

CITY OF PISMO BEACH

STORM WATER MANAGEMENT  
PROGRAM



August 2009

**National Pollutant Discharge Elimination System  
(NPDES)  
Phase II**

**Storm Water Management Program  
City of Pismo Beach**

**August 2009**

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## **INTRODUCTION**

The City of Pismo Beach operated one of 116 MS4s (Municipal Separate Storm Sewer Systems) in the central coast region of the California Regional Water Quality Control Board. In order to comply with State and Federal Laws that regulate the operation of MS4s, the City must enroll in the State's Phase II General Permit for Municipal Stormwater. The City has prepared a Storm Water Management Program (SWMP) to comply with State requirements for the General Permit. The Program is organized to provide background information about the City and the planning area, to describe the regulatory requirements and to describe the control measures the City intends to implement to meet the requirements of the General Permit. Finally, the SWMP describes the reporting and monitoring plan that will verify that the City is meeting the objectives of the plan.

The City acknowledges the importance of protecting water quality, beneficial uses, and the biological and physical integrity of its watersheds and is committed to attain compliance with the General Permit. Therefore, specific best management practices (BMP's) are selected and defined in this SWMP to realize these goals. The City, with the support of the public, staff, and Central Coast Regional Water Quality Control Board, is confident it can reduce the discharge of pollutants to the Maximum Extent Practicable (MEP), establish and effectively manage hydromodification controls, and address specific water quality challenges it currently faces.

The City recognizes that developing a compact urban core is also a goal of watershed management and beneficial to achieving the goals of the SWMP. The San Luis Obispo Council of Governments (SLOCOG) has identified growth areas within the County where growth should be encouraged. The City SWMP has provided provisions to accommodate the growth objectives of the region while incorporating the SWMP objectives.

### ***Purpose***

The Storm Water Management Program (SWMP) is prepared by the City of Pismo Beach to comply with mandatory requirements of the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Phase II Final Rule and the State Water Resources Control Board (SWRCB) General Permit. The Storm Water Management Program provides an integrated approach for prevention of pollution from stormwater runoff in Pismo Beach. The program relies on public outreach, education and participation to help prevent pollution problems at the source.

Pollution from stormwater runoff has a major impact on waterways in San Luis Obispo County and our local communities. Stormwater runoff transports pollutants from residential streets, parking lots, and other sources to creeks, rivers, estuaries, and the ocean. Activities such as land clearing, excavation and filling, use of fertilizers, pesticides and herbicides, illegal dumping, municipal operations, and even improper disposal of pet waste can generate stormwater pollution. Water quality concerns that result from stormwater pollution include suspended sediment, nutrients, pathogens, nitrates, chlorides, sodium, heavy metals, polychlorinated biphenyls (PCBs), and low dissolved oxygen levels. Stormwater pollutants can inhibit the "beneficial uses" of a waterway, ranging from human contact and recreational uses to uses for commercial fisheries, drinking water, and habitat for animals and plants.

Until 2003, stormwater runoff in areas with a population of less than 100,000 people was not regulated. Although many existing stormwater runoff controls are in place, there is not an integrated and comprehensive approach to preventing pollution from stormwater runoff in these areas. In 2003, the State's General Permit was adopted and with it came new regulations for small communities.

### ***Characteristics and History of the City***

Pismo Beach is a popular tourist destination, and has been since the 1880s, when John Price moved his hotel from the Arroyo Grande/Avila Road location -- where it was a failure -- down to the Pismo Beach where it thrived. Price laid out the town site of El Pismo around his hotel and with the coming of the Southern Pacific Railroad in 1895. Later the coastal routing of State Highway 1 (now U.S. 101) in 1912 provided vacationers with easy access to the new town and the broad sandy beaches of the Central Coast.

Today, 100 years later, tourism is still the dominant economic activity in Pismo Beach. The City currently serves a population of 8,562, according to the 2000 U.S. Census, up from the 7,669 residents, per the 1990 U.S. Census. Visitors increase the local population, on average, by one-third, and on summer holidays, by as much as two to three times the current population. The railroad no longer stops at Pismo Beach, but the U.S. 101 freeway now forms the spine of the City, giving travelers along this route the only contact with the ocean edge for some 300 miles between San Francisco and Santa Barbara County.

Communities that are popular vacation spots often tend to be popular retirement areas, as well. A comparison of age statistics in the San Luis Obispo region shows that Pismo Beach is no exception. According to the 2000 census, the median age for the County was 37.3 years; for Pismo Beach, 46.8 years.

Pismo Beach stretches along the Pacific shoreline for some seven miles. Most of the City lies within the California Coastal Zone, although recent development in the southeastern sector now extends into the foothills beyond the coastal boundary. The northwestern half of the City is confined on the northeast by steep hillsides that rise to 1,000 feet in some areas and form a magnificent open-space backdrop to the land and beaches below. The State of California controls about a mile of sandy beach within the city limits, as well as many of the public beach areas that stretch to the south for some 20 miles. Mobile home parks, RV parks, and camping areas extend along these beaches. North of the downtown, the shore is lined with steep bluffs reaching to 100 feet above the water's edge. Much of this area is developed with large hotels and restaurants. The remainder of the City is residential neighborhoods; smaller beach-oriented cottages and apartments in Shell Beach and the downtown; larger, newer homes and condos east of the freeway and in the extreme northwest sector. The City is currently experiencing a fair amount of infill development and rehabilitation of existing properties because there are very few opportunities to annex additional land into the City's service area due to geographic constraints, such as hillsides to the north and east, two adjacent municipalities to the south and the Pacific Ocean to the west.

### ***Population and Demographics***

The City of Pismo Beach's build-out population estimate is 11,122 persons within the current Sphere of Influence (9,414 within the current city limits). Over 58 acres of zoned

commercial land is expected to develop over the coming years. All 58 acres are within current city limits. Hotel/motel units are expected to increase by 965 units, or a 53 percent increase over current hotel/motel units. The Growth Management Element of the General Plan stipulates a maximum growth rate of 3 percent for the City. Since the preparation of the General Plan in 1992, growth has occurred at a slower rate, with an annual average of 1 percent.

**Table 1.0 Population – Current and Projected**

	Existing Population	Build out within City Boundary	Build out within Sphere of Influence
Residential Population	8,562	9,414	11,122

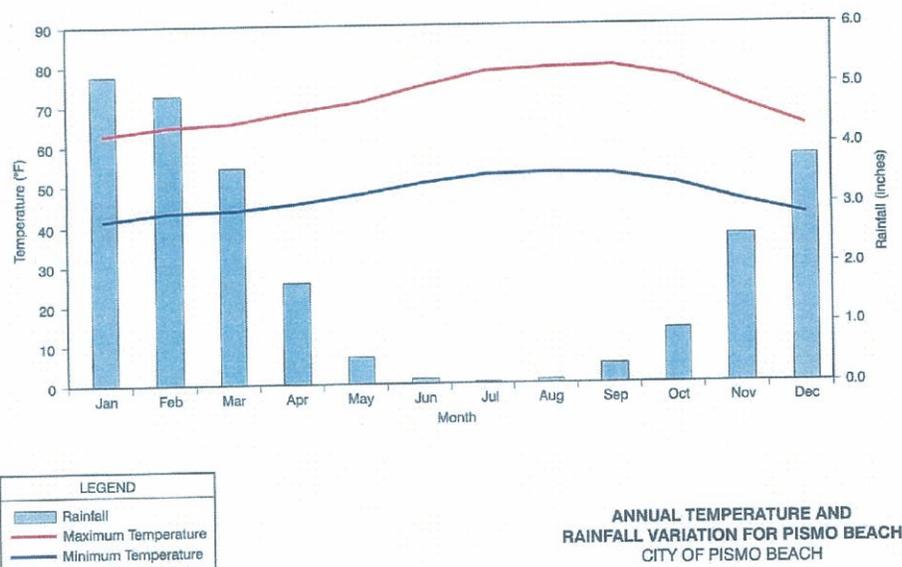
***Climate***

The climate in Pismo Beach is influenced by the marine environment with year-round highs ranging from the 60s to 80s and lows between the 40s and the 50s. The warmest months are August through October, with coastal fog in the mornings, clearing to afternoon sunshine (1). The average monthly precipitation and average monthly temperature from years 1948 to 2005 is presented in Table 1.1. The average annual precipitation for the area is 23.5 inches. Figure 1.2 shows annual temperature and rainfall variation for Pismo Beach. The climate information was provided by the Western Regional Climate Center’s San Luis Obispo Polytechnic Station.

**Table 1.1 Climate**

<b>Average Monthly Precipitation and Temperature Data (1) City of Pismo Beach</b>			
<b>Month</b>	<b>Rainfall (inches)</b>	<b>Maximum Temperature (°F)</b>	<b>Minimum Temperature (°F)</b>
January	5.17	63.1	41.6
February	4.86	64.9	43.4
March	3.65	65.7	43.9
April	1.71	68.4	45.4
May	0.45	70.8	47.6
June	0.07	74.9	50.4
July	0.03	78.3	52.5
August	0.05	79.3	52.9
September	0.33	79.5	52.5
October	0.90	76.7	50.0
November	2.47	70.4	45.9
December	3.79	64.5	42.1
Note: (1) Western Regional Climate Center, Station No. 0475871, 1948-2005.			

Figure 1.0 Annual Temperature and Rainfall Variation for Pismo Beach



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### ***Watershed Areas***

There are major and regional tributary watersheds that contribute drainage to the City’s creeks and drainage ways. The four watershed areas contained within the City of Pismo Beach are:

- Pismo Creek Watershed
- Pismo Lake Watershed
- Chumash Park Watershed
- Freeway Foothills Watershed

To convey the drainage resulting from these watersheds, the City employs a system of creeks, ditches, basins, and storm drains. Table 1.2 lists each watershed area and its corresponding size. A description of each regional watershed is found below.

**Table 1.2 Regional Tributary Watershed Areas**

<b>Regional Tributary Watershed</b>	<b>Area (Square Miles)</b>
Pismo Creek Watershed	47
Pismo Lake Watershed	6
Chumash Park Watershed	unknown
Freeway Foothills Watershed	unknown

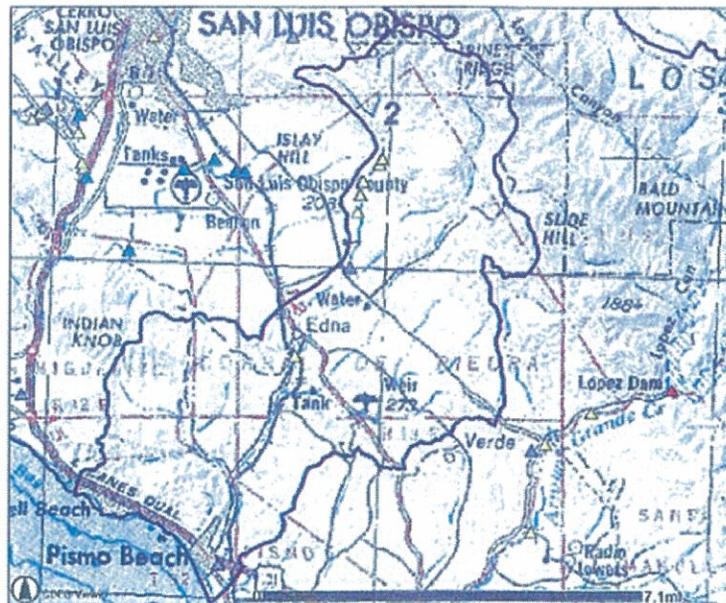
## Pismo Creek Watershed

The Pismo Creek Watershed occupies approximately 47 square miles within southern San Luis Obispo County. The drainage attains a maximum elevation of almost 2,865 feet above mean sea level. It consists of approximately 54 percent mountainous and foothill area and 46 percent valley area.

Pismo Creek's tributaries, West Corral de Piedra, East Corral de Piedra, and Canada Verde, cumulatively measure about 53 miles in length from their headwaters in the Santa Lucia Mountains to where they join, forming the main stem Pismo Creek, upstream of the Union Pacific Railroad crossing (DWR, 2002). The main stem originates at the confluence of East Corral de Piedra and West Corral de Piedra Creeks and flows south-southwest for approximately 5.5 miles to the Pacific Ocean within the City limits of Pismo Beach.

Pismo Creek flows through relatively rugged terrain in a steep, incised channel, with small alluvial deposits appearing sporadically before it empties into the Pacific Ocean. Pismo Creek stream flow is not gauged except for a short period of record by Balance Hydrologics, Inc. (January 1989 through September 1992). The elevation of the gage site during this period was estimated to be 18 feet above mean sea level.

Figure 1.1 Pismo Creek Watershed



Map of Pismo Watershed

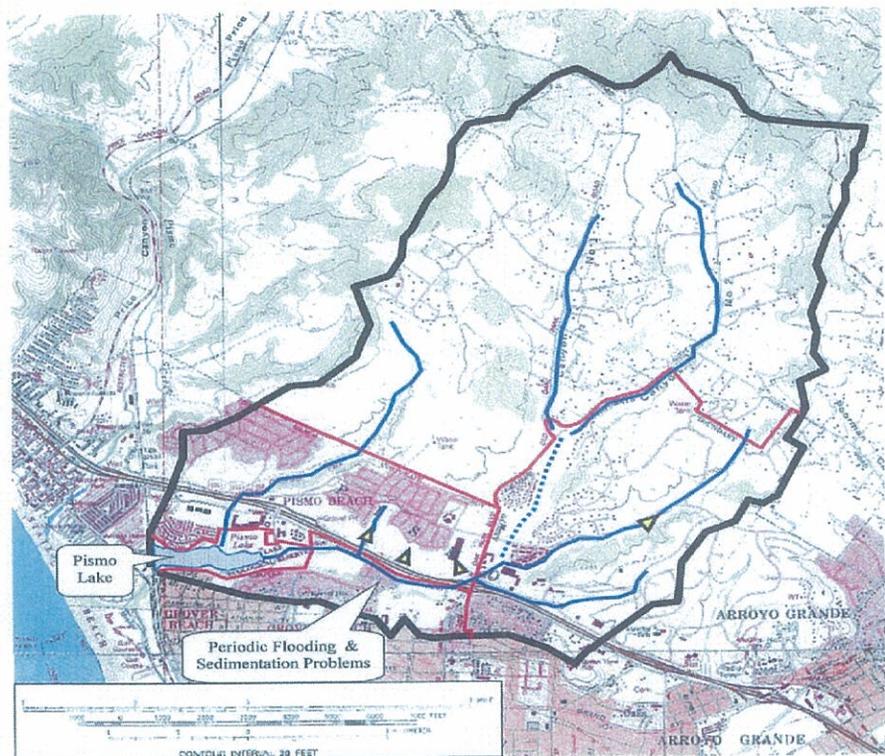
## Pismo Lake Watershed (Meadow Creek)

Pismo Lake is nestled between Grover Beach and Pismo Beach in the Pismo Beach Ecological Reserve. Land within the reserve supports a riparian-woodland habitat, dominated by willows and other plants native to the Central Coast of California. The lake is unique because it has both salt and fresh water. Two hundred and fifty bird species, mammals, reptiles, and amphibians inhabit this protected environment.

