



Storm Water Management Program



Craig Rice
Public Works Director

City of Bellmead, Texas Storm Water Management Program (SWMP)

The City of Bellmead has developed its Stormwater Management Program (SWMP) to comply with Federal and State regulations and to improve the quality of life in our city. The SWMP contains activities to reduce the number of pollutants from the city in the stormwater that runs off to our waterways to the maximum extent practicable. The overall objectives of our program are to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and the Texas Water Code. The SWMP incorporates each of the six Minimum Control Measures outlined in the Phase II MS4 General Permit. Measurable goals are selected for each BMP with a quantifiable target and a time or frequency established for implementation and/or evaluation.

The City's Stormwater Management Plan consists of Best Management Practices (BMPs) in six general Minimum Control Measures (MCMs) listed below:

- Public Education and Outreach
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination (IDDE)
- Construction Site Stormwater Runoff Control
- Post Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention and Good Housekeeping for Municipal Operations

Goals of the Stormwater Program:

- To Attain and protect the beneficial uses of the bodies of water in McClennan County.
- To raise citizen awareness of common daily activities such as car maintenance and yard care, that can adversely impact water quality and to prevent those seemingly harmless activities from becoming causes of water pollution.
- Include public input into program implementation.
- Include opportunities for citizens to participate in control measure implementation.
- Reducing pollutants in stormwater

MCM1: Public Education and Outreach

The City of Bellmead, Texas is a city of 10,500 people that conducts an outreach effort to the general public which includes citizens, city employees, and local businesses. The focus of this outreach effort will be to improve and to protect water quality. This outreach will inform the general public about impacts storm water can have on water quality, hazards associated with illegal discharges, and *steps they can take* to reduce pollutants in storm water runoff.

BMPs were selected based on the probability that the educational material would reach the public as well as commercial and business enterprises. Measurable goals for each MBP were selected by formulating attainable goals for the various BMP implementation tasks.

Best Management Practices

- BMP 1: Information on the MS4 Operator's website
 - o Maintain a webpage with current and accurate information and working links. All links shall be checked, and the page shall be updated as necessary to a minimum of once annually. Must be maintained for the full year, each year.
- BMP 2: Social media posts, social media campaign
 - o Post a minimum of four times each year on a minimum of one social media platform. The message shall address ways attendees can minimize or avoid adverse stormwater impacts or practices to improve the quality of stormwater runoff. The messages shall be seasonally appropriate. Must make a minimum of one post per quarter and all quarterly posts must be visible by attendees for the full year, each year.
- BMP 3: Maintain or mark storm drains and inlets with, "No Dumping – Drains to Creek" or similar message.
 - o Placard, stencil, or paint a minimum of 10% of all known stormwater inlets in either high-impact areas identified by the small MS4 operator or impairment watersheds within the MS4 area each year. Where all known stormwater inlets have been marked, inspect, and maintain the markers for a minimum of 15% of all known stormwater inlets in

either high-impact areas identified by the small MS4 operator or impairment watersheds within the MS4 area each year.



- BMP 4: Fact sheets/brochures/utility bill inserts/door hangers
 - o Develop material topics that are group specific and address activities or pollutants of concern. Fact Sheets, brochures, bill inserts, door hangers, or handouts shall be distributed each year for at least 75% of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.

MCM 2: Public Involvement/Participation

Best Management Practices (BMPs) in this area are designed to get local community involvement and participation in drainage management measures. Gaining community involvement assist in all management practices but impresses a hands on and in-person look at local drainage conditions and goals for future practices.

Best Management Practices

- BMP 1: Stream/lake or watershed clean-up events; litter/trash clean-up events such as Adopt-A-Highway, Adopt-A-Spot, Adopt-A-Street, Adopt-A-Stream, etc.

- Host or support at a minimum one event for Level 1 and 2 MS4s or two events for Level 3 and 4 MS4s annually. To be considered an event the land area cleaned must be a minimum of: two acres, 400 yards of stream/streambank/riparian area, or two miles of roadside. These may be combined (such as one acre of land and 200yards of stream).
- BMP 2: Stormwater related speaker series
 - Provide or support a minimum of one session for Level 1 and 2 MS4s or two sessions for Level 3 and 4 MS4s each year. These may be different speakers or audiences.
- BMP 3: MS4 area-wide stormwater survey for input on program implementation
 - Provide or support a minimum of one public survey annually for input on the program implementation to be distributed to at least 75% of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

Best Management Practices (BMPs) in this area are designed to eliminate substances other than storm water from entering the City's storm drainage system. Our storm drain system is designed to carry storm water only, and it is illegal to put any other substances in the storm drains

Best Management Practices

- BMP 1: Maintain a current and accurate MS4 map as described in Part IV.D.3.(c)(1) of the General Permit.
 - Review and update, as necessary, at least one time annually to include features which have been added, removed, or changed.
- BMP 2: Maintain and publicize a public reporting method for the public to report illicit discharges, illegal dumping, or water quality impacts associated with discharges into or from the small MS4 such as a reporting hotline,

online form, or other similar mechanism as described in Part IV.D.3.(c)(3) of the General Permit.

