

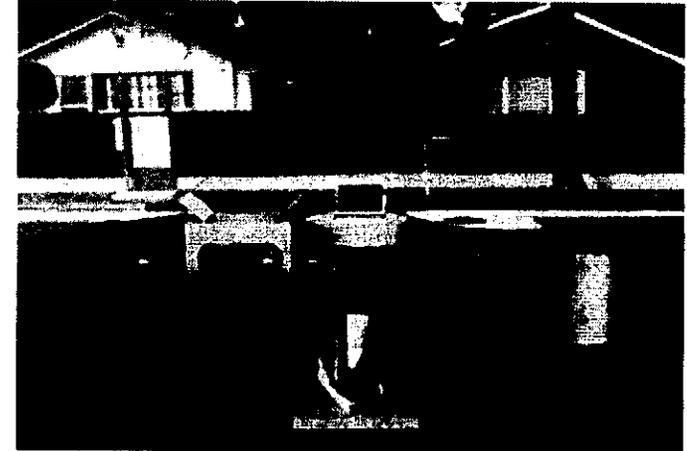
# Creeks Restoration & Water Quality Improvement

## Bacterial Reduction Program/Water Quality Capital

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to design and install targeted water quality treatment projects (such as dry weather diversions and active treatment) to reduce the discharge of polluted water to creeks in Santa Barbara. Funding for the next 6-year capital program will allow for the development of three to four new projects (design, permitting, and construction). It is anticipated that grant funds will assist with project construction costs.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	100,000	100,000	100,000	100,000	100,000	100,000	\$600,000
Grant Funding	<input type="checkbox"/>	0	250,000	250,000	250,000	0	0	\$750,000
<b>Total</b>		<b>100,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>100,000</b>	<b>100,000</b>	<b>\$1,350,000</b>

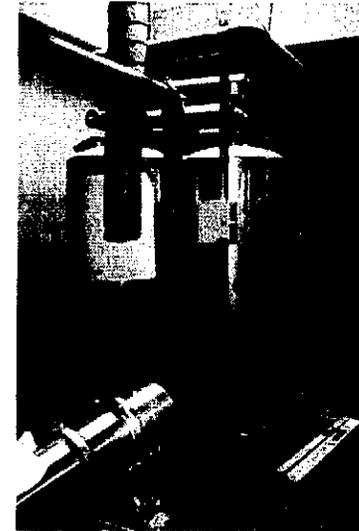
# Creeks Restoration & Water Quality Improvement

## Capital Replacement for Storm Water Facilities

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to set aside funds for the replacement of pumps, filters, and other hardware installed in water quality treatment capital projects.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	25,000	25,000	25,000	25,000	25,000	25,000	\$150,000
	<b>Total</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>\$150,000</b>

# Creeks Restoration & Water Quality Improvement

## Catch Basin Filters/Debris Screens

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to install catch basin filters and/or debris screens in various areas of the City to prevent pollutants from entering the storm drain system. Funds in FY 2010 & 2011, as well as existing funds, will be used to design and install debris screens in the the Eastside neighborhood and upper State Street areas. Funds in FY 2012 through FY 2015 will be used for additional areas and/or to replace existing screens.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	100,000	150,000	200,000	200,000	100,000	100,000	\$850,000
	<b>Total</b>	<b>100,000</b>	<b>150,000</b>	<b>200,000</b>	<b>200,000</b>	<b>100,000</b>	<b>100,000</b>	<b>\$850,000</b>

# Creeks Restoration & Water Quality Improvement

## Invasive Plant Removal/Revegetation Program

**Annual Maintenance/Operations Cost:** \$20,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to develop and implement a program to remove invasive non-native plants and re-vegetate with native trees and shrubs in each watershed within the City. The first phase of the program plan was developed in FY 2008, with environmental review and permitting in FY 2008 and FY2009. Implementation will begin in FY2009 and continue through FY2013. It is anticipated that grants or partnerships with other agencies (such as the County Flood Control District) could fund some portions of this program.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	75,000	75,000	50,000	50,000	0	0	\$250,000
Grant Funding	<input type="checkbox"/>	0	75,000	75,000	75,000	0	0	\$225,000
<b>Total</b>		<b>75,000</b>	<b>150,000</b>	<b>125,000</b>	<b>125,000</b>	<b>0</b>	<b>0</b>	<b>\$475,000</b>

# Creeks Restoration & Water Quality Improvement

## Las Positas Valley Restoration

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to design and implement a creek restoration project in the lower Las Positas Valley. This is a continuing capital project with funding in the amount of \$340,000. While construction is not anticipated in the next two years, existing funds and new capital funds will provide adequate funding to undertake the planning, design, technical studies and environmental review for a large scale project. Some funds may be used as matching funds for grants.



