FINAL REPORT ON SACRAMENTO AREA FLOOD CONTROL AGENCY
ASSESSMENT DISTRICT SOURCES AND USES OF FUNDING -1989 TO PRESENT

January 2007

INTRODUCTION

The Sacramento Area Flood Control Agency (SAFCA) was created in 1989 to address the deficiencies in the federal/state flood control system protecting the Sacramento area that were exposed by the record flood of 1986. This report presents an overview of the activities funded by SAFCA and its federal and state partners since the Agency's inception. The report groups these activities into the three special benefit assessment districts which SAFCA has created to provide local funding: the Operations and Maintenance Assessment District No. 1 (O&M District), the North Area Local Project Capital Assessment District No. 2 (NALP District), and the American River/South Sacramento Streams Group Capital Assessment District No. 3 (AR/SSSG District).

O&M DISTRICT

Background

In 1990, the California Legislature enacted the Sacramento Area Flood Control Agency Act (Stats. 1990, c. 510 (SB 46)) declaring that "...the agency shall have as its highest priority the protection of life, property, watercourses, watersheds and public highways within its boundaries from damage from flood and storm waters. In addition, to the maximum extent feasible and consistent with its flood protection and flood management requirements and with state and federal agreements, the agency shall carry out its flood management requirements in ways which provide for the optimum protection of the natural environment, especially riparian habitat and natural stream channels suitable for native plant and wildlife habitat and public recreation." The SAFCA Act authorizes the agency to use a variety of funding mechanisms to achieve these purposes including collecting assessments to pay for operation and maintenance of projects, satisfaction of liabilities arising from projects, administration of the agency, and accumulation of a fund to advance the cost of agency projects, provided such advances are repaid from assessments, special taxes or fees charged by the agency pursuant to the Act.

The SAFCA Board created the O&M District in 1991 to fund general administration and flood control planning activities, SAFCA's share of the cost of levee strengthening and related floodway management efforts, SAFCA's share of the cost of re-operating Folsom Dam on an interim basis, and operation and maintenance activities related to completed projects. As set forth in the *Engineer's Report for Sacramento Area Flood Control Agency Operation and Maintenance Assessment for Assessment District No. 1*, the O&M District includes a "flood zone" encompassing all of the properties that could be inundated in the event of an uncontrolled 200-year flood along the Lower Sacramento and American Rivers and a "non-flood zone" encompassing the properties within SAFCA's jurisdiction that contribute run-off to the flood zone. Annual assessments are apportioned within the district based on potential for flood damage, runoff, dependence on floodable public infrastructure, and land value. Flood zone properties bear approximately 85 percent of the assessment. The remaining 15 percent is borne by the non-flood zone properties.

General Administration Activities

The general administration of the agency covers the following activities: office facilities, staff salaries, mailing, insurance, assessment engineering, legal and lobbying services, grant writing, special events, and other ongoing activities. The cost of these activities recurs on an annual basis and is paid out of the proceeds of the annual O&M District assessment. Table 1 provides a summary of the cost of these activities since 1989.

Planning Activities

SAFCA's planning activities include engineering, environmental, legislative and legal services performed by SAFCA staff and consultants in connection with a diverse array of projects that have the potential to reduce flood risk, protect riparian habitat and natural stream channels, and facilitate open space recreation along the Lower Sacramento and American Rivers, Lower Dry/Robla Creek, Lower Arcade Creek, the Natomas East Main Drainage Canal/Steelhead Creek (NEMDC), and portions of the North Delta south of Freeport. Because of the breadth of the affected flood control, environmental and recreational interests in these areas, these planning activities often involve partnerships with other local, state and federal agencies and are supported in part by grants and contributions from these agencies. Some planning activities are ongoing and some are project specific. As a general rule, project specific costs are allocated to planning until essential California Environmental Quality Act (CEQA) requirements are met and the project is authorized for implementation by the Board. Table 1 summarizes the costs associated with SAFCA's project planning activities, including the sources of funding for these activities.

Debt Service

In order to facilitate funding of operations and maintenance and capital improvement activities in the initial years following SAFCA's creation, the agency arranged a series of loans from the City and County of Sacramento and then repaid these loans from assessments and bond proceeds. City and County loans totaling $4,325,800 were received in 1990-91 to cover the costs of strengthening the east levee of the Sacramento River as part of the Sacramento Urban Area Levee Reconstruction Project. These loans were repaid during the following three years from O&M District assessments. In 1993, SAFCA obtained an additional $10.0 million loan from the City to cover ongoing operation and maintenance activities and initiation of the North Area Local Project. SAFCA made interest only payments on this loan until 1996 when the loan principal was repaid with bond proceeds. The O&M District received half of the benefits of the City loan and absorbed responsibility for half of the debt service on the 1996 bonds. Table 1 provides a summary of these debt service payments.

Table 1 – General Administration and Planning Costs

Fiscal Year	Administration	Planning	Debt Service
1989-90	394,115.00		
1990-91	1,229,634.00	108,410.00	1,352,055.00
1991-92	958,495.00	867,856.00	1,386,181.00
1992-93	650,531.00	409,803.00	2,356,893.00
1993-94	936,252.00	1,436,145.00	719,000.00
1994-95	2,531,810.00	1,331,641.00	719,000.00
1995-96	1,729,674.00	1,523,211.00	719,000.00
1996-97	2,515,521.00	1,863,462.00	1,167,793.00
1997-98	4,143,557.00	1,434,680.00	822,166.00
1998-99	1,450,428.00	760,410.51	282,231.00
1999-2000	2,395,788.00	2,733,983.00	888,441.00
2000-01	2,641,902.00	725,860.00	437,645.00
2001-02	4,130,181.00	1,273,265.00	519,124.00
2002-03	2,786,674.00	1,635,580.00	
2003-04	2,987,720.00	1,241,224.00	385,906.00
2004-05	3,570,968.00	981,197.00	392,849.00
2005-06	4,066,040.96	991,114.53	389,233.93
2006-07 Est	4,548,491.24	594,610.00	377,000.00
Total	**43,667,782.20**	**19,912,452.04**	**12,914,517.93**

Operation and Maintenance Activities

SAFCA's operation and maintenance activities are also both ongoing and project specific. The ongoing activities focus on operation and maintenance of completed improvements for which the agency has accepted responsibility in the floodways along Lower Dry Creek, the lower portion of the NEMDC (North Area Floodway) and along the Lower American River (American River Floodway). These activities and their costs are described below and summarized in Tables 2 through 6.