- Maintain a minimum of one public reporting mechanism 100% of the time during the permit term. Publicize the public reporting mechanism a minimum of two times annually in a method designed to reach the majority of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness. In addition, if the MS4 operator has a public website, the public reporting mechanism must be publicized on the public website 100% of the time during the permit term.
- BMP 3: Develop and maintain procedures for responding to illicit discharges, illegal dumping, and spills as described in Part IV.D.3.(c)(4) of the General Permit.
 - Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable.
- BMP 4: Source investigation and elimination of illicit discharges and illegal dumping as described in Part IV.D.3.(c)(5) of the General Permit.
 - Respond to 100% of known illicit discharges and illegal dumping incidents each year to investigate sources (or some Level 2b MS4s must notify the appropriate agency with the authority to act). Each year, respond to 100% of high priority discharges each year, such as sanitary sewer discharges within 24 hours. For 100% of known illicit discharges or illegal dumping incidents where the small MS4 does not have jurisdiction, notify the adjacent MS4 operator or the applicable TCEQ regional office each year. Notify TCEQ immediately of 100% of illicit flows believed to be an immediate threat to human health or the environment throughout the permit term.
- BMP 5: Corrective action to eliminate illicit discharges and illegal dumping as described in Part IV.D.3(c)(5) of the General Permit.
 - For 100% of illicit discharges or illegal dumping where a source has been determined, notify the responsible party of the problem within 24 hours. Require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.

- BMP 6: Inspection Procedures as described in Part IV.D3.(c)(6) of the General Permit.
 - Review and update the procedures at least one time annually to address changes and make improvements to the established inspection procedures where applicable.
- BMP 7: Inspections in response to complaints as described in Part IV.D.3.(c)(6) of the General Permit.
 - Conduct inspections in response to 100% of complaints each year according to the established procedures. Conduct follow up inspections in 100% of cases each year where necessary as described in the established procedures.

MCM 4: Construction Site Stormwater Runoff Control

Best Management Practices (BMPs) in this area are designed to address stormwater runoff from construction activities that result in a land disturbance of one acre or greater. Construction site operators are required by the Texas Commission of Environmental Quality (TCEQ) to develop a Storm Water Pollution Prevention Plan (SWPPP) and comply with the regulations contained in the Construction General Permit, TPDES CGP, TXR150000 (SWPPP). The City is required to implement ordinances and procedures to ensure the construction site operators comply with State regulations.

Best Management Practices

- BMP 1: Develop and maintain an ordinance or other regulatory mechanism as described in Part IV.D.4.(a) of the General Permit.
 - Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.
- BMP 2: Prohibit discharges as described in Part IV.D.4.(b)(2) of the General Permit.
 - Develop and maintain an ordinance or other regulatory mechanism to prohibit these discharges. Review and update the ordinance or other regulatory mechanism at least one time during the permit term to

address changes and make improvements to the ordinance where applicable.

- BMP 3: Maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction as described in Part IV.D.4.(b)(3) of the General Permit.
 - Review and update site plan review procedures at least one time annually to address changes and make improvements to the established procedures where applicable. Implement site plan review procedures for 100% of new construction site plans received each year.
- BMP 4: Implement procedures for inspecting large and small construction projects as described in Part IV.D.4.(b)(4) of the General Permit.
 - Review and update inspection procedures at least one time annually to address changes and make improvements to the established procedures where applicable.
- BMP 5: Conduct construction site inspections as described in Part IV.D.4.(b)(4) of the General Permit.
 - Conduct inspections at a minimum of 80% of active construction sites annually according to the established procedures (or some Level 2b small MS4s must notify the appropriate agency with the authority to act). Each year, conduct follow up inspections in 100% of cases where necessary as described in the established procedures.
- BMP 6: Develop, implement, and maintain procedures for receipt and consideration of information submitted by the public as described in Part IV.D.4.(b)(5) of the General Permit.
 - Review and update procedures for the receipt and consideration of information submitted by the public at least one time annually to address changes and make improvements to the established procedures where applicable. Maintain one webpage, hotline, or similar method for receipt of information submitted by the public throughout the permit term.
- BMP 7: Conduct training for all the MS4 staff whose primary job duties are related to implementing the construction stormwater program as described in Part IV.D.4.(b)(6) of the General Permit. Training may be conducted in

person or using self-paced training materials such as videos or reading materials.

- Conduct a minimum of one training annually for 100% of MS4 staff whose primary job duties are related to implementing the construction stormwater program.

MCM 5: Post Construction Stormwater Management in New Development and Redevelopment.

Best Management Practices (BMPs) in this area are designed to address stormwater runoff from areas of new development and redevelopment. Unlike the temporary BMPs during construction, post-construction BMPs are permanent and are used to control pollution after construction is completed. Post construction BMPs should be incorporated into the development projects and provide for the long-term operation and maintenance of post construction BMPs. The purpose of post construction BMPs is to reduce the negative effect of stormwater from new or redevelopment areas on downstream water bodies by treating, storing or infiltrating runoff before it can affect these water bodies. The City of Bellmead will inspect construction sites during and after construction to ensure compliance with the Stormwater Management Plan.

