

SURFACE WATER PROJECTS FY 2007-2008

**SURFACE WATER CAPITAL IMPROVEMENT PROGRAM BUDGET FY 07-08
 PROJECT SUMMARY**

PROJECTS (dollars in \$000)	Prior Years	07-08	Total Appro. thru 07-08	08-09	09-10	10-11	11-12	Est. Total
C500103 R/R Industry Track Relocation	\$ 1,425	\$ 5	\$ 1,430	\$ -	\$ -	\$ -	\$ -	\$ 1,430
C500208 River Plan - Denman Phase 3	-	509	509	-	-	-	-	509
C500308 Stream and Precipitation Gages	-	81	81	-	-	-	-	81
C500704 Dredge Spoils Reclamation Plan	557	100	657	-	-	-	-	657
C500705 Lakeville Channel Improvement	215	-	215	-	-	-	-	215
C500804 Flood Drainage Improvements	178	336	514	325	325	325	325	1,814
C500805 River Habitat Restoration	221	-	221	-	-	-	-	221
TOTAL	<u>\$ 2,596</u>	<u>\$ 1,031</u>	<u>\$ 3,627</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 4,927</u>
SOURCES (dollars in \$000)								
Storm Drainage Impact Fees	\$ 2,596	\$ 469	\$ 3,065	\$ 325	\$ 325	\$ 325	\$ 325	\$ 4,365
SCWA Zone 2A Assessments	-	562	562	-	-	-	-	562
TOTAL	<u>\$ 2,596</u>	<u>\$ 1,031</u>	<u>\$ 3,627</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 4,927</u>

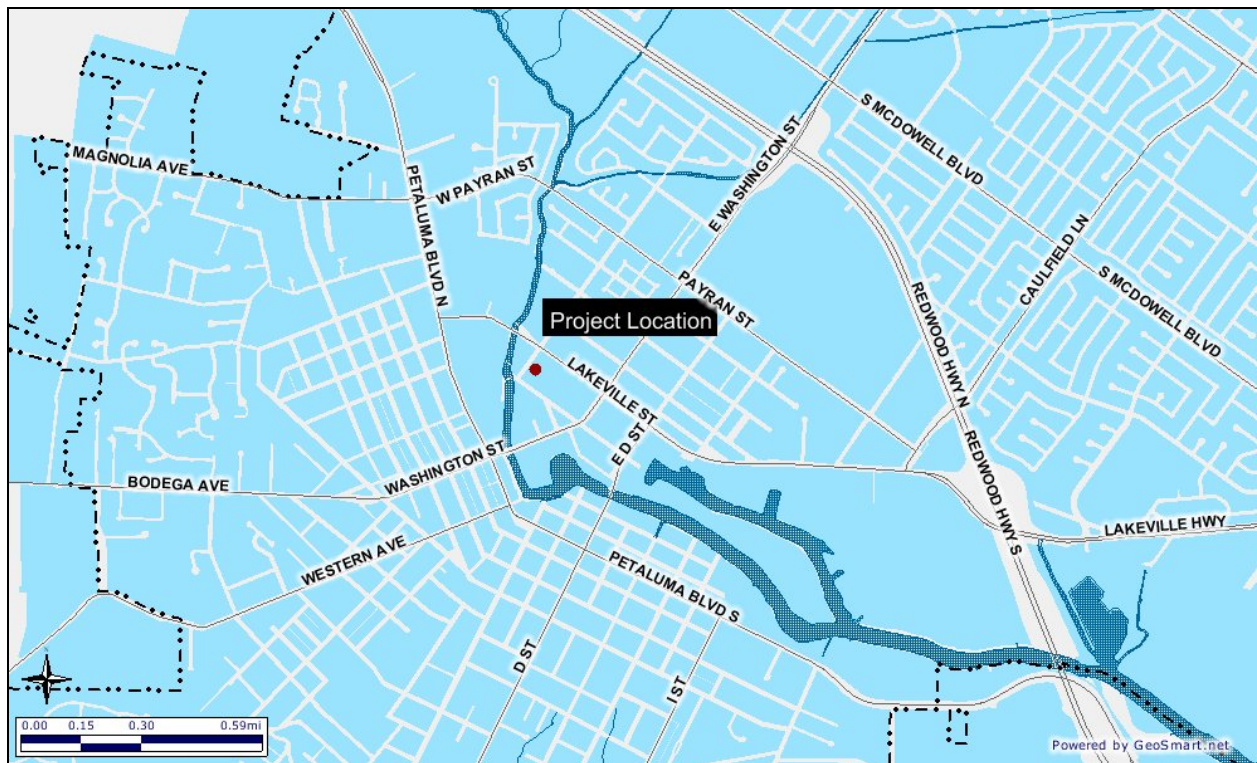
Project Title: Railroad Industry Track Relocation

Project #: C500103

The existing railroad trestle bridge downstream of Lakeville Street impedes flows in the Petaluma River. This bridge, known as the Drill Line Railroad Bridge, is currently not in operation and serves only one parcel (Dairyman’s Feed).

