

City of Solvang

## Storm Water Management Program

City of Solvang  
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**TABLE OF CONTENTS**

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Table of Contents.....2

List of Acronyms.....4

Introduction.....5

    I.1 Purpose.....5

    I.2 SWMP Organization.....6

    I.3 Regulatory Background.....6

    I.4 General Permit application.....6

    I.5 Water Quality Protection Conditions.....7

    I.6 Achieving Water Quality.....8

    I.7 City Departmental Contacts.....8

    I.8 Timeline.....9

    I.9 Legal Authority and Enforcement.....9

    I.10 Enforcement Process.....10

    City Overview.....11

        Figure I-1 City of Solvang Map.....14

        Figure I-2 City of Solvang Zoning Areas.....15

Minimum Control Measures.....16

    1.0 Public Education and Outreach ..... 16

        1.1 Minimum Requirements ..... 16

        1.2 Best Management Practices ..... 16

        1.3 Measurable Goals..... 17

        1.4 Reporting..... 18

    2.0 Public Participation and Involvement..... 19

        2.1 Minimum Requirements ..... 19

        2.2 Best Management Practices ..... 20

            2.2.1 Hold regular public meetings ..... 20

            2.2.2 Establish regular coordination among agencies ..... 20

            2.2.3 Community clean-ups ..... 21

            2.2.4 Additional Measures ..... 21

        2.3 Measurable Goals..... 21

        2.4 Reporting..... 22

    3.0 Illicit Discharge Detection and Elimination ..... 22

        3.1 Minimum Requirements ..... 22

        3.2 Best Management Practices ..... 23

            3.2.1 Storm Drain System Mapping ..... 24

            3.2.2 Storm Water Ordinance ..... 24

            3.2.3 Education & Outreach..... 25

            3.2.4 Identification and Elimination of Illicit Discharge Sources ..... 26

            3.2.5 Wastewater Programs ..... 30

        3.3 Measurable Goals..... 31

        3.4 Reporting..... 32

4.0 Construction Site Runoff Control ..... 333

    4.1 Minimum Requirements ..... 33

        4.1.1 Program Development ..... 34

    4.2 Best Management Practices ..... 34

        4.2.1 Construction Site Enforcement, Inspections ..... 35

        4.2.2 Discretionary Projects –Conditions of Approval ..... 35

        4.2.3 Staff Training ..... 35

        4.2.4 Construction Workshops ..... 35

        4.2.5 Measurable Goals ..... 35

    4.3 Reporting ..... 36

5.0 Post-Construction Runoff Control ..... 37

    5.1 Minimum Requirements ..... 37

        5.1.1 Background ..... 38

    5.2 Best Management Practices ..... 39

        5.2.1 Update Land Use Regulations ..... 40

        5.2.2 Staff Training ..... 40

        5.2.3 Monitor Discretionary Projects ..... 41

        5.2.4 Master Drainage Plan ..... 41

    5.3 Measurable Goals ..... 41

    5.4 Reporting ..... 42

6.0 Pollution Prevention and Good Housekeeping for Municipal Operations ..... 42

    6.1 Minimum Requirements ..... 42

    6.2 Best Management Practices ..... 43

        6.2.1 Development of Citywide Best Management Practices (BMPs) ..... 45

        6.2.2 Purchasing and Contracts ..... 45

        6.2.3 Training by City Departments ..... 45

        6.2.4 Street Sweeping ..... 46

        6.2.5 Storm Drain Cleaning ..... 46

        6.2.6 Trash, Green Waste and Recycling ..... 46

        6.2.7 Landscaping, Parks, and Open Space Maintenance ..... 47

    6.3 Measurable Goals ..... 47

    6.4 Reporting ..... 48

    Monitoring Progress and Reporting ..... 51

7.0 Monitoring and Reporting Requirements ..... 51

8.0 References ..... 52

Appendix A

    Measures to be Included in Review of City Land Use Policies and Design Guidelines ..... 53

Appendix B

    Public Outreach Information ..... 54

Appendix C - Maps

    Solvang Storm Drain Map ..... 56

**ACRONYMS**

Basin Plan	Central Coast Basin Water Quality Control
BIIP	Business and Industry Inspection Program
BMP	Best Management Practice
CAO	City Attorney's Office Covenants
CASQA	California Storm Water Quality Association
CC&R	Conditions and Restrictions Central Coast
CCR	California Code of Regulations
CCWQP	Central Coast Water Quality Preservation, Inc
CCRWQCB	Central Coast Regional Water Quality Control Board
CDD	Community Development Department
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics
CWA	Clean Water Act
DPR	Department of Pesticide Regulation
EHS	County Environmental Health Services Division
EIR	Environmental Impact Report
FCD	Flood Control District
FEMA	Federal Emergency Management Agency
GGCP	Green Gardener Certification Program
GH	Good Housekeeping
GIS	Geographic Information System
HMP	Hydromodification Management Plan
IDDE	Illicit Discharge Detection and Elimination
IPM	Integrated Pest Management
LUDP	Land Use Development Policy
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MRP	Monitoring and Reporting Plan
MS4	Municipal Separate Storm Sewer System
ND	Negative Declaration
NOI	Notice of Intent
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OWOW	Our Water, Our World
PAH	Polycyclic Aromatic Hydrocarbon
PCA	Pest Control Advisors
PCW	Project Clean Water
PDF	Portable Document Format
PEO	Public Education and Outreach
POTW	Publicly Owned Treatment Works
PW	County Public Works Department
RFQ	Request for Qualifications
RWQCB	Regional Water Quality Control Board
SBCAMM	Santa Barbara County Association of Storm Water Managers
SCWRC	South Coast Watershed Resource Center
SOPs	Standard Operating Procedures
SUSMP	Standard Urban Storm Water Mitigation Plans
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USEPA	United States Environmental Protection Agency

## INTRODUCTION

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The City of Solvang (the City) must comply with federal and state regulations related to environmental protection. One of the primary environmental laws impacting the City is the Clean Water Act (CWA) and associated implementing regulations. The purpose of the CWA is to protect and restore the physical, chemical, and biological integrity of our nation's waterways by controlling and limiting discharges of pollutants to these waterways.

In California, the State Water Resources Control Board (SWRCB) has determined that urban runoff is a leading cause of pollution throughout the state and that it contributes pollutants of concern such as sediments, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides to waterways. In addition, the impervious nature (i.e. pavement and hardscape) of most urban communities has resulted in storm water discharges that have greater volumes, velocity, and pollutant loads than pre-development runoff.

The impacts of these changes include damaging effects on both human health and aquatic ecosystems. However, when water quality impacts are considered during the planning stages of a project, new development, or many redevelopment projects, a municipality can more efficiently incorporate measures to protect water quality.

The SWRCB identified the City of Solvang as a small municipal separate storm sewer system (MS4) requiring coverage under the National Pollutant Discharge Elimination System (NPDES) *General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)*, Water Quality Order No. 2003-0005-DWQ (General Permit). A requirement of the General Permit is development of a Storm Water Management Program designed to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The General Permit also requires the development and implementation of Best Management Practices (BMPs) to address six Minimum Control Measures (MCMs), which include (1) Public Education and Outreach on Storm Water Impacts; (2) Public Involvement and Participation; (3) Illicit Discharge Detection and Elimination; (4) Construction Site Storm Water Runoff Control; (5) Post-Construction Storm Water Management in New Development and Redevelopment; and (6) Pollution Prevention/Good Housekeeping for Municipal Operations.

### I.1 PURPOSE

This Storm Water Management Plan (SWMP) has been prepared by the City of Solvang pursuant to the General Permit and describes the City's program necessary to comply with the General Permit. More importantly, this SWMP will serve as a framework for identifying, assigning, and implementing control measures and BMPs intended to reduce the discharge of pollutants from the MS4 and protect downstream water quality. In addition to these primary objectives, this SWMP will

- Serve as a planning and guidance document to be used by the City's regulatory body, all City departments, contractors, and the general public;
- Be dynamic and adaptively managed to address changes in General Permit requirements, organizational structure, responsibilities, and goals;
- Define techniques and measurable goals for measuring BMP effectiveness; and

- Define a five-year schedule for Storm Water Management Program implementation to comply with the requirements of the General Permit.

## **I.2 STORM WATER MANAGEMENT PLAN ORGANIZATION**

Section I introduces the background and requirements associated with the General Permit and summarizes the purpose of this SWMP; provides an overview of the City, including current land use, City facilities, the watershed, waterbodies, and water quality challenges; Section 1.0 - 7.0 describes the SWMP implementation; and identifies and describes the BMPs and associated measurable goals that will fulfill the requirements of the six MCMs outlined in the General Permit. Section 8.0 outlines references used.

## **I.3 REGULATORY BACKGROUND**

In 1972 the Federal Water Pollution Control Act, known as the Clean Water Act, was enacted. The CWA established the baseline goal of attaining fishable, swimmable waters throughout the United States. In 1987, the CWA was amended to add Section 402, which established a framework for regulating discharges from MS4s as a special category of point source discharges under the NPDES Program. In 1990, the United States Environmental Protection Agency (U.S. EPA) promulgated regulations for permitting MS4s serving a population of 100,000 or more. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain storm water permits. The U.S. EPA adopted the Phase II Final Rule in December 1999. The Phase II regulations address storm water discharges from MS4s with a population of less than 100,000 (Small MS4s).

The SWRCB administers both the Phase I and Phase II programs in California, as established by the Porter- Cologne Water Quality Control Act of 1962 and regulated under Title 23 of the California Code of Regulations (CCR). The Phase II Final Rule promulgated by the U.S. EPA prompted the SWRCB to adopt the General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, Water Quality Order No. 2003-0005-DWQ on April 30, 2003. A copy of this General Permit is included as Appendix A.

The Central Coast Regional Water Quality Control Board (RWQCB, or Water Board) is one of nine Wracks in California and has jurisdiction over a 300-mile-long by 40-mile-wide section of California's Central Coast. Its geographic area includes the City of Solvang and, therefore, the Water Board is responsible for the coordination and control of water quality locally, including compliance oversight associated with the General Permit.

## **I.4 GENERAL PERMIT APPLICABILITY TO THE CITY OF SOLVANG**

The General Permit adopted on April 30, 2003, requires permits for storm water discharges from Small MS4s and regulates storm water discharges from Small MS4s. The SWRCB defines an MS4 as:

*...a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):(i) designed or used for collecting or conveying storm water; (ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works (POTW)(40 CFR §122.26[b][8]).*

The General Permit also defines a "Small MS4" as

*...an MS4 that is not permitted under the municipal Phase I regulations, and which is "owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having*

*jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity....” (40 CFR §122.26[b] [16]). Small MS4s include 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 2 very discrete areas, such as individual buildings.*

Small MS4s regulated under the General Permit are designated in one of the following ways:

- 1) Automatically designated by U.S. EPA pursuant to Title 40, Code of Federal Regulations (40 CFR, Section 122.32[a]) because it is located within an urbanized area as defined by the Bureau of the Census, or
- 2) Individually designated by the SWRCB or RWQCB after consideration of the following factors:
  - (a) high population density (1,000 residents per square mile), (b) high growth or growth potential (growth greater than 25% between 1990 and 2000 or anticipated growth greater than 25% over a 10-year period), (c) a significant contributor of pollutants to an interconnected permitted MS4,
  - (d) a discharger to sensitive water bodies, and/or (e) a significant contributor of pollutants to waters of the United States.

These factors were considered by the SWRCB and/or RWQCB when evaluating whether a Small MS4 should be required to obtain coverage under the General Permit and then develop and implement a SWMP. An MS4 and the population that it serves need not meet all of the factors to be designated. The City of Solvang is a Small MS4 subject to the General Permit because it meets the criteria specified in items 2 a and b of the above referenced criteria considered by the SWRCB and RWQCB and was designated by the U.S. EPA as a regulated Small MS4 in the Phase II Final Rule.

## **I.5 WATER QUALITY PROTECTION CONDITIONS**

In a letter dated February 15, 2008, and titled *Notification to Traditional, Small MS4s on Process for Enrolling Under the State’s General Permit for Storm Water Discharges* (Central Coast Water Board 2008a, included in Appendix B), the Central Coast Water Board defined a newly established process and schedule for SWMP approval and described expectations for SWMP content necessary for General Permit compliance. In particular the City's SWMP is required to include an array of BMPs to achieve four additional water quality protection conditions not specifically defined within the General Permit. These conditions and their associated implementation requirements are as follows:

### **1. Maximize Infiltration of Clean Storm Water, and Minimize Runoff Volume and Rate**

This condition requires the City to present a schedule for developing and adopting control standards for hydromodification. The schedule for adopting hydromodification control standards is required to include

- Numeric criteria for controlling storm water runoff volume and rates from new development and redevelopment;
- Numeric criteria for stream stability required to protect downstream beneficial uses and prevent physical changes to downstream channels that would adversely affect the

physical structure, biologic condition, and water quality of streams;

- Specific applicability criteria, land disturbance acreage thresholds, and exemptions;
- Performance criteria for control BMPs and an inspection program to ensure proper long-term functioning; and
- Education requirements for appropriate municipal staff on hydromodification and low-impact development.

## **2. Protect Riparian Areas, Wetlands, and Their Buffer Zones**

This condition requires the City to present a strategy to adopt and implement BMPs and/or other control measures to establish and maintain a minimum 30-foot buffer zone for riparian areas and wetlands.

## **3. Minimize Pollutant Loading**

This condition requires the City develop a strategy to reduce pollutant loading through the use of BMPs and/or other control measures including volume- and/or flow-based treatment criteria.

## **4. Provide Long-Term Watershed Protection**

This condition requires the City to present a strategy to develop a watershed-based Hydromodification Management Plan (HMP). The Central Coast Water Board recommends the HMP incorporate Low Impact Development (LID) strategies with the goal of post construction storm water management that achieves an effective impervious area of no more than 3 to 10 percent of watershed area within the City's jurisdiction, depending on local conditions.

