

City of O'Fallon



Stormwater Annual Report-MS4s

June 13, 2013
Through
June 12, 2014

This is the annual stormwater report for O'Fallon's Stormwater General Operating Permit MO-RO40039, with an original issue date of April 23, 2003, which provides updates to our current five (5) year SWMP that is in place to implement and maintain the six (6) minimum control measures to ensure full compliance with the permit issuance for Small Municipal Separate Storm Sewer System regulations.

This report covers the reporting period for June 13, 2013 to June 12, 2014

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Introduction

The City of O'Fallon has maintained a positive approach towards compliance with all aspects of the NPDES Phase II Permit requirements since the inception of the program in 2003 and as stated in our most current submitted Stormwater Management Plan (SWMP). We have continued to make improvements and changes to our SWMP, ordinances and policies to make adjustments, trained our employees, educated the public and will continue these efforts to strive to improve the water quality and address water quantity issues as well in our community.

We have begun implementation of our five year SWMP for years 2013-2018. This report is a result of our successes and challenges since the program was implemented in 2003. The plans implementation process proposed is a direct reflection of growth in the program and the direction that it will go.

This reporting cycle will encompass the dates June 13, 2013-June 12, 2014 as requested by the Missouri Department of Natural Resources. The MCM Individual Responsibility information has been updated as well as the goals for each of the six MCMs. See **Appendix L** for implementation of the most recent SWMP 2013-2018 Operation Plan for each MCM.

MCM 1-Public Education and Outreach

1. Implementation Status

General Summary

The City of O'Fallon, Missouri has implemented items which provide educational opportunities for the public and outreach documents for the citizens of O'Fallon. **Eight (8)** continuing education sessions were held with a total of **871** residents/employees educated. See **Exhibit A** for further detail.

Program Elements Changed or Refined Since Previous Report

Due to the continued success of Public Works Day, the City has continued to hold this event annually and Stormwater continues to participate. The Missouri Department of Conservation partnered with us for the use of their Enviroscape to demonstrate how pollutants travel into