<b>Funding Sources</b>	<b>Funded</b>	<b><u>2009-2010</u></b>	<b><u>2010-2011</u></b>	<b><u>2011-2012</u></b>	<b><u>2012-2013</u></b>	<b><u>2013-2014</u></b>	<b><u>2014-2015</u></b>	<b><u>Total</u></b>
Measure B	<input type="checkbox"/>	0	100,000	200,000	200,000	0	0	\$500,000
Grant Funding	<input type="checkbox"/>	0	0	450,000	500,000	0	0	\$950,000
<b>Total</b>		<b>0</b>	<b>100,000</b>	<b>650,000</b>	<b>700,000</b>	<b>0</b>	<b>0</b>	<b>\$1,450,000</b>

# Creeks Restoration & Water Quality Improvement

## Lower Arroyo Burro Restoration Program

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to develop restoration programs for up to two reaches of lower Arroyo Burro. This may include the creek reach north of the Cliff Drive bridge as well as the creek reach north of Torino Road. Both of these creek areas experience bank erosion and extensive areas of non-native vegetation, and include public and private land ownership.

This is a continuing project with an existing capital fund of \$250,000. Existing funds will be expended for planning, design, environmental review, and permitting. Technical studies would begin in FY2010 and preliminary design would be completed in FY 2011.

Grant funding and other sources would supplement Measure B funds for construction.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	0	0	0	100,000	200,000	100,000	\$400,000
Grant Funding	<input type="checkbox"/>	0	0	0	0	500,000	500,000	\$1,000,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>100,000</b>	<b>700,000</b>	<b>600,000</b>	<b>\$1,400,000</b>

# Creeks Restoration & Water Quality Improvement

## Mission Creek Barrier Removal/Watershed Restoration

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to remove key steelhead barriers and develop a restoration plan for mid- and upper-Mission Creek (above Canon Perdido). Preliminary planning and design work began in FY 2007, primarily funded by state and private grants. Measure B funds in FY 2010 - 2012 would be used to match grant funding to complete planning, final design and technical studies, environmental review, permitting and construction for selected projects.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	100,000	250,000	250,000	0	0	0	\$600,000
Grant Funding	<input type="checkbox"/>	500,000	1,500,000	1,250,000	0	0	0	\$3,250,000
<b>Total</b>		<b>600,000</b>	<b>1,750,000</b>	<b>1,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$3,850,000</b>

# Creeks Restoration & Water Quality Improvement

## Old Mission Creek at West Figueroa

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** This project has two primary objectives: 1) to develop a storm water detention system to reduce bacteria, sediment, and other pollutants in storm water in Old Mission Creek, and 2) to restore and enhance the riparian habitat adjacent to the creek. This is a continuing project. Detailed concept plans were completed in FY 2007. Additional steps include negotiating landowners easements, completing preliminary plans, environmental review and permitting, final design and seeking grant funds for project construction. Construction is anticipated for FY 2014.

Existing funds for this project total approximately \$470,000. Additional Measure B funds will be used for the steps outlined above and may be used to match grants for construction.



<b>Funding Sources</b>	<b>Funded</b>	<b><u>2009-2010</u></b>	<b><u>2010-2011</u></b>	<b><u>2011-2012</u></b>	<b><u>2012-2013</u></b>	<b><u>2013-2014</u></b>	<b><u>2014-2015</u></b>	<b><u>Total</u></b>
Measure B	<input type="checkbox"/>	0	0	0	200,000	200,000	0	\$400,000
Grant Funding	<input type="checkbox"/>	0	0	0	100,000	100,000	0	\$200,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>300,000</b>	<b>300,000</b>	<b>0</b>	<b>\$600,000</b>

# Creeks Restoration & Water Quality Improvement

## Sycamore Creek Watershed Restoration

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to develop a restoration plan for Sycamore Creek (FY 2009 & 2010) and complete conceptual designs/technical studies for preferred projects in FY 2011. Specific projects would address creek bank restoration, flood reduction and riparian habitat enhancement. Preliminary/final design for up to two projects would be completed in FY 2012. Existing funds for this project total \$150,000. Grant funds for construction would be identified and secured between FY 2012 and FY 2014.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	0	50,000	100,000	150,000	150,000	0	\$450,000
Grant Funding	<input type="checkbox"/>	0	0	150,000	250,000	250,000	0	\$650,000
<b>Total</b>		<b>0</b>	<b>50,000</b>	<b>250,000</b>	<b>400,000</b>	<b>400,000</b>	<b>0</b>	<b>\$1,100,000</b>