# **I.6 ACHIEVING THE WATER QUALITY CONDITIONS**

The City acknowledges the importance of protecting water quality, beneficial uses, and the biological and physical integrity of its watersheds and is determined to attain compliance with the General Permit and the aforementioned Water Quality Conditions. Therefore, specific BMPs have been selected and defined in this SWMP to realize these goals. The City—with the support of the public, staff, and Central Coast Water 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.

# **I.7 CITY DEPARTMENTS AND COORDINATION**

Implementation of the City of Solvang SWMP involves several City departments and requires total City involvement and support. Dedicated efforts stem from the staff of the Public Works, Engineering, Planning, Recreation and Parks and the offices of the City Manager and City Attorney. The Program will be managed by the Engineering Department with significant support from the Planning and Public Works Departments. Contact information for those directly involved in the implementation and planning is provided in Table 1-1;

**Table 1-1 Solvang Staff Contacts**

<b>Department</b>	<b>Name</b>	<b>Title</b>	<b>Phone</b>
City Manager	Brad Vidro	City Manager	688-5575
City Clerk	Mary Ellen Rio	City Clerk	688-5575
Planning/ Building	Shelly Stahl	Planning Director	688-4414
City Attorney Office	Roy Hanley	City Attorney	
Public Works	Tully Clifford	Public Works Director	686-5575
Engineering	Frank Saunders	Engineering Technician	688-5575
	Shelly Ingram	Stormwater Compliance Officer	688-5200
Recreations and Parks	Fred Lageman	Parks and Recreation Director	688-7529

## **I.8 TIMELINE**

The City of Solvang's original SWMP was submitted to the Central Coast Water Board in accordance with the timeline established by the Phase II Final Rule. The Phase II Final Rule required the City to submit a Notice of Intent (NOI) and SWMP to the Central Coast Water Board on or before September, 2003.

The initial submittal received comments and review from the Regional Water Board and was re-submitted in November of 2005. In February of 2006 letters recommending further revisions were received by the Water Board from Santa Barbara Channelkeeper and Heal the Ocean. These organizations requested the addition of BMPs with regard to public involvement and education, enforcement actions against violators, and stronger guidelines for construction activities. This 2009 revision of the SWMP endeavors to address those concerns.

The SWMP will be implemented over the term of the permit coverage as described in Sections 1.0 through 7.0. Each MCM and its associated BMPs have their own implementation schedule based on program priorities.

## **I.9 LEGAL AUTHORITY AND ENFORCEMENT**

The City of Solvang has adopted numerous ordinances over the years to create and maintain a healthy, safe, and pleasant environment in which to live, work, and play. In order to maintain and enhance the quality of life in Buellton, the Code Compliance Division of the City Attorney's office investigates and resolves municipal code violations on private property, including:

- Building or remodeling without permits;
- Garage conversions;
- Substandard housing such as lack of heat, hot water, or sanitation;
- Inoperative vehicles on private property such as vehicles supported on blocks or jacks; burned or abandoned; or vehicles stored with flat tires;
- Vehicles parked on lawns;
- Zoning complaints such as a business in a residential district;
- Noise complaints, including noise from dogs and roosters;
- Blighted property such as abandoned or open structures;
- Weeds, junk, and debris on private property; and
- Signs unlawfully displayed.

Sources of the City's legal authority to enforce this SWMP include the General Plan, the Municipal Code, the building and development plan review and grading permit processes, Public

Works Department's Standard Specifications, and solid waste regulations. The City has adequate legal authority to enforce the current ordinance already in place to protect water quality, but is committed to write and adopt additional ordinances to the Municipal Code to specifically implement the SWMP. The City will maintain its legal authority to implement and enforce the SWMP to reduce the discharge of pollutants from the MS4 to the MEP and to protect water quality.

The City's Engineering Department is responsible for inspecting all new development and construction sites and facilitating any enforcement actions that may result.

The City's Department of Public Works is responsible for inspecting existing commercial and industrial facilities. A list of these facilities is included in Appendix D. The City is committed to enforcing the SWMP and the Municipal Code up to and including prosecution, administrative remedies, penalties, costs or other legal actions.

The City expects to have on staff a certified Stormwater Compliance Officer by May 2009 to support implementation of the SWMP and enforcement of the Municipal Code as it relates to storm water quality, illicit discharges and connections, construction storm water controls, and post-construction storm water controls and maintenance.

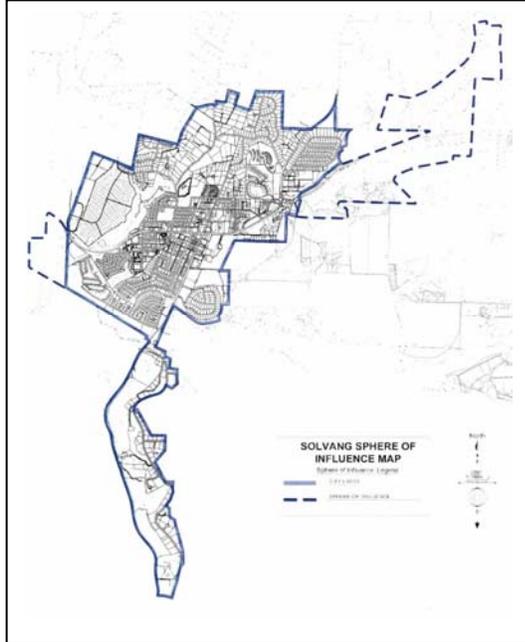
#### **1.10 ENFORCEMENT PROCESS**

City Departments coordinate internally to expedite investigation into violations observed or reported via a direct call or written complaint to any City Department or the Santa Barbara County hotline. Once received by the Stormwater Compliance Officer and based on the merits of each individual case, an appropriate municipal code section is applied to the violation (if any). Depending on the individual factors associated with a particular case as outlined in Municipal Code. If compliance is not achieved, legal action may include the issuance of an administrative citation, criminal prosecution, injunctive relief or a compliance order followed by hearing before the.

The Planning Department has an established process for verifying resolution of a Municipal Code violation. Verification can be addressed by the Code Compliance Officer or by a representative from another Department. All phases of the enforcement process are tracked by the Planning Department.

## CITY OF SOLVANG OVERVIEW

Solvang is located 6 miles east of US Highway 101 in Santa Barbara County. It was founded in 1911 by a group of Danish teachers and incorporated in 1985. The City has an estimated population of 5,450, an increase of approximately 13% over its recorded 1990 population of 4,741. The population is approximately 80.7% Caucasian 17.2 % Hispanic/Latino and 2.8% other races combined. The median age is 43 and median annual income is approximately \$57,703. Los Angeles is two hours south of Solvang on US 101, and San Francisco is about a five-hour drive north on US 101 or scenic Highway 1.

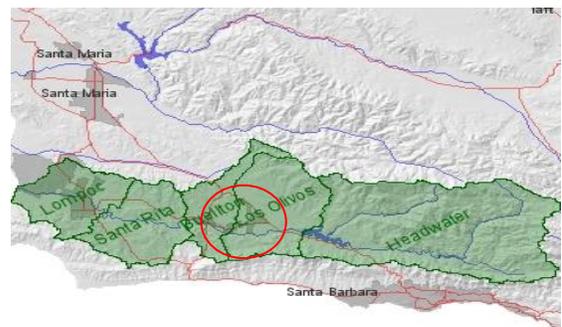


The City operates under a five-member City Council, five-member Planning Commission, five member Parks and Recreation Commission and City Manager form of government. The City adopted a general plan in 1988. The City's boundaries and sphere of influence are shown at left.

Solvang enjoys a Mediterranean coastal climate with mild, dry summers and cool, wet winters. Typical summer temperatures are in the 80-90s and winter temperatures hover in the 50-60s. Winter lows are generally in the 30s with an occasional frosty dip

below freezing. Yearly precipitation averages about 12 inches between the months of November and March. Storms usually come from the northwest during the winter months. Offshore afternoon winds from the northwest occur throughout the year. "Santa Ana" winds also occur during the fall and winter. These are warm, dry northeasterly winds of 15-20 mph.

Solvang is part of the Buellton Uplands and Los Olivos Groundwater Basins of the Santa Ynez River Watershed. The Buellton Uplands Groundwater Basin encompasses about 29 square miles located about 18 miles east of the Pacific Ocean and directly north of the Santa Ynez River. The basin boundaries include the impermeable bedrock of the Purisima Hills to the north, the Santa Ynez River Fault to the south, a limited connection to the Santa Ynez Upland Groundwater Basin to the east and a topographic (drainage) divide with the Lompoc Basin to the west. The Santa Ynez River Riparian Basin sediments overlie portions of the Buellton Uplands in the south-east part of the basin.



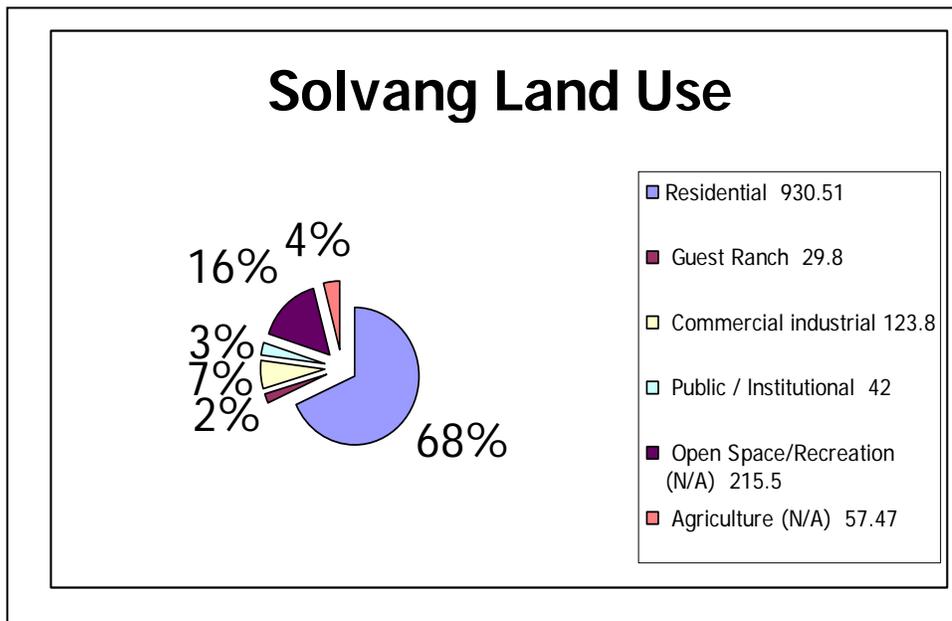
While not a part of the Santa Ynez River system, the Santa Ynez, Buellton and Lompoc Uplands provide extracted groundwater to meet demands in their respective areas within the watershed. Two groundwater systems are associated with the Santa Ynez River. These are divided at the Lompoc Narrows. The groundwater system east of the Narrows is considered as the subsurface

flow of the Santa Ynez River. The system to the west is known as the Below Narrows Groundwater Basin and is defined as a percolating groundwater system.

The City’s MS4 consists of curbs and gutters, a network of open and closed storm water drains and portions of Alisal, Adobe Canyon and Ballard Canyon creeks. Alamo Pintado Creek is identified by the Federal Emergency Management Agency (FEMA) as having a 100 year peak discharge value of between 4,600 and 7,400 cubic feet per second (cfs). In 1977 the SCS installed steel pipes at some sections to protect the banks. No FEMA data is available for Alisal, Adobe Canyon or Ballard Canyon creeks.

The larger storm water conveyance ditches, channels, and basins are primarily owned and maintained by Santa Barbara County Flood Control and Water Conservation District (FCD). The City’s MS4 essentially discharges to the FCD’s MS4; City flow then co-mingles with County flow and agricultural tailwater. The entire flood control system was initially constructed with the intent to manage and convey flood waters many years before water quality issues were a concern. In recent years it has become recognized that this co-mingled surface flow is impacting both groundwater and the Santa Ynez River. The Santa Ynez River is under the jurisdiction of the County of Santa Barbara and is currently listed as “impaired” by the State of California for nutrients, salinity and sedimentation/siltation. The River itself and the origination points of those creeks passing through the City’s SOI are current areas designated as under the County’s jurisdiction.

The City currently has a total of 1,368.4 acres of land within its City boundaries. Of that land 68% is zoned residential which includes specific areas designated for medium (266.5 acres) and high density development (31.5 acres) and mobile home parks (103.3 acres), 15.8% zoned for open space, 6.8% zoned commercial industrial, 4.2% zoned agricultural, 3% zoned public and 2% containing an established guest ranch. There were approximately 2,076 dwelling units as of 2006. There are approximately 210 units pending development and 322 potential units to be developed for a total of 532 additional units. A total of 2,608 dwelling units are estimated at build-out. Each dwelling unit houses an average of 2.37 people according to the 2000 U.S. Census. The estimated population at build-out is 6,181 people.



The City's most recent residential growth was the Skytt Mesa development on the south west edge of town. The project received final City approval in 2005. It currently has 42 of the proposed 169 homes completed as part of Phase I of the project. Construction of the drainage improvements for the project has been completed through Phase 3. Project stormwater design features include a 219,777 cubic foot basin located in Hans Christian Anderson Park that allows for retention and filtration of the site's stormwater, aiding in the preservation of the banks of adjacent Adobe Canyon Creek. One of the oldest and most specialized sections of the City is the Alisal Guest ranch, located on the south eastern tip of the City's boundary. The guest ranch, originally built in 1946, contains equestrian and ranch facilities and a golf course. The course was completed in 1992 and contains a lake to aid in onsite runoff retention. The city contains approximately 30 acres of the ranch's 10,000 acre total area.

