

Farmington City

# Storm Water Management Program

Permit # UTR090006

**Submitted to:**

State of Utah

Department of Environmental Quality

Division of Water Quality

**Submitted by:**

Farmington City

160 S Main

Farmington, UT 84025

November, 2010

## **Purpose**

Farmington City's Storm Water Management Program (SWMP) is intended to give direction to the City in satisfying Federal and State water quality requirements as set forth under the National Pollutant Discharge Elimination System (NPDES) and Utah Pollutant Discharge Elimination System (UPDES) permits. The purpose of the SWMP is to establish a program which will effectively limit the discharge of pollutants from the Farmington City storm drainage system to the maximum extent practicable (MEP).

In an effort to prevent harmful pollutants from being carried by storm water runoff into local water bodies, this program outlines the implementation of controls in specific areas. The six minimum control measures addressed under the UPDES permit are:

1. Public Education and Outreach on Storm Water Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination (IDDE)
4. Construction Site Storm Water Runoff Control
5. Long-Term Storm Water Management in Development and Re-Development (Post-Construction Storm Water Management)
6. Pollution Prevention and Good Housekeeping for Municipal Operations

The SWMP includes the following information for each of the six minimum control measures:

- The Best Management Practices (BMPs) that the City will implement.
- The measurable goals for each of the BMPs.
- The persons/positions responsible for implementing or coordinating the BMPs.
- A rationale for how and why each of the BMPs and measurable goals for the program was selected.

## **Legal Authority**

### **Federal**

In 1972 Congress enacted the Clean Water Act (CWA). The primary purpose for this federal statute is to protect the nation's waters. The objective of the Act is the total elimination of the discharge of pollutants into the nation's waters. The NPDES is a provision of the CWA. This provision prohibits discharge of pollutants into waters of the United States unless a special permit is issued by the Environmental Protection Agency (EPA), a state, or another delegated agency. As authorized by the CWA, the NPDES permit program controls water pollution by regulating point sources that discharge into waters of the United States. Point sources are discreet conveyances such as pipes or man-made ditches.

Phase II of the NPDES permit program focuses on Small Municipal Separate Storm Sewer Systems (MS4s). The regulated entities must obtain coverage under an NPDES

storm water permit and implement a SWMP. The main objective of the program is to control point source pollution in urbanized areas to the maximum extent practicable.

### **State**

The State Department of Environmental Quality (DEQ) administers the NPDES permit program in the State of Utah. The State has a General Permit. The DEQ issues UPDES permits under the State's General Permit.

### **County**

Each of the 15 cities in Davis County files for separate permits. Although Farmington City has been issued a separate permit, the City works jointly with the Davis County Storm Water Coalition and Davis County to facilitate a program addressing the first three minimum control measures:

1. Public Education and Outreach on Storm Water Impacts
2. Public Involvement/Participation
3. Illicit Connection and Illicit Discharge Detection and Elimination

Components of the County's program include public education, mapping, and training among joint partners in the County.

### **City**

Farmington is located in Davis County. The population of the community is estimated to be 15,000. The majority of the land use in the City is residential. There are some agricultural areas, and little commercial, although there is a large commercial development (approximately 60 acres) currently under construction.

Farmington City will implement management practices that will effectively limit, to the maximum extent practicable, the discharge of pollutants from the storm drainage system. The City has established legal authority to control discharges to and from the storm drainage system through a combination of statute, ordinance, permit, contract or order.

Management and oversight of the Farmington City Storm Water Management Program is funded by the Farmington City Storm Water Utility. The Farmington City SWMP is coordinated by the Storm Water Official.

## **SWMP Review and Modification**

Farmington City will participate in an annual review of the SWMP. In conjunction with that review, an annual report will be prepared and submitted to the State. Any changes or modifications will be described and submitted. This review will include the following:

- A status review of the program implementation and compliance with the schedule of compliance contained in the SWMP
- A review of any revision or change of BMPs in the reporting year and assessment of the change or revision for effectiveness
- An overall assessment of the goals and direction of the SWMP and effectiveness of BMPs

An annual report will be submitted using the report form provided on the Division of Water Quality's (Division) website.

The SWMP may be modified in compliance with the following:

- Changes adding (but not subtracting) components, controls, or requirements to the SWMP may be made at any time upon written notification to the Division.
- Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP with an alternate BMP may be adopted at any time, provide the analysis is clearly outlined and subsequently approved by the Division. An analysis shall include:
  1. An explanation of why the BMP is ineffective or infeasible.
  2. Expectations or report on the effectiveness of the replacement BMP.
  3. An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced, or has achieved those goals.
- Change requests or notification must be made in writing and signed as required.

## Chapter One

# Public Education and Outreach

The purpose of this chapter is to define the outreach and education efforts that will be used to inform the public about storm water pollution issues in Farmington City. The City will continue to participate with the Davis County Storm Water Coalition in its efforts to provide public education and outreach to the citizens in Davis County.

