

Example BMP Summary Sheet

MS4 Name:

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-1

<p>*BMP Title: Education Program: Public Education and Outreach</p>
<p>*Audience(s) Involved: General public including City residents, homeowners, business owners, and school children (students K-12).</p>
<p>*Educational Goals for Each Audience: Increase public awareness and understanding of stormwater issues within the community. Inform and educate the public about the impacts of stormwater runoff on water quality.</p>
<p>*Activities Used to Reach Educational Goals:</p> <ol style="list-style-type: none"> 1) Highlight stormwater issues through City sponsored community events and programs that focus on public participation. <ul style="list-style-type: none"> • Volunteer community cleanup days. • Volunteer river, stream, and pond cleanup program. • Volunteer native tree and shrub planting program. • Volunteer storm drain stencil program. 2) Stormwater hotline for citizens to report illegal dumping. 3) Articles in the community newsletter that highlight seasonal stormwater issues and stormwater related community events and programs. 4) Stormwater information on the City web site. 5) Stormwater educational materials provided at public places. Materials will be bilingual. <ul style="list-style-type: none"> • Stormwater poster display and educational guides at the City Hall and local public library. • Signage in public places (e.g. post maps of storm drains to local waters at City beaches and public boat launches, post pet waste cleanup signs at City parks and trails). • Promote Pet Waste Disposal Program by providing information to dog owners (e.g. pet waste fact sheets distributed to dog owners with application for dog license). 6) Work with local schools to develop and implement a program for elementary school children focused on household stormwater management.
<p>*Activity Implementation Plan:</p> <p><u>Activity #1</u> Year 1) Develop a plan for sponsoring and implementing the volunteer public participation events and programs. Years 2-5) Community cleanup days held bi-annually; in the spring to coincide with Earth Day and in the fall. Years 2-5) River, stream, and pond cleanup events held annually in the spring to coincide with Earth Day. Years 2-5) Tree and shrub planting events held annually in the spring to coincide with Arbor Day. Years 2-5) Stencil storm drains in the spring/early summer; mark 10% of City storm drains annually.</p> <p><u>Activity #2</u> Year 1) Establish stormwater hotline. Years 1-5) Track number and location of illegal dumping incidents reported.</p>

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Years 2 & 4) Evaluate data for trends, review public education outreach effort on illegal dumping.

Activity #3

Years 1-5) Publish stormwater articles quarterly in the community newsletter.

Activity #4

Year 1) Develop stormwater page on City web site and post for public access.

Years 1-5) Update stormwater page quarterly as needed.

Activity #5

Years 1-2) Research what educational materials are available; have materials in place for the public to view by the end of year 2.

Years 2-5) Track the number of City beach closings. Determine if the beach closing is related to the amount of pet waste improperly disposed of and washed into the beach area from stormwater runoff.

Year 2) At the end of year 2, the City will evaluate the effectiveness of the educational materials specifically for the Pet Waste Disposal Program, and make adjustments as needed.

Activity #6

Year 1) Create a focus group with the local school district to determine the type of program to be implemented and what resources are necessary for program implementation.

Year 2) Develop or obtain applicable educational and outreach materials/activities for the students.

Year 2) Run a pilot program with all 2nd grade students at the six public elementary schools in the City.

Year 3) Assess the results of the pilot program.

Years 4-5) Implement a permanent stormwater education program at the public elementary schools.

***Performance Measures:**

Activity #1

- Complete plan and implement volunteer public participation events and programs.
- Track the number of persons participating in volunteer programs.
- Track the pounds of trash collected on cleanup days and report in the community newsletter.
- Track the number of water bodies cleaned and report in the community newsletter. Cleaner waters as documented by before and after photographs.
- Track the number, type, and location of plantings and report in the community newsletter.
- 50% of storm drains are marked by year 5 in specified neighborhoods.

Activity #2

- Track increase/decrease in illegal dumping incidents.

Activity #3

- Publish stormwater articles quarterly.
- At the end of the first year, survey citizens to determine if the stormwater articles were read and if they felt that their knowledge of stormwater issues has increased.