# Creeks Restoration & Water Quality Improvement

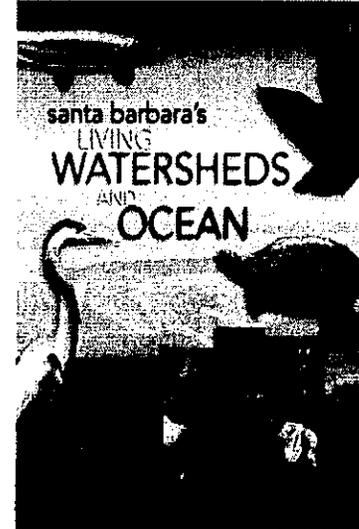
## Watershed Action Plan Implementation

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to implement project and program recommendations developed through the watershed action plans. While specific projects are not yet identified, they may be focused on creek restoration, erosion control, urban runoff, and storm water treatment projects. Funds in this capital project may be used to provide assistance to public and private landowners.

Implementation of this project is scheduled to begin in FY 2012, after the Plan Santa Barbara General Plan update and Watershed Action Plans are complete.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	0	0	100,000	100,000	100,000	100,000	\$400,000
Grant Funding	<input type="checkbox"/>	0	0	50,000	50,000	50,000	50,000	\$200,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>\$600,000</b>

# Creeks Restoration & Water Quality Improvements

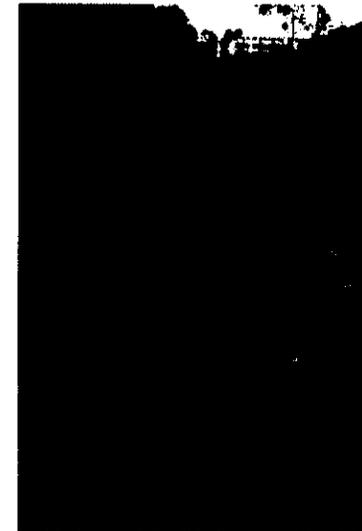
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## Honda Valley Restoration

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to restore the riparian corridor in Honda Valley Park. Restoration could include non-native weed removal and revegetation with native plants, biotechnical stabilization of eroding banks, removal of asphalt from the creek channel bottom, and improvement of trails and interpretive information. This project is consistent with the Creek Inventory and Assessment Study (2000) and Wildland Fire Management Plan.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	0	0	0	0	75,000	100,000	\$175,000
Grant Funding	<input type="checkbox"/>	0	0	0	0	0	50,000	\$50,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75,000</b>	<b>150,000</b>	<b>\$225,000</b>

# Creeks Restoration & Water Quality Improvements

## Laguna Watershed Water Quality Improvement

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** With funding from a grant through the State Water Resources Control Board, the Creeks Division is currently conducting the Laguna Watershed Study. The purpose of the study is to identify water pollution sources in the Laguna Watershed and to conduct a feasibility analysis and conceptual design for water quality improvement projects in the watershed. The purpose of this project is to provide funds for planning, design, environmental review, permitting, and construction of the projects identified in the Laguna Watershed Study. The study will be complete in FY 2009. Final design, environmental review and permitting are scheduled to be completed in FY 2010, with construction occurring in FY 2011.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	50,000	250,000	0	0	0	0	\$300,000
Grant Funding	<input type="checkbox"/>	200,000	250,000	0	0	0	0	\$450,000
<b>Total</b>		<b>250,000</b>	<b>500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$750,000</b>

# Creeks Restoration & Water Quality Improvements

## Lighthouse Watershed Restoration

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to restore the riparian corridor in La Mesa Park. Restoration could include non-native weed removal and revegetation with native plants, biotechnical stabilization of eroding banks, and improvement of trails and interpretive information.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	0	0	0	0	50,000	100,000	\$150,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>100,000</b>	<b>\$150,000</b>

# Creeks Restoration & Water Quality Improvements

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## Mid-Arroyo Burro Restoration

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to restore the riparian corridor in the mid-Arroyo Burro watershed (above Highway 101). Restoration could include non-native weed removal and revegetation with native plants, biotechnical stabilization of eroding banks, removal of concrete from the creek channel, and improvement of trails and interpretive information.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Measure B	<input type="checkbox"/>	0	0	0	100,000	150,000	200,000	\$450,000
Grant Funding	<input type="checkbox"/>	0	0	0	0	250,000	500,000	\$750,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>100,000</b>	<b>400,000</b>	<b>700,000</b>	<b>\$1,200,000</b>

