee maintenance. However, it is anticipated that rising costs due to inflation and other employer related demands, such as health and retirement benefits, will outpace the anticipated growth and increased density. Therefore, an increase in the assessment rate is likely in the foreseeable future.

5. Impact of service plans and policies on growth and/or land use patterns for adjacent areas, on mutual or regional social and economic interest, and on the local governmental structure of the county.

Not applicable. Flood protection impacts a defined geographic area. Flooding would impact areas beyond the American River Flood Control District boundary if District levees should fail. People would have to be temporarily or permanently relocated to other areas; structures could be seriously damaged and could need extensive repair. Such an event would affect the region or a single neighborhood; could affect exclusively private property, or affect businesses, public entities or governmental agencies.

6. Relationship between an agency's boundary and SOI with the projected growth in the study area.

Not applicable.

7. Compatibility of service plan(s) with other local agency land use/development plans.

The American River Flood Control District's plan for protecting its District boundary from flooding is compatible with the plans and services of other local land use/ development plans. Without flood protection, existing development in the area would not have been possible; new development would not be possible.

8. Compatibility between agency service plans, regional growth projections and efficient urban development.

The District protects the urban core and existing resources that are vital to the region and its future.

III. Financing Constraints and Opportunities

1. Implementation of appropriate financing/ funding practices.

Benefit assessment is the appropriate funding source for this type of service. Properties share the cost of services provided based on expected benefits.

2. Potential for shared financing and/or joint funding applications.

Contracting with SAFCA and/or leverage with Corps grants is a potential for shared funding applications.

3. Combination of enterprise and/or non-enterprise financing functions.

Not applicable. Flood control cannot be an enterprise function because services benefit land within a specific geographic area exposed to the potential danger of flooding. It is a service; not a commodity that can be purchased as needed, like water or electricity.

4. Compared analysis of financing rates between other agencies in study area.

Not applicable

5. Bond rating(s).

Not applicable.

6. Ability to obtain financing.

   Not applicable. The District does not debt finance projects.

7. Existing and/or proposed assessment district(s).

   Benefit assessment is the appropriate funding source for this type of service. Properties share the cost of services provided based on expected benefits.

8. Opportunities for additional revenue streams, including joint agency grant applications, untapped resources, or alternative government structures.

   At this time, the District does not need additional resources to fund its services. However, it will look for funding opportunities, particularly grant programs available to improve the reliability of the system. Opportunities may also exist to combine flood control improvements with environmental restoration using recently passed State Bonds.

9. Methods to pay down existing debt(s), including using excess revenues.

   Not applicable. The District does not have any outstanding debt.

IV. Cost Avoidance Opportunities

1. Opportunity for joint agency practices, including shared insurance coverage opportunities.

   The District is a member of the Association of California Water Agencies and the Joint Powers Insurance Authority. The District uses this joint powers authority for its employee health benefits as well as insurance needs including liability, property and workmen's compensation.

2. Availability of outsourcing for financial and administrative duties and cost-benefits of outsourcing versus in-house management.

   The District uses consultants for its accounting and legal services.

3. Duplication of services.

   The type of levee maintenance service provided by the District is not duplicated by other agencies, i.e., there are no service overlaps.

4. Impact of service practices and/or facilities in relation to land: available for infill; where excess capacity exists; planned for growth; easiest to serve; and with the

fewest topographic and geographic constraints; and in a manner that supports affordable housing objectives

Not applicable.

5. Impact of service practices and/or facilities in relation to benefit/detriment of service cost.

Not applicable.

6. Impact of growth inducement measures on construction costs and near-term infrastructure deficiencies.

Not applicable.

7. Policies and/or plans to extend services to an area proposed for annexation or new development, particularly with respect to the impact of extending services to existing customers.