Pismo Lake Ecological Reserve was a healthy wetland when the Wildlife Conservation Board purchased it in 1976. However, in less than a decade, excessive sediment loads from development along Meadow Creek had reduced the 30 acres of open water to just 2.5 acres. In 1986 the lake was dredged and deepened along its length at a cost of \$100,000. A spillway was installed at the western end to maintain a water depth of about five feet. Dredged material was used to build four islands, ranging in size from one half an acre to 2 acres.

The Pismo Lake watershed contains steep, highly erodible soils. As construction and other activities occur in the watershed, there is a risk that erosion will generate unacceptably high sediment loads. These sediments would fill Pismo Lake and cause other problems such as clogged drainage facilities and increased flooding.

Figure 1.2 Pismo Lake Watershed



Pismo Lake Watershed

-  Sediment Control Facilities
-  Watershed Boundary
-  Surface Waters
-  Jurisdiction Boundary

## **Chumash Park Watershed**

The Chumash Park Watershed area consists of a portion of Pismo Beach and a portion of land outside the City limits. Chumash Park consists of 41.15 acres of land, and has tributary runoff from residential subdivisions to the north and south. The Mankins Ranch, located outside the city limits, also contributes to the Chumash Park watershed and occasionally cattle have grazed on their land.

Although there is little data on this watershed, this area is a sub-region of the Meadow Creek Area and exhibits many of the same characteristics.

## **Freeway Foothills Watershed**

The Freeway Foothills area consists of the foothills lying adjacent to and east of U.S. Highway 101. The area consists of developed planned residential developments, a restaurant, a small shopping complex, a few scattered single family dwellings, and the 116-acre Mattie Road annexation area, (currently outside the city limits but within LAFCO adopted Sphere of Influence Area).

This area is highly visible from U.S. Highway 101 above Shell Beach and Sunset Palisades. The foothills provide an important visual and open space backdrop for the entire northern half of the City. The planning area itself has spectacular ocean views. The Freeway Foothills area is physically separated from the other City areas by U.S. Highway 101.

The Freeway Foothills watershed consists of tributary areas within the City as well as outside the City limits.

## ***Regulatory Requirements***

The Federal Water Pollution Control Act that established the National Pollutant Discharge Elimination System NPDES program was adopted in 1972. The NPDES program regulates the discharge of wastewaters from point sources to surface waters. The Federal Water Pollution Control Act was amended in 1977 and became known as the Clean Water Act (CWA). In 1987 the CWA was again amended to add section 402, which established a framework for regulating discharges from municipal separate stormwater systems (MS4s) as a special category of point source under the NPDES program.

Enacted in 1990, Phase I of the Storm Water Rule applied to municipal separate storm sewer systems (MS4s) with a service population greater than 100,000, to construction projects affecting five acres or more, and to certain industrial activities. Phase II of the Storm Water Rule is generally applicable to MS4s serving an urban population greater than 10,000 and construction activities affecting one or more acres.

Under the Storm Water Phase II Rule, small MS4s that meet specific criteria must obtain a permit for stormwater discharges. NPDES stormwater permits will be issued by the State Water Resources Control Board (SWRCB) and must be renewed every five years. The first five-year permit term began on October 27, 2003, at which time the small MS4s on this permit application were required to file a Notice of Intent (NOI) to comply with the State's General Permit. To comply with the State's General Permit, the small MS4 operator must implement a Storm Water Management Program (SWMP) that reduces

the discharge of pollutants to the “maximum extent practicable” (MEP), to protect water quality. The cities must submit a NOI, a permit fee, and their SWMP on or before the State’s General Permit deadline.

### ***Scope of the Storm Water Management Plan***

To meet the requirements of the Storm Water Phase II Rule, the City of Pismo Beach has coordinated with the San Luis Obispo County Partnership for Water Quality, which includes numerous Cities and San Luis Obispo County.

This Storm Water Management Program (SWMP) was created to serve as a guide for developing and implementing the NPDES Phase II requirements for stormwater discharges. This document describes how pollutants in stormwater will be controlled and also describes recommended Best Management Practices (BMPs) that address the six required minimum control measures in a small MS4. Each BMP is accompanied by measurable goals to be achieved during the permit term, as a means of determining program compliance and accomplishments, and as an indicator of program effectiveness.

A “Small Municipal Separate Storm Sewer System or Small MS4” is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that are:

1. Owned or operated by the United States, a state, city, town, borough, country, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law as a sewer district, flood control district, drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
2. Not defined as “large” or “medium” municipal separate storm sewer system.
3. Small MS4s, including systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares, but do not include separate storm sewers in very discrete areas, such as individual buildings.

This program includes specific BMP’s for the six minimum control measures and defines measurable goals for each control measure. Best Management Practices for stormwater management are defined as schedules of activities, prohibition of practices, maintenance procedures, the use of pollution control devices, and other management practices used to prevent or reduce the amount of pollution introduced to receiving waterways from stormwater runoff. Recommended BMP’s for each of the six minimum control measures are provided in Section 2 through 7 of this plan.

The “Maximum Extent Practicable” (MEP) standard involves applying best management practices (BMP’s) that are effective in reducing the discharge of pollutants in stormwater runoff realized by implementing the six minimum control measures. It is recognized that “pollutant reductions that represent MEP may be different for each small MS4, given the unique local hydrologic and geologic concerns that may exist and the differing possible

pollutant control strategies. Therefore, each permittee will determine appropriate BMP's to satisfy each of the six minimum control measures through an evaluative process" (Federal Register, Volume 64, No. 235, page 68754, December 8, 1999). Determining whether a BMP protects water quality to the maximum extent practicable is subjective. MEP is generally a result of emphasizing pollution prevention. Source control BMP's are the first line of defense and may be used in combination with treatment methods where appropriate as additional lines of defense. The MEP approach is an evolving, flexible and advancing concept that considers technical and economic feasibility. As knowledge about controlling urban runoff continues to evolve, the standard for MEP is also evolving. The activities described in this Storm Water Management Program (SWMP) are the recommendations for reducing or eliminating pollutants in stormwater to the MEP.

"Measurable Goals" provide a method to determine compliance with the General Permit requirements and should reflect the specific needs and characteristics of the city according to the EPA guidelines. Measurable goals for each city may vary depending on the individual characteristics and needs of that city. , Measurable goals do not necessarily have to be quantitative, but should be attainable and controllable. Measurable goals shall include, at a minimum, a description of the action to be taken and, what result is expected to be achieved by each goal. The frequency and dates for which such actions will be taken should also be indicated.

"Inspections and Monitoring" are both important aspects of the stormwater program. Visual inspections and monitoring of stormwater runoff and infrastructure (e.g. drop inlets, basins and gutters) can determine the effectiveness of a stormwater program. Through visual inspections and monitoring, non-stormwater discharges can be discovered and subsequently eliminated, maintenance needs can be identified, and visual pollutants and erosion problems can be detected. Inspection of facilities is also important to ensure proper BMP implementation, detect non-stormwater discharges, and proper maintenance of business and municipal sites. stormwater Monitoring can also be used to involve the public through citizen monitoring groups, to identify and target pollutants of concern, and to illustrate water quality improvements and permit compliance.

The City of Pismo Beach will determine whether the MEP is being achieved through annual review and reporting of stormwater management activities. On construction sites, the City will determine the MEP on a case-by-case basis. To determine the MEP for a specific site, the City will consider the proximity of the site to local waterways and the state of the waterways, among other factors, for the proposed activities.

The Storm Water Phase II Final Rule and the MS4 General Permit require that the City implement a SWMP that "***reduces stormwater discharges to the maximum extent practicable (MEP) to protect water quality, meet water quality standards, and comply with receiving water limitations.***" MEP can be achieved by implementing BMP's for the six minimum control measures described below. Measurable goals allow for evaluation of BMP effectiveness in improving stormwater quality.

As declared by the EPA, the goal of the Storm Water Management Program is: (1) to protect the water quality of the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems and natural drainage ways (e.g. creeks, lakes, estuaries, and the ocean) during storm events to the "maximum extent practicable," and (2) to satisfy the requirements of the Clean Water Act.

To meet these goals the Phase II Program requires a "Small MS4" to develop, implement, and enforce a Storm Water Management Program (SWMP) that includes six minimum control measures:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention and Good Housekeeping for Municipal Operations

***Pollutants of Concern (POC) and Total Maximum Daily Loads (TMDL's)***

***POC's***

"Pollutants of Concern consist of any pollutants that exhibit one or more of the following characteristics (Municipal Phase II General Permit):

- Current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water
- Elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bioaccumulate in organisms therein
- The detectable inputs of the pollutant are at concentrations or loads considered potentially toxic to humans and/or flora and fauna."

Pollutants of concern found in urban runoff include (Municipal Phase II General Storm water Permit):

- Sediments
- Non-sediment solids
- Nutrients
- Pathogens
- Oxygen-demanding substances
- Petroleum hydrocarbons
- Heavy metals
- Floatables
- Polycyclic aroatic hydrocarbons (PAH's)
- Trash
- Pesticides and herbicides

The Environmental Protection Agency's 2006 303(d) list of water quality limited segments requiring TMDL's has identified the following as an impaired water body:

<u>Water body</u>	<u>Pollutant</u>	<u>Potential Sources</u>	<u>Approved TMDL</u>
Pacific Ocean at Pismo Beach	Indicator Bacteria	Unknown	No

The Central Coast Regional Water Quality Control Board has identified additional POC's in Pismo Beach, as listed below:

Pismo Creek

- 1) Pathogens
- 2) Low Index of Biotic Integrity

The Central Coast Regional Water Quality Control Board had identified other possible pollutant sources within the City of Pismo Beach, which are listed below. These possible pollutant sources are under study and are included in the SWMP. .

- Birds at Pismo Beach; No feeding the birds ordinance was adopted on June 5, 2007 by City Council. The City installed dome lids on the trash receptacles on the pier and the beach, the City obtained a proposition 50 Clean Beaches Grant to do a scientific ID Source Tracking Study: \$660,000 that is currently underway.
- Homeless encampments (outside the city limits)
- Septic systems: seven septic systems are known to exist within the City and are still functioning. One septic system is exempt by the Municipal Code from connecting to the City sewer system. Two systems were dye tested by City staff, and two were found to be connected to the city sewage system, one being right next to the bluff top. All remaining septic systems were required to have an inspection by a licensed contractor to ensure their systems are working at acceptable standards. One resident has yet to test their system, which is not near the beach.
- Construction
- Landscape fertilizers
- Discharge of polluted groundwater to storm drains; the City is unaware of any impacted groundwater that is discharged to storm drains that would impact water quality.

**Table 1.3 City of Pismo Beach Pollutant Activity/Sources**

Land Use	Generating Site	Potential Pollutant Activities/Sources	POC Groups	BMP Cross-Reference
Residential	<ul style="list-style-type: none"> <li>• Apartments</li> <li>• Multi-family</li> <li>• Single Family detached</li> </ul>	<ul style="list-style-type: none"> <li>• Driveway and sidewalk cleaning</li> <li>• Vehicle and equipment maintenance/washing</li> <li>• Landscape maintenance and washing</li> <li>• Swimming pool and spa discharges</li> <li>• Illicit connections</li> <li>• Sump dewatering</li> <li>• Painting</li> </ul>	<ul style="list-style-type: none"> <li>• Sediment</li> <li>• Nutrients (P, N, NO3, NO2)</li> <li>• Pathogens (indicator bacteria)</li> <li>• Hydrocarbons (O&amp;G, lubricants)</li> <li>• Pesticides</li> <li>• Gross pollutants (litter, trash, debris)</li> <li>• Toxics (organics, hazardous waste, etc)</li> </ul>	<ul style="list-style-type: none"> <li>• 1.9, 1.11, 1.14</li> <li>• 3.3</li> <li>• 4.1, 4.5, 4.8</li> <li>• 5.4, 5.2, 5.4, 5.6</li> </ul>
Commercial	<ul style="list-style-type: none"> <li>• Auto maintenance and oil change shops</li> <li>• Gas stations</li> <li>• Commercial</li> </ul>	<ul style="list-style-type: none"> <li>• Building maintenance (power washing)</li> <li>• Dumping and spills</li> <li>• Outdoor fluid storage</li> </ul>	<ul style="list-style-type: none"> <li>• Sediment</li> <li>• Nutrients (P, N, NO3, NO2)</li> <li>• Hydrocarbons (O&amp;G, lubricants)</li> </ul>	<ul style="list-style-type: none"> <li>• 1.1, 1.9, 1.11, 1.14</li> <li>• 3.3, 3.4, 3.5, 3.6</li> <li>• 4.1, 4.2, 4.5,</li> </ul>

