APPENDIX K

FUTURE CAPITAL PROJECTS FROM MNWD 2006 LONG RANGE PLAN UPDATE (DMMs)

Table 7-2
Future Capital Improvement Projects
(Thousands 2006 $)

Item No.	Project	Project Cost	Estimated Cost Per Fiscal Year (unescalated)						
			06-07	07-08	08-09	09-10	10-11	11-12	Beyond 2012
Planning and Construction Fund (P&CF) - Fund 14									
1	Interconnections with other Districts	2,200	500	500	600	600			0
2	Upper Chiquita Reservoir (portion)	13,100		5,000	5,000	3,100			0
3	IRWD Intertie to JTM Phase 1	2,000	1,000	1,000					0
4	Water Easement Pipeline Lining	2,300			400	500	500	500	400
5	Potable Water MSSOP	550		374	176				0
6	Potable Water Hydraulic Model (2005.019)	106	106						0
7	AMP Take-out Booster P.S.	1,100			1,100				0
8	Marguerite CIP Flow Control Facility	500					500		0
9	SOCWA Coastal Treatment Plant Lift Station **	1,100			300	800			0
10	Aliso Creek Restoration	1,200						1,200	0
11	Rehab 18-inch Aliso Creek Sewer **	1,100			200	900			0
12	J.B.Latham AWT (2005.022) **	3,500	125	2,000	1,375				0
13	San Juan Basin Authority Capital Projects	33	33						0
14	Security Enhancements (2004.008)	1,200	155	145	300	300	300		0
15	Telemetry Modifications	1,800				600	600	600	0
16	Geographical Information Systems	500		100	100	100	100	100	0
17	Miscellaneous Unanticipated Projects	1,200	250	250	200	200	150	150	0
P&CF Subtotal (Unescalated)		31,289	1,669	8,869	9,151	6,500	2,150	2,550	400
P&CF Subtotal (Escalated)		33,479	1,669	9,140	9,710	7,100	2,420	2,960	480
Possible SRF Loan (SRF)									
18	Recycled Water Supply - Phase 5 Expansion *	0							0
19	RW Distribution - Phase 5 Expansion	19,800					5,600	7,000	7,200
SRF Loan Subtotal Unescalated		19,800	0	0	0	0	5,600	7,000	7,200
SRF Escalated thru FY 10-11		23,010	0	0	0	0	6,300	8,110	8,600
TOTAL CAPITAL PROJECTS (UNESCALATED)		51,089	1,669	8,869	9,151	6,500	7,750	9,550	7,600
TOTAL CAPITAL PROJECTS (ESCALATED)		56,489	1,669	9,140	9,710	7,100	8,720	11,070	9,080

3.0% Escalation Factor

* costs are accounted for in line 12.

** Pending Proposition 50 Grant Eligibility

The following are general descriptions of the projects listed in Table 7-2.

Planning and Construction Fund

1. **Interconnections With Other Districts.** This project consists of installing new and upgrading existing potable-water interconnections with the District's neighboring water districts. The weeklong Allen-McColloch Pipeline outage in December 1999, which was caused by a break in the pipeline, illustrates the need to share water in the event of an emergency. The costs shown are the District's projected share for the interconnections to accommodate a portion of the seven-day supply interruption required by MWDSC.

2. **Upper Chiquita Reservoir.** This project will allow the District to sustain a seven-day interruption of Metropolitan Water District supply. It will consist of storage (up to 336 acre-feet) in the proposed SMWD Upper Chiquita Reservoir. A portion of the funding will come from sources other than the Planning and Construction Fund. This project is discussed in detail in Chapter 9.

3. **IRWD Intertie to the JTM – Phase 1.** This project consists of installing a pump station and connection from IRWD's water system to the Joint Transmission Main. About 30 cfs (15 cfs to MNWD) will be able to be conveyed from IRWD (winter months only) to the South County agencies during an emergency or planned MWDSC interruption. This project is discussed in detail in Chapter 9.

4. **Water Easement Pipeline Lining.** The District will proactively reinforce existing high-pressure water pipelines within private property easements to reduce the risk of pipeline breaks near homes.

5. **Potable Water MSSOP.** This project will complete the final phase of the MSSOP program for potable water standard operating procedures, link with graphical user interface, and create a hydraulic network model.

6. **Potable Water Hydraulic Model (2005.019).** This computer model will be comprised of all of the potable water pipelines in the District and assist water distribution in operations and emergency situations.