Figure I-1. City of Solvang

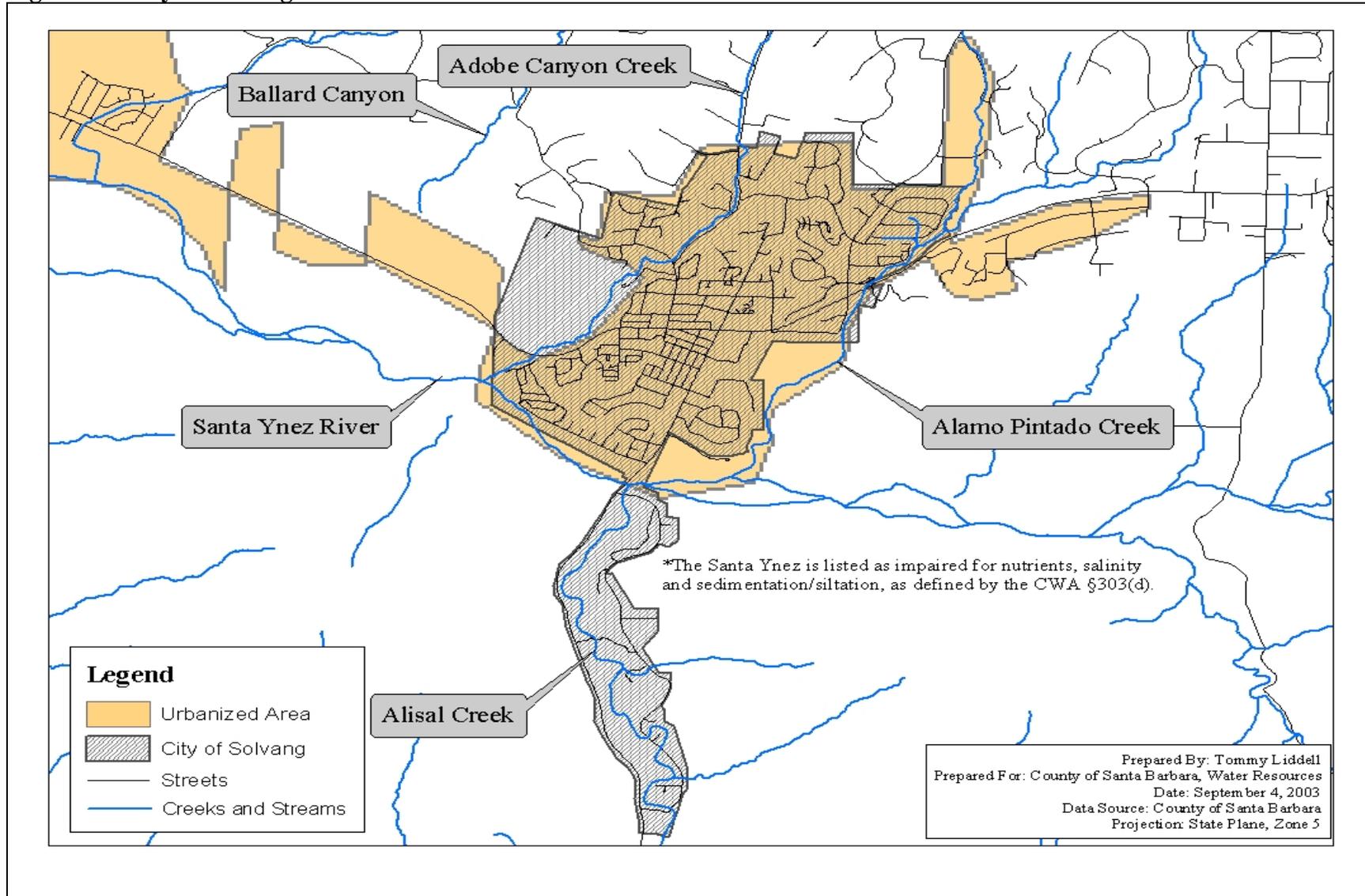
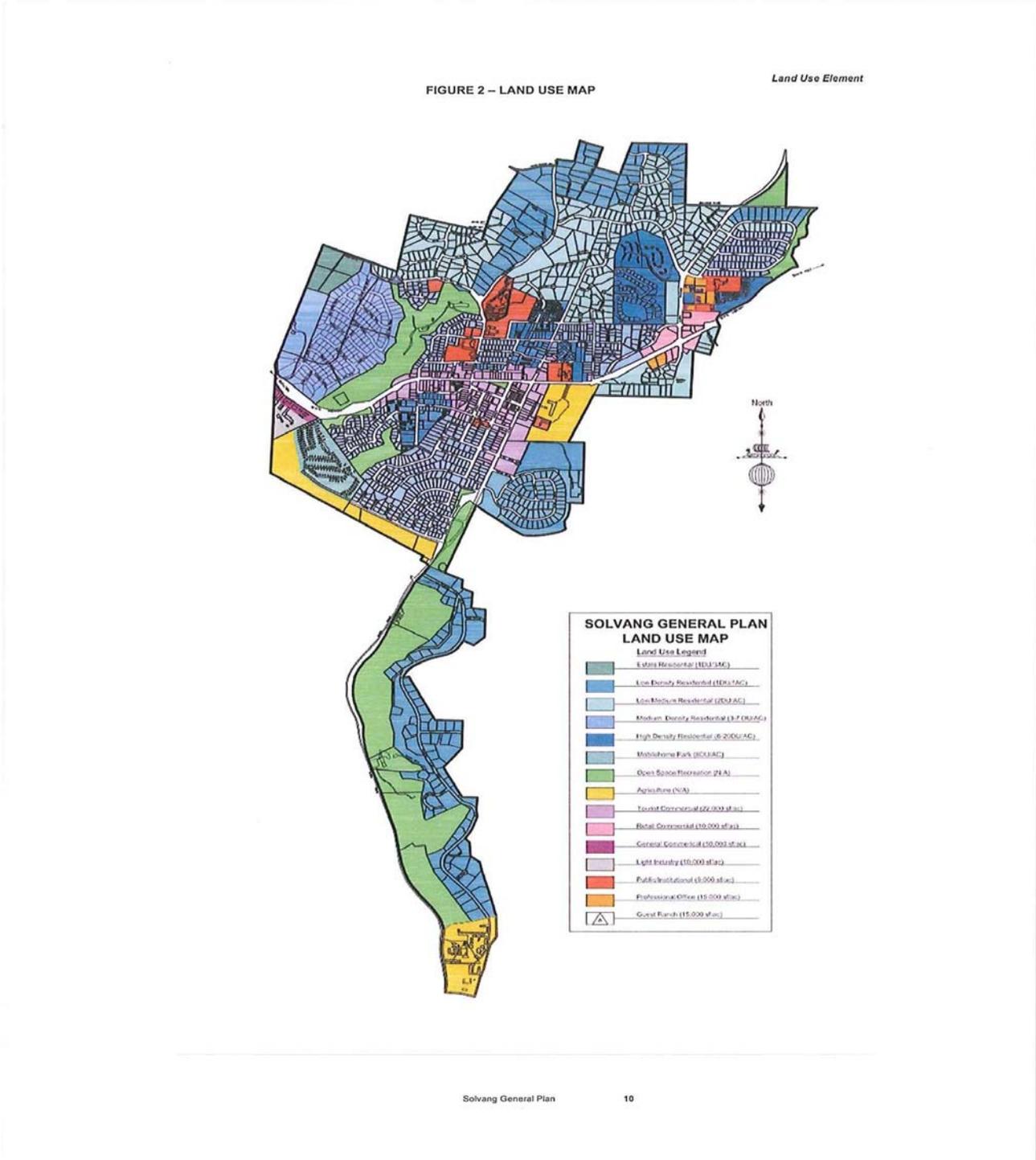


Figure I-2. City of Solvang Zoning areas



## MINIMUM CONTROL MEASURES

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The implementation and evaluation of the six minimum control measures, listed on page 7 - 8 and detailed below, comprise the heart of the City's Storm Water Management Program. Within each MCM category, specific BMPs were selected based on a number of factors including input from community members and the results of physical observations of local creeks. Information collected by the City and other reports pertaining to this SWMP may be reviewed at the City offices (City of Solvang, 1644 Oak St., Solvang, California) or at the City website at [www.cityofsolvang.com](http://www.cityofsolvang.com). The information collected by the County is summarized in annual reports and other studies posted on the County website at [www.countyofsb.org/project\\_cleanwater](http://www.countyofsb.org/project_cleanwater).

### 1.0 PUBLIC EDUCATION AND OUTREACH

This minimum control measure is intended to ensure greater public support and compliance for the storm water management program. Specifically these efforts are to teach the public the importance of protecting storm water quality, both for the benefit of the environment and human health. The role of each community member, both at home and work, are a particular emphasis. The City has already begun and will continue to partner with other local municipalities, such as the County of Santa Barbara and the Cities of Lompoc, Santa Maria, Buellton, Goleta, Santa Barbara, and Carpinteria to develop educational materials and host civic events.

#### 1.1 Minimum Requirements

USEPA guidelines establish the following "Best Management Practices" for Public Education and Outreach Minimum Control Measure (*Fact Sheet 2.3 – Public Education and Outreach Minimum Control Measure, 01/00*):

- Distribute educational materials on the impact of storm water discharges and steps that can be taken to reduce storm water pollution
- Brochures or fact sheets
- Alternative information sources such as web sites, bumper stickers, and refrigerator magnets
- A library of educational materials
- Volunteer citizen educators
- Event participation
- Educational programs for school children
- Storm drain stenciling
- Storm water hotlines

#### 1.2 Best Management Practices

Those BMPs that are or will be implemented are described in more detail below.

- **Brochures:** The City will partner with the County of Santa Barbara and other local municipalities to have available and distribute a series of informational brochures on storm water quality targeting gardeners, dog and horse owners, creekside residents, and homeowners. Additional informational brochures include a general storm water brochure called "The Ocean Starts at Your Door", and a brochure on proper disposal of and alternatives to hazardous household products. These materials are all produced in both English and

Spanish. These brochures will be available at City offices and distributed at special events, city council and chamber meetings, by mail, through enforcement activities, and by request. The City has also created several brochures of its own for distribution to the general public and City employees, all of these are available on the City website (see Attachment B).

- **Alternative information sources:** The City has added a page to their existing web site to explain storm water issues and include a copy of the SWMP. The City has linked to the County of Santa Barbara's web site, which features general information, copies of reports, studies, and educational materials, and a calendar of events. The City has distributed materials that list the web site address and a hotline phone number (described below).
- **Event participation:** The City will participate in relevant public events (i.e. Earth Day, Pollution Prevention Week, Creek Week ) to distribute information about the storm water program. The City has also developed a poster for display at public events (see Attachment B).
- **Educational programs for school children:**  
In 2004 a design contest was held to develop a design for the city storm water logo, five entries were received and a winner was selected (see Appendix B). In year 1 the City proposes to identify appropriate materials to be distributed to all schools within the City boundaries. These may include but are not limited to a coloring/activity book for grades K-6, age appropriate activity materials for grades 6-12. To be distributed by the end of year 2.
- **Storm drain marking:** The City will complete marking all storm drain drop inlets with markers that say "No Dumping - Drains to the River". (see Appendix B)
- **Storm water hotline:** The regional Water Quality Hotline is accessible at 1-877-OUR-OCEAN. The City will be included so that callers from Solvang can report water quality issues or get information such as where to dispose of hazardous waste. In addition, residents may call the City directly to report a water quality issue.
- **Media Campaigns:** Print ads or articles will appear in local newspapers as deemed appropriate and necessary. In year one the most effective publication times and types of articles will be identified.
- **Business Outreach:** The City will distribute homeowner information sheets and appropriate brochures to all applicants seeking zoning clearance. Brochures and posters, in English and Spanish, which target restaurants, automotive services, construction contractors, and mobile cleaners will also be on display in City offices and distributed during site visits by City staff and EHS restaurant inspectors. The City will also coordinate its ongoing outreach from the Solvang Wastewater Treatment Plant to offer BMP training to restaurant managers. (see Appendix B)

### 1.3 Measurable Goals

The City will educate the general public about storm water quality issues and their role in the solutions by outreach to the community, school children, and businesses. Measurable goals for each BMP are listed below.

**BMP:** Brochures, Alternative Information Sources, Event Participation

- Compile the number of brochures and alternative information sources distributed, web site hits, and events attended with displays as well as the number of people who attended the event.
- Reach 80% of the permit area population each year for 5 years.

**BMP:** Educational programs for school children

- A minimum of 50% of school children (K-8) in the permit area will be educated annually on storm water quality by providing school districts with stormwater curriculum tools and information for teachers.

**BMP:** Storm Drain Marking

- Maintain storm drain decals in the City by checking decals annually and replacing as necessary.
- 100% of all City storm drains are currently marked
- 100% of all storm drains in the City decals in good condition.

**BMP:** Water Quality hotline

- Promote use of the hotline by publicizing the number on all printed materials and through the City's web site.
- Respond to 100 % calls and/or email contacts within 24 hours.

**BMP:** Business outreach

- Compile the number of businesses reached through the zoning clearance information distribution.
- Maintain outreach efforts to targeted businesses, compiling the number of brochures distributed.
- Measure participation in the restaurant outreach program with Solvang Wastewater Treatment Plant; include 20% of the restaurants in the outreach program each year for 5 years.

**BMP:** Media Campaign

- Sponsor one media campaign per year for 5 years associated with Earth Day, Pollution Prevention Week, Watershed Month, or Creek Week.
- Compile the number of print ads run, and storm water related press releases/media coverage.

**1.4 Reporting**

The data collected for each measure (such as number of brochures distributed, number of print ads run, number of students in attendance, etc.) will be compiled, reviewed and summarized in annual reports. Significant variance from targets will be assessed and discussed in annual reports. Progress in implementing goals that have multi-year timelines (such as educational programs, event participation, and media campaign) will be reported annually. Implementation of existing BMPS will be fine tuned as needed. Measurable goals will be adjusted as appropriate, and the basis for any changes will be included in the next annual report.