Replacement of the Drill Line Railroad Bridge is prohibitively expensive. This project provides a cost-effective alternative by replacing the existing Drill Line Railroad Bridge with an industrial lead to serve Dairyman’s Feed. The lead would begin on the southeasterly side of the river so no bridge would be necessary. The existing Drill Line Bridge would be demolished after construction of the lead track.

The City costs include right-of-way acquisition and design. The U.S. Army Corps of Engineers (Corps) is responsible for the construction of this project. The federal project will reimburse the City 65% of the design costs. Completion of this project is contingent on the Corps of securing the federal funding for construction and contract administration.



R/R Industry Track Relocation

C500103

USES (dollars in \$000)		Prior	Total Appro.					Est.	
		Years	07-08	thru 07-08	08-09	09-10	10-11	11-12	Total
54110	Design	\$ 100	\$ -	\$ 100	\$ -	\$ -	\$ -	\$ -	\$ 100
54120	Legal Counsel	-	5	5	-	-	-	-	5
54150	Planning/Environmental	1	-	1	-	-	-	-	1
54151	Construction Contracts	250	-	250	-	-	-	-	250
54152	Construction Management	25	-	25	-	-	-	-	25
55011	CIP Overhead	67	-	67	-	-	-	-	67
62110	Land and Easements	982	-	982	-	-	-	-	982
TOTAL		\$ 1,425	\$ 5	\$ 1,430	\$ -	\$ -	\$ -	\$ -	\$ 1,430

SOURCES (dollars in \$000)

Storm Drainage Impact Fees	\$ 1,425	\$ 5	\$ 1,430	\$ -	\$ -	\$ -	\$ -	\$ 1,430
----------------------------	-----------------	-------------	-----------------	-------------	-------------	-------------	-------------	-----------------

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

This project is part of the Payran Reach Flood Control project that is being funded by the Army Corps of Engineers. The Flood and Surface Water Impact Fee are providing initial funding. Maintenance of the project will be the responsibility of the railroad.

CALCULATION OF FUTURE SAVINGS

Unknown costs savings due to the redesign of the railroad cannot be calculated at this time. It could provide savings in the future related to flood mitigation.