North Area Floodway Management

SAFCA has responsibility for operating, maintaining and managing completed flood control and associated environmental mitigation facilities in the North Area Floodway along lower Dry Creek and the lower portion of the NEMDC in North Sacramento. These facilities include: the NEMDC stormwater pumping station (pumping station), the new Dry Creek north levee, the new reach of the Robla Creek south levee, and the new Robla Creek north levee, the Wolf Ranch Wildlife Refuge and the Hansen Ranch mitigation area.

The NEMDC pumping station was constructed as part of the North Area Local Project to control high water in the NEMDC near the mouth of Dry Creek resulting from simultaneous flood flows in Lower American River, Lower Dry Creek and the tributary streams between Sankey Road and Dry Creek east of Natomas. This facility was completed in 1998 and is operated and maintained by the Sacramento County Department of Water Resources under contract to SAFCA.

The Dry Creek north levee was also constructed as part of the North Area Local Project. It extends eastward from the NEMDC pumping station and prevents the flows contained by this facility from spilling onto developed lands north of Dry Creek. This facility was completed in 1995 and is operated and maintained by the American River Flood Control District under contract to SAFCA.

The 65-acre Wolf Ranch Wildlife Refuge was acquired as part of the North Area Local Project to provide borrow material for levee improvements and was then reclaimed to create enhanced fish and wildlife habitat as mitigation for unavoidable losses of such habitat attributable to the project. The site consists of a large open water pond ringed by seasonal wetland/riparian habitat areas that provide a refuge for birds and small mammals and hiking and

wildlife viewing opportunities for local citizens. The site is maintained by consultants under contract to the Agency with supervision by SAFCA staff.

The Hansen Ranch Mitigation Area covers approximately 250 acres of grazing land extending east from the mouth of Dry Creek between the new Dry Creek north levee and the Robla Creek south levee. This land is owned by the City of Sacramento. SAFCA acquired easements on the land as part of the North Area Local Project to provide storage space for flood waters contained by the NEMDC pumping station and the Dry Creek north levee and to preserve vernal pool habitat located on the property. The property is operated and maintained by consultants under contract to the Agency with supervision by SAFCA staff.

American River Floodway Management

SAFCA has responsibility for maintaining a number of mitigation areas in the lower reach of the American River Parkway that have been created to offset unavoidable losses of seasonal wetland/riparian and aquatic habitat resulting from a series of bank protection and levee improvement projects undertaken by the U.S. Army Corps of Engineers (Corps), the State Reclamation Board (Reclamation Board) and SAFCA along the Lower American River. These mitigation areas include a 20-acre borrow/seasonal wetland and riparian habitat restoration site on the north side of the river near the intersection of Northgate Boulevard and Del Paso Road; and floodplain habitat restoration sites along the left (L) and right (R) banks of the river at River Miles 0.9(R), 1.8(L), 2.1(L), 3.3(L), 4.2(L), 4.4(L), 7.2(L), 7.6(R), 8.3(R), 10.0(L) and 11.6(R). These sites have been maintained by consultants under contact to the Agency with supervision by SAFCA staff.

Table 2 – Operation and Maintenance Activities Costs			
Fiscal Year	**North Area Floodway Mgt**	**American River Floodway Mgt**	**Total**
1998-99	214,785.59	101,632.48	316,418.07
1999-2000	1,395,388.83	150,419.09	1,545,807.92
2000-01	346,614.21	326,783.03	673,397.24
2001-02	550,546.44	456,433.28	1,006,979.72
2002-03	291,067.55	314,612.05	605,679.60
2003-04	498,143.79	366,296.25	864,440.04
2004-05	619,621.23	342,559.86	962,181.09
2005-06	148,108.00	263,469.93	411,577.93
2006-07 Est	1,427,306.00	301,640.00	1,728,946.00
Total	**5,491,581.64**	**2,623,845.97**	**8,115,427.61**

Levee Strengthening

Levee strengthening has been a major O&M activity undertaken to correct design deficiencies in the Federal/State levee system protecting the Sacramento area. This activity has focused primarily on the east levee of the Sacramento River between Verona at the mouth of the Natomas Cross Canal (NCC) and the town of Freeport and to a lesser extent on the south levee of the NCC and the west levee of the Pleasant Grove Creek Canal (PGCC) at the northern end of Natomas. The costs associated with these activities and the sources of funding for these costs are summarized in Table 3.

Sacramento River Urban Levee Reconstruction

Reconstruction of the east levee of the Sacramento River was initiated by the Corps in 1990 with the cooperation of the Reclamation Board and SAFCA to correct design deficiencies exposed during the flood of 1986. Between 1990 and 1993, the cooperating agencies reconstructed significant portions of the levee to address through-levee seepage problems. The remedial work consisted primarily of inserting seepage cut-off walls into the affected levee sections and, where real estate was available, constructing drained stability berms along the landside of the levee. In 2003, SAFCA corrected additional seepage problems that threatened the levee in the little Pocket and Pocket

areas of Sacramento near one of the City of Sacramento's major storm water pumping facilities. This work also involved construction of a cutoff wall through the levee.