**Table 1-2  
BMP Implementation: Public Education & Outreach**

Year	BMP	Current Status	Implementation Details	Measurable Goal	Responsible Party
1 thru 5	Brochures Events	Brochures and posters are available in English and Spanish.	Brochures provide info on how community members can prevent storm water pollution. Storm Water page has been added to City web site.	Compile number of brochures and alternative information sources distributed; add web page and document web site hits, number of people attending public events. Target is to reach 80% of permit area annually for 5 years.	Public Works Department
1 thru 5	Educational Programs for children	Ongoing	Project WET curriculum information distributed to teachers in all public schools. Annual art contest sponsored	Educate 50% of school children (K-8) every two years. Compile the number of informational books distributed, number of entrants in the Art contest and number of school participants in any cleanup activities sponsored	Public Works Department
1 thru 3	Storm drain marking	Decals applied to 100% of City storm drain inlets.	Install/ Replace as needed Decals reading "No Dumping –Drains to the River"	Check decals and repair/replace every year as needed for the life of the permit.	Public Works Department
1 thru 5	Storm water hotline	Regional hotline is established	Hotline directs complaints and gives information.	Promote use of hotline through printed materials and web site.	Public Works 1-877-OUR-OCEAN
1 thru 5	Business Outreach	Current program focuses on restaurants, automotive services, mobile cleaners, and construction trades. Add additional distribution of information at the time of zoning clearance.	Written materials and brochures are distributed to businesses, during complaint response, at events and at time of zoning clearance. A Restaurant Recognition Award is presented annually.	Compile number of materials/brochures, zoning clearance information distributed annually to businesses. Target is to reach 20% of business in permit area.	Public Works Department and Planning Department
1 thru 5	Media Campaign	Media campaigns are run on an annual basis.	Media campaigns are run around events such as Pollution Prevention Week.	Sponsor one media campaign each year. Compile number of print ads and amount of press coverage annually.	Public Works Department and Administrative Department

## 2.0 PUBLIC PARTICIPATION AND INVOLVEMENT

This minimum control measure is intended to foster active community support for the SWMP and direction as to its implementation. Participation by the public ensures that the program reflects community values and priorities and thus has the highest potential for success. All public notices related to this minimum control measure will be conducted in compliance with all State and local public notice requirements.

### 2.1 Minimum Requirements

USEPA guidelines recommend the following "Best Management Practices" for the Public Participation/Involvement minimum control measure (*Fact Sheet 2.4 Public*

*Participation/Involvement Minimum Control Measure, 01/00; and “Measurable Goals Guidance for Phase II Small MS4s”*):

- Establish a steering committee
- Hold regular public meetings
- Establish regular coordination among agencies
- Volunteer water quality sampling
- Community clean-ups

These BMPs assure that the program will be supported by City residents and provide input to guide development of the program in the future.

## **2.2 Best Management Practices**

Since the established North County Stakeholders meetings have proven to garner few if any attendees, the City will not attempt to establish a steering committee but instead focus on regularly attended public forums (see below).

The City will implement the Best Management Practices described below.

### **2.2.1 Hold regular public meetings**

Annual NPDES permit reports will be presented in a public forum, such as at a City Planning Commission or Council meeting to update the community on the storm water program, address any storm water concerns, City accomplishments, and future goals. The first such meeting is scheduled for March 2009. In addition, City staff will work with other local Phase II permittees and the Regional Water Quality Control Board to explore alternative public forums on water quality.

### **2.2.2 Establish regular coordination among local agencies/stakeholders**

Since 1998, the County has hosted a quarterly meeting of local, state and federal agencies with interests in local and regional storm-water issues. This meeting of the “intergovernmental committee” includes both regulators (such as RWQCB) and regulated entities such as the City. The City will participate in this Intergovernmental Committee (now recognized as the Santa Barbara County Association of MS4 Managers- SBCAMM). Topics for discussion are suggested by participants and include development and interpretation of non-point source regulations, opportunities for cooperative efforts, emerging technology and sharing of water quality information. Through this group the City is also kept apprised information provided by the California Storm Water Quality Association (CASQA), which facilitates the exchange of information and joint research and efforts among Phase I and Phase II agencies statewide. CASQA meets on a bimonthly basis.

### 2.2.3 Community clean-ups

Each year the City will sponsor at least one clean-up effort within the City limits. The City will solicit community participation through the local school district, local clubs and youth organizations. By year 1 a date for an annual clean up will be established.

### 2.2.4 Additional Measures

#### Water Quality Hotline

See discussion under “Public Education & Outreach” Minimum Control Measure. The County hotline encourages community members to report water quality problems that they observe. The hotline is promoted on all printed materials and through the City and County web sites.

## 2.3 Measurable Goals

Public involvement and participation has been essential to the development and ongoing activities of the City storm water program, insuring that our program reflects community concerns and priorities while improving creek and ocean water quality. Measurable goals for each BMP are listed below.

#### **BMP: Hold regular public meetings**

- NPDES annual report will be presented in a public forum (i.e. Council and Commission meetings) and the number of attendees will be documented. The SWMPP update is scheduled to be heard by both the Council and Planning Commission in March 2009. Both meetings will be noticed in the local paper with special notices sent to any agency or individual who has commented on the City’s SWMPP.

#### **BMP: Establish regular coordination among agencies**

- The City will attend quarterly meetings of the Intergovernmental Committee (now recognized as the Santa Barbara County Association of MS4 Managers -SBCAMM), and attendance and actions will be documented. In addition the City will also coordinate with the County of Santa Barbara, other area communities, and agencies including but not limited to Caltrans, on information, discussions, updates on storm water BMPs, and other findings at CASQA meetings.

#### **BMP: Community clean-ups**

- The City will sponsor a volunteer community clean-up annually and record location and number of attendees. Amount of waste collected will be quantified by total weight or number of bags collected.

#### **BMP: Water quality hotline**

- See Public Education and Outreach Measurable Goals

**Table 2-1  
BMP Implementation: Public Participation**

Year	BMP	Current Status	Implementation Details	Measurable Goal	Responsible Party
1 thru 5	Regular Public meetings		NPDES annual report will be presented in a public forum and the number of attendees will be documented	Present report annually.	Public Works Department
1 thru 5	Coordination among agencies	Ongoing	Attend the Intergovernmental Committee quarterly	Attend IC meetings, document attendance, coordinate with County on CASQA and document.	Public Works Department
1 thru 5	Community Clean-ups		The City will sponsor community clean-ups annually.	Document community clean-up locations and attendance. Try to increase attendance annually.	Public Works Department
1	Water Quality Hotline	See Public Education and Outreach section			

**2.4 Reporting**

The data collected for each measure will be compiled, reviewed and reported in annual reports. Significant variance from targets will be assessed and discussed in annual reports. Measurable goals will be adjusted as appropriate; the basis for any changes will be included in the next annual report. Feedback from the community interest groups and other sources will be used to improve implementation of all six minimum control measures.

**3.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION**

This minimum control measure of the Storm Water Management Program is designed to reduce pollutants in storm water runoff to receiving waters. It requires the development and implementation of a system to identify and eliminate sources of illicit discharge and illegal dumping. The City will enhance its current system to identify and eliminate illicit discharges throughout the permit area. This system will primarily depend on City employees periodically reviewing and inspecting common problem areas in the City. City staff, which will contain at least 1 certified Storm Water Inspector, will also work closely with the County, and Caltrans officials to provide adequate storm water protection for areas within the City’s jurisdiction. In year one, a map clearly identifying “trouble spots and potential illegal dumping areas” in the City will be developed and will be continually updated as areas are cleared or new areas identified. The system will also depend on input and reporting by the public on illegal dumping by contacting the City or the hotline as previously described in this SWMP. The specific requirements for this system are described in detail below, including measurable goals for determining effectiveness.

**3.1 Minimum Requirements**

USEPA guidelines establish the following “Best Management Practices” for Illicit Discharge Detection and Elimination Minimum Control Measure (*USEPA Fact Sheet 2.6, 01/00*):

- Develop, implement and enforce a program to detect and eliminate illicit discharges
- Develop a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls
- To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions;
- Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system; and
- Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

The following discharges may be exempted from being regulated discharges unless they are determined to be a significant source of pollution or a nuisance. Currently the city utilizes existing ordinances, BMPs and storm water controls to prevent any of these activities from making a significant contribution of pollutants.

**Table 3-1:  
Discharges Exempted From SWMP Regulation**

Irrigation Water	Emergency Fire Fighting Discharges
Landscape Irrigation	Springs
Diverted Stream Flows	Water From Crawl Space Pumps
Rising Ground Waters	Footing Drains
Lawn Watering	Dechlorinated Swimming Pool Discharges
Foundation Drains	Uncontaminated Pumped Ground Water Air
Individual Residential Car Washing	Conditioning Condensation
Flows From Riparian Habitats And Wetlands	

Items listed above have such a minimal affect on the storm water quality of the area that they can be exempted from the SWMP. Though they are not addressed specifically in this SWMP it is still important to educate the public and City employees on the BMPs regarding these items to prevent them from becoming a POC. For example:

1. Street and sidewalk washing is mentioned in this SWMP section 6.2.4 while car washing is addressed in section 6.2.3 under training of Vehicle Maintenance.
2. Water line Flushing is mentioned in this SWMP in Table 6-2 under water pressure testing and fire hose testing.
3. Swimming pool discharge is neglected due to the minimal number of pools in the City.
4. Irrigation in the City is mentioned in section 6.2.7 of this SWMP, and its affects are limited by the use of native and drought resistant plants.
5. Rising Groundwater, pumped groundwater, foundation and footing drains, etc. issues are on a case by case basis and installed with BMPs such as leach lines and gravel and filter fabric wraps where necessary.
6. Diverted stream flows are also neglected due to the fact the streams are allowed to flow on their natural path.

## **3.2 Best Management Practices**

The City intends to maintain ongoing efforts to control illicit discharges at current levels and will implement additional suggested “Best Management Practices” listed in this section. Currently the City’s ordinance related to illicit discharges is the same as the County of Santa Barbara, adopted by reference. In year one, the City has begun the process of evaluating the need for a storm water ordinance or other regulatory mechanism and recognizes accepted BMPs for use within the City’s jurisdiction. The future ordinance must provide “right of entry” to private property for the inspection of individual sources of illicit discharges.

### **3.2.1 Storm Drain System Mapping**

The City has an atlas of its underground storm drains that shows major pipes and outfall locations of the City’s storm drain system. Additional research is necessary to confirm the completeness of the storm drain system map, in particular storm drain inlet locations, particularly in most recently developed areas. This existing storm drain system map is attached for reference. It is anticipated that the storm drain atlas will be completed by the end of year two. The atlas will be continually updated as new development installs drainage structures within the City. Currently approximately 79 % of the City’s residential-zoned land is developed and approximately 92% of the commercial/industrial-zoned land is already built out.

### **3.2.2 Storm Water Ordinance**

The City and County share jurisdiction over various facilities and potential dischargers (such as restaurants and schools). The City and County currently have a number of ordinances prohibiting inappropriate waste disposal, including prohibitions against unpermitted discharge of liquid waste, and illegal disposal of solid waste. These ordinances also apply to and regulate the prevention of storm water impairment through the prohibition, enforcement and abatement remedies that they encompass. Although these ordinances have been sufficient to meet storm water protection objectives to date, a future evaluation of existing City ordinances is part of this SWMP.

The need for an additional ordinance to specifically address non-storm water discharges will be initiated in year two of the permit. At the completion of year one the City will evaluate the scope of existing ordinances and the level of success in addressing illicit discharge under existing regulations. All appropriate City departments will evaluate existing regulations in the context of a new blanket storm water ordinance to ensure that any new ordinance does not conflict, interfere with, duplicate or negate existing law and enforcement. Due to the extent of build-out already attained in the city (approximately 79% of residential areas and 92% of commercial/industrial areas) logically the primary focus of the City’s new ordinances will be to introduce BMPs for existing and remodeled areas with a secondary focus on new building practices.

Authority for detection and elimination of illicit dischargers and illegal connections are referenced or described in:

- Adoption of “conditions of approval” for new development projects. Per AB 3180 (PRC 21081.6). The City has established a program to monitor CEQA mitigation measures adopted as conditions of approval on new development projects
- City Excavation and Grading Code, which includes preparation and implementation of erosion control plans.

The City will evaluate the effectiveness of existing laws to ensure that they are adequate to address pet/animal waste and other sources of potential creek contamination. To the extent that new regulations are necessary to meet the objectives of NPDES Phase II regulations and the State’s General Permit, the City will adopt appropriate regulations before the completion of year 5.

The following evaluations will be part of this assessment to determine the current needs and abilities of the City to regulate and enforce water quality protection measures through a new ordinance:

- Primary enforcement responsibilities may need to be further clarified among the various City Departments and other enforcement entities.
- A determination will be made regarding whether additional staff resources are needed for enforcement. Additional funding sources for enforcement, if necessary, will be provided to the appropriate departments.

Existing ordinances and laws will be reviewed by City staff to determine effectiveness and what will be done for improvement. Enforcement is conducted by City staff and includes items such as stop work notices and fines. These enforcement measures will still be applicable until they are reviewed by the City staff and determined how effective they are. Effectiveness can be measured by number of violations, repeat offenses, and reports of illicit discharge in the City.

**Table 3-2: Legal References**

<b>Animal waste</b>	<b>Liquid discharge from commercial vehicles</b>
City Code Title 5 Public Health and Safety	City Code Title 5 Public Health and Safety
City Code Title 6 Police Regulations	Health and Safety Code §§5410 et. seq.
Health and Safety Code §§5410 et.seq.	Water Code §§13000 et. seq.
Water Code §§13000 et.seq.	Fish and Game Code §§5650 et.seq.
Fish and Game Code §§5650 et.seq.	Penal Code §§374.3 et. seq.
Penal Code §§374.3 et.seq.	
<b>General dumping of trash</b>	<b>Discharge of liquid waste from recreational vehicles</b>
City Code Title 5 Public Health and Safety	City Code Title 5 Public Health and Safety
City Code Title 8 Public Ways and Property	Health and Safety Code §§5410 et.seq.
Health and Safety Code §§5410 et.seq.	Health and Safety Code §§117550
Health and Safety Code §§117550	Water Code §§13000 et.seq.
Water Code §§13000 et.seq.	Fish and Game Code §§5650 et.seq.
Fish and Game Code §§5650 et.seq.	Penal Code §§374.3 et.seq.
Penal Code §§374.3 et. seq.	