Best Management Practices

- BMP 1: Develop and maintain an ordinance or other regulatory mechanism as described in Part IV.D.5.(a)(2) of the General Permit.
 - Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.
- BMP 2: Document and maintain records of enforcement actions and make them available for review by the TCEQ as described in Part IV.D.5.(b)(1) of the General Permit.
 - Maintain records of 100% of enforcement actions taken each year. Make 100% of enforcement records available to TCEQ for review within 24 hours of request.

- BMP 3: Ensure the long-term operation and maintenance of structural stormwater control measures installed as described in Part IV.D.5.(b)(2) of the General Permit.
 - o Following a maintenance plan and schedule established by the small MS4 operator, maintain 100% of stormwater control measures each year where the small MS4 operator is responsible for maintenance. Each year, require 100% of the owners or operators of any new development or redeveloped sites to develop and implement a maintenance plan addressing maintenance requirement for any structural control measures installed on site. Require the site owner or operators to maintain documentation, such as a tracking log, onsite of 100% of the maintenance performed and made available for review by the small MS4 operator or TCEQ within 24 hours of the request.

MCM 6: Pollution Prevention and Good Housekeeping for Municipal Operation

Best Management Practices (BMPs) in this area are designed to address the amount of pollutants generated by municipal operations that accumulate on ground surfaces and are transported by runoff to receiving waters. The City will develop and implement an operation and maintenance (O&M) program. The program will include identification of pollutants of concerned discharged from O&M activities, develop and implement pollution prevention measures to reduce pollutant discharges. The program will also include employee training, which has the goal to reduce/prevent pollution from municipal operations and inspection program for pollution prevention. To better control algae blooms in the spring and summer, the City plans to focus municipal lawn and park maintenance activities and spill prevention to reduce the amount of chemicals entering the MS4 because of improper storage, use, and handling practices. The City will also continue to focus its street sweeping efforts for streets and parking lots to reduce the amount of sediment, associated pollutants, and vegetative matter discharged to the MS4 from roadways and parking lots.

Best Management Practices

- BMP 1: Permittee-owned Facilities and Control Inventory as described by Part IV.D.6.(b)(1) of the General Permit.

- Develop and maintain an annual inventory for 100% of the small MS4 owned and operated facilities and controls in the small MS4 area. Review and update the inventory at least one time annually to address changes or additions to the facilities and controls where applicable
- BMP 2: Training and Education as described in Part IV.D.6.(b)(2) of the General Permit. Training may be conducted in person or using self-paced training materials such as videos or reading materials.
 - Conduct a minimum of one training annually for 100% of employees involved in implementing pollution prevention and good housekeeping practices. For small MS4s which use only contractors to implement pollution prevention and good housekeeping practices, ensure training of 100% of applicable contract staff is conducted at least one time annually using contract language or another similar method.
- BMP 3: Disposal of Waste Material as described in Part IV.D.6.(b)(3) of the General Permit.
 - Ensure that 100% of waste from the MS4 is disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable each year.
- BMP 4: Assessment of permittee-owned operations as described in Part IV.D.6.(b)(5)a of the General Permit.
 - Evaluate 100% of operation and maintenance activities, in conjunction with procedure reviews if appropriate, for their potential to discharge pollutants in stormwater annually.
- BMP 5: Identify pollutants of concern as described in Part IV.D.6.(b)(5)b. of the General Permit.
 - Identify pollutants of concern that could be discharged from all of the operation and maintenance activities described in Part IV.D.6.(b)(5)b and maintain a list of 100% of the pollutants identified. Including for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash. Review and update the pollutants of concern list at least one time annually to address changes or additions to the operation and maintenance activities where applicable.
- BMP 6: Pollution Prevention Measures as described in Part IV.D.6.(b)(5)c. of the General Permit.

- Develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the permittee-owned operations.
 - Track 100% of the application of deicing and anti-icing compounds in the MS4 area and record the amount of compound used for each application annually.
 - Use suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips and other pollutants during 80% of regular bridge maintenance each year.
- BMP 7: Inspection of Pollution Prevention Measures as described in Part IV.D.6.(b)(5)d of the General Permit.
 - At least one time annually, visually inspect 100% of pollution prevention measures implemented at permittee-owned facilities to ensure they are working properly. Develop and maintain written procedures that describe the frequency of inspections and how they will be conducted. Review and update the inspection procedures at least one time annually to address changes or additions to the pollution prevention measures. Maintain a log of 100% of the inspections conducted annually and make the log available for review by the TCEQ within 24 hours of a request.
- BMP 8: Structural Control Maintenance as described by Part IV.D.6.(b)(6) of the General Permit.
 - At least one time annually, perform maintenance of 100% of the structural controls which require maintenance. Maintenance must follow a plan and schedule developed by the small MS4 operator to be consistent with maintaining the effectiveness of the BMP. The permittee shall develop and maintain written procedures that define the frequency of inspections and how they will be conducted. Review and update the maintenance procedures at least one time annually to address changes or additions to the pollution prevention measures.