Natomas Cross Canal (NCC) and Pleasant Grove Creek Canal (PGCC) Levee Reconstruction

Between 1993 and 1999, SAFCA reconstructed portions of the NCC south levee and the PGCC levee in Sutter County. The purpose of this work was to strengthen these levees so that they could safely withstand the flood events for which they were designed without substantial risk of failure. The work along the south levee of the NCC consisted of constructing a stability berm along the landside of the levee, similar to what was done along the portions of the east levee of the Sacramento River as part of the Sacramento Urban Levee Reconstruction Project. The work along of the PGCC levee consisted of hardening low spots in the levee at three road crossings, Howsley Road, Fifield Road, and Sankey Road, so that the flood water contained by the levee could overtop the levee at these locations and flow into Natomas without causing the levee to fail.

Table 3 – Levee Strengthening Activities Costs					
	Sacramento River East Levee			NCC/PGCC	
Fiscal Year	Federal	State	SAFCA	SAFCA	Total
1990-91			3,358,609.00		3,358,609.00
1991-92			1,525,734.00		1,525,734.00
1992-93			80,537.00	6,325.00	86,862.00
1993-94			101,589.00	28,592.00	130,181.00
1994-95				28,811.00	28,811.00
1995-96				890,551.00	890,551.00
1996-97				5,240,185.00	5,240,185.00
1997-98				227,256.00	227,256.00
1998-99			7,144.00	43,346.00	50,490.00
1999-2000					
2000-01					
2001-02			827,610.78		827,610.78
2002-03			641,234.36		641,234.36
2003-04			6,219,583.04		6,219,583.04
2004-05			1,293,996.49		1,293,996.49
2005-06			1,247,388.25		1,247,388.25
2006-07 Est			2,748,266.53		2,748,266.53
Total	**28,002,700.00***	**6,533,960.00***	**18,051,692.45**	**6,465,066.00**	**59,053,418.45**

*Summary totals only available

Magpie Creek Diversion Channel Reconstruction

The Magpie Creek Diversion Channel (Diversion Channel) is a Federal/State facility that was constructed by the Corps in the 1950's to intercept flood flows in the Magpie Creek watershed upstream of Raley Boulevard and redirect them to Lower Dry/Robla Creek. The Diversion Channel left levee has inadequate height to contain high flows in the watershed. Since 1995, SAFCA has been cooperating with the Corps, the Reclamation Board, the American River Flood Control District, and the City of Sacramento in efforts to redesign and reconstruct the Diversion Channel so as to prevent uncontrolled flooding in the floodplain encompassing portions of the City of Sacramento downstream of Raley Boulevard. These efforts have included engineering feasibility studies,

environmental review, land acquisition and minor improvements to the Diversion Channel pending agreement on a long-term reconstruction plan. The costs associated with these activities and the sources of funding for these costs are summarized in Table 4.

Table 4 – Magpie Creek Diversion Channel Activities Costs

Fiscal Year	Federal	State	SAFCA	Total
1995-96			51,189.00	51,189.00
1996-97			29,391.00	29,391.00
1997-98			28,588.00	28,588.00
1998-99			63,746.00	63,746.00
1999-2000			682,991.00	682,991.00
2000-01			152,674.00	152,674.00
2001-02			174,344.00	174,344.00
2002-03			89,930.00	89,930.00
2003-04			61,054.00	61,054.00
2004-05			38,173.00	38,173.00
2005-06			71,120.00	71,120.00
2006-07 Est			18,580.00	18,580.00
Total	**2,384,455.00***	**2,211,798.00****	**1,461,780.00**	**6,058,035.00**

* Summary totals only available

** Includes $1,685,000 in transfers to SAFCA placed in unspent reserve

Interim Folsom Dam Re-operation

In March 1995, SAFCA entered into an agreement with the United States Bureau of Reclamation (Reclamation) to modify the flood control operation at Folsom Dam. The agreement called for Reclamation to increase the space available for flood control storage at Folsom by up to 270,000 acre-feet if measured storage conditions in three non-federal reservoirs upstream of the dam warranted such an adjustment. The agreement further called for SAFCA to reimburse Reclamation contractors for any loss of water, hydropower, or other benefits provided by Folsom Dam resulting from the new operation. This new operation was recognized and approved by Congress in Section 101(a)(1) of the Water Resources Development Act of 1996 (PL 104-303) and Section 209(b) of the Energy and Water Development Appropriations Act of 2002 (PL 107-66) which direct Reclamation to absorb 75 percent of the costs incurred for this operation. Table 5 summarizes these costs, most of which reflect reimbursements for ongoing

impacts to hydropower operations and planning and environmental compliance costs. The most significant single year of cost occurred in 1997 when SAFCA and Reclamation cooperated in acquiring and delivering approximately 100,000 acre-feet of water to Folsom Reservoir to offset the effects of lowering reservoir levels during the flood of 1997. The cost of these activities and the sources of funding for these costs are summarized in Table 5.

