

## SURFACE WATER PROJECTS FY 2006-2007

**SURFACE WATER CAPITAL IMPROVEMENT PROGRAM BUDGET FY 06-07  
 PROJECT SUMMARY**

<b>PROJECTS (dollars in \$000)</b>	<b>Prior Years</b>	<b>06-07</b>	<b>Total Appro. thru 06-07</b>	<b>07-08</b>	<b>08-09</b>	<b>09-10</b>	<b>10-11</b>	<b>Est. Total</b>
C500103 R/R Industry Track Relocation	\$ 1,215	\$ 210	\$ 1,425	\$ -	\$ -	\$ -	\$ -	\$ 1,425
C500704 Dredge Spoils Reclamation Plan	210	347	557	-	-	-	-	557
C500705 Lakeville Channel Improvement	215	-	215	-	-	-	-	215
C500804 Flood Drainage Improvements	126	52	178	341	341	341	341	1,542
C500805 River Habitat Restoration	210	11	221	-	-	-	-	221
C500904 H Street Storm Drain	185	(176)	9	1,705	-	-	-	1,714
<b>TOTAL</b>	<b>\$ 2,161</b>	<b>\$ 444</b>	<b>\$ 2,605</b>	<b>\$ 2,046</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 5,674</b>
<b>SOURCES (dollars in \$000)</b>								
Storm Drainage Impact Fees	\$ 1,985	\$ 620	\$ 2,605	\$ 414	\$ 341	\$ 341	\$ 341	\$ 4,042
SCWA Zone 2A Assessments	176	(176)	-	1,632	-	-	-	1,632
<b>TOTAL</b>	<b>\$ 2,161</b>	<b>\$ 444</b>	<b>\$ 2,605</b>	<b>\$ 2,046</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 5,674</b>

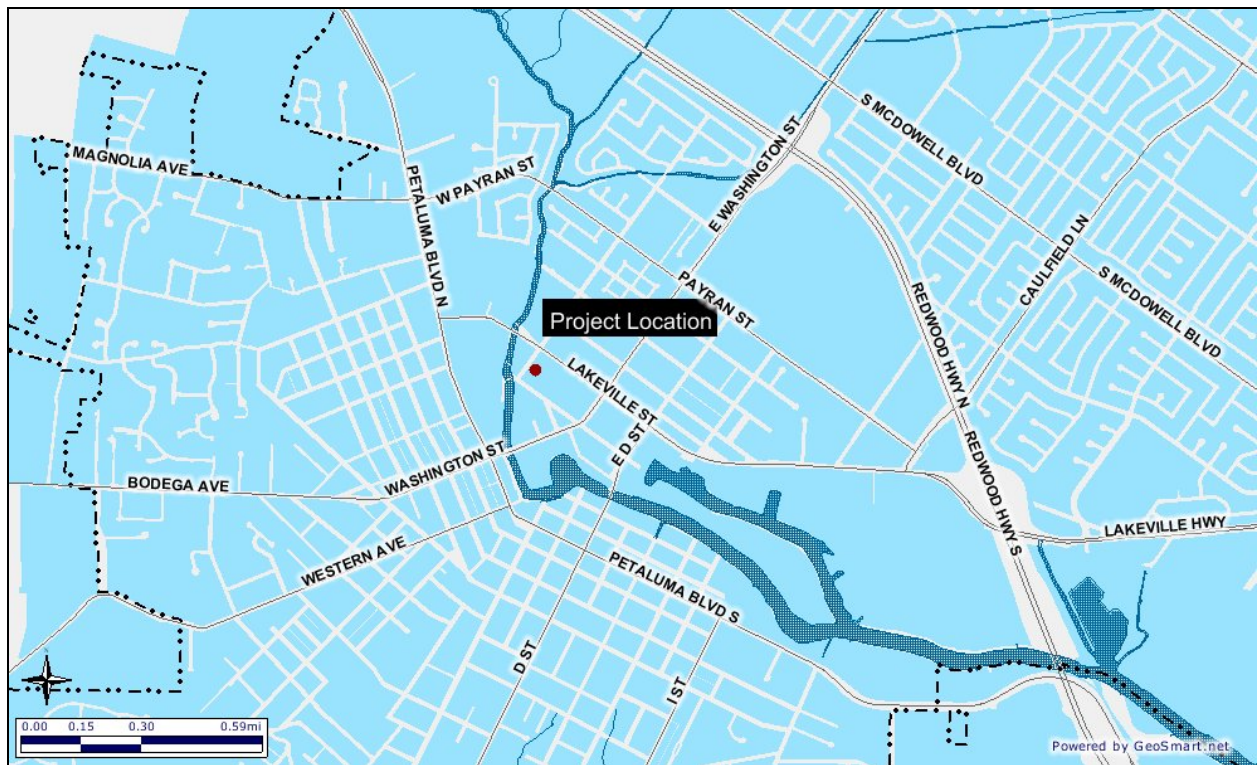
**Project Title: Railroad Industry Track Relocation**