The District operates and maintains most of the levees along the American River. There is a very short stretch on the north side between Steelhead Creek and the Sacramento River that is a part of Natomas and thus, maintained by Reclamation District No. 1000. The District currently provides levee operation and maintenance services outside of its boundaries through an agreement with SAFCA in the Dry and Robla Creek areas. As described previously, SAFCA decided to proceed with design and construction of levee improvements in the north area of the District when Congress failed to authorize a comprehensive flood control project in the early 1990's. SAFCA contracted with the District to maintain the new facilities since they were in the same general vicinity as existing District facilities and it could provide the desired services in an efficient and cost effective manner. When the District proceeds with an assessment increase triggering a Proposition 218 election, it may be appropriate to annex these areas into the District through the election process.

In addition, the District is considering a similar relationship with SAFCA for planned levee improvements along the American River upstream of the Mayhew Drain in the Rancho Cordova area. An existing levee operated and maintained by the County of Sacramento is to be improved by the Corps of Engineers and assimilated into the federal Sacramento River Flood Control Project (Project). The District currently operates and maintains all of the American River levees which are part of the Project, SAFCA must give assurance to the State of California for the future maintenance of the new facilities. It is logical for the District to assume the actual maintenance obligations through an agreement with SAFCA. Similar to the levees described above, it may be appropriate for the District to annex this area as part of a future Proposition 218 election.

8. Impact of service practices and/or facilities on affordable housing objectives.

Not applicable.

9. Impact of additional services/ capacity on agency's fiscal viability, including cost and adequacy of services in existing or proposed service areas and/or areas served by other special districts, cities, or the county.

Not applicable.

10. Relationship between current level of service and customer needs and preferences.

Not applicable.

11. Opportunities for savings or augmentation in overhead, including employee salary or benefits, elected official compensation or benefits, equipment purchases, planning, etc.

There are limited opportunities for overhead savings. Employee salaries are comparable to other public agencies and payments to Trustees are minimal. The District has a small equipment fleet which is used on a regular basis. Regional flood control planning efforts are done by SAFCA.

12. Pro-rata service costs for customer/ratepayer and/or taxpayer.

Not applicable.

13. Application and/or bid process for contractor assistance, including comparison of rates.

Not applicable.

V. Opportunities for Rate Restructuring

1. Agency's methodology for determining rates.

The District currently is divided into three zones of benefit. The allocation of costs which must be spread among the properties in each zone is based on the linear levee mileage protecting that zone. Thus, the maintenance costs spread to each zone are directly proportional to the amount of levee protecting that zone.

2. Availability of revenue enhancement opportunities to lessen and/or stabilize rates.

Not applicable.

3. Relationship between rate differences among service providers and levels of service.

   Not applicable. There are no other service providers in the area served by the District.

4. Rate comparison between service providers with similar service conditions.

   Not applicable.

5. Cost of services versus fees.

   The assessments currently collected cover the cost of services that are provided.

6. The services that ratepayers and/or assessed properties are receiving for which they are paying.

   Services provided are on-going operations and maintenance costs used to maintain a levee system designed to prevent flooding.

7. Financial impacts on existing customers caused by the funding of infrastructure needed to support new development.

   Not applicable. The infrastructure is fixed and no change or increase is required to support new development or infill within the District's service boundary. However, the level of infrastructure required to protect the territory within the District boundary could change if federal, state or local engineers determine that the levees are not high enough to protect against storms that would exceed the capacity of the entire American River and Sacramento River flood control system. In this case, the local funding would be provided through SAFCA.

8. Impacts of standby rates (charges assessed to under-or-undeveloped land used for rural, agricultural or open spaces uses) on open space and affordable housing plans.

   Not applicable.

9. Relationship between rate and service policies and the provision of decent and affordable housing.

   Not applicable.

10. Availability of reasonable emergency reserves.

The District maintains Flood Fight, Emergency Repair and Capital Outlay Reserve funds. Based on current fund balances, the District staff believes there are adequate funds to cover emergency situations, and the District is prepared for severe winter storms.