# Creeks Restoration & Water Quality Improvements

## Mission Creek Restoration at Oak Park

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to restore Mission Creek in Oak Park. Restoration could include non-native weed removal and revegetation with native plants, removal of steelhead passage barriers, biotechnical stabilization of eroding banks, removal of concrete from the creek channel, and improvement of trails and interpretive information.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Grant Funding	<input type="checkbox"/>	0	250,000	250,000	0	0	0	\$500,000
Measure B	<input type="checkbox"/>	0	400,000	400,000	0	0	0	\$800,000
<b>Total</b>		<b>0</b>	<b>650,000</b>	<b>650,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$1,300,000</b>

# Creeks Restoration & Water Quality Improvements

## Rattlesnake Creek Restoration Program

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to restore upper Rattlesnake Creek. Restoration could include non-native weed removal and revegetation with native plants, biotechnical stabilization of eroding banks, removal of hard structures from the creek channel, and improvement of trails and interpretive information.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Grant Funding	<input type="checkbox"/>	0	0	0	0	100,000	500,000	\$600,000
Measure B	<input type="checkbox"/>	0	0	0	0	150,000	250,000	\$400,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>250,000</b>	<b>750,000</b>	<b>\$1,000,000</b>

# Creeks Restoration & Water Quality Improvements

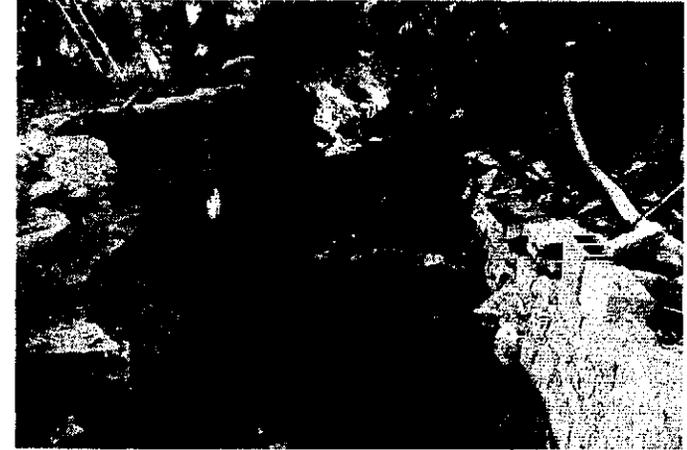
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## San Pascual Drain at Old Mission Creek

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to research and identify the source of persistently high indicator bacteria levels in the water discharging from the San Pascual Drain into Old Mission Creek at the upstream end of Bohnett Park, and to design and construct a treatment solution to improve water quality at the site. Research, design, and permitting are scheduled to occur in FY 2010 and 2011, and construction will be completed in FY 2011. Grant funding will be sought for both design and construction.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Grant Funding	<input type="checkbox"/>	50,000	150,000	0	0	0	0	\$200,000
Measure B	<input type="checkbox"/>	50,000	150,000	0	0	0	0	\$200,000
<b>Total</b>		<b>100,000</b>	<b>300,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$400,000</b>

# Creeks Restoration & Water Quality Improvements

## San Roque Creek Restoration

**Annual Maintenance/Operations Cost:** \$25,000.00

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to restore the upper San Roque Creek watershed. Restoration could include non-native weed removal and revegetation with native plants, biotechnical stabilization of eroding banks, removal of hard structures from the creek channel, and improvement of trails and interpretive information.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Grant Funding	<input type="checkbox"/>	0	0	0	0	100,000	500,000	\$600,000
Measure B	<input type="checkbox"/>	0	0	0	0	150,000	250,000	\$400,000
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>250,000</b>	<b>750,000</b>	<b>\$1,000,000</b>

# Creeks Restoration & Water Quality Improvements

## Stormwater Treatment Retrofit Projects (LID)

**Annual Maintenance/Operations Cost:** Negligible

**Annual Energy Savings:** Negligible

**Description:** The purpose of this project is to design, permit, and construct a "Low Impact Development" (storm water and urban runoff treatment) demonstration project, or projects, on City-owned properties to improve creek and ocean water quality. Conceptual designs will be developed in FY 2009. Final design, permitting, and construction will occur on the first project in FY 2010. A new LID project will be pursued each year.



Funding Sources	Funded	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>	<u>Total</u>
Grant Funding	<input type="checkbox"/>	100,000	100,000	100,000	100,000	100,000	100,000	\$600,000
Measure B	<input type="checkbox"/>	150,000	150,000	200,000	200,000	200,000	200,000	\$1,100,000
<b>Total</b>		<b>250,000</b>	<b>250,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>\$1,700,000</b>