Table 5 – Interim Folsom Dam Re-operation Activities Costs

Fiscal Year	Federal	SAFCA	Total
1991-92		62,841.00	62,841.00
1992-93		123,036.00	123,036.00
1993-94		468,481.00	468,481.00
1994-95		808,016.00	808,016.00
1995-96		135,798.00	135,798.00
1996-97		276,842.00	276,842.00
1997-98	3,519,100.00		3,519,100.00
1998-99		307,858.00	307,858.00
1999-2000		640,244.00	640,244.00
2000-01		87,153.00	87,153.00
2001-02		600,302.00	600,302.00
2002-03		18,392.00	18,392.00
2003-04		63,282.00	63,282.00
2004-05		3,791.00	3,791.00
2005-06		1,951.50	1,951.50
2006-07 Est		31,080.00	31,080.00
Total	**3,519,100.00**	**3,629,067.50**	**7,148,167.50**

Hayer Dam Site Renovation

The Hayer Dam Site Renovation is a project undertaken jointly by SAFCA and the Sacramento County Department of Regional Parks (County Parks). The dam site comprised a small part of approximately 65 acres of land owned by the Hayer family near the confluence of Dry and Robla Creeks in northern Sacramento County. SAFCA and County Parks cooperated with the Sacramento Valley Conservancy in bringing this land into public ownership so it could be managed for flood conveyance, habitat, and passive recreation as part of SAFCA's North Area Local Project and the County's Dry Creek Parkway. Hayer Dam was a private structure, originally constructed as an irrigation facility that

created an impoundment through the insertion of removable flash boards that allowed water to flow by gravity onto nearby farmland. More recently, this facility was used to divert water by gravity to the Bell Acqua ski lakes. The dam structure included an old rail car that served as a rudimentary bridge across Dry Creek. Operation of the dam was considered a significant impediment to the passage of salmon and steelhead native to Dry Creek.

Due to its crude design and lack of maintenance over the years, the dam was in a very hazardous condition and its passage into public ownership created a liability problem for the County and SAFCA. To address this problem, SAFCA secured a grant for land acquisition and floodway enhancements along Dry Creek through the State's Flood Corridor Protection Program funded by Proposition 13. A portion of the grant was allocated to improvement of the Hayer Dam site. The improvement program had several elements: removal of the existing hazardous conditions, restoration of the stream for fish passage, construction of a new bridge to connect to the emerging trail system in the Dry Creek Parkway, and continued diversion of surface water to Bell Acqua in accordance with their water rights. Because the Hayer Dam site renovation was considered to be a signature project for the Dry Creek Parkway, SAFCA and County Parks sought the best possible design for restoring the stream channel while continuing to provide the required diversion to the ski lakes. This necessitated installation of subsurface collectors and a pumping system. Table 6 summarizes the costs associated with Hayer Dam Site Renovation activities and the funding sources for these costs.

Table 6 - Hayer Dam Site Renovation				
Fiscal Year	USES	SOURCES		
		State	County	SAFCA
1989-90				
1990-91				
1991-92				
1992-93				
1993-94				
1994-95				
1995-96				
1996-97				
1997-98				
1998-99				
1999-2000				
2000-01				
2001-02				
2002-03	3,516.00			3,516.00
2003-04	329,274.00			329,274.00
2004-05	492,208.00			492,208.00
2005-06	1,403,127.99	437,500.00	268,708.45	696,919.54
2006-07 Est	487,240.00			487,240.00
Total	**2,715,365.99**	**437,500.00**	**268,708.45**	**2,009,157.54**

Summary

Table 7 presents a summary of O&M District activities costs and the sources of the funding used to cover these costs, including O&M District revenues.

TABLE 7 - SUMMARY OF OPERATIONS AND MAINTENANCE DISTRICT SOURCES AND USES OF FUNDS

Fiscal Year	USES O&M Activities	SOURCES O&M District	1996 Bonds	City/County Loan	Federal	State	Interest/Other	Invest Earn/ Coverage*	Total
1989-90	394,115.00								
1990-91	6,048,708.00			4,325,800.00					4,325,800.00
1991-92	4,801,107.00	6,046,543.00							6,046,543.00
1992-93	3,627,125.00	5,900,730.00							5,900,730.00
1993-94	3,690,059.00	6,595,255.00							6,595,255.00
1994-95	5,419,278.00	5,772,427.00							5,772,427.00
1995-96	6,217,216.00	5,863,268.00							5,863,268.00
1996-97	9,925,401.00	5,739,997.00	5,000,000.00						10,739,997.00
1997-98	10,175,347.00	6,013,030.00			3,731,408.36		241,378.00		9,985,816.36
1998-99	3,231,581.58	5,967,139.00					28,489.00		5,995,628.00
1999-2000	8,887,254.92	6,267,698.00					40,560.00		6,308,258.00
2000-01	4,718,631.24	6,091,185.00				16,963.00	128,536.00		6,236,684.00
2001-02	8,531,806.50	6,098,672.00					227,030.00		6,325,702.00
2002-03	5,781,005.96	6,106,722.00				1,693,150.85	113,375.50		7,913,248.35
2003-04	12,152,483.08	6,131,376.00					20,353.00		6,151,729.00
2004-05	7,735,363.58	6,203,688.00			111,706.00	494,833.00	119,698.00		6,929,925.00
2005-06	7,875,346.64	6,205,749.53			215,458.42	210,731.98	90,894.00		6,722,833.93
Total	**109,211,829.50**	**91,003,479.53**	**5,000,000.00**	**4,325,800.00**	**4,058,572.78**	**2,415,678.83**	**1,010,313.50**	**2,160,496.87**	**109,974,341.51**

*Reflects cumulative earnings on coverage funds established in connection with the 1996 Subordinated Capital and Operations and Maintenance Bonds.

2006-07 Est	10,857,213.77	6,200,000.00		10,000,000.00					16,200,000.00

NALP DISTRICT

Background

The North Area Local Project (NALP) is an outgrowth of the American River Watershed Investigation (ARWI), and generally reflects the footprint of the Natomas Features of the ARWI as described in the feasibility report of the Chief of Engineers that was presented to Congress in the summer of 1992 (1992 Chief's Report). The 1992 Chief's Report included the Natomas Features in a recommended plan that also included construction of a new flood control dam at Auburn. The recommended plan would have provided a 200-year level of protection to Natomas and the rest of Sacramento.

