

WASTEWATER UTILITY PROJECTS FY 2008-2009

WASTE WATER CAPITAL IMPROVEMENT PROGRAM BUDGET FY 08-09

PROJECT SUMMARY

Fund 6600.66999

PROJECTS (dollars in \$000)	Prior	Total Appro.					Est.
	Years	08-09	thru 08-09	09-10	10-11	Future Yrs	Total
C00500205 C Street Pump Station Upgrade	\$ 1,295	\$ 1,731	\$ 3,026	\$ -	\$ -	\$ -	\$ 3,026
C00500305 Demolition of Hopper WWTF	21	930	951	362	562	8,783	10,658
C00500402 Water Recycling Fac. - Ellis Creek	147,614	11,805	159,419	405	120	-	159,944
C00500406 SCADA Ellis Creek WRF	2,103	502	2,605	400	-	-	3,005
C00500408 Sewer Recycle Reservoir Phase 2B	3,176	584	3,760	3,910	-	-	7,670
C00500505 Phase 2A Recycled Water - Pipeline	1,693	866	2,559	1,305	-	-	3,864
C00500508 Sewer Recycle Phase 3	352	405	757	3,244	1,822	1,885	7,708
C00500608 Water Street North Sewer Main Replacement	-	985	985	-	-	-	985
C00500708 Sewer Main Replacement 2008 Various	-	480	480	-	-	-	480
C00500808 Pond Influent Pump Station (PIPS) Improvemnt.	191	909	1,100	-	-	-	1,100
C00500908 Recycled Water Pump Stn 2 Improvements	237	375	612	-	-	-	612
C00501400 Wilmington Pump Station	834	-	834	-	-	-	834
C66400901 Sewer Main Replacement 2009 Various	-	1,020	1,020	-	-	-	1,020
C66400902 Recycled Water Main Pump Stn Improvemts	-	150	150	450	-	-	600
C66400903 Recycled Water Pump Stn 1 Improvements	-	570	570	-	-	-	570
C66400904 Outfall Replacement Project	-	383	383	-	-	-	383
TOTAL	\$ 157,516	\$ 20,742	\$ 178,259	\$ 10,076	\$ 2,504	\$ 10,668	\$ 201,506

SOURCES (DOLLARS IN \$000)

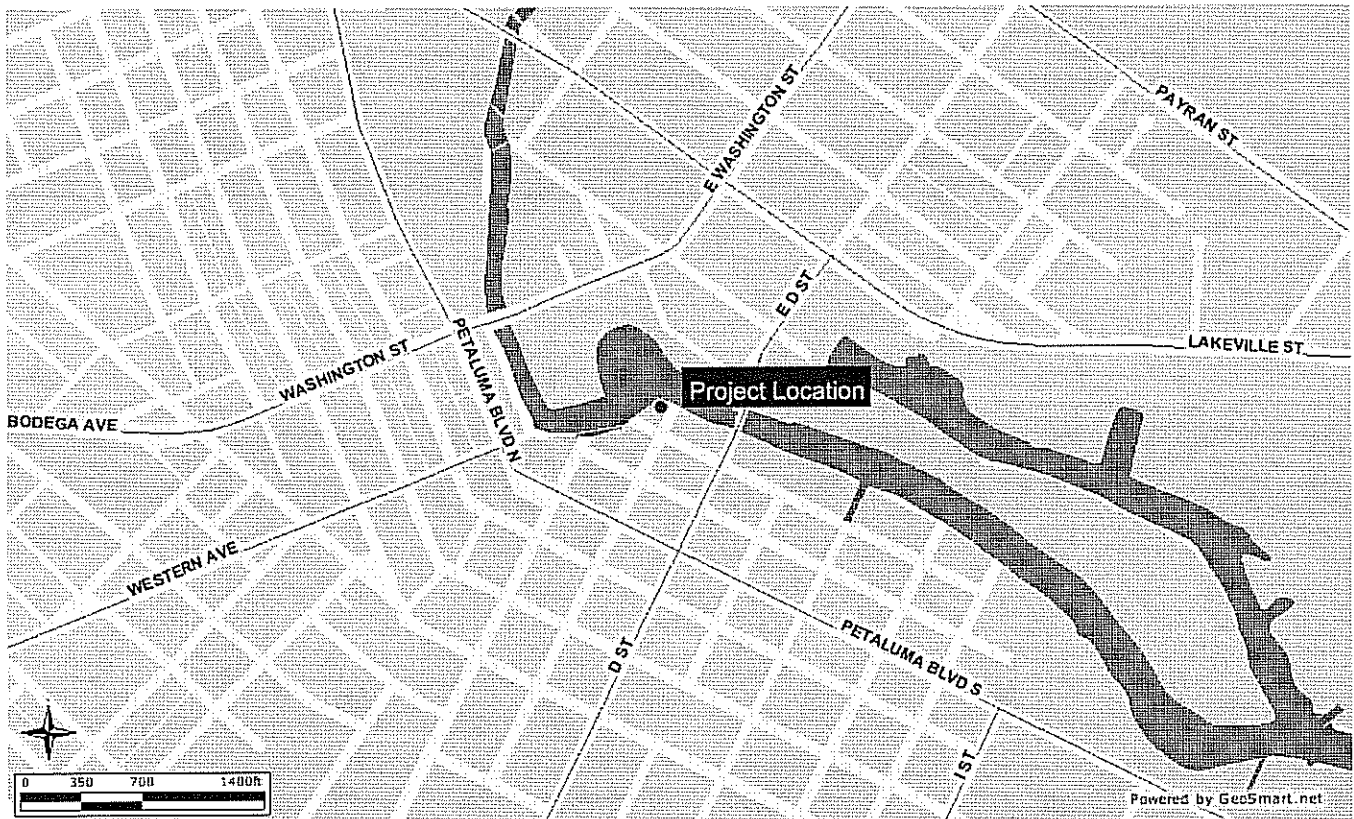
Waste Water Operating	\$ 20,157	\$ 5,636	\$ 25,793	\$ 1,878	\$ 944	\$ 326	\$ 28,940
Waste Water Capital	204	1,020	1,224	-	-	-	1,224
Debt Proceeds	4,408	2,281	6,689	24,392	1,560	10,342	42,984
State Revolving Loan Fund Proceeds	75,000	49,152	124,152	-	-	-	124,152
Interim Financing	54,052	(37,858)	16,194	(16,194)	-	-	-
State Grant - Coastal Conservancy	1,995	205	2,200	-	-	-	2,200
State Grant - Open Space District	1,700	306	2,006	-	-	-	2,006
TOTAL	\$ 157,516	\$ 20,742	\$ 178,258	\$ 10,076	\$ 2,504	\$ 10,668	\$ 201,506

Project Title: C Street Pump Station Upgrade

Project #: C00500205

The C Street sanitary sewer pumping station is located on the west bank of the Petaluma River, near the intersection of First and C Streets, and pumps wastewater from the southwest basin underneath the river to a gravity sewer line that flows to the City's Pond Influent Pump Station (PIPS). The C Street pump station runs at full capacity during high flow events with no back up pump available. If a pump were to fail during a storm event, the pump station would not be able to pump all of the flow and an overflow could result. This critical pump station is no longer operating at an acceptable level of service and does not meet the City's needs. Structural, mechanical, and electrical improvements are necessary to meet flow capacity, reliability, safety, and maintenance requirements. The project was ready for construction in FY07/08, but could not proceed because the City could not obtain debt financing because of the pending rate initiative. This project is ready to begin once funding is obtained.

Project schedule:	
Begin Design	FY 2004-2005
Complete Design	FY 2005-2006
Begin Construction	FY 2007-2008
Complete Construction	FY 2008-2009



Project Title: Demolition of Hopper Street Wastewater Treatment Facility

Project #: C00500305

Once the new Ellis Creek Water Recycling Facility begins operation and replaces the existing wastewater treatment facility at 950 Hopper Street, two different projects will need to be completed before the site can be used for other purposes. The first is a decommissioning project. Decommissioning includes all the steps necessary to take the Hopper Street WWTP out of commission, including draining and cleaning out all the liquid and solid waste products from the equipment, draining and disposal of any hazardous wastes and chemicals, and safe shutdown and disconnection of electrical energy. Sewage services to other facilities (corporation yard, Animal Shelter, Mary Isaak Center) at the wastewater property may need to be reconfigured to continue service. Once the site is unmanned, making the site safe for people who may inadvertently enter into the area will be critical to protect the public given the proximity to the Mary Isaak Center. The decommissioning portion of the work makes the site clean, safe, and secure. The FY 08-09 budget includes decommissioning and construction needed to place the site in a clean, safe and secure condition, and make minor improvements needed to ensure the facilities remaining on the site can operate without interruption.

The second project is a demolition project. A study would first need to be conducted to assess potential future uses of the site and the level of demolition required to meet each use. This work is scheduled for FY 09-10. Assessment of environmental requirements for disposal is part of this phase of the work. Funding for the site changes would also be explored as part of this study (i.e. new development may want removal of everything below grade, potentially very costly). On the other hand, if the City determines to site new facilities in this area, removal to one foot below grade may be appropriate. If funding is provided by a project that would like to use the wastewater property site, then all structures associated with the existing facility would have to be demolished to the level necessary for the future use. The cost of the study phase is estimated at \$360,000. Design is estimated at \$400,000 - \$500,000. Demolition to 1-foot below is estimated at \$6 to \$8 million.

The Pond Influent Pump Station (PIPS) and the biofilter odor scrubber will remain on the site. Changes required for that area are presented under Project #: C500808. Even though these facilities comprise a small part of the site, it would be prudent for the City to reserve at least 3 – 5 acres of the wastewater property adjacent to the PIPS for: 1) Buffer for odor control, 2) Opportunity to add additional treatment facilities, which could be required by future regulations, and 3) Opportunity to site a small water recycling plant to provide recycled water to the west side of the City.