## Requirements

1. The City will participate in a public education and outreach program to promote behavior change by the public to reduce water quality impacts associated with pollutants in storm water runoff and illicit discharges. The effort will include a multimedia approach and shall be targeted and presented to specific audiences for increased effectiveness. Education and outreach efforts will include the following four audiences: (1) residents, (2) businesses, institutions, and commercial facilities, (3) developers and contractors (construction), and (4) MS4 industrial facilities. The minimum performance measures which should be based on land use and target audiences found within the community include:
  - a. Targeting specific pollutants and pollutant sources determined by the Coalition or City to be impacting, or have the potential to impact, the beneficial uses of receiving water. This includes providing information and outreach activities which describe the potential impacts from storm water discharges; methods for avoiding, minimizing, reducing and/or eliminating the adverse impacts of storm water discharges and the actions individuals can take to improve water quality, including encouraging participation in local environmental stewardship activities, based on the land uses and target audiences found within the City.
  - b. Informing businesses and the general public of the City's prohibitions against and the water quality impacts associated with illegal discharges and improper disposal of waste.
  - c. Providing information for engineers, construction contractors, developers, development review staff, and land use planners about the development of storm water pollution prevention plans (SWPPS) and BMPs for reducing adverse impacts from storm water runoff from development sites.
  - d. Providing and documenting training given to engineers, developers, development and plan review staff, land use planners, and other parties as applicable to learn about Low Impact Development (LID) practices, green infrastructure practices, and to communicate the specific requirements for post-construction control and the associated Best Management Practices (BMPs) chosen within the SWMP.

Specific targeted pollutants and audiences were discussed in meetings with the Coalition members. Notes from those meetings are on record at Farmington City Hall.

Included below is a table showing the proposed activities of the Davis County Storm Water Coalition in which Farmington City will participate:

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## Measurable Goals

The table below represents measurable goals that are to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness.

<b>Measurable Goals- Public Education &amp; Outreach</b>	
<b>Target Date</b>	<b>Activity</b>
1st Year August, 2011	<ul style="list-style-type: none"> <li>○ Provide funding and review of 4th grade outreach program and provide education for all 4th grade classes in Davis County in cooperation with the Davis County Storm Water Coalition</li> <li>○ Provide funding and participate in annual Water Fair for 4th graders in cooperation with the Davis County Storm Water Coalition</li> <li>○ Publish one article in the Farmington City Newsletter addressing local storm water issues</li> <li>○ Provide funding through the Davis County Storm Water Coalition for the Salt Lake County television ad campaign</li> <li>○ Provide funding and support for contractor, municipal employee, developer etc. training annually through the Davis County Storm Water Coalition</li> </ul>
2nd Year August, 2012	<ul style="list-style-type: none"> <li>○ Provide funding and review of 4th grade outreach program and provide education for all 4th grade classes in Davis County in cooperation with the Davis County Storm Water Coalition</li> <li>○ Provide funding and participate in annual Water Fair for 4th graders in cooperation with the Davis County Storm Water Coalition</li> <li>○ Publish one article in the Farmington City Newsletter addressing local storm water issues</li> <li>○ Provide funding through the Davis County Storm Water Coalition for the Salt Lake County television ad campaign</li> <li>○ Provide funding and support for contractor, municipal employee, developer etc. training annually through the Davis County Storm Water Coalition</li> </ul>
3rd Year August, 2013	<ul style="list-style-type: none"> <li>○ Provide funding and review of 4th grade outreach program and provide education for all 4th grade classes in Davis County in cooperation with the Davis County Storm Water Coalition</li> <li>○ Provide funding and participate in annual Water Fair for 4th graders in cooperation with the Davis County Storm Water Coalition</li> <li>○ Publish one article in the Farmington City Newsletter addressing local storm water issues</li> <li>○ Provide funding through the Davis County Storm Water Coalition for the Salt Lake County television ad campaign</li> <li>○ Provide funding and support for contractor, municipal employee, developer etc. training annually through the Davis County Storm Water Coalition</li> </ul>

<p>4th Year August, 2014</p>	<ul style="list-style-type: none"> <li>o Provide funding and review of 4th grade outreach program and provide education for all 4th grade classes in Davis County in cooperation with the Davis County Storm Water Coalition</li> <li>o Provide funding and participate in annual Water Fair for 4th graders in cooperation with the Davis County Storm Water Coalition</li> <li>o Publish one article in the Farmington City Newsletter addressing local storm water issues</li> <li>o Provide funding through the Davis County Storm Water Coalition for the Salt Lake County television ad campaign</li> <li>o Provide funding and support for contractor, municipal employee, developer etc. training annually through the Davis County Storm Water Coalition</li> </ul>
<p>5th Year August, 2015</p>	<ul style="list-style-type: none"> <li>o Provide funding and review of 4th grade outreach program and provide education for all 4th grade classes in Davis County in cooperation with the Davis County Storm Water Coalition</li> <li>o Provide funding and participate in annual Water Fair for 4th graders in cooperation with the Davis County Storm Water Coalition</li> <li>o Publish one article in the Farmington City Newsletter addressing local storm water issues</li> <li>o Provide funding through the Davis County Storm Water Coalition for the Salt Lake County television ad campaign</li> <li>o Provide funding and support for contractor, municipal employee, developer etc. training annually through the Davis County Storm Water Coalition</li> </ul>

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## Chapter Two

# Public Involvement and Participation

The purpose of this chapter is to outline a plan to include public involvement and participation in the process for developing this Storm Water Management Program.