When Congress chose not to authorize the recommended plan as part of the Water Resources Development Act of 1992, Sacramento's Congressional representatives secured separate authorization of the Natomas Features in PL 102-396 which directs the Secretary of the Army to: (1) re-evaluate the project recommended in the 1992 Chief's Report, (2) construct the Natomas Features of the project, provided such construction does not encourage the development of deep floodplains, and (3) credit or reimburse the non-federal sponsor for construction work which is commenced prior to the Corps initiating such construction and which is consistent with the feasibility report.

In reliance on the promise of reimbursement, the SAFCA Board opted to construct the NALP with local funds. Preconstruction engineering and design activities were initiated in 1991-92. In 1995, SAFCA's assessment engineer prepared the *Engineer's Report for Sacramento Area Flood Control Agency North Area Local Project Capital Assessment District No. 2* (Engineer's Report) describing the improvements needed to provide at least a 200-year level of flood protection along the lower reaches of the American River, the NEMDC, Dry/Robla Creek and Arcade Creek, and identifying the properties that would proportionally benefit from these improvements. In June 1995, the SAFCA Board approved the Engineer's Report and formed the NALP District. The special benefit assessments generated by the district, augmented by a Capital Investment Equalization Fee imposed on new development in the protected area, funded construction of the NALP.

Sources and Uses of NALP District Funding

The main features of the NALP were completed in 1998. These features included raising and strengthening the east and west levees of the NEMDC, the north and south levees of Arcade Creek, and the south levee of Dry/Robla Creek; construction of a new levee along the north side of Dry Creek; installation of a new pumping station in the

NEMDC near the mouth of Dry Creek; construction of fish and wildlife habitat mitigation/enhancements in the NEMDC channel, Lower Dry Creek and the Lower American River Parkway; and land acquisition in the Lower Dry Creek floodway. Since 1998, project completion activities have included extension of the Dry/Robla Creek south levee; construction of a new levee around the Bell Acqua subdivision in Lower Dry/Robla Creek; relocation and restoration of a portion of Robla Creek; reconstruction of a portion of Dry Creek Road; redesign and reconstruction of local drainage facilities along Dry Creek Road; and land acquisition in the Dry/Robla Creek floodway. Table 8 summarizes the cost of these NALP District activities and the funding sources for these costs.

Table 8 – Summary of NALP District Sources and Uses of Funding

	USES	SOURCES								
Fiscal Year	Construction/ Envr/Engrg	Bonds	City Aid	County Aid	State Aid	Fed Aid	Contrib.	CIE Fee	Interest Earnings	Total Sources
1991-92	747,630.00									
1992-93	1,121,526.00									
1993-94	4,999,989.00									
1994-95	6,348,537.00									
1995-96	15,473,992.00	40,741,155.00	567,000.00	688,152.81		41,400.00			328,950.00	42,366,657.81
1996-97	22,393,580.00	5,500,000.00		7,516,752.88			118,505.00		1,757,315.00	14,892,572.88
1997-98	5,912,100.00							26,353.00	375,514.00	401,867.00
1998-99	2,815,711.00							7,168.00	39,114.00	46,282.00
1999-2000	2,571,485.00					15,000,000.00		30,271.00	769,634.00	15,799,905.00
2000-01	5,137,327.00							30,620.00	833,831.00	864,451.00
2001-02	6,363,428.00			143,000.00			52,177.00	430,280.00	364,705.00	990,162.00
2002-03	6,515,454.00			319,311.00	8,150.85		5,989.18	591,885.00	(19,939.00)	905,397.03
2003-04	2,227,490.00			1,250,000.00	4,900,000.00	1,115,000.00	15,261.00	1,101,302.00	12,844.00	8,394,407.00
2004-05	1,320,387.00			250,000.00		510,000.00		591,870.00	34,437.00	1,386,307.00
2005-06	2,762,022.00				41,108.71		102,637.50	408,634.79	8,565.88	560,946.88
2006-07 Est	1,900,632.00	300,000.00*		850,000.00	496,000.00			750,000.00	10,000.00	2,406,000.00
Total	88,611,290.00	46,541,155.00	567,000.00	11,017,216.69	5,445,259.56	16,666,400.00	294,569.68	3,968,383.79	4,514,970.88	89,014,955.60

*Debt Service Trust Fund

Federal and State Reimbursements

The Corps' authority to reimburse SAFCA for the federal share of the cost of the NALP is set forth in the December 5, 1996 Memorandum for the Chief of Engineers prepared by the Assistant Secretary of the Army (Civil Works), H. Martin Lancaster:

> "The work for which SAFCA might receive reimbursement must be consistent with the intent of Section 9159 of the Defense Appropriations Act of 1993. Reimbursement should only be for those flood damage reduction features included in the plan described in the June 29, 1992 report of the Chief of Engineers, and must be at the level of flood protection recommended in the report. For reimbursement, the features must be complete and actually provide flood protection, must be economically justified, and must either have acceptable environmental impacts or include the authorized fish and wildlife mitigation measures described in the June 29, 1992 report of the Chief of Engineers...Reimbursement should only be considered for flood damage reduction features which do not encourage development of deep floodplains."

As a first step, the Corps agreed to reimburse SAFCA for the level of work that would have been done had Congress approved the complete plan recommended in the 1992 Chief's Report (including a flood control dam at Auburn). The scope of this initial reimbursement is described in the 1999 Natomas Federal Plan (1999 Federal Plan) and the terms and conditions for payment and receipt are set forth in an agreement between the Corps and SAFCA dated September 21, 1999. Based on the findings of the 1999 Federal Plan, and a subsequent evaluation of the real estate rights involved in the project, the Corps has agreed to provide SAFCA with an initial reimbursement totaling $21,377,560, of which $16,666,400 has been received to date. The remaining $4,550,000 of the initial federal reimbursement has been appropriated to the Corps but not yet delivered to SAFCA.