Demolition of Hopper WWTF
 Fund C00500305
 6600.66999

		Prior		Total Appro.				Est.
		Years	08-09	thru 08-09	09-10	10-11	Future Yrs	Total
USES (dollars in \$000)								
54110	Design	\$ -	\$ 150	\$ 150	\$ 200	\$ 510	\$ 400	\$ 1,260
54150	Planning/Environmental	20	180	200	160	-	20	380
54151	Construction Contracts	-	500	500	-	-	8,000	8,500
54152	Construction Management	-	50	50	-	50	360	460
54153	Administration	-	-	-	2	2	3	7
55011	CIP Overhead	1	-	1	-	-	-	1
57310	Contingency	-	50	50	-	-	-	50
TOTAL		\$ 21	\$ 930	\$ 951	\$ 362	\$ 562	\$ 8,783	\$ 10,658

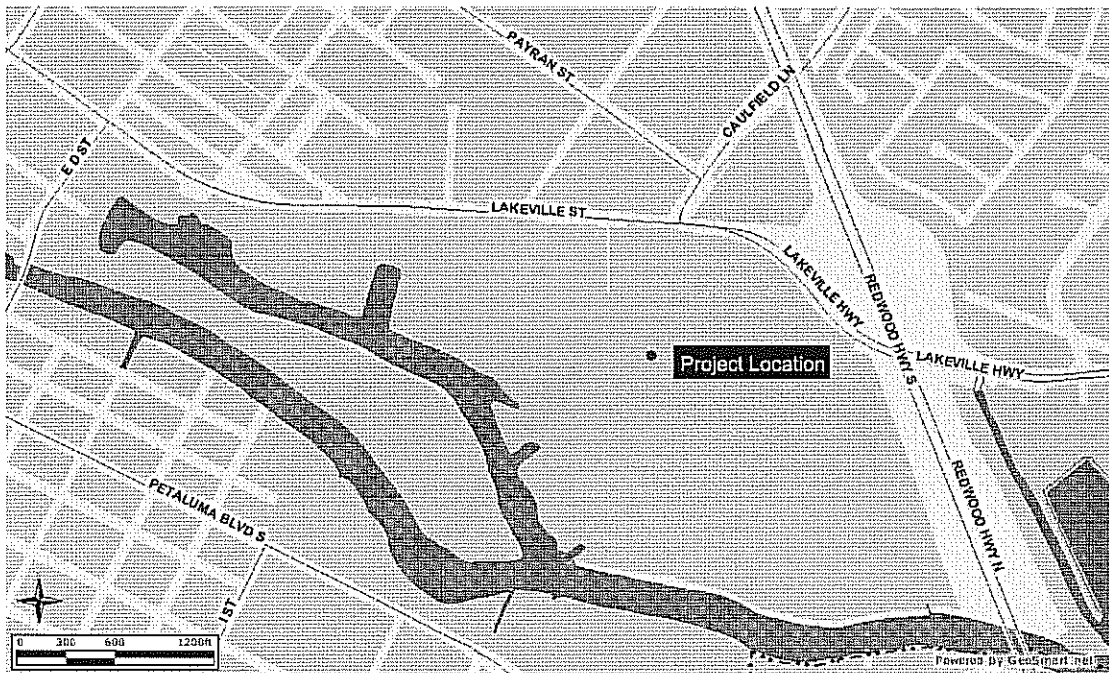
SOURCES (dollars in \$000)								
	Waste Water Operating	\$ 17	\$ 380	\$ 397	\$ 362	\$ 562	\$ -	\$ 1,321
	Waste Water Capital	4	-	4	-	-	-	4
	Debt Proceeds	-	550	550	-	-	8,783	9,333
TOTAL		\$ 21	\$ 930	\$ 951	\$ 362	\$ 562	\$ 8,783	\$ 10,658

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

This project involves the decommissioning and partial demolition of an existing facility. Once the facility is demolished, no further maintenance costs will be incurred.

CALCULATION OF FUTURE SAVINGS

Once decommissioned, no further maintenance costs will be associated with this facility.

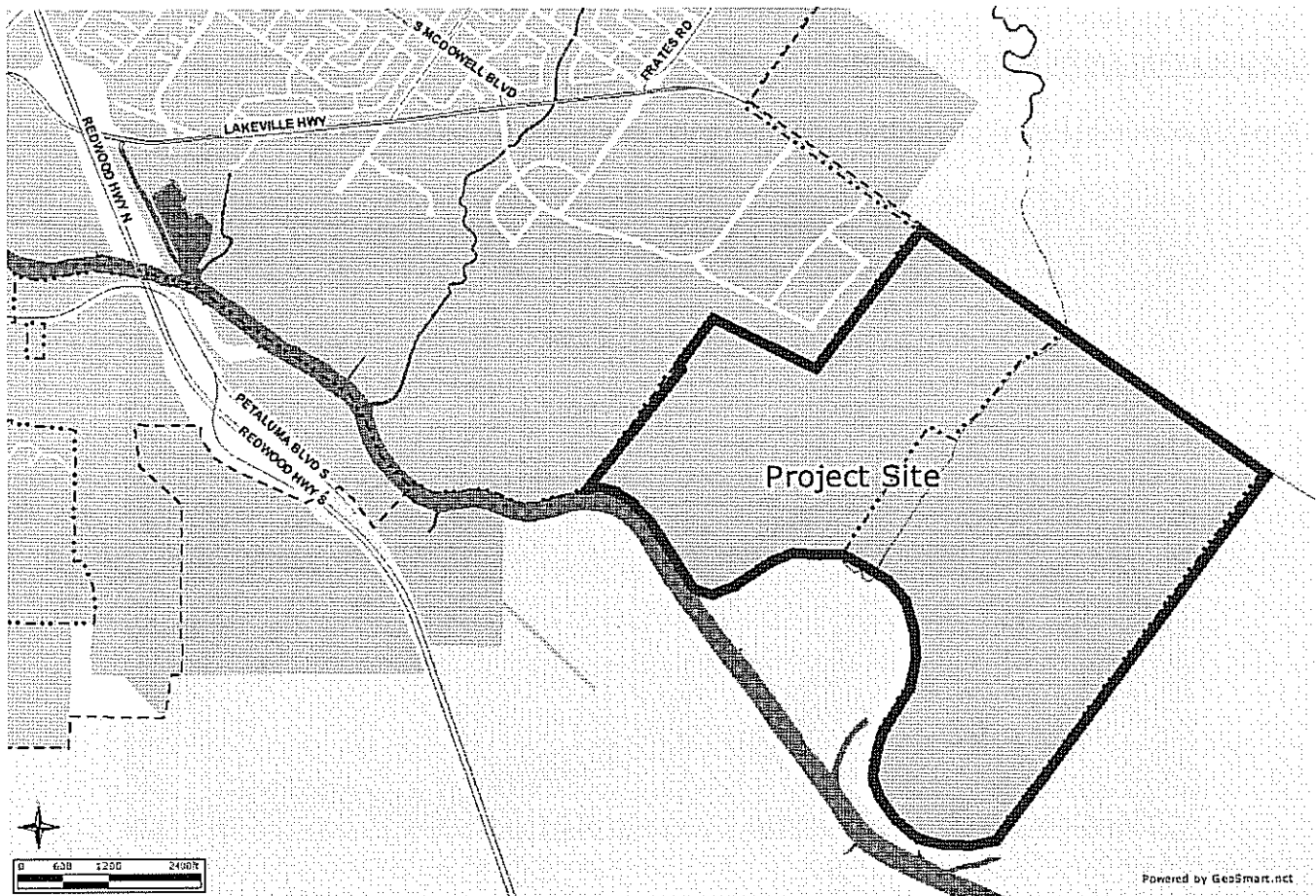


Project Title: Water Recycling Facility – Ellis Creek

Project #: C00500402

This project is development of a water recycling facility to replace the City's existing wastewater treatment facility. The Ellis Creek Water Recycling Facility (ECWRF) will provide superior protection of public health and the environment, meet the community's needs, provide improved treatment capability and reliability, and achieve regulatory requirements. The ECWRF includes tertiary treatment to produce recycled water for irrigation of City parks and fields to offset potable water demands.

In FY 00-01, the City completed Phase 1 – Project Report. In FY 01-02, the City completed pre-design and the Draft EIR. In FY 02-03, the City certified the Final EIR and completed 50% of the design. The City acquired a parcel of land adjacent to the pond site through City funding and grant funding in FY 03-04. Construction commenced in FY 05-06 with approximately 74% of the project completed by the end of FY07-08. The CIP anticipates project completion in FY 08-09. Start up of the new facilities is anticipated in fall 2008 with tie in of the force main. It will take several months of start up testing and optimization before the full functionality of the facility is realized in June 2009.



Water Recycling Fac. - Ellis Creek Fund C00500402
6600.66999

	Prior Years	08-09	Total Appro. thru 08-09	09-10	10-11	Future Yrs	Est. Total
USES (dollars in \$000)							
54110 Design	\$ 12,166	\$ 1,888	\$ 14,054	\$ -	\$ -	\$ -	\$ 14,054
54120 Legal Counsel	150	30	180	20	20	-	220
54150 Planning/Environmental	4,130	72	4,202	55	-	-	4,257
54151 Construction Contracts	104,092	6,237	110,329	-	-	-	110,329
54152 Construction Management	8,268	3,871	12,139	325	95	-	12,559
54153 Administration	169	10	179	5	5	-	189
55011 CIP Overhead	2,867	-	2,867	-	-	-	2,867
57120 Capitalized Interest	5,467	(1,726)	3,741	-	-	-	3,741
57310 Contingency	7,725	1,423	9,148	-	-	-	9,148
62110 Land and Easements	2,580	-	2,580	-	-	-	2,580
TOTAL	\$ 147,614	\$ 11,805	\$ 159,419	\$ 405	\$ 120	\$ -	\$ 159,944
SOURCES (dollars in \$000)							
Waste Water Operating	\$ 14,867	\$ -	\$ 14,867	\$ 405	\$ 120	\$ -	\$ 15,392
Debt Proceeds	-	-	-	16,194	-	-	16,194
State Revolving Loan Fund Proceeds	75,000	49,152	124,152	-	-	-	124,152
Interim Financing	54,052	(37,858)	16,194	(16,194)	-	-	-
State Grant - Coastal Conservancy	1,995	205	2,200	-	-	-	2,200
State Grant - Open Space District	1,700	306	2,006	-	-	-	2,006
TOTAL	\$ 147,614	\$ 11,805	\$ 159,419	\$ 405	\$ 120	\$ -	\$ 159,944

FUTURE MAINTENANCE COST OF CAPITAL IMPROVEMENT PROJECT

This project is ongoing and actual construction will be completed by the end of fiscal year 2008. Once constructed, ongoing maintenance costs will be provided from the Water Pollution Control funds.