11. Use of annual savings.

Annual cost savings roll into fund balances to augment reserve fund balances and for future projects and repairs that are needed. The American River Flood Control District appears to have adequate fund balances at this time. Major storms that tax the system do not occur ever year, thus fund balances and resource needs are not constant. The District attempts to prepare for major storm events by accumulating fund balances during "normal" rain years.

VI. Opportunities for Shared Facilities

1. Current shared activities with other service providers, including shared facilities and staff.

Since much of the District facilities are located adjacent to the American River Parkway, County Park staff, fire districts, utility companies and other regular users of the Parkway have come to rely on the District's levees for access along the parkway, especially during high water. The District's levees are used extensively by members of the public for walking, jogging, bike riding and other leisure activities. In a number of locations, bike trails have been placed on and adjacent to the levees as part of the County's Jedediah Smith trail. Also due to the proximity of Parkway property to our levees, the District has extended its mowing and spraying activities to include some of the County property where reasonable. The District has also assisted with vegetation removal and assisted in responding to fires in the Parkway using its resources to assist fire responders.

In addition, through a Mutual Aid Agreement, the District can use City and County staff to supplement its own resources during a major flood event. These are typically staff which are not working during a flood such as construction and building inspectors. Flood training is provided annually for these supplemental staff through the District.

2. Suggested existing and/or future shared facility opportunities by the agency.

None.

3. Opportunities for conjunctive and/or joint use projects, such as groundwater storage/parks, schools/parks, or flood detention/parks.

The City of Sacramento is currently proposing a number of recreational trails on and adjacent to the District's levees along the American River and the creeks in North Sacramento. The District has adopted a policy supporting such recreational use provided it does not interfere with our ability to properly operate and maintain the levees, especially during a flood emergency. During most times of the year, recreational activities can co-exist without causing problems. The development of bike trails along the flood control system can also assist in alternative transportation modes for commuters, thus reducing traffic congestion and air pollution.

As part of recent improvements to the City of Sacramento's water intake facility along the Sacramento River, the City has incorporated a rotunda for the public to gather and observe the Sacramento River as part of the levee system. Of course during maintenance activities and floods, this area will be closed to the public for safety reasons.

The District also has the ability to share equipment, manpower, material and expertise with other flood control districts. There are general standard maintenance techniques of work performed that is similar between districts. There are different operational philosophies and conditions, however. For example, one flood control district may stockpile rock for emergencies while another district relies on contracts to provide rock and other materials upon demand. The decision to either stockpile or to rely on delivery by contract would be determined by factors that include the location of potential trouble spots, access to trouble spots by roadways that would be available in an emergency, as well as availability of a location for stockpiling rock.

4. Duplication of existing and/or planned facilities of other service providers.

Not applicable. Levee systems are not duplicated.

5. Availability of excess capacity to serve customers of other agencies.

Not applicable. There is no excess capacity to serve customers of other agencies.

VII. Government Structure Options

1. Available government options to provide more logical service boundaries to the benefit of customers and regional planning goals and objectives.

Flood protection is a regional issue and must be addressed as such, including operation and maintenance. Poor maintenance in one jurisdiction could lead to

flood damages in another. Therefore, it is prudent to address flood control on a system-wide basis rather than using existing political boundaries. The Sacramento Area Flood Control Agency was created to plan and finance a regional flood control system in cooperation with the State and Federal governments. Local flood control districts and reclamation districts operate and maintain portions of the regional system that protects specific geographic areas.

2. Recommendations by a service provider and/or an interested party for government options.

   Not applicable.

3. Anticipated proposals to LAFCo that will affect the service provider.

   Not applicable.

4. Prior proposals or attempts by the agency to consolidate and/or reorganize.

   The American River Flood Control District has taken over the maintenance of levees in District Maintenance Area Nos. 10 and 11 from state control. These levees are located on the north side of the American River on the east and west sides of Watt Avenue. This extension of American River Flood Control District levee maintenance is logical and appropriate because of its proximity to the area already served by the District.