**3.2.3 Education & Outreach**

One effective action in the elimination and prevention of illicit discharges is the education and cooperation of a concerned public. Education is a primary tool of enforcement activities. The

efforts for educating the community about eliminating illicit discharges, listed below, are discussed in greater detail in Section 1.0 - Public Education and Outreach:

- City and County web sites
- Regional Water Quality Hotline (1-877-OUR-OCEAN)
- Business outreach
- Sanitary system pre-treatment inspections
- Brochures
- Public events
- Media campaign

Since many illicit discharges can occur due to a lack of awareness on the part of the discharger, education is an important tool of enforcement activities. Often, simply pointing out the error and suggesting best management practices to be used in the future is enough to convince businesses and homeowners to cease discharging, dumping or to eliminate an illegal storm-drain connection. In most cases the individual responsible can be motivated to do the right thing, and will implement appropriate BMPs.

#### **Outreach to the community**

Targeted information brochures are currently available from the County addressing creek-side residents, owners of domesticated animals, and various businesses to educate them on appropriate BMPs to reduce these types of violations. Informational brochures have been developed for issuance along with each new zoning application. (See Appendix C)

#### **Municipal employees**

The City has arranged to partner with the City of Santa Maria to use the illicit discharge detection and elimination pocket guide they have developed for Solvang City staff. The purpose of the pocket guide is to provide additional information and guidance for staff to identify and report illicit discharges, connections, or activity encountered during their regular duties. Staff participation and recognition of illicit discharges will greatly reduce the economic, health, and environmental consequences associated with illicit connections and discharges into the MS4. This pocket guide will be distributed to City staff during Storm Water Pollution Prevention (SWP2) training sessions, beginning in year 2

### **3.2.4 Identification and Elimination of Illicit Discharge Sources**

In order to maximize the limited resources available, potential sources of illegal dumping and illicit connections are identified and prioritized based in part on public access and contact to the area (or storm drain), and characterization of nearby land uses as industrial, commercial, and older residential areas. In addition, the sources shown in Table 3-3 will be evaluated on an on-going basis for their potential impacts to the storm water quality within City watersheds.

**Table 3-3: Potential Illicit Discharge Sources**

Accidents	Illicit Connections
Spills of Vehicle Fluids (antifreeze, oil, grease, hydraulic fluids, lubricants) gas,	Residential
	Commercial
	Industrial
Glass	Illegal Dumping
Asbestos Brake Fibers	Solids
Auto Dealers	Liquids
Auto Shops	Industrial Cooling Water
Auto - Residential Cleaning	Oil Drips/Fuel Leaks (new/used)
Businesses Washdown	Commercial
Commercial Irrigation	Residential
Construction	Apartments
Sediment	Paint
Asphalt Cuttings	Parking Lots
Carpet/Residential Cleaning	Pools and Spas
Cement Washing	Residential
Equipment Cleaning	Grey Water
Food Facility Cleaning	Hazardous Materials
Facility Cleaning - gray water	Pesticides
Cooking Equipment - grease, oil and hazardous cleaning agents	Fertilizers
	Sediments
Grease Trap	RV Waste
Dumpsters	Sewage Spills
Gas Stations/Vehicle Service Stations	Septic Spills
Car Wash	Sumps/Dewatering

The City’s existing program for identification and elimination of illicit discharge sources comprises two parts:

1. Spill and/or Complaint Response
2. Field Investigation and Abatement

These two program elements are discussed in more detail below. City Public Works, Water Division, County Environmental Health Services, County Flood Control/Water Resources, the City Fire Department, Caltrans and other agencies are all engaged in detection and elimination of illicit discharge activities within the City of Solvang.

The following procedures are used to address the ongoing identification and abatement of illicit discharges:

Spill and Complaint Response

- Receive complaint or notice of the spill, discharge or illegal connection. Complaints are often received from other local agency staff or through the Project Clean Water Hotline at 1-877-OUR-OCEAN.
- Identify the potential source of the discharge to determine appropriate response agency.
- Document response and track the spill/discharge to source.
- Use education and enforcement to eliminate the discharge to the storm drain/sewer or ground surface.

- Impose BMPs if applicable to assure on-going compliance.
- Maintain records of response to establish database, and to identify re-occurrence patterns.
- Establish ongoing compliance through subsequent site visits/inspections.

#### Field Investigation and Abatement

- Identify and prioritize areas of potential illicit discharge and/or illegal connections for residential, commercial and industrial locations based on specified criteria
- Conduct annual creek walks to identify potential sources
- Conduct field/manhole/site inspections
- Verify illicit discharge/illegal connection and identify the source
- Use education and/or enforcement to eliminate the discharge to the storm drain/sewer or ground surface
- BMPs if applicable to assure on-going compliance
- Maintain records of response to establish data base and to identify reoccurrence patterns
- Establish ongoing compliance through subsequent site visits/inspections

Enforcement of existing policies and ordinances is crucial to the effort of maintaining water quality in the creeks and oceans. The City and County use a “single point” system for reporting water quality problems, tracking follow-up, and insuring enforcement of water quality policies/ordinances. These efforts include a water quality reporting hotline (1-877-OUR-OCEAN), coordination between various enforcement agencies and personnel, and increased report follow-up.

The initial approach to prevention and elimination is education on what the pollution source is, what effects it has on our watershed and how the problem may be eliminated through best management practices. When necessary, education can be used in combination with legal enforcement in order to achieve elimination of the illicit discharge.

In addition to complaints, the scheduled creek walks conducted in each watershed discover places where solid waste has been discarded into the creek or along the creek banks. To address these issues, letters and informational brochures are sent to property owners whose parcel is clearly identified as the source of contamination. For example, if a large pile of greenwaste is seen directly on the creek bank behind a home, a letter would be sent to the owner of that parcel explaining the impacts greenwaste has on water quality and outlining alternative methods of disposal or composting of greenwaste. Existing water-quality brochures, such as “Gardener’s Guide to Clean Water”, “Creekside Concerns”, “A Dog-Owner’s Duty”, and “Helpful Hints for Horse Owners” are included in the letter as appropriate.

Educating the general public, business owners, industries, school children, teachers, and regulatory personnel on the hazards associated with illegal discharges and improper disposal of waste is being accomplished in a number of ways. A detailed discussion on storm water educational outreach and participation is made in Sections 1.0 and 2.0 of this document.

Activities to identify and eliminate illicit discharges are summarized by City and County departments below:

City Public Works, Water Division: City staff responds to complaints regarding water quality throughout the year. Response occurs within twenty-four hours of notification, resulting in compliance with the performance measures regarding service response. Complaints range from illegal dumping of trash, horse manure and green-waste in the creeks to the illegal disposal of liquid waste. Complaint response may require the cooperation of many agencies. Callers are not always aware of the boundaries between incorporated and unincorporated areas, so a call referral system has been established so that calls can be efficiently redirected to the correct agency.

The “Mutt Mitt” program consists of providing pet waste disposal bags at City parks and open spaces for use by the public. This program is successful in eliminating pet waste pollution. The City will evaluate new Mutt Mitt stations and more visible signage at various parks and trails as needs are identified. City Park facilities and operations are discussed in Section 6.0.

County Environmental Health Services (EHS): Another program that abates illicit discharge violations is the EHS Community Health Program. District Specialists perform routine annual inspections and complaint investigations at all retail food facilities. EHS has expanded their normal inspection techniques (such as time and temperature controls for perishable foods) to include storm water management activities. Due to increased public awareness, EHS has received a greater number of complaints associated with unlawful discharges from permitted food facilities. Illegal activities include floor mat and floor wash-down discharge to storm drains. EHS responds to each complaint and takes appropriate enforcement action. The appropriate Health and Safety Code authority is cited for each violation and abatement obtained.

Additionally, EHS also cooperates with the staff of the Cities of Solvang, Buellton, Santa Barbara, Goleta and Carpinteria to create a regional outreach and recognition program for restaurants that have established good operational practices to prevent the discharge of liquid waste off-site and into storm drains. This program is described in Section 1.0.

EHS Liquid Waste Program: This program investigates and abates violations of liquid waste discharge. Illegal and/or illicit discharges of liquid waste onto the ground surface and/or into the storm drain collection system may be the result of discharges from faulty sewer laterals, sewer mains or failing septic systems. Correction notices are issued to owners of deficient septic systems, requiring them to make repairs or upgrades as necessary to meet current septic system sanitary standards. Inspections to ensure remediation of the problem may be made by EHS and/or City Planning staff.

In an effort to prevent illicit discharges from faulty septic systems, in April 1999, Environmental Health Services revised Chapter 29 of the County Code to include mandatory reporting of septic system servicing and inspection. This ongoing reporting system of voluntary septic system servicing reveals operational problems in existing septic systems. These systems are required to make repairs or modifications to meet minimum operational sanitary standards.

Concurrent with the efforts described above, EHS is supporting the efforts of several local community groups (e.g. Heal the Ocean, CURE, etc.) to provide incentives to parcel owners using septic systems in problem areas to convert their systems to sanitary sewer.

County Fire Department – Protection Services: Labeling and storage of hazardous material is within the jurisdiction of the County Fire Department. For new businesses that use or store hazardous materials, conditions of approval are included in the standard conditions and mitigation measures enforced by this department. These require that a safe, storage area for pesticides, herbicides, and fertilizers be designed to contain spills. In addition, a Hazardous Materials Business Plan must be submitted to the Fire Department for review and approval for each business in order to detect potential hazards associated with the chemicals.

The Fire Department is responsible for inspecting sites and monitoring their compliance with hazardous materials best management storage practices and spill response. First responders and the hazardous materials response team, may conduct a spill response, depending on the hazard level and severity of the spill. Emphasis is made on containment and cleanup with public health and safety as the foremost consideration in an environmentally sensitive manner. The Fire Department facilities and operations are discussed in Section 6.0.

### **3.2.5 Wastewater Programs**

#### City of Solvang Wastewater Division

The City operates a wastewater treatment plant serving both the City and portions of the unincorporated community of Santa Ynez. The system serves approximately 1,806 connections and collects, treats and disposes of 860,000 gallons of wastewater per day. Wastewater is generated primarily from domestic sources with 258 connections from commercial establishments but does not include storm water collection. The City maintains two lift stations and 39 miles of collection sewers. All of the water is treated and discharged to percolation basins located southeast of the City.

The Plant meets or exceeds all permit requirements. The City conducts routine flushing of the collection system every two years. In addition, preventative maintenance is provided on a regular basis for older portions of the system. Pipeline video inspection is done routinely to further assess the system's condition. Identified trouble spots are then scheduled for repair. At this time, the City has only a few minor industrial discharges and does maintain a set of requirements for pretreatment for these facilities.

The State Water Resources Control Board permits the wastewater treatment plant. Facility operations and water quality programs are summarized below. Activities are discussed in more detail to the extent that they address NPDES Phase II regulations. Programs such as restaurant outreach are discussed in Section 1.0.

Pursuant to their permit, the treatment facility employs procedures designed to discover illicit discharges and illegal connections to the storm sewer system. These include:

- Good housekeeping and preventative maintenance of facility equipment and machinery to capture and prevent spills and discharges.
- Smoke testing of the City sewer system. Smoke testing is used to detect interconnections and leaks (cross connections) between the sewer system and the storm drain system,

groundwater, and creeks. The City also performs smoke testing to detect illicit storm drain connections to the sewer, including residential rain gutters and other hard piped connections collecting surface runoff to the sewer. Diverting storm water discharge away from the sewer prevents sewer overflows to storm drains and creeks in wet weather conditions.

- Closed circuit television video of sewer lines is part of their ongoing program to assess the condition of the sewer lines. As part of their maintenance program the City can prioritize problem areas and detect and fix leaks, plugs, root balls, oil and grease buildup, and replace aging sewer lines.
- Development of public education programs. The City's compliance inspector conducts outreach for contractors, plumbers, engineers, other industrial and professional groups and classes for young people to teach them about the hazards of illicit discharges and illegal connections.

### **3.3 Measurable Goals**

The following measurable goals for best management practices have been selected to ensure that illicit discharges are detected, eliminated and prevented. The effectiveness of the best management practices for this minimum control measure will be evaluated by tracking and evaluating the following:

#### **BMP: Storm Drain System Mapping**

- Verification of existing mapping of storm drain system and 100% complete map by end of year 3. Update atlas as necessary with new development through the end of year 5 and ongoing as necessary.

#### **BMP: Storm Water Ordinance**

- Assessment of existing ordinances/policies
- Development and adoption of storm water ordinance or other regulatory mechanism by end of year 5.

#### **BMP: Education & Outreach**

- Articles that appeared and circulation numbers for each newspaper
- The number of brochures that are printed and delivered to target groups (See Section 1.0)
- The number of commercial training events and the number of attendees that visit each event
- 100% City employee participation in annual in-house training for illicit discharge awareness and best management practices at work and home.
- The quantity of mutt mitts for pet waste disposal that are provided.

#### **BMP: Spill & Complaint Response**

- Response to complaints of illicit/illegal discharge within 24 hours of receiving the complaint, referral or notice
- Numbers of complaints, notices and referrals received/responded to

**BMP: Illicit Discharge Field Investigation & Abatement**

- Inspection of targeted creeks within the City on a routine basis of once per year with follow-up inspections as appropriate to ensure abatement of violations.
- Response to inspection reports from septic system pumpers that identify deficiencies in order to ensure that the deficiencies are repaired or eliminated. Corrections of reported septic system failures with surfacing sewage (failures that are repaired, modified, replaced to meet minimum sanitary standards)
- Number of septic to sewer conversions
- Numbers of Notices to Correct issued to septic system owners
- Numbers of illegal connections identified by the City Wastewater Division

**BMP: Sanitary Sewer Overflow (SSO) Response Program**

- Development of a standard SSO Response Program that would outline and identify the procedures and forms required to respond to a sanitary sewer overflow and prevent contact with surface water, by end of year 3.