**Project #: C500103**

There are two railroad bridges impeding flows in the Petaluma River. The Mainline Railroad Bridge has been replaced. The Drill Line Railroad Bridge, currently not in operation, 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 federal project will reimburse the City 65% of the design costs. Completion of this project is contingent on the U.S. Army Corps of Engineers securing the federal funding for construction and administration.



City of Petaluma, California  
 Fiscal Year 2007 Budget

---

R/R Industry Track Relocation C500103

<b>USES (dollars in \$000)</b>	<b>Prior Years</b>	<b>06-07</b>	<b>Total Appro. thru 06-07</b>	<b>07-08</b>	<b>08-09</b>	<b>09-10</b>	<b>10-11</b>	<b>Est. Total</b>
54110 Design	\$ 100	\$ -	\$ 100	\$ -	\$ -	\$ -	\$ -	\$ 100
54150 Planning/Enviromental	1	-	1	-	-	-	-	1
54151 Construction Contracts	250	-	250	-	-	-	-	250
54152 Construction Management	25	-	25	-	-	-	-	25
55011 CIP Overhead @ 5%	57	10	67	-	-	-	-	67
62110 Land and Easements	782	200	982	-	-	-	-	982
<b>TOTAL</b>	<b>\$ 1,215</b>	<b>\$ 210</b>	<b>\$ 1,425</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,425</b>
 <b>SOURCES (dollars in \$000)</b>								
Storm Drainage Impact Fees	<b>\$ 1,215</b>	<b>\$ 210</b>	<b>\$ 1,425</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,425</b>