   In the past, the District has also considered taking over the levee maintenance responsibilities of Maintenance Area No. 9 along the Sacramento River since properties in that area are subject to flooding from a levee failure along the American River and likewise, some properties in the District are susceptible to flooding from a levee failure on the Sacramento River.

   However, the District does not believe this is an appropriate time to consider further consolidation of maintenance activities, such as taking over the responsibility for Maintenance Area No. 9. There is still a significant amount of capital improvements on these and other levees in the system being studied, designed and constructed. Once all the major modifications to the system are completed for this period, a comprehensive review of the overall system operation and maintenance would be appropriate.

5. Availability of government options that improve public participation, local accountability, and governance.

   Similar to the response above. The State currently maintains the levees in Maintenance Area No. 9 where there is no local representation or opportunities for public participation other than through the State. If the area were to be annexed into the District, there would be additional opportunities for local

governance, accountability and public participation. Also as noted above, though, the District believes that such consolidation would be inappropriate at the present time.

6. Opportunities to create definite and certain boundaries that conform to lines of assessment or ownership and/or eliminate islands, corridors of unincorporated territory, and other difficult or illogical service areas.

   The area served by the American River Flood Control District is definite and certain based on territory that potentially could flood. It is a defined geographic area based on engineering studies.

7. Existing boundary disputes.

   None.

8. Elimination of overlapping boundaries that confuse the public, cause service inefficiencies, unnecessarily increase in the cost of infrastructure, exacerbate rates and/or undermine good planning practices.

   None. Boundaries do not overlap with other flood control districts or reclamation districts. The entire American River Flood Control District is contained within the boundaries of the Sacramento Area Flood Control Agency. Assessments charged by SAFCA are for capital improvements to the system for the purpose of upgrading existing levees and/or constructing new levees. Assessment methodologies between the two agencies are different.

9. Reevaluation of boundaries, including downsizing SOI boundaries and/or approving other boundary modifications that remove important open space and agricultural lands from urban services areas.

   Not applicable.

10. Availability of government options that stabilize, steady and/or clarify the government process in order to reduce costs or increase customer satisfaction.

    Unknown. Several potential options exist to reorganize or consolidate operations. However, additional analysis would be required. The following governmental structure alternatives to the present structure exist:

    (1) Consolidate all urban levee maintenance (except Natomas) under the American River Flood Control District.

    (2) Reorganize American River Flood Control District into the City of Sacramento Department of Utilities and Sacramento County Department of Water Resources as separate divisions of these respective agencies.

(3) Consolidate or reorganize all the urban districts responsible for maintaining levees into one responsible agency for the entire County of Sacramento.

(4) Consolidate or reorganize levee maintenance functions with the Sacramento Area Flood Control Agency to create a super regional flood control agency responsible for both the construction and the maintenance and operation of the regional flood control system and its facilities.

As noted above, given the outstanding performance of the American River Flood Control District as evaluated by the Department of Water Resources, it is staff's recommendation that the Commission take no action to modify the current governmental structure.

11. Availability of government options that may produce economies of scale and improve buying power in order to reduce service and housing costs.

Not applicable.

12. Availability of government options that cause appropriate facilities to be shared and avoid the construction of extra and/or necessary infrastructure.

Consolidation would not eliminate the need for infrastructure. There could be possible savings by avoiding duplication of overhead related to administrative functions, office space, warehouse and sharing of equipment and material. Additional analysis would be required.

13. Making excess capacity available to other service users in order to eliminate duplicate infrastructure construction by multiple agencies and reduce costs to customers.

Excess capacity is not available for use by other service providers.

14. Opportunities to improve the availability of water rights and/or supplies (surface, reclaimed or groundwater) to a larger customer base through a change in government organization.

Not applicable.

15. Availability of government options that could facilitate construction, financing and/or eliminate the need for new facility construction.

The capacity to help reduce the duplicative costs of operating and maintaining two or more offices exists through consolidation or reorganization.

16. Cost benefit of restructuring current elected board and/or administration to any proposed alternative.

Minimal, if at all.