Project Title: Petaluma River Dredge Spoils Reclamation Plan

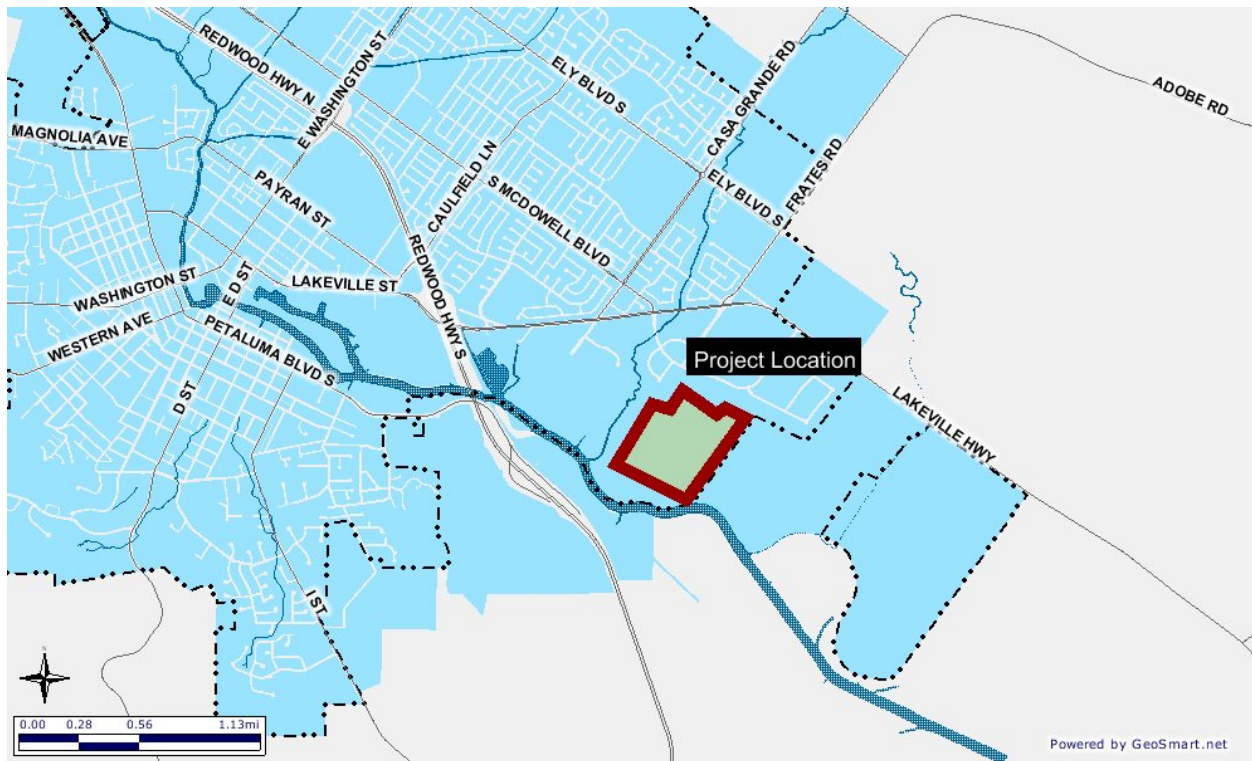
Project #: C500704

For many years, the City has benefited from periodic maintenance dredging of the Petaluma River by the U.S. Army Corps of Engineers. The purpose of this dredging is to maintain sufficient channel depth for commercial and recreational navigation on the River. This periodic dredging of the channel has also contributed greatly to flood control by maintaining sufficient hydraulic capacity for conveying storm flows.

The City owns and operates a dredge spoils disposal and reclamation site at Shollenberger Park for stockpiling the sediments removed from the River.

This project will identify the long-term dredging needs, to maintain sufficient channel capacity and develop a management plan for continued operation of the dredge spoils reclamation site. This plan is expected to include specific implementation measures for future dredging of the Payran Flood Control Project and potential improvements to the dredge spoils disposal site.

The conceptual management plan for the dredge spoil reclamation site has been completed. Final design and implementation of the permanent dredge spoils facilities will begin in FY 2007-2008.



Dredge Spoils Reclamation Plan C500704

USES (dollars in \$000)	Prior	Total Appro.					Est.	
	Years	07-08	thru 07-08	08-09	09-10	10-11	11-12	Total
54110 Design	\$ 50	\$ -	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ 50
54150 Planning/Environmental	150	-	150	-	-	-	-	150
54151 Construction Contracts	300	100	400	-	-	-	-	400
54152 Construction Management	30	-	30	-	-	-	-	30
55011 CIP Overhead	27	-	27	-	-	-	-	27
62110 Land and Easements	-	-	-	-	-	-	-	-
TOTAL	\$ 557	\$ 100	\$ 657	\$ -	\$ -	\$ -	\$ -	\$ 657

SOURCES (dollars in \$000)	07-08	thru 07-08	08-09	09-10	10-11	11-12	Total
Storm Drainage Impact Fees	\$ 557	\$ 100	\$ 657	\$ -	\$ -	\$ -	\$ 657

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

This is an ongoing responsibility of the City. The impact fee is providing funds since dredging of the Petaluma River provides protection against flooding.

After the initial completion of the dredge spoils facility, ongoing maintenance will require funding from the impact fee fund. That fund is dependant on development and could be impacted by a slowdown in development in the City. If funds are not available from that source, responsibility may fall to the General Fund.

CALCULATION OF FUTURE SAVINGS

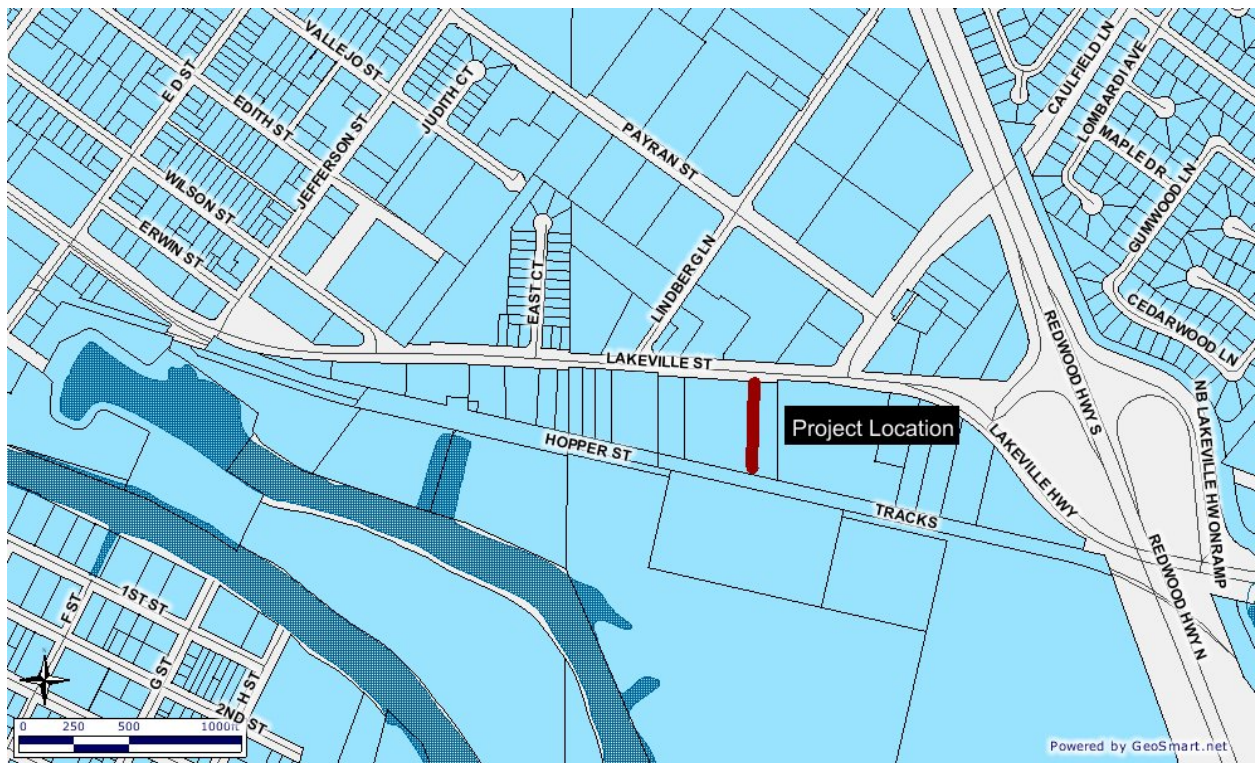
Future savings, especially in the potential to avoid flooding, cannot be quantified at this time.