## Requirements

1. The City will implement a program that complies with applicable state and local public notice requirements. The SWMP will include ongoing opportunities for public involvement and participation such as advisory panels, public hearings, watershed committees, stewardship programs, environmental activities, other volunteer opportunities, or other similar activities. The City may prioritize all potentially affected stakeholder groups, which include but are not limited to, commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and education organizations. The minimum performance measures will be:
  - a. The City will adopt a program or policy directive to create opportunities for the public to provide input during the decision making processes involving the development, implementation and update of the SWMP, including development and adoption of all required ordinances and regulatory mechanisms.
  - b. The City will make the latest updated version of the SWMP available to the public for review and input. A current version of the SWMP will remain available for public review and input for the life of the permit. The City will post the latest version of the SWMP on its website to allow the public to review and provide input.
  - c. Notice of all SWMP-related public hearings should be published in a community publication or newspaper of general circulation to provide opportunities for public involvement.

## Measurable Goals

Measurable Goals- Public Involvement & Participation	
Target Date	Activity
1st Year August, 2011	<ul style="list-style-type: none"> <li>◦ Hold a public hearing to provide input and adopt the SWMP</li> <li>◦ Participate in Storm Water Coalition meetings which include input from private sector representatives</li> <li>◦ Post SWMP on Farmington City Website and request public input into program</li> <li>◦ Respond to all comments received concerning SWMP</li> <li>◦ Revise SWMP on an annual basis if needed</li> </ul>
2nd Year August, 2012	<ul style="list-style-type: none"> <li>◦ Hold a public meeting to solicit input on potential changes to the SWMP</li> <li>◦ Participate in Storm Water Coalition meetings which include input from private sector representatives</li> <li>◦ Post the SWMP on the Farmington City Website and request public input into program</li> <li>◦ Respond to all comments received concerning SWMP</li> <li>◦ Revise SWMP on an annual basis if needed</li> </ul>
3rd Year August, 2013	<ul style="list-style-type: none"> <li>◦ Hold a public meeting to solicit input on potential changes to the SWMP</li> <li>◦ Participate in Storm Water Coalition meetings which include input from private sector representatives</li> <li>◦ Post the SWMP on the Farmington City Website and request public input into program</li> <li>◦ Respond to all comments received concerning SWMP</li> <li>◦ Revise SWMP on an annual basis if needed</li> </ul>
4th Year August, 2014	<ul style="list-style-type: none"> <li>◦ Hold a public meeting to solicit input on potential changes to the SWMP</li> <li>◦ Participate in Storm Water Coalition meetings which include input from private sector representatives</li> <li>◦ Post the SWMP on the Farmington City Website and request public input into program</li> <li>◦ Respond to all comments received concerning SWMP</li> <li>◦ Revise SWMP on an annual basis if needed</li> </ul>
5th Year August, 2015	<ul style="list-style-type: none"> <li>◦ Hold a public meeting to solicit input on potential changes to the SWMP</li> <li>◦ Participate in Storm Water Coalition meetings which include input from private sector representatives</li> <li>◦ Post the SWMP on the Farmington City Website and request public input into program</li> <li>◦ Respond to all comments received concerning SWMP</li> <li>◦ Revise SWMP on an annual basis if needed</li> </ul>

## **Chapter Three**

# **Illicit Discharge Detection and Elimination**

The purpose of this chapter is to outline a program designed to systematically find and eliminate sources of non-storm water discharges from the Farmington storm water system and to implement defined procedures to prevent illicit connections and discharges.

Farmington City will work with the Davis County Public Health Department, which maintains an illicit discharge reporting hotline, to evaluate illicit discharges and assure that they are stopped and properly cleaned up.

## **Requirements**

Farmington City will:

1. Maintain a current storm sewer system map of the City, showing the location of all municipal storm sewer outfalls and the names and location of all state waters that receive discharges from those outfalls, storm drain pipes, and other storm water conveyance structures within the system.
2. Effectively prohibit, through ordinances or other regulatory mechanisms, illicit discharges into the storm sewer system, and implement appropriate enforcement procedures and actions.
3. Develop, implement and document a plan to detect and address non-storm water discharges to the City, including spills, illicit connections, sanitary sewer overflows, and illegal dumping.

## **Ordinance for Illicit Discharges**

Farmington City Ordinance 16-04-140 addresses illicit discharges to the storm water system. The Storm Water Ordinance, Title 16, provides for penalties for violating the ordinance.

