

3.0 MCM1: PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT

3.1 OVERVIEW

The key to a successful SWMP is having a well-educated community with ownership in the City's efforts for good stewardship of stormwater quality. Public education and outreach is a key component to the success of a SWMP. Through public education, residents gain an understanding of how their actions affect stormwater quality, and they become more informed about water quality issues in their community. When citizens understand that poor water quality may result from common everyday activities, a major source of stormwater pollutants may be easily eliminated. Perhaps more importantly, an educated public will serve as a broad base of support for a SWMP. The objective of a public education program is to promote a clear identification and understanding of the issues associated with stormwater pollution and to promote community ownership of the problems and solutions.

Public involvement and participation is another important component in the development and implementation of the SWMP. Involving the public goes together with a local government's public education efforts and can help accomplish some of the same goals. Public involvement and participation can also create more opportunities to gain expertise from interested individuals and other organizations or governmental entities. These added resources can add to the success of the program.

The City has been and continues to be dedicated to educating the Sugar Land community on the impacts stormwater can have on water quality, the hazards associated with illegal discharges, and the steps that can be taken to reduce pollutants in stormwater runoff, while involving the public through various opportunities in stormwater quality decision making and hands on projects affecting stormwater quality. Recent actions by the City include using social media platforms in attempts to reach out to the public regarding water quality issues. This is described in further detail below as are additional goals for this permitting period.

3.2 FEDERAL REGULATORY REQUIREMENTS

40 CFR 122.34 (b)(1) states that the MS4 operator must implement a public education program to distribute educational material to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

3.3 TPDES PHASE II PERMIT REQUIREMENTS

3.3.1 Public Education and Outreach

- (a) All permit holders shall develop, implement and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste and about the impacts that stormwater discharges can have on local waterways, as well as the

steps the public may take to reduce pollutants in stormwater. As an existing permit holder, the City shall assess the previous program elements, modify, develop, and implement new elements as necessary, to continue reducing the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The program must, at a minimum:

- (1) Define goals and objectives of the program based on high priority community-wide issues;
 - (2) Identify targeted audiences;
 - (3) Develop and use appropriate educational materials, such as printed materials, social media messages, signage at select locations, and website updates;
 - (4) Determine cost effective and practical methods and procedures for distribution of materials.
- (b) Throughout the permit term, all permittees shall make the educational materials available to convey the program's message to the target audience(s) at least annually.
- (c) If the permittee has a public website, the permittee shall post its SWMP and the annual reports required under Part IV.B.2. or a summary of the annual report on the permittee's website. The SWMP must be posted no later than 30 days after the approval date, and the annual report no later than 30 days after the due date.
- (d) Annually review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2 of the permit. All changes must be reflected in the annual report, maintained on site or in the SWMP, and made available for inspection by the TCEQ.
- (e) MS4 operators may collaborate with other MS4 operators to maximize the program and cost effectiveness of the required outreach.

3.3.2 Public Involvement/Participation

- (a) The MS4 operator must involve the public, and, at a minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP. As an existing permit holder, the City shall assess the previous program elements, modify, and develop and implement new elements as necessary, to continue reducing the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The program must, at a minimum:
- (1) Consider using public input in the implementation of the program;
 - (2) Create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Spot" programs, and educational activities;
 - (3) Ensure the public can easily find information about the SWMP.

3.4 DISCUSSION OF STORMWATER PROGRAMS

The City of Sugar Land currently institutes a variety of public outreach and education programs to educate and inform the community of the effects their actions have on the environment.

3.4.1 Stormwater Quality Education Materials

The Environmental & Neighborhood Services Department, in coordination with the Communications Department, developed a variety of educational materials during the first permitting term to inform the community of the effects polluted stormwater runoff can have on water quality and how individuals can minimize the impacts they have on the environment. Current publications include:

- City of Sugar Land eNews Report
- City promotional materials for environmental awareness (e.g. brochures, posters, pencils, books, etc.)

These educational materials are currently distributed and/or available at community events, school events, City departmental offices, local community meetings, posted on the City's website and upon request. The City of Sugar Land will continue to develop, obtain, and distribute educational materials to the public on a variety of topics including, but not limited to:

- Lawn and garden management;
- Proper handling and disposal of household hazardous waste (HHW);
- Pet waste;
- Stormwater pollution;
- Littering;
- Illicit discharges;
- Restaurant and Commercial pollution prevention; and
- Waste management.

As part of the Upper Oyster Creek TMDL and other impaired water bodies, the City will also develop or acquire public educational materials that educate the public in minimizing bacteria and oxygen-demanding substances to local streams and surface waters of the state.