17. Cost benefit of restructuring overhead, including staff, capital outlays, allocation of reserves or savings, loaded administrative charges for grant administration, accounting, and other contracted services.

Minimal, if at all.

18. Cost benefit of restructuring the direct distribution of costs or debts from shared facilities to a larger user population.

Minimal, if at all.

19. Opportunities for the sale of surplus properties through a change in government organization.

Not applicable.

20. Availability of excess reserves for service improvements and/or rate reductions through a change in government organization.

Not applicable.

21. Opportunities to enhance capital improvement plans and programs through a change in government structure.

Not applicable.

22. Opportunities to streamline services through the reorganization of service providers that no longer provide services for which they were formed.

Not applicable.

23. Opportunities for early debt repayment and related savings through a change in government structure.

Not applicable.

24. Elimination of rate structures that impose growth pressures on open space resources.

Not applicable

25. Identification of illogical boundaries and their effect on rates.

Not applicable.

26. Impact of government structure options on an agency's financial stability.

Not applicable.

27. Rationale for an agency's emergency and/or undesignated reserves (fund equity or balance), particularly in relation to their gross annual revenue.

The District has established three separate contingency accounts. The District must be in a position to respond immediately to a flood emergency to prevent a catastrophic levee failure. As such, there must be adequate cash reserves to pay for materials, equipment and labor. During a flood fight, activities are going 24-hours a day seven days a week. The District estimates a three-day flood fight could cost in excess of $1 million, depending on the number of concurrent sites where the levee is under threat. The District has established a Flood Fight Reserve Fund to meet this obligation.

Similarly, after the flood threat has passed and there is significant damage to a levee or in the unfortunate circumstance where a levee has failed, the District would need to immediately repair the damage or close the gap in the levee before the next storm occurs. Though outside emergency funds may be used, they may not be available in a timely manner to do the work before the next flood threat. Therefore, the District must be in a financial position to incur the costs for the repairs and seek reimbursement. Based on recent levee construction costs during "ideal" conditions, the cost to reconstruct a significant piece of levee would exceed $1 million. The District has established an Emergency Repair fund to finance this obligation.

Finally, the District has established a Capital Improvement Reserve fund for anticipated future capital projects. Recent experience has shown that floods are causing serious erosion along the American and Sacramento Rivers' banks and adjoining levees. This erosion is anticipated to increase over time with future floods. A number of sites have been repaired in the past using District funds and in some cases; they have included State and Federal funds, always with some local cost sharing. The cost of these projects has increased exponentially, primarily because of environmental mitigation requirements to lessen the impacts to rare and endangered species as required by law. Recent projects along the American River have cost several million dollars for limited reaches along the bank. Fortunately, the Federal and State government picked up most of the project costs and SAFCA, along with the District, funded the remaining costs. The Capital Improvement Reserve fund will provide the District with the financial means to implement these projects in the future.

28. Changes and/or modifications in boundaries in order to promote planned, orderly, and efficient patterns of urban development.

Not applicable. Land use patterns within the American River Flood Control District have already been established and approved by City of Sacramento and County of Sacramento General Plans.

29. Changes and/or modifications in boundaries in order to avoid premature inducement, facilitation, or conversion of existing open space lands, including: the direction of growth away from prime agricultural and important open space lands towards infill areas or areas containing nonprime agricultural land; the development of vacant land adjacent to existing urban areas and within existing spheres of influence.

30. Boundary adjustments in order to minimize the amount of land needed to accommodate growth in the next 5-10 years within the spheres of influence of special districts and cities.

Not applicable.

31. Prevention of extensions of urban services to important agriculture and open space areas not planned for growth or within the boundaries of the city or special district.

Not applicable.

32. Impact of a change in government structure on the implementation of regional transportation, water quality, air quality, fair share housing allocation, environmental justice, airport land use, open space, agricultural, and other environmental policies or programs.

Not applicable.

33. Impacts of government structures on fair housing programs.

Not applicable.