	<ul style="list-style-type: none"> <li>laundry and dry cleaning</li> <li>Nurseries/garden centers</li> <li>Restaurants</li> </ul>	<ul style="list-style-type: none"> <li>Parking lot maintenance (power washing)</li> <li>Wash down of greasy equipment and grease traps</li> <li>Illicit connections</li> <li>Sump dewatering</li> </ul>	<ul style="list-style-type: none"> <li>Pesticides</li> <li>Metals</li> <li>Gross pollutants (litter, trash, debris)</li> <li>Detergents</li> <li>Toxics (organics, hazardous waster, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>4.8</li> <li>5.1, 5.2, 5.4, 5.6</li> </ul>
Industrial	<ul style="list-style-type: none"> <li>Wineries</li> </ul>	<ul style="list-style-type: none"> <li>Building maintenance (power washing)</li> <li>Dumping and spills</li> <li>Equipment washing</li> <li>Illicit connections</li> <li>Sump dewatering</li> <li>Outdoor fluid storage</li> </ul>	<ul style="list-style-type: none"> <li>Nutrients (P, N, NO3, NO2)</li> <li>Sediment</li> <li>Pathogens (indicator bacteria)</li> <li>Hydrocarbons (O&amp;G, lubricants)</li> <li>Gross pollutants (trash, debris, litter)</li> <li>Toxics (organics, hazardous waste, etc)</li> </ul>	<ul style="list-style-type: none"> <li>1.2, 1.14</li> <li>3.3</li> <li>4.1, 4.5,4.8</li> <li>5.1, 5.2, 5.4, 5.6</li> </ul>
Institutional	<ul style="list-style-type: none"> <li>Churches</li> <li>Schools</li> </ul>	<ul style="list-style-type: none"> <li>Building maintenance (power washing)</li> <li>Dumping and spills</li> <li>Swimming pool and spa discharges</li> <li>Landscaping and grounds care (irrigation)</li> <li>Parking lot maintenance (power washing)</li> <li>Vehicle washing</li> <li>Illicit connections</li> <li>Sump dewatering</li> </ul>	<ul style="list-style-type: none"> <li>Sediment</li> <li>Pathogens (indicator bacteria)</li> <li>Hydrocarbons (O&amp;G, lubricants)</li> <li>Pesticides</li> <li>Gross pollutants (trash, debris)</li> </ul>	<ul style="list-style-type: none"> <li>2.2, 2.14</li> <li>4.3, 4.6</li> <li>5.2, 5.5, 5.8</li> <li>6.1, 6.2, 6.6</li> </ul>
Municipal	<ul style="list-style-type: none"> <li>Maintenance depots</li> <li>Municipal fleet storage</li> <li>Public works yards</li> <li>Streets and highways</li> </ul>	<ul style="list-style-type: none"> <li>Building maintenance (power washing)</li> <li>Dumping and spills</li> <li>Landscaping and grounds care (irrigation)</li> <li>Outdoor fluid storage</li> <li>Parking lot maintenance (power washing)</li> <li>Road maintenance</li> <li>Spill prevention and response</li> <li>Vehicle fueling, maintenance, repair, and washing</li> <li>Illicit connections</li> </ul>	<ul style="list-style-type: none"> <li>Sediment</li> <li>Nutrients (P, N, NO3, NO2)</li> <li>Hydrocarbons (O&amp;G, lubricants)</li> <li>Pesticides</li> <li>Metals</li> <li>Gross pollutants (trash, debris)</li> <li>Detergents</li> <li>Toxics (organics, hazardous waste)</li> </ul>	<ul style="list-style-type: none"> <li>1.4</li> <li>3.1, 3.2, 3.3, 3.6</li> <li>4.1, 4.5, 4.8</li> <li>5.1, 5.2, 5.4, 5.6</li> <li>6.1, 6.2, 6.3, 6.9</li> </ul>
Other/All	<ul style="list-style-type: none"> <li>Mobile</li> <li>Parks</li> <li>Multi-use detention basins and detention/recharge basins</li> <li>Construction sites</li> </ul>	<ul style="list-style-type: none"> <li>Vehicle accidents</li> <li>Mobile car wash and auto detailers, painters, power washers, pet washers, and food vendors</li> <li>New developments and redevelopment</li> <li>Homeless encampments</li> <li>Operations and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Sediment</li> <li>Pathogens (indicator bacteria)</li> <li>Hydrocarbons (O&amp;G, lubricants)</li> <li>Metals</li> <li>Gross pollutants (trash, debris)</li> <li>Detergents</li> <li>Toxics (organics, hazardous waste, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>1.7, 1.13, 1.14</li> <li>3.3, 3.6</li> <li>4.1, 4.2, 4.5, 4.8</li> <li>5.1, 5.2, 5.4, 5.6</li> <li>6.1, 6.2, 6.7, 6.8</li> </ul>

### ***TMDL's***

A TMDL is the amount of a particular material that a water body can assimilate on a regular basis and still remain at levels that protect uses designated for that water body. A TMDL is approved by the Regional Water Quality Control Board, the State Water Resources Control Board, and the U.S. Environmental Protection Agency. Once a TMDL is approved, it establishes the following:

- 1) An allowable amount of a pollutant to a water body;
- 2) Proportional responsibility for controlling the pollutant;
- 3) Numeric indicators of water quality;
- 4) Implementation to achieve the allowable amount of pollutant loading.

TMDL's are developed by analyzing information from existing or commissioned studies, and/or by stakeholders interested in the water body or conditions being investigated. TMDL development results in a definition of water quality problems in a water body or watershed, a numeric value for the TMDL, and an implementation plan that identifies how the problems will be solved and the TMDL achieved. The implementation plans identify new requirements, based on existing regulations, in conjunction with other existing water quality management activities. The implementation plan identifies which requirements or activities apply to which agencies, landowners, resource managers, and/or the public.

### ***Area of Permit Coverage***

One of the first steps in developing the SWMP was to determine the stormwater areas to be managed. Small MS4s have been encouraged to propose their own boundaries and maps, which are included in this document (See Attachment A). All urbanized areas within the boundaries of the City on this permit application shall be included as part of this SWMP. Agricultural lands within the boundaries of this permit application will not be addressed under the general permit for Small MS4s, as there are no agricultural lands located within the City limits.

### ***STORM WATER MANAGEMENT PROGRAM (SWMP)***

Section D of the MS4 General Permit requires the following:

"The Permittee shall maintain, implement, and enforce an effective SWMP, and develop adequate legal authority to implement and enforce the SWMP, designed to reduce the discharge of pollutants from the permitted MS4 to the MEP and to protect water quality. The SWMP shall serve as the framework for identification, assignment, and implementation of control measures/BMP. The permitted agency shall implement the SWMP and shall subsequently demonstrate its effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the MEP. The SWMP shall be fully implemented by the expiration of the MS4 General Permit, or within five years of designation for Small MS4s subsequent to permit adoption, with reasonable progress made toward implementation throughout the term of the General Permit. Existing programs that have stormwater quality benefits can be identified in the SWMP and be part of a permittee's stormwater program."

"The SWMP shall be revised to incorporate any new or modified BMP's or measurable goals developed through the permittee's annual reporting process. The permittee shall incorporate changes required by or acceptable to the RWQCB Executive Officer into applicable annual revisions to the SWMP and adhere to its implementation."

### **Minimum Control Measures, Best Management Practices and Measureable Goals**

The Storm Water Phase II Final Rule and the MS4 General Permit require that the City of Pismo Beach implement a SWMP that "***reduces stormwater discharges to the maximum extent practicable (MEP) to protect water quality, meet water quality standards, and comply with the receiving water limitations.***" MEP can be achieved by implementing BMP's for the six minimum control measures described in the following sections. Measurable goals allow for evaluation of BMP effectiveness in improving stormwater quality.

### **Summary of BMP's Selected for Each Minimum Control for this SWMP**

The BMP's the City selected for each Minimum Control Measure are summarized in Table 1.4 below. Each BMP and its measurable goals are described in more detail in Sections 1-6. The BMP implementation timetable and city department responsibilities for the Measurable Goals for each BMP are shown in tables that follow.

**Table 1.4 Summary of Minimum Control Measures and Best Management Practices Selected for SWMP**

Minimum Control Measure	Best Management Practices
<p><b>1. Public Outreach and Education</b></p>	<ul style="list-style-type: none"> <li>• Develop a “Clean Water” certification program for commercial businesses.</li> <li>• Provide an education program for school children.</li> <li>• Stencil storm drain inlets with “Drains to Ocean” notice.</li> <li>• Establish a Storm Water “Hotline.”</li> <li>• Create a stormwater web page.</li> <li>• Provide an information kiosk in the beach pier/plaza area describing the importance of clean beaches.</li> <li>• Provide dog-mess bags for public use near beaches and in parks.</li> <li>• Adopt a revised pet waste ordinance including enforcement provisions.</li> <li>• Distribute informational brochures in English and Spanish educating businesses, residents and tourists about stormwater pollution.</li> <li>• Provide PSAs on public access/government channel educating viewers about stormwater pollution prevention.</li> <li>• Distribute flyers educating the public on the proper use and disposal of landscape and garden chemicals, and proper auto maintenance procedures.</li> <li>• Develop public education information on proper trash disposal for residents and place on the city’s Web site and on Public Access Channel 20</li> <li>• Hold presentations regarding stormwater for residents at the mobile home parks within the city.</li> <li>• Hold workshops and presentations targeting different neighborhoods within the city. Each area of the city has a unique aspect of stormwater attached to it.</li> <li>• The City will commit to further assessing community based social marketing strategies.</li> </ul>
<p><b>2. Public Participation and Involvement</b></p>	<ul style="list-style-type: none"> <li>• Develop a formal mechanism to solicit community participation/input on the city’s SWMP.</li> <li>• Promote public participation in Coastal Clean-up Day and Creek Clean-ups by collaborating with SLO Partners for Water Quality to advertise the events and assist with provision of incentives to participants.</li> <li>• Establish a Storm Water Pollution Prevention committee. Include Cal Trans District 5 in the committee to incorporate state highway runoff.</li> <li>• The City will commit to further assessing community based social marketing strategies.</li> </ul>
<p><b>3. Illicit Discharge Detection and Elimination (IDDE)</b></p>	<ul style="list-style-type: none"> <li>• The City will prepare a stormwater sewer map.</li> <li>• The City will video inspect all storm drains for illicit connections.</li> <li>• Update Title 13 of the Municipal Code to more clearly define illicit discharges and enforcement provisions.</li> <li>• Conduct field surveys/inspections to identify illicit discharges of restaurant grease traps and other possible discharges of waste to surface drainage.</li> <li>• Conduct inspections of automobile servicing businesses.</li> <li>• Conduct inspections of parking lots over 10,000 feet in area or providing over 25 parking spaces.</li> <li>• Revise the current complaint tracking system to identify illegal discharges by the public. Also track reports of illicit discharges reported on the stormwater hotline.</li> <li>• Provide public education regarding the importance of reporting illicit discharges.</li> <li>• Enhance hazardous spill protection and control procedures and training to prevent illicit discharge into the storm sewer system.</li> </ul>
<p><b>4. Construction Site Runoff Control</b></p>	<ul style="list-style-type: none"> <li>• Develop an ordinance specifically addressing all construction site erosion and sediment control with appropriate penalties , including escalating enforcement measures for non-compliance.</li> <li>• Develop procedures and a checklist for adequate review of site plans to address erosion and sediment control on construction sites greater than one acre and sites less than one acre that are part of a larger planned development. Review plans to ensure that erosion control measures are in accordance with RWQCB erosion and sediment control field manual, Cal Tran’s standards, or CASQA BMP handbooks.</li> <li>• The City will inform the community regarding construction site runoff problems and</li> </ul>

	<p>report on actions taken to address construction site issues.</p> <ul style="list-style-type: none"> <li>• Implement guidelines and standards for construction site runoff.</li> <li>• Conduct construction site inspections on sites greater than one acre and sites less than one acre that are part of a larger planned development.</li> <li>• The Public Works Departments review discretionary projects submitted for impacts to water quality and hydrology.</li> <li>• Inspect construction sites during construction to verify post-construction BMP's are being built pursuant to the approved plans.</li> </ul>
<p><b>5. Post-Construction Storm Water Management in New Development and Redevelopment</b></p>	<ul style="list-style-type: none"> <li>• The City, with enrollment into the SWMP, will establish Planning application requirements and standards for implementing the interim HM criteria within the first year of enrollment. See options in BMP 5.1.</li> <li>• The City will develop a review process of structural and non-structural BMP's to ensure that LID principles are incorporated into site and grading plans.</li> <li>• Include post-construction stormwater management in the development review process. Applications shall be deemed complete if they include appropriate post-construction BMP selection, sizing and siting.</li> <li>• HM and LID public education and outreach for project applicants, contractors, developers, architects, property owners, and other interested parties. The City will commit to educating municipal staff, including plan reviewers and inspectors, on LID and HM requirements within the first three months of enrollment.</li> <li>• Maintain the installation of a drain inlet filter on Main Street near the beach (part of the Promenade IV construction).</li> <li>• Conduct post-construction site inspections for stormwater management for sites in excess of one acre, and sites that are less than one acre and part of a larger common planned development including development and redevelopment projects that are in excess of 5,000 square feet and contain greater than 5 percent impervious area.</li> <li>• Continue enforcing Pismo Beach's current zoning ordinances with existing riparian buffer zones during the subdivision process.</li> <li>• The City will work with SLO County to develop and implement a Low Impact Development (LID) Design Standards Manual.</li> <li>• The City will develop long-term watershed plan Based on the appropriate recommendations contained in the March 2009 Pismo Creek/Edna Valley Watershed Management Plan.</li> <li>• The City will require developers to incorporate LID measures identified in the SLO County LID Design Manual upon completion until such time as the City manual is adopted: 1) Require cluster development when appropriate, 2) Maximize trees &amp; vegetation, 3) Vegetate parking islands, 4) Protect slopes, 5) Properly design outdoor material storage areas.</li> </ul>
<p><b>6. Good Housekeeping and Pollution Prevention for Municipal Operations</b></p>	<ul style="list-style-type: none"> <li>• Implement employee training for municipal operations: road maintenance, park and open space maintenance, fleet and building maintenance, water and wastewater operating, and storm sewer maintenance.</li> <li>• Develop and implement maintenance procedures for Municipal Operations: sidewalks, parks, detention basins, corporation yard, public roads and bridges, etc.</li> <li>• Maintain existing street sweeping program.</li> <li>• Implement storm sewer inspection and maintenance procedures and schedules.</li> <li>• Develop a Storm Sewer Atlas.</li> <li>• Provide opportunities for proper disposal of trash and hazardous waste.</li> <li>• Provide dog-mess bags to the public at various locations at the beach and in parks.</li> <li>• Continue to place and maintain dome lids on trash receptacles on the pier and the beach.</li> <li>• The City contracts out to provide Highway 101 on and off ramp trash pick up once a month.</li> <li>• Employ Achievement House to provide trash pick up services by hand throughout the City.</li> <li>• The City will provide, during the five-year initial permit period, an annual report prepared by Public Works staff and approved by City Council that describes the City's performance during the prior year as it relates to the Storm Water Management Program.</li> </ul>

## **PUBLIC EDUCATION AND OUTREACH**

This control measure is intended to ensure greater public support and compliance for the Storm Water Management Program. Specifically, these efforts are directed to teach the public about the importance of protecting stormwater quality, both for the benefit of the environment and human health. The role of each community member, both at home and at work, is a major emphasis of this minimum control measure.