The federally authorized Natomas Features project was subsequently approved by the State Legislature in 2000 and SAFCA entered into an agreement with the California Reclamation Board dated March 13, 2003 for initial reimbursement of the state's share of the cost of the project. The Reclamation Board has agreed to provide an initial reimbursement of $4,900,000, all of which has been received to date. SAFCA has negotiated a new agreement with the Reclamation Board to receive an additional $496,000 in reimbursements appropriated by the Legislature.

In 2005, SAFCA prepared the Expanded Natomas Federal Plan (ENFP) Report documenting the basis for enlarging the federal and state reimbursements to cover the project actually completed by SAFCA. The ENFP report indicates how the criteria set forth in the December 5, 1996 memorandum cited above have been met. The report concludes that the features of the ENFP are the same as those included in the 1992 Chief's Report, with minor adjustments in levee height and length, as necessary to provide the recommended level of flood protection. The ENFP includes only the completed improvements necessary to protect existing development from flooding along the Lower American River and Lower Dry and Arcade Creeks. SAFCA's strengthening of the NCC and PGCC levees in Sutter County, which protect undeveloped portions of the Natomas Basin, are not included in the ENFP.

SAFCA has provided 100 percent of the cost for the ENFP features, including the federal and state shares of this cost. In order to fully reimburse SAFCA for the Federal and State shares of the cost of the ENFP, the reimbursements approved to date should be increased by approximately $19,700,000, including an additional $16,000,000 in Federal reimbursements and $3,700,000 in State reimbursements. The reimbursements received, authorized and anticipated are displayed in the Table 9.

Status	Table 9- Federal and State Reimbursements		Total
	Federal	State	
Received by SAFCA	16,666,400.00	5,445,260.00	22,111,660.00
Authorized but Unpaid	4,550,000.00		4,550,000.00
Supported by ENFP Report	16,000,000.00	3,700,000.00	19,700,000.00
Total	**37,216,400.00**	**9,145,260.00**	**46,361,660.00**

AMERICAN RIVER/SOUTH SACRAMENTO STREAMS GROUP (SSSG) FUND

Background

The American River/South Sacramento Streams Group (AR/SSSG) Assessment District (District) was created in June 2000 to reduce the risk of flooding to approximately 85,000 parcels occupying the federally regulated 100-year floodplain along the Lower American and Sacramento Rivers (outside Natomas) and Morrison Creek and its tributaries in South Sacramento. Toward this end, the AR/SSSG District collects special benefit assessments on the protected properties in order to raise the local share of the cost of the following projects:

- *Folsom Dam Re-operation Project*
- American River Levee Improvements Project (*Common Features Project*)
- South Sacramento Streams Group Project (*SSSG Project*)
- *Folsom Dam Modifications Project*

This assessment authority is derived from the AR/SSSG District's compliance with the 'right to vote on taxes' provisions enacted into the State Constitution in 1996 through the passage of Proposition 218. Under these provisions, assessments may be imposed on property owners to pay for improvements that impart special benefits to their property, provided that these benefits are proportionately allocated and the owners are afforded the opportunity to protest the assessment through a mail balloting process, under which the ballots are weighted to reflect each property's proportional benefit/assessment. In this instance, the special benefit is protection from flooding to a degree sufficient to remove the affected properties from the Federally regulated 100-year floodplain. This benefit has been proportionally allocated on a parcel by parcel basis by mapping the affected parcels into two separate overlapping 100-year floodplains (Lower American River and SSSG), and assigning benefits/assessments to each parcel based on the local cost of the projects needed to protect these floodplains, the size of the parcel, its use (residential, commercial, industrial, etc.), the first floor square footage of any structures on the property, and the depth of flooding likely to be produced on the property by an uncontrolled 100-year flood.

As set forth in the *Engineer's Report for Sacramento Area Flood Control Agency American River/South Sacramento Streams Group Capital Assessment* (AR/SSSG) District No. 3 and the informational materials provided to the property owners at the time the AR/SSSG District was formed, it was anticipated that the funded projects would be sufficiently completed by 2006 to provide most of the 85,000 parcels in the District with slightly more than a 100-year level of flood protection (reducing the annual risk of flooding to less than one percent). This would clear the

way for removing these properties from the federally regulated 100-year floodplain, making flood insurance coverage for these property owners optional and significantly less costly. Thereafter, it was expected that project implementation would continue until about 2010, further reducing flood risk, with assessment district payments extending to 2015.

Within the first four years of the AR/SSSG District, SAFCA entered into a long-term agreement with the U. S. Bureau of Reclamation (Reclamation) to modify the flood control operation at Folsom Dam to account for the effects of reservoir storage upstream of the dam. This Folsom Dam Reoperation Project, combined with Common Features Project levee improvements along the Lower American and Sacramento rivers, made it possible to achieve the 100-year flood protection objective for about 55,000 assessment district parcels at the end of 2004.

Construction contracts are currently in place to ensure that more than 25,000 additional parcels reach this milestone by the end of 2006, as planned. This will leave a small number of parcels in the regulated floodplain along the American River upstream of the Mayhew Drain and along Morrison Creek and the tributaries that contribute to the SSSG floodplain. These parcels will be protected incrementally over the next four to six years as the Common Features Project and SSSG Project move toward completion.

The transition to a comprehensive flood control program for Sacramento, providing a 200-year or greater level of flood protection, which was to begin with the Folsom Dam Modifications Project, has been slower and more costly than anticipated. The original design of the project which called for modifying the dam's low level outlets by drilling through the existing dam structure has proven to be far more technically challenging, more risky and much more expensive than anticipated. As a result, this project is not yet under construction and project sponsors have opted to abandon the drill-through design in favor an auxiliary spillway just south of the main dam. This spillway is being designed to accomplish -- in an integrated fashion -- what had been the separate objectives of the Folsom Dam Modification Project and the complementary Folsom Dam Raise Project that was authorized in 2003.