**3.4 Reporting**

The data collected for each BMP will be compiled, reviewed and reported in annual reports. Significant variance from targets will be assessed and discussed in annual reports. Measurable goals will be adjusted as appropriate; the basis for any changes will be included in the next annual report. Feedback from Community Interest Groups and other sources will be used to improve implementation of all six minimum control measures.

**Table 3-4  
BMP Implementation: Illicit Discharge Detection & Elimination**

Year	BMP	Current Status	Implementation Details	Measurable Goal	Responsible Party
1 thru 2	Storm Drain Mapping	The City’s storm drain system map is 100% complete	Update and revise map to 100% complete by the end of year 3. Utilize maps to track sources of illicit discharges.	100% complete map by the end of year 3.	Public Works Department
3 thru 5	Storm Drain Mapping		Update and revise Storm drain map with new development.	100% complete map annually by year 5.	Public Works Department
1	Storm Water Ordinance	Reliant on existing City ordinances	Evaluate scope of existing ordinances to determine need for new ordinance at end of year one.	Have evaluation of existing ordinances complete by end of year 2.	Public Works Department
2 thru 5	Storm Water Ordinance		Following evaluation at end of year 1, develop and adopt new ordinance if needed.	Develop and adopt new ordinance if needed by end of year 5.	Public Works Department

Year	BMP	Current Status	Implementation Details	Measurable Goal	Responsible Party
1 thru 5	Education & Outreach	Ongoing	Continue to utilize web sites, hotline, brochures, public events, and media campaigns to educate the community and in-house training for City staff.	Document education material handouts annually; document training session attendance annually; also documentation in accordance with the measurable goals stated in Section 1.0 Public Education and outreach.	All City Departments
1 thru 5	Spill & Complaint Response	Ongoing	Respond to complaints received through the water quality hotline, observations, and reports from field personnel and public.	Respond to complaints within 24 hours of receiving complaint, referral or notice. Document number of complaint responses.	Public Works Department and Planning Department (Code Enforcement)
1 thru 2	SSO Response Program	Ongoing	Development of formal program with forms and procedures for response to a sanitary sewer overflow.	Develop and adopt.	Public Works Department
1 thru 5	Field Investigation & Abatement	Ongoing	Perform field investigations to identify and abate septic system problems	Inspect creeks annually to identify illicit discharges. Respond to septic inspection reports to insure repair or elimination of deficiencies. Document number of septic to sewer conversions, Notices to Correct, and illegal connections.	Engineering / Storm Water Compliance Department and Public Works Department

**4.0 CONSTRUCTION SITE RUNOFF CONTROL**

The purpose of construction site runoff controls is to prevent soil and construction waste from entering storm water. Sediment is usually 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 the contribution of other pollutants from construction sites can cause physical, biological, and chemical harm to local waterways.

**4.1 Minimum Requirements**

EPA guidelines establish the following “Best Management Practices” for Construction Site Runoff Control Minimum Control Measure (*Fact Sheet 2.6 - Construction Site Runoff Control Minimum Control Measure, 01/00*):

- Ordinance or other regulatory mechanism, as well as sanctions to ensure compliance
- Requirements for construction site operators to implement appropriate erosion and sediment control BMPs

- Requirements for construction site operators to control waste such as...
  - Procedures for site plan review which incorporate consideration of potential water quality impacts
  - Procedures for receipt and consideration of information submitted by the public
  - Procedures for site inspection and enforcement of control measures

The State General Permit for NPDES Phase II requires local jurisdictions to establish construction site controls for sites of one or more acres. In addition, the State General Permit for Construction Activities requires filing of an NOI (with the RWQCB) and development of a Storm Water Pollution Protection Plan pursuant to RWQCB regulation.

#### **4.1.1 Program Development**

The State has direct jurisdiction over construction sites of one acre or more. In addition, under state planning law and the California Environmental Quality Act (CEQA), the City is responsible for evaluating new development and redevelopment projects and, therefore, has a key role in implementing the NPDES Phase II construction runoff control measures. The City will review its Excavation and Grading Code to determine whether it provides the necessary framework for fully implementing construction runoff control measures. The City will consider various other jurisdictions' regulations in its review. In addition, one potential addition to the Excavation and Grading Code could be reference to BMP manuals. The manuals treating relevant BMPs include:

- Storm Water Quality Task Force (1997 or current). Construction Activity Best Management Practice Guidebook.
- Caltrans (2002 or current). Construction Site Best Management Practices Handbook.
- San Francisco Regional Water Quality Control Board (1999 or current). Erosion and Sediment Control Field Manual.

#### **4.2 Best Management Practices**

Currently the City Excavation and Grading Code regulates all excavations of 3 feet of vertical height or more and projects disturbing 30 cubic yards of earth or more. City Code provides that slopes in excess of 3 feet vertical height "shall be planted to prevent erosion" or otherwise protected.

The City will review its current Excavation and Grading Code and standard practices and may contract with a consultant assist in the review and development of any changes to ordinance or standard practice. One element of proposed requirements shall be to require applicants to provide a copy of their SWPPP and NOI for City approval prior to issuance of any grading permit. Any recommended revisions will be considered by the City and reported as part of its implementation of this SWMP. The City will also require all construction projects to collect construction waste and materials on site and dispose of it in a legal and proper manner. Concrete washout stations are also required to prevent contaminants from reaching the soil on any site where concrete shall be poured. All construction sites are also required to provide onsite sanitary facilities to be properly kept in working order and regularly maintained.

#### **4.2.1 Construction Site Enforcement, Inspections**

Section 10-5-7 of the Excavation and Grading Code specifies routine inspections shall occur. In addition the City Engineer may require such other inspections of any work to ascertain compliance with the provisions of this Chapter and other laws and regulations as may be required. Non-compliance is subject to construction site activity suspension (“red-tagging”), fines or both. The need for additional inspections will be evaluated as part of review of the Excavation and Grading Code. Site inspectors will enforce clean sites and proper and legal disposal of litter and construction waste materials. Potentially hazardous chemicals and materials will be required to be stored in a proper manner and used appropriately to prevent any contamination.

#### **4.2.2 Discretionary Projects –Conditions of Approval**

In addition to the regulations under the Excavation and Grading Code, the City may apply conditions of approval relating to construction site controls to new discretionary projects. For example, large projects may be required to develop erosion control plans for construction (and post-construction) and may have specific requirements relating to fueling and maintenance of equipment and control of construction site debris. The City will re review its approach to conditioning discretionary projects as part of its review of its Excavation and Grading Code. Staff will be trained in the appropriate selection and application of adopted conditions of approval that relate to storm water.

#### **4.2.3 Staff Training**

Construction inspection staff will be responsible for understanding and enforcing erosion and sediment control requirement of the Excavation and Grading Code or Storm Water Pollution Prevention Plans, as appropriate. Staff will receive annual training in currently applicable regulations and compliance standards and techniques. One staff member will receive training at a recognized 24 hour Caltrans approved inspector training and be certified by the end of year1.

#### **4.2.4 Construction Workshops**

The construction community will be responsible for developing and implementing erosion and sediment control plans or Storm Water Pollution Prevention Plans, as appropriate. The City will partner with the County in providing free or low cost workshops to explain regulations and demonstration appropriate BMPs. In addition, annual public workshops will gather comment on City construction site BMPs.

#### **4.2.5 Measurable Goals**

The following goals will be used to check progress each year as well as demonstrate the efforts made to reduce pollutants to the maximum extent practicable. The intent is to provide both an opportunity to assess and evaluate the program and a feedback mechanism to measure and update the program as appropriate.

The following measurable goals will be applied to the construction program.

**BMP: Update Excavation and Grading Code**

- Review City Excavation and Grading Code and make recommendations for revisions to conform to the State General Permit by end of Year 3.
- Adopt revised Excavation and Grading Code to conform to the State General Permit by end of Year 5.

**BMP: Construction Site Enforcement, Inspections**

- 100% compliance with project-approved erosion and sediment control plan (or SWPPP, as appropriate)
- 100% compliance with City code for construction sites
- Daily inspections on active projects one acre or larger of land disturbance
- Minimum of monthly inspections conducted throughout project duration
- City-implemented enforcement action at 100% of sites where BMPs failed, which may include verbal warnings, letters to correct, stop work order, use of construction bonds, etc.

**BMP: Discretionary Projects – Conditions of Approval**

- 100% annual training of planning staff in the appropriate selection and application of appropriate conditions to discretionary projects by end of Year 2.

**BMP: Staff Training**

- 100% annual training of City grading inspectors by end of Year 2.
- One City staff member will be a certified SWMP inspector by end of year 1.

**BMP: Construction Workshops**

- Promotion of Participation in County or City-sponsored training/workshops directed toward the construction community with brochures and guidance materials developed or adopted from existing materials distributed to development and construction community by the end of Year 2.

**4.3 Reporting**

Feedback from City and County inspectors, Caltrans and RWQCB staff, construction contractors, project owners and the public will be evaluated and potential changes to the Grading Ordinance and its implementation will be evaluated. To the extent these changes could change the level of protection to storm water quality they will be discussed in the annual report.

**Table 4-1  
BMP Implementation: Construction Site Runoff Control**

Year	BMP	Current Status	Implementation Details	Measurable Goals	Responsible Party
1 thru 3	Review City Excavation and Grading Code	Erosion and dust control measures required in permit application	Make recommendations for revisions to conform to the State General Permit	Review 100% of the existing Grading code and have revisions recommended.	Public Works Department

Year	BMP	Current Status	Implementation Details	Measurable Goals	Responsible Party
1 thru 5	Construction Site Enforcement & Inspections	Existing Excavation and Grading Code provides for inspections and enforcement.	Make recommendations regarding existing Excavation and Grading Code. Inspections will be conducted according to currently adopted Excavation and Grading Code.	Document project site inspections, and enforcement actions and provide in annual report.	Public Works Department
3 thru 5	Adopt revised Excavation and Grading Code		Code to conform to the State General Permit by end of year 5	Adopt revised code.	Public Works Department and Planning Department
1 thru 5	Discretionary Projects – conditions of approval	Conditions of approval include construction site controls.	Existing practice will be reviewed as part of recommendations for revisions to Excavation and Grading Code. Staff will be trained to implement any changes.	Annual training of 100 % of the planning staff in selection and application of adopted standard conditions	Public Works Department
1 thru 5	Staff Training	No specific training on storm water BMPs	Staff will be trained in currently applicable regulations. One City staff member will be a certified SWMP inspector by end of year 1.	Annual training of grading inspectors	Public Works Department
2	Construction Workshops	None	Develop BMP workshops for construction community.	Workshops developed or adopted by end of year 2 . At least one public workshop on BMPs annually by end of year 2.	City/County

**5.0 POST-CONSTRUCTION RUNOFF CONTROL**

One opportunity to reduce the generation of non-point source pollution from urban runoff is through planning and design, before developments are built. Once built, it is complex and expensive to correct problems. This minimum control measure focuses on site planning and design considerations, which are most effective when addressed in the early stages of project development. Effective long-term management and maintenance are critical, so the best design opportunities are those with the least maintenance needs. The goal of the program is to integrate basic and practical storm water management techniques into new development to protect water quality.

Most of the area within the City is developed and the nature of the local economy suggests that little new development is likely to occur. Nevertheless, the City will implement this minimum control measure through its land use regulatory process.

**5.1 Minimum Requirements**

USEPA regulations for post-construction runoff control require that the City must, at a minimum (*EPA Fact Sheet 2.7 – Post-Construction Runoff Control, 01/00*):

- Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre
- Develop and implement strategies that include a combination of structural and/or non-structural best management practices (BMPs)
- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment to the extent allowable under local law
- Ensure adequate long-term operation and maintenance of BMPs

Furthermore, the State General Permit requires “for those Small MS4s described in Supplemental Provision E below, the requirements must at least include the design standards contained in Attachment 4 of this General Permit.” Based on both population and projected growth rates, the requirements of Attachment 4, which address Receiving Water Limitations and Design Standards, do not apply to the City of Solvang. However the City will review the efficacy of regulations intended to address the issues discussed in Attachment 4 as part of the revision of its General Plan and Zoning Ordinance.

### 5.1.1 Background

Under state planning law and the California Environmental Quality Act (CEQA), the City is responsible for evaluating new development and redevelopment projects, therefore the City has a key role in implementing the NPDES Phase II post-construction runoff control measures. The City’s existing land use policies and development review process provide a general framework for water quality protection and compliance. These include:

- City of Solvang General Plan
- CEQA initial study checklist
- Standard conditions of approval and mitigation measures for discretionary projects.
- Engineering Permit Conditions
- Solvang Municipal Code

New projects are also reviewed on behalf of the City by a consultant team of engineers and policy reviewers. The team supports City staff and conducts the bulk of new development review and evaluation. In response to the February 2008 letter from CCRWQCB the City has already begun to establish a baseline for future hydromodification requirements in the form of the City of Solvang drainage flow and impervious surface maps. These maps will be completed by the end of Year 2. From this baseline and by summarizing information gained from relevant technical sources the City intends to characterize the watershed and future development patterns.

The City has evaluated several methods for assessing the results of urbanization on the watershed and determining the effectiveness of proposed control measures. Due to the timeline imposed by the Regional Water Board and future financial constraints for research, the City intends to utilize the hydromodification guidelines outlined in other approved Agency SWMPs.

The City will then evaluate several methods for assessing the results of urbanization on the watershed and determining the effectiveness of proposed control measures. This evaluation will include assessment methods that are well understood or currently used by other governing

agencies. New assessment methods will not be developed. The methods will be compared in a decision matrix and the most appropriate method selected based upon the relevant criteria.

Assessment methods will address the following issues:

- Estimate hydrograph modification (volume, duration, and rate);
- Accommodate a wide range of flow events (e.g., 1- to 10-year return period);
- Evaluate EIA;
- Evaluate downstream affects (stream stability);
- Estimate buffer zone requirements; and
- Estimate water quality impacts.

The City will then Adopt/Develop Guidance for Hydromodification Control Selection, Design, Monitoring, Maintenance, and Inspection requirements and guidance to assist developers in the selection, design, and maintenance of hydromodification control measures.