### ***Objectives and Requirements***

- Understand the public perceptions and attitudes toward the problem of urban runoff;
- Increase community awareness about urban runoff pollution and its impacts on the community's water resources;
- Educate the community about specific pollutant sources and what individuals can do to reduce urban runoff pollution;
- Foster participation through community-based projects or volunteer activities focused on pollution prevention.

To meet these objectives, the requirements of the Public Education and Outreach component of the Storm Water Program are to:

- Implement a public education program which distributes education materials and conducts outreach activities aimed at informing the public about the impacts of stormwater discharges on local water bodies, and receiving waters;
- Implement appropriate BMP's and develop achievable and measurable goals in order to assess the success of the public education and outreach program.

Section D.2.a of the MS4 General Permit requires that regulated Small MS4s develop and implement BMP's, measurable goals and timetables for implementation of the Public Education and Outreach Minimum Control Measure. "The permittee must educate the public in its permitted jurisdiction about the importance of the stormwater program and the public's role in the program. The permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impact of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff."

**STORMWATER POLLUTION PREVENTION PUBLIC EDUCATION AND OUTREACH**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 1.1</b>	The City will develop a "Clean Water" certification program for commercial businesses including auto services, restaurants, landscape contractors and hotels.	The intent of this BMP is to provide a public commitment by local businesses to reduce pollutants that may reach the ocean.	The City will meet with and audit appropriate BMP's for the type of business being conducted. The City will prepare a correction list that will be completed prior to certification. The City will contact 24 businesses a year and certify at least 50 percent.	City Engineer		X	X	X	X
<b>BMP 1.2</b>	The City will provide an education program for school children.	The intent of this BMP is to engage youngsters in the importance of reducing pollutants originating from their households that may reach the ocean.	The City will provide a brief presentation and brochures to all 4 <sup>th</sup> grade children each year. At the conclusion of the presentation, present "Clean Water Officer" badges to children who make a commitment to introduce household BMP's to their families.	City Engineer		X		X	
<b>BMP 1.3</b>	The City will stencil storm drain inlets with "Drains to Ocean" notice	The intent of this BMP is to raise awareness that anything that enters the drainage inlets is ultimately discharged to the ocean.	The City will stencil all inlet structures in the first year and refresh the markings every year thereafter.	City Engineer	X	X	X	X	X
<b>BMP 1.4</b>	The City will establish a Storm Water "Hotline"	The intent of this BMP is to provide the opportunity for concerned citizens to report a possible illicit discharge or request information on BMP's.	The City will advertise the hotline number on the City Web site and on the local government cable channel. The City will monitor the number of calls and the action taken to determine the value of the reports and the type of information most requested.	City Engineer	X	X	X	X	X

**STORMWATER POLLUTION PREVENTION PUBLIC EDUCATION AND OUTREACH**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 1.5</b>	The City will create a Storm Water Web page	The intent of this BMP is to provide information on BMP's, the certification program, the hotline number and links to educational materials.	The City will include BMP's for households and various businesses, describe the certification program, list certified businesses, explain how to report illicit discharge, provide the hotline phone number, and provide links to education materials.	City Engineer	X	X	X	X	X
<b>BMP 1.6</b>	The City will provide an information kiosk in the beach pier/plaza area describing the importance of clean beaches.	The intent of this BMP is to raise awareness that litter on the beaches is a threat to the ocean environment.	The City will include pictorial representations of sea life caught in trash or strangled on cigarette butts, a littered beach at the end of a weekend, a health advisory sign and other visual impacts of littering. The City will revise the kiosk photos once/quarter.	City Engineer	X	X	X	X	X
<b>BMP 1.7</b>	The City will continue to provide dog-mess bags (mutt-mitts) for public use near beaches and in parks.	This BMP will provide both a reminder and an easy method for citizens to clean-up pet waste.	The City provides mutt-mitt stations in all parks and any public beach areas where dogs are permitted.	Public Works/ City Engineer	X	X	X	X	X
<b>BMP 1.8</b>	The City will adopt a revised pet waste ordinance including enforcement provisions.	The intent of this BMP is to provide an enforcement tool for people who refuse to clean-up after their pets.	City staff will present the new pet waste ordinance to the City Council for adoption within one year.	City Engineer		X	X	X	X
<b>BMP 1.9</b>	The City will distribute informational brochures in English and Spanish educating businesses, residents and tourists about stormwater pollution.	The intent of this BMP is to raise awareness of the proper stewardship of stormwater that could result in decreased pollution.	The City will distribute materials to residents and businesses as inserts in water bills twice/year. The City will distribute materials to all hotels/motels by personal contact within one year.	City Engineer	X	X	X	X	X
					X		X		X

STORMWATER POLLUTION PREVENTION PUBLIC EDUCATION AND OUTREACH									
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 1.10</b>	The City will provide PSAs on public access/ government channel educating viewers about stormwater pollution prevention.	The intent of this BMP is to raise awareness of the proper stewardship of stormwater that could result in decreased pollution.	The City will run a new PSA each quarter.	City Engineer			X	X	X
<b>BMP 1.11</b>	The City will distribute flyers educating the public on the proper use and disposal of landscape and garden chemicals, and proper auto maintenance procedures (i.e., auto washing techniques, proper disposal of auto fluids, etc.).	The intent of this BMP is to educate the public through the "Our Water Our World" program that is currently in place in Orchard Supply Hardware for landscape and garden. The City will distribute flyers about proper auto maintenance to businesses and through water bills. The City will also place the flyers at City Hall and on the City Web site.	The goal is to reduce the pollutants leached into the ground water and stormwater system.	City Engineer	X	X	X	X	X
<b>BMP 1.12</b>	The City will develop public education information on proper trash disposal for residents and place on the City's Web site and on public access channel 20.	The intent of this BMP is to educate the public on the importance of proper trash disposal and the effects of improper trash disposal on the stormwater system.	The goal is to reduce the pollutants in the street, drain inlets, and storm system.	City Engineer		X	X	X	X
<b>BMP 1.13</b>	The City will hold presentations regarding stormwater for residents at the mobile home parks within the City.	The intent of this BMP is to educate the City's disadvantaged communities on the importance of keeping the stormwaterways clean.	The goal is to reduce the pollutants in the street, drain inlets, storm drain system and creeks.	City Engineer		X		X	
<b>BMP 1.14</b>	The City will hold workshops and presentations targeting different neighborhoods within the city. Each area of the city has a unique	The intent of the BMP is to educate the residents in different areas of the city to increase their knowledge and awareness of stormwater.	The measurable goal is to provide public education to increase the knowledge and awareness of the target audience. There is an uncertain effectiveness, so the	City Engineer		X		X	X

**STORMWATER POLLUTION PREVENTION PUBLIC EDUCATION AND OUTREACH**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	aspect of stormwater attached to it.		approaches used to educate the public will evolve over time.						
<b>BMP 1.15</b>	The City will commit to further assessing community –based social marketing strategies.	The intent of this BMP is to demonstrate that behavior change is achieved through public awareness delivered at the community level.	The City will track: <ul style="list-style-type: none"> <li>• Number of brochures given out</li> <li>• Number of workshops held</li> <li>• Number of attendees at workshops</li> </ul>	City Engineer			X	X	X

## **PUBLIC PARTICIPATION AND INVOLVEMENT**

This control measure is intended to foster active community support for the Storm Water Management Program and provide recommendations for public participation that will ensure the program reflects community values and priorities and therefore has the highest potential for success.

### ***Objectives and Requirements***

- Increase community awareness about urban runoff pollution; and
- Involve the community in developing and implementing the Storm Water Management Program in order to promote community interest and support.

To meet these objectives, the requirements of the Public Participation and Involvement component of the Storm Water Management Program are to:

- Comply with all state and local public notice requirements;
- Involve the community in the continuing development and refinement of the Storm Water Management Program;
- Allow the community to review the permit and the Storm Water Management Program;
- Include a procedure to receive and respond to comments from the community regarding the Storm Water Management Program;
- Implement appropriate BMP's and develop achievable and measurable goals in order to assess the success of community participation and involvement in the program.

STORMWATER POLLUTION PREVENTION PUBLIC PARTICIPATION AND INVOLVEMENT										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPON-SIBLE DEPART-MENT	BMP IMPLEMENTATI ON TIMETABLE (YEAR)					
					1	2	3	4	5	
<b>BMP 2.1</b>	The City will develop a formal mechanism to solicit community participation and input on the City's Storm Water Management Program.	Involving the community early in the development and revision process of the Storm Water Management Program should increase support for the program and provide additional input and suggestions to help shape the program and its implementation.	The City will document the number of citizen surveys distributed through the city utility bill and responses received.	City Engineer	X	X				
<b>BMP 2.2</b>	The City will promote public participation in Coastal Clean-up Day and creek clean-ups by collaborating with the SLO Partners for Water Quality and ECOSLO to advertise the events and assist with provision of incentives to participants.	The intent of this BMP is to promote community support for the Storm Water Management Program and to reduce pollution from litter, trash and illegal dumping.	The City will collaborate with SLO Partners and ECOSLO to document the number of clean-up events, the amount of trash removed and the number of participants involved.	City Engineer	X	X	X	X	X	
<b>BMP 2.3</b>	Establish a Storm Water Pollution Prevention Committee that will include: community members, stakeholder organizations, Chamber of Commerce members, Hotel and Visitors Bureau members, and also include Cal Trans District 5 representatives. The committee meeting will be open to the public and be publicly noticed per state and local noticing	The intent of this BMP is to provide a forum for the public to discuss the City's SWMP, and to provide an advisory body to assist in implementation of the SWMP. By involving members of the community and industry, the Storm Water Management Program can be sustained and supported by others, in addition to the City's efforts. By providing opportunities for community members to discuss areas of concern, information can be relayed to the appropriate City staff members.	The committee shall consist of members of the community, representatives of various stakeholder organizations such as the Surfriders' Foundation, Cal Trans District 5, the Chamber of Commerce, the Hotel and Visitors Bureau, Coastal HOAs and other representative organizations who may apply. The committee will meet quarterly and will advise the City Council on implementation of the SWMP.	City Engineer	X	X	X	X	X	X

STORMWATER POLLUTION PREVENTION PUBLIC PARTICIPATION AND INVOLVEMENT									
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPON-SIBLE DEPART-MENT	BMP IMPLEMENTATI ON TIMETABLE (YEAR)				
					1	2	3	4	5
	requirements. The Water Pollution Prevention Committee and the Planning Commission shall be an advisory committee to the City Council and subject to the Brown Act, providing for public comment period.								
<b>BMP 2.4</b>	The City will commit to further assessing community –based social marketing strategies.	The intent of this BMP is to demonstrate that behavior change is achieved through public awareness delivered at the community level.	The City will track: <ul style="list-style-type: none"> <li>• Number of brochures given out</li> <li>• Number of workshops held</li> <li>• Number of attendees at workshops.</li> </ul>	City Engineer			X	X	X

## **ILLICIT DISCHARGE DETECTION AND ELIMINATION**

This control measure of the Storm Water Management Program is intended to reduce pollutants in stormwater runoff to receiving waters. It requires the development and implementation of a system to identify and eliminate sources of illicit discharges and illicit dumping. The program depends on a number of partners, including the community and other local agencies.

An illicit discharge is defined as any discharge to the municipal storm sewer system that is not composed entirely of stormwater, except for discharges authorized by an NPDES permit. Illicit discharges may enter the storm sewer system through either (1) direct connections (accidental or deliberate connections to storm sewers), or (2) indirect connections (i.e., filtering into storm sewers from cracked wastewater pipes, spills draining into storm sewer inlets, or waste waters or materials deliberately dumped into storm sewers). Discharge sources must be controlled and illicit behavior prevented.

### ***Objectives and Requirements***

- Control illicit discharges by conducting field surveys and investigations of the storm sewer system to identify and eliminate illicit connections and discharges;
- Prevent improper disposal of waste through public education and provide appropriate waste material disposal options and incentives;
- Contain and clean-up accidental spills using proper clean-up and disposal materials and methods.

To meet these objectives, the requirements of the Illicit Discharge Detection and Elimination component of the Storm Water Management Program are to:

- Develop a storm sewer map that shows the location of all outfalls and the names and locations of all waters that receive discharges from the outfalls;
- Develop enforceable means to prohibit non-stormwater discharges (i.e., an ordinance or other regulatory mechanism);
- Develop a city-wide plan to detect and address non-stormwater discharges;
- Educate the general public, businesses, and public employees about the hazards (and legal consequences) of illicit discharges.

The following table of discharges may be exempt from regulations unless they are determined to be a significant source of pollution or a nuisance.