7. **AMP Take-out Booster P.S.** This project was planned to allow continued delivery from the AMP project after its available delivery HGL drops below MNWD's 650 zone requirements. The lower HGL will result from increased demands on the AMP system.

8. **Marguerite CIP Flow Control Facility.** This project consists of constructing a flow-control facility on the CIP (Central Intertie Pipeline) at Marguerite Parkway and Oso Parkway. The facility will control the flow (up to 5 cfs) from the CIP to Marguerite Reservoir, facilitating the additional use of CIP water in the City of

Mission Viejo.

9. **SOCWA Coastal Treatment Plant Lift Station.** A new wastewater lift station will be constructed to lift wastewater from the District's 18-inch Aliso Creek Sewer to the SOCWA Coastal Treatment Plant. The new station will be on the northerly portion of the CTP site.

10. **Aliso Creek Restoration.** This project consists of restoring and adding protection to the banks of Aliso Creek. This will protect the District's pipelines along the creek. The costs shown are the District's share of the probable Corps of Engineers restoration project.

11. **Rehab 18-Inch Aliso Creek Sewer.** This project consists of rehabilitating the existing 18-inch sewer along Aliso Creek, from Alicia Parkway and Aliso Creek Road to the Coastal Treatment Plant. The sewer will convey approximately 2 mgd of wastewater to the Coastal Treatment Plant.

12. **J.B. Latham AWT (2005.022).** This potential grant-funded facility would provide the District with up to 1.5 million gallons per day (1,680 acre-feet per year) of recycled water to distribute in the southern part of the District. The City of San Juan Capistrano and the South Coast Water District would be partners in the project.

13. **San Juan Basin Authority Capital Projects.** This will fund the SJBA capital projects in 2005-06. The District has water rights in the San Juan Creek Basin through the Basin Authority.

14. **Security Enhancements.** This project will implement portions of the Vulnerability Risk Assessment recommendations following adoption of County Pre-disaster Mitigation Plan.

15. **Telemetry Modifications.** This project consists of upgrading the potable water central computer system and installing fiber optics, pressure sensors, flow meters, and cameras at critical locations and facilities. These modifications will improve the information the central computer obtains about the water and sewer systems, thus improving the reliability, efficiency, and safety of these systems.

16. **Geographical Information System.** This project consists of converting the District's sectional drawing and facilities information to a graphical database. The system facilitates the sharing and maintenance of information about the District's facilities and operations.

17. **Miscellaneous Unanticipated Projects.** Major projects are individually identified in this Long Range Plan. Miscellaneous projects are minor projects, such as engineering studies, small pipelines, and facilities improvements that the

District does on an annual basis. Approximately $200,000 per year will be expended for these projects.

WateReuse Finance Authority Loan

1. **Upper Chiquita Reservoir.** A portion of the Reservoir will also be funded as part of this loan program. The remainder will come from the Planning and Construction Fund or a new COPS issue.

State Revolving Fund Loan Program

18. **Recycled Water Supply Phase 5 Expansion.** This project consists of constructing the fifth phase of the water-recycling project. This phase will add up to 3.0 mgd advanced wastewater treatment (AWT) to the system at either the ETWD Treatment Plant, the Joint Regional Plant, Plant 3A, or the J.B. Latham Plant, or some combination of these locations. Costs are included in Item 12, the current preferred alternative pending Proposition 50 funding.

19. **Recycled Water Distribution - Phase 5 Expansion.** This expansion of the distribution system will expand pumping station and operational storage capacities and install over 110,000 linear feet of pipeline to serve up to 277 additional landscape services.

Table 7-3 summarizes the project costs for the currently approved and proposed expenditures, shown in Tables 7-1 and 7-2 respectively, by funding source and fiscal year.

Table 7-3
Capital Improvement Expenditures
(Escalated dollars)

Fiscal Year	Planning and Construction Fund	WateReuse Loan	Subtotal	Potential SRF Loans	Total
06-07	$5,802,000	$1,765,000	$7,567,000	$0	$7,567,000
07-08	10,403,000	3,718,000	14,121,000	0	14,121,000
08-09	10,277,000	0	10,277,000	0	10,277,000
09-10	7,100,000	0	7,100,000	0	7,100,000
10-11	2,420,000	0	2,420,000	6,300,000	8,720,000
11-12	2,960,000	0	2,960,000	8,110,000	11,070,000
Total	$38,962,000	$5,483,000	$44,445,000	$14,410,000	$58,855,000