

Appendix A

Water

30-Year Capital Improvement Plan

WATER CIP PROGRAM (FY 2011 dollars)

30-year forecast

	FY 12/13 1 year	FY 13/14 2 year	FY 14/15 3 year	FY 15/16 4 year	FY 16/17 5 year	FY 17/18 6 year	FY 18/19 7 year	FY 19/20 8 year	FY 20/21 9 year	FY 21/22 10 year	FY 22/23 11 year	FY 23/24 12 year	FY 24/25 13 year	FY 25/26 14 year	FY 26/27 15 year
PROGRAMMATIC CIPs	\$3,647,083	\$4,132,416	\$2,466,000	\$5,515,000	\$7,002,990	\$4,302,500	\$3,422,500	\$3,462,500	\$3,612,500	\$4,257,500	\$3,500,000	\$3,570,000	\$3,460,000	\$3,460,000	\$3,955,000
Reserve/Miscellaneous	\$1,832,083	\$2,647,416	\$1,706,000	\$4,905,000	\$5,992,990	\$2,647,500	\$2,667,500	\$2,807,500	\$2,957,500	\$3,152,500	\$2,845,000	\$2,815,000	\$2,805,000	\$2,805,000	\$2,850,000
Base CIP Reserve (10%) ***	\$382,083	\$1,197,416	\$1,256,000	\$3,905,000	\$4,967,990	\$1,802,500	\$1,822,500	\$1,962,500	\$2,112,500	\$2,307,500	\$2,275,000	\$2,245,000	\$2,235,000	\$2,235,000	\$2,280,000
Unplanned Corrective Maintenance - Emergency Repair	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Asset Management	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Condition Assessment	\$1,000,000	\$1,000,000	\$0	\$550,000	\$575,000	\$375,000	\$375,000	\$375,000	\$375,000	\$375,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Fire Hydrant & Gate Valve Replacement	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Grant Writer	\$0	\$0	\$0	\$0	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Regulatory	\$735,000	\$635,000	\$560,000	\$410,000	\$410,000	\$405,000	\$505,000	\$405,000	\$405,000	\$505,000	\$405,000	\$505,000	\$405,000	\$405,000	\$505,000
Utilities ADA Improvements	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Backflow Prevention Devices	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Drinking Water Quality (LIMS software - \$200K 1st year)	\$300,000	\$175,000	\$100,000	\$100,000	\$100,000	\$100,000	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Distribution Flushing Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water System Security (Homeland Security)	\$125,000	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Groundwater Protection Program (well abandonment)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Planning	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000
Water Supply Master Planning	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000
Information Technology	\$980,000	\$750,000	\$100,000	\$100,000	\$100,000	\$1,100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
IT Projects	\$250,000	\$250,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Utility Energy Efficiency (water optimization software)	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CMMS (replace Cityworks) *	\$230,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CIS Software Replacement	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
REHABILITATION & REPLACEMENT	\$157,421,667	\$9,158,334	\$4,080,000	\$33,695,000	\$16,050,000	\$30,525,000	\$16,625,000	\$18,125,000	\$19,625,000	\$21,125,000	\$21,125,000	\$21,125,000	\$21,125,000	\$21,125,000	\$21,125,000
Pipe - Transmission Main **	\$916,667	\$1,833,334	\$0	\$4,125,000	\$4,125,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000
ramp up to 1% per year (1.5 miles per year) over 5 years	\$916,667	\$1,833,334	\$0	\$4,125,000	\$4,125,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000
Pipe - Distribution Main **	\$1,500,000	\$3,000,000	\$1,855,000	\$7,345,000	\$8,300,000	\$9,000,000	\$10,500,000	\$12,000,000	\$13,500,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000
ramp up to 1% per year (15 miles per year) over 10 years	\$1,500,000	\$3,000,000	\$1,855,000	\$7,345,000	\$8,300,000	\$9,000,000	\$10,500,000	\$12,000,000	\$13,500,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000
Reservoirs	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000	\$100,000	\$100,000	\$100,000	\$100,000
Wells	\$2,000,000	\$2,000,000	\$1,000,000	\$2,500,000	\$2,500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Treatment Plants	\$150,600,000	\$1,100,000	\$1,100,000	\$18,600,000	\$0	\$15,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sacramento River	\$150,600,000	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E. A. Fairbairn (rehab filters 1-8)	\$0	\$0	\$0	\$18,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E. A. Fairbairn (replace filter media 9-16)	\$500,000	\$500,000	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E. A. Fairbairn Plant Rehab	\$0	\$0	\$0	\$0	\$0	\$15,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Replacement Program (high and low lift pumps)	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Building	\$1,305,000	\$125,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Meter Shop Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fullertown House Improvements	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Warehouse Storage Building *	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Misc - Facility Repair	\$0	\$0	\$0	\$0	\$0	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
DOU Facility Roof Rehab	\$105,000	\$25,000	\$25,000	\$25,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Florin Res Backup Engine	\$850,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$1,000,000	\$1,000,000	\$0	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fluoride Equipment Rehab	\$1,000,000	\$1,000,000	\$0	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
IMPROVEMENT	\$0	\$0	\$0	\$1,000,000	\$20,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
South Sacramento T-Main ****	\$0	\$0	\$0	\$1,000,000	\$20,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL WATER METER PROGRAM through 2025 (Option 1)	\$13,920,000	\$19,020,000	\$24,120,000	\$34,533,112	\$34,533,112	\$34,533,112	\$34,533,112	\$34,533,112	\$34,533,112	\$34,533,112	\$25,300,000	\$21,300,000			
Pay Go	\$1,532,308	\$1,632,308	\$1,732,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308	\$1,712,308
Finance	\$12,387,692	\$17,387,692	\$22,387,692	\$32,820,804	\$32,820,804	\$32,820,804	\$32,820,804	\$32,820,804	\$32,820,804	\$32,820,804	\$23,587,692	\$19,587,692			
TOTAL	\$174,988,750	\$32,310,750	\$30,666,000	\$74,743,112	\$77,586,102	\$69,360,612	\$54,580,612	\$56,120,612	\$57,770,612	\$59,915,612	\$50,325,000	\$45,995,000	\$24,585,000	\$24,585,000	\$25,080,000

* Multi-funded
 ** Estimated 100-Year Useful Life
 *** Excludes Treatment Plants @ \$150M, \$18M & \$15M, Water Meter Program, and Improvement/Development
 **** Bonding for \$20M transmission main to Florin Road

FY 27/28 16 year	FY 28/29 17 year	FY 29/30 18 year	FY 30/31 19 year	FY 31/32 20 year	FY 32/33 21 year	FY 33/34 22 year	FY 34/35 23 year	FY 35/36 24 year	FY 36/37 25 year	FY 37/38 26 year	FY 38/39 27 year	FY 39/40 28 year	FY 40/41 29 year	FY 41/42 30 year	Sub Total
\$3,500,000	\$3,570,000	\$3,460,000	\$3,460,000	\$3,955,000	\$3,950,000	\$3,570,000	\$3,460,000	\$3,460,000	\$3,955,000	\$3,950,000	\$3,570,000	\$3,460,000	\$3,460,000	\$3,955,000	\$114,500,989
\$2,845,000	\$2,815,000	\$2,805,000	\$2,805,000	\$2,850,000	\$3,295,000	\$2,815,000	\$2,805,000	\$2,805,000	\$2,850,000	\$3,295,000	\$2,815,000	\$2,805,000	\$2,805,000	\$2,850,000	\$88,695,989
\$2,275,000	\$2,245,000	\$2,235,000	\$2,235,000	\$2,280,000	\$2,725,000	\$2,245,000	\$2,235,000	\$2,235,000	\$2,280,000	\$2,725,000	\$2,245,000	\$2,235,000	\$2,235,000	\$2,280,000	\$67,695,989
\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$7,500,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$1,500,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$7,000,000
\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$4,500,000
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$500,000
\$405,000	\$505,000	\$405,000	\$405,000	\$505,000	\$405,000	\$505,000	\$405,000	\$405,000	\$505,000	\$405,000	\$505,000	\$405,000	\$405,000	\$505,000	\$13,875,000
\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$175,000
\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$6,000,000
\$100,000	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$200,000	\$100,000	\$100,000	\$100,000	\$3,775,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000	\$925,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,000,000
\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$5,400,000
\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$150,000	\$150,000	\$150,000	\$150,000	\$500,000	\$5,400,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$5,530,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$230,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000
\$21,525,000	\$21,125,000	\$21,125,000	\$21,125,000	\$21,125,000	\$26,025,000	\$21,125,000	\$21,125,000	\$21,125,000	\$21,125,000	\$26,025,000	\$21,125,000	\$21,125,000	\$21,125,000	\$21,125,000	\$759,530,001
\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$148,500,001
\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$148,500,001
\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$382,000,000
\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$382,000,000
\$500,000	\$100,000	\$100,000	\$100,000	\$100,000	\$5,000,000	\$100,000	\$100,000	\$100,000	\$100,000	\$5,000,000	\$100,000	\$100,000	\$100,000	\$100,000	\$14,000,000
\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$22,500,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$186,400,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$151,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$2,130,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$625,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$205,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000,000
															\$345,391,784
															\$20,307,696
															\$325,084,088
\$25,025,000	\$24,695,000	\$24,585,000	\$24,585,000	\$25,080,000	\$29,975,000	\$24,695,000	\$24,585,000	\$24,585,000	\$25,080,000	\$29,975,000	\$24,695,000	\$24,585,000	\$24,585,000	\$25,080,000	\$1,240,422,774

Priority Lists

Pipes - Transmission Mains

Rank	Location	Project Length (ft)	Pipe Diameter (inch)	Material	Age	Asset Scores		Total CIP Score	Total Cost
						Criticality Score	Condition Score		
1	9th St - K/L Alley to Capitol Mall	600	16.0	C	112	5.3	5.0	26.7	\$386,364
2	9th St - H to I Sts	400	14.0	C	112	3.5	5.0	17.5	\$257,576
3	9th St - I St to K/L Alley	1063	18.0	WS	73	5.3	3.7	19.5	\$684,508
4	9th St - E to H Sts	1200	14.0	C	112	3.0	5.0	15.0	\$772,727
5	12th & L Sts to 14th & K Sts	1200	16.0	C	96	3.3	4.8	16.1	\$772,727
6	14th St - J to I Sts	400	16.0	C	96	3.2	4.8	15.3	\$257,576
7	14th St - I to H Sts	400	16.0	C	96	3.2	4.8	15.3	\$257,576
8	19th & Q Sts to Broadway @ RR Tracks	3992	24.0	WS	76	5.5	3.8	20.9	\$2,570,660
9	Broadway @ RR Tracks to 21st St & 3rd/4th Ave Alley	2733	24.0	WS	76	5.5	3.8	20.9	\$1,759,886
10	3rd/4th Ave Alley - 21st to 24th Sts	1302	16.0	C	76	3.2	3.8	12.0	\$838,409
11	21st St & 3rd/4th Ave Alley to 23rd St & 12th Ave.	3956	24.0	WS	76	5.5	3.8	20.9	\$2,547,424
12	24th St - Broadway/X Alley to 5th/Donner Alley	4200	14.0	C	96	3.0	4.8	14.5	\$2,704,545
13	30th St - D to H Sts	1602	30.0	WS	73	5.7	3.7	20.7	\$1,031,591
14	Alhambra Blvd & H St to Mc Kinley Blvd & 36th St	2392	20.0	C	87	4.5	4.3	19.5	\$1,540,303
15	E St - 30th St to Alhambra Blvd	489	24.0	WS	65	4.5	3.3	14.7	\$314,886
16	North B St - Sac WTP to 18th st	7445	42.0	LB	84	6.2	4.2	26.0	\$4,794,129
17	18th St - North B St to D St	1655	30.0	WS	73	5.8	3.7	21.3	\$1,065,720
18	D St - 18th to 19th Sts	400	30.0	WS	73	5.8	3.7	21.3	\$257,576
19	D St - 19th St to Alhambra Blvd	4397	30.0	WS	73	4.3	3.7	15.8	\$2,831,402
20	Alhambra Blvd & J/K Alley to Alhambra Reservoir	550	20.0	WS	73	4.3	3.7	15.8	\$354,167
21	J St - 41st to 51st Sts	3000	16.0	C	96	3.2	4.8	15.3	\$1,931,818
22	Broadway - 5th to Martin Luther King Blvd	3936	16.0	C	96	3.2	4.8	15.3	\$2,534,545
23	Martin Luther King Blvd - Broadway to 9th Ave	1173	14.0	C	96	3.2	4.8	15.3	\$755,341
24	Alhambra Blvd - Hwy50 to X St	520	20.0	RS	96	3.2	4.8	15.3	\$334,848
25	Alhambra Blvd @ X/Y Alley	60	16.0	C	96	3.2	4.8	15.3	\$38,636