Project Title: Lakeville Channel Improvements

Project #: C500705

The City currently owns and maintains an open drainage ditch at 960 Lakeville Street. The ditch conveys storm water runoff from Lakeville Street and the surrounding area into an adjacent channel. Maintaining adequate flow capacity of this ditch is exacerbated by the growth of cattails.

This project will clean out the ditch and install approximately 500 linear feet of pipe. The potential environmental impacts of this proposed project have been determined, and mitigation alternatives need to be evaluated in order to proceed with the construction of this project.



City of Petaluma, California
 Fiscal Year 2008 Budget

Lakeville Channel Improvement

C500705

USES (dollars in \$000)	Prior	Total Appro.					Est.	
	Years	07-08	thru 07-08	08-09	09-10	10-11	11-12	Total
54110 Design	\$ 5	\$ -	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 5
54150 Planning/Environmental	10	-	10	-	-	-	-	10
54151 Construction Contracts	170	-	170	-	-	-	-	170
54152 Construction Management	15	-	15	-	-	-	-	15
55011 CIP Overhead	10	-	10	-	-	-	-	10
57310 Contingency	5	-	5	-	-	-	-	5
62110 Land and Easements	-	-	-	-	-	-	-	-
TOTAL	\$ 215	\$ -	\$ 215	\$ -	\$ -	\$ -	\$ -	\$ 215

SOURCES (dollars in \$000)

Storm Drainage Impact Fees	<u>\$ 215</u>	<u>\$ -</u>	<u>\$ 215</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 215</u>
----------------------------	---------------	-------------	---------------	-------------	-------------	-------------	-------------	---------------

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

City field crews will maintain the storm drainage improvements constructed through this project.

CALCULATION OF FUTURE SAVINGS

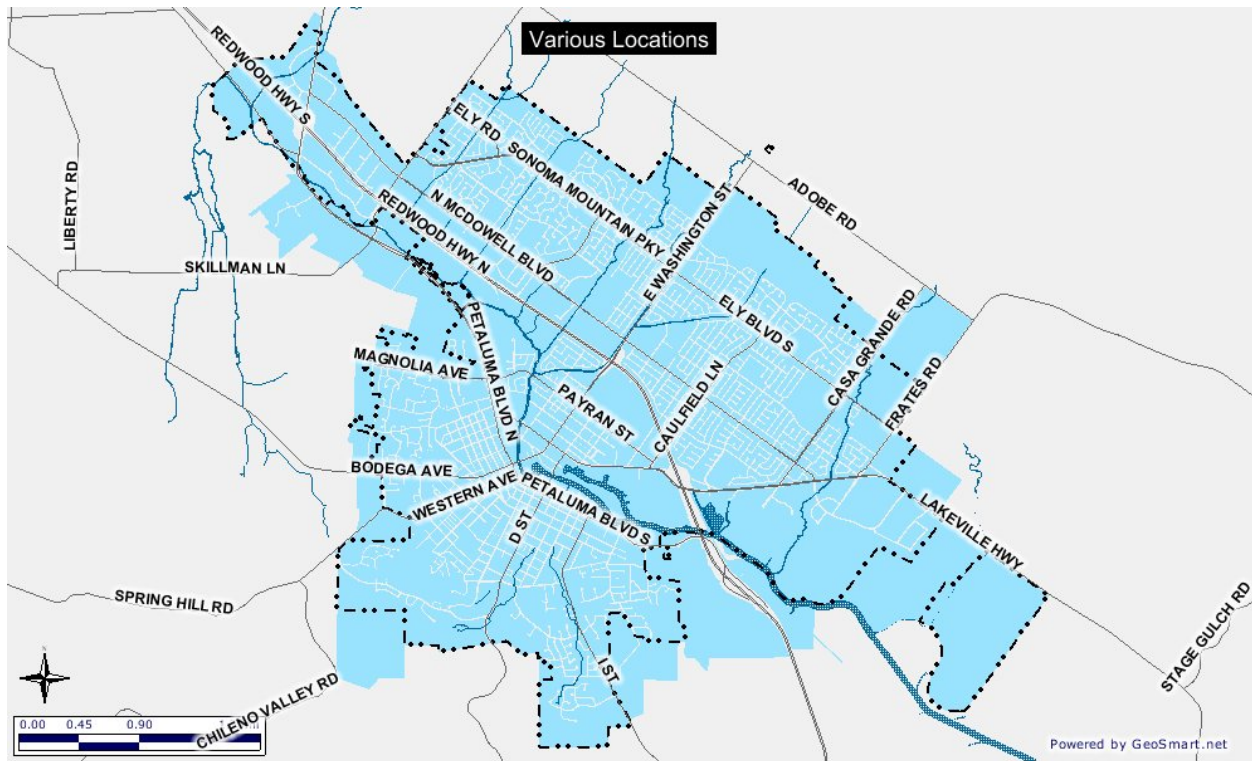
Future savings will be realized through reduced flooding and increased service life of road facilities currently subject to routine ponding of water.