**Table 1.5: Non- Storm Water Discharges**

Allowable Non-Storm Water Discharges	Discharge Management Plan
Water Line Flushing/potable water discharge	Normal operations and maintenance of the city's water distribution system require periodic flushing of lines, draining of tanks, backwashing of wells and flushing of fire hydrants. In performing these operations, the city will comply with the RWQCB's General NPDES Permit for Discharges with Low Threat to Water Quality.
Irrigation Water/Landscape Irrigation/Lawn Watering	The City Water Conservation Ordinance prohibits excessive gutter runoff from outdoor irrigation. City staff will respond to reports of violations and cite property owners who are found to be discharging excessive and/or polluted runoff.
Springs/Rising Groundwater/Uncontaminated Groundwater Infiltrations to Separate Storm Sewers	Although the City has areas of high groundwater, no instances of contaminated groundwater have been noted. Groundwater, when necessary, is directed to drainage swales or other appropriate facilities where erosion and accompanying sediment problems can be avoided.
Diverted Stream Flows	The City does not allow the diversion of stream flows unless properly evaluated and mitigated through the environmental review process.
Water from Crawl Space Pumps/Footing Drains/Foundation Drains	Water that is pumped from beneath buildings may be contaminated by sewage, oil, grease or other pollutants common to basements and parking garages. Discharges from these pumps cannot be connected to a public underground storm sewer system and are therefore discharged to a location subject to discovery, citation and clean-up by City inspectors.
Individual Residential Car Washing	The City Water Conservation Ordinance requires that washing of vehicles, boats, etc. must be attended and have hand-controlled water devices, typically including spring-loaded shut-off nozzles.
Uncontaminated Pumped Groundwater	Pumping of underground water requires an NPDES permit
Dechlorinated Swimming Pool Discharges	City ordinances require that swimming pool water must be discharged to the sanitary sewer system.
Flows from Riparian Habitats and Wetlands	The City restricts access to habitat areas in order to prevent contamination by human activity. Possible contamination by natural causes is currently under study.
Air Conditioning Condensation	The City required the correction of a condition that discharges contaminated AC condensate to the city storm sewer system.

Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants.

**Activities Performed in 2007-2008:**

- Septic tank investigation;
- Video inspection of all sewers adjacent to the beach;
- Relining of the sewer pipe between Pomeroy and Main (There was no ruptured pipe);
- Potholing and replacement of a section of sewer on the 100 block of Stimson Avenue;
- Proposition 50 Clean Beaches Grant to do a scientific ID Source Tracking Study: \$660,000.

**Awards:**

- The City's Wastewater Treatment Plant has received Project of the Year awards from the American Society of Civil Engineers, the American Public Works Association, and the California Water Environmental Association.

**ILLCIT DISCHARGE DETECTION AND ELIMINATION (IDDE)**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 3.1</b>	The City will prepare a Storm Sewer System Map to include locations of all inlet and outlet structures as well as the location, size and type of underground pipelines.	The intent of this BMP is to create a storm sewer system map that will assist the City in identifying outfalls with dry weather flows and other illicit discharges that need monitoring or investigation. It is also essential for maintenance and long-term planning of the storm sewer system.	The City will complete the Storm Sewer Systems Map by the end of year 2.	City Engineer		X	X	X	X
<b>BMP 3.2</b>	The City will video inspect all storm drains within the right of way and easements for illicit connections.	The intent of this BMP is to determine if poor infrastructure conditions in older sections of the City or outdated building codes may have resulted in the direct connection of waste water pipes to the storm sewer system, which must be removed or rerouted. Other connections may have been established illegally and could be pollutants of concern into the City's storm sewer system.	Separate the City into five zones based on age of storm drain infrastructure. The City will video inspect one zone each year for illicit connections and damaged or deteriorating pipe. Require illicit connections to be removed or rerouted in accordance with Municipal Code Section 13.14.210.	Public Works	X	X	X	X	X
<b>BMP 3.3</b>	The City will update Title 13 of the Municipal Code to refine the definition of illicit discharges and enforcement provisions. Code provisions will address wash down of hard surfaces, discharge of material other than clean water onto public property, clean-up of accidental spills and other discharges of contaminants into	The City will adopt an ordinance updating Title 13 of the Municipal Code that provides a broader description of what is an allowable discharge and what is an illicit discharge. The ordinance updating Title 13 of the Municipal Code will site appropriate sanctions for violators.	The City will develop a revised ordinance in the first year, including public hearings and adoption by the City Council.	City Engineer	X	X	X		

ILLCIT DISCHARGE DETECTION AND ELIMINATION (IDDE)										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
	the storm drain system, including non-stormwater discharges included in Table 1.5 of this document.									
<b>BMP 3.4</b>	The City will conduct field surveys and inspections to identify illicit discharges of restaurant grease traps and other possible illicit discharges of waste to surface drainage.	The intent of this BMP is to ensure compliance by restaurant owners and managers to protect the stormwater system and to dispose properly of pollutants of concern.	The City will inspect 20 percent of restaurants located in the City each year. Citations will be issued to businesses illicitly discharging grease or other pollutants of concern in storm sewer inlets or to surface drainage areas.	Public Works/Wastewater		X	X	X	X	
<b>BMP 3.5</b>	The City will conduct inspections of automobile servicing businesses for illicit discharges.	The intention of this BMP is to ensure compliance by automobile service owners and managers to protect the stormwater system and to dispose properly of pollutants of concern.	The City will inspect 20 percent of automobile service businesses in the City each year. Citations will be issued to businesses violating discharge requirements.	City Engineer		X	X	X	X	
<b>BMP 3.6</b>	The City will conduct inspections of parking lots over 10,000 square feet in area or providing over 25 parking spaces for proper disposal of pollutants of concern.	The intent of this BMP to ensure compliance by parking lot owners and managers that surface pollutants of concern are being properly removed and disposed of.	The City will inspect all parking lots that meet the BMP criteria each year.	Public Works		X	X	X	X	
<b>BMP 3.7</b>	The City will revise the current complaint tracking system to identify illicit discharges reported by the public. The City will also track reports of illicit discharges	The City responds to 100% of all requests for service (complaints) from the public. The City shall respond to 100% of all illicit discharge complaints.	The hotline and the existing Comcate complaint tracking system will be implemented within the first year. The City routinely tracks all requests for service (complaints) until a resolution is	City Engineer		X	X	X	X	

ILLCIT DISCHARGE DETECTION AND ELIMINATION (IDDE)										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
	reported on the stormwater hotline.		reached. This system will be used for stormwater requests for service. Responses to hotline and Web Site illicit discharge complaints will be logged into the Comcate system and tracked until resolved.							
<b>BMP 3.8</b>	The City will provide public education regarding the importance of reporting illicit discharges.	The intent of this BMP is to ensure that the public is aware of the different types of illicit discharges that result in pollution of the ocean and to offer them several methods to report such illicit discharges.	The City will create an education program that will consist of mailers to all city water customers in year 1. The City stormwater Web page will also include this information.	City Engineer		X	X	X	X	
<b>BMP 3.9</b>	The City will enhance its hazardous spill protection and control procedures and training to prevent illicit discharge into the storm sewer system.	The intent of this BMP to reduce accidental illicit discharge of hazardous material spills into the storm sewer system.	The City will train all City employees, including public safety personnel and maintenance personnel in Year 1 and in alternate years thereafter.  Training for personnel will include a session on how to recognize and report an illicit discharge. Training for public works personnel will also include training on immediate response to a hazardous spill as well as who to notify in the event of a spill and what additional resources are available in the event local resources are not adequate.	Public Works		X		X		

## **CONSTRUCTION SITE RUNOFF CONTROLS**

This control measure of the Storm Water Management Program is intended to prevent soil and construction debris from entering the stormwater system. Sediment is typically the main pollutant of concern. During a short period of time, construction sites can contribute more sediment to creeks than can be deposited naturally over several decades. The resulting siltation and contribution of other pollutants from construction sites can cause physical, biological and chemical harm to local waterways.

### ***Objectives and Requirements***

- Develop, implement and enforce a program to reduce the amount of pollutants in stormwater runoff from construction activities that result in land disturbance of one acre or more and sites less than one acre that are part of a larger planned development.

To meet this objective, the requirements of the Construction Site Runoff Control component of the Storm Water Management Program are to:

- Develop an ordinance or other regulatory mechanism, requiring the implementation of proper erosion and sediment controls on construction sites, and penalties for non-compliance;
- Require construction site operators to implement appropriate and effective erosion and sediment control BMP's to reduce or eliminate stormwater pollution;
- Require construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality;
- Develop procedures for site plan review of construction plans to address water quality impacts;
- Develop procedures for site inspections and enforcement of control measures;
- Establish procedures for receiving information and/or concerns about construction site practices from the public.

**CONSTRUCTION SITE RUNOFF CONTROL**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 4.1</b>	The City will develop an ordinance specifically addressing all construction site erosion and sediment control with appropriate penalties, including escalating enforcement measures for non-compliance.	The revised Grading Ordinance will provide specific guidelines regarding construction site erosion and sediment control and identify escalating enforcement measures.	<p>The Adoption of the revised Grading Ordinance in year three will provide for the first measurable goal. Following the adoption of the ordinance the City will track:</p> <ul style="list-style-type: none"> <li>• number of contractors and developers informed;</li> <li>• number of informational materials created and distributed.</li> <li>• number of approved BMP's in place in relation to number of informational materials distributed.</li> </ul>	City Engineer/ Community Development			X	X	X
<b>BMP 4.2</b>	The City will develop procedures and a checklist for adequate review of site plans to address erosion and sediment control on construction sites greater than one acre and sites less than one acre that are part of a larger planned development. Review plans to ensure that erosion control measures are in	The intent of this BMP is to require sites greater than one acre and sites less than one acre that are part of a larger planned development to significantly reduce the erosion and sedimentation from construction sites.	<ul style="list-style-type: none"> <li>• The City will track: number of reviews completed;</li> <li>• number of site inspections completed.</li> </ul> <p>The City will provide access to the RWQCB Erosion and Sediment Control Field Manual, Cal Tran's standards, and CASQA BMP handbooks to all employees for review.</p>	City Engineer	X	X	X	X	X

CONSTRUCTION SITE RUNOFF CONTROL										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
	accordance with RWQCB Erosion and Sediment Control Field Manual, Cal Tran's standards, and CASQA BMP handbooks.									
<b>BMP 4.3</b>	The City will inform the community regarding construction site runoff problems and report on actions taken to address construction site issues.	The intent of this BMP is to provide information to supplement the City's efforts to identify and respond to incidents of soil erosion from construction sites. It will also be another way for the public to become involved in the overall program to reduce pollution in local waterways.	The City will provide information to be submitted by the public. The City will track: <ul style="list-style-type: none"> <li>• number of complaints received</li> <li>• number of violations cited</li> <li>• number of corrections certified.</li> </ul>	City Engineer	X	X	X	X	X	
<b>BMP 4.4</b>	The City will implement Guidelines and Standards for Construction Site Runoff. City staff (plan reviewers, etc.) and the public will have access to the RWQCB erosion and sediment control Field Manual, Cal Trans' stormwater Web page, and CASQA's BMP handbooks (print and Web-based) at the Public Works	The intent of this BMP is to reduce pollutants in the City's stormwater runoff by controlling the discharge of pollutants from construction sites.	All construction plans and construction sites are to implement the RWQCB Erosion and Sediment Control Field Manual, including but not limited to: <ul style="list-style-type: none"> <li>• use of good site planning</li> <li>• minimization of soil movement, erosion and sediment control BMP's</li> <li>• good housekeeping practices for recycling and disposal of discarded building materials, concrete</li> </ul>	City Engineer		X	X	X	X	

CONSTRUCTION SITE RUNOFF CONTROL										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
	Department, and on the city's Web site at no charge.		truck washouts, chemicals, litter and sanitary waste at construction sites. The City will track: <ul style="list-style-type: none"> <li>• number of times the public used the manual at the counter</li> <li>• number of hits it receives on the Web site.</li> </ul>							
<b>BMP 4.5</b>	The City will conduct construction Site Inspections on sites greater than one acre and sites less than one acre that are part of a larger planned development.	The intent of this BMP is to reduce the amount of sediment and construction materials from construction sites greater than one acre as well as small subdivisions less than one acre from discharging sediment into a stormwater system.	The City will create a checklist for construction site inspections within 1 year  The City will conduct inspections prior to the wet season to ensure compliance with approved plans, and continue at a <i>minimum</i> of once per month thereafter until the end of the wet season, and every 2 months thereafter. Within 1 year.  The City will create a tracking system to track inspection information and analyze the information each year to improve upon implementation procedures. Within 3 years.	City Engineer	X	X	X	X	X	
					X	X	X	X	X	
							X	X	X	
<b>BMP 4.6</b>	The City's Public Works Department will review discretionary projects submitted for impacts to water quality and	The intentions of this BMP are to determine if a project is considered to have a potentially significant impact to either water quality or hydrology. The project proponent will be required	Track the number of discretionary reviews conducted by the Public Works Department.	Public Works	X	X	X	X	X	

CONSTRUCTION SITE RUNOFF CONTROL										
BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
	hydrology.	to mitigate impacts to the greatest extent feasible.								
<b>BMP 4.7</b>	The City will inspect construction sites during construction to verify post-construction BMP's are being built pursuant to the approved plans.	The intent of this BMP is to ensure that the contractor is including the approved BMP's into the project as required to reduce pollutants in stormwater runoff by controlling the discharge of pollutants from construction sites.	Track the number of inspections conducted each year relative to the number of permits issued.	City Engineer			X	X	X	

## **POST-CONSTRUCTION RUNOFF CONTROLS**

This control measure of the Storm Water Management Program focuses on site and design considerations, which are most effective when addressed in the planning and design stages of project development. Effective long-term management and maintenance are critical, so the best design solutions are those with minimum maintenance needs. The goal of this control measure is to integrate basic and practical stormwater management techniques into new development to protect water quality.

### ***Objectives and Requirements***

- Reduce the long-term potential for discharge of pollutants into urban runoff from new development and redevelopment.

To meet this objective, the requirements of the Post-Construction Runoff Control component of the Storm Water Management Program are to:

- Develop an ordinance, or other regulatory framework, requiring the implementation of post-construction runoff controls;
- Develop appropriate structural and non-structural BMP strategies to address post-construction runoff;
- Ensure adequate long-term operation and maintenance of control measures;
- Determine appropriate BMPs and measurable goals to meet these requirements.

## **HYDROMODIFICATION CONTROL AND LOW IMPACT DEVELOPMENT**

### **Hydromodification Control Criteria Management Program**

The City intends to identify the areas where hydromodification control will apply and develop a map showing these areas. Areas not requiring hydromodification control are those areas that directly discharge to the ocean. The map will also indicate that all areas within the City shall use LID and other treatment applications to improve the quality of stormwater that will enter the ocean or other water bodies. For those areas that are subject to hydromodification control criteria, the City intends to develop, within one year, interim hydromodification control criteria equivalent to those described in BMP 5.1. Over the next three to four years, the City will study the Pismo Creek Watershed, compiling information from existing reports and developing permanent hydromodification criteria for those areas.