Activity #4

- Track the number of “hits” on the City web site stormwater page.

Activity #5

- At the end of the first year, survey citizens to determine if the stormwater educational materials were read and if they felt that their knowledge of stormwater issues has increased (combine with survey under Activity #3 above).
- Track increase/decrease in the number of beach closings.

Activity #6

- Test children’s general knowledge at the beginning and end of each school year to determine effectiveness of the program.
- Survey parents at the end of each school year to determine if anything that the children learned throughout the year was put into practice in the home.

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Example BMP Summary Sheet

MS4 Name:

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-2

*BMP Title: Education Program: Public Participation
*Audience(s) Involved: General public including City residents, homeowners, and business owners.
*Educational Goals for Each Audience: 1) Increase public awareness and understanding of stormwater issues within the community. 2) Inform and educate the public about the impacts of stormwater runoff on water quality and what they can do to actively protect local lakes and streams from polluted stormwater runoff. 3) Inform and educate the public about how the City manages stormwater runoff through its' Stormwater Pollution Prevention Program (SWPPP).
*Activities Used to Reach Educational Goals: 1) The City will report in the community newsletter on activities related to managing stormwater and implementing the SWPPP. Topics for the newsletter may include information about the water quality of our City lakes and streams; events and programs the public can participate in to raise their awareness about stormwater impacts; specific stormwater management activities the City is implementing; and the stormwater budget/fees. 2) The City will sponsor a City Park Cleanup Day. 3) The City will hold a public information meeting (in addition to the annual meeting on the SWPPP) to update citizens on the City's progress toward implementing the SWPPP, and to provide information on stormwater related budget/fee issues. A special recognition event will be held at the public information meeting to recognize citizens who participated in the Park Cleanup Day. To encourage citizens to attend, the City will plan the public information meeting to coincide with another City sponsored event. The City will also consider providing some type of stormwater related promotional item for Park Cleanup Day participants (e.g. "raingarden" seed packets, plants,...)
*Activity Implementation Plan: <u>Activity #1</u> Years 1-5) Publish articles on stormwater management and the SWPPP quarterly in the community newsletter. <u>Activity #2</u> Year 1) Develop a plan for sponsoring and implementing the City Park Cleanup Day. Years 2-5) City Park Cleanup Day to be held annually in the spring. <u>Activity #3</u> Years 1-5) Hold one combined public information meeting/recognition event annually. Provide notice of the meeting in the community newsletter, on the City web site, at the City offices, and at the local public library 30 days prior to the meeting/event date.

***Performance Measures:**Activity #1

- Publish stormwater articles quarterly.
- At the end of the first year, survey citizens to determine if the stormwater articles were read and if they felt that their knowledge of stormwater issues has increased. Survey may be conducted under the BMP Summary Sheet 1c-1 (Education Program: Public Education and Outreach) Performance Measure.

Activity #2

- Track the number of persons participating in Park Cleanup Day.
- Track the pounds of trash collected and report in the community newsletter.

Activity #3

- Complete public notice.
- Track the number of citizens attending the meeting/event.
- Track the number of questions about the SWPPP/stormwater issues addressed at the meeting.
- Recognize citizens for their volunteer efforts.

Activity #1 - #3

- At the end of the year 2, the City will evaluate the effectiveness of the Education Program for Public Participation and make adjustments as needed to increase public awareness and participation.

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Example BMP Summary Sheet

MS4 Name:

Minimum Control Measure: 2-PUBLIC PARTICIPATION/INVOLVEMENT

Unique BMP Identification Number: 2b-1

<p>*BMP Title: Solicit Public Input and Opinion on the Adequacy of the SWPPP</p>
<p>*BMP Description:</p> <p>1) The City will use the education and outreach efforts outlined on BMP Summary Sheet 1c-2 (Education Program: Public Participation) for providing information to the general public about how the City manages stormwater runoff through it's Stormwater Pollution Prevention Program (SWPPP), to encourage the public to learn about the SWPPP, and to facilitate public input and comment on the SWPPP.</p> <p>2) If the annual public meeting on the SWPPP is scheduled to occur during a regular meeting of the City Council, the City will request that the SWPPP be placed on the meeting agenda at a time that will be conducive to the public attending and providing input on the SWPPP (i.e. not at the end of the agenda).</p> <p>3) At the annual meeting, the City will provide a presentation on the purpose, goals, and requirements of the SWPPP to educate, inform, and encourage citizens to provide input and comment on the SWPPP.</p> <p>4) The City will provide opportunity for interested persons to make oral statements or provide written comments on the SWPPP at the meeting. A reasonable amount of time will be made available at the meeting for a questions and comments relating to the SWPPP. Persons not able to attend the meeting may submit written comments on the SWPPP within the time identified in the public notice for the meeting.</p> <p>5) The City will also solicit public input and provide opportunity for comment on the SWPPP at any other subsequent public meetings, as needed, regarding modifications of or amendments to the SWPPP.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP: The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>1) Increase citizen's understanding of the impacts of stormwater runoff and increase public input on the SWPPP. Evaluate the level of public participation and input on the SWPPP; review the Education Program for Public Participation and make adjustments as needed to increase public participation/involvement on the SWPPP.</p> <p>2) Track the number of attendees at the annual public meeting on the SWPPP.</p> <p>3) Prepare and provide a presentation on the SWPPP.</p> <p>4) Track the number of oral and written comments received on the SWPPP, and the number of questions addressed at the annual public meeting. A summary of the comments submitted on the SWPPP and the questions addressed at the meeting will be made available on the City web site stormwater page.</p> <p>5) Hold additional public meeting(s) regarding modifications and/or amendments to the SWPPP; track the level of public input.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Years 1-5) The City will implement the education and outreach efforts according to the timeline/implementation schedule in BMP Summary Sheet 1c-2.</p> <p>Years 1 & 3) Review Education Program for Public Participation, make adjustments as needed.</p> <p>Years 1-5) Hold public meeting on the SWPPP annually.</p>

Specific Components and Notes:

The City staff will pose questions or initiate discussion at the meeting in an effort to encourage the public to ask questions and submit comments on the SWPPP.

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Example BMP Summary Sheet

MS4 Name:

Minimum Control Measure: 3-ILLICIT DISCHARGE DETECTION AND ELIMINATION

Unique BMP Identification Number: 3d-1

BMP Title:** Public and Employee Illicit Discharge Information ProgramBMP Description:**

The City will use the education efforts outlined on BMP Summary Sheet 1c-3 (Education Program: Illicit Discharge Detection and Elimination) for providing information to the general public concerning the hazards associated with illegal discharges and the improper disposal of wastes. The City will develop a separate effort to provide training to City employees. This training will focus on those City employees that are involved in activities out in the community (e.g. Public Works/Engineering and Parks Department field staff) which may impact stormwater quality including; road salt and sand application, landscaping, and other activities. The City intends to provide each employee with broad based training followed by annual retraining which will focus on specific, yet to be determined issues.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

- 1) See BMP Summary Sheet 1c-3 for Measurable Goals concerning public education efforts regarding Illicit Discharge Detection and Elimination.
- 2) Develop a training program for educating City employees about the hazards associated with illegal discharges and the improper disposal of wastes which relate to their work activities.
- 3) Train all City employees who are involved in activities which could possibly result in illicit discharges to stormwater.
- 4) Develop a training program to provide annual retraining, with specific focused training efforts, to City employees.
- 5) Implement annual retraining and focused training efforts.

***Timeline/Implementation Schedule:**

See BMP Summary Sheet 1c-3 for Timeline/Implementation Schedule concerning public education efforts regarding Illicit Discharge Detection and Elimination.

Calendar Year 2006 - Develop training program for educating City employees about the hazards associated with illegal discharges and the improper disposal of wastes which relate to their work activities.

Calendar Year 2007 - Train all City employees who are involved in activities which could possibly result in illicit discharges to stormwater.

Calendar Year 2008 - Develop training program to provide annual retraining and focused training efforts to City employees and implement this training.

Calendar Years 2009-2010 - Continue annual retraining and focused training efforts.