34. Available government options that improve the ability to provide and explain budget and financial data.

The District now provides an annual newsletter to all ratepayers and plans to disseminate information via the Internet.

35. Opportunities for improvement in the quality and/or levels of service through changes in government structure.

Service levels for existing service providers appear to be comparable. It would be difficult to determine whether or not the quality of maintaining a levee would improve significantly through a change in governmental structure.

36. Impact of investment policies on service levels and quality.

Minimal.

37. Evaluation of bond rates, ability to borrow or obtain grants, budget practices and other aid.

Not applicable at this time.

38. Ability to gain environmental benefits (wetland restoration, water conservation, and other conservation policies) through government structure options.

Unknown. The District needs to coordinate with other State and local agencies to minimize any negative environmental impacts related to the operation of levee maintenance.

39. Opportunities to integrate services without excessive cost.

Unknown.

40. Cost benefit analysis of potential changes in government structure through merging staff, staff reduction by attrition, phasing out of elected or appointed positions, and management staff.

Unknown but probably minimal.

41. Opportunities for improved service delivery and/or an increase in system standards by system integration through changes in government structure.

Not applicable.

42. Identify prohibitions in the affected Principal Acts that would affect government structure options, including pending litigation, court judgments, other legal issues, restricted assets, financial or other constraints.

The District was created by the Legislature and revisions to its principal act would need to be made by the Legislature.

43. Integration of debts and obligations analyses.

Not applicable.

44. Potential successor agencies.

Not applicable.

45. Impact on existing systems (upgrades) due to government structure changes.

Not applicable.

46. Impact on operating cost (short and long term) due to government structure changes.

Not applicable but probably minimal.

47. Evaluation of long term savings through government structure changes versus related transition costs.

Not applicable but probably minimal.

48. Evaluation of permit status upon integration.

Unknown.

VIII. Evaluation of Management Efficiencies

1. Evaluation of agency's capacity to assist with and/or assume services provided by other agencies.

The District is able to assist other flood control districts in carrying out certain tasks, within the limits of staff and budget.

2. Evaluation of agency's spending on mandatory programs.

Not applicable.

3. Comparison of agency's mission statement and published customer service goals and objectives.

Not applicable.

4. Availability of master service plan(s).

Not applicable.

5. Contingency plans for accommodating existing and planned growth.

   There is only modest infill development anticipated in the District, most of the area is already urbanized.

6. Publicized activities: Newsletter, Board meetings.

   The District recently mailed an annual newsletter to all property owners and renters in the District which provide information about the activities of the District including the time and place of its regular Board of Trustee meetings. It also included phone numbers, addresses and e-mails for the District and its management staff.

7. Implementation of continuous improvement plans and strategies for budgeting, managing costs, training and utilizing personnel, and customer service and involvement.

   District management staff regularly attends professional seminars in order to be able to implement appropriate management plans and strategies.

8. Personnel policies.

   The District has an Employee Handbook which describes the District's personnel policies.

9. Availability of resources (fiscal, manpower, equipment, adopted service or work plans) to provide adequate service.

   The District generates an annual maintenance plan that is submitted and approved by the State Department of Water Resources. The District has adequate personnel, equipment and materials for normal operation and maintenance as confirmed by its "outstanding" rating for the last 10 years by DWR.

10. Available technology to conduct an efficient business.

    The District has personal computers and is fully integrated into the Internet to access real time weather, river stage, and reservoir levels.

11. Collection and maintenance of pertinent data necessary to comply with state laws and provide adequate services.

    District management staff attends workshops, seminars and conferences to keep abreast of new legislation affecting personnel and labor issues. The District's contract counsel also provides legal advice to the Board and staff on these matters.

12. Opportunities for joint powers agreements, Joint Powers Authorities, and/or regional planning opportunities.

    The District is one of the member agencies for SAFCA which is the regional planning agency for flood control issues

13. Evaluation of agency's system of performance measures.

    District's performance is evaluated twice a year by DWR staff and includes a written record.