Hydromodification control will include the following objectives:

- Performance criteria for controlling BMPs and an inspection program to ensure proper long-term functioning;
- Education requirements for appropriate municipal staff on hydromodification control and LID

It is the City's intent that implementation of hydromodification control will meet the goals identified in the City of Santa Maria Enrollment letter from the Central Coast Regional Water Quality Control Board by (1) maximizing infiltration of clean stormwater, and

minimizing runoff volume and rate, (2) protecting riparian areas, wetlands, and their buffer zones, (3) minimizing pollutant loading, and (4) providing long-term watershed protection.

### **Unique Aspects of Pismo Beach Hydromodification Control Strategy**

Pismo Beach is a coastal city with many unique aspects about it that are particularly interesting in regards to hydromodification control. Pismo Beach is in close proximity to the Pacific Ocean and is comprised of impervious asphalt and concrete surfaces between specific properties and ocean outfalls.

Prior to developing any type of hydromodification control requirements, the City of Pismo Beach must evaluate specific hydrologic and geological conditions within the City. These conditions will be evaluated in years 1, 2, and 3 of the SWMP, and the City will begin to develop its own hydromodification requirements in years 4 and 5. Specific concerns to be examined will include, but are not limited to:

- Local high ground water
- Local high bedrock
- Different geologic conditions throughout the City

#### Shell Beach Area

The Shell Beach area of Pismo Beach has many unique aspects of its own. Most of Shell Beach is built out and property owners are now removing homes and rebuilding. Soils tests have determined that these properties have very high ground water, up to two feet below the surface. Shell Beach is also unique in that a majority of the streets do not have curbs and gutters or storm drains to accommodate groundwater and stormwater runoff. The only approved drainage outlet for residential developments are the streets "drainage swale" areas.

#### James Way Area

The James Way area includes the subdivisions located above James Way, on the hillside. This area has high ground water problems that are geologically different than those of Shell Beach. In some cases, there are underground streams just below the street and sidewalk surfaces.

### **Minimize Pollutant Loading**

- Complete Ocean Water Quality Study, compilation and analysis of data from the Proposition 50 Clean Beaches Grant to do a scientific ID Source Tracking Study (\$660,000). The study is anticipated to be complete in 2010.
- Pismo Creek/Edna Valley Watershed Management Plan, completed in March 2009.
- Identify and compile spreadsheet of pollutants of concern within the City and their locations as they arise. Track similarities throughout the City.

### **Provide Long-term Watershed Protection**

- Characterize watershed and future development patterns, per the Pismo Creek Watershed Management Plan.

- Watershed characterization data (soils, streams, basins, riparian areas, effective impervious area (EIA), hydrology), per the Pismo Creek/Edna Valley Watershed Management Plan.

### **Evaluation of Hydromodification Control Criteria Management Program**

- Verify that BMPs are being implemented; create inspection programs.
- Identify areas within the City where these criteria must be met.
- Evaluate long-term trends in receiving water quality.

### **Low Impact Development**

The Central Coast Water Board defines Low Impact Development (LID) as: minimizing or eliminating pollutants in stormwater through natural processes and maintaining pre-development hydrologic characteristics, such as flow patterns, surface retention, and recharge rates. LID is required because traditional development and redevelopment techniques typically cause or threaten to cause pollution problems. The volume and velocity of stormwater discharged from impervious surfaces also cause increased bank erosion and downstream sedimentation, scouring, and channel widening, which significantly impact aquatic ecosystems and degrade water quality.

LID practices reduce urban impacts to receiving waters. This is achieved by:

1. Designing sites (starting with the site layout, and the grading and compaction phases of construction) that:
  - disturb only the smallest area necessary;
  - minimize soil compaction and imperviousness;
  - preserve natural drainage ways, vegetation and buffer zones.
2. Utilize on-site, lot-sized stormwater infiltration techniques that minimize pollutant transport and maximize on-site pollutant treatment.

Retrofit projects that replace impervious surfaces with pervious surfaces, utilize landscaped areas for infiltration and capture rain water for future use will improve an existing developed site to a more natural state.

The Central Coast Regional Water Quality Control Board requires municipalities, via the Municipal General Storm Water Permit, to minimize negative impacts on aquatic ecosystems and degradation of water quality to the maximum extent practicable. Permittees must implement Best Management Practices (BMPs) that reduce pollutants in stormwater runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality.

## **Exemptions**

The following routine maintenance applications are exempt from hydromodification control within the City of Pismo Beach:

- Pipeline trenching and replacement
- Sidewalk installation/repair; rehabilitation of sidewalk
- Repaving of streets
- Road sealing
- Utility installation
- Beach access (elevated stairs) projects
- Normal maintenance of existing infrastructure.

In addition to the above exemptions, the City will also take into consideration, on a case by case basis, projects that may have special circumstances that are unable to meet hydromodification control and LID requirements. Project circumstances may include (but are not limited to): (1) high ground water table, (2) existing soil conditions, (3) lack of potential sediment transport to a sensitive habitat. The exemptions do not apply to new subdivisions or major reconstruction projects where significant repair or replacement is proposed.

## **Development Review**

As a part of the development review process in preparation for issuance of grading permits and other discretionary permits, the City of Pismo Beach will provide assistance in the form of reference to available project files for examples of good site design, including LID techniques. The City has imposed a requirement for “no net increase” in runoff flows at peak storm times. This requirement is implemented through design and construction of on-site stormwater detention basins and other stormwater conveyance systems. On-site detention basins maintain the goal of “no net increase” in peak stormwater flows above historical pre-development levels, and they also constitute a powerful interception facility to prevent discharges of potential pollutants to receiving waters. The City of Pismo Beach will continue to implement this program.

If the applicant is able to prove through a soils report, calculations, and other pertinent information that they are not able to achieve HM/LID for their project, the project may be classified as exempt from HM/LID requirements. The methods proposed shall be approved by the City Engineer and Community Development Director, and consistent with the requirements for the watershed where the project is located.

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 5.1</b>	The City, with enrollment into the SWMP, will establish Planning application requirements and standards for implementing the interim HM control criteria within the first year of enrollment. The City will, within 1 year of enrollment, have adequate permitting procedures to impose conditions of approval, or other enforceable mechanisms, to implement quantifiable measures (numeric criteria) for interim hydromodification control. The City will develop penalty provisions for noncompliance with design, operation and maintenance or construction requirements by the end of year 1 and summarize escalating enforcement actions. These requirements and standards will apply to projects <i>not</i> yet deemed complete when the City adopts interim hydromodification control criteria and include site plans, erosion control	The intent of the BMP is to protect the Pismo Creek Watershed from further erosion by human activity.	The measurable goal will be adoption of the Interim Hydromodification Control Criteria, establishment of the implementation plan, and the creation of development standards with enforcement activities.	Community Development Director/City Engineer	X	X	X	X	X

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	<p>plans, and grading plans within the HM control area that are not exempt by other criteria. With adoption of the new permanent HM control criteria, an ordinance provision will be prepared that will formalize the final standards and requirements of the HM control criteria during the planning process and facilitate the enforcement and maintenance of those facilities in the long term. The City will develop a points system for reviewing site plans similar to City of Salinas (a Phase I community).</p> <p>The City will choose one of the following three options for developing interim hydromodification control criteria:  <b>Option 1:</b>                      The proposed criteria may include the following types of requirements, which provide a high degree of assurance of effective hydromodification control without regard to the nuances of individual watersheds:</p>								

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	<ul style="list-style-type: none"> <li>• For new development and redevelopment projects, Effective Impervious Area shall be maintained at less than five percent (5%) of total project area.</li> <li>• For new development and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, the post-construction runoff hydrographs, for a range of events with return periods from 1-year to 10-years.</li> <li>• For projects whose disturbed project area exceeds two acres, preserve the pre-development drainage density (miles of stream length per square mile of watershed) for all drainage areas serving a first order stream or larger, and ensure that post-</li> </ul>								

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	<p>project time of concentration is equal or greater than pre-project time of concentration.</p> <p>OR</p> <p>“As effective as” means the City may use other approaches (including other variables or numeric criteria, different than Option 1 criteria, appropriate for the watershed) to control hydromodification and protect the biological and physical integrity of the City’s watershed. Other acceptable approaches to develop interim criteria that are as effective as Option 1 include:</p> <p><b>Option 2:</b></p> <ul style="list-style-type: none"> <li>• Adopt and implement hydromodification control criteria developed by another local municipality and approved by the Water Boards, such as the criteria the Water Board adopted for the City of Salinas, as interim control criteria.</li> </ul> <p>OR</p> <p><b>Option 3:</b></p>								

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	<p>Use the following methodology to develop interim flow control and infiltration criteria:</p> <ul style="list-style-type: none"> <li>• Identify a range of runoff flow rates for which post-project runoff flow rates and durations shall not exceed pre-project runoff rate and durations, where the increased discharge rates and durations will result in off-site erosion or other significant adverse impacts to beneficial uses.</li> <li>• Establish numeric criteria for development projects to maximize infiltration on-site and approximate natural infiltration levels to the maximum extent practicable and to effectively implement applicable low impact development strategies.</li> <li>• Identify the projects, including project type, size and location, to which the City will apply the interim control</li> </ul>								

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	<p>criteria. The projects to which the City will apply the interim control criteria will include all those projects that will cause off site erosion or other significant adverse impacts to beneficial uses.</p> <ul style="list-style-type: none"> <li>• Identify methods to be used by project proponents to demonstrate compliance with the interim discharge rate and duration criteria, including continuous simulation of the entire rainfall record.</li> <li>• Identify methods to be used by project proponents to demonstrate compliance with the interim infiltration criteria, including analysis of site imperviousness.</li> </ul> <p>Should the RWQCB approve and alternate method to establishing hydromodification control criteria through the Low Impact Development</p>								

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	<p>Center, the City may choose to use this method of hydromodification control criteria as an alternate option.</p> <p>The City will submit their proposed interim hydromodification control criteria (numeric and non-numeric) , no less that three (3) weeks prior to 365 days after enrollment under the General Permit, to provide Water Board staff adequate time to review the proposed criteria.</p> <p>“The Central Coast Water Board Executive Officer will notify the City and other interested persons of the acceptability of the City’s proposed interim hydromodification control criteria for new development. The Water Board shall provide interested persons the opportunity for comment and a hearing before the Water Board staff’s determination, prior to Water Board action being final.”</p>								

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 5.2</b>	The City will develop a review process of structural and non-structural BMPs to ensure that LID principles are incorporated into site and grading plans. The LID manual currently under development by San Luis Obispo County Department of Public Works will provide a basis for reviewing applications to assure that LID principles are contained within new development projects.	The intent of this BMP is to establish effective controls for post-construction site runoff. Proper planning and design of a building site can include features that reduce the amount of runoff after construction is completed.	The City will track: <ul style="list-style-type: none"> <li>• number of projects with approved structural and non-structural BMPs in place</li> <li>• number of applications that are submitted with structural and non-structural BMPs on the first submittal.</li> </ul> Within 4 years.	City Engineer				X	X
<b>BMP 5.3</b>	The City will include post-construction stormwater management in the development review process. Applications shall be deemed complete if they include appropriate post-construction BMP selection, sizing and silting.	The intent of this BMP is to reduce pollutants in stormwater runoff by checking for good site design and post – construction stormwater management during the development review process.	The City will add post- construction stormwater management to development review by the end of year 1.	City Engineer	X	X	X	X	X
<b>BMP 5.4</b>	The City will develop interim HM control criteria and Low Impact Development public education and outreach for project applicants, contractors, developers, architects, property owners, and other interested parties.	The intent of this BMP is to create interim HM control criteria and LID brochures for public distribution for educational purposes. It is also to educate the public on HM and LID through workshops and presentations. The City will place the brochure and other information on the City Web Site.	The City will track: <ul style="list-style-type: none"> <li>• number of LID brochures distributed</li> <li>• number of workshops and presentation held</li> <li>• number in attendance</li> <li>• number of Web site hits for the link</li> <li>• how many applications</li> </ul>	City Engineer		X	X	X	X

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	The City will commit to educating municipal staff, including plan reviewers and inspectors, on LID and interim HM control criteria requirements within the first 3 months of enrollment. The City will prepare a public relations program for interim HM control criteria and LID within the first year of enrollment.	The intent of this BMP is to educate plan review staff and inspectors on HM control and LID through various media outlets, such as brochures, the City Web Site, workshops, and presentations.	include post-construction runoff controls in the first submittal  The City will place the brochure on the City Web Site, and at the public counter for the public to take with them. Within two years.  Beginning in year 1.		X		X		X
<b>BMP 5.5</b>	The City will maintain the installation of a drain inlet filter on Main Street near the beach (part of the Promenade IV construction)	The intent of this BMP is to reduce sediment from reaching the beach and ocean.	The City will track: <ul style="list-style-type: none"> <li>the number of times per year filter is cleaned</li> <li>how much material is collected per year.</li> </ul>	Public Works	X	X	X	X	X
<b>BMP 5.6</b>	The City will conduct post-construction site inspections for stormwater management for sites in excess of one acre, and sites that are less than one acre and part of a larger common planned development. The inspections will include development and redevelopment projects that are in excess of 5,000 square feet and contain greater than 5 percent impervious area.	The intent of this BMP is to conduct inspections twice a year, prior to wet season and at the beginning of summer. The City will analyze all projects in the interim HM control criteria areas that use LID and other measures to maintain an Effective Impervious Area of less than 5 percent of the total project area.	The City will create a form to track: <ul style="list-style-type: none"> <li>inspections</li> <li>inspection results</li> <li>the percentage of passing inspections per year.</li> </ul> The City will evaluate in year 5 if five years is a sufficient time frame for monitoring long-term effectiveness of post-construction BMPs.	City Engineer			X	X	X