Specific Components and Notes:

To identify areas which may be addressed as part of retraining/focused training efforts, the City will develop a process for conducting an illicit discharge evaluation of City public works projects.

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Example BMP Summary Sheet

MS4 Name:

Minimum Control Measure: 3-ILLCIT DISCHARGE DETECTION AND ELIMINATION

Unique BMP Identification Number: 3e-1

BMP Title:** Identification of Non-Stormwater Discharges and FlowsBMP Description:**

The City will develop a process to evaluate whether any of the following categories of non-stormwater discharges or flows are significant contributors of pollutants to our MS4:

water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges or flows from fire fighting activities.

For any non-stormwater discharges or flows which the City finds to be a significant contributor of pollutants to the MS4 the City will develop an action plan to evaluate and address the impact the discharge is having on stormwater quality.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

- 1) Develop a process to investigate and evaluate the potential for the non-stormwater discharges identified in permit Part V.G.3.e (see above) to be significant contributors of pollutants to our MS4.
- 2) Conduct investigation and evaluation of non-stormwater discharges and flows.
- 3) For those non-stormwater discharges or flows identified as significant contributors of pollutants to our MS4, develop an action plan to evaluate and address the impact the discharge is having on stormwater quality.
- 4) Implement the action plan for significant non-stormwater discharges and flows.

***Timeline/Implementation Schedule:**

Calendar Year 2006 - Develop process to investigate and evaluate non-stormwater discharges and flows.

Calendar Year 2007 - Conduct investigation and evaluation of non-stormwater discharges and flows and develop action plans for those which are identified as being significant contributors of pollutants to our MS4.

Calendar Year 2008 - Implement the action plans for significant non-stormwater discharges and flows.

Calendar Years 2009-2010 - Continue with action plan concerning significant non-stormwater discharges and flows.

Calendar Years 2009-2011 - Evaluate the implementation phase of the action plans and make adjustments as necessary to prepare for a permanent program for Identification of Non-Stormwater Discharges and Flows to be put in place.

Specific Components and Notes:

The City has a large number of residents who own permanent swimming pools. Because of this, the City plans to develop a public education component to inform residents about the need and procedures to dechlorinate swimming pool water prior to discharge. An article on proper swimming pool discharge from residential pools will be included in the community newsletter (see BMP Summary Sheet 1c-1). This public education component will be

further developed as outlined on BMP Summary Sheet 1c-3.

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Example BMP Summary Sheet

MS4 Name:

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Unique BMP Identification Number: 4b-1

<p>*BMP Title: Construction Site Implementation of Erosion and Sediment Control BMPs</p>
<p>*BMP Description:</p> <p>The City Public Works/Engineering Departments formed a BMP Review Board. Of all the BMPs available in the literature, ten (10) were found to be the most effective in keeping erosion under control and containing sediment on the construction site and off the streets. These ten (10) BMPs were outlined in an Erosion and Sediment Control Handbook (and are highlighted in the City's stormwater ordinance) that the City gives to all builders, contractors, and developers. The second week in February, the City hosts a BMP Workshop for all local builders, contractors, and developers. The ten (10) BMPs selected by the BMP Review Board are explained in detail with data from the literature denoting the efficacy of each BMP. The second week in May, the City hosts a Field Day when the staff from the Public Works/Engineering Departments demonstrate the proper way to install the ten (10) BMPs. Proper maintenance of the BMPs is also discussed at this event.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP: The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <ol style="list-style-type: none"> 1) Review the BMP Workshop evaluation comments submitted by the attendees and determine the percentage that believed the BMP Workshop was meaningful and would help them do their job correctly. 2) Determine the number of other agencies and local units of government that are willing to form an erosion team (E-Team) to meet monthly to discuss erosion and sediment control issues and do conjoint inspections. 3) Get copies of the MPCA's site inspection reports and determine the sites that were compliant using the ten (10) BMPs versus those that were not - adjust workshops accordingly.
<p>*Timeline/Implementation Schedule:</p> <p>During the year following the completion of the stormwater ordinance and the selection of the ten (10) BMPs, start the implementation of these BMPs.</p> <p>Years 1-5) Annual BMP Workshop in February. Years 1-5) Annual Field Day in May. Years 2-5) Add five (5) new BMPs that the BMP Review Board feels are justifiable. Year 2) Try the formation of the E-Team.</p> <p>Specific Components and Notes:</p> <ol style="list-style-type: none"> 1) Make certain that the BMPs selected by the BMP Review Board are consistent with the requirements of the Phase II General Stormwater Permit for Construction Activity. 2) Implement monthly meetings with the E-Team. 3) Attendance at the BMP Workshops.