Project Title: Flood Drainage Improvements

Project #: C500804

Various streets and intersections throughout the City are susceptible to flooding during heavy downpours due to the lack of adequate drainage facilities.

This project will annually identify and prioritize the necessary storm drain improvements, required to reduce or eliminate ponding water. Specific locations and improvements will be determined as part of the detailed design. The construction timetable will depend on local considerations, such as street paving and repair schedules, construction of other utilities, redevelopment projects, and development activity.



City of Petaluma, California
 Fiscal Year 2008 Budget

Flood Drainage Improvements C500804

USES (dollars in \$000)	Prior	Total Appro.					Est.	
	Years	07-08	thru 07-08	08-09	09-10	10-11	11-12	Total
54110 Design	\$ 50	\$ 50	\$ 100	\$ 50	\$ 50	\$ 50	\$ 50	\$ 300
54151 Construction Contracts	100	250	350	250	250	250	250	1,350
54152 Construction Management	10	10	20	25	25	25	25	120
55011 CIP Overhead	8	16	24	-	-	-	-	24
57310 Contingency	10	10	20	-	-	-	-	20
62110 Land and Easements	-	-	-	-	-	-	-	-
TOTAL	\$ 178	\$ 336	\$ 514	\$ 325	\$ 325	\$ 325	\$ 325	\$ 1,814

SOURCES (dollars in \$000)								
Storm Drainage Impact Fees	<u>\$ 178</u>	<u>\$ 336</u>	<u>\$ 514</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 325</u>	<u>\$ 1,814</u>

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

City field crews will maintain the storm drainage improvements constructed through this project.

CALCULATION OF FUTURE SAVINGS

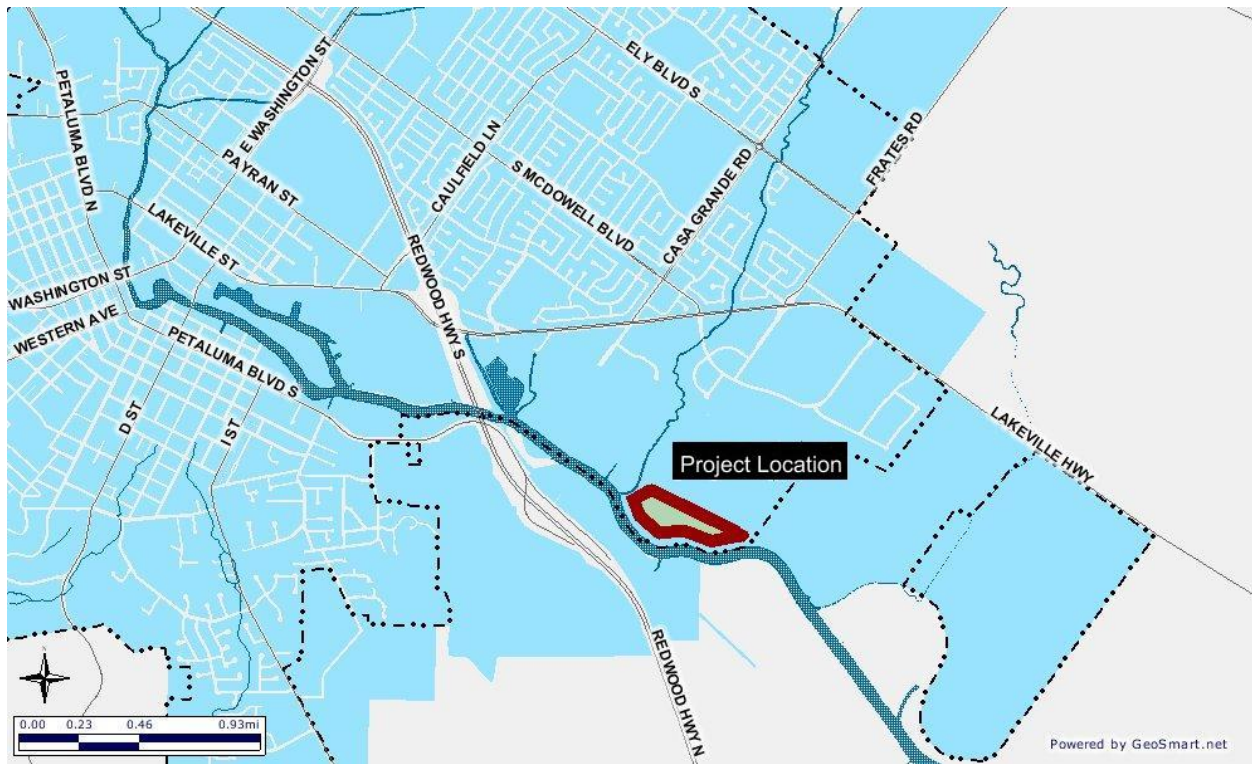
Future savings will be realized through reduced flooding and increased service life of road facilities currently subject to routine ponding of water.