## Measurable Goals- IDDE

Measurable Goals- IDDE	
Target Date	Activity
1st Year August, 2011	<ul style="list-style-type: none"> <li>o Develop the IDDE Program for the City.</li> <li>o Adopt the IDDE Program after receiving public input at a public hearing.</li> <li>o Create a list of priority areas likely to have illicit discharges</li> <li>o Inspect 20% of priority areas identified.</li> <li>o Produce a Field Inspection Form to document findings of inspections.</li> <li>o Develop SOPs for tracing the source of an illicit discharge.</li> <li>o Develop SOPs for characterizing the nature of, and the potential public or environmental threat posed by any detected illicit discharge.</li> <li>o Develop SOPs for ceasing illicit discharges.</li> <li>o Develop a written spill/dumping response procedure and flow chart.</li> <li>o Provide employee training about the IDDE program.</li> </ul>
2nd Year August, 2012	<ul style="list-style-type: none"> <li>o Implement the IDDE program for the City.</li> <li>o Implement the SOPs for tracing sources of illicit discharges.</li> <li>o Implement SOPs for characterizing the nature of, and the potential public or environmental threat posed by any detected illicit discharge.</li> <li>o Inspect 20% of priority areas identified and document all inspections.</li> <li>o Update storm water system map to include any new discharge points.</li> <li>o Input results of inspections in GIS data base</li> <li>o Monitor suspected outfalls.</li> <li>o Identify and fix sources of illicit discharge.</li> <li>o Provide employee training about the IDDE program</li> </ul>
3rd Year August, 2013	<ul style="list-style-type: none"> <li>o Inspect 20% of priority areas identified and document all inspections</li> <li>o Update storm water system map to include any new discharge points.</li> <li>o Input results of inspections in GIS data base.</li> <li>o Monitor suspected outfalls.</li> <li>o Identify and fix sources of illicit discharge.</li> <li>o Review ordinance and revise to meet needs identified in IDDE program that are not currently addressed.</li> <li>o Provide employee training about the IDDE program</li> </ul>
4th Year August, 2014	<ul style="list-style-type: none"> <li>o Inspect 20% of priority areas identified and document all inspections</li> <li>o Update storm water system map to include any new discharge points.</li> <li>o Input results of inspections in GIS data base.</li> <li>o Monitor suspected outfalls.</li> <li>o Identify and fix sources of illicit discharge.</li> <li>o Review ordinance and revise to meet needs identified in IDDE program that are not currently addressed.</li> <li>o Provide employee training about the IDDE program.</li> </ul>

Measurable Goals- IDDE	
Target Date	Activity
5th Year August, 2015	<ul style="list-style-type: none"> <li>○ Inspect 20% of priority areas identified and document all inspections</li> <li>○ Update storm water system map to include any new discharge points.</li> <li>○ Input results of inspections in GIS data base</li> <li>○ Monitor suspected outfalls</li> <li>○ Identify and fix sources of illicit discharge.</li> <li>○ Review ordinance and revise to meet needs identified in IDDE program that are not currently addressed.</li> <li>○ Provide employee training about the IDDE program.</li> </ul>

### Procedure for Locating and Listing Priority Areas Likely to Have Illicit Discharge

1. Locate on the zoning map areas zoned for residential, commercial, industrial and mixed uses.
2. Discuss with the planning and public works departments which areas are oldest and most likely to have illicit connections.
3. Discuss with the County Public Health Department where there are permitted on-site sewage disposal systems or where there have been instances of sewer overflows or cross-connections
4. Identify sensitive water bodies in the community and use the zoning map to identify areas upstream from these water bodies.
5. Based on identified areas, develop a priority list of most likely areas to have illicit discharges and document the basis for the selection of each priority area.
6. Update the list annually.

## Chapter Four

# Construction Site Storm Water Runoff Control

The purpose of this chapter is to outline a program designed to reduce pollutants in storm water from construction sites. This will be achieved through a combination of structural and non- structural BMPs. This section addresses water quality concerns for construction sites with a land disturbance greater than equal to one acre, including projects that are less than one acre that are part of a larger plan of development or sale.

## Requirements

Farmington City will:

Enforce the storm water ordinance (Title 16 of the Farmington City Ordinances) which requires erosion and sediment controls for construction projects disturbing greater than or equal to one acre and to construction project of less than one acre that are part of a common plan of development or sale.

1. Require construction operators or developers to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply BMPs as necessary to protect water quality, reduce the discharge of pollutants, and control waste such as, but not limited to, discarded building materials, concrete truck washout, chemicals litter and sanitary waste at the construction site that may cause adverse impacts to water quality.
2. Develop an enforcement strategy and implement the enforcement provisions of the ordinance, including:
  - a. Documented procedures that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators which shall include appropriate, escalating enforcement procedures and actions.
  - b. Documentation and tracking of all enforcement actions.
3. Require access by qualified personnel to inspect construction storm water BMPs on private properties that discharge to the City.
4. Adopt and implement procedures for site plan review which incorporate consideration of potential water quality impacts. Prior to construction the City will:
  - a. Review construction Storm Water Pollution Preventions Plans (SWPPPs) and keep records for, at a minimum, all construction sites that disturb one acre or more, or are less than one acre and are part of a common plan of development. The City will keep copies of these records for five years or until construction is completed, whichever is longer.
  - b. The City will provide training for all staff involved in permitting, planning, and review.
5. The City will adopt and implement procedures for site inspection and enforcement of construction storm water pollution control measures. The construction site storm water runoff control program will provide:
  - a. Training for staff on the fundamentals of erosion prevention and sediment control and in how to review SWPPPs;
  - b. Identification of priority construction activities, including at a minimum those construction activities discharging directly into or immediately upstream of waters that the state recognizes as impaired or high quality;