cont. Pipes - Transmission Mains

Rank	Location	Project Length (ft)	Pipe Diameter (Inch)	Material	Age	Asset Scores		Total CIP Score	Total Cost
						Criticality Score	Condition Score		
26	Alhambra Blvd @ X St	140	16.0	P	19	3.2	0.9	2.9	\$90,152
27	Stockton Blvd - 2nd Ave to Broadway	1672	16.0	C	96	3.2	4.8	15.3	\$1,076,667
28	Broadway - Stockton Blvd to 53rd St	2744	14.0	C	96	3.2	4.8	15.3	\$1,766,970
29	15th Street - Q St to Broadway	3350	14.0	C	87	3.0	4.3	13.0	\$2,157,197
30	R St - 34th to 40th Sts	2350	16.0	C	96	3.0	4.8	14.5	\$1,513,258
31	Sutterville Road - West Pacific Ave to Franklin Blvd	1900	18.0	WS	73	3.8	3.7	14.0	\$1,223,485
32	30th ST - H to L Sts	1750	42.0	WS	65	6.5	3.3	21.1	\$1,126,894
33	30th ST - L to Q Sts	2065	36.0	WS	65	6.0	3.3	19.5	\$1,329,735
34	Q St / 30th St to Alhambra	400	24.0	WS	69	5.7	3.4	19.5	\$257,576
35	Q St @ 30th St	40	24.0	WS	69	5.7	3.4	19.5	\$25,758
36	J/K Alley - 30th St to Alhambra Blvd	400	24.0	WS	65	4.3	3.3	14.1	\$257,576
37	P St - 30th St to Alhambra Blvd	364	24.0	WS	65	3.7	3.3	11.9	\$234,394
38	56th St & J St to 45th St & D St	5505	24.0	WS	65	4.8	3.3	15.8	\$3,544,886
39	59th St & Light Rail Tracks to 56th St & J St	4309	24.0	WS	65	5.3	3.3	17.4	\$2,774,735
40	59th St - US50 to R St	325	24.0	WS	65	5.0	3.2	16.2	\$209,280
41	59th St - Broadway to US50	2738	24.0	WS	65	5.0	3.2	16.2	\$1,763,106
42	6th St - Q St to Broadway	3396	24.0	WS	65	4.8	3.3	15.7	\$2,186,818
43	Broadway & 6th Street to Fremont Way & Riverside Blvd.	4205	24.0	WS	65	4.5	3.3	14.6	\$2,707,765
44	Riverside Blvd. - Fremont Way to 11th Ave	3820	24.0	WS	65	4.5	3.3	14.6	\$2,459,848
45	11th Ave - Riverside to 23rd St	5851	24.0	WS	65	4.7	3.3	15.2	\$3,767,689
46	56th St - H St to F St	1192	20.0	WS	65	4.2	3.3	13.6	\$767,576
47	Messina Dr - Elvas to Shepard	2000	14.0	S	64	3.0	3.2	9.6	\$1,287,879
48	Front St - T St to U St	755	42.0	WS	45	8.5	2.2	19.1	\$486,174
49	EAFWTP to College Town Dr & EAFWTP	1109	48.0	CCP	50	7.5	2.5	18.8	\$714,129
50	SRWTP to South End of Bercut Dr	1096	42.0	WS	45	8.3	2.2	18.7	\$705,758

Groundwater Well

Rank	Well Number	Year Drilled	Age (Years)	Year Well Rehabilitated	System-wide Hydraulic Importance ¹
1	154	1967	45	2005	1
2	153a	1993	19		1
3	134	1962	50		1
4	137	1965	47	2004	1
5	156	1968	44	1999	1
6	124	1959	53	2002	1
7	143	1965	47		1
8	116	1956	56	2001	1
9	107	1964	48		1
10	159	1969	43		1
11	155	1968	44	2000	1
12	83	1963	49	2005	2
13	94	1955	57		2
14	120	1946	66		2
15	122	1948	64		2
16	126	1950	62	2008	2
17	127	1965	47		2
18	129	1957	55		2
19	131	1946	66		2
20	133	1962	50		2
21	138	1965	47		2
22	144	not available	not available		2
23	92	1955	57	2003	3
24	93	1956	56		3
25	142	1965	47		3
26	158	1968	44		3
27	164	1993	19	2010	3

¹Hydraulic Importance: 1 - High, 3 Low

Treatment Plants

Asset	Rank	Recommended Projects
<i>SRWTP</i>		
Intake, Plaza and Fountain	4	Install air release valves on 54-inch vent piping. Repair settlement; replace 2 small intake pumps; repair/replace leaking piping/fountain filter system
Grit Basin	4	Replace Polychain
Coagulation Bldg	4	Replace roof, seismic update, and lower loading dock
SMUD Substation	5	Generators and new security camera
Basin 1	4-5	Replace or decommission basin
Basin 2	4	Replace or rehabilitate basin
Old Filters 1-16	4-5	Replace or decommission filters
Headhouse	4-5	Replace 50-inch sluice gate, existing electrical and instrumentation equipment, master surface washwater butterfly valve. Investigate/replace backwash tank cathodic protection and perform a seismic evaluation
5.0 MG Reservoir	4-5	Replace hydraulic gates and rehab failed baffle walls
HSPS	4-5	Replace High Service Pump Station
North Vault	5	Replace North Vault
Plant SCADA	4	Replace existing supervisory control and data acquisition (SCADA) human machine interface (HMI) server
<i>EAFWTP</i>		
Grit Basin	4	Replace all bypass sluice gates and motor control center (MCC) 40T
Train 1/2	4-5	Replace old hydraulic sluice gates, drain valves, piping, and handrail that meets code. Rehabilitate concrete surfaces
Fluoride System	4	Replace entire fluoride system
Old Filters 1-8	4	Completely rehab old filters, including structural repairs. Replace filter effluent valves. Install SCADA filter controls
Filter Gallery Train 1/2	4	Replace roof, drain channel conduit and disconnects, and corroded piping
20 MG Reservoir	4	Replace hydraulic gates
SMUD Substation	4-5	Replace circuit breakers and backup emergency generator
Sludge Room	4	Replace drain valves and electrical conduits and boxes. Install PLC/SCADA instrumentation and controls
Train 1/2		
Admin Bldg	5	Replace old Administration Building roof
Plant SCADA	4	Replace existing SCADA HMI server
Notes:		
1. Summary taken from Condition Assessment TM No. 4 and TM No. 5		

Meters

Summary of Project Cost Estimates

Project ID	# of Services to Meter	2012 Meter Retrofit Cost Estimate	2012 Meter Retrofit Cost Estimate
Meter Retrofits			
M-4	1112	\$ 1,500,000	\$ 1,500,000
E-M-4	802	\$ 1,080,000	\$ 1,080,000
E-M-4	1976	\$ 2,670,000	\$ 2,670,000
E-M-8	1089	\$ 1,470,000	\$ 1,470,000
E-M-4	1872	\$ 2,530,000	\$ 2,530,000
Z-M-3	1772	\$ 2,390,000	\$ 2,390,000
E-M-2	1000	\$ 2,400,000	\$ 2,400,000
Subtotal	10461	\$ 14,120,000	\$ 14,120,000
Cost - All Pipes Replaced (Incl. Replacing Street/Alley Mns)			
Cost - BYPR only (Retrofits on Street Mains)			
Pipeline Replacements			
E-PR-9*	476	\$ -	\$ 3,400,000
E-PR-10	502	\$ -	\$ -
E-PR-11	766	\$ -	\$ -
H-PR-6	725	\$ -	\$ -
H-PR-7	697	\$ -	\$ -
H-PR-8	536	\$ -	\$ -
E-PR-8	395	\$ -	\$ -
E-PR-8	342	\$ -	\$ -
E-PR-10	446	\$ -	\$ -
E-PR-11	556	\$ -	\$ -
Subtotal	5446	\$ -	\$ 3,400,000
consultant costs			\$ 68,000
TOTAL	15,907	14,120,000	17,520,000
Target Meters	15,224		
Difference	-683		
Add another \$1.5M if consultants are used for survey and design services.			
* E-PR-9 construction is to be funded in FY12/13, design was funded in FY 11/12			

5-Year CIP Project Plan

WATER CIP PROGRAM (FY 2011 dollars)

5-year

	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17
	1 year	2 year	3 year	4 year	5 year
PROGRAMMATIC CIPs	\$3,647,083	\$4,132,416	\$2,466,000	\$5,515,000	\$7,002,990
Reserve/Miscellaneous	\$1,832,083	\$2,647,416	\$1,706,000	\$4,905,000	\$5,992,990
Base CIP Reserve (10%) ***	\$382,083	\$1,197,416	\$1,256,000	\$3,905,000	\$4,967,990
Unplanned Corrective Maintenance - Emergency Repair	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Asset Management	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Condition Assessment	\$1,000,000	\$1,000,000	\$0	\$550,000	\$575,000
Fire Hydrant & Gate Valve Replacement	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Grant Writer	\$0	\$0	\$0	\$0	\$0
Regulatory	\$735,000	\$635,000	\$560,000	\$410,000	\$410,000
Utilities ADA Improvements	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Backflow Prevention Devices	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Drinking Water Quality (LIMS software - \$200K 1st year)	\$300,000	\$175,000	\$100,000	\$100,000	\$100,000
Distribution Flushing Program	\$0	\$0	\$0	\$0	\$0
Water System Security (Homeland Security)	\$125,000	\$150,000	\$150,000	\$0	\$0
Groundwater Protection Program (well abandonment)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Planning	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Water Supply Master Planning	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Information Technology	\$980,000	\$750,000	\$100,000	\$100,000	\$100,000
IT Projects	\$250,000	\$250,000	\$100,000	\$100,000	\$100,000
Utility Energy Efficiency (water optimization software)	\$500,000	\$500,000	\$0	\$0	\$0
CMMS (replace Cityworks) *	\$230,000	\$0	\$0	\$0	\$0
CIS Software Replacement	\$0	\$0	\$0	\$0	\$0
REHABILITATION & REPLACEMENT	\$157,421,667	\$9,158,334	\$4,080,000	\$33,695,000	\$16,050,000
Pipe - Transmission Main **	\$916,667	\$1,633,334	\$0	\$4,125,000	\$4,125,000
ramp up to 1% per year (1.5 miles per year) over 5 years					
Pipe - Distribution Main **	\$1,500,000	\$3,000,000	\$1,955,000	\$7,345,000	\$8,300,000
ramp up to 1% per year (1.5 miles per year) over 10 years					
Pipe (Transmission & Distribution) *****	\$2,416,667	\$4,833,334	\$1,855,000	\$11,470,000	\$12,425,000
3-PR-9	X				
3-PR-10	X				
3-PR-11	X				
4-PR-6	X				
4-PR-7	X				
4-PR-8	X				
5-PR-8	X				
6-PR-8	X				
6-PR-10	X				
6-PR-11	X				
Reservoirs	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Wells	\$2,000,000	\$2,000,000	\$1,000,000	\$2,500,000	\$2,500,000
Treatment Plants	\$150,600,000	\$1,100,000	\$1,100,000	\$18,600,000	\$0
Sacramento River	\$150,000,000	\$500,000	\$500,000	\$0	\$0
E.A. Fairbairn (rehab filters 1-8)	\$0	\$0	\$0	\$18,000,000	\$0
E.A. Fairbairn (replace filter media 9-16)	\$500,000	\$500,000	\$500,000	\$500,000	\$0
E.A. Fairbairn Plant Rehab	\$0	\$0	\$0	\$0	\$0
Pump Replacement Program (high and low lift pumps)	\$100,000	\$100,000	\$100,000	\$100,000	\$0
Building	\$1,305,000	\$125,000	\$25,000	\$25,000	\$25,000
Meter Shop Improvements	\$0	\$0	\$0	\$0	\$0
Fullerton House Improvements	\$100,000	\$100,000	\$0	\$0	\$0
Warehouse Storage Building *	\$250,000	\$0	\$0	\$0	\$0
Misc - Facility Repair	\$0	\$0	\$0	\$0	\$0
DOU Facility Roof Rehab	\$105,000	\$25,000	\$25,000	\$25,000	\$25,000
Florin Res Backup Engine	\$850,000	\$0	\$0	\$0	\$0
Other	\$1,000,000	\$1,000,000	\$0	\$1,000,000	\$1,000,000
Fluoride Equipment Rehab	\$1,000,000	\$1,000,000	\$0	\$1,000,000	\$1,000,000
IMPROVEMENT	\$0	\$0	\$0	\$1,000,000	\$20,000,000
South Sacramento T-Main ****	\$0	\$0	\$0	\$1,000,000	\$20,000,000
RESIDENTIAL WATER METER PROGRAM through 2025 (Option 1)	\$13,920,000	\$19,020,000	\$24,120,000	\$34,533,112	\$34,533,112
Pay Go	\$1,532,308	\$1,632,308	\$1,732,308	\$1,712,308	\$1,712,308
Finance	\$12,387,692	\$17,387,692	\$22,387,692	\$32,820,804	\$32,820,804
1-M-4	X				
2-M-4	X				
3-M-1	X				
5-M-8	X				
6-M-4	X				
7-M-3	X				
8-M-2	X				
TOTAL	\$174,988,750	\$32,310,750	\$30,666,000	\$74,743,112	\$77,586,102

* Multi-funded

** Estimated 100-Year Useful Life

*** Excludes Treatment Plants @ \$150M, \$18M & \$15M, Water Meter Program, and Improvement/Development

**** Bonding for \$20M transmission main to Florin Road

***** Transmission & distribution pipe programs are coordinated with meter retrofit program

Project Priority Lists

**Pipe Replacement
&
Meter Retrofits**

FY13-15

CIP INFORMATION SHEET

PROJECT: East Sac Water Main Replacement - Phase 1
WATER FUND: 413

Rehab & Replace

1. ASSET PROFILE & LOCATION

Asset Rank	?									
Criticality Score	?									
Minor	Moderate	Critical	Super Critical							
1	2	3	4	5	6	7	8	9	10	
Condition Score				?						
Excellent	Good	Fair	Poor	Failed						
1	2	3	4	5						
Total Score (CRIT * CA)					#VALUE!					
Est. Project Cost:					\$3,962,000					
Project Funding Source					Bond Funding & Utility Rates					
Project Number					Z14010061					
Est. Design Completion					Nov-12					
Est. Const Completion					Dec-13					



2. PROJECT DETAILS

PROJECT DESCRIPTION:
This project abandons/replaces 21,000 feet of 6" and 8" cast iron and transite water mains in street right of ways and backyard easements with 8" and 12" mains placed in street right of ways. Water services and meters will be placed from the main to the house. Fire protection will also be improved.

PROJECT OBJECTIVE:
The East Sacramento Water Main Replacement project will replace aging water mains and will allow easier access to the water main and meters for future maintenance and service. The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:
It is Department policy to replace backyard mains at or near the end of their useful life as determined by industry standards and place new mains within City streets. Residential water services constructed prior to 1993 were not required to have a water meters.