**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**

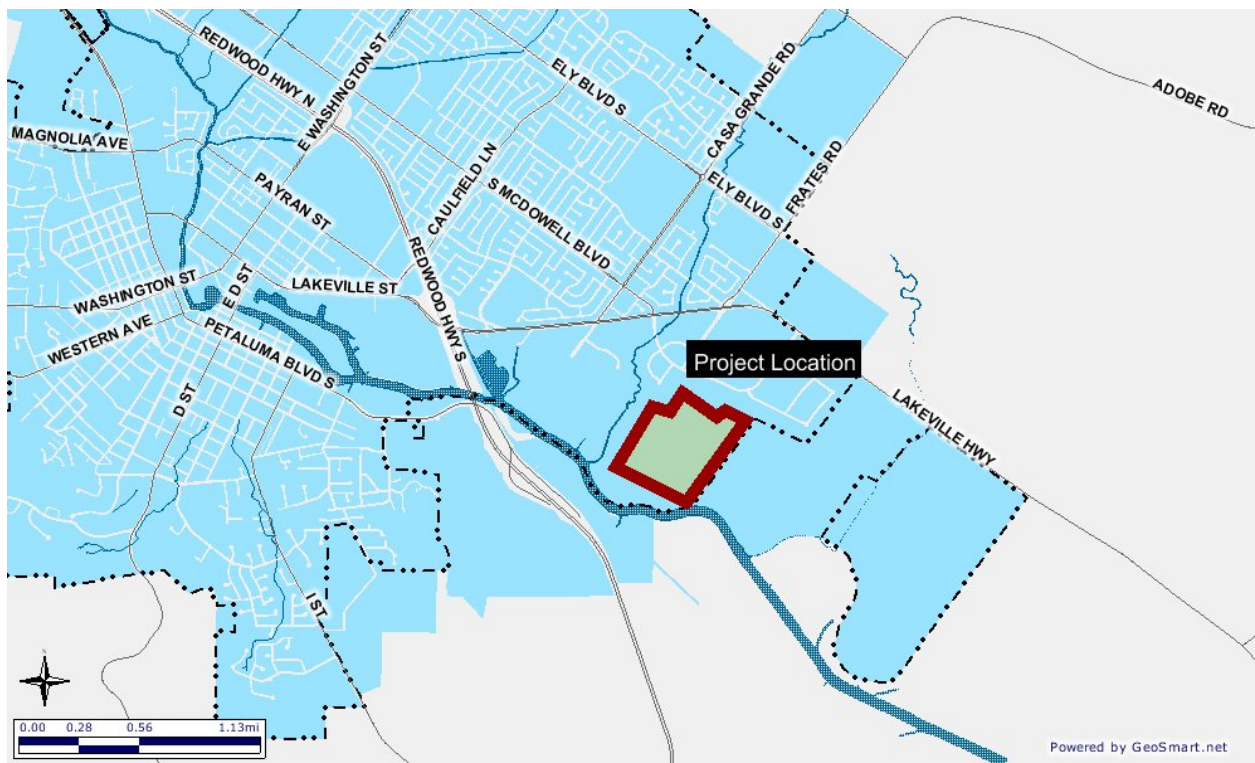
**Project #: C500704**

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.

Planning and design will be completed, and implementation of the permanent dredge spoils facilities began in FY 2005-2006, and will continue in FY 2006-2007.



City of Petaluma, California  
 Fiscal Year 2007 Budget

---

Dredge Spoils Reclamation Plan C500704

USES (dollars in \$000)	Prior	Total Appro.					Est.	
	Years	06-07	thru 06-07	07-08	08-09	09-10	10-11	Total
54110 Design	\$ 50	\$ -	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ 50
54150 Planning/Environmental	150	-	150	-	-	-	-	150
54151 Construction Contracts	-	300	300	-	-	-	-	300
54152 Construction Management	-	30	30	-	-	-	-	30
55011 CIP Overhead @ 5%	10	17	27	-	-	-	-	27
62110 Land and Easements	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>\$ 210</b>	<b>\$ 347</b>	<b>\$ 557</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 557</b>
<b>SOURCES (dollars in \$000)</b>								
Storm Drainage Impact Fees	<b>\$ 210</b>	<b>\$ 347</b>	<b>\$ 557</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 557</b>