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
	The City will establish an annual inspection program of post construction BMPs for the term of the permit.									
<b>BMP 5.7</b>	The City will continue to enforce the current zoning ordinance with existing riparian buffer and wetland zones and require that developers of new subdivisions study expanding buffer zones during the subdivision process (distances vary, minimum of 30 feet) and wetland buffer zones.	The objective of this BMP is to reduce pollutants in the riparian and wetlands areas by increasing the buffer zones, to the maximum extent practicable. The City will revise the current Zoning Ordinance within a year of completion of the City's long term watershed plan for Pismo Creek.	The City will provide enforcement of the current Zoning Ordinance Chapter 17.24.120. to the City will require projects to protect riparian and wetland areas by requiring a buffer zone. The proposed buffer zone will be analyzed during the subdivision review process, and expanded as required. Following completion of the long term watershed planning effort, the Zoning Ordinance will be revised within one year.	City Engineer	X	X	X	X	X	
<b>BMP 5.8</b>	The City will work with SLO County to develop and implement a Low Impact Development (LID) Design Standards Manual.	The intention of this BMP is to reduce pollutants in stormwater runoff by implementing Low Impact Development Design Standards in San Luis Obispo County.	The City will develop and publish an LID Design Manual. The LID Design Manual will be in compliance with design standards applying to all new projects one acre or more in size and smaller projects that develop; or redevelop 5,000 square feet or larger of impervious area. The LID Design Manual is required to provide design specifications and guidance to help project proponents achieve compliance	City Engineer				X		

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
			with the SWMP.  • The City will provide a copy of the LID Design Manual on the City Web site.							X
<b>BMP 5.9</b>	The City will develop a longterm watershed management plan based on the appropriate recommendations contained in the March 2009 Pismo Creek/Edna Valley Watershed Management Plan prepared by Central Coast Salmon Enhancement Group. Within the first year the City will develop an implementation schedule as part of the plan. The City will coordinate with other municipalities, landowners, and other users and Central Coast Salmon Enhancement to implement the plan.	This BMP will provide a long-term plan to guide the improvement of the Pismo Creek/Edna Valley Watershed Plan.	The goal is to minimize pollutant loading and reduce the effective impervious area in the watershed. The City will integrate all stormwater MCMs into all aspects of land use planning and development. By the end of year 1, the City will develop an implementation schedule for long-term watershed planning.	City Engineer	X	X	X	X	X	
<b>BMP 5.10</b>	The City will require developers to incorporate LID measures identified in the SLO County LID Design Manual upon completion until such time as the City manual is adopted. Some of these LID measures are:	The intent of this BMP is to implement HM control/LID in the design phase of a project and to reduce pollutants in stormwater by implementing these processes.	The goal of this BMP is to minimize pollutant loading. The City will track: <ul style="list-style-type: none"> <li>• number of trees planted in completed developments per year;</li> <li>• the square feet of vegetative parking islands installed</li> </ul>	City Engineer			X	X	X	

**POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	1)Require cluster development when appropriate 2)Maximize trees and vegetation 3)Vegetate parking lot islands 4)Protect slopes from erosion by conveying runoff safely from tops of slopes, utilizing natural drainages, stabilizing permanent channel crossings, vegetating slopes with native vegetation 5)Properly design outdoor material storage areas to enclose materials or provide secondary containment, pave storage areas, and roof storage areas.		per year.						

## **GOOD HOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

This control measure of the Storm Water Management Program is intended to assure that the City's delivery of public services occur in a manner protective of stormwater quality.

### ***Objectives and Requirements***

- Reduce the amount and type of pollutants that are discharged from streets, parking lots, material storage areas and vehicle maintenance yards into the storm sewer system.

To meet this objective, the requirements of the Pollution Prevention/Good Housekeeping for Municipal Operations component of the Storm Water Management Program are to:

- Develop and implement an operation and maintenance program for the City to prevent or reduce polluted runoff from municipal operations;
- Provide employee training on how to incorporate pollution prevention and good housekeeping into all municipal operations such as park and open space maintenance, fleet and building maintenance, road maintenance and storm drain maintenance;
- Determine the appropriate BMPs and measurable goals to meet these requirements.

### **Corporation/Maintenance Yards within the City**

- Public Works Yard, 550 Frady Lane  
(see Appendix A for large scale map)

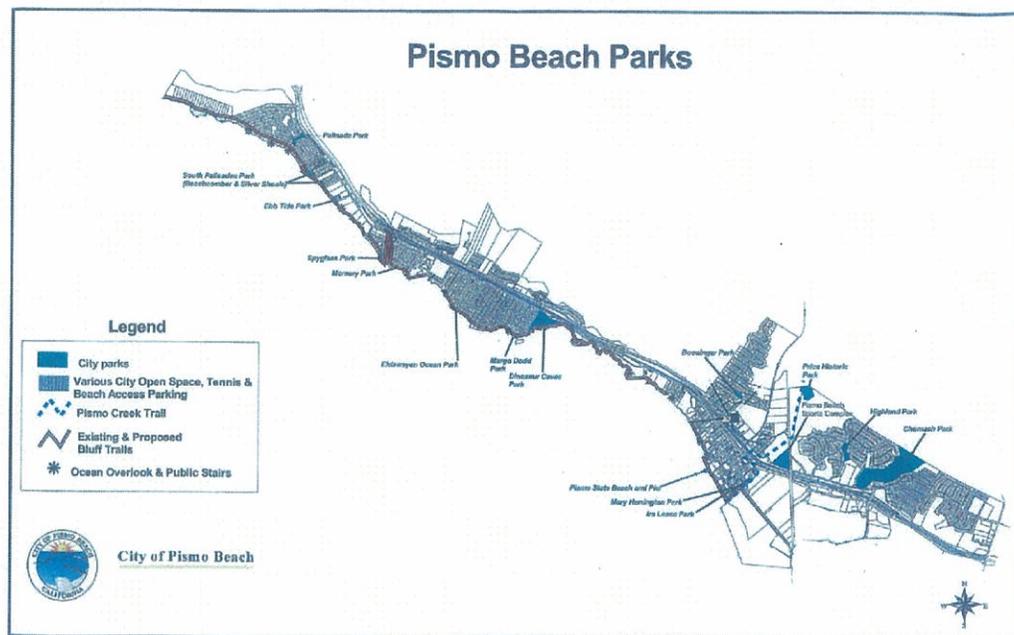
Figure 1.3 City of Pismo Beach Corporation Yard



## Public Parks within the City

- Spyglass Park
- Margo Dodd Park
- Chumash Park
- Dinosaur Caves Park
- Highland Park
- Mary Harrington Park
- Ira Lease Park
- Boosinger Park
- Ocean Park
- Memory Park
- Palisades Park
- Sports Complex (Blair Field, Ford Field, Rooker Field)  
(see Appendix A for large scale map)

Figure 1.4 Pismo Beach Parks



**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 6.1</b>	<p>The City will implement an employee training program for municipal operations including, but not limited to the following operations:</p> <ul style="list-style-type: none"> <li>• road maintenance</li> <li>• park and open space maintenance</li> <li>• fleet and building maintenance</li> <li>• water and wastewater operations</li> <li>• stormwater system maintenance</li> </ul> <p>The training program will include existing training for proper hazardous materials storage and provisions for new employee training. This program will be included in the City's on-going annual employee training program.</p>	The objective is to reduce pollutants in stormwater runoff by preventing the discharge of pollutants from municipal operations.	<ol style="list-style-type: none"> <li>1. The goal will be accomplished upon completion of the employee training program for Public Works staff, covering how to incorporate pollution prevention and good housekeeping into municipal operations.</li> <li>2. The City will provide stormwater pollution prevention refresher training to each municipal operations employee on an annual basis.</li> <li>3. The City will determine the effectiveness of the training, using scored quizzes and evaluations. Verify that all employees were trained.</li> </ol>	City Engineer/ Public Works Director		X	X	X	X
<b>BMP 6.2</b>	<p>The City will develop and implement maintenance procedures for Municipal Operations including, but not limited to :</p> <p>a. Sidewalks,</p>	The objective of this BMP is for the City to develop procedures and guidelines for implementing control measures for all of city-owned and maintained facilities in order to reduce polluted runoff to local water bodies.	<p>The City will track:</p> <ul style="list-style-type: none"> <li>• amount of trash collected</li> <li>• amount of green waste collected</li> <li>• amount of automotive and equipment fluid recycled.</li> </ul>	City Engineer			X	X	X

**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	plazas, parking lots b. Municipal landscaped areas (parks, medians, landscaping) c. Municipal detention and retention basins d. Public roads and bridges e. Public works corporation yard f. Procedures to prevent pollution during bridge maintenance from entering storm drains g. Procedures to properly remove collected waste (i.e., wash water, accumulated sediments, floatables, and debris. h. Procedures for proper storage of hazardous materials		The City will develop procedures by the end of year 3.						
<b>BMP 6.3</b>	The City will continue its existing Street Sweeping Program: <ul style="list-style-type: none"> <li>• M,W,F, weekly: pier parking lot and Addie St. parking lot</li> <li>• M, weekly: All streets west of Hwy101 between Addie and Bay, Dolliver and Cypress</li> <li>• W,F, weekly: Dolliver from</li> </ul>	The intent of this BMP is to reduce the amount of pollutants in stormwater runoff from city streets.	1. The City will sweep city owned parking lots three times a week. 2. The City will sweep all city streets with and without storm drains, curb, and gutter on a monthly basis or sooner. Identify heavily soiled areas or other areas that require sweeping more	City Engineer	X	X	X	X	X

**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	Price to Pismo Creek, Price from Dolliver to Hwy101, Wadsworth from Bello to Cypress, Pomeroy from Price to pier parking lot, Hinds from Bello to pier parking lot, Cypress from Addie to Main, Ocean View from Price to Dolliver. <ul style="list-style-type: none"> <li>• 1<sup>st</sup> Fri, every other month: Shell Beach Rd. (Dolliver to El Portal). Includes Indio, El Portal, Prado, Bonita, Encanto, Topaz, El Dorado, Florin, Hermosa, Shoreline, Terrace, Spyglass, Solano, Franklin, Wilmar, Harbor View, Sea Ridge, Beachcomber, Ebb Tide, Silver Shoals.</li> <li>• 2<sup>nd</sup> Fri, every other month: Oak Park Heights, Oak Park Rd, James Wy, 4<sup>th</sup> St, Pacific Estates Subdivision, Pismo Oaks Subdivision, Mid Coast Land Co, Ventana Del Mar Subdivision, Sea</li> </ul>		frequently. 3. The City will track the number of miles swept and the amount of material collected annually.						

**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)					
					1	2	3	4	5	
	<p>View Estates, Vista Pacifica.</p> <ul style="list-style-type: none"> <li>• 3<sup>rd</sup> Fri, every other month: Shell Beach area, Vista Del Mar to Cliff, Shell Beach Rd to Ocean Blvd, Seaciff, Coburn, Paddock, Naomi, Baker, Ruby Ct.</li> <li>• 4<sup>th</sup> Fri, every other month: Pismo Heights, all streets east of Hwy101 between railroad tracks and Wadsworth/ Longview.</li> </ul>									
<b>BMP 6.4</b>	The City will implement Storm Sewer Inspection and Maintenance Procedures and Schedules.	The purpose of this BMP is to reduce the amount of pollutants in stormwater runoff by inspecting and properly maintaining the storm sewer.	The City will implement routine inspection and cleaning procedures and schedules for storm drain catch basins and other components of the storm sewer that require cleaning at least twice a year on an ongoing basis. The City's inspection and cleanings shall occur prior to the wet season and toward the end of wet season. Problem areas of debris accumulation will be re-inspected during the wet season.	Public Works		X	X	X	X	
<b>BMP 6.5</b>	The City will develop a Storm Sewer Atlas	This BMP is a part of a long-term strategy to address urban runoff. A storm sewer atlas will target improvements and	The City will complete a Storm Sewer Atlas within three years.	City Engineer	X	X	X			

**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
		upgrades needed and provide an opportunity to try out new technologies as they are developed.							
<b>BMP 6.6</b>	The City will provide opportunities for the proper disposal of trash and hazardous waste.	The intent of this BMP is to make proper disposal of household hazardous waste and trash easier by providing more accessible disposal locations (community hazardous waste/ recycling days). By providing more trash receptacles in public areas, it will make disposal of trash easier for visitors to the City.	The City will increase the number of new trash receptacles installed within the City and the number of household clean-up days.	City Engineer	X	X	X	X	X
<b>BMP 6.7</b>	The City will continue to provide dog-mess bags (mutt mitts) to the public at various locations on the beach and in parks.	The objective of this BMP is to provide both a reminder and an easy method for citizens to clean up pet waste.	The City will track number of mutt-mitts placed throughout the City each year.	Public Works/Parks	X	X	X	X	X
<b>BMP 6.8</b>	The City will continue to place and maintain dome lids on trash receptacles on the pier and the beach.	The intent of this BMP is to prevent birds from picking trash out of receptacles, possibly resulting in less fecal contamination of the pier and beach areas.	The City will track the estimated number of birds in the area per year.	Public Works	X	X	X	X	X
<b>BMP 6.9</b>	The City will continue to contract out to provide Highway 101 on and off ramp trash pick up once a month	The intent of this BMP is to reduce the amount of trash blown and washed down to the ocean via storm drains and gutters.	The City will estimate amount of trash collected.	Public Works	X	X	X	X	X
<b>BMP 6.10</b>	The City will continue to employ Achievement House to provide trash pick-up services by hand throughout the City.	The objection of this BMP is to reduce the amount of trash blown and washed down to the ocean via storm drains and gutters.	The City will estimate the amount of trash collected.	Public Works	X	X	X	X	X

**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
<b>BMP 6.11</b>	<p>The City will provide, during the five-year initial permit period, an annual report prepared by Public Works staff and approved by City Council that describes the City's performance during the prior year as it relates to the Storm Water Management Program.</p> <p>Data compiled for each measurable goal will be compiled and reviewed. Significant variance from target dates will be assessed and discussed in annual reports to the RWQCB. Feedback from staff, permittee, developers, stakeholders, etc., will be used to modify BMPs or measurable goals, as appropriate. The basis for any changes will be included in the following annual report.</p> <p>The report shall summarize the activities performed throughout the previous reporting period (fiscal year) and must include:</p> <ul style="list-style-type: none"> <li>• Status and</li> </ul>			City Engineer	X	X	X	X	X

**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	<p>compliance with permit conditions</p> <ul style="list-style-type: none"> <li>• Assessment of the appropriateness and effectiveness of the identified BMPs</li> <li>• Status of the identified measurable goals</li> <li>• Summary of stormwater activities the permittee plans to undertake during next reporting period</li> <li>• Any proposed changes to SWMP along with justification of why they are necessary</li> <li>• Results of information collected and analyzed during the reporting period</li> <li>• Changes of the person or persons implementing and coordinating the SWMP.</li> </ul> <p>Pursuant to the General Permit, the City will retain stormwater records for five years. Each department responsible for implementing substantial elements of the</p>								

**GOODHOUSEKEEPING AND POLLUTION PREVENTION FOR MUNICIPAL OPERATIONS**

BMP ID#	BEST MANAGEMENT PRACTICES (BMPS)	BMP INTENT	MEASURABLE GOALS AND OUTCOMES	RESPONSIBLE DEPARTMENT	BMP IMPLEMENTATION TIMETABLE (YEAR)				
					1	2	3	4	5
	SWMP will be instructed to keep their records for five years. These records will be the source of compiled data contained in the annual report.								