- c. Review of all SWPPPs prior to construction;
- d. Pre-construction meetings with at a minimum, construction site operators of priority construction activities;
- e. Inspections by the City of priority construction sites at least bi-weekly.
- f. Inspections of all new construction sites that disturb one acre or more, or are part of a common plan of development or sale at least monthly by qualified personnel.
- g. An adopted procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, verbal warnings, stop work orders, warning letters, noticed of violations, and other enforcement records.

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## Measurable Goals- Construction Site Storm Water Runoff Control

Measurable Goals- Construction Site Storm Water Runoff Control	
Target Date	Activity
1st Year August, 2011	<ul style="list-style-type: none"> <li>◦ Review Title 16 and identify areas where it is not equivalent to the technical requirements set forth in the UPDES Storm Water General Permit for Construction Activities, UTR300000 and MS4 General UPDES Permit No. UTR090006.</li> <li>◦ Develop a written enforcement strategy.</li> <li>◦ Develop SOPs for pre-construction SWPPP review.</li> <li>◦ Identify priority construction sites</li> <li>◦ Develop construction site inspection SOPs</li> <li>◦ Develop a procedure for being notified by builders when active construction is completed to verify stabilization and removal of temporary BMPs.</li> <li>◦ Track all training of enforcement staff.</li> <li>◦ Develop and adopt a procedure for maintaining records of all projects requiring a permit.</li> </ul>
2nd Year August, 2012	<ul style="list-style-type: none"> <li>◦ Implement the enforcement strategy</li> <li>◦ Review all SWPPPs prior to construction.</li> <li>◦ Identify priority construction sites</li> <li>◦ Inspect all construction sites requiring a permit at least monthly and document inspections.</li> <li>◦ Inspect priority construction sites at least biweekly and document inspections.</li> <li>◦ Take all necessary follow-up action and track and document them.</li> <li>◦ Maintain records of all projects requiring a permit</li> <li>◦ Track all training of enforcement staff.</li> <li>◦ Revise Title 16 to address any issues identified during the year.</li> </ul>
3rd Year August, 2013	<ul style="list-style-type: none"> <li>◦ Identify priority construction sites</li> <li>◦ Inspect all construction sites requiring a permit at least monthly and document inspections.</li> <li>◦ Inspect priority construction sites at least biweekly and document inspections.</li> <li>◦ Take all necessary follow-up action and track and document them.</li> <li>◦ Maintain records of all projects requiring a permit.</li> <li>◦ Attend at least one training opportunity which addresses storm water pollution prevention compliance.</li> <li>◦ Require SWPPPs for all developments meeting minimum threshold requirements</li> <li>◦ Review all SWPPPs prior to construction.</li> <li>◦ Track all training of enforcement staff</li> <li>◦ Revise Title 16 to address any issues identified during the year</li> </ul>

<p>4th Year August, 2014</p>	<ul style="list-style-type: none"> <li>o Identify priority construction sites</li> <li>o Inspect all construction sites requiring a permit at least monthly and document inspections.</li> <li>o Inspect priority construction sites at least biweekly and document inspections.</li> <li>o Take all necessary follow-up action and track and document them.</li> <li>o Maintain records of all projects requiring a permit.</li> <li>o Attend at least one training opportunity which addresses storm water pollution prevention compliance.</li> <li>o Require SWPPPs for all developments meeting minimum threshold requirements</li> <li>o Review all SWPPPs prior to construction.</li> <li>o Track all training of enforcement staff.</li> <li>o Revise Title 16 to address any issues identified during the year.</li> </ul>
<p>5th Year August, 2015</p>	<ul style="list-style-type: none"> <li>o Identify priority construction sites</li> <li>o Inspect all construction sites requiring a permit at least monthly and document inspections.</li> <li>o Inspect priority construction sites at least biweekly and document inspections.</li> <li>o Take all necessary follow-up action and track and document them.</li> <li>o Maintain records of all projects requiring a permit.</li> <li>o Attend at least one training opportunity which addresses storm water pollution prevention compliance.</li> <li>o Require SWPPPs for all developments meeting minimum threshold requirements</li> <li>o Review all SWPPPs prior to construction.</li> <li>o Track all training of enforcement staff.</li> <li>o Revise Title 16 to address any issues identified during the year.</li> </ul>

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**Chapter Five**  
**Long-Term Storm Water Management in New Development  
and Redevelopment**

The City will develop, implement and enforce a program to address post-construction storm water runoff to the City from new development and redevelopment projects according to the minimum performance measures listed below. The objective is for the hydrology of a new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water. The program applies to private and public development sites, including roads.