IMPACTS:
Construction impacts may include the following:
Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE

Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> med
Restoration of Service	<input type="checkbox"/> <4hrs	<input type="checkbox"/> >4hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med

LIKELIHOOD OF FAILURE

Within the next year 5-yrs 10-yrs

LEVEL OF SERVICE ANALYSIS

Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

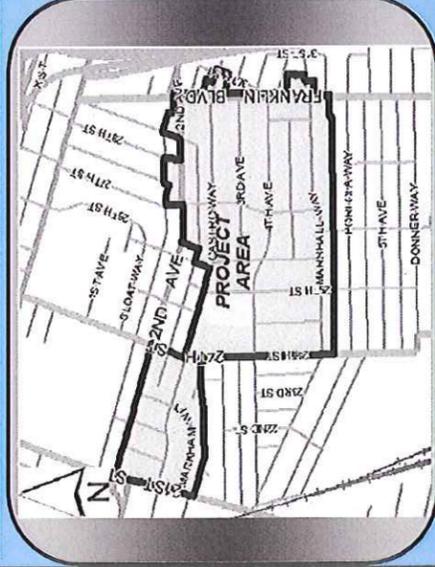
PROJECT BENEFIT
Encourages water conservation, prevents leaks and pipeline failure, fire hydrant upgrades, complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY
Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with valuable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

1. ASSET PROFILE & LOCATION

Asset Rank	?									
Criticality Score	?									
Minor	Moderate	Critical	Super Critical							
1	2	3	4	5	6	7	8	9	10	
Condition Score				?						
Excellent	Good	Fair	Poor	Failed						
1	2	3	4	5						
Total Score (CRIT * CA)				#VALUE!						

Est. Project Cost:	\$3,470,000
Project Funding Source	Bond Funding & Utility Rates
Project Number	Z14010062
Est. Design Completion	Dec-13
Est. Const. Completion	Jun-15



2. PROJECT DETAILS

PROJECT DESCRIPTION:
Abandon and replace existing aging water distribution main currently located in backyard easements and place new main in street right of ways. Place water services and meters from the main to the house. Fire protection will also be improved.

PROJECT OBJECTIVE:
The Curtis Park Water Main Replacement project will replace aging water mains and will allow easier access to the water main and meters for future maintenance and service. The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:
It is Department policy to replace backyard mains at or near the end of their useful life as determined by industry standards and place new mains within City streets. Residential water services constructed prior to 1993 were not required to have a water meters.

IMPACTS:
Construction impacts may include the following:
Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE	Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
	Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
	Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
	Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> low
	Restoration of Service	<input type="checkbox"/> <4hrs	<input type="checkbox"/> >4>12hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med	

LIKELIHOOD OF FAILURE	Within the next	<input type="checkbox"/> year	<input type="checkbox"/> 5-yrs	<input type="checkbox"/> 10-yrs
------------------------------	-----------------	-------------------------------	--------------------------------	---------------------------------

LEVEL OF SERVICE ANALYSIS	Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
	Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
	Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
	Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

PROJECT BENEFIT
Encourages water conservation, prevents leaks and pipeline failure, fire hydrant upgrades, complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY
Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with valuable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

1. ASSET PROFILE & LOCATION

Asset Rank: ?

Criticality Score: ?

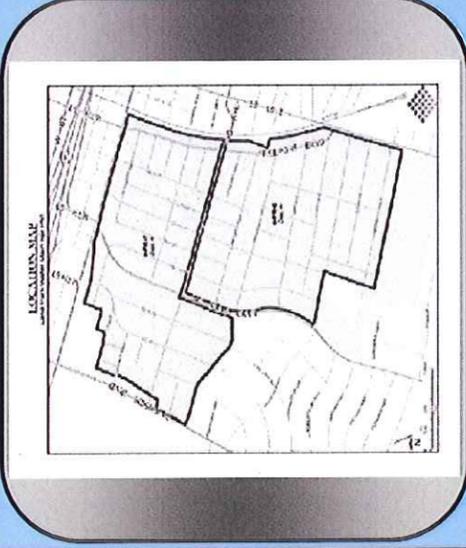
Minor	Moderate	Critical	Super Critical
1	2	3	4
5	6	7	8
9	10		

Condition Score: ?

Excellent	Good	Fair	Poor	Failed
1	2	3	4	5

Total Score (CRIT * CA) #VALUE!

Est. Project Cost:	\$12,360,000
Project Funding Source:	Bond Funding & Utility Rates
Project Number:	Z14010063
Est. Design Completion:	Jan-14
Est. Const Completion:	May-15



2. PROJECT DETAILS

PROJECT DESCRIPTION:
 This project includes abandoning/replacing 45,000 feet of 8 inch and 12 inch water mains in street right of ways and backyard easements. All new mains will be placed in street right of ways and new water services and meters will be placed from the water main to the house. Fire protection will also be improved. Project boundaries: Riverside Blvd (west), Broadway (north), Freepport Blvd (east), McClatchy High School & Cal Middle School (south)

PROJECT OBJECTIVE:
 The Land Park Water Main Replacement project will replace aging water mains and will allow easier access to the water main and meters for future maintenance and service. The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:
 It is Department policy to replace backyard mains at or near the end of their useful life as determined by industry standards and place new mains within City streets. Residential water services constructed prior to 1993 were not required to have a water meters.

IMPACTS:
 Construction impacts may include the following:
 Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE

Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> med
Restoration of Service	<input type="checkbox"/> <4hrs	<input type="checkbox"/> 4-12hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med

LIKELIHOOD OF FAILURE

Within the next: year 5-yrs 10-yrs

LEVEL OF SERVICE ANALYSIS

Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

PROJECT BENEFIT

Encourages water conservation, prevents leaks and pipeline failure, fire hydrant upgrades, complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY

Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with vaulable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

1. ASSET PROFILE & LOCATION

Asset Rank: ?

Criticality Score: ?

Minor	Moderate	Critical	Super Critical
1	2	3	4
5	6	7	8
9	10		

Condition Score: ?

Excellent	Good	Fair	Poor	Failed
1	2	3	4	5

Total Score (CRIT * CA) #VALUE!

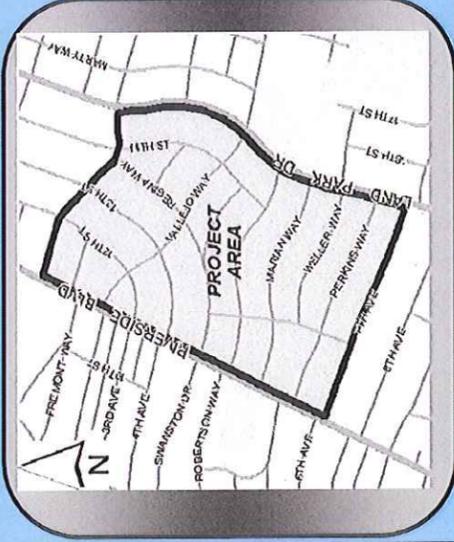
Est. Project Cost: \$5,710,000

Project Funding Source: Bond Funding & Utility Rates

Project Number: Z14010064

Est. Design Completion: Feb-14

Est. Const Completion: Feb-15



2. PROJECT DETAILS

PROJECT DESCRIPTION:

This project includes abandoning/replacing 25,000 feet of 8 inch & 12 inch water mains in street right of ways and backyard easements. All new mains will be placed in street right of ways and new water services and meters will be placed from the water main to the house. Fire protection will be improved. Project boundary: Land Park Dr (east), 7th Ave (south), Riverside (west), Markham Wy (north).

PROJECT OBJECTIVE:

The Land Park Water Main Replacement project will replace aging water mains and will allow easier access to the water main and meters for future maintenance and service. The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:

It is Department policy to replace backyard mains at or near the end of their useful life as determined by industry standards and place new mains within City streets. Residential water services constructed prior to 1993 were not required to have a water meters.

IMPACTS:

Construction impacts may include the following:
Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE

Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> med
Restoration of Service	<input type="checkbox"/> 4hrs	<input type="checkbox"/> 4>12hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med

LIKELIHOOD OF FAILURE

Within the next: year 5-yrs 10-yrs

LEVEL OF SERVICE ANALYSIS

Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

PROJECT BENEFIT

Encourages water conservation, prevents leaks and pipeline failure, fire hydrant upgrades, complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY

Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with vaulable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

FY13-15

CIP INFORMATION SHEET
PROJECT: Tahoe Park Water Main Replacement
WATER FUND: 413

Rehab & Replace

1. ASSET PROFILE & LOCATION

Asset Rank: ?

Criticality Score: ?

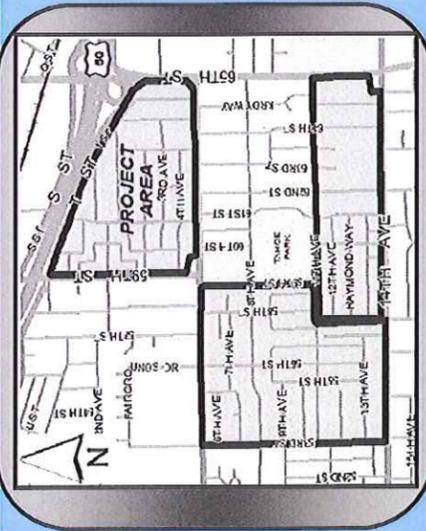
Minor	Moderate	Critical	Super Critical
1	2	3	4
5	6	7	8
9	10		

Condition Score: ?

Excellent	Good	Fair	Poor	Failed
1	2	3	4	5

Total Score (CRIT * CA) #VALUE!

Est. Project Cost:	\$8,290,000
Project Funding Source	Bond Funding & Utility Rates
Project Number	Z14010065
Est. Design Completion	Nov- 2013
Est. Const Completion	June- 2014



2. PROJECT DETAILS

PROJECT DESCRIPTION:
 Replace existing water distribution main and place new meter boxes, setters, and meters on existing front yard or alley water services.

PROJECT OBJECTIVE:

The Tahoe Park Water Main Replacement project will replace aging water mains and will allow for easier access to the water main and meters for future maintenance and service. The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:

It is Department policy to replace backyard mains at or near the end of their useful life as determined by industry standards and place new mains within City streets. Residential water services constructed prior to 1993 were not required to have a water meters.

IMPACTS:

Construction impacts may include the following:
 Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> med
Restoration of Service	<input type="checkbox"/> 4hrs	<input type="checkbox"/> 4-12hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med

LIKELIHOOD OF FAILURE

Within the next year 5-yrs 10-yrs

LEVEL OF SERVICE ANALYSIS

Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

PROJECT BENEFIT

Encourages water conservation, prevents leaks and pipeline failure, fire hydrant upgrades, complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY

Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with valuable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

FY13-15

CIP INFORMATION SHEET
 PROJECT: East Sacramento Water Main Replacement - Phase 2
 WATER FUND: 413

Rehab & Replace

1. ASSET PROFILE & LOCATION

Asset Rank: ?

Criticality Score: ?

Minor	Moderate	Critical	Super Critical
1	2	3	4
5	6	7	8
9	10		

Condition Score: ?

Excellent	Good	Fair	Poor	Failed
1	2	3	4	5

Total Score (CRIT * CA) #VALUE!

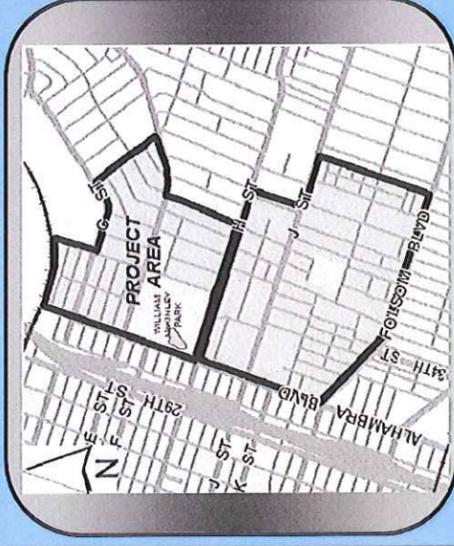
Est. Project Cost: \$13,343,885

Project Funding Source: Bond Funding & Utility Rates

Project Number: Z14010066

Est. Design Completion: Mar-14

Est. Const Completion: Jun-15



2. PROJECT DETAILS

PROJECT DESCRIPTION:

This project abandons/replaces 24,000 feet of 6" and 8" cast iron and transit water mains in street right of ways and backyard easements with 8" and 12" mains placed in street right of ways. Water services and meters will be placed from the main to the house. Fire protection will also be improved.

PROJECT OBJECTIVE:

The East Sacramento Water Main Replacement project will replace aging water mains and will allow easier access to the water main and meters for future maintenance and service. The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:

It is Department policy to replace backyard mains at or near the end of their useful life as determined by industry standards and place new mains within City streets. Residential water services constructed prior to 1993 were not required to have a water meters.

IMPACTS:

Construction impacts may include the following:
 Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE

Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> med
Restoration of Service	<input type="checkbox"/> <4hrs	<input type="checkbox"/> >4hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med

LIKELIHOOD OF FAILURE

Within the next: year 5-yrs 10-yrs

LEVEL OF SERVICE ANALYSIS

Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

PROJECT BENEFIT

Encourages water conservation, prevents leaks and pipeline failure, fire hydrant upgrades, complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY

Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with valuable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

1. ASSET PROFILE & LOCATION

Asset Rank	?			
Criticality Score	?			
Minor	Critical	Super Critical		
1	2	3		
2	3	4		
3	4	5		
4	5	6		
5	6	7		
6	7	8		
7	8	9		
8	9	10		
9	10			
10				
Condition Score	?			
Excellent	Good	Fair	Poor	Failed
1	2	3	4	5
Total Score (CRIT * CA)		#VALUE!		