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Example BMP Summary Sheet**MS4 Name:****Minimum Control Measure:** 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**Unique BMP Identification Number:** 5a-1***BMP Title:** Development and Implementation of Structural and/or Non-structural BMPs***BMP Description:**

Post-construction stormwater management in areas that have recently undergone construction (new development or redevelopment) is necessary because runoff from these areas significantly impact surface water quality. As runoff flows over areas altered by construction, it picks up harmful sediment and chemicals which are then deposited in surface waters. A second type of post-construction impact is the interruption of natural infiltration of rainfall by the new impervious surfaces associated with construction projects. The result is increased volumes of stormwater reaching streams. The end result is the scouring of riverine systems and flooding.

A combination of structural (wet detention ponds) and non-structural (swales) BMPs work well for managing post-construction stormwater. Wet detention basins allow sediment to settle out of the water column as well as controlling the discharge of stormwater to receiving waters. Swales allow sediment and other pollutants to drop out of stormwater runoff.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

- 1) Update wet detention pond design standards annually along with investigating new post-construction BMPs.
- 2) Track the number of new wet detention ponds created per calendar year.
- 3) Determine the acres of new impervious surface that has been put in place each calendar year.
- 4) Photograph receiving streams annually so comparisons per calendar year can be made in regards to scouring and acres of new impervious surface.

***Timeline/Implementation Schedule:**

Years 1-5) Review and update structural and non-structural BMPs.

The Engineering Department will continue to conduct reviews of all construction projects with stormwater management being a major component and focus of the review.

Specific Components and Notes:

- 1) All wet detention ponds should be designed to remove 60% of phosphorus load.
- 2) The wet detention ponds should release stormwater at a rate that is equal to or less than pre-development rates.
- 3) Review site plans to make sure that there is maximum infiltration of stormwater taking place.

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Example BMP Summary Sheet

MS4 Name:

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-2

*BMP Title: Street Sweeping**
<p>*BMP Description:</p> <p>The Public Works Department will develop a Street Sweeping Program for all City streets and parking lots. The City intends to sweep these impervious surfaces at least once a year, in the spring. Street sweeping will begin as early in the spring as weather allows with a goal of sweeping all streets and parking lots within a two (2) week timeframe.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP: This summary sheet details all SWPPP information for this BMP.</p>
<p>*Measurable Goals:</p> <ol style="list-style-type: none"> 1) Research available street sweeping equipment; evaluate the costs of purchasing equipment vs. contracting services for street sweeping. 2) Develop Street Sweeping Program. 3) Implement Street Sweeping Program.
<p>*Timeline/Implementation Schedule:</p> <p>Calendar Year 2006 - Research street sweeping equipment/services and costs. Calendar Year 2007 - Development and Implement Street Sweeping Program. Calendar Years 2008-2010 - Continue with Street Sweeping Program implemented in previous year. Calendar Year 2009 - Evaluate program effectiveness and recommend changes if needed. Calendar Year 2010-2011 - Revise program to include necessary changes and implement these changes.</p>
<p>Specific Components and Notes:</p> <ol style="list-style-type: none"> 1) The City (or contracted service) will sweep all City streets and parking lots at least once a year in the spring. The City will also sweep those streets which discharge stormwater to Lake XXXX at least one additional time in mid to late summer. The City will track and record the amount of street sweeping wastes collected to assist in the evaluation of this additional street sweeping. 2) Vacuum sweeper equipment will be used for all street sweeping. 3) All street sweeping waste collected by the City will be disposed of at the XXXX Landfill where it is used as daily cover material.
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