Folsom Dam Re-operation Project

The Folsom Dam Reoperation Project was initiated on an interim, pay-as-you go basis by an agreement between SAFCA and the United States Bureau of Reclamation (Reclamation) in March 1995. The agreement obligated Reclamation to create more storage space for flood control in Folsom Reservoir depending on the availability of flood control storage space in three large non-federal reservoirs located higher up in the American River watershed. SAFCA agreed to reimburse Reclamation for any resulting impacts to other beneficial uses of Folsom Reservoir. The

agreement had a renewable five-year term. In 1996, Congress directed Reclamation to continue the variable storage space operation until a comprehensive flood control program for the American River is in place. Congress also directed Reclamation to extend the agreement with SAFCA and to absorb 75 percent of the cost of any impacts resulting from the variable storage operation.

Effective March, 2004, SAFCA and Reclamation amended their agreement to: (1) incorporate modifications to the variable storage operation that would ensure safe containment of a 100-year flood along the American River, (2) establish conditions for terminating the agreement, and (3) require SAFCA to carry out improvements to Folsom Dam and the floodway along the Lower American River in lieu of continuing the pay-as-you go approach to offsetting impacts. More specifically, the amended agreement requires SAFCA to provide $2.0 million in funding for modifying the shutter system that allows Folsom Dam operators to manage the temperature of the water released through Folsom's hydropower units so as to accommodate the needs of the anadromous fish in the Lower American River. In addition, the amended agreement requires SAFCA to provide $1.0 million in funding to improve floodplain habitat for fish in the lower river.

Although the amended agreement anticipated that these funds would be spent by the end of 2006, SAFCA and Reclamation are currently negotiating an extension of this timeline to take advantage of the availability of state and federal funding that could augment the scope of the dam and floodplain improvements. Accordingly, there have been no expenditures on this project to date.

American River Common Features Levee Improvements Project

The American River Common Features Levee Improvements Project (Common Features Project) was initially authorized in Section 101(a) of the Water Resources Development Act of 1996. Companion approval of the project by the State Legislature appears in Section 12670.10 of the California Water Code. As authorized, the project included the levee improvements along the Lower American River that were 'common' to the range of dam and reservoir operation improvements in the American River watershed then under consideration by the federal government. These improvements consisted primarily of slurry walls to be inserted into the existing levees along both sides of the river. The authorized cost ceiling for this work was $67.0 million, of which the Federal, State and local shares were 75 percent, 17.5 percent, and 7.5 percent, respectively.

In less than a decade, the cost ceiling of the Common Features Project has risen to $242.0 million, of which the local share is $18.15 million. This rise has been fueled by the following factors. First, in Section 101(a) of the

Water Resources Development Act of 1999, Congress broadened the scope of the project as part of a package of authorized flood control improvements that included levee raising along the north side of the river, reconstruction of Sacramento County's levee upstream of the Mayhew Drain and construction of a closure structure across the drain. These improvements were subsequently approved by the State Legislature as reflected in Section 12670.14(b) of the State Water Code.

Second, as part of the preconstruction engineering and design process, the Corps substantially altered the original project design. It was determined that the slurry walls needed to be deeper and that the gaps in the slurry wall system at roadway and other utility crossings of the levees had to be closed. The new technology ('jet grouting') selected for these closures has considerably increased the cost of the project. It was also determined that several reaches of the levee system were susceptible to erosion in high flow events and required significant instream armoring. Finally, the Corps concluded that several reaches of the east levee of the Sacramento River between the mouth of the American River and the Town of Freeport were susceptible to failure in a 100-year flood event due to underseepage and/or erosion. Thus, the benefits of the Common Features Project could not be secured without addressing this susceptibility.

These changes in the scope of the project were not fully anticipated at the time the AR/SSSG District was created. As a result, the District has had to substantially increase the funding allocated to this purpose. Table 10 displays the local, state and federal expenditures to date on the Common Features Project.

Table 10 – Common Features Project Costs				
Fiscal Year	**Federal**	**State**	**SAFCA**	**Total**
1997-98			243,091.00	243,091.00
1998-99			646,261.00	646,261.00
1999-2000			1,040,261.00	1,040,261.00
2000-01			2,211,600.00	2,211,600.00
2001-02			2,648,112.00	2,648,112.00
2002-03			1,748,920.00	1,748,920.00
2003-04			1,870,793.54	1,870,793.54
2004-05			599,811.46	599,811.46
2005-06			918,874.02	918,874.02
2006-07 Est			1,879,440.00	1,879,440.00
Total	**100, 938,175.00***	**21,905,193.00***	**13,807,164.02**	**136,650,532.02**

* Summary totals only available

South Sacramento Streams Group (SSSG) Project

The SSSG Project provides for improvements to the levees and related facilities along Morrison Creek and its tributaries and along the southern border of the City of Sacramento. The first phase of the project was initiated in 1995-96 with the construction of a ring levee around the Sacramento County's Regional Wastewater Treatment Plant (Treatment Plant). This work was carried out at local expense pursuant to a crediting agreement between SAFCA and the Corps authorized under Section 104 of the 1986 Water Resources Development Act. Such an agreement memorializes the understanding of the parties that if the locally funded work is subsequently authorized by Congress as part of a larger flood control project, the qualifying local expenditures will be credited to the local share of the cost of the larger project.