Project Title: Upper Petaluma River Maintenance Dredging – Habitat Restoration

Project #: C500805

Between October 2002 and January 2003, the U.S. Army Corps of Engineers removed approximately 250,000 cubic yards of sediment from the Petaluma River. The dredged material was hydraulically mined from the river and deposited as slurry at the City’s 160-acre dredge spoil disposal site. The City constructed a berm to separate a 48-acre parcel in the southern portion of the site from the northern 112-acre area. The dredge slurry was placed on the northern 112 acres of the disposal site. The 48-acre parcel, referred to as Shollenberger Marsh, was set aside as compensation for potential salt marsh harvest mouse habitat in accordance with U.S. Fish and Wildlife Service requirements.

The purpose of this project is to evaluate the Shollenberger Marsh and identify methods to improve the site, possibly including the creation of additional mouse habitat. A monitoring plan was developed and must now be evaluated to determine how to address hydrology, sedimentation, erosion, and vegetation issues for the Shollenberger Marsh.



City of Petaluma, California
 Fiscal Year 2008 Budget

River Habitat Restoration

C500805

USES (dollars in \$000)	Prior Years	07-08	Total Appro. thru 07-08	08-09	09-10	10-11	11-12	Est.
								Total
54150 Planning/Environmental	\$ 10	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ 10
54151 Construction Contracts	160	-	160	-	-	-	-	160
54152 Construction Management	20	-	20	-	-	-	-	20
55011 CIP Overhead	11	-	11	-	-	-	-	11
57310 Contingency	20	-	20	-	-	-	-	20
62110 Land and Easements	-	-	-	-	-	-	-	-
TOTAL	\$ 221	\$ -	\$ 221	\$ -	\$ -	\$ -	\$ -	\$ 221

SOURCES (dollars in \$000)

Storm Drainage Impact Fees	\$ 221	\$ -	\$ 221	\$ -	\$ -	\$ -	\$ -	\$ 221
----------------------------	--------	------	--------	------	------	------	------	--------

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

This project will require ongoing maintenance. Funds will be provided by the Water Waste Waster Utility fund, which is funded through user fees.