**Requirements**

The minimum performance measures are:

1. Develop and adopt an ordinance or other regulatory mechanism that requires post-construction storm water controls at new development and redevelopment projects. The ordinance or other regulatory mechanism shall apply, at a minimum, to new development and redevelopment sites that discharge to the City and that disturb one acre or more or are less than one acre and are part of a common plan of development or sale. The ordinance shall require BMP selection, design, installation, operation and maintenance standards necessary to protect water quality and reduce the discharge of pollutants to the City.
2. Develop an enforcement strategy and implement the enforcement provisions of the ordinance. Procedures for enforcement of BMPs include:
  - a. Procedures that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators which shall include appropriate escalating enforcement procedures and actions.
  - b. Documentation on how the requirements of the ordinance will protect water quality and reduce the discharge of pollutants to the MEP. Documentation shall include:
    - i. How storm water BMPs were selected;
    - ii. The pollutant removal expected from the selected BMPs; and
    - iii. The technical basis which supports the performance claims for the selected BMPs.
3. Develop a new development/redevelopment program that has requirements or standard to ensure that any storm water controls or management practices for new development or redevelopment will prevent or minimize impacts to water quality.
4. Develop a new development/redevelopment program that includes a process to evaluate and encourage a Low Impact Development (LID) approach which encourages the implementation of structural BMPs, where practicable, that infiltrate, evapotranspire or harvest and use storm water from the site to protect water quality. Structural controls may include green infrastructure practices such as rainwater harvesting, rain gardens, permeable pavements, and vegetated swales. The selection

and design of post-construction controls must take into consideration clogging or obstruction issues, freeze-thaw problems, effect on slope stability and groundwater, and the ability to effectively maintain the control.

5. Develop a plan to retrofit existing developed sites that are adversely impacting water quality. The retrofit plan will be developed to emphasize controls that infiltrate, evapotranspire or harvest and use storm water discharges. The plan will include the ranking of control measures to determine those best suited for retrofitting as well as those that could later be considered for retrofitting. The following will be included when developing the criteria for the retrofit plan:
  - a. Proximity to water body
  - b. Status of waterbody to protect unimpaired waterbodies
  - c. Hydrologic condition of the receiving waterbody
  - d. Proximity to sensitive ecosystem or protected area
  - e. Any upcoming sites that could be further enhanced by retrofitting storm water controls
6. Define a specific hydrologic method or methods for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs and to facilitate plan review. Other unique or complex methodologies may be allowed.
7. Adopt and implement procedures for site plan review which incorporate consideration of water quality impacts. Prior to construction the City will:
  - a. Review SWPPPs for all new development and redevelopment sites that disturb one acre or more, or less than one acre and are part of a common plan of development to ensure that the plans include long-term storm water management measures that meet the requirements of this minimum control measure
  - b. Provide developers and contractors with preferred design specifications to more effectively treat storm water for different development types such as industrial parks, commercial strip malls, retail gasoline outlets, restaurants, parking lots, automotive service facilities, street and road construction and project located in, adjacent to or discharging to environmentally sensitive areas.
  - c. Keep a representative copy of information that is provided to design professionals; and if information is distributed to a large number of design professionals at one time, the dates of the mailings and lists of recipients.
8. Adopt and implement SOPs for site inspection and enforcement of post-construction storm water control measures. These measures will ensure adequate long-term operation and maintenance of approved storm water control measures.
  - a. The ordinance will include provisions for both construction-phase and post-construction access for the City to inspect storm water control measures on private properties that discharge to the storm sewer system to ensure that adequate maintenance is being performed. The ordinance may require private property owner/operators or qualified third parties to conduct maintenance and provide annual certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality.
  - b. Permanent structural BMPs will be inspected at least once during installation by qualified personnel.
  - c. Inspections and any necessary maintenance must be conducted annually by either the City or through a maintenance agreement, the property owner/operator. On

sites where the property owner/operator is conducting maintenance, the City shall inspect those storm water control measures at least once every five years, or more frequently as determined by the City to verify and ensure that adequate maintenance is being performed. The City will document its findings in an inspection which includes the following:

- i. Inspection date;
  - ii. Name and signature of inspector;
  - iii. Project location; current ownership information;
  - iv. A description of the condition of the storm water control measure including the quality of: vegetation and soil; inlet and outlet channels and structures; catch basins; spillways; weirs, and other control structures; and sediment and debris accumulation in storage as well as in and around the inlet and outlet structures;
9. Provide adequate training for all staff involved in post-construction storm water management, planning and review, and inspections and enforcement. Training will be provided or made available for staff in the fundamentals of long-term storm water management through the use of structural and non-structural control methods. The training records kept will include dates, activities or course descriptions, and names and positions of staff in attendance.
10. Maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redeveloped sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The inventory will include both public and private sector sites located within the City's service area.
- a. Each entry in the inventory will include basic information on each project, such as project's name, owner's name and contact information, location, start/end date, etc. In addition, inventory entries will include the following for each project:
    - i. Short description of each storm water control measure (type number, design or performance specifications);
    - ii. Short description of maintenance requirements (frequency of required maintenance and inspections); and
    - iii. Inspection information (date, findings, follow up activities, prioritization of follow-up activities, compliance status).
  - b. Based on inspection conducted, the City will update the inventory as appropriate where changes occur in property ownership or the specific control measures implemented at the site.