In this instance, Congress subsequently authorized the SSSG Project in Section 101(a) of the Water Resources Development Act of 1999. The State Legislature adopted companion legislation (Water Code Section 12670.14(d)(1)) in 2000. The authorized project has a cost ceiling of $91.0 million, of which 65 percent is allocated to the federal government, 24.5 percent to the state, and 10.5 percent to SAFCA. Since the authorized project encompasses the Treatment Plant ring levee, SAFCA is entitled to credits for pre-authorization expenditures totaling over $7.0 million. These expenditures were made in part by the Sacramento County Regional Sanitation District

and in part by SAFCA through advances to the project from the Operations and Maintenance Fund. Table 11 displays the local, State and Federal expenditures to date on the SSSG Project.

Table 11 – South Sacramento Streams Group (SSSG) Project Costs					
Fiscal Year	**Federal**	**State**	**SAFCA**	**Local**	**Total**
1995-96			1,581,795.00		1,581,795.00
1996-97			223,027.00		223,027.00
1997-98					
1998-99					
1999-2000					
2000-01			285,651.22		285,651.22
2001-02			310,128.04		310,128.04
2002-03			214,129.65		214,129.65
2003-04			563,629.37		563,629.37
2004-05			136,700.84		136,700.84
2005-06			245,283.67		245,283.67
2006-07 Est			160,724.00		160,724.00
Total	**12,741,660.00***	**4,802,630.00***	**3,721,068.79**	**7,193,252.00***	**28,458,610.79**

*Summary totals only available

Folsom Dam Modifications Project

The Folsom Dam Modifications Project was authorized by Congress in Section 101(a) of the Water Resources Development Act of 1999. The State Legislature adopted companion legislation (Water Code Section 12670.14(c)) in 2000. The project calls for increasing the dam's low level discharge capacity by enlarging the dam's eight existing river outlets and constructing new outlets to remedy current inefficiencies in the flood control operation. As presently designed, the dam's eight river outlets have a discharge capacity of 26,000 cubic feet per second (cfs). Another 8,000 cfs can be released through the dam's three hydropower units. Releases from the dam cannot match the full capacity of the downstream channel (115,000 to 152,000 cfs) until the space allocated to flood control in the reservoir is half-filled and inflowing flood water can be discharged through the gates on top of the dam's main spillway.

The Folsom Dam Modifications Project would have addressed this problem by tripling the discharge capacity of the dam's low level outlets, allowing dam operators to more fully utilize the capacity of the downstream channel during the early stages of a flood event, thus preserving reservoir storage space and increasing the flood protection provided by the system. At the time the Assessment District was formed, it was thought that the desired increase in low level discharge capacity could be achieved relatively quickly and at a relatively low cost by drilling through the existing dam structure. It was anticipated that these improvements would at some point be complemented by an increase in Folsom Dam's flood control storage capacity achieved through raising the dam about seven feet. Together, these increases in discharge and storage capacity, combined with a regulatory mandate to continue the Folsom Dam Reoperation Project, constituted the essential components of a comprehensive 200-year flood control program for Sacramento.

The AR/SSSG Assessment District's expectations with respect to the Folsom Dam Modification Project have not been fulfilled. Although the concept of raising the dam did get authorized by Congress less than four years after the Assessment District was formed, modifying the existing outlets by drilling through the existing dam structure has proven to be far more technically challenging, more risky, and much more expensive than anticipated. As a result, this project is not yet under construction. In fact, after receiving construction bids in the spring of 2005, the project sponsors opted to abandon the drill-through design in favor constructing a more traditional auxiliary spillway just south of the main dam. This spillway is being designed to accomplish in an integrated fashion what had been the separate objectives of the outlet modification and dam raise projects. Table 12 displays the local, State and Federal expenditures to date for the Folsom Dam Modifications Project.

Table 12 - Folsom Dam Modifications Project Costs

Fiscal Year	Federal	State	SAFCA	Total
2000-01			34,324.66	34,324.66
2001-02			82,769.83	82,769.83
2002-03			72,553.34	72,553.34
2003-04			3,040,752.31	3,040,752.31
2004-05			1,369,931.01	1,369,931.01
2005-06			2,590,182.88	2,590,182.88
2006-07 Est			1,116,600.00	1,116,600.00
Total	**38,629,470.00***	**13,628,015.00***	**8,307,114.03**	**60,564,599.03**

* Summary totals only available

Summary

Table 13 presents a summary of AR/SSSG District construction and design costs and the sources of the funding for these costs, including the portion covered by AR/SSSG District assessments.

Table 13 - Summary AR/SSSG District Sources and Uses of Funding									
Fiscal	USES	SOURCES							
Year	Design/Constr	Assessments	Interest	Contributions	Sub-Total	Federal	State	Local	Grand Total
1995-96	1,581,795.00			311,123.91	311,123.91				311,123.91
1996-97	223,027.00			444,500.37	444,500.37				444,500.37
1997-98	243,091.00			110,744.32	110,744.32				110,744.32
1998-99	646,261.00								
1999-2000	1,040,261.00								
2000-01	2,531,575.88	3,572,120.00	77,134.00		3,649,254.00				3,649,254.00
2001-02	3,041,009.87	4,714,666.00	175,291.00		4,889,957.00				4,889,957.00
2002-03	2,035,602.99	3,678,119.00	170,256.00	35,005.68	3,883,380.68				3,883,380.68
2003-04	5,475,175.22	3,779,584.00	136,755.00		3,916,339.00				3,916,339.00
2004-05	2,106,443.31	3,797,611.00	75,759.00		3,873,370.00				3,873,370.00
2005-06	3,754,340.57	3,762,048.70	26,626.00		3,788,674.70				3,788,674.70
2006-07 Est	4,756,764.00	3,700,000.00		2,238,973.00	5,938,973.00				5,938,973.00
Total	27,435,346.84	27,004,148.70	661,821.00	3,140,347.28	30,806,316.98	152,309,305.00*	40,335,838.00*	7,193,252.00*	230,644,711.98

*Summary totals only available