CALCULATION OF FUTURE SAVINGS

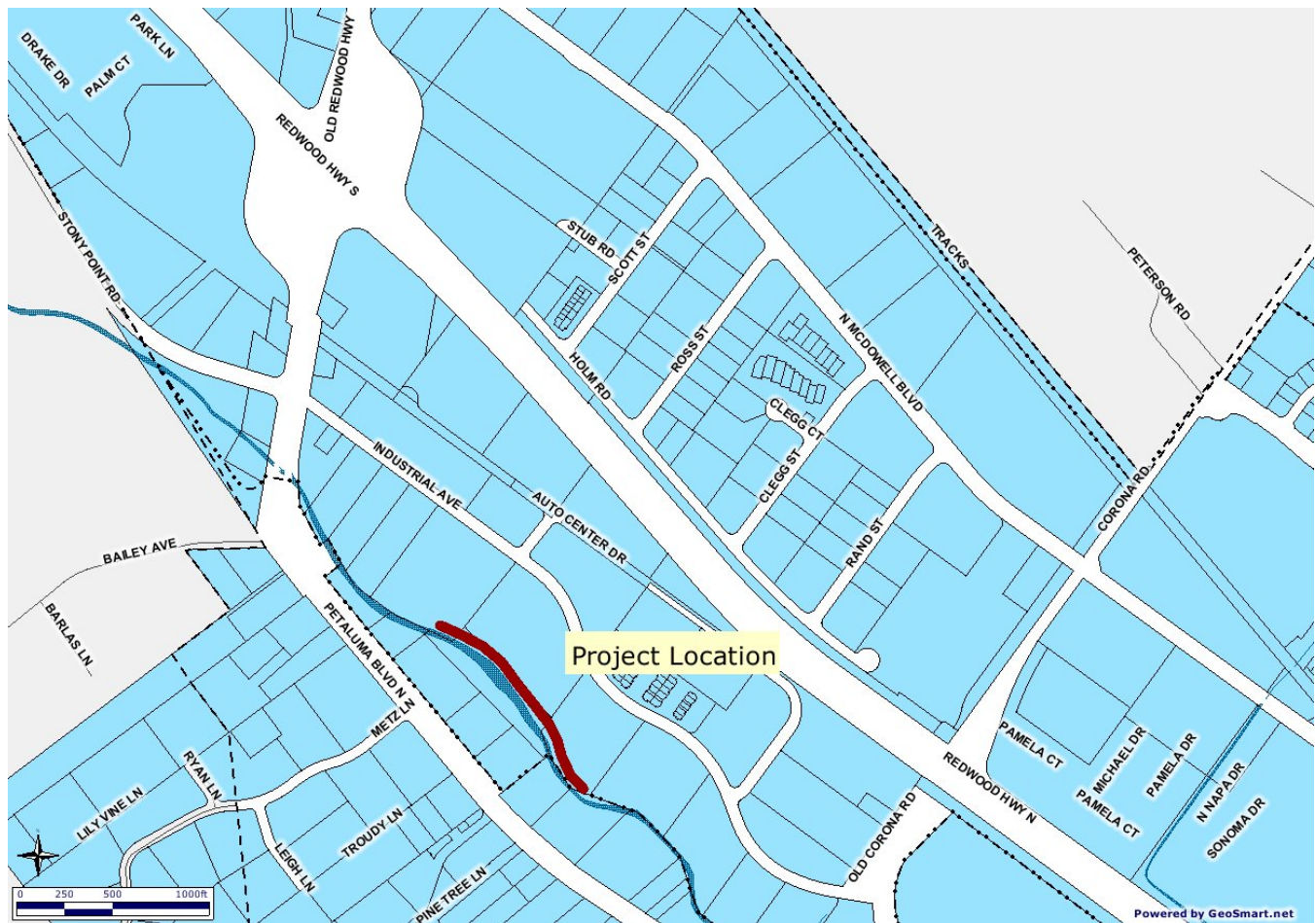
Restoration of this site will result in cost savings through the use of native plant species requiring a minimum of maintenance and the improved efficiency of the City's dredge spoils disposal site.

Project Title: River Plan – Denman Reach Phase 3

Project #: C500208

This project is located along the Petaluma River, upstream of Corona Road within the Denman Reach. The project consists of excavating a longitudinal bench along the low-flow channel of the river to create a flood terrace and restore the wetland and upland habitat areas upstream of the previously constructed Phase 1 and 2 projects. This will result in stabilization of the existing incised river channel and unstable bank areas, improvement of hydraulic function, and reduction of localized flood levels currently impacting adjacent development in the City and unincorporated areas. The Sonoma County Water Agency owns a portion of the land at the project site. The project also includes the extension of an existing floodwall by approximately 1500 linear feet and 4 feet in height northwest of the Corona Road bridge to alleviate flooding in the commercial and residential area of Sonoma County located between the Petaluma River and Petaluma Boulevard North.

The Sonoma County Water Agency owns a portion of the land at the project site. The remainder of the project will be constructed on private property within existing and new easement areas.



City of Petaluma, California
 Fiscal Year 2008 Budget

River Plan - Denman Phase 3

C500208

		Prior	Total Appro.					Est.	
USES (dollars in \$000)		Years	07-08	thru 07-08	08-09	09-10	10-11	11-12	Total
54110	Design	\$ -	\$ 65	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ 65
54150	Planning/Environmental	-	20	20	-	-	-	-	20
54151	Construction Contracts	-	340	340	-	-	-	-	340
54152	Construction Management	-	30	30	-	-	-	-	30
55011	CIP Overhead	-	24	24	-	-	-	-	24
62110	Land and Easements	-	30	30	-	-	-	-	30
TOTAL		\$ -	\$ 509	\$ 509	\$ -	\$ -	\$ -	\$ -	\$ 509
SOURCES (dollars in \$000)									
	Storm Drainage Impact Fees	\$ -	\$ 24	\$ 24	\$ -	\$ -	\$ -	\$ -	\$ 24
	SCWA Zone 2A Assessments	-	485	485	-	-	-	-	485
TOTAL		\$ -	\$ 509	\$ 509	\$ -	\$ -	\$ -	\$ -	\$ 509

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

This project will require ongoing maintenance, which will be the responsibility of the Sonoma County Water Agency.