Est. Project Cost:	\$5,250,000
Project Funding Source	Utility Rates
Project Number	Z14010068
Est. Design Completion	Feb- 2013
Est. Const Completion	Jul- 2013



2. PROJECT DETAILS

PROJECT DESCRIPTION:
 Place new meter boxes, meter setters and meters on existing water services within the project boundaries.

PROJECT OBJECTIVE:
 The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:
 Residential water services constructed prior to 1993 were not required to have a water meter.

IMPACTS:
 Construction impacts may include the following:
 Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE	
Reliable, high quality customer service	<input type="checkbox"/> yes <input type="checkbox"/> no
Regulations and Environmental Impact	<input type="checkbox"/> yes <input type="checkbox"/> no
Health & Safety of Public/Employees	<input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low
Economic Impact	<input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low
Restoration of Service	<input type="checkbox"/> <4hrs <input type="checkbox"/> 4-12hrs <input type="checkbox"/> >12hrs
Location/critical facility impact	<input type="checkbox"/> high <input type="checkbox"/> med <input type="checkbox"/> low

LIKELIHOOD OF FAILURE	
Within the next	<input type="checkbox"/> year <input type="checkbox"/> 5-yrs <input type="checkbox"/> 10-yrs

LEVEL OF SERVICE ANALYSIS	
Unscheduled shut down/year	<input type="checkbox"/> zero <input type="checkbox"/> one <input type="checkbox"/> >one
Scheduled service interruption	<input type="checkbox"/> 4hrs or less <input type="checkbox"/> hrs
Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less <input type="checkbox"/> 30 min.
Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less <input type="checkbox"/> 60 min.

PROJECT BENEFIT
 Encourages water conservation, and complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY
 Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with valuable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

1. ASSET PROFILE & LOCATION

Asset Rank: ?

Criticality Score: ?

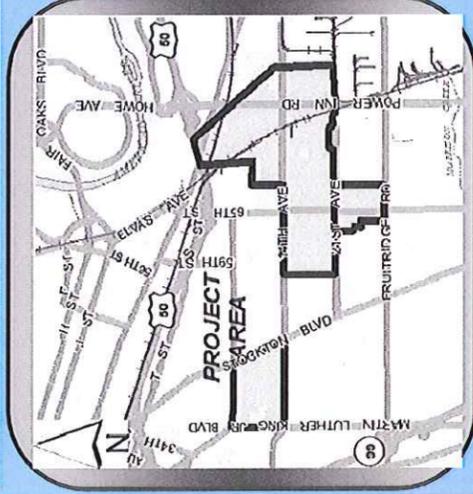
Minor	Moderate	Critical	Super Critical
1	2	3	4
5	6	7	8
9	10		

Condition Score: ?

Excellent	Good	Fair	Poor	Failed
1	2	3	4	5

Total Score (CRIT * CA) #VALUE!

Est. Project Cost (2008):	\$4,000,000
Project Funding Source	Utility Rates
Project Number	Z14010069
Est. Design Completion	May- 2013
Est. Const Completion	Nov- 2013



2. PROJECT DETAILS

PROJECT DESCRIPTION:
 Place new meter boxes, meter setters and meters on existing water services within the project boundaries.

PROJECT OBJECTIVE:
 The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:
 Residential water services constructed prior to 1993 were not required to have a water meter.

IMPACTS:
 Construction impacts may include the following:
 Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE

Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> med
Restoration of Service	<input type="checkbox"/> <4hrs	<input type="checkbox"/> >4hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med

LIKELIHOOD OF FAILURE

Within the next: year 5-yrs 10-yrs

LEVEL OF SERVICE ANALYSIS

Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

PROJECT BENEFIT
 Encourages water conservation, and complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY
 Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with vaulable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

1. ASSET PROFILE & LOCATION

Asset Rank	?									
Criticality Score	?									
Minor	Moderate	Critical	Super Critical							
1	2	3	4	5	6	7	8	9	10	
Condition Score				?						
Excellent	Good	Fair	Poor	Failed						
1	2	3	4	5						
Total Score (CRIT * CA)				#VALUE!						

Est. Project Cost (2008):	\$4,870,000
Project Funding Source	Utility Rates
Project Number	Z14010070
Est. Design Completion	Apr - 2013
Est. Const Completion	Apr - 2014



2. PROJECT DETAILS

PROJECT DESCRIPTION:
 Place new meter boxes, meter setters, and meters on existing front yard or alley water services. This project is bounded by Franklin Blvd to the East, the Union Pacific Railroad to the West, Union House creek to the South, and G Parkway & Meadowgate Drive to the North.

PROJECT OBJECTIVE:
 The project helps meet the objectives of Assembly Bill 2572 by installing water meters on all residential water services by year 2025.

EXISTING SITUATION:
 Residential water services constructed prior to 1993 were not required to have a water meter.

IMPACTS:
 Construction impacts may include the following:
 Maximum 4 hour water shut down, traffic impacts such as some street closures to through traffic and the potential for temporary parking restrictions, potential for minor dust and noise, landscaping will be returned to original condition, and temporary equipment & material storage on the street

3. BUSINESS CASE

CONSEQUENCE OF FAILURE	Reliable, high quality customer service	<input type="checkbox"/> yes	<input type="checkbox"/> no
	Regulations and Environmental Impact	<input type="checkbox"/> yes	<input type="checkbox"/> no
	Health & Safety of Public/Employees	<input type="checkbox"/> high	<input type="checkbox"/> med
	Economic Impact	<input type="checkbox"/> high	<input type="checkbox"/> med
	Restoration of Service	<input type="checkbox"/> 4hrs	<input type="checkbox"/> 4>12hrs
Location/critical facility impact	<input type="checkbox"/> high	<input type="checkbox"/> med	

LIKELIHOOD OF FAILURE	Within the next	<input type="checkbox"/> year	<input type="checkbox"/> 5-yrs	<input type="checkbox"/> 10-yrs
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LEVEL OF SERVICE ANALYSIS	Unscheduled shut down/year	<input type="checkbox"/> zero	<input type="checkbox"/> one	<input type="checkbox"/> >one
	Scheduled service interruption	<input type="checkbox"/> 4hrs or less	<input type="checkbox"/> hrs	
	Emergency Resp. bus. hours	<input type="checkbox"/> 30 min. or less	<input type="checkbox"/> 30 min.	
	Emergency Resp. after hours	<input type="checkbox"/> 60 min. or less	<input type="checkbox"/> 60 min.	

PROJECT BENEFIT
 Encourages water conservation and complies with both regulatory and legislative requirements.

NON CRITICAL INFORMATION ONLY
 Meter projects are spread throughout the City and are also adjacent to other completed projects. Projects are sequenced so they create efficient meter reading routes. Once meters are placed and the contractor has completed the project, City crews will install the automated meter reading component on each meter and will leave a doorhanger with valuable information for the homeowner regarding water savings tips and information on how to schedule a Free Water Wise house call.

Appendix B
Wastewater

30-Year Capital Investment Plan

SEWER CIP PROGRAM (FY 2011 dollars)

30-year forecast

	FY12/13 1 year	FY 13/14 2 year	FY 14/15 3 year	FY 15/16 4 year	FY 16/17 5 year	FY 17/18 6 year	FY 18/19 7 year	FY 19/20 8 year	FY 20/21 9 year	FY 21/22 10 year	FY 22/23 11 year	FY 23/24 12 year	FY 24/25 13 year	FY 25/26 14 year	FY 26/27 15 year	FY 27/28 16 year	FY 28/29 17 year	FY 29/30 18 year	FY 30/31 19 year
PROGRAMMATIC CIPs	\$10,184,500	\$16,634,000	\$5,151,500	\$17,716,500	\$27,716,500	\$38,866,000	\$18,511,000	\$22,896,000	\$22,896,000	\$22,896,000	\$23,123,500	\$22,896,000	\$23,186,000	\$22,906,000	\$22,926,000	\$23,131,000	\$22,998,500	\$22,916,000	\$22,911,000
Reserve/Miscellaneous	\$915,000	\$999,000	\$466,500	\$1,056,500	\$1,606,500	\$4,936,000	\$1,981,000	\$2,366,000	\$2,366,000	\$2,366,000	\$2,393,500	\$2,366,000	\$2,656,000	\$2,376,000	\$2,396,000	\$2,401,000	\$2,468,500	\$2,386,000	\$2,381,000
Base CIP Reserve (10%) ****	\$745,000	\$829,000	\$295,500	\$855,500	\$1,336,500	\$4,516,000	\$1,561,000	\$1,946,000	\$1,946,000	\$1,946,000	\$1,973,500	\$1,946,000	\$2,236,000	\$1,956,000	\$1,976,000	\$2,048,500	\$1,966,000	\$1,961,000	
Unplanned Corrective Maintenance - Emergency Repair	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Management	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Condition Assessment	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Grant Writer	\$0	\$0	\$0	\$0	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Regulatory	\$8,639,500	\$15,135,000	\$4,435,000	\$16,410,000	\$25,960,000	\$32,480,000	\$16,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000
CSS Miscellaneous 3330 PRGM	\$5,675,000	\$12,875,000	\$1,275,000	\$12,875,000	\$21,075,000	\$27,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000
On-call Sewer Pipe Cleaning CCTV	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Sewer System Rehabilitation 3110	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Collection Pipe Replacement	\$425,000	\$700,000	\$1,600,000	\$2,150,000	\$3,600,000	\$4,000,000	\$8,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000
Collection Pipe Bursting	\$393,500	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Collection Pipe Lining	\$511,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Flow Monitoring/Hydrology	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Utility ADA Improvements	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Air Quality - Generators	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Sewer System Security (Homeland Security)	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Update CSS Improvement Plan	\$200,000	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Flow metering	\$150,000	\$150,000	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Planning	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Combined Sewer Master Planning	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Sewer System Master Planning	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Information Technology	\$480,000	\$250,000	\$100,000	\$100,000	\$100,000	\$1,100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
IT Projects	\$250,000	\$250,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
CMMS (replace Cityworks) *	\$230,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CIS Software Replacement	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
REHABILITATION & REPLACEMENT	\$1,635,000	\$1,385,000	\$860,000	\$835,000	\$735,000	\$12,935,000	\$585,000	\$435,000	\$435,000	\$435,000	\$510,000	\$435,000	\$3,335,000	\$535,000	\$735,000	\$685,000	\$1,460,000	\$635,000	\$585,000
Sumps (electrical rehab)	\$400,000	\$450,000	\$75,000	\$50,000	\$200,000	\$0	\$150,000	\$0	\$0	\$0	\$75,000	\$0	\$50,000	\$100,000	\$300,000	\$150,000	\$1,025,000	\$200,000	\$150,000
85	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
146	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
145	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
137	\$0	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
143	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
81	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$75,000	\$0	\$50,000	\$100,000	\$300,000	\$150,000	\$1,025,000	\$200,000	\$150,000	
Sumps (other)	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Other	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Sump 11A (electrical rehab)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
Sump 11A (other)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Other	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Sump 22A (electrical rehab)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sump 22A (other)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Other	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
CVWTP (electrical rehab)	\$200,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MCC 'B'	\$100,000	\$0	\$																

FY 31/32 20 year	FY 32/33 21 year	FY 33/34 22 year	FY 34/35 23 year	FY 35/36 24 year	FY 36/37 25 year	FY 37/38 26 year	FY 38/39 27 year	FY 39/40 28 year	FY 40/41 29 year	FY 41/42 30 year	Sub Total
\$22,896,000	\$23,268,600	\$22,956,000	\$22,903,500	\$22,953,500	\$23,131,000	\$23,116,000	\$22,903,500	\$22,896,000	\$22,901,000	\$22,916,000	\$663,003,000
\$2,366,000	\$2,638,600	\$2,426,000	\$2,373,600	\$2,423,600	\$2,601,000	\$2,386,000	\$2,373,600	\$2,366,000	\$2,371,000	\$2,386,000	\$67,393,600
\$1,946,000	\$2,118,600	\$2,006,000	\$1,953,600	\$2,003,600	\$2,181,000	\$1,966,000	\$1,953,600	\$1,946,000	\$1,951,000	\$1,966,000	\$56,043,500
\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$6,250,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$1,600,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,000,000
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$500,000
\$20,280,000	\$20,480,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,480,000	\$20,280,000	\$20,280,000	\$20,280,000	\$20,280,000	\$586,579,600
\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$249,579,600
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$2,250,000
\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$2,250,000
\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$14,893,500
\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$15,011,000
\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$3,000,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$175,000
\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200,000
\$0	\$200,000	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$500,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,600,000
\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$1,500,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$3,000,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$4,630,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$230,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000
\$435,000	\$1,980,000	\$1,035,000	\$510,000	\$1,010,000	\$2,785,000	\$435,000	\$510,000	\$435,000	\$485,000	\$635,000	\$39,325,000
\$0	\$325,000	\$0	\$75,000	\$175,000	\$950,000	\$0	\$75,000	\$0	\$50,000	\$200,000	\$5,225,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
\$0	\$325,000	\$0	\$75,000	\$175,000	\$950,000	\$0	\$75,000	\$0	\$50,000	\$200,000	\$4,250,000
\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$4,600,000
\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$4,500,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850,000
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$300,000
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$300,000
\$0	\$1,200,000	\$0	\$0	\$0	\$600,000	\$0	\$0	\$0	\$0	\$0	\$3,800,000
\$0	\$1,200,000	\$0	\$0	\$0	\$600,000	\$0	\$0	\$0	\$0	\$0	\$3,800,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,000,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,000,000
\$0	\$0	\$600,000	\$0	\$400,000	\$800,000	\$0	\$0	\$0	\$0	\$0	\$2,150,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,800,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$2,300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$1,500,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$14,200,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,500,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$1,500,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$1,500,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$1,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$750,000
\$23,331,000	\$25,228,500	\$23,991,000	\$23,413,500	\$23,963,500	\$25,916,000	\$23,551,000	\$23,413,500	\$23,331,000	\$23,386,000	\$23,551,000	\$702,328,000