**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**

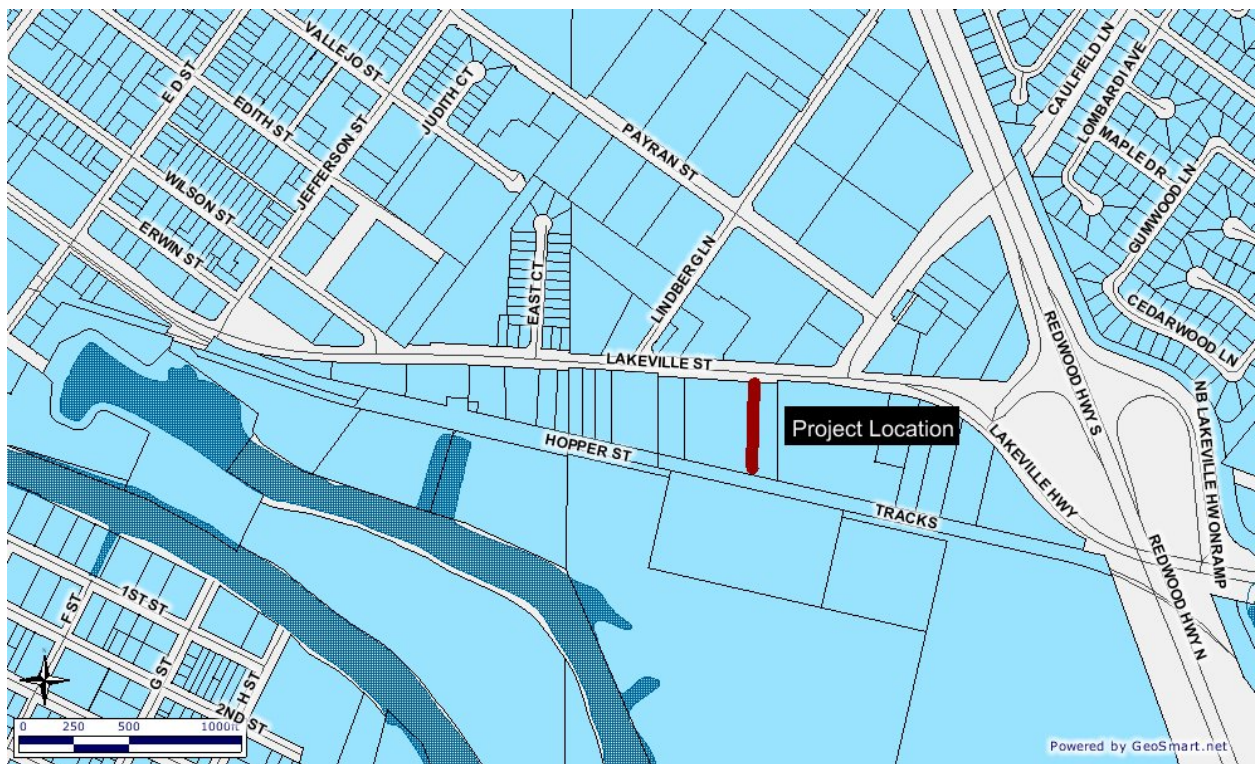
Future savings, especially in the potential to avoid flooding, cannot be quantified at this time.

**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.



City of Petaluma, California  
 Fiscal Year 2007 Budget

Lakeville Channel Improvement C500705

USES (dollars in \$000)	Prior	Total Appro.						Est.
	Years	06-07	thru 06-07	07-08	08-09	09-10	10-11	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 @ 5%	10	-	10	-	-	-	-	10
57310 Contingency	5	-	5	-	-	-	-	5
62110 Land and Easements	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>\$ 215</b>	<b>\$ -</b>	<b>\$ 215</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 215</b>
<b>SOURCES (dollars in \$000)</b>								
Storm Drainage Impact Fees	<b>\$ 215</b>	<b>\$ -</b>	<b>\$ 215</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 215</b>

**FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT**

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

**CALCULATION OF FUTURE SAVINGS**

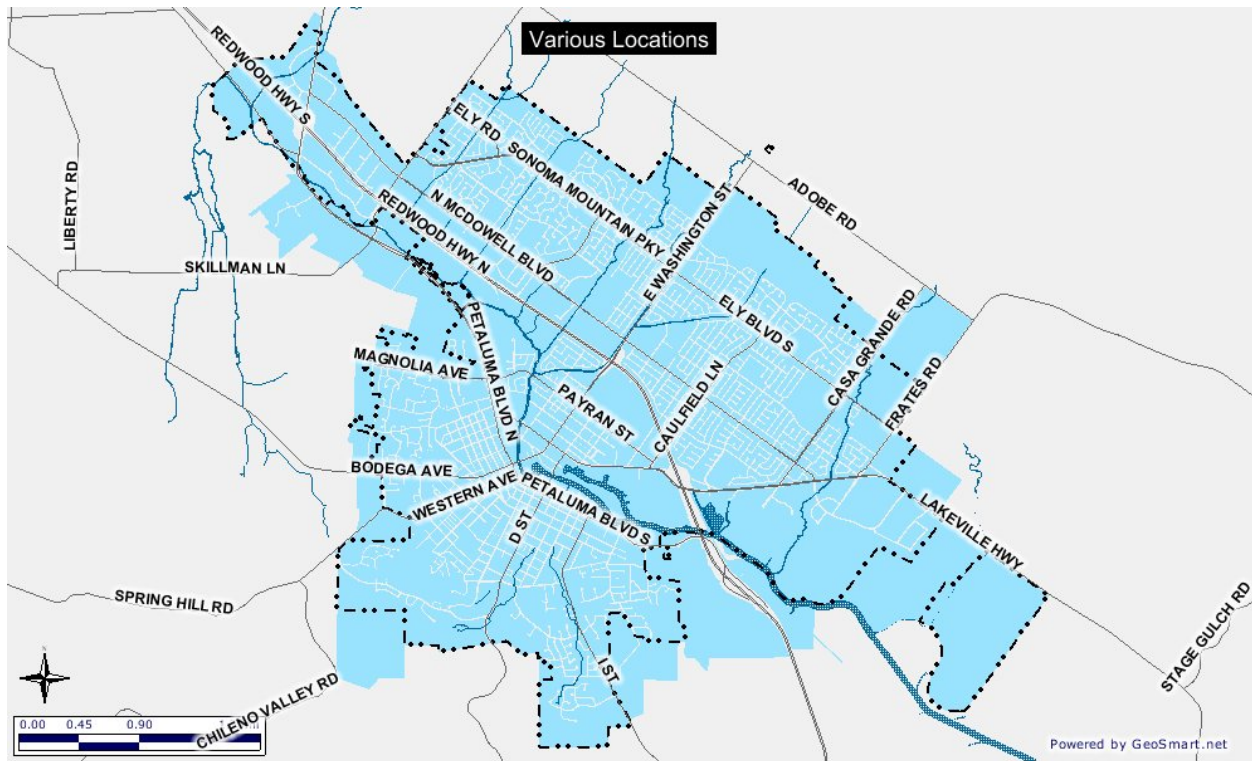
Future savings will be realized through reduced flooding and increased service life of road facilities currently subject to routine ponding of water.

**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 2007 Budget

---

Flood Drainage Improvements C500804

USES (dollars in \$000)	Prior	Total Appro.						Est.
	Years	06-07	thru 06-07	07-08	08-09	09-10	10-11	Total
54110 Design	\$ 50	\$ -	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 250
54151 Construction Contracts	50	50	100	250	250	250	250	1,100
54152 Construction Management	10	-	10	25	25	25	25	110
55011 CIP Overhead @ 5%	6	2	8	16	16	16	16	72
57310 Contingency	10	-	10	-	-	-	-	10
62110 Land and Easements	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>\$ 126</b>	<b>\$ 52</b>	<b>\$ 178</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 1,542</b>

SOURCES (dollars in \$000)								
Storm Drainage Impact Fees	<b>\$ 126</b>	<b>\$ 52</b>	<b>\$ 178</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 341</b>	<b>\$ 1,542</b>

**FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT**

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

**CALCULATION OF FUTURE SAVINGS**

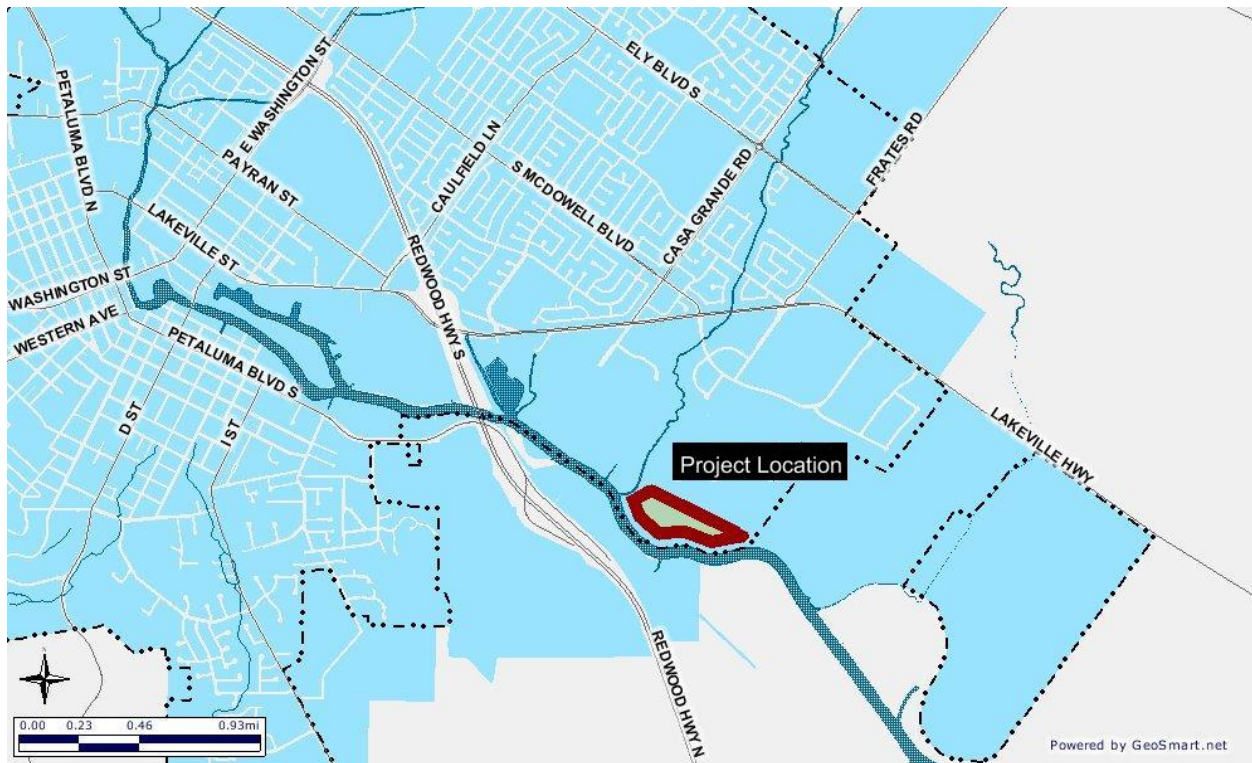
Future savings will be realized through reduced flooding and increased service life of road facilities currently subject to routine ponding of water.

**Project Title: 2002 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 2007 Budget

---

River Habitat Restoration C500805

USES (dollars in \$000)	Prior	Total Appro.					Est.	
	Years	06-07	thru 06-07	07-08	08-09	09-10	10-11	Total
54150 Planning/Environmental	-	10	10	-	-	-	-	10
54151 Construction Contracts	160	-	160	-	-	-	-	160
54152 Construction Management	20	-	20	-	-	-	-	20
55011 CIP Overhead @ 5%	10	1	11	-	-	-	-	11
57310 Contingency	20	-	20	-	-	-	-	20
62110 Land and Easements	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>\$ 210</b>	<b>\$ 11</b>	<b>\$ 221</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 221</b>

SOURCES (dollars in \$000)								Est.
Storm Drainage Impact Fees	<b>\$ 210</b>	<b>\$ 11</b>	<b>\$ 221</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 221</b>