## Measurable Goals- Long-Term Storm Water Management in New Development and Redevelopment

Measurable Goals- Long-Term Storm Water Management in New Development and Redevelopment	
Target Date	Activity
<p>1st Year August, 2011</p>	<ul style="list-style-type: none"> <li>○ Review ordinances and make sure they contain all regulations required by Permit # UTR090006.</li> <li>○ Revise ordinance to include any missing items</li> <li>○ Develop a written enforcement strategy</li> <li>○ Provide documentation on how the ordinance meets 4.2.5.2.2 of Permit # UTR090006</li> <li>○ Develop process to evaluate and encourage Low Impact Development (LID)</li> <li>○ Develop and define specific hydrologic method or methods for calculating runoff volumes and flow rates</li> <li>○ Adopt and implement procedures for site plan review which incorporate consideration of water quality impacts</li> <li>○ Review all SWPPPs to ensure plans include long-term storm water management measures</li> <li>○ Develop an inventory of all post-construction structural storm water control measures</li> <li>○ Develop SOP for site inspection and enforcement of post-construction storm water control measures</li> <li>○ Develop a schedule for inspecting existing long-term storm water management facilities</li> <li>○ Provide training for staff involved in post-construction storm water management, planning and review, and inspection and enforcement.</li> </ul>
<p>2nd Year August, 2012</p>	<ul style="list-style-type: none"> <li>○ Develop plan to retrofit existing developed sites that are adversely impacting water quality</li> <li>○ Review all SWPPPs to ensure plans include long-term storm water management measures</li> <li>○ Develop and provide preferred design specifications to more effectively treat storm water to developers and contractors</li> <li>○ Inspect scheduled long-term storm water management facilities</li> <li>○ Provide training for new staff involved in post-construction storm water management, planning and review, and inspection and enforcement</li> <li>○ Maintain and update the inventory of all post-construction structural storm water control measures</li> </ul>

<p>3rd Year August, 2013</p>	<ul style="list-style-type: none"> <li>◦ Review all SWPPPs to ensure plans include long-term storm water management measures</li> <li>◦ Provide preferred design specifications to more effectively treat storm water to developers and contractors</li> <li>◦ Inspect scheduled long-term storm water management facilities</li> <li>◦ Provide training for new staff involved in post-construction storm water management, planning and review, and inspection and enforcement</li> <li>◦ Maintain and update the inventory of all post-construction structural storm water control measures</li> </ul>
<p>4th Year August, 2014</p>	<ul style="list-style-type: none"> <li>◦ Review all SWPPPs to ensure plans include long-term storm water management measures</li> <li>◦ Provide preferred design specifications to more effectively treat storm water to developers and contractors</li> <li>◦ Inspect scheduled long-term storm water management facilities</li> <li>◦ Provide training for new staff involved in post-construction storm water management, planning and review, and inspection and enforcement</li> <li>◦ Maintain and update the inventory of all post-construction structural storm water control measures</li> </ul>
<p>5th Year August, 2015</p>	<ul style="list-style-type: none"> <li>◦ Review all SWPPPs to ensure plans include long-term storm water management measures</li> <li>◦ Provide preferred design specifications to more effectively treat storm water to developers and contractors</li> <li>◦ Inspect scheduled long-term storm water management facilities</li> <li>◦ Provide training for new staff involved in post-construction storm water management, planning and review, and inspection and enforcement</li> <li>◦ Maintain and update the inventory of all post-construction structural storm water control measures</li> </ul>

**Chapter 6**  
**Pollution Prevention and Good Housekeeping**  
**For Municipal Operations**

The City will develop and implement an operations and maintenance (O&M) program for City-owned or operated facilities, municipal operations, and structural storm water controls which include standard operating procedures (SOPs) and a training component that have the ultimate goal of preventing or reducing pollutant runoff from municipal operations and facilities. The minimum performance measures will be as follows:

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## Measurable Goals

<b>Pollution Prevention and Good Housekeeping For Municipal Operations Measurable Goals</b>	
Target Date	Activity
1st Year August, 2011	<ul style="list-style-type: none"> <li>o An inventory of all municipal facilities and operations will be conducted</li> <li>o An assessment will be made of the inventory for their potential to discharge typical pollutants to the storm water system</li> <li>o High priority facilities or operations that have high potential to generate storm water pollutants will be identified</li> <li>o Facility-specific SOPs will be adopted for the high priority facilities or operations</li> <li>o SOPs addressing the storm water collection system will be adopted</li> <li>o SOPs will be adopted for the shop/maintenance facilities</li> <li>o SOPs will be adopted for vehicle fleet and equipment maintenance</li> <li>o SOPs will be adopted addressing roads, highways, parking lots and snow removal</li> <li>o SOPs will be adopted address parks and open space operations and maintenance</li> <li>o SOPs will be adopted to address municipal building maintenance</li> <li>o Two training sessions will be held for municipal employees</li> <li>o An inventory of all floor drains inside all City owned or operated building will be made by February 1, 2011</li> <li>o An inventory including a map of all storm drains located on the property of all City owned or operated buildings will be made by February 1, 2011</li> </ul>
2nd Year August, 2012	<ul style="list-style-type: none"> <li>o Review and update inventory of municipal facilities and operations</li> <li>o Inspect all municipal facilities at least once for SWPPP compliance</li> <li>o Conduct two training sessions for municipal employees</li> <li>o Develop a list of priority storm water treatment and flow control facilities and inspect them after major storm events</li> <li>o Obtain a UPDES Permit for any new construction projects</li> <li>o Conduct pre-construction meetings to discuss BMPS for all new municipal construction</li> <li>o Conduct weekly visual inspections of "high priority" facilities</li> <li>o Conduct at least quarterly comprehensive inspections of high priority facilities</li> <li>o Visually observe the quality of the storm water discharges from "high priority" facilities at least quarterly</li> <li>o Develop and implement a process to assess water quality impacts in the design of all new flood management structural controls that discharge to the City storm water system</li> <li>o Asses existing flood management structural controls to determine whether changes or additions should be made to improve water quality</li> </ul>
3rd Year August, 2013	<ul style="list-style-type: none"> <li>o Review and update inventory of municipal facilities and operations</li> <li>o Inspect all municipal facilities at least once for SWPPP compliance</li> <li>o Conduct two training sessions for municipal employees</li> <li>o Inspect priority storm water treatment and flow control facilities after major storm events</li> <li>o Obtain a UPDES Permit for any new construction projects</li> <li>o Conduct pre-construction meetings to discuss BMPS for all new municipal construction</li> </ul>

	<ul style="list-style-type: none"> <li>o Conduct weekly visual inspections of "high priority" facilities</li> <li>o Conduct at least quarterly comprehensive inspections of high priority facilities</li> <li>o Visually observe the quality of the storm water discharges from "high priority" facilities at least quarterly</li> </ul>
<p>4th Year August, 2014</p>	<ul style="list-style-type: none"> <li>o Review and update inventory of municipal facilities and operations</li> <li>o Inspect all municipal facilities at least once for SWPPP compliance</li> <li>o Conduct two training sessions for municipal employees</li> <li>o Inspect priority storm water treatment and flow control facilities after major storm events</li> <li>o Obtain a UPDES Permit for any new construction projects</li> <li>o Conduct pre-construction meetings to discuss BMPS for all new municipal construction</li> <li>o Conduct weekly visual inspections of "high priority" facilities</li> <li>o Conduct at least quarterly comprehensive inspections of high priority facilities</li> <li>o Visually observe the quality of the storm water discharges from "high priority" facilities at least quarterly</li> </ul>
<p>5th Year August, 2015</p>	<ul style="list-style-type: none"> <li>o Review and update inventory of municipal facilities and operations</li> <li>o Inspect all municipal facilities at least once for SWPPP compliance</li> <li>o Conduct two training sessions for municipal employees</li> <li>o Inspect priority storm water treatment and flow control facilities after major storm events</li> <li>o Obtain a UPDES Permit for any new construction projects</li> <li>o Conduct pre-construction meetings to discuss BMPS for all new municipal construction</li> <li>o Conduct weekly visual inspections of "high priority" facilities</li> <li>o Conduct at least quarterly comprehensive inspections of high priority facilities</li> <li>o Visually observe the quality of the storm water discharges from "high priority" facilities at least quarterly</li> </ul>

**APPENDIX TO THE FARMINGTON CITY  
STORM WATER MANAGEMENT PROGRAM**

**Appendix A-**

**Appendix B-**

**Appendix C-**

**Appendix D-** Description of the assessment process and findings of City-owned facilities

**Appendix E-** Description of the assessment process and findings of City-owned facilities

**Appendix F-** Standard Operating Procedures for City operations

**Appendix G-** Process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the City or discharge to the MS4

**Appendix H-** Process to assess whether changes or additions should be made to structural controls to improve water quality

**THIS ASSESSMENT WILL BE UNDERTAKEN IN YEAR 1 AND WILL BE  
ADDED TO THE SWMP AT THE NEXT UPDAE PERIOD**

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**Appendix F- Standard Operating Procedures for City operations**

**THE SOPS BELOW ARE DRAFT STANDARD OPERATING PROCEDURES.  
THEY HAVE NOT YET BEEN ADOPTED BY THE CITY**

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**Appendix G-** Process to assess the water quality impacts in the design of all new flood management structural controls that are associated with the City or discharge to the MS4

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