## **MONITORING AND REPORTING**

### ***Monitoring and Reporting Requirements***

The purpose of monitoring and reporting is to document successful implementation of the SWMP. The draft general permit requires annual reports to be submitted by September 15th of each year, or as otherwise required by the RWQCB Executive Officer. The City intends these annual reports to cover the fiscal year immediately prior to the reporting period.

The City will monitor the implementation of its programs and the overall effectiveness by measuring and reporting the data discussed in the individual Minimum Control Measure sections discussed above.

The City will regularly evaluate both current conditions and BMP effectiveness, and as appropriate, update BMPs and measurable goals to achieve the objective of meeting water quality standards to the Maximum Extent Practicable. If, after implementing the minimum control measures there is still a water quality impairment associated with discharges from the City's MS4, it may be necessary to expand or better tailor existing BMPs.

### ***Form and Content of Annual Report***

Guidance had not yet been provided as to the specific form and content of the annual report. Because the City is required to keep records for five years and due to the intent of the reporting requirements, the annual report will focus on a summary of progress and discuss any changes to the SWMP to be implemented in meeting the Maximum Extent Practicable standard. The focus will be to clearly show progress, to discuss program adjustments, and respond to challenges in implementing the SWMP.

### ***Monitoring***

"Inspections, as a form of visual monitoring, are important to a stormwater program. Inspections of stormwater runoff and infrastructure (such as drop inlets, basins, and gutters) can say a lot about the effectiveness and needs of a stormwater program. Through inspections, non-stormwater discharges can be discovered and subsequently stopped, maintenance needs can be identified, and visual pollutants and erosion problems can be detected. Inspections of facilities are also important for public education and outreach, to ensure proper BMP implementation and maintenance, and to detect non-stormwater discharges."

"More specifically, the objectives of a monitoring program may include:

- Assessing compliance with this General Permit
- Measuring and improving the effectiveness of the SWMP
- Characterizing stormwater discharges
- Identifying source of pollutants

- Assessing the overall health and evaluating long-term trends in receiving water quality; and
- Assessing the chemical (exempt) physical, and biological impacts on receiving waters resulting from urban runoff"

### ***Reporting***

The City will provide, during the five-year initial permit period, an annual report prepared by Public Works staff and approved by City Council that describes the City's performance during the prior year as it relates to the Storm Water Management Program.

Data compiled for each measurable goal will be compiled and reviewed. Significant variance from target dates will be assessed and discussed in annual reports to the RWQCB. Feedback from staff, permittee, developers, stakeholders, etc., will be used to modify BMPs or measurable goals, as appropriate. The basis for any changes will be included in the following annual report.

The report shall summarize the activities performed throughout the previous reporting period (fiscal year) and must include:

1. Status and compliance with permit conditions;
2. Assessment of the appropriateness and effectiveness of the identified BMPs;
3. Status of the identified measurable goals;
4. Summary of stormwater activities the permittee plans to undertake during next reporting period;
5. Any proposed changes to SWMP along with justification of why they are necessary;
6. Results of information collected and analyzed during the reporting period; and
7. Changes of the person or persons implementing and coordinating the SWMP.

Pursuant to the General Permit, the City will retain stormwater records for five years. Each department responsible for implementing substantial elements of the SWMP will be instructed to keep their records for five years. These records will be the source of compiled data contained in the annual report.

## ***STORM WATER MANAGEMENT PROGRAM DEVELOPMENT AND ADMINISTRATION***

### **SWMP Program Administration: Staff and Budget**

#### **Staff**

The City of Pismo Beach has the task of achieving compliance with federal, state and local environmental regulations. The two key City departments involved in the implementation of the SWMP are the Department of Public Works and the Community Development Department (Building and Planning).

The City has a representative from each of the two departments, one of which is the

NPDES Coordinator. Their task is to implement the City's SWMP in compliance with the NPDES Phase II stormwater regulations and the MS4 General Permit. The representatives seek to protect and improve water quality in the City of Pismo Beach by implementing stormwater pollution prevention BMPs. Teamwork among City departments enables the City to consider stormwater quality in all aspects of the City's activities.

### **Budget**

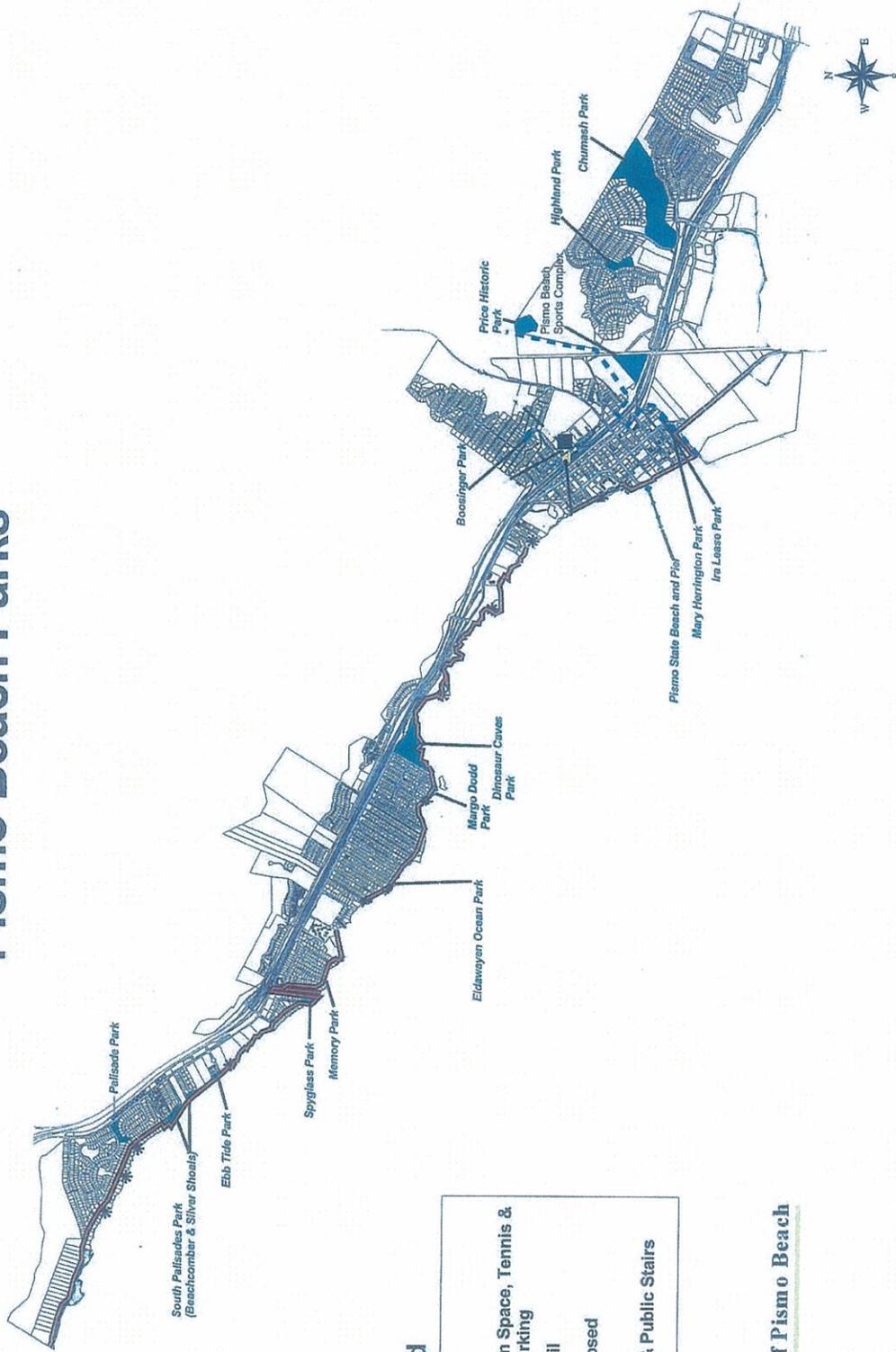
In 2003, the Regional Water Quality Control Board conditioned Walter Cavanaugh and Gary Grossman to deposit \$50,000 into an account with the City of Pismo Beach to be utilized for implementation, including monitoring, of the City's Phase II non-point source stormwater runoff control plan. Portions of these funds have been utilized for programs within the Phase II permit scope, and \$37,626.66 remains. This amount is the initial start-up funding that the City of Pismo Beach will begin with. SWMP implementation will have a broad impact on the City, the development community, and City departments, including Public Works, Community Development, as well as the general public.

### **Funding**

Funding for this program is part of the overall Storm Water Management Program. Potential sources for funding that will be investigated include state and federal grants, establishing a separate stormwater utility, and other potential funding sources that are being developed statewide. Proposition 84 Storm Water Grant funds may be used to provide matching grants to local public agencies for the reduction and prevention of stormwater pollution of rivers, lakes, and streams, beaches, bays and coastal waters. As the program evolves, new and innovative sources for funding will be developed and the City will identify these potential sources as they become available.

## **Appendix A**

# Pismo Beach Parks



## Legend

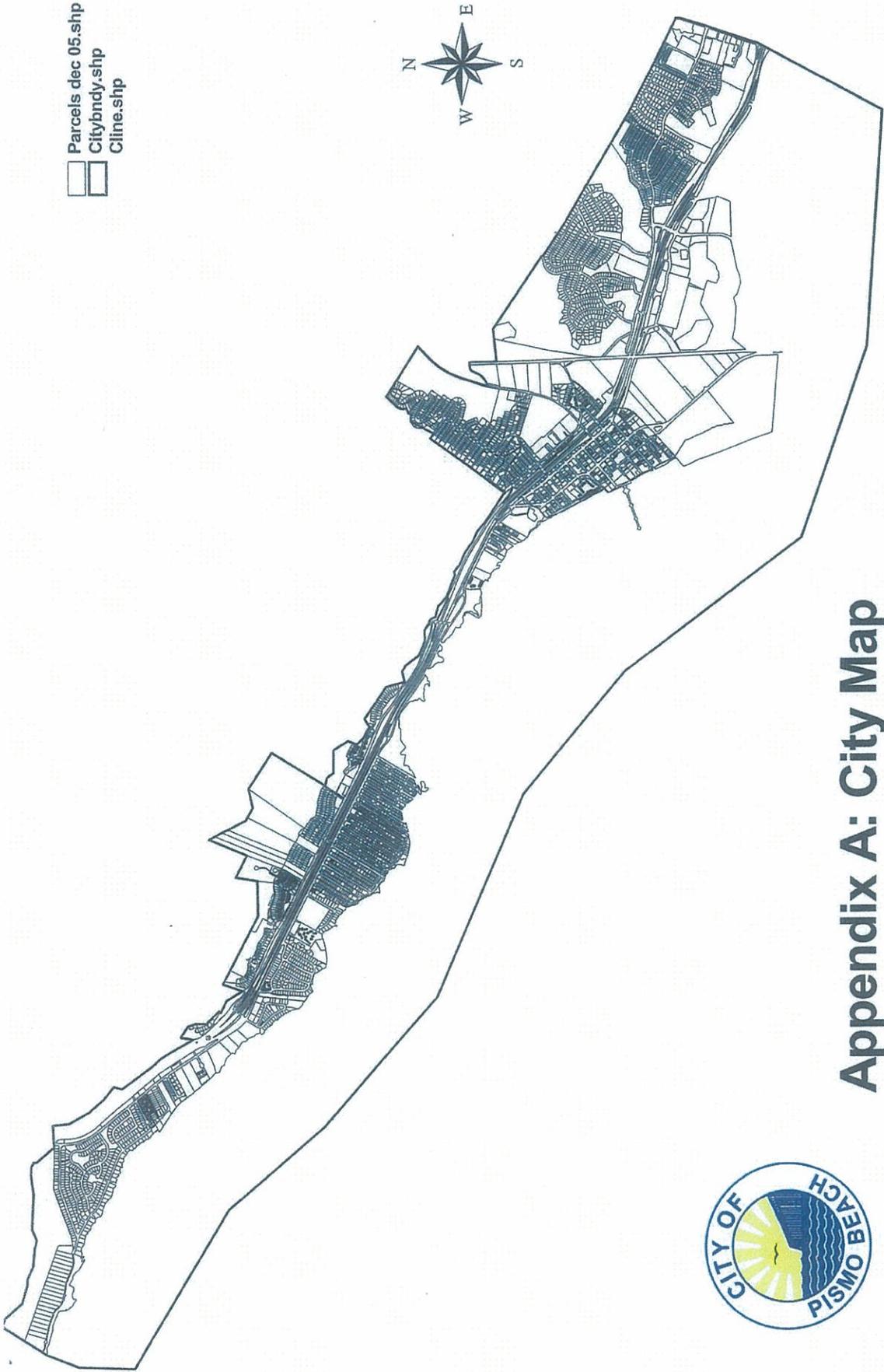
-  City parks
-  Various City Open Space, Tennis & Beach Access Parking
-  Pismo Creek Trail
-  Existing & Proposed Bluff Trails
-  Ocean Overlook & Public Stairs



City of Pismo Beach

**Corporate Yard  
550 Frady Lane**





# Appendix A: City Map