- Establish numeric criteria for runoff rate and volume control for development and redevelopment projects;
- Establish numeric criteria for stream stability impacts for development and redevelopment projects;
- Identify areas within the City where these criteria must be met;
- Specify performance and monitoring criteria for installed hydromodification control infrastructure; and
- Establish riparian buffer zone requirements.
- Development of appropriate hydromodification control strategy will primarily focus on maximizing the use of the existing detention basin and drainage system within the City to achieve the HMP objectives. Control measures may include LID concepts, on-site hydrologic and water quality controls, in-stream controls, and regional facilities to meet future development conditions. It is the City's intent that implementation of these guidelines will result in improved water quality throughout the watershed.

A final report describing the assessment methodology, numeric criteria, and areas of applicability will be developed by City Staff by the end of Year 3.

## **5.2 Best Management Practices**

The City will encourage and recommend designs that use practical structural means of controlling post-construction runoff such as wet ponds and dry basins, grassy swales, bio-swales, and filter strips. Other structural design standards that will be desired are infiltration basins/trenches, dry wells, and porous pavement to percolate runoff through the soil to the groundwater. Non-structural BMPs include general protection of surface water quality which occurs during evaluation of potential impacts in CEQA review and/or in establishing conditions for project approval. These protective policies and guidelines are discussed below.

### **5.2.1 Update Land Use Regulations**

Water Quality Protection Policies:

The City will review existing water quality protection policies such as the General Plan and Municipal Code and revise, if appropriate, to apply to all new development and redevelopment projects of one acre or more in area in the City. These policies will provide City staff and the development community with a framework to identify appropriate water quality protection measures for proposed projects, including the development of reasonable and feasible best management practices.

As anticipated, these policies would direct growth away from sensitive areas, encourage environmentally sensitive site design, protect wetland and riparian resources, and minimize degradation of water quality.

CEQA Initial Study Checklist:

The CEQA Initial Study Checklist provides a preliminary analysis of the potentially significant environmental impacts of a proposed project to identify appropriate measures to mitigate the impact, and ultimately, to determine whether a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report is required. The City's initial study checklist is the current recommended checklist contained in the State CEQA Guidelines (see [http://ceres.ca.gov/topic/env\\_law/ceqa/guidelines/Appendix\\_G.html](http://ceres.ca.gov/topic/env_law/ceqa/guidelines/Appendix_G.html)). Presently, the City checklist includes direct reference to water quality impacts resulting from project-related discharges.

Standard Conditions of Approval/Mitigation Measures and Engineering Permit Conditions:

The City's Standard Conditions of Approval and Mitigation Measures and Engineering Permit Conditions will be evaluated to assure compliance with the minimum requirements described above to protect water quality where impacts are identified during the project review and CEQA processes. The Conditions/Measures are developed in conjunction with other City and County departments (e.g., County Fire), therefore these parties would be consulted prior to revising the Standard Conditions of Approval and Mitigation Measures. New conditions would address both construction site pollution control and post-construction runoff control for new development and redevelopment.

Conceptual Review:

Conceptual review meetings are used for moderately complex or complex projects where there is the potential for significant environmental or policy concerns. During the meeting staff advises the applicant and can suggest changes in the project to avoid policy or environmental conflicts before the plans are submitted. The conceptual review process will be evaluated to determine whether water quality issues are adequately addressed.

**5.2.2 Staff Training**

Planning staff and supporting consultants will need to be trained to recognize potential storm water impacts during design review, and to condition projects appropriately. Training can be used to initiate new staff, and to provide updates on innovative site design for existing staff. One staff member will be a certified SWMP inspector by the end of year 1.

### 5.2.3 Monitor Discretionary Projects

Discretionary projects will be monitored for compliance with water quality measures, and non-compliance may include a correction notice, stop work order, collection of any bonds, and establishing a time frame for developer to take corrective steps to resume work.

### 5.2.4 Master Drainage Plan

The City is in the process of developing a Master Drainage Plan. To this end the City will develop a drainage flow map by the end of Year 2. This plan will be an opportunity to include new development strategies to protect water quality and will be evaluated as such.

## 5.3 Measurable Goals

The following goals will be used to check progress each year as well as demonstrate the efforts made to reduce pollutants to the maximum extent practicable. The intent is to provide an opportunity to assess and evaluate the program and a feedback mechanism to measure and update the program as appropriate. The following measurable goals would be applied toward the new development and redevelopment minimum control measure:

#### **BMP: Update Land Use Regulations**

- Review City Code, General Plan, and CEQA checklist to determine effectiveness; recommend modifications and or revisions by end of year 2.
- Adopt or revise City Code, General Plan, and revised CEQA checklist to provide appropriate water quality protection standards, conditions and policies by end of year 5.

#### **BMP: Staff Training**

- 100% of all Public Works and Planning staff participate in an annual City water quality training (in-house)
- 100% of Planning staff encourage and recommend design of projects to incorporate structural and non-structural BMPs.

#### **BMP: Monitor Discretionary Projects**

- Evaluate 100% of all discretionary projects which are subject to storm-water regulation and that receive approval after for construction, implementation, and as appropriate, proper functioning and maintenance of water quality measures.

Where there is non-compliance on conditioned projects with approved water quality design, operation and/or maintenance procedures, City will take enforcement actions on 100% of all projects, which may include a correction notice, stop work order, collection of any bonds, and establishing a time frame for developer to take corrective steps to resume work.

## 5.4 Reporting

Data collected for each measurable goal will be compiled, reviewed, and summarized in annual reports. Significant variance from targets will be assessed and discussed in annual reports to RWQCB. Feedback from City staff, permittees, developers, the Community Interest Group, etc. will be used to modify BMPs or the measurable goals, as appropriate; the basis for any changes will be included in the following annual report.

**Table 5-1  
BMP Implementation: Post construction Runoff Control**

Year	BMP	Current Status	Implementation Details	Measurable Goals	Responsible Party
2 thru 3	Update land use regulations	Review existing policies and regulations.	City will evaluate General Plan, CEQA, conditions of approval, engineering conditions, and all municipal codes to address water quality	Determine effectiveness and recommend modifications.	Public Works Department and Planning Department
4 thru 5	Update land use regulations	Existing policies and regulations provide some level of control.	Adopt and implement recommended revisions	Adopt and implement recommended revisions.	Public Works Department and Planning Department
2 thru 5	Staff training	Permitting and review staff responsible for conditioning projects to protect water quality	Training will be used to initiate new staff, and to provide updates on innovative site design utilizing structural and non-structural BMPs.	Document attendance at annual training. Document all BMPs incorporated in annual report	All City Departments
2 thru 5	Monitor discretionary projects	No specific monitoring in effect.	Implemented during construction and post-construction monitoring.	Evaluate all discretionary projects for function of water quality protection measures implemented. Enforcement action on all non-compliant projects.	Public Works Department

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

The purpose of this minimum control measure for Municipal Operations/Good Housekeeping Practices is to assure that the City’s delivery of public services occurs in a manner protective of storm water quality. In this way the City may serve as a model to the community.

**6.1 Minimum Requirements**

The State’s General Permit states that the City must develop and implement an operations and maintenance plan the will prevent or reduce pollutants in runoff from municipal operations (*EPA Fact Sheet 2.8 – Pollution Prevention/Good Housekeeping, 01/00*).

The minimum requirements are:

- To consider municipal activities and identify those that may contribute pollutants to storm water;
- To select and implement Best Management Practices (BMPs) that will reduce or eliminate pollutants in storm water runoff from these activities to the Maximum Extent Practicable; and
- To train new and existing employees on the potential impacts to storm water from municipal activities and the implementation of BMPs to prevent and reduce these impacts.

**6.2 Best Management Practices**

Tables 6-1 and 6-2 summarize the City facilities and services and identifies those that may contribute pollutants to storm water.

**Table 6-1: City Facilities**

<b>Facility</b>	<b>Potential Pollutant Sources</b>	<b>Responsible Division</b>
City Hall	Trash bin, parking lot, janitorial wastes, landscaping	PublicWorks(Maintenance), all City staff, Parks and Rec
Fire Station	Vehicle washing, janitorial wastes	Fire, Ambulance staff
Municipal Annex	Public recycling bins, staff picnic area, parking lot, landscaping.	Public Works, Parks and Rec, all City staff
Water & Maintenance Shop, including storage areas	Equipment storage, parking, trash bins, public recycling bins (all shop maintenance conducted indoors)	Public Works
Wastewater Treatment Plant	No potential storm water pollutants. Runoff is captured and treated at headworks via lift station; facility requires no NPDES Industrial permit.	Public Works, Wastewater
Veteran’s Memorial Building	Trash bins, parking	Maintenance, Parks and Rec
Elverhoy Museum	Trash bins, parking	Maintenance, Parks and Rec
Hans Christian Anderson Park, Park Residence	Trash bins, parking, equipment storage	Maintenance, Parks and Rec
Parking lots (4)	Vehicle wastes, litter	Maintenance
Restrooms (3) at Public Parking lots	Janitorial wastes, litter	Maintenance, Parks and Rec
Streets and storm drains	Vehicle wastes, litter, unknown material including illegal dumping	Maintenance
Water Supply Reservoirs (3) and groundwater wells (4)	Every two years cleaned with rinse waters disposed to storm drain (no cleansers)	Water

**Table 6-2: City Activities**

<b>Activity</b>	<b>Potential Pollutant Sources</b>	<b>Responsible Division</b>
Park maintenance	Over application of pesticides, herbicides, spills during mobilization and storage, improper greenwaste disposal	Parks & Rec
Trash removal and temporary storage	Trash that misses the bins, trash bin liquid discharges	Maintenance
Vehicle maintenance, Washing, Minor repairs (i.e., oil changes)	Improperly managed wastes, including solids, liquids, and hazardous materials, contaminated wash water,	All (about 32 cars distributed in each division, plus ten additional vehicles such as tractors, fire engine, and buses)
Janitorial service (in-house and contractor)	Improper disposal of wash water and other waste products into storm drain system	Maintenance
Construction (contractors)	Improperly managed construction wastes, sediment runoff, staging area runoff (equipment leaks or spills)	Engineering
Water pressure testing – discharged into storm drain	Pollutants which may be present in gutters, & storm drains, i.e., trash, organics, etc.	Water
Water supply reservoir maintenance	?? any wastes end up in storm drains from this activity?	Water
Fire hose testing –discharged into storm drain	Any pollutants present in street, gutters, & storm drains	Fire

### 6.2.1 Development of Citywide Best Management Practices (BMPs)

BMP guidance material will be developed for all City facilities and activities with identified pollutant sources, shown above in Tables 6-1 and 6-2. The guidance material will be used by City staff to 1) assure that water quality is being protected at municipal operations through the use of BMPs, 2) track implementation of BMPs, 3) develop a plan for future implementation of BMPs, and 4) prepare annual reports for internal purposes and for the annual monitoring report required under the NPDES permit.

The guidance material will contain a menu of suggested BMPs that either are or will be implemented by the City. Those BMPs that are appropriate to the City's municipal operations will be identified on a case-by-case basis. The menu approach for listing BMPs provides flexibility for similar activities at different locations and allows the city to track implementation for reporting. For example, vehicle washing may be acceptable at the wastewater treatment plant where wash water is treated, but another BMP such as using dry methods or containment may be appropriate at City Hall. The menu approach also allows flexibility when operations change. For example, a landscaped area of lawn could be replanted using a xeriscape design, and little or no application of pesticides would be necessary afterward. In this case, the activity remains the same (Landscaping) but the BMPs employed would have changed.

The City's guidance material will also make excellent reference tools for public education, applicable to residential and commercial interests within the City.

### **6.2.2 Purchasing and Contracts**

The City will review contractual language for vendors and contractors under service, and determine whether to include a requirement to employ the City's storm water Best Management Practices. Such services and contracts may include roadwork, vehicle maintenance, housekeeping, painting, and construction.

Contracts may be reworded to include specific language requiring contractors to obtain approval from the City of project-oriented BMPs or activity-related Water Quality Plan (similar to a Storm Water Pollution Prevention Plan as required for construction activities under the Federal NPDES program). The contractor's approved BMPs or Water Quality Plan would describe how storm water conveyances would be protected from potential pollutants specific to the project undertaken. If the contractor violates the plan, it would be sufficient reason for termination of the contract without harm to the City.

### **6.2.3 Training by City Departments**

All City employees will receive an appropriate level of training on storm water pollution prevention based on their work responsibilities. Most of the training programs will be integrated into existing training presented to staff, such as safety training. A program will be developed City-wide for distributing the BMP Fact Sheet developed. The Fact Sheet relating to training will provide general direction to all City employees through new employee orientation to protect water quality both at work and at home.

Depending on personnel involved, storm water training will occur at least quarterly or annually. City managers will develop guidance on their departmental responsibilities for storm water management and provide this information to all relevant personnel. Frequency and type of training will depend on the activities targeted, ranging from the general "City-Wide Employee BMPs" to activity-specific BMPs such as "Vehicle Maintenance."

#### **6.2.4 Street Sweeping**

The City contracts for street sweeping over 51 curb-miles of pavement plus five City-owned public parking lots. Sweeping is conducted twice per month throughout the city, and weekly within the downtown village area. No water is discharged from the street sweeping with the exception of dust control spray. Wastes are removed and disposed of by the contractor.

Sidewalk cleaning is conducted as-needed in the downtown area using a recently-purchased steam cleaner. No chemicals are used in the process. Solids are collected by-hand prior to and subsequent to steam cleaning.

#### **6.2.5 Storm Drain Cleaning**

Currently, there is no regular program for cleaning the storm drain system, including pipelines, catch-basins, and drop inlets. Minor maintenance is conducted by hand, prior to the rain season each year, to remove fallen leaves and other debris collected in the system. Where more serious blockages occur, the City utilizes a Vactor truck for cleaning the storm drain. For the most part, the storm drain system operates without blockages and therefore maintenance is on an as-needed basis.