CALCULATION OF FUTURE SAVINGS

No future savings are anticipated. This project will provide new sources of drainage in the project area.

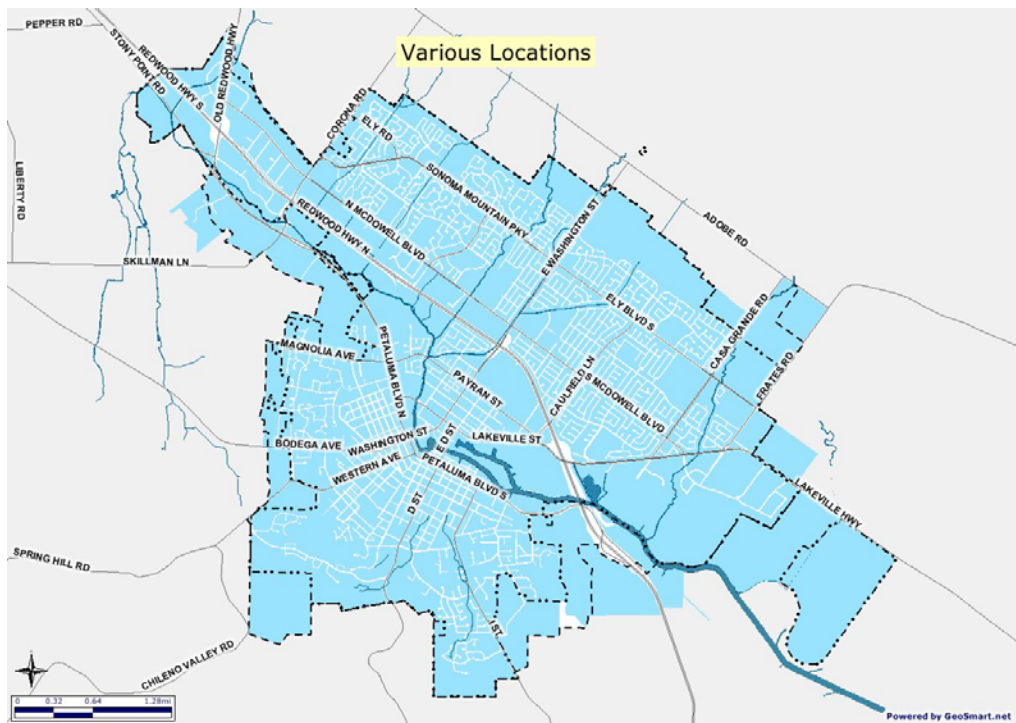
Project Title: Stream and Precipitation Gauges

Project #: C500308

This project is located in the upper Petaluma River watershed within the city limits, as well as unincorporated Sonoma County. The project consists of the installation of ten additional gauges to measure and record stream depth and precipitation at the following locations:

- Corona Creek
- Capri creek
- Lynch Creek
- East Washington Creek
- Adobe Creek
- Kelly Creek
- Thompson Creek
- Washington Creek (upstream of East Washington Creek)
- Petaluma River (Corona Reach)
- Petaluma River (Downstream of Adobe Creek)

The purpose of this project is to provide additional data necessary to evaluate surface water runoff and flooding in the watershed by providing additional real-time data for the computer-based watershed computer model. These gauges will also augment the existing gauges used for City flood response activities. Completion of this project is contingent on receiving SCWA Zone 2A funding.



City of Petaluma, California
 Fiscal Year 2008 Budget

Stream and Precipitation Gages

C500308

		Prior	Total Appro.					Est.	
USES (dollars in \$000)		Years	07-08	thru 07-08	08-09	09-10	10-11	11-12	Total
54110	Design	\$ -	\$ 3	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ 3
54151	Construction Contracts	-	71	71	-	-	-	-	71
54152	Construction Management	-	3	3	-	-	-	-	3
55011	CIP Overhead	-	4	4	-	-	-	-	4
62110	Land and Easements	-	-	-	-	-	-	-	-
TOTAL		\$ -	\$ 81	\$ 81	\$ -	\$ -	\$ -	\$ -	\$ 81
SOURCES (dollars in \$000)									
Storm Drainage Impact Fees		\$ -	\$ 4	\$ 4	\$ -	\$ -	\$ -	\$ -	\$ 4
SCWA Zone 2A Assessments		-	77	77	-	-	-	-	77
TOTAL		\$ -	\$ 81	\$ 81	\$ -	\$ -	\$ -	\$ -	\$ 81

FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT

City field crews will maintain the facilities installed through this project.

CALCULATION OF FUTURE SAVINGS

Future savings cannot be determined at this time. These facilities will provide additional monitoring and flood warning capability to better utilize City resources in the event of a flood emergency.



This is an older picture of the Petaluma Railroad Depot. It has been rehabilitated and houses the Petaluma Visitor's Bureau.