Measurable Goals:

- Develop or acquire one stormwater quality education material for the City's environmental awareness campaign by December of each year (2019-2024).

Evaluation:

- Report the quantity of materials developed/acquired and provide a description of the material.

3.4.2 Storm Drain Marking Program

The City will continue to implement a storm drain marking program throughout their MS4. Storm drain markers are a visual means of preventing pollution within Sugar Land’s waterways while educating the residents on the effects their actions may have on the environment. The Environmental & Neighborhood Services Department will continue to oversee that storm drain markers are placed on all newly constructed infrastructure.

Measurable Goals:

- Implement the Storm Drain Marking Program each year of the permit period (2019-2024) in all areas of the MS4. Inspect 20% of the total storm drain markers by December of each year (2019-2024) and install/replace markers on unmarked drains.
- Utilize at least one volunteer organization for program implementation each year (2019-2024).

Evaluation:

- Record and report the number of storm drains marked in any newly constructed areas. Compare total number of known marked storm drains to the number of inlets inspected. Twenty percent (20%) of installed storm drain markers will be inspected and replaced (if necessary) by December of each year (2019-2024).
- Record and report the participating volunteer organization and number of volunteers utilized.

3.4.3 Community Events

Each year, the Environmental & Neighborhood Services Department sponsors and co-sponsors a variety of community events where residents can obtain educational information regarding stormwater pollution, water conservation, and recycling. These events include:

- Don’t Mess with Texas Trash-Off; and
- Earth Day festivities.

During each of these events, participants receive educational materials on a variety of topics. Residents can also obtain information at annual Community Town Hall meetings where the Environmental & Neighborhood Services Department hosts a booth of educational materials and is on hand to answer any questions residents may have concerning water quality in the community.

Measurable Goals:

- Sponsor and participate in at least one (1) “Don’t Mess with Texas Trash-off” and Earth Day festival event by December of each year (2019-2024).

Evaluation:

- Record and report the number of volunteers, exhibitors, and individuals who attend the community events, and the quantity of litter collected at the Trash-off event.

3.4.4 Business Education Program

The City continues to coordinate with Keep Sugar Land Beautiful (KSLB) to provide environmental education programs for businesses. As part of the Business Education Program, specific guidelines may be developed for certain types of businesses.

Measurable Goals:

- Conduct at least one (1) business education program annually with KSLB by December of each year (2019-2024).

Evaluation:

- Report the number and type of programs conducted with KSLB.

3.4.5 Speakers' Bureau

Organizations throughout the community hold regular meetings and request speakers to present community information to their members. These organizations range from gardening clubs, the Chamber of Commerce, school groups, Girl Scouts, Boy Scouts, and environmental clubs. Upon request, the City will make presentations to community organizations regarding the causes and effects of stormwater pollution and what individuals can do to reduce their impact to the environment.

Measurable Goals:

- Hold at least two (2) speaking events by December of each year (2019-2024).

Evaluation:

- Report the number and topic of presentation for all events hosted through the Speakers' Bureau.

3.4.6 311 Contact Center

The City of Sugar Land will evaluate the procedures for receipt and consideration of information submitted by the public regarding the implementation of the SWMP, illicit discharges, illegal dumping, spills, construction stormwater site violations, and/or additional environmental issues that may affect the community.

The 311 Contact Center procedures for receipt of information, prioritization, and department referral processes will be reviewed. The City will use this information to respond to water quality

complaints received. The City will promote and publicize the 311 Contact Center through the City website, social media and printed educational materials.

Measurable Goals:

- Record and classify all incoming 311 Contact Center calls regarding stormwater quality issues from January 1 to December 31 of each year (2019-2024).
- Distribute one type of educational outreach material to enhance 311 Contact Center exposure at one community event by December of each year (2019-2024).
- Investigate all complaints identified through the 311 Contact Center from January 1 to December 31 of each year (2019-2024).

Evaluation:

- Report the number and classification of all 311 Contact Center calls received regarding stormwater quality issues.
- Record and report the quantity, type and distribution method used to enhance 311 Contact Center exposure at annual event.
- Record the responses associated with complaints received and how many were closed.

3.4.7 Adopt-a-Spot Program

The City will continue to participate in the Adopt-a-Spot Program. In order to encourage litter reduction and beautification throughout the community, the City and KSLB developed the Adopt-a-Spot program, a program patterned after the Texas Department of Transportation’s Adopt-a-Highway program, which encourages residents and businesses to actively participate in the environmental community.

KSLB currently administers the Adopt-a-Spot program on behalf of the City, and through the program, volunteer groups clean city parks and roadways. As an element of the SWMP, the City will continue this program to include litter reduction along community waterways, drainage ditches, and other stormwater channels throughout the City.