14. Capital improvement projects as they pertain to Section 65401 and 651039c.

15. Accounting practices.

    The District's financial records are subject to an annual audit by an independent auditor.

16. Maintenance of contingency reserves.

    As noted above, the District maintains adequate reserve funds for use during or after a flood emergency.

17. Written policies regarding the accumulation and use of reserves and investment practices.

    The District has a written investment policy adopted by the Board of Trustees.

18. Impact of agency's policies and practices on environmental objectives and affordable housing.

    The District fully complies with CEQA in performing its activities.

19. Environment and safety compliance.

    The District fully complies with all applicable environmental and safety laws in carrying out its activities. District staff attend regular training sessions on how to perform their jobs in a safe manner.

20. Current litigation and/or grand jury inquiry involving the service under LAFCo review.

    The District is one of several parties (including the County of Sacramento, City of Sacramento, Reclamation District 1000, and the State of California) being sued by plaintiffs as a result of the 1986 floods.

IX. Local Accountability and Governance

1. Compliance with state disclosure laws and the Brown Act.

   The American River Flood Control District complies with state public disclosure laws and the Brown Act.

2. Level of public participation (i.e., open meetings, accessible staff and elected officials, an accessible office open to the public, a phone and/or message center, customer complaint and suggestion opportunities).

   American River Flood Control District staff is available and accessible to the public at the District's offices. The Board of Trustees meets once per month at noticed public meetings held in the District office.

   Time: 11:00 A.M.
   Date: Second Friday of each Month
   Place: ARFCD District Office
   165 Commerce Circle, Suite D.
   Sacramento, California

   The District provided the names, phone numbers, addresses and e-mail for its management staff to the public in its annual newsletter. A number of responses to the newsletter were received and provided with appropriate responses.

3. Agency representatives (i.e., board members, employees, staff).

   Nine positions and five Board of Trustee members represent the American River Flood Control District.

4. Public outreach efforts (i.e., newsletters, bill inserts TV, website).

   The District has prepared an annual Newsletter entitled *Floodwise* that is mailed to all property owners and renters within the boundaries of the American River Flood Control District. The newsletter provides information on the Board meeting days and times, activities of the District, and contact information such as names, phone numbers and e-mail addresses for the public to ask questions or get information. In addition, the District has revised its logo and places it on all equipment owned by the District as well as employee uniforms so they can be readily identified by the public. The District anticipates construction of a website in the near future to provide more public outreach including Board agendas, budget information and links to other flood control sites.

5. Media involvement (i.e., meetings publicized, evening board meetings, evening or weekend public planning sessions).

   See numbers 2 and 4 above.

6. Accessibility of meetings (i.e., meetings publicized, evening board meetings, evening or weekend planning sessions).

   See numbers 2 and 4 above. Also, the District posts its agenda at the District's offices as required by the Brown Act. The District office is ADA compliant.

7. Election process.

   Trustees are elected to serve four year staggered terms.

8. Participation of service users in elections (i.e., elections publicized, day and evening voting).

   The American River Flood Control District combines its election with the County general election in November. Therefore, all eligible voters who vote in the November General Election have an opportunity to vote for the District's Board of Trustees. The percentage of landowners who participated in the election of Board of Trustee members for the American River Flood Control District is unknown.

9. Public access to adopted budgets.

   The American River Flood Control District is a public agency. Its work is part of the public record. The public has access to staff reports, budget information and all other public records.

10. Budget reports' compatibility with state law.

    Budget reporting and accounting procedures comply with state law.

11. Audits.

    The American River Flood Control District is audited annually by the firm of Essary, Dal Porto & Lowe. Copies of the audit are available to the public at District offices. No issues or concerns have been reported by auditors that need to be brought to the attention of district staff, the Board, the District Attorney's Office or the Grand Jury.

12. Access to program progress reports.

    Annual Newsletter.

13. Current provision of service(s).

PB:Maf
(ARFCD Exhibit A2)