Priority Lists

Pipes - Replacement

Rank	Project Name	Combined (C) or Separated (S) System	Project Length (ft)	Pipe Diameter (inch)	Asset Scores			Total CIP Score	Normalized Score	Total Cost
					Defect	Vulnerability	Criticality			
1	3085 Freeport Blvd	C	1009	36	255	134	251	217.9	21.83	\$822,000
2	V/W Alley from 14th-15th Street	C	352	8	236	195	191	214.7	21.5	\$273,018
3	1608 Q Street	C	270	8	150	205	191	174.7	17.5	\$234,241
4	1700 Santa Ynez	C	300	8	150	209	170	171.7	17.2	\$223,100
5	Donner/5th Ave Alley Replacement, 26th to 27th St	C	540	8	140	197	191	167.3	16.8	\$256,324
6	S/T Alley Replacement, 9th to 10th St	C	370	8	152	171	191	165.5	16.6	\$229,868
7	R Street Sewer, 16th to 18th St	C	900	12	149	134	191	152.9	15.3	\$353,172
8	3030 Capitol Ave	C	360	8	130	138	191	144.6	14.5	\$184,506
9	32nd St btwn X & Y St	C	160	8	101	181	170	138.8	13.9	\$159,140
10	1254 Sunland Vista	C	140	6	87	187	191	137.8	13.8	\$128,193
11	Broadway and 39th Street	C	302	8	85	171	191	132.0	13.2	\$233,990
12	24th Street from 3rd Ave to Castro Way	C	470	8	85	162	170	125.1	12.5	\$334,172

1	Easement East of Benbow St	S	130	6	147	213	191	175.6	17.6	
2	Babette & 23rd St.	S	560	6	97	257	191	163.8	16.4	
3	Harbor Lt btwn Riverwind & Zephyr Ranch	S	260	8	100	247	191	162.3	16.3	\$132,413
4	Lampasas btwn Norwood and Grove	S	1180	10	107	201	212	156.2	15.7	\$489,827
5	Hogan btwn Monifieth & Middlecoff Wy	S	133	6	72	239	227	153.1	15.3	
6	Del Rio and Campbell Ln	S	75	6	87	203	191	142.6	14.3	\$56,286
7	5621 Milner Way	S	650	6	70	197	191	132.3	13.3	\$245,188

Pipes - Lining

Rank	Project Name	Combined (C) or Separated (S) System	Project Length (ft)	Pipe Diameter (inch)	Asset Scores			Total CIP Score	Normalized Score	Total Cost
					Defect	Vulnerability	Criticality			
1	1782 11th Ave	C	225	8	130	205	170	160.5	16.1	\$33,282
2	Btwn Y St and Sherman Wy	C	429	8	167	136	170	158.3	15.9	\$61,086
3	Easement btwn 22 & 23rd st & 9th to 10th St.	C	601	8	127	187	170	153.6	15.4	\$93,390
4	4th Ave & 22nd St	C	205	8	110	167	191	143.3	14.4	\$31,307
5	715 19th St	C	417	8	94	197	170	140.1	14.0	\$67,561
6	3421 I Street	C	529	8	72	187	191	130.3	13.1	\$78,620
7	Easement 43rd-44th St- 12th-13th Ave	C	225	8	79	167	186	126.8	12.7	\$33,282

1	5605 Bradd in Easement	S	974	6	145	173	191	162.6	16.3	\$128,562
2	35th St, East of Park Village St.	S	1544	6	133	173	191	156.6	15.7	\$191,534
3	2020 Quincy Ave	S	415	6	90	231	191	152.5	15.3	\$58,997
4	28th St and 16th Ave	S	145	6	99	199	191	147.4	14.8	\$32,797
5	Easement btwn Hillsboro and Del Rio	S	676	6	115	157	191	142.8	14.3	\$99,645
6	Easement btwn 58th and 59th Streets	S	753	8	104	175	191	142.7	14.3	\$100,738
7	7225 17th St & 1708 Wakefield	S	466	6	107	153	212	141.8	14.2	\$71,606
8	6017 13th Street	S	330	6	98	149	191	131.9	13.2	\$58,409
9	Easement -KenstonWy -Euclid Ave	S	676	6	68	197	170	127.1	12.74	\$137,949
10	5941 Newman Ct	S	455	8	74	157	191	122.3	12.3	\$63,653

Pipes - Bursting

Rank	Project Name	Combined (C) or Separated (S) System	Project Length (ft)	Pipe Diameter (inch)	Asset Scores			Total CIP Score	Normalized Score	Total Cost
					Defect	Vulnerability	Criticality			
1	1800 3rd Street	C	383	8	229	169	212	207.6	20.8	\$211,566
2	1913 D Street	C	450	8	240	159	191	205.9	20.6	\$233,244
3	Sherman Way/Y Street Easement from Miller Way to 39th St	C	750	8	183	205	221.0	197.2	19.8	\$283,191
4	1914 L Street	C	400	8	169	209	191	185.4	18.6	\$217,066
5	1901 F Street	C	400	8	144	174	191	162.4	16.3	\$169,946
6	Easement, 24th St east of Highland	C	665	8	154	152	170	156.6	15.7	\$255,688

1	Upper Sac South Drainage Canal Sewer - Ph 1	S	1080	8	208	263	191	221.1	22.2	\$301,872
2	Upper Sac South Drainage Canal Sewer - Ph 2	S	900	8	103	213	191	153.6	15.39	\$301,872
3	Easement btwn Grove and Edgewater	S	380	10	116	129	212	139.1	13.9	\$147,492
4	Upper Sac South Drainage Canal Sewer - Ph 3	S	780	8	65	199	191	130.4	13.07	\$272,506
5	Deeble Street and Atlas Ave	S	250	6	44	219	191.0	125.9	12.6	\$145,915
6	Easement 50th-51st St-W. of Golfview	S	400	8	70	153	191	119.1	11.9	\$169,946

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Sump Stations

Rank	Sump ID	Location	Criticality Score
1	55	6203 Gloria Dr., between 43rd ave & Fernwood Ct.	36
2	85	2237 Edgewater, access alley across from 2237 Edgewater	36
3	119	5610 1/2 S. Land Park Dr, next to Sump 104	34
4	107	#1 Capitol Mall, inside parking lot Old Sac	33
5	137	8117 Rush River Dr, NW corner of Greenhaven & Rush River	32
6	48	6577 San Joaquin Street bet. 6711 San Joaquin and Church	30
7	29	5800 Block of H Street, SE side of RR underpass	30
8	45	7459 24th Street between 68th/Gardendale & MatsonDr./69th	29
9	21	Freeport Blvd, North of Florin Road	28
10	146	39 Twin Leaf Ct, North of Main Ave, West of Lone Leaf Ct	28
11	131	3755 Pell Circle	28
12	53	In a field North of Sumps 88 & 89	27
13	40	6802 S. Land Park Dr., near Sump 39 driveway	27
14	135	#11 Tidewater Ct, Coolwind at end of Tidewater	26
15	120	Martin Luther King Blvd & 23rd Street	26
16	145	7599 Windbridge Rd, Driveway next to bridge SE side of ditch	26
17	42	1039 Seamas Avenue, NW corner of Seamas and Riverside	26
18	49	7761 Detroit Blvd, use driveway between 7759 & 7763 Detroit	26
19	57	7200 S. Land Park Drive, NW corner of S. Land Park & Florin	26
20	80	2922 Marysville Blvd, 100' North of 2920 Marysville Blvd	25
21	136	7433 Windbridge Dr, between Kline Way and Delta Way	25
22	134	817 Shoreside Dr, off Riverside at Lake between Shrubs	25
23	79	1700 Fienza Ave, corner of Fienza and Plover	25
24	143	7405 Greenhaven Dr	25
25	133	599 North B Street	25
26	87	120 Harris Street, West of Norwood Ave	24
27	122	2622 Fernandez Drive	24
28	84	2082 Railroad Drive, in Los Rios College parking lot	24
29	36	5730 24th Street, rear of corp yard inside elec. Storage bldg	24
30	127	6699 Orleans Way between Claiborne & Riverside Blvd	23
31	6	Haggin Oaks Golf Course, West end of Club House	22
32	121	5002 S. Land Park Dr, between Theo Way & 27th Ave	22
33	81	4038 Balsam Street between Rene & North Streets	22
34	123	Marina View Dr. @ Miller Park by restrooms near boat dock	19
35	124	Marina View Dr. @ Miller Park near snack bar	19
36	125	Boat Ramp Rd @ Miller Park by East Boat Ramp	19
37	126	7701 Marin Ave between Bradford Dr & 78th Street	19
38	3	Ramp Way in Miller Park off Front Street and Broadway	18
39	32	6201 S Street & 61st Street, NW corner of SMUD parking lot	17
40	88	In a field off Beach Lake Levee Rd, access of Freeport Blvd	N/A

Sump Stations - Electrical

Rank	Sump ID	Location	Year Built or Rehabed	Age	Estimated cost (x1000)	Replacement Year
1	CWTP.5	1395 35th Ave	1952	60	100	2013
2	CWTP.7	1395 35th Ave	1952	60	100	2013
3	85	2237 Edgewater Rd.	1961	51	200	2013
4	146	39 Twin Leaf Court	1985	27	100	2013
5	145	7599 Windbridge Drive	1985	27	100	2013
6	CWTP.8	1395 35th Ave	1977	35	150	2014
7	137	8117 Rush River Drive	1985	27	400	2014
8	143	7405 Greenhaven Drive	1985	27	50	2014
9	40	6802 South Land Park Dr.	1987	25	75	2015
10	81	4038 Balsam Street	1989	23	50	2016
11	122	2622 Fernandez Drive in Rear	1990	22	50	2017
12	36	5730 24th Street	1990	22	50	2017
13	6	Haggin Oaks Golf Course	1990	22	50	2017
14	3	Ramp Way at Miller Park	1990	22	50	2017
15	107	1 Capitol Mall	1992	20	150	2019
16	121	5002 South Land Park Drive	1996	16	75	2023
17	1	2100 Front Street	1999	13	100	2025
18	1A	End of U Street	1999	13	750	2025
19	2A	3530 Riverside Blvd.	2000	12	2000	2025
20	29	5800 H Street	1998	14	50	2025
21	87	120 Harris Street	1999	13	100	2026
22	133	599 North B Street	2000	12	50	2027
23	123	Marina View Drive at Miller Park	2000	12	50	2027
24	124	Marina View Drive at Miller Park	2000	12	50	2027
25	125	Boat Ramp Rd at Miller Park	2000	12	50	2027
26	80	2922 Marysville Blvd.	2000	12	100	2027
27	42	1039 Seamas Ave.	2001	11	50	2028
28	127	6699 Orleans Way	2001	11	50	2028
29	126	7701 Marin Avenue	2001	11	50	2028
30	57	7200 South Land Park Drive	2002	10	100	2029
31	120	Martin Luther King Jr. Blvd.	2002	10	75	2029
32	79	1700 Frienza Avenue	2002	10	50	2029
33	55	6230 Gloria Drive	2002	10	300	2029
34	119	5610-1/2 South Land Park Drive	2002	10	500	2029
35	32	6201 S Street	2003	9	100	2030
36	45	7459 24th Street	2003	9	100	2030
37	21	Between 6689 and 6695 14th Street	2004	8	150	2031
38	Sump 2.1	3530 Riverside Blvd.	2008	4	1200	2033
39	48	6577 San Joaquin Street	2006	6	100	2033
40	53	Field North of Sumps 88 & 89	2006	6	100	2033
41	49	7761 Detroit Blvd.	2006	6	50	2033
42	84	2082 Railroad Dr.	2006	6	75	2033
43	CWTP.1	1395 35th Ave	2008	4	600	2034
44	131	3755 Pell Circle	2008	4	75	2035
45	CWTP.2	1395 35th Ave	2010	2	400	2036
46	135	11 Tidewater Court	2009	3	50	2036
47	134	817 Shoreside Drive	2009	3	50	2036

cont. Sump Stations - Electrical

Rank	Sump ID	Location	Year Built or Rehabed	Age	Estimated cost (x1000)	Replacement Year
48	136	7433 Windbridge Drive	2009	3	75	2036
49	CWTP.6	1395 35th Ave	1952	60	150	2037
50	CWTP.4	1395 35th Ave	1952	60	150	2037
51	CWTP.3	1395 35th Ave	1952	60	150	2037
52	Sump 2.2	3530 Riverside Blvd.	1977	35	600	2037

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Sump 1, Sump 2, & Primary Treatment

Rank	Facility ID	Location	Process	Criticality Score
1	Sump 2A	3530 Riverside Blvd	Generator	50
2	Sump 2A	3530 Riverside Blvd	Effluent Pump Sta	50
3	Sump 2A	3530 Riverside Blvd	Effluent Pump Sta	50
4	Sump 2 - Flow Control Structure	3530 Riverside Blvd	Chamber	50
5	Sump 2 - Flow Control Structure	3530 Riverside Blvd	Chamber	50
6	Sump 2	3530 Riverside Blvd	Pump Sta	50
7	Sump 2	3530 Riverside Blvd	Pump Sta	50
8	Sump 1A	2100 Block of Front Street at the end of U Street	Pump Sta	46
9	Sump 1A	2100 Block of Front Street at the end of U Street	Pump Sta	46
10	Pioneer Res	Front & V Street behind Town Ford Museum	Sedimentation	45
11	Sump 2A	3530 Riverside Blvd	Screening	44
12	Sump 2A	3530 Riverside Blvd	Effluent Pump Sta	44
13	Sump 1A	2100 Block of Front Street at the end of U Street	Screening	41
14	Sump 1A	2100 Block of Front Street at the end of U Street	Pump Sta	41
15	Sump 2	3530 Riverside Blvd	Pump Sta	35
16	CWTP	1174 35th Ave (de-watering station)	Effluent Pump Sta	34
17	Sump 2	3530 Riverside Blvd	Pump Sta	33
18	Pioneer Res	Front & V Street behind Town Ford Museum	Effluent Discharge	33
19	Pioneer Res	Front & V Street behind Town Ford Museum	SCADA/Switchgear	32
20	Sump 2A	3530 Riverside Blvd	Effluent Pump Sta	30
21	Sump 2	3530 Riverside Blvd	SCADA/Switchgear	28
22	Sump 1A	2100 Block of Front Street at the end of U Street	SCADA/Switchgear	28
23	Sump 1	SE corner of Front & U Street	Effluent Pump Sta	28
24	CWTP	1174 35th Ave (de-watering station)	SCADA/Switchgear	28
25	CWTP	1174 35th Ave (de-watering station)	Sedimentation	28
26	Sump 2A	3530 Riverside Blvd	SCADA/Switchgear	26
27	Sump 1A	2100 Block of Front Street at the end of U Street	Generator	26
28	Sump 1A	2100 Block of Front Street at the end of U Street	Pump Sta	26
29	Sump 2A	3530 Riverside Blvd	Effluent Pump Sta	25
30	Sump 2A	3530 Riverside Blvd	Effluent Pump Sta	25
31	Sump 2 - Flow Control Structure	3530 Riverside Blvd	Chamber	25
32	Pioneer Res	Front & V Street behind Town Ford Museum	Chlorination	23
33	Pioneer Res	Front & V Street behind Town Ford Museum	De-chlorination	23

cont. Sump 1, Sump 2, & Primary Treatment Plants

Rank	Facility ID	Location	Process	Criticality Score
34	CWTP	1174 35th Ave (de-watering station)	Chlorination	23
35	CWTP	1174 35th Ave (de-watering station)	De-chlorination	23
36	Sump 1	SE corner of Front & U Street	Effluent Pump Sta	22
37	Sump 1	SE corner of Front & U Street	Effluent Pump Sta	22
38	Sump 1	SE corner of Front & U Street	Effluent Pump Sta	22
39	Sump 1	SE corner of Front & U Street	Effluent Pump Sta	22
40	Sump 1	SE corner of Front & U Street	Screening	20
41	Pioneer Res	Front & V Street behind Town Ford Museum	Sedimentation	19
42	Sump 2	3530 Riverside Blvd	Pump Sta	18
43	Pioneer Res	Front & V Street behind Town Ford Museum	Effluent Discharge	18
44	CWTP	1174 35th Ave (de-watering station)	Effluent Pump Sta	18
45	Sump 1A	2100 Block of Front Street at the end of U Street	Pump Sta	16
46	Sump 1	SE corner of Front & U Street	SCADA/Switchgear	16
47	Sump 1	SE corner of Front & U Street	Effluent Pump Sta	16
48	Pioneer Res	Front & V Street behind Town Ford Museum	Sedimentation	11
49	CWTP	1174 35th Ave (de-watering station)	Sedimentation	11
50	CWTP	1175 35th Ave (de-watering station)	Sedimentation	9
51	CWTP	1176 35th Ave (de-watering station)	Sedimentation	7
52	CWTP	1177 35th Ave (de-watering station)	Effluent Pump Sta	7
53	Sump 1B	2100 Block of Front Street at the end of U Street	Entire Station	6
54	Pioneer Res	Front & V Street behind Town Ford Museum	Effluent Discharge	6
55	Pioneer Res	Front & V Street behind Town Ford Museum	Odor Control	5
56	CWTP	1177 35th Ave (de-watering station)	Sedimentation	5
57	Pioneer Res	Front & V Street behind Town Ford Museum	Effluent Discharge	
58	CWTP	1177 35th Ave (de-watering station)	Effluent Pump Sta	

5-Year CIP Project Plan

SEWER CIP PROGRAM (FY 2011 dollars)

5-year

	FY12/13 1 year	FY 13/14 2 year	FY 14/15 3 year	FY 15/16 4 year	FY 16/17 5 year
PROGRAMMATIC CIPS	\$5,964,500	\$16,534,000	\$5,811,500	\$17,716,500	\$27,716,500
Reserve/Miscellaneous	\$874,500	\$999,000	\$465,500	\$1,055,500	\$1,505,500
Base CIP Reserve (10%) ****	\$704,500	\$829,000	\$296,500	\$686,500	\$1,336,500
Unplanned Corrective Maintenance - Emergency Repair	\$0	\$0	\$0	\$0	\$0
Asset Management	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000
Condition Assessment	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Grant Writer	\$0	\$0	\$0	\$0	\$0
Regulatory	\$4,460,000	\$15,135,000	\$5,095,000	\$16,410,000	\$25,960,000
CSS Miscellaneous 3230 PRGM	\$2,825,000	\$12,875,000	\$1,935,000	\$12,675,000	\$21,075,000
7th Street K to P **	X			X	
L Street 7th to 9th Street **	X			X	
9th Street L to H **	X			X	
Curtis Park Storage				X	
Oak Park Regional Storage				X	
McKinley Village Regional Storage				X	
V/W Alley from 14th-15th Street	X				
1901 F St	X				
R Street Sewer 16th to 18th St	X				
3085 Fremont Blvd				X	
1914 L Street				X	
1608 O Street				X	
3030 Capitol Ave				X	
32nd St bwn X & Y St				X	
1254 Sunland Vista				X	
Broadway and 38th Street				X	
1800 3rd Street				X	
1913 D Street				X	
Sherman Way/N Street Easement from Miller Way to 39th St				X	
1700 Santa Ynez				X	
Donner/5th Ave Alley Replacement, 26th to 27th St				X	
S/T Alley Replacement 9th to 10th St				X	
Easement 24th St east of Highland				X	
24th Street from 3rd Ave to Castro Way				X	
1789 11th Ave				X	
Bvm Y St and Sherman Wy				X	
Easement bwn 22 & 23rd St & 9th to 10th St				X	
4th Ave & 22nd St				X	
715 18th St				X	
3421 I Street				X	
Easement 43rd-44th St- 12th-13th Ave				X	
On-call Sewer Pipe Cleaning CCTV				X	
Sewer System Rehabilitation 3110	\$75,000	\$100,000	\$100,000	\$100,000	\$100,000
Collection Pipe Replacement - Separated System	\$320,000	\$700,000	\$1,600,000	\$2,150,000	\$3,600,000
Harbor Lt bwn Riverwind & Zachry Ranch	X				
Lampias bwn Newwood and Grove	X				
Babbette & 23rd St					
Del Rio and Campbell Ln					
5621 Milner Way					
Easement East of Benbow St					
Hogan bet Monifeth & Middlecoff Way					
Collection Pipe Bursting - Separated System	\$296,000	\$500,000	\$500,000	\$500,000	\$500,000
Upper Sac South Drainage Canal Sewer - Ph 1	X				
Easement bwn 58th and 59th Streets					
Easement bwn Grove and Edgewater	X				
Upper Sac South Drainage Canal Sewer - Ph 3					
Deeble Street and Atlas Ave					
Easement 50th-51st St- W. of Golfview					
Collection Pipe Lining	\$384,000	\$500,000	\$500,000	\$500,000	\$500,000
FY12 projects	X				
5605 Bradd in Easement					
35th St, East of Park Village St	X				
2020 Quincy Ave	X				
28th St and 16th Ave	X				
Easement bwn Hillsboro and Del Rio					
7225 17th St & 1708 Wakefield					
6017 13th Street					
Easement-KemstonWy -Euclid Ave					
5941 Newman Ct					
Flow Monitoring/Hydrology	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Utility ADA Improvements	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Air Quality - Generators	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Sewer System Security (Homeland Security)	\$50,000	\$75,000	\$75,000	\$75,000	\$75,000
Update CSS Improvement Plan	\$200,000	\$0	\$0	\$0	\$0
Flow metering	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Planning	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Combined Sewer System Planning	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Sewer System Master Planning	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Information Technology	\$480,000	\$250,000	\$100,000	\$100,000	\$100,000
IT Projects	\$250,000	\$250,000	\$100,000	\$100,000	\$100,000
CMMS (replace Cityworks) *	\$0	\$0	\$0	\$0	\$0
CIS Software Replacement	\$0	\$0	\$0	\$0	\$0
REHABILITATION & REPLACEMENT	\$1,785,000	\$1,385,000	\$860,000	\$835,000	\$735,000
Sumps (electrical rehab)	\$400,000	\$450,000	\$75,000	\$50,000	\$200,000
85	\$200,000	\$0	\$0	\$0	\$0
146	\$100,000	\$0	\$0	\$0	\$0
145	\$100,000	\$0	\$0	\$0	\$0
137	\$0	\$400,000	\$0	\$0	\$0
143	\$0	\$50,000	\$75,000	\$0	\$0
40	\$0	\$0	\$0	\$50,000	\$0
51	\$0	\$0	\$0	\$0	\$200,000
Sumps (other)	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Sump 1/1A (electrical rehab)	\$0	\$0	\$0	\$0	\$0
Other	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Sump 1/1A (other)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Other	\$0	\$0	\$0	\$0	\$0
Sump 2/2A (electrical rehab)	\$0	\$0	\$0	\$0	\$0
Other	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Sump 2/2A (other)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Other	\$200,000	\$150,000	\$0	\$0	\$0
CWTP (electrical rehab)	\$100,000	\$0	\$0	\$0	\$0
MCC "B"	\$100,000	\$0	\$0	\$0	\$0
MCC "D"	\$100,000	\$0	\$0	\$0	\$0
Chem Building/Control Room	\$0	\$150,000	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0
CWTP (other)	\$250,000	\$250,000	\$250,000	\$250,000	\$50,000
Potable/non potable Replacement Study	\$50,000	\$150,000	\$150,000	\$150,000	\$0
Service Road (NEW)	\$100,000	\$0	\$0	\$0	\$0
Chemical Tank Replacement	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Other	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Pioneer (electrical rehab)	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0
Pioneer (other)	\$100,000	\$100,000	\$100,000	\$100,000	\$50,000
Chemical Tank Replacement	\$50,000	\$50,000	\$50,000	\$50,000	\$0
Roof Repair	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Other	\$0	\$0	\$0	\$0	\$0
Manholes	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Building	\$250,000	\$100,000	\$100,000	\$100,000	\$100,000
Warehouse Storage Building *	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Misc - Facility Repair	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
TOTAL	\$7,749,500	\$17,919,000	\$6,671,500	\$18,551,500	\$28,451,500

* Multi-funded
 ** Grant Funded
 *** Per Consent Decree
 **** Excludes Improvement/Development

Project Priority Lists

Pipe Bursting

PROJECT DETAILS

PROJECT DESCRIPTION:

Line approximately 1080 feet of existing 8-inch sewer main from MH 715KK13 to 129LL13.

EXISTING PROJECT CONDITION:

Pipe has gushing I/I, sags and moderate to heavy grease deposits. Pipe is VCP and is btwn 61 & 80 years old.

PROJECT OBJECTIVE:

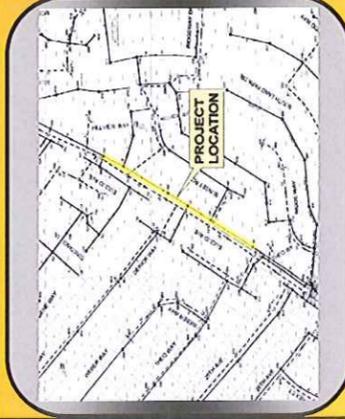
The project objective is to ensure the reliability of the sewer system and avoid impacts to the environment and public health.

POTENTIAL ENVIRONMENTAL ISSUES:

No significant issues

POTENTIAL DISRUPTIONS:

Project will require traffic control. May require night work on a couple occasions



CIP SCORING

DEFECT MODEL

Parameter	IF	Category	Rank	Score
Broke, Fractured or Cracked Asset	10	Single Fractured pipe where void is visible	8	80
Broke, Fractured or Cracked Asset	10	Multiple cracks or fractures (>10% of pipe segment)	4	40
Grease or Debris Deposits	3	Mod. to heavy grease deposits (<10% of pipe segment)	3	9
Obstacles and Obstructions	6	Object wedged in joint	1	6
Offset and/or Separated Joints	3	Isolated offset/separated joints	1	3
Infiltration/Inflow (I/I)	5	Gushing I/I	10	50
Pipe Sags	4	Medium sag (camera partially submerged)	5	20
Corrosion	2			

VULNERABILITY MODEL

Parameter	IF	Category	Rank	Score
SSO/CSO's Over Past 3 yrs.	10	1	5	50
Work Orders Over Past 3 yrs.	7	6 to 10	9	63
Scheduled Maintenance Frequency	6	1 to 6 Months	8	48
Pipe Age	6	61 to 80 yrs	7	42
Pipe Material	4	VCP	10	40
Pipe/Project Length	2	700+ ft	10	20

CRITICALITY MODEL

Parameter	IF	Category	Rank	Score
Impact of SSO/CSO to Property	10	Critical	7	70
Environmental Regulation Impact	7	Moderate	4	28
Health & Safety Impact	8	Moderate	4	32
Economic Impact	7	Negligible	1	7
Ability to Restore Asset to Design LOS	5	Negligible	1	5
Critical Facility Impact	7	Critical	7	49

ADDITIONAL PROJECT OR DESIGN INFORMATION:

CCTV of downstream pipe segment nearly entirely underwater, not sure if it's due to sags or groundwater. Pipe bursting access from Theo Way and along drainage canal for this phase of the project. 3 bursts: 500LF, 435LF, 145LF

ASSET PROFILE

Asset Rank: 1

Defect Score (D): 208

Good Fair Poor Failed

0 50 100 150 200 250 300 350 400 450 500 550

Vulnerability Score (V): 263

Good Fair Poor

0 50 100 150 200 250 300 350

Criticality Score (C): 191

Negligible Moderate Critical Highly Critical

0 40 80 120 160 200 240 280 320 360 400 440

Total CIP Score
(0.5*D)+(0.3*V)+(0.2*C) = 221.1

Normalized CIP Score
[(Total CIP Score)/998]*100 = 22.15

Est. Project Cost (2011): \$393,461

Definitions:

Defect Model - Assigns relative importance factors to each defect identified during CCTV inspection

Vulnerability & Criticality Models - Based on engineering judgment, with consideration for DOU business policy, evaluate the susceptibility of an asset to future failure/maintenance and the importance or criticality of the asset within the sewer system. Both models provide the answer to questions like "which assets are most in need of replacement or rehabilitation and which assets may be most costly to repair if a future failure occurs?"

Parameter - Factors used to generally characterize each model

Importance Factor (IF) - Multipliers or weighted factors used to prioritize each parameter within a model. The most important parameter is assigned a 10, whereas a parameter that is judged to be "half as important" is assigned a 5 and so on

Category - Factors used to define or describe each parameter

Rank - Additional multipliers or weighted factors used to prioritize each category with a parameter. The most important category is assigned a 10, whereas a category that is judged to be "half as important" is assigned a 5 and so on

Score = (IF) x Rank

PROJECT DETAILS

PROJECT DESCRIPTION:

Line approximately 380 feet of existing 10-inch sewer main in easement from MH 304W/17 to 610W/17. Pipeline is located just upstream of Sump 85.

EXISTING PROJECT CONDITION:

Pipe has multiple cracks/fractures, medium roots, moderate to heavy grease deposits, and gravel or debris deposits. Pipe is VCP and is between 41 and 60 years old.

PROJECT OBJECTIVE:

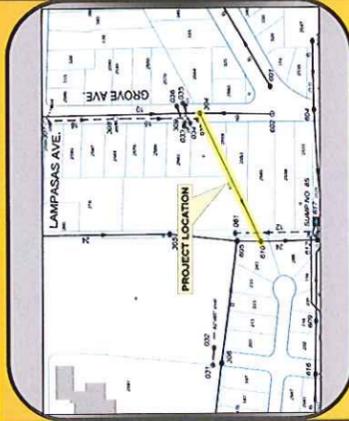
The project objective is to ensure the reliability of the sewer system and avoid impacts to the environment and public health.

POTENTIAL ENVIRONMENTAL ISSUES:

No significant issues

POTENTIAL DISRUPTIONS:

Project will require traffic control. May require night work on a couple occasions



CIP SCORING

DEFECT MODEL		
Parameter	IF	Rank Score
Broke, Fractured or Cracked Asset	10	40
Grease or Debris Deposits	3	30
Grease or Debris Deposits	3	9
Root Intrusion	5	25
Offset and/or Separated Joints	3	12
Infiltration/Inflow (I/I)	5	
Pipe Sags	4	
Corrosion	2	

VULNERABILITY MODEL

Parameter	IF	Rank Score
SSO/CSO's Over Past 3 yrs.	10	0
Work Orders Over Past 3 yrs.	7	35
Scheduled Maintenance Frequency	6	12
Pipe Age	6	30
Pipe Material	4	40
Pipe/Project Length	2	12

CRITICALITY MODEL

Parameter	IF	Rank Score
Impact of SSO/CSO to Property	10	70
Environmental Regulation Impact	7	49
Health & Safety Impact	8	32
Economic Impact	7	28
Ability to Restore Asset to Design LOS	5	5
Critical Facility Impact	7	28

ADDITIONAL PROJECT OR DESIGN INFORMATION:

Needs CCTV. Assume pipe is in good condition with a few defects, similar to other pipe in area. Proposed project is different than project submitted by O&M. O&M CIP does not address DS hydraulic problems that is causing grease and SSO problems. Therefore, project greatly expanded. Project will also help trib areas to north. No SSO's on CMMS. Pipe crosses private property with no easement, therefore, bursting is considered.

ASSET PROFILE

Asset Rank 40

Defect Score (D) 116

Vulnerability Score (V) 129

Criticality Score (C) 212

Total CIP Score
(0.5*D)+(0.3*V)+(0.2*C) = 139.1

Normalized CIP Score
[(Total CIP Score)/998]*100 = 13.94

Est. Project Cost (2011): \$153,165

Definitions:
Defect Model - Assigns relative importance factors to each defect identified during CCTV inspection
Vulnerability & Criticality Models - Based on engineering judgment, with consideration for DOU business policy, evaluate the susceptibility or criticality of the asset within the sewer system. Both models provide the answer to questions like "which assets are most in need of replacement or rehabilitation and which assets may be most costly to repair if a future failure occurs?"
Parameter - Factors used to generally characterize each model
Importance Factor (IF) - Multipliers or weighted factors used to prioritize each parameter within a model. The most important parameter is assigned a 10, whereas a parameter that is judged to be "half as important" is assigned a 5 and so on
Category - Factors used to define or describe each parameter
Rank - Additional multipliers or weighted factors used to prioritize each category with a parameter. The most important category is assigned a 10, whereas a category that is judged to be "half as important" is assigned a 5 and so on
Score = (IF) x Rank

Pipe Lining

Replacement CIP's

PROJECT DETAILS

PROJECT DESCRIPTION:

Remove and replace approximately 260 feet of existing 8-inch separated system main.

EXISTING PROJECT CONDITION:

Pipe has severe joint sag and grease problems that have caused SSO's.

PROJECT OBJECTIVE:

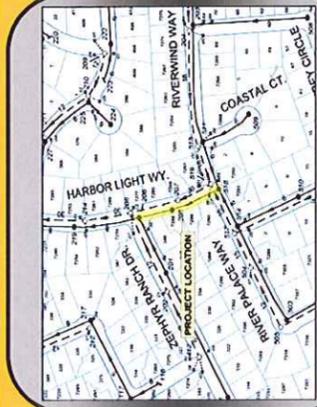
The project objective is to ensure the reliability of the sewer system and avoid impacts to the environment and public health.

POTENTIAL ENVIRONMENTAL ISSUES:

No significant issues

POTENTIAL DISRUPTIONS:

Project will require traffic control. May require night work on a couple occasions



CIP SCORING

DEFECT MODEL

Parameter	IF	Category	Rank	Score
Grease or Debris Deposits	3	Mod. to heavy grease deposits (>10% of pipe segment)	10	30
Offset and/or Separated Joints	3	Multiple offset or separated joints (> 10% of joints)	10	30
Infiltration/Inflow (I/I)	5	Severe sag (camera submerged)	10	40
Pipe Sags	4			
Corrosion	2			

VULNERABILITY MODEL

Parameter	IF	Category	Rank	Score
SSO/CSO's Over Past 3 yrs.	10	2 to 3	7	70
Work Orders Over Past 3 yrs.	7	6 to 10	9	63
Scheduled Maintenance Frequency	6	1 to 6 Months	8	48
Pipe Age	6	21 to 40 yrs	3	18
Pipe Material	4	VCP	10	40
Pipe/Project Length	2	100 - 299 ft	4	8

CRITICALITY MODEL

Parameter	IF	Category	Rank	Score
Impact of SSO/CSO to Property	10	Critical	7	70
Environmental Regulation Impact	7	Critical	7	49
Health & Safety Impact	8	Moderate	4	32
Economic Impact	7	Negligible	1	7
Ability to Restore Asset to Design LOS	5	Negligible	1	5
Critical Facility Impact	7	Moderate	4	28

ADDITIONAL PROJECT OR DESIGN INFORMATION:

Pipe in good condition. Severe grease problem that has caused SSO's. Most joints off-set. Replace MH 205SS09, rehab other two. Definate capacity issues downstream due to I/I. Joint sags causing camera to be submerged even at MH 205SS09 and 206SS09.

ASSET PROFILE

Asset Rank 22

Defect Score (D) 100

Good Fair Poor Failed

0 50 100 150 200 250 300 350 400 450 500 550

Vulnerability Score (V) 247

Good Fair Poor

0 50 100 150 200 250 300 350

Criticality Score (C) 191

Negligible Moderate Critical Highly Critical

0 40 80 120 160 200 240 280 320 360 400 440

Total CIP Score
 $(0.5 \cdot D) + (0.3 \cdot V) + (0.2 \cdot C) = 162.3$

Normalized CIP Score
 $[(\text{Total CIP Score}) / 999] \cdot 100 = 16.26$

Est. Project Cost (2011): \$132,413

Definitions:

Defect Model - Assigns relative importance factors to each defect identified during CCTV inspection

Vulnerability & Criticality Models - Based on engineering judgment, with consideration for DOU business policy, evaluate the susceptibility of an asset to future failure/maintenance and the importance or criticality of the asset within the sewer system. Both models provide the answer to questions like "which assets are most in need of replacement or rehabilitation and which assets may be most costly to repair if a future failure occurs?"

Parameter - Factors used to generally characterize each model

Importance Factor (IF) - Multipliers or weighted factors used to prioritize each parameter within a model. The most important parameter is assigned a 10, whereas a parameter that is judged to be "half as important" is assigned a 5 and so on

Category - Factors used to define or describe each parameter

Rank - Additional multipliers or weighted factors used to prioritize each category with a parameter. The most important category is assigned a 10, whereas a category that is judged to be "half as important" is assigned a 5 and so on

Score = (IF) x Rank

PROJECT DETAILS

PROJECT DESCRIPTION:

Remove and replace approximately 2,235 feet of existing 6-inch separated system main.

EXISTING PROJECT CONDITION:

Pipe experiences grease build up and SSO's from downstream hydraulic problems. Project will help tributary areas to north.

PROJECT OBJECTIVE:

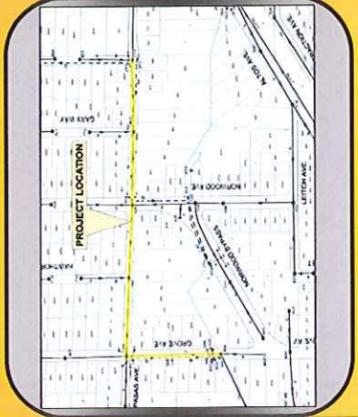
The project objective is to ensure the reliability of the sewer system and avoid impacts to the environment and public health.

POTENTIAL ENVIRONMENTAL ISSUES:

No significant issues

POTENTIAL DISRUPTIONS:

Project will require traffic control. May require night work on a couple occasions



CIP SCORING

DEFECT MODEL

Parameter	IF	Category	Rank	Score
Broke, Fractured or Cracked Asset	10	Multiple cracks or fractures (=<10% of pipe segment)	3	30
Broke, Fractured or Cracked Asset	10	Isolated cracks or fractures (=<10% of pipe segment)	1	10
Root Intrusion	5	Medium roots (=<10% of joints)	3	15
Root Intrusion	5	Fine roots (>10% of joints)	2	10
Grease or Debris Deposits	3	Mod. to heavy grease deposits (>10% of pipe segment)	10	30
Offset and/or Separated Joints	3	Occasional offset/separated joints (=<10% of joints)	4	12
Infiltration/Inflow (I/I)	5			
Pipe Sags	4			
Corrosion	2			

VULNERABILITY MODEL

Parameter	IF	Category	Rank	Score
SSO/CSO's Over Past 3 yrs.	10	0	0	0
Work Orders Over Past 3 yrs.	7	6 to 10	9	63
Scheduled Maintenance Frequency	6	1 to 6 Months	8	48
Pipe Age	6	41 to 60 yrs	5	30
Pipe Material	4	VCP	10	40
Pipe/Project Length	2	700+ ft	10	20

CRITICALITY MODEL

Parameter	IF	Category	Rank	Score
Impact of SSO/CSO to Property	10	Critical	7	70
Environmental Regulation Impact	7	Critical	7	49
Health & Safety Impact	8	Moderate	4	32
Economic Impact	7	Moderate	4	28
Ability to Restore Asset to Design LOS	5	Negligible	1	5
Critical Facility Impact	7	Moderate	4	28

ADDITIONAL PROJECT OR DESIGN INFORMATION:

Needs CCTV. Assume pipe is in good condition with a few defects, similar to other pipe in area. Proposed project is different then project submitted by O&M. O&M CIP does not address DS hydraulic problems that is causing grease and SSO problems. Therefore, project greatly expanded. Project will also help tributaries areas to north. No SSO's on CMMS.

ASSET PROFILE

Asset Rank 27

Defect Score (D) 107

Good Fair Poor Failed

0 50 100 150 200 250 300 350 400 450 500 550

Vulnerability Score (V) 201

Good Fair Poor

0 50 100 150 200 250 300 350

Criticality Score (C) 212

Negligible Moderate Critical Highly Critical

0 40 80 120 160 200 240 280 320 360 400 440

Total CIP Score
 $(0.5 \cdot D) + (0.3 \cdot V) + (0.2 \cdot C) = 156.2$

Normalized CIP Score
 $[(\text{Total CIP Score}) / 998] \cdot 100 = 15.65$

Est. Project Cost (2011): \$439,827

Definitions:

Defect Model - Assigns relative importance factors to each defect identified during CCTV inspection

Vulnerability & Criticality Models - Based on engineering judgment, with consideration for DOU business policy, evaluate the importance or criticality of the asset within the sewer system. Both models provide the answer to questions like "which assets are most in need of replacement or rehabilitation and which assets may be most costly to repair if a future failure occurs?"

Parameter - Factors used to generally characterize each model

Importance Factor (IF) - Multipliers or weighted factors used to prioritize each parameter within a model. The most important parameter is assigned a 10, whereas a parameter that is judged to be "half as important" is assigned a 5 and so on

Category - Factors used to define or describe each parameter

Rank - Additional multipliers or weighted factors used to prioritize each category with a parameter. The most important category is assigned a 10, whereas a category that is judged to be "half as important" is assigned a 5 and so on

Score = (IF) x Rank

Appendix C
Storm Drainage

30-Year Capital Improvement Plan

DRAINAGE CIP PROGRAM (FY 2011 dollars)

30-year forecast	FY 12/13 1 year	FY 13/14 2 year	FY 14/15 3 year	FY 15/16 4 year	FY 16/17 5 year	FY 17/18 6 year	FY 18/19 7 year	FY 19/20 8 year	FY 20/21 9 year	FY 21/22 10 year	FY 22/23 11 year	FY 23/24 12 year	FY 24/25 13 year	FY 25/26 14 year	FY 26/27 15 year
PROGRAMMATIC CIPs	\$1,405,000	\$1,204,500	\$1,455,500	\$3,865,500	\$5,015,500	\$6,645,000	\$6,620,000	\$7,625,000	\$7,675,000	\$7,180,000	\$7,250,000	\$7,270,000	\$7,185,000	\$7,190,000	\$7,385,000
Reserve/Miscellaneous	\$375,000	\$359,500	\$425,500	\$1,405,500	\$1,555,500	\$1,390,000	\$1,365,000	\$1,370,000	\$1,420,000	\$1,425,000	\$1,495,000	\$1,515,000	\$1,430,000	\$1,435,000	\$1,630,000
Base CIP Reserve (10%) **	\$125,000	\$109,500	\$175,500	\$1,005,500	\$1,155,500	\$970,000	\$945,000	\$950,000	\$1,000,000	\$1,005,000	\$1,075,000	\$1,095,000	\$1,010,000	\$1,015,000	\$1,210,000
Unplanned Corrective Maintenance - Emergency Repair	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Asset Management	\$0	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Condition Assessment	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Unionhouse Creek Flood Control Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grant Writer	\$0	\$0	\$0	\$0	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Regulatory	\$300,000	\$325,000	\$360,000	\$1,640,000	\$2,540,000	\$3,155,000	\$4,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000
Utility ADA Improvements	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
NPDES - CSS Improvement Plan	\$0	\$0	\$0	\$1,000,000	\$2,000,000	\$3,000,000	\$4,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Air Quality - Generators	\$250,000	\$250,000	\$285,000	\$385,000	\$385,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Drainage System Security (Homeland Security)	\$50,000	\$75,000	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Levee Pipe Condition Assessment (Corp of Engineers)	\$0	\$0	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Planning	\$250,000	\$270,000	\$570,000	\$820,000	\$820,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Drainage Master Planning	\$250,000	\$270,000	\$570,000	\$820,000	\$820,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Information Technology	\$480,000	\$250,000	\$100,000	\$100,000	\$100,000	\$1,100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
IT Projects	\$250,000	\$250,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
CMMS (replace Cityworks) *	\$230,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CIS Software Replacement	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
REHABILITATION & REPLACEMENT	\$0	\$250,000	\$0	\$3,700,000	\$3,775,000	\$4,025,000	\$3,775,000	\$2,825,000	\$3,325,000	\$3,875,000	\$4,575,000	\$4,775,000	\$3,925,000	\$3,975,000	\$5,925,000
Pipe	\$0	\$0	\$0	\$250,000	\$500,000	\$750,000	\$1,000,000	\$1,250,000	\$1,500,000	\$1,750,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Sumps	\$0	\$0	\$0	\$2,625,000	\$2,000,000	\$2,450,000	\$1,950,000	\$750,000	\$1,000,000	\$1,300,000	\$1,750,000	\$1,950,000	\$1,100,000	\$1,150,000	\$3,100,000
Sumps (electrical rehab)	\$0	\$0	\$0	\$2,625,000	\$2,000,000	\$1,950,000	\$1,450,000	\$250,000	\$500,000	\$800,000	\$1,250,000	\$1,450,000	\$600,000	\$650,000	\$2,600,000
4	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
157	\$0	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
56	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
83	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
100	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
152	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
132	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
other	\$0	\$0	\$0	\$0	\$0	\$1,950,000	\$1,450,000	\$250,000	\$500,000	\$800,000	\$1,250,000	\$1,450,000	\$600,000	\$650,000	\$2,600,000
Sumps (other)	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
34 (transfer switch upgrade)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
157 (engine study first year)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
160 (engine study)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
other	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Channels/Ditches/Streams/Sloughs/Creeks/Basins	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Gates/Boxes/Outfalls/Walls/Wells/Levees	\$0	\$0	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Sump 90 Dyke Repair	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Manholes	\$0	\$0	\$0	\$50,000	\$500,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
DI's	\$0	\$0	\$0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Building	\$0	\$250,000	\$0	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Warehouse Storage Building *	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Misc - Facility Repair	\$0	\$0	\$0	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
IMPROVEMENT	\$950,000	\$0	\$0	\$3,150,000	\$5,200,000	\$7,200,000	\$9,200,000	\$11,200,000	\$13,700,000	\$13,700,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000
Pipe, Detention Basin, & Pump Station Upgrades	\$950,000	\$0	\$0	\$3,150,000	\$5,200,000	\$7,200,000	\$9,200,000	\$11,200,000	\$13,700,000	\$13,700,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000
Pipe Improvements	\$0	\$0	\$0	\$2,000,000	\$4,000,000	\$6,000,000	\$8,000,000	\$10,000,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000
Channel Improvements	\$950,000	\$0	\$0	\$150,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$0	\$0	\$0	\$0	
Improvement Projects	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	
TOTAL	\$2,355,000	\$1,454,500	\$1,455,500	\$10,715,500	\$13,990,500	\$17,870,000	\$19,595,000	\$21,650,000	\$24,700,000	\$24,755,000	\$24,325,000	\$24,545,000	\$23,610,000	\$23,665,000	\$25,810,000

* Multi-funded
** Excludes Improvement/Development

FY 27/28 16 year	FY 28/29 17 year	FY 29/30 18 year	FY 30/31 19 year	FY 31/32 20 year	FY 32/33 21 year	FY 33/34 22 year	FY 34/35 23 year	FY 35/36 24 year	FY 36/37 25 year	FY 37/38 26 year	FY 38/39 27 year	FY 39/40 28 year	FY 40/41 29 year	FY 41/42 30 year	Sub Total
\$7,285,000	\$7,430,000	\$7,597,500	\$7,500,000	\$7,275,000	\$7,310,000	\$7,290,000	\$7,175,000	\$7,155,000	\$7,125,000	\$7,125,000	\$7,125,000	\$7,287,500	\$7,225,000	\$7,325,000	\$194,201,000
\$1,530,000	\$1,675,000	\$1,842,500	\$1,745,000	\$1,520,000	\$1,555,000	\$1,535,000	\$1,420,000	\$1,400,000	\$1,370,000	\$1,370,000	\$1,370,000	\$1,532,500	\$1,470,000	\$1,570,000	\$41,501,000
\$1,110,000	\$1,255,000	\$1,422,500	\$1,325,000	\$1,100,000	\$1,135,000	\$1,115,000	\$1,000,000	\$980,000	\$950,000	\$950,000	\$950,000	\$1,112,500	\$1,050,000	\$1,150,000	\$29,451,000
\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$7,500,000
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$1,350,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$2,700,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$500,000
\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$5,155,000	\$130,940,000
\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$135,000
\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$125,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,555,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000
\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$4,050,000
\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$17,230,000
\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$17,230,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$4,530,000
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$230,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000
\$4,925,000	\$6,375,000	\$8,050,000	\$7,075,000	\$4,825,000	\$5,175,000	\$4,975,000	\$3,825,000	\$3,625,000	\$3,325,000	\$3,325,000	\$3,325,000	\$4,950,000	\$4,325,000	\$5,325,000	\$122,150,000
\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$47,000,000
\$2,100,000	\$3,550,000	\$5,225,000	\$4,250,000	\$2,000,000	\$2,350,000	\$2,150,000	\$1,000,000	\$800,000	\$500,000	\$500,000	\$500,000	\$2,125,000	\$1,500,000	\$2,500,000	\$52,175,000
\$1,600,000	\$3,050,000	\$4,725,000	\$3,750,000	\$1,500,000	\$1,850,000	\$1,650,000	\$500,000	\$300,000	\$0	\$0	\$0	\$1,625,000	\$1,000,000	\$2,000,000	\$39,675,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,625,000	\$1,000,000	\$2,000,000	\$35,050,000
\$1,600,000	\$3,050,000	\$4,725,000	\$3,750,000	\$1,500,000	\$1,850,000	\$1,650,000	\$500,000	\$300,000	\$0	\$0	\$0	\$1,625,000	\$1,000,000	\$2,000,000	\$12,500,000
\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$12,500,000
\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$6,750,000
\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$5,400,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$1,800,000
\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$8,100,000
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$925,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$675,000
\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$314,300,000
\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$314,300,000
\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$305,000,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000,000
\$24,710,000	\$26,305,000	\$28,147,500	\$27,075,000	\$24,600,000	\$24,985,000	\$24,765,000	\$23,500,000	\$23,280,000	\$22,950,000	\$22,950,000	\$22,950,000	\$24,737,500	\$24,050,000	\$25,150,000	\$630,651,000

Priority Lists

5-Year CIP Project Plan

DRAINAGE CIP PROGRAM (FY 2011 dollars)

5-year	FY 12/13 1 year	FY 13/14 2 year	FY 14/15 3 year	FY 15/16 4 year	FY 16/17 5 year
PROGRAMMATIC CIPs	\$1,405,000	\$1,204,500	\$1,455,500	\$3,865,500	\$5,015,500
Reserve/Miscellaneous	\$375,000	\$359,500	\$425,500	\$1,405,500	\$1,555,500
Base CIP Reserve (10%) **	\$125,000	\$109,500	\$175,500	\$1,005,500	\$1,155,500
Unplanned Corrective Maintenance - Emergency Repair	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Asset Management	\$0	\$0	\$0	\$50,000	\$50,000
Condition Assessment	\$0	\$0	\$0	\$100,000	\$100,000
Unionhouse Creek Flood Control Project	\$0	\$0	\$0	\$0	\$0
Grant Writer	\$0	\$0	\$0	\$0	\$0
Regulatory	\$300,000	\$325,000	\$360,000	\$1,540,000	\$2,540,000
Utility ADA Improvements	\$0	\$0	\$0	\$5,000	\$5,000
NPDES - CSS Improvement Plan	\$0	\$0	\$0	\$1,000,000	\$2,000,000
Air Quality - Generators	\$250,000	\$250,000	\$285,000	\$385,000	\$385,000
Drainage System Security (Homeland Security)	\$50,000	\$75,000	\$75,000	\$0	\$0
Levee Pipe Condition Assessment (Corp of Engineers)	\$0	\$0	\$0	\$150,000	\$150,000
Planning	\$250,000	\$270,000	\$570,000	\$820,000	\$820,000
Drainage Master Planning	\$250,000	\$270,000	\$570,000	\$820,000	\$820,000
Information Technology	\$480,000	\$250,000	\$100,000	\$100,000	\$100,000
IT Projects	\$250,000	\$250,000	\$100,000	\$100,000	\$100,000
CMMS (replace Cityworks) *	\$230,000	\$0	\$0	\$0	\$0
CIS Software Replacement	\$0	\$0	\$0	\$0	\$0
REHABILITATION & REPLACEMENT	\$0	\$250,000	\$0	\$3,700,000	\$3,775,000
Pipe	\$0	\$0	\$0	\$250,000	\$500,000
Sumps	\$0	\$0	\$0	\$2,625,000	\$2,000,000
Sumps (electrical rehab)	\$0	\$0	\$0	\$2,625,000	\$2,000,000
4	\$0	\$0	\$0	\$100,000	\$0
157	\$0	\$0	\$0	\$1,200,000	\$0
30	\$0	\$0	\$0	\$75,000	\$0
56	\$0	\$0	\$0	\$75,000	\$0
83	\$0	\$0	\$0	\$100,000	\$0
100	\$0	\$0	\$0	\$75,000	\$0
152	\$0	\$0	\$0	\$1,000,000	\$0
132	\$0	\$0	\$0	\$0	\$2,000,000
other	\$0	\$0	\$0	\$0	\$0
Sumps (other)	\$0	\$0	\$0	\$0	\$0
34 (transfer switch upgrade)	\$0	\$0	\$0	\$0	\$0
157 (engine study first year)	\$0	\$0	\$0	\$0	\$0
160 (engine study)	\$0	\$0	\$0	\$0	\$0
other	\$0	\$0	\$0	\$0	\$0
Channels/Ditches/Streams/Sloughs/Creeks/Basins	\$0	\$0	\$0	\$250,000	\$250,000
Gates/Boxes/Outfalls/Walls/Wells/Levees	\$0	\$0	\$0	\$200,000	\$200,000
Sump 90 Dyke Repair	\$0	\$0	\$0	\$0	\$0
Manholes	\$0	\$0	\$0	\$50,000	\$500,000
DI's	\$0	\$0	\$0	\$300,000	\$300,000
Building	\$0	\$250,000	\$0	\$25,000	\$25,000
Warehouse Storage Building *	\$0	\$250,000	\$0	\$0	\$0
Misc - Facility Repair	\$0	\$0	\$0	\$25,000	\$25,000
IMPROVEMENT	\$950,000	\$0	\$0	\$3,150,000	\$5,200,000
Pipe, Detention Basin, & Pump Station Upgrades	\$950,000	\$0	\$0	\$3,150,000	\$5,200,000
Pipe Improvements	\$0	\$0	\$0	\$2,000,000	\$4,000,000
Channel Improvements	\$950,000	\$0	\$0	\$150,000	\$200,000
Improvement Projects	\$0	\$0	\$0	\$1,000,000	\$1,000,000
TOTAL	\$2,355,000	\$1,454,500	\$1,455,500	\$10,715,500	\$13,990,500

* Multi-funded

** Excludes Improvement/Development