Measurable Goals:

- Perform one collection activity at all active Adopt-a-Spot locations by December of each year (2019-2024).

Evaluation:

- Record the number of volunteer hours and track the volume of garbage collected at each event.

3.4.8 Texas Stream Team Water Quality Monitoring Program

The City will continue to sponsor and participate in the Texas Stream Team Water Quality Monitoring Program. Texas Stream Team is a network of trained volunteers who monitor local waterways and collect quality-assured information about the natural resources of Texas and may be used by government organizations and the public. The program helps the City (and other local water quality stakeholders) obtain additional information regarding the community's natural resources along with educating residents on the effects of pollution in the local waterways. The City has coordinated with H-GAC since the summer of 2006 for program implementation.

Water quality monitors are assigned water quality monitoring kits and monitor water quality in a designated area on a monthly basis. In order to ensure the quality of the data, the City reviews all data submitted by the Texas Stream Team volunteers, and all volunteers follow the Texas Stream Team certification guidelines. Volunteer efforts can provide a substantial amount of water quality data, which may be used to analyze and assess water quality throughout the area. This data can also assist in identifying areas of concern where additional sampling may be necessary.

This data has been used as a resource in the previous permitting term for determining hot spot areas to investigate for illicit discharges.

Measurable Goals:

- Utilize at least one volunteer to perform water quality monitoring activities at all active monitoring locations on a monthly basis from January to December of each year (2019-2024).
- Distribute one type of educational outreach material to enhance program exposure at one community event by December of each year (2019-2024).

Evaluation:

- Report the number of active Texas Stream Team Water Quality Monitoring locations and record the names of participating individuals.
- Report the type and distribution technique of educational outreach materials distributed to the community to promote the program.

3.4.9 Reforestation Program

The City will continue to participate in the Tree Celebration event. Tree Celebration is an annual event co-sponsored by the City and KSLB in honor of Arbor Day. During the celebration, community volunteers and City staff participate in the planting of native trees at a designated location within the community. City staff will annually select a location for the implementation of the reforestation project. Representatives from KSLB and the City are also available to answer residents' questions.

Measurable Goals:

- Sponsor one Tree Celebration promoting community reforestation in honor of Arbor Day by December of each year (2019-2024).
- Apply for recertification in the Tree City USA Program by December of each year (2019-2024). This program is sponsored by the Arbor Day Foundation, the USDA Forest Service, and the National Association of State Foresters to provide the framework for community forestry management for cities and towns across America.

Evaluation:

- Record the number of trees planted during the reforestation project.
- Report the City’s current status in the Tree City USA Program.

3.4.10 Community & Student Environmental Education Classes

The City will continue to sponsor and provide environmental education classes to the community and local schools. In coordination with KSLB, the City sponsors a variety of environmental education classes throughout the year. Presentations are made to local schools about stormwater pollution, recycling, and water conservation. The City also hosts community environmental classes which are open to Sugar Land residents and include information from a variety of topics:

- Tree Care;
- Recycling;
- Irrigation;
- Water conservation; and
- Stormwater pollution prevention.

Measurable Goals:

- Sponsor at least one community environmental education class and one student education presentation regarding water quality aspects such as stormwater, recycling, and conservation by December of each year (2019-2024).

Evaluation:

- Record the number of environmental education classes and student presentations held and the number of people attending those classes.

3.4.11 Social Media Outreach

The City developed a social media outreach program tailored specifically for residents, businesses, and other community participants. There will be a focus on awareness regarding bacteria and oxygen depleting pollutants as part of the public education campaign identified in the Upper Oyster Creek TMDL. The social media outreach program will help to educate the public about illegal

discharges and improper disposal of waste and their associated impacts on local waterways with the use of newer social media technologies.

Measurable Goals:

- Use the City’s social media platforms to provide four water quality educational posts to the public by December of each year (2019-2024).

Evaluation:

- Record and report the number of social media posts regarding stormwater pollution prevention and the numbers of views for each post.

3.4.12 SWMP and Annual Report

The City has a website with specific pages dedicated to the stormwater program. From the webpage, viewers can access educational material, staff contact information, and ways to get involved in the community. The SWMP and annual reports will be posted for the public to view at <https://www.sugarlandtx.gov/336/Regulatory>. Program implementation information will also be provided on the website to comply with state and local public notice requirements. While preparing the annual report, the City will review the SWMP and update procedures as needed, in accordance with Part III.A.2.

Measurable Goals:

- Post the approved SWMP and annual reports on City's stormwater webpage in compliance with TXR040000 requirements.

Evaluation:

- Post the SWMP within 30 days of receiving TCEQ’s approval; post annual reports by April 30 of each year (2019-2024).