CALCULATION OF FUTURE SAVINGS

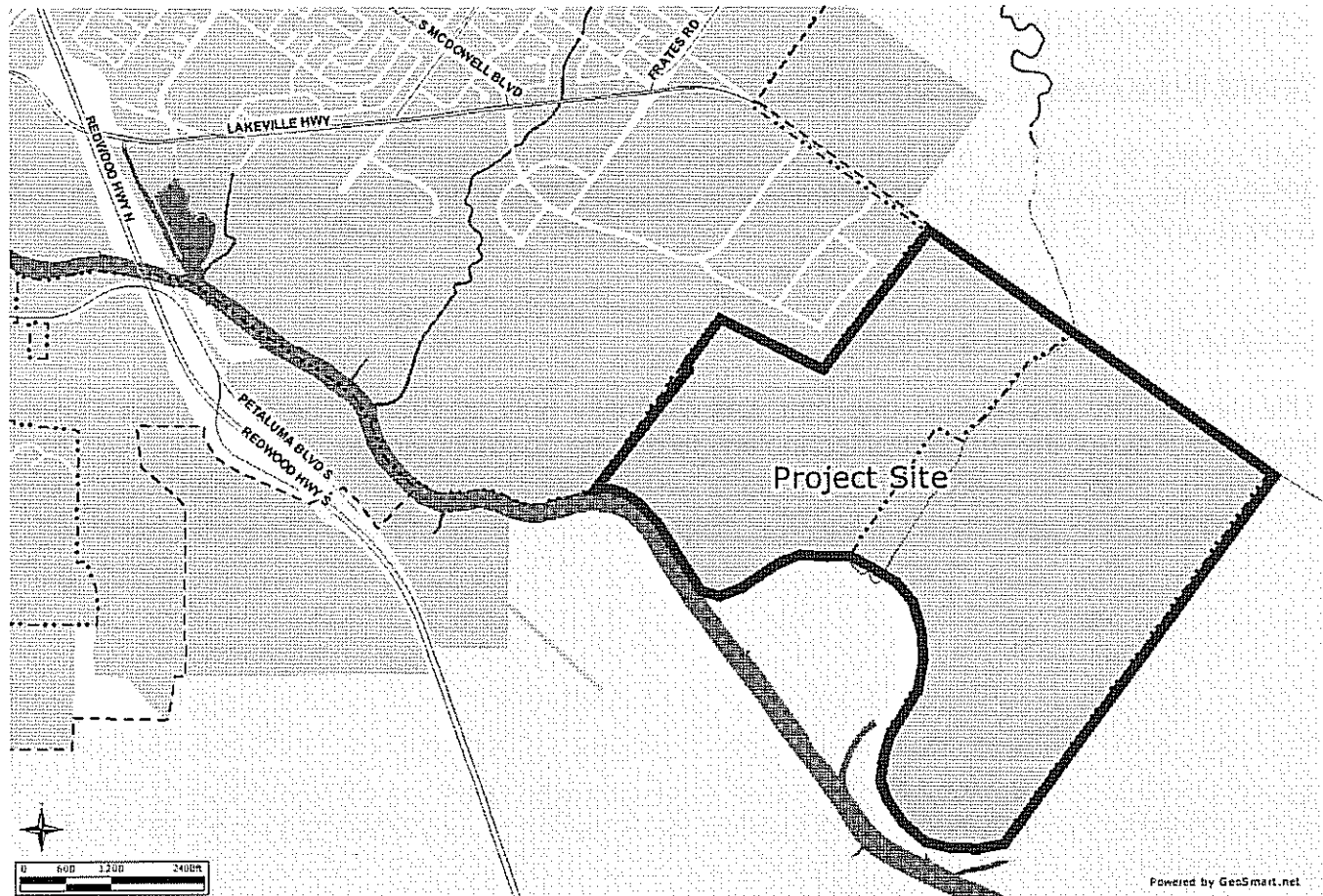
This new facility will replace one that was originally built in 1938. The Ellis Creek Facility leverages state-of-the-art control technology to reduce operating costs.

Project Title: SCADA Ellis Creek WRF

Project #: C00500406

This project includes programming of the Supervisory, Control and Data Acquisition (SCADA) system for the new Ellis Creek Water Recycling Facility. The facility is programmed using a state-of-the-art control system. Each piece of equipment is monitored and controlled using the SCADA system. Data is collected as required by regulators (time of peak flow, minimum pH, etc), for process control (i.e. flow pace chemical addition), and for maintenance (i.e. equipment run times) and then loaded to a SQL server for access by desk top programs utilized for regulatory reporting and maintenance management. The system is required for regulatory compliance and monitoring of the new recycling facility. The system responds to upset conditions and calls an operator on the off-shift. The operating team can also dial in and observe plant operations from off-site.

During FY 05-06, approximately 30% of the programming work was completed. Programming and computers for the outfall area of the plant was delivered in February 2008. All the computers are slated for delivery to the operations building in early June 2008. Start up and optimization of control strategies will be the focus of this project in FY08-09.



SCADA Ellis Creek WRF
 Fund C00500406
 6600.66999

		Prior	Total Appro.				Est.	
		Years	08-09	thru 08-09	09-10	10-11	Future Yrs	Total
USES (dollars in \$000)								
54110	Design	\$ 1,911	\$ 430	\$ 2,341	\$ -	\$ -	\$ -	\$ 2,341
54150	Planning/Environmental	100	(100)	-	-	-	-	-
55011	CIP Overhead	92	(28)	64	-	-	-	64
57310	Contingency	-	200	200	400	-	-	600
TOTAL		\$ 2,103	\$ 502	\$ 2,605	\$ 400	\$ -	\$ -	\$ 3,005
SOURCES (dollars in \$000)								
Waste Water Operating		\$ 2,103	\$ 502	\$ 2,605	\$ 400	\$ -	\$ -	\$ 3,005
TOTAL		\$ 2,103	\$ 502	\$ 2,605	\$ 400	\$ -	\$ -	\$ 3,005

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of the SCADA system will be part of the maintenance cost of the new Ellis Creek Water Recycling Facility. Software upgrades, daily checks of the system, and updates to programming will all be routine maintenance procedures once the facility is operational.

CALCULATION OF FUTURE SAVINGS

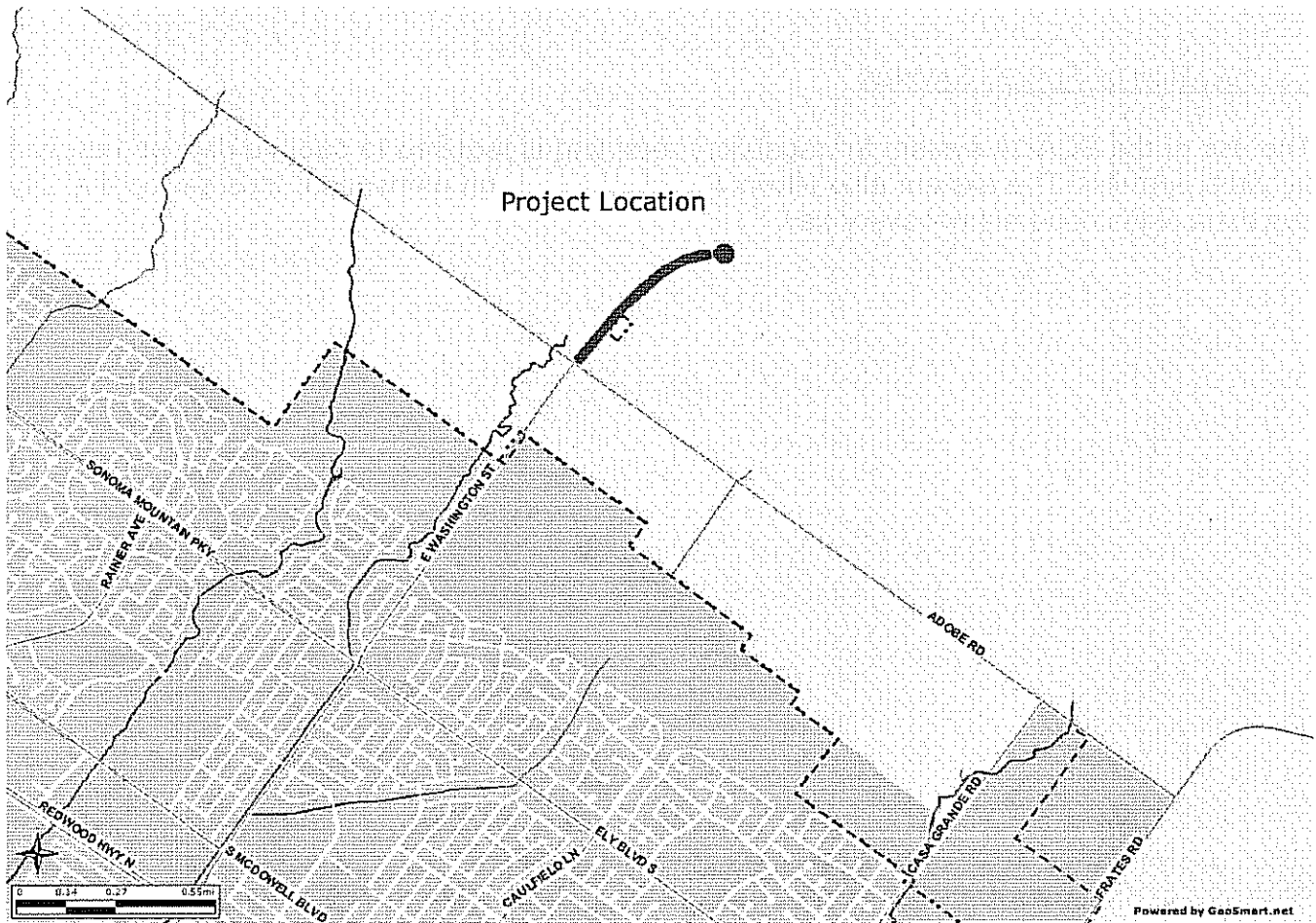
The use of the SCADA system for regulatory reporting is required to capture data as required by plant permits. The system also allows the plant to be run unmanned, thus saving the City two extra shifts of personnel every day.

Project Title: Phase 2B Recycled Water - Reservoir

Project #: C00500408

This project is identified in the General Plan to provide tertiary recycled water for irrigation of parks, golf courses, and open space areas. The tertiary recycled water will be produced at the Ellis Creek Water Recycling Facility. The Phase 1 project was constructed in 2004 and included 19,000 linear feet of pipeline and turnouts to serve Rooster Run Golf Course and other nearby turf areas in the future.

The Phase 2B project includes installation of a 2.2 million gallon prestressed concrete tank at elevation 280' in the foothills northeast of the intersection of Adobe Road and East Washington. The project includes 3,200 linear feet of 20-inch diameter pipeline to connect to the Phase 2A project. The environmental impact report for the project is in the final stages of development and is anticipated to be released for public comment in the summer of 2008. Construction of Phase 2B is expected to begin in early 2009. The City applied for State Revolving Loan funding for this project. This project leverages use of a local resource for part of its water supply, while offsetting demands on the potable water system.



Sewer Recycle Reservoir Phase 2B Fund C00500408
 6600.66999

	Prior		Total Appro.				Est.
	Years	08-09	thru 08-09	09-10	10-11	Future Yrs	Total
USES (dollars in \$000)							
54110 Design	\$ 500	\$ 230	\$ 730	\$ 150	\$ -	\$ -	\$ 880
54120 Legal Counsel	-	-	-	-	-	-	-
54150 Planning/Environmental	200	180	380	100	-	-	480
54151 Construction Contracts	2,000	-	2,000	3,000	-	-	5,000
54152 Construction Management	75	165	240	360	-	-	600
54153 Administration	100	(90)	10	-	-	-	10
55011 CIP Overhead	151	(151)	-	-	-	-	-
57310 Contingency	50	150	200	300	-	-	500
62110 Land and Easements	100	100	200	-	-	-	200
TOTAL	\$ 3,176	\$ 584	\$ 3,760	\$ 3,910	\$ -	\$ -	\$ 7,670
SOURCES (dollars in \$000)							
Waste Water Operating	\$ 851	\$ 584	\$ 1,435	\$ -	\$ -	\$ -	\$ 1,435
Debt Proceeds	2,325	-	2,325	3,910	-	-	6,235
TOTAL	\$ 3,176	\$ 584	\$ 3,760	\$ 3,910	\$ -	\$ -	\$ 7,670

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by Water Pollution Control funds

CALCULATION OF FUTURE SAVINGS

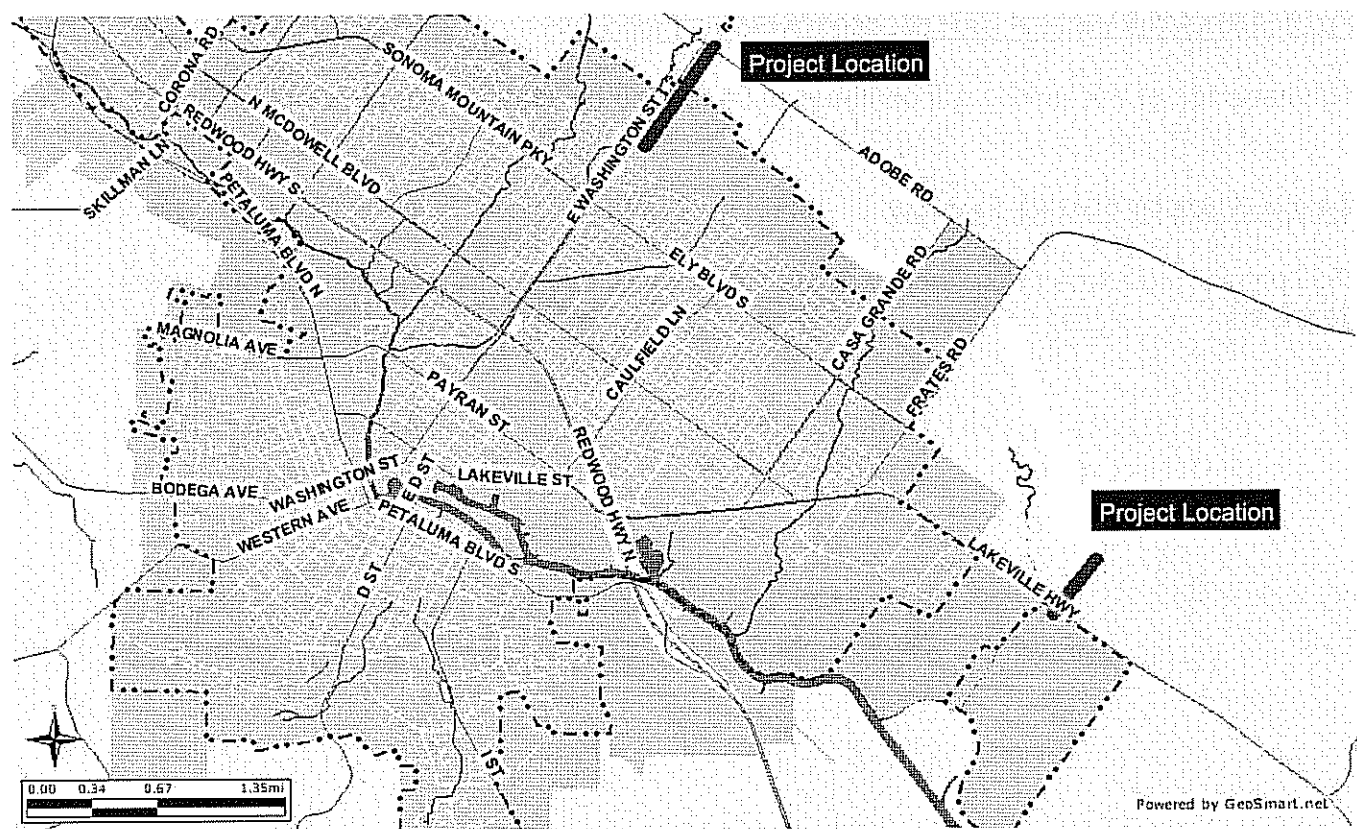
This project improves the reliability of the City's water system by offsetting potable water demands.

Project Title: Phase 2A Recycled Water - Pipeline

Project #: C00500505

This project is identified in the General Plan as a key component of the City's water supply plan, and includes providing tertiary recycled water for irrigation of parks, golf courses, and open space areas. The tertiary recycled water will be produced at the Ellis Creek Water Recycling Facility. The Phase 1 project was constructed in 2004 and included 19,000 linear feet of pipeline and turnouts to serve Rooster Run Golf Course and other nearby turf areas in the future.

The Phase 2A project includes the installation of 7,600 linear feet of 20-inch diameter pipeline to connect the Phase 1 project to the recycled water pump station at the Ellis Creek Water Recycling Facility, and extension of a 20-inch pipeline in East Washington Street from Executive Drive to Adobe Road. The reservoir supporting this pipeline will be constructed under the Phase 2B Recycled Water – Reservoir Project (C00500408). Construction is scheduled to begin in 2009. The City applied for State Revolving Loan funding for this project.



Phase 2A Recycled Water - Pipeline Fund C00500505
 6600.66999

		<u>Prior</u>		<u>Total Appro.</u>				<u>Est.</u>
		<u>Years</u>	<u>08-09</u>	<u>thru 08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>Future Yrs</u>	<u>Total</u>
USES (dollars in \$000)								
54110	Design	\$ 421	\$ 73	\$ 494	\$ 50	\$ -	\$ -	\$ 544
54150	Planning/Environmental	144	160	304	25	-	-	329
54151	Construction Contracts	700	700	1,400	1,000	-	-	2,400
54152	Construction Management	70	70	140	130	-	-	270
54153	Administration	207	(190)	17	-	-	-	17
55011	CIP Overhead	86	(72)	14	-	-	-	14
57310	Contingency	15	125	140	100	-	-	240
62110	Land and Easements	50	-	50	-	-	-	50
	TOTAL	\$ 1,693	\$ 866	\$ 2,559	\$ 1,305	\$ -	\$ -	\$ 3,864
SOURCES (dollars in \$000)								
	Waste Water Operating	\$ 565	\$ 866	\$ 1,431	\$ -	\$ -	\$ -	\$ 1,431
	Debt Proceeds	1,128	-	1,128	1,305	-	-	2,433
	TOTAL	\$ 1,693	\$ 866	\$ 2,559	\$ 1,305	\$ -	\$ -	\$ 3,864

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by the Water Pollution Control funds.

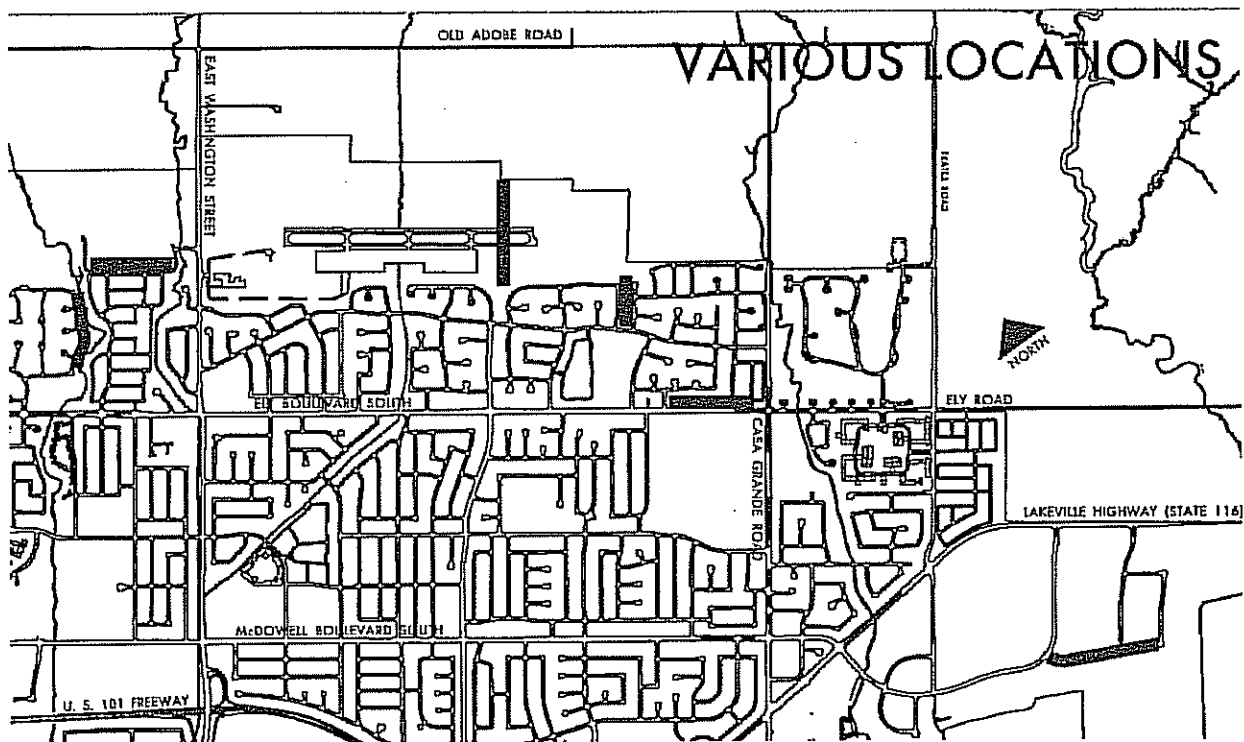
CALCULATION OF FUTURE SAVINGS

This project improves the reliability of the City's water system by offsetting potable water demands.

Project Title: Phase 3 Recycled Water - Distribution

Project #: C00500508

This project is identified in the General Plan as a key component of the City's water supply plan, and will connect City facilities on the east side of the City to the tertiary recycled water system, and convert these facilities to irrigation with recycled water. Recycled water is a drought-proof, locally supplied water resource that saves potable water. The distribution lines will be phased in over a four year period with construction on the first phase starting in late FY 08-09. There are over 20 sites, comprising approximately 150 irrigated acres, to be connected to the recycled water system, including Casa Grande High School, Prince Park, McDowell Park, Wiseman Park, Lucchesi Park, Leghorns Park, Fox Hollow Park, and Eagle Park.



Sewer Recycle Phase 3
 Fund C00500508
 6600.66999

		Prior		Total Appro.				Est.
		Years	08-09	thru 08-09	09-10	10-11	Future Yrs	Total
USES (dollars in \$000)								
54110	Design	\$ 75	\$ 399	\$ 474	\$ 356	\$ 299	\$ 358	\$ 1,488
54150	Planning/Environmental	25	-	25	5	5	5	40
54151	Construction Contracts	200	-	200	2,391	1,244	1,244	5,078
54152	Construction Management	25	23	48	263	149	154	614
55011	CIP Overhead	17	(17)	-	-	-	-	-
57310	Contingency	10	-	10	229	124	124	488
TOTAL		\$ 352	\$ 405	\$ 757	\$ 3,244	\$ 1,822	\$ 1,885	\$ 7,708
SOURCES (dollars in \$000)								
	Waste Water Operating	\$ 117	\$ 405	\$ 522	\$ 261	\$ 262	\$ 326	\$ 1,370
	Debt Proceeds	235	-	235	2,983	1,560	1,559	6,338
TOTAL		\$ 352	\$ 405	\$ 757	\$ 3,244	\$ 1,822	\$ 1,885	\$ 7,708

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of portions of the project that are part of the water recycling facility will be funded by Water Pollution Control funds.

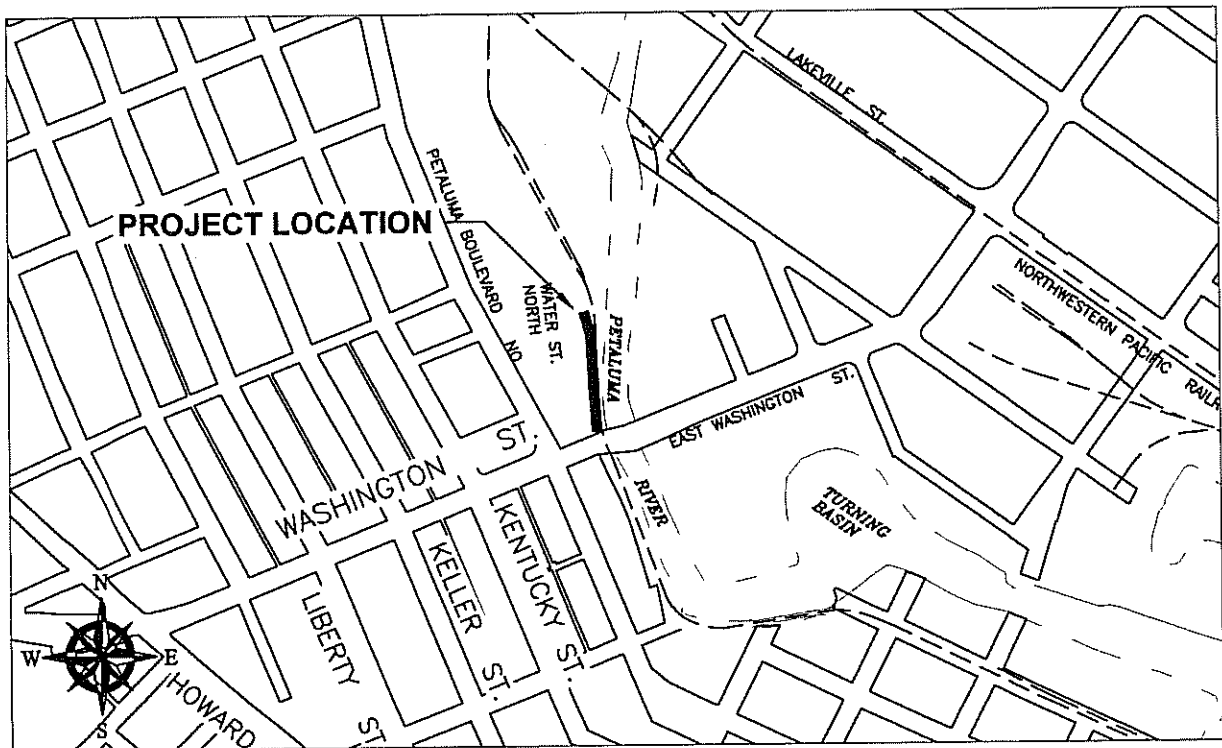
CALCULATION OF FUTURE SAVINGS

This project improves the reliability of the City's water system by offsetting potable water demands and provides a drought-proof source of water for irrigation of City facilities.

Project Title: Water Street North Sewer Main Replacement

Project #: C00500608

This project is part of an ongoing program to repair and rehabilitate existing sewer mains. This project will replace approximately 900 linear feet of 18-inch corrugated metal sewer main located adjacent to the Petaluma River and next to the railroad tracks. The existing main is over 70 years old, is corroded and is in poor condition and needs to be replaced. This project includes right-of-way acquisition and coordination with public and private projects along Water Street North.



Water Street North Sewer Main Replacement C00500608
 Fund 6600.66999

		Prior	Total Appro.			Future Yrs	Est.
		Years	08-09	thru 08-09	09-10	10-11	Total
USES (dollars in \$000)							
54110	Design	\$ -	\$ 20	\$ 20	\$ -	\$ -	\$ 20
54151	Construction Contracts	-	650	650	-	-	650
54152	Construction Management	-	75	75	-	-	75
57310	Contingency	-	90	90	-	-	90
62110	Land and Easements	-	150	150	-	-	150
TOTAL		\$ -	\$ 985	\$ 985	\$ -	\$ -	\$ 985
SOURCES (dollars in \$000)							
Waste Water Operating		\$ -	\$ 985	\$ 985	\$ -	\$ -	\$ 985
TOTAL		\$ -	\$ 985	\$ 985	\$ -	\$ -	\$ 985

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this sewer main continues to be funded from Wastewater Enterprise funds.

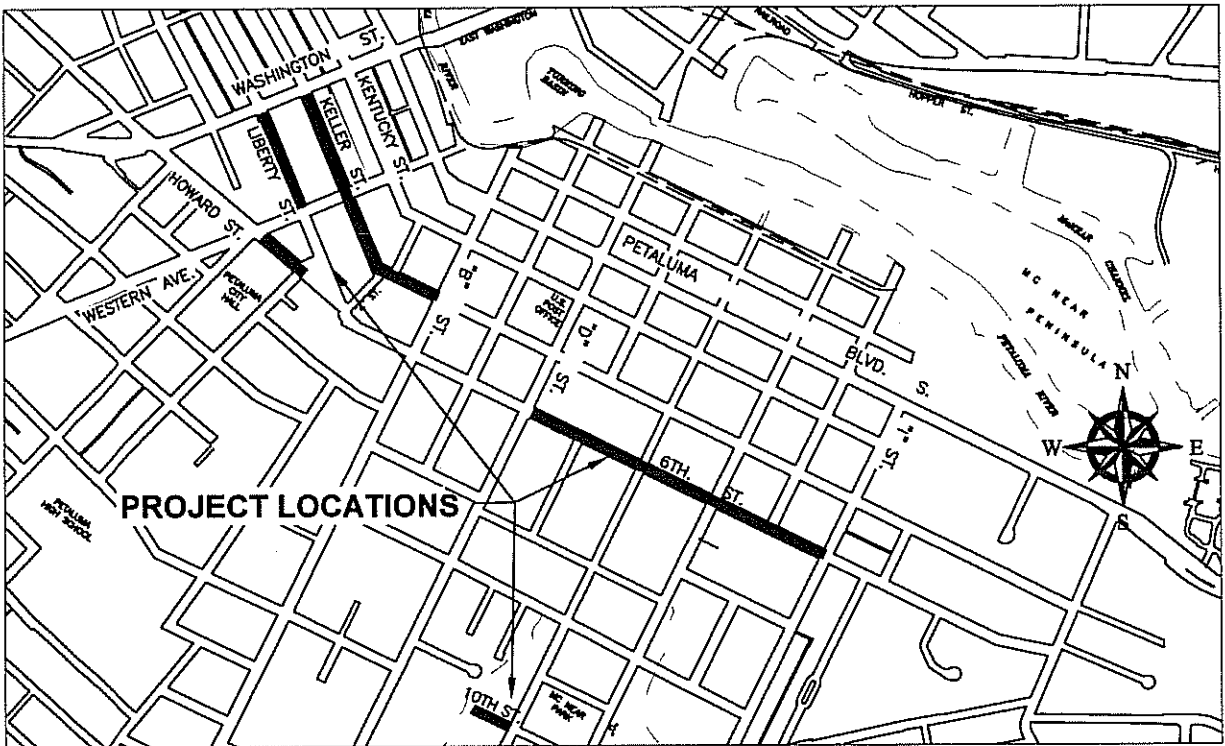
CALCULATION OF FUTURE SAVINGS

Replacing the deteriorated sewer main will reduce maintenance costs and inflow and infiltration.

Project Title: 2008 Sewer Main Replacement Various Locations

Project #: C00500708

This project is part of an ongoing program to repair and rehabilitate existing sewer mains. This project will replace approximately 350 linear feet of 6-inch vitrified clay pipe (VCP) sewer main on Howard Street and rehabilitate the 6-inch sanitary sewer mains on 6th Street and Liberty Street using a trenchless "cured-in-place-pipe" (CIPP) technology. On 10th Street, the project will replace the existing 6" clay sewer main and upgrade the existing 1-1/2-inch water main with a new 6-inch water main, water services and fire hydrants to increase flow and bring the area up to current city standards. This project will also replace existing water services on Howard, Keller, and 5th streets as well as replace exiting fire hydrants on Keller, 5th and 6th streets. The existing utilities are old, in poor condition, and need to be upgraded. The costs of the water mains, services and fire hydrants will be reimbursed from Water Enterprise Funds. This project will precede the proposed downtown street reconstruction projects.



Sewer Main Replacement 2008 Various Fund C00500708
 6600.66999

	<u>Prior</u>		<u>Total Appro.</u>				<u>Est.</u>
	<u>Years</u>	<u>08-09</u>	<u>thru 08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>Future Yrs</u>	<u>Total</u>
USES (dollars in \$000)							
54151 Construction Contracts	\$ -	\$ 400	\$ 400	\$ -	\$ -	\$ -	\$ 400
54152 Construction Management	-	20	20	-	-	-	20
57120 Capitalized Interest	-	-	-	-	-	-	-
57310 Contingency	-	60	60	-	-	-	60
TOTAL	<u>\$ -</u>	<u>\$ 480</u>	<u>\$ 480</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 480</u>
SOURCES (dollars in \$000)							
Waste Water Operating	\$ -	\$ 480	\$ 480	\$ -	\$ -	\$ -	\$ 480
TOTAL	<u>\$ -</u>	<u>\$ 480</u>	<u>\$ 480</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 480</u>

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of these facilities continues to be funded from Wastewater and Water Enterprise funds.

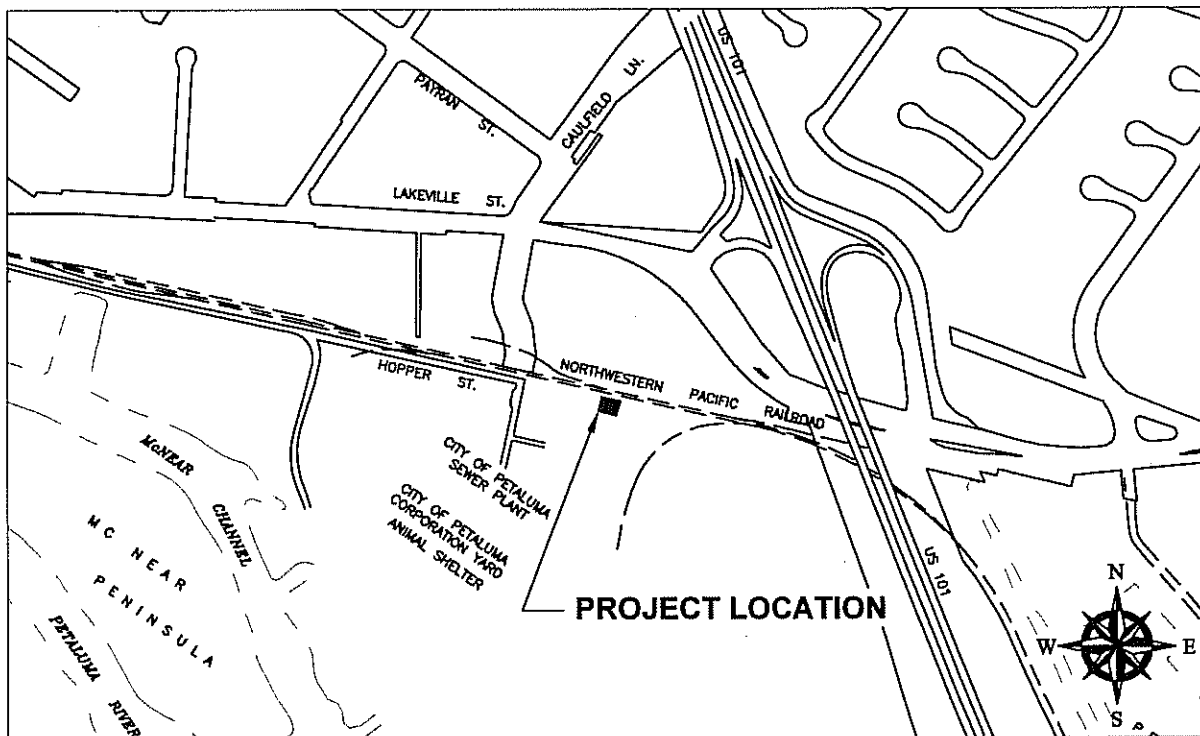
CALCULATION OF FUTURE SAVINGS

Replacing these facilities will reduce maintenance costs and reduce inflow and infiltration costs.

Project Title: Pond Influent Pump Station (PIPS) Improvements

Project #: C00500808

This will ready the Pond Influent Pump Station (PIPS) at the Hopper Street Wastewater Treatment Plant for independent operation once the Hopper Street WWTP facility stops operating. Needed improvements include: influent screens to protect the pumps from large debris such as wood and tires, etc., control programming changes to facilitate low flow pump operation, upgrades to the influent diversion box to restrict flow from entering the treatment plant and return the 60" incoming sewer line to full capacity, odor control soil bed rehabilitation, connection to City water, enhanced security at pump station control boxes and doors, transmitter at the PIPS to send performance data to the new Ellis Creek WRF control system, programming and screen development for the Ellis Creek site computer system to make pump station data visible to the operating crew. The project will be substantially constructed by October 2008.



Pond Influent Pump Station (PIPS) Improvemt. C00500808
 Fund 6600.66999

	Prior Years	08-09	Total Appro. thru 08-09	09-10	10-11	Future Yrs	Est. Total
USES (dollars in \$000)							
54110 Design	\$ 191	\$ 76	\$ 267	\$ -	\$ -	\$ -	\$ 267
54150 Planning/Environmental	-	15	15	-	-	-	15
54151 Construction Contracts	-	671	671	-	-	-	671
54152 Construction Management	-	81	81	-	-	-	81
57310 Contingency	-	67	67	-	-	-	67
TOTAL	\$ 191	\$ 909	\$ 1,100	\$ -	\$ -	\$ -	\$ 1,100
SOURCES (dollars in \$000)							
Waste Water Operating	\$ 191	\$ 909	\$ 1,100	\$ -	\$ -	\$ -	\$ 1,100
TOTAL	\$ 191	\$ 909	\$ 1,100	\$ -	\$ -	\$ -	\$ 1,100

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by the Water Pollution Control funds.

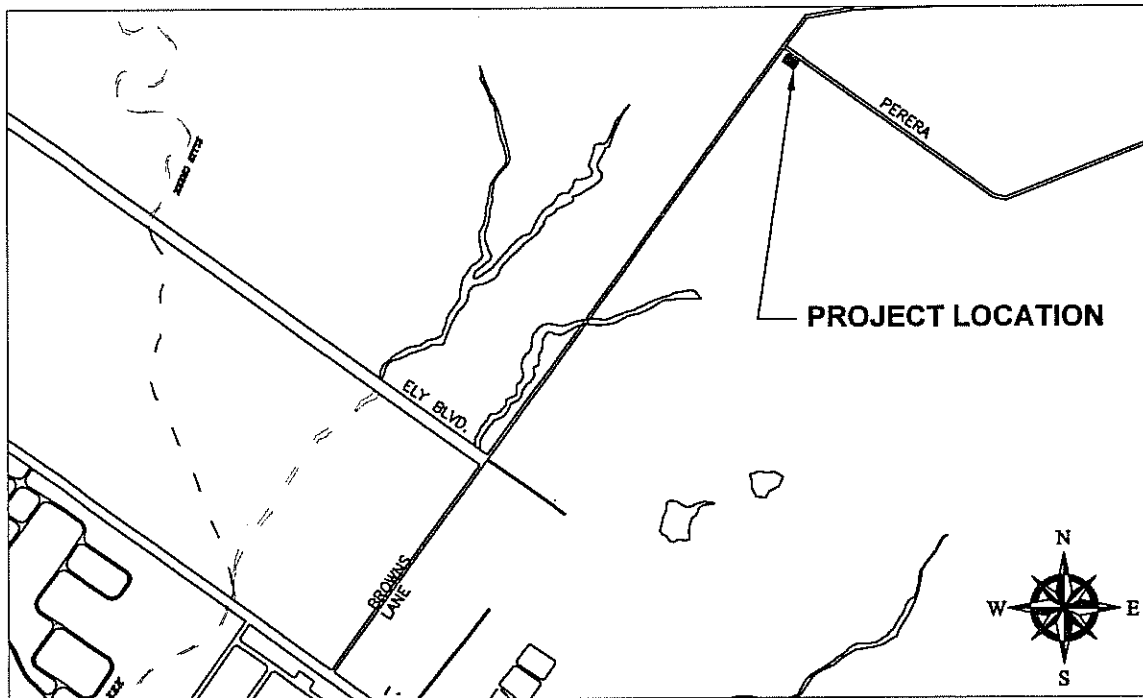
CALCULATION OF FUTURE SAVINGS

The cost to run the pump station will be similar because influent flows are anticipated to remain consistent. Risk reduction by providing monitoring and alarms that will reach the operating crew is anticipated.

Project Title: Recycled Water Pump Station No. 2 Improvements

Project #: C00500908

This pump station was built in 1981. It works in tandem with Recycled Water Pump Station No. 1 and conveys secondary recycled water for agricultural irrigation. During the summer, this pump station operates at full capacity which puts a tremendous amount of wear and tear on the equipment. The electrical and instrumentation equipment need to be upgraded to prevent system failure. This project includes replacement of the variable frequency drives, programmable logic controller, and other instrumentation needed to operate and control the pump station. Construction is anticipated to start in November 2008, after the irrigation season.



Recycled Water Pump Stn 2 Improvements C00500908
 Fund 6600.66999

	Prior Years	08-09	Total Appro. thru 08-09	09-10	10-11	Future Yrs	Est. Total
USES (dollars in \$000)							
54110 Design	\$ 77	\$ 75	\$ 152	\$ -	\$ -	\$ -	\$ 152
54151 Construction Contracts	120	250	370	-	-	-	370
54152 Construction Management	15	20	35	-	-	-	35
57310 Contingency	25	30	55	-	-	-	55
TOTAL	\$ 237	\$ 375	\$ 612	\$ -	\$ -	\$ -	\$ 612
SOURCES (dollars in \$000)							
Waste Water Operating	\$ 237	\$ 375	\$ 612	\$ -	\$ -	\$ -	\$ 612
TOTAL	\$ 237	\$ 375	\$ 612	\$ -	\$ -	\$ -	\$ 612

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by the Water Pollution Control funds.

CALCULATION OF FUTURE SAVINGS

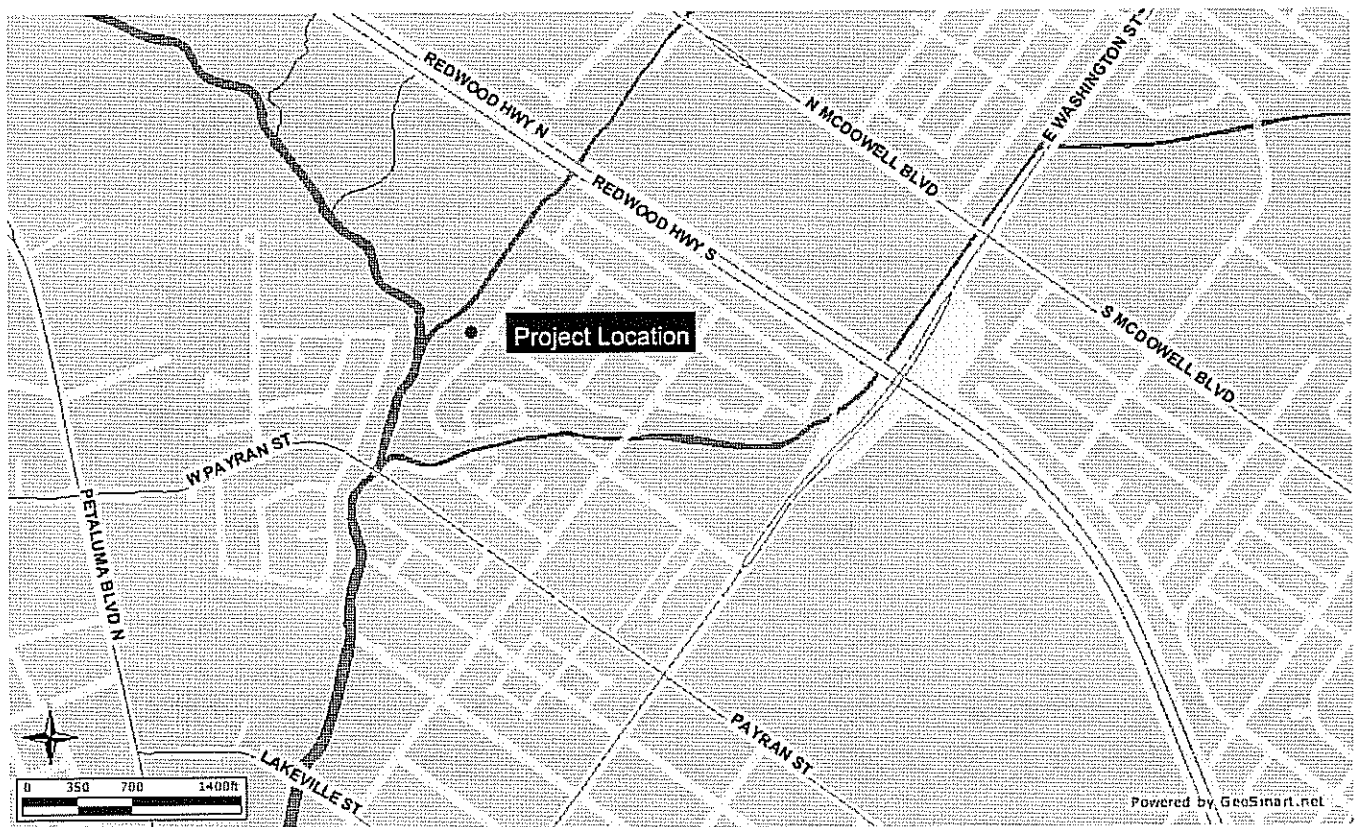
Savings are inherent to conducting maintenance in a predictive and preventive manner, instead of reactive maintenance.

Project Title: **Wilmington Pump Station**

Project #: **C00501400**

The Wilmington Pump Station pumps raw wastewater to the City's wastewater treatment facility. This project is designed to improve the aesthetic appeal of the pump station, which is necessary due to its close proximity to a residential area.

This project includes construction of a soil filter bed to control odors, replacement of fencing, and installation of landscaping to enhance the site aesthetics. Design and construction is anticipated to commence in FY 09-10.



Wilmington Pump Station
 Fund

C00501400
 6600.66999

	Prior Years	08-09	Total Appro. thru 08-09	09-10	10-11	Future Yrs	Est. Total
USES (dollars in \$000)							
54110 Design	\$ 60	\$ -	\$ 60	\$ -	\$ -	\$ -	\$ 60
54150 Planning/Environmental	63	-	63	-	-	-	63
54151 Construction Contracts	571	-	571	-	-	-	571
54153 Administration	125	-	125	-	-	-	125
55011 CIP Overhead	15	-	15	-	-	-	15
TOTAL	\$ 834	\$ -	\$ 834	\$ -	\$ -	\$ -	\$ 834
SOURCES (dollars in \$000)							
Waste Water Operating	\$ 834	\$ -	\$ 834	\$ -	\$ -	\$ -	\$ 834
TOTAL	\$ 834	\$ -	\$ 834	\$ -	\$ -	\$ -	\$ 834

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by the Water Pollution Control Funds.

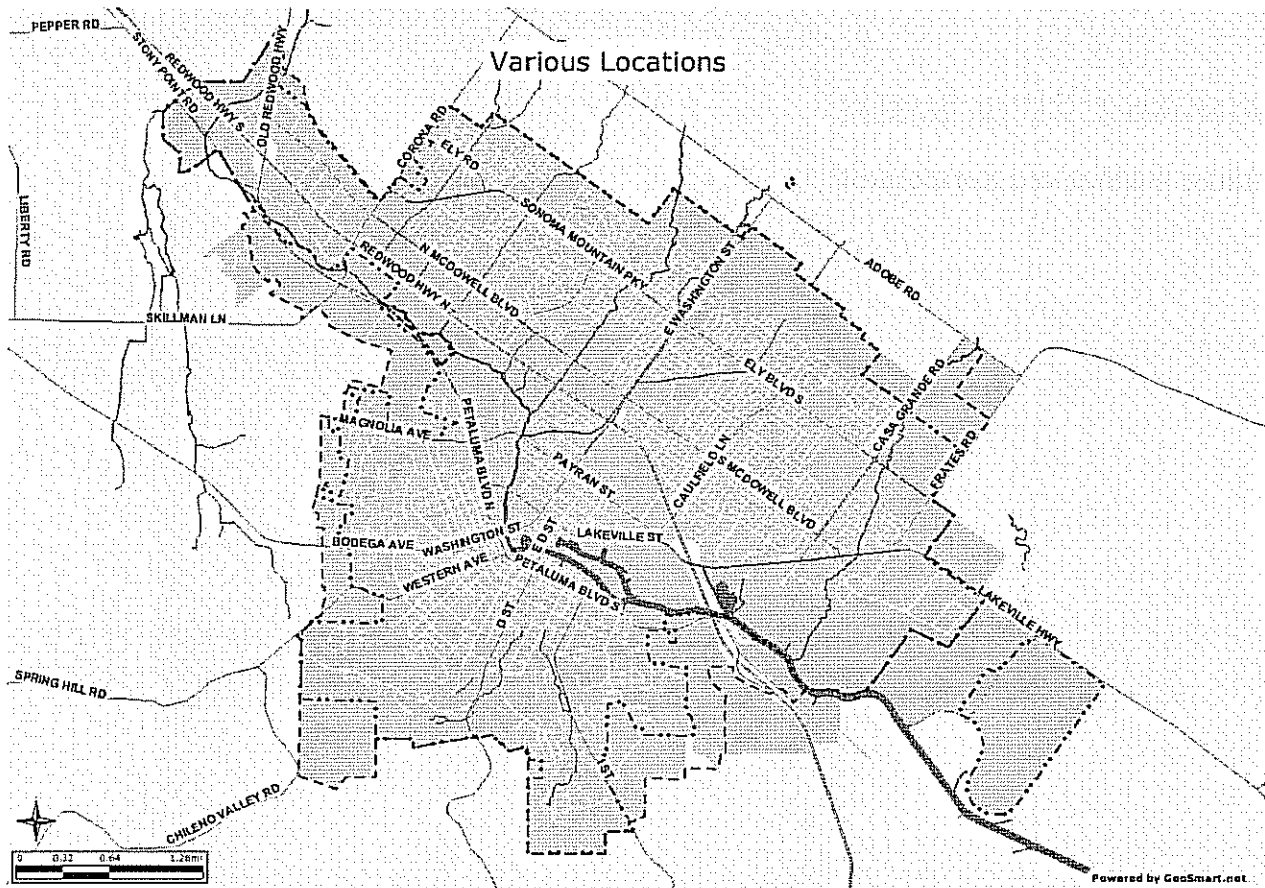
CALCULATION OF FUTURE SAVINGS

No future savings are anticipated.

**Project Title: 2009 Sewer Replacement
Various Locations**

Project #: C66400901

This project is part of an ongoing program upgrade existing sewer mains. This project replaces or rehabilitates old, deteriorated and undersized sewer mains and manholes to maintain and improve existing infrastructure. Replacement or lining of sewer mains and manholes reduces infiltration and inflow and provides improved maintenance access for cleaning and televising lines. Replacing undersized mains increases system capacity and can eliminate surcharge conditions. Locations will be determined by analyzing the condition of existing mains, maintenance records and coordination with Public Works' pavement reconstruction projects.



Sewer Main Replacement 2009 Various Fund C66400901
 6600.66999

	<u>Prior</u>		<u>Total Appro.</u>			<u>Est.</u>
	<u>Years</u>	<u>08-09</u>	<u>thru 08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>Total</u>
USES (dollars in \$000)						
54151 Construction Contracts	\$ -	\$ 850	\$ 850	\$ -	\$ -	\$ 850
54152 Construction Management	-	85	85	-	-	85
57310 Contingency	-	85	85	-	-	85
TOTAL	\$ -	\$ 1,020	\$ 1,020	\$ -	\$ -	\$ 1,020
SOURCES (dollars in \$000)						
Waste Water Capital	-	1,020	1,020	-	-	1,020
TOTAL	\$ -	\$ 1,020	\$ 1,020	\$ -	\$ -	\$ 1,020

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of sewer mains and manholes continues to be funded from wastewater enterprise funds.

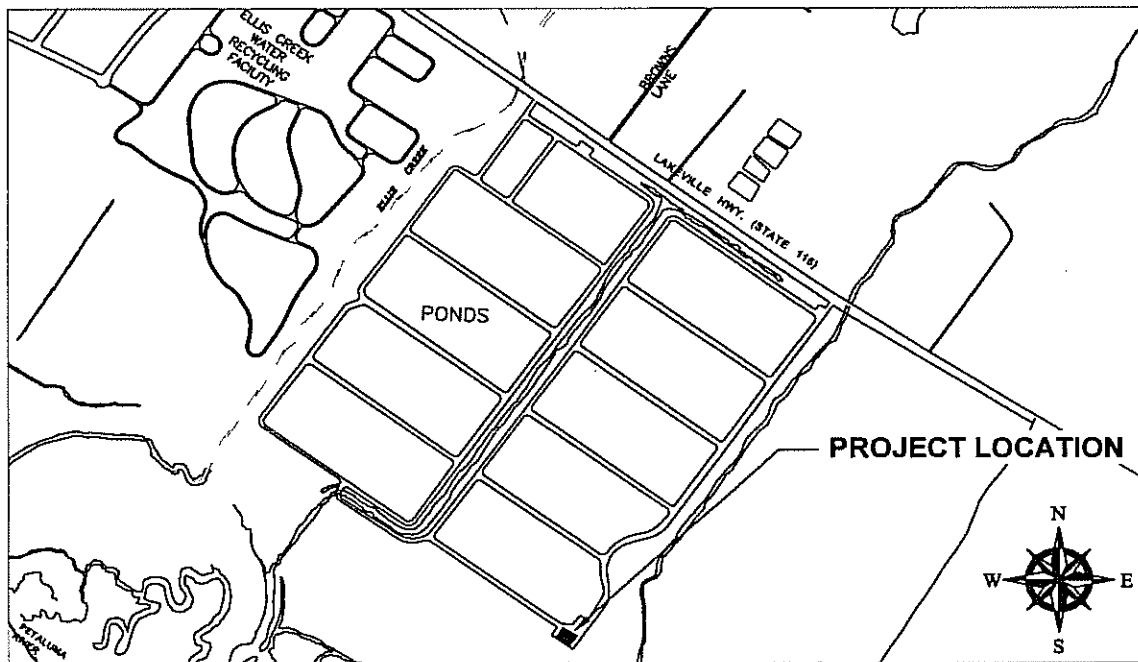
CALCULATION OF FUTURE SAVINGS

Replacing or lining existing sewer mains and manholes will reduce maintenance costs, extend useful life of system, and reduce inflow and infiltration.

Project Title: Recycled Water Main Pump Station Improvements

Project #: C66400902

Recycled Water Main Pump Station conveys recycled water from the oxidation ponds to Recycled Water Pump Station No. 1. During the summer months, the secondary recycled water system operates at full capacity. There are no provisions in the system to monitor and control minor changes in flow patterns and pressures that can significantly disrupt operation and wear and strain the equipment. The first year of this project includes installation of pressure and flow control valves to help stabilize the entire distribution system when water use changes. The variable frequency drives, which are worn due to age and significant use, will be replaced in the second year. Instrumentation and controls will also be upgraded to provide better coordination between the three pump stations that work in tandem to provide recycled water to approximately 800 acres of agricultural land.



Recycled Water Main Pump Stn Improvmts C66400902
 Fund 6600.66999

		Prior	Total Appro.			Future Yrs	Est.
		Years	08-09	thru 08-09	09-10	10-11	Total
USES (dollars in \$000)							
54110	Design	\$ -	\$ 20	\$ 20	\$ 150	\$ -	\$ 170
54151	Construction Contracts	-	110	110	250	-	360
54152	Construction Management	-	10	10	25	-	35
57310	Contingency	-	10	10	25	-	35
	TOTAL	\$ -	\$ 150	\$ 150	\$ 450	\$ -	\$ 600
SOURCES (dollars in \$000)							
	Waste Water Operating	\$ -	\$ 150	\$ 150	\$ 450	\$ -	\$ 600
	TOTAL	\$ -	\$ 150	\$ 150	\$ 450	\$ -	\$ 600

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by the Water Pollution Control funds.

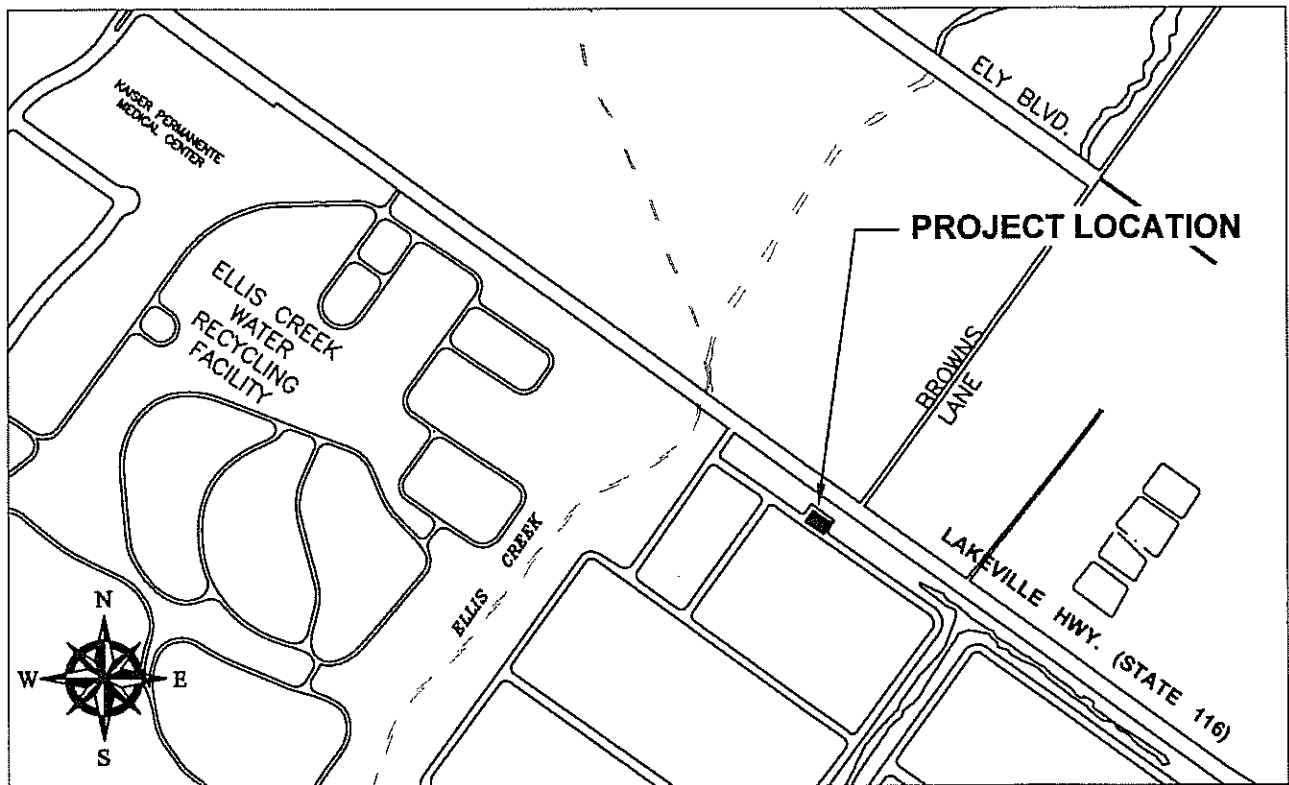
CALCULATION OF FUTURE SAVINGS

Savings are inherent to conducting maintenance in a predictive and preventive manner, instead of reactive maintenance.

Project Title: Recycled Water Pump Station No. 1 Improvements

Project #: C66400903

This pump station was built in 1981 and conveys secondary recycled water to Recycled Water Pump Station No. 2 and to fields for agricultural irrigation. During the summer, this pump station operates at full capacity which puts a tremendous amount of wear and tear on the equipment. The electrical and instrumentation equipment will be upgraded as part of this project to prevent system failure. Upgrading the instrumentation and controls will also provide better coordination between the three recycled water pump stations that work in tandem to provide recycled water to approximately 800 acres of agricultural land.



Recycled Water Pump Stn 1 Improvements C66400903
 Fund 6600.66999

	Prior Years	08-09	Total Appro. thru 08-09	09-10	10-11	Future Yrs	Est. Total
USES (dollars in \$000)							
54110 Design	\$ -	\$ 210	\$ 210	\$ -	\$ -	\$ -	\$ 210
54151 Construction Contracts	-	300	300	-	-	-	300
54152 Construction Management	-	30	30	-	-	-	30
57310 Contingency	-	30	30	-	-	-	30
TOTAL	\$ -	\$ 570	\$ 570	\$ -	\$ -	\$ -	\$ 570
SOURCES (dollars in \$000)							
Waste Water Operating	\$ -	\$ 570	\$ 570	\$ -	\$ -	\$ -	\$ 570
TOTAL	\$ -	\$ 570	\$ 570	\$ -	\$ -	\$ -	\$ 570

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by the Water Pollution Control funds.

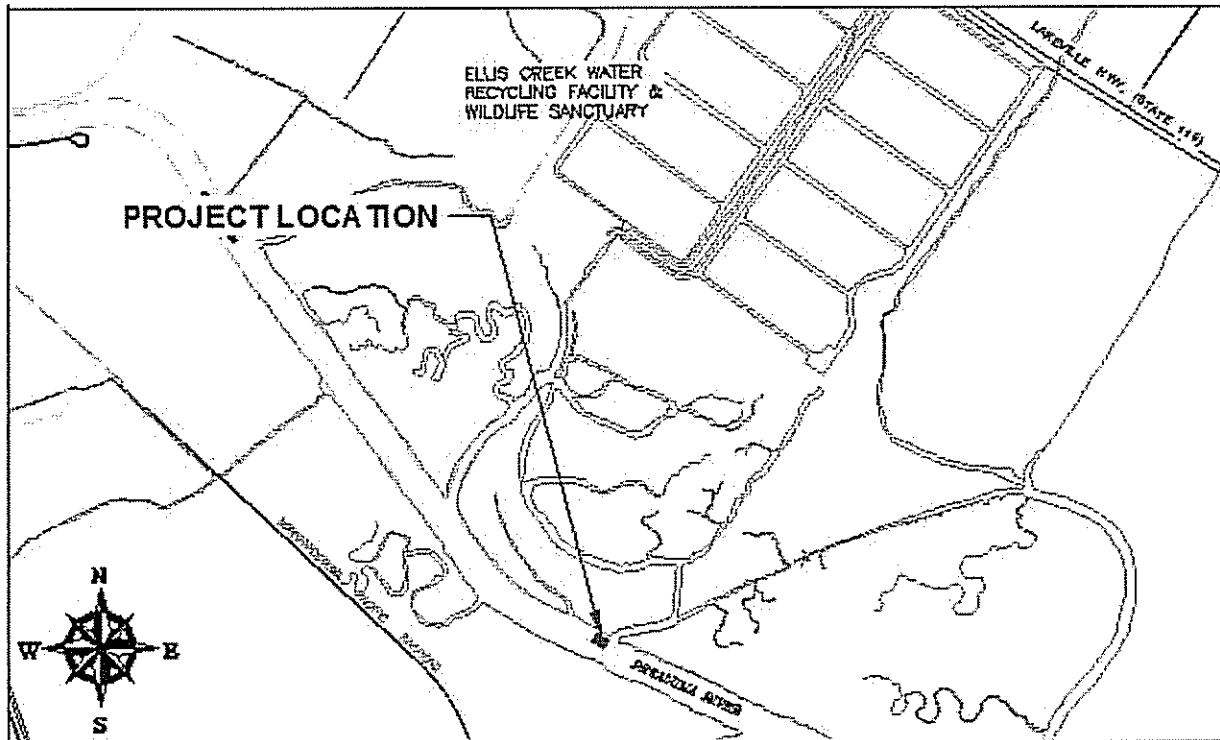
CALCULATION OF FUTURE SAVINGS

Savings are inherent to conducting maintenance in a predictive and preventive manner, instead of reactive maintenance.

Project Title: Outfall Replacement Project

Project #: C66400904

Treated effluent is conveyed to the Petaluma River during the winter months through an outfall which is located adjacent to the river. The outfall was damaged when struck by a large vessel in the river, and needs to be replaced. Access to the Petaluma River to affect the repairs is limited to a six week window in the fall due to endangered species bird breeding and fish spawning season. Regulatory permits to complete the project were procured last year. The repaired outfall will include new check valves (24") and navigation aids to try to alleviate any future incident by adding additional warnings for vessels navigating in the area of the outfall. Construction is anticipated to commence on September 1, 2008.



Outfall Replacement Project C66400904
 Fund 6600.66999

	<u>Prior</u>		<u>Total Appro.</u>				<u>Est.</u>
	<u>Years</u>	<u>08-09</u>	<u>thru 08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>Future Yrs</u>	<u>Total</u>
USES (dollars in \$000)							
54110 Design	\$ -	\$ 68	\$ 68	\$ -	\$ -	\$ -	\$ 68
54150 Planning/Environmental	-	10	10	-	-	-	10
54151 Construction Contracts	-	250	250	-	-	-	250
54152 Construction Management	-	30	30	-	-	-	30
57310 Contingency	-	25	25	-	-	-	25
TOTAL	\$ -	\$ 383	\$ 383	\$ -	\$ -	\$ -	\$ 383
 SOURCES (dollars in \$000)							
Waste Water Operating	\$ -	\$ 383	\$ 383	\$ -	\$ -	\$ -	\$ 383
TOTAL	\$ -	\$ 383	\$ 383	\$ -	\$ -	\$ -	\$ 383

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

Maintenance of this facility will continue to be funded by the Water Pollution Control funds.

CALCULATION OF FUTURE SAVINGS

No future savings are anticipated.