City staff will evaluate the cost-effectiveness of employing the Vactor truck on a regular basis for clean out of the storm drain system.

#### **6.2.6 Trash, Green Waste and Recycling**

In order to prevent solid wastes from entering the storm drain system, the City provides trash, green waste, and recycling services. There are 90 public trash containers maintained by the City. These are emptied four days a week, or more frequently if needed, often daily for some receptacles. Trash from the public receptacles is collected and stored temporarily within City bins. The trash is then removed by a private waste-haul contractor.

The City has enacted a Green Waste Ordinance, requiring residential and commercial users of the waste service to separate green waste from trash and use the green waste bins provided by the hauler. There are also three public green waste bins available to the public. The City also enacted a ban on the disposal of cardboard

The City also provides commingled recycling bins to the public. There are five bins located near the City Hall and Annex, four more at the Nielsen's Market complex, and four single bin recycling sites located around town.

#### **6.2.7 Landscaping, Parks, and Open Space Maintenance**

The Parks and Recreation Department maintains the following facilities in the City:

- City Hall (landscaping)
- Elverhoy Museum (landscaping)
- Annex (landscaping)

- Vets Hall (landscaping)
- Solvang Park (landscaping, buildings)
- Hans-Christian Anderson Park (landscaping, buildings)

Maintenance activities include mowing, trimming, watering, and weed management. Occasionally, work is contracted to outside vendors for specialty services (i.e., tree trimming, large weed mowing jobs) or low-cost labor (SWAP, Community Service). Most sidewalk planters are maintained under contract.

Most of the City's landscaping includes drought tolerant or native species to minimize maintenance needs. Pesticide use is kept at a minimum and applied only on an as-needed basis. City staff are trained in the proper use of pesticides and supervised under a state-certified pesticide applicator. Non-restricted chemicals used in landscaping are reported monthly to the Santa Barbara County Agriculture Office, as required.

### **6.3 Measurable Goals**

The City will use the following measurable goals to track the implementation and effectiveness of the BMPs.

#### **BMP: DEVELOPMENT OF CITYWIDE BMPS FOR MUNICIPAL OPERATIONS**

- Staff will identify appropriate BMPs and tabulate the BMPs by Year 1.
- BMPs already implemented will be reported on during first annual report to RWQCB; timetables for implementation of additional BMPs will be defined by Year 1. Implementation will be ongoing through 5-year implementation period.

#### **BMP: Purchasing and Contracts**

- Identify and evaluate contractual language used in all City contracts by Year 1.
- Determine whether contractors have policies protective of water quality by Year 1.
- Revise contractual language to include provision to protect water quality by Year 5
- Report the number of Notice of Violations per project and the number of Corrective actions with their schedules – ongoing Years 2 through 5.

#### **BMP: Training**

- Distribute information on the City's NPDES permit and permit requirements to all staff by Year 1. Information will include the timetable for developing the City-wide Best Management Practices for Municipal Activities and outline various levels of responsibility by City staff.
- Prepare training material and conduct training appropriate for divisional practices by Year 2; content, frequency, method of presentation, and subsequent reporting will be developed by each divisional manager as appropriate for staff.

#### **BMP: Street Sweeping**

- Conduct street sweeping as currently practiced and provide annual report documenting lane-miles, solids removed, and status of sweeping contract.
- Evaluate effectiveness of street sweeping and provide brief assessment in annual NPDES report for Year 1.

**BMP: Storm Drain Cleaning**

- Determine cost-effectiveness of scheduling clean-out of the storm drain system as part of routine maintenance by Year 1. Make recommendation for future assessments.

**BMP: Trash, Green Waste and Recycling**

- Continue providing trash, green waste, and recycling receptacles to public.
- Evaluate effectiveness of waste program and provide brief assessment in annual NPDES report.
- Evaluate additional BMPs as outlined in City-wide BMPs.

**BMP: Landscaping, Parks, and Open Space Maintenance**

- Continue providing landscape maintenance to City facilities.
- Evaluate additional BMPs as outlined in City-wide BMPs by Year 1.

**6.4 Reporting**

Data collected for each measurable goal will be compiled, reviewed and summarized as part annual report to the RWQCB. Significant variance from targets, City employees and the Community Interest Groups input, and other sources will be used to modify BMPs or the measurable goals, as appropriate; the basis for any changes will be included in the following annual report. The City will retain storm water records for five years. Each department will also keep their records for five years.

**Table 6-1  
BMP Implementation: Pollution Prevention and Good Housekeeping  
for Municipal Operations**

Year	BMP	Current Status	Implementation Details	Measurable Goals
2-5	Implementation of BMPs	Generic lists of BMPs for various operations are available.	Staff will review draft BMPs and select those appropriate for facilities and operations. Staff will utilize reporting format to verify BMP implementation.	Tabulate number of BMPs implemented. Develop implementation schedule for future BMPs. Evaluate implemented BMPs.
2-5	Staff Training - BMPs	No current storm water training.	Staff will receive appropriate training on water pollution prevention BMPs.	Number of training sessions presented per year. Number of staff attending. Number of email or other mass-distributed messages on water quality / permit.
2	Purchasing & Contracts	Municipal activities that could affect water quality are often performed by outside contractors; these need to be reviewed.	Contract language will be reviewed and contractors will be required to implement BMPs to protect water quality. Some contracts will be revised.	Number of projects or city-contracted activities that affect water quality. Evaluate contractor compliance with BMPs. Report the number of Notice of Violations or Corrective actions taken.

<b>Year</b>	<b>BMP</b>	<b>Current Status</b>	<b>Implementation Details</b>	<b>Measurable Goals</b>
1-5	Street Sweeping	Ongoing	Continue sweeping Evaluate program annually	Area and lane miles swept Frequency swept Volume / weight of material removed
1-5	Storm Drain Cleaning	Only performed as-needed (due to blockages)	Determine cost-effectiveness of scheduling clean-out of the storm drain system as part of routine maintenance	Number of catchbasins maintained Material removed
1-5	Trash, Green Waste and Recycling	Ongoing	Continue providing services Evaluate program annually	Material removed Accessibility of dump sites to public
1-5	Landscaping, Parks, and Open Space Maintenance	Ongoing minimal use of chemicals and reliance on drought-tolerant vegetation	Continue services Evaluate program annually.	BMPs employed under this activity
1	Staff Training – NPDES permit requirements	No current storm water training.	Distribute information on the City’s NPDES permit and permit requirements to all staff. Include timetable for developing BMPs	Date of training or distribution of information
1	Develop BMP guidance material	existing BMP Fact Sheets example will be reviewed	Identify BMPs for sites and activities Determine tracking and reporting mechanism	BMPs employed

## **MONITORING PROGRESS AND REPORTING**

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### **7.0 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 be submitted starting in August 2004. 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 program and the overall effectiveness by measuring and reporting the data discussed in the individual Minimum Control Measures sections discussed above.

In general, four types of data will be collected:

- Progress establishing BMPs that are developed during the SWMP implementation period, or establishing existing BMPs in newly identified permit areas
- Training City staff (and contractors as appropriate contractors),
- Objective measures of ongoing BMPs such as public participation or education outreach, and
- Response time and results of pollution cleanup.

The City will 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. It may be necessary to expand or better tailor existing BMPs after implementing the minimum control measures described in this SWMP. Such changes would be based on the results of monitoring provided in the annual reports and developed in consultation with the Community Interest Group and the Central Coast Regional Water Quality Control Board (RWQCB).

#### Form and Content of Annual Report

The State has not yet provided specific guidance as to the specific form and content of the annual report. The City intends to provide summaries of data in tabular form. Data such as number of employees trained, number of construction sites inspected, etc. will be presented in summary tables. Because the City is required to keep records for five years and due to the intent of the reporting requirement, 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. Of necessity, the reporting format needs to be flexible and if changed, reasons will be given. Focus will be to clearly show progress, discuss program adjustments, and respond to challenges in implementing the SWMP.

#### Reporting and Compilation of data

The City is developing a central reporting system to allow a web-based reporting of BMPs. This City-wide program is intended to track BMP selection and implementation, identify schedules for all facilities, and provide opportunity for feedback and clarification on BMPs. Report results

will be used directly in the annual report to the RWQCB to identify BMPs implemented by the City.

Pursuant to the State's draft "General Permit," the City will retain storm water records for five years. Each department responsible for implementing substantive elements of the SWMP will be directed to keep their records for five years. These records will be the source of compiled data contained in the Annual Report.

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## APPENDIX A

### *Measures to be Included in Review of City Land Use Policies and Design Guidelines*

#### **Site Planning Measures** (these minimize impervious surface and maximize infiltration):

- Cluster development
- Preserve natural drainages
- Reduce sidewalk widths, especially in low-traffic areas
- Avoid curb and gutter along driveways and streets where appropriate
- Use alternate paving materials/porous/permeable materials, where appropriate
- Reduce the length of driveways or infiltrate driveway runoff
- Reduce street width by eliminating on-street parking
- Reduce alley width or use alternate materials for paving alleys
- Set aside open space

#### **Source Control Measures** (these avoid pollution in the long run by eliminating sources):

- Provide green areas where pets can be exercised
- Install landscaping or other ground cover
- Incorporate low-maintenance landscaping that does not require frequent fertilizer or water
- Require labeling of storm drains to discourage dumping
- Where possible, eliminate gutters/roof drains draining to paved areas or direct runoff to landscaped areas
- Construct designated vehicle wash area in new residential developments
- Encourage underground parking and the construction of multi-storied parking structures
- Encourage cooperative or shared parking
- Encourage use of alternate paving materials for parking lots
- Reduce building footprint and increase use of taller structures (where appropriate)
- Use berms around waste storage areas
- Install valves on storm drain inlets in loading dock areas

#### **Treatment Control Measures** (these capture and treat the polluted runoff before it enters the city's storm drain system or other receiving waters):

- Rooftop Catchment Systems
- Vegetated Filter Strips
- Vegetated Swales
- Infiltration Basins
- Infiltration Trenches
- Dry Detention Ponds/Basins
- Retention Ponds/Wet Basins
- Constructed/Restored Wetlands
- Filtration Systems
- Oil/Grit Separators

APPENDIX B

Public Outreach Information

Webpage with links to brochures

City of Solvang - Storm Water System Page 1 of 2



City of Solvang  
Storm Water Plan

HOME CITY NEWS CITY COUNCIL DEPARTMENTS STAFF SPECIAL EVENTS FORMS/MAPS PHOTOS LINKS CITY MANAGER'S WELCOME

The River Begins On Your Street!



The City of Solvang has adopted a Storm Water Management Plan. Proposed Best Management Practices (BMPs) for City operations are posted here...

- [Alternate Safer Practices \(330 kb\)](#)
- [Building Maintenance & Repair \(336 kb\)](#)
- [Employee Training \(430 kb\)](#)
- [Housekeeping \(292 kb\)](#)
- [Kitchen, Restaurant & Deli \(308 kb\)](#)
- [Landscape & Undeveloped Areas \(349 kb\)](#)
- [Loading & Unloading \(311 kb\)](#)
- [Materials & Hazardous Waste Storage \(342 kb\)](#)
- [Metal, Wood, Paint & Print Shops \(299 kb\)](#)
- [Parking Lots & Garages \(288 kb\)](#)
- [Spill Prevention & Cleanup \(329 kb\)](#)
- [Storm Drains & Catch Basins \(918 kb\)](#)
- [Trash & Dumpster Management \(294 kb\)](#)
- [Vehicle & Equipment Fueling \(419 kb\)](#)
- [Vehicle & Equipment Maintenance & Repairs \(380 kb\)](#)
- [Vehicle & Equipment Washing & Steam Cleaning \(298 kb\)](#)
- [Basic BMPs for Employees \(336 kb\)](#)

To view the entire draft document (438KB) in pdf format click here [STORM WATER MANAGEMENT PLAN](#)

STORMWATER TIPS FOR THE PUBLIC

- Don't litter
- Pick up after pets
- Wash your vehicle at a car wash
- Sweep your driveway and sidewalk instead of rinsing it
- Do not dump ANY green waste into creeks or drainage channels
- Dispose of ALL automotive fluids properly
- Don't let your vehicle drip fluids onto the ground
- Dispose of ALL chemicals & pesticides properly
- Plant trees & native plants instead of concrete

ART CONTEST WINNER!

We have a winner in the recent "Storm Water Logo Contest"  
Congratulations to Pat Dalo for his winning entry

<http://www.cityofsolvang.com/stormwater.html>

10/28/2008

## Public Outreach Information

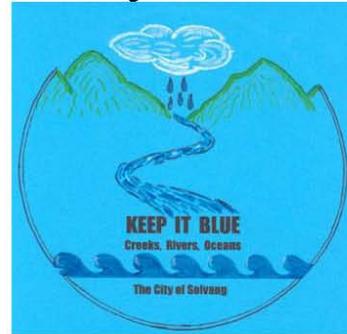
### SOLVANG ANNOUNCES WINNER OF STORM WATER LOGO CONTEST



Pat Dalo of Santa Ynez Valley High School was presented with the First Place Award for his artwork entry in Solvang's recent Storm Water Logo Contest. The prize, a Portable CD Player, was presented to him in front of City Hall on Wednesday, May 26, 2004 by Ken James of the Public Works Department. Pat's logo, entitled "KEEP IT BLUE" was chosen to represent Solvang's efforts to improve public awareness of the link between storm drains and clean water. The winning logo depicts a distant mountain range, clouds and rain leading to a blue river.

The Second Place winner in the contest was Barrett Colvin, who will be awarded a \$40 Gift Certificate to Tower Pizza. Third place prizes of movie tickets will be awarded to Tyler Dalo, Shashi Mostafa, and Suvra Mostafa. All winners have their entries displayed on the City's website.

Storms drains lead straight to local creeks, rivers, and the ocean. Whatever enters a storm drain travels untreated to local water sources. For more information regarding Solvang's Storm Water Management Plan please visit Solvang's website at [www.cityofsolvang.com](http://www.cityofsolvang.com) or contact City Hall at 688-5575.



APPENDIX C - MAPS