**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.

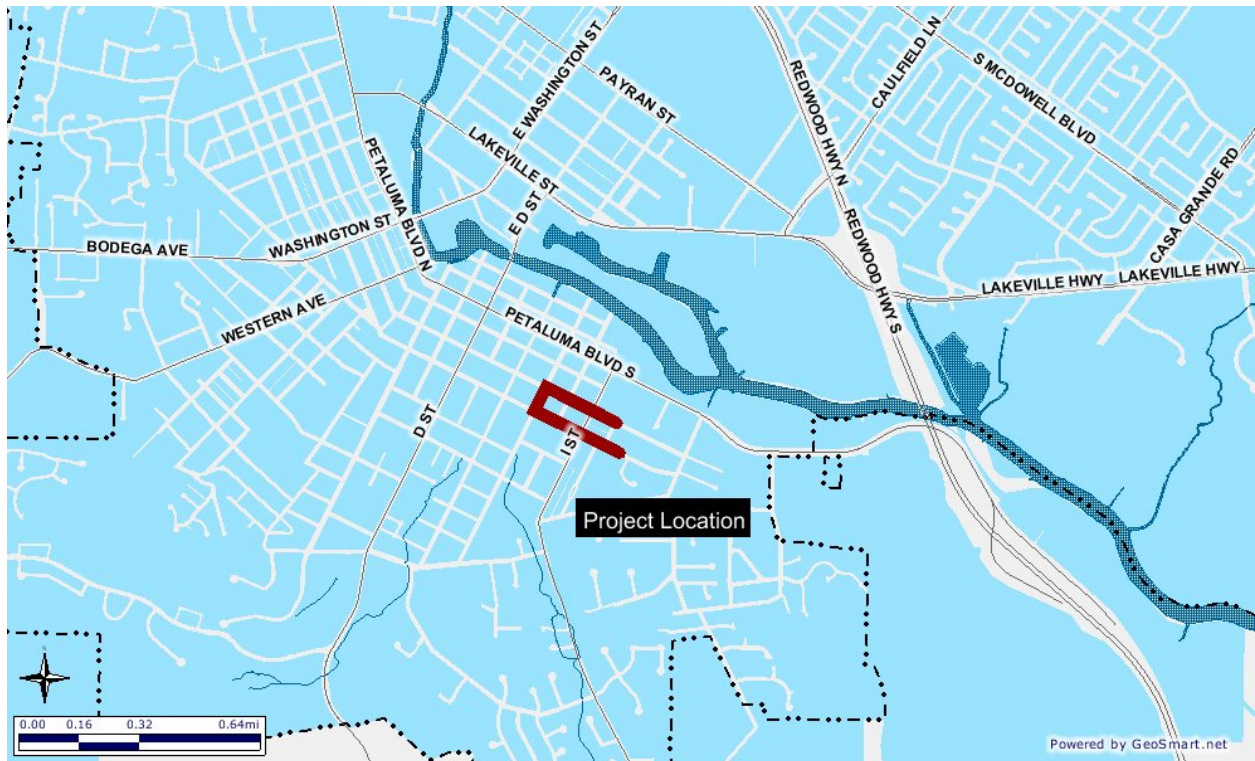
**Project Title: H Street Storm Drain**

**Project #: C500904**

The proposed H Street storm drain is located along 5<sup>th</sup>, 6<sup>th</sup>, and H Streets, in southwest Petaluma. No storm drains presently exist in this residential area, and the streets are inadequate to convey the flows from a 10-year frequency storm.

This project connects to the existing storm drain system on 6<sup>th</sup> Street, and consists of the installation of approximately 2600 linear feet of concrete pipe storm drain, ranging in size from 18 to 30 inches in diameter. Appurtenant facilities include 3 manholes and 12 inlets.

Planning and design of the storm drain system were planned for FY 2005-2006, but have not been completed, as SCWA Zone 2A Assessment funding has not yet been secured. Project will commence once funding is available.



City of Petaluma, California  
 Fiscal Year 2007 Budget

H Street Storm Drain

C500904

USES (dollars in \$000)	Prior	Total Appro.					Est.	
	Years	06-07	thru 06-07	07-08	08-09	09-10	10-11	Total
54110 Design	\$ 150	\$ (141)	\$ 9	\$ 150	\$ -	\$ -	\$ -	\$ 159
54150 Planning/Environmental	26	(26)	-	26	-	-	-	26
54151 Construction Contracts	-	-	-	1,300	-	-	-	1,300
54152 Construction Management	-	-	-	156	-	-	-	156
55011 CIP Overhead @ 5%	9	(9)	-	73	-	-	-	73
62110 Land and Easements	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>\$ 185</b>	<b>\$ (176)</b>	<b>\$ 9</b>	<b>\$ 1,705</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,714</b>
<b>SOURCES (dollars in \$000)</b>								
Storm Drainage Impact Fees	\$ 9	\$ -	\$ 9	\$ 73	\$ -	\$ -	\$ -	\$ 82
SCWA Zone 2A Assessments	176	(176)	-	1,632	-	-	-	1,632
<b>TOTAL</b>	<b>\$ 185</b>	<b>\$ (176)</b>	<b>\$ 9</b>	<b>\$ 1,705</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,714</b>

**FUTURE MAINTENANCE OF CAPITAL IMPROVEMENT PROJECT**

This project will require ongoing maintenance, which will require future allocations from the Waste Water fund. This fund is self-supporting through user fees.

**CALCULATION OF FUTURE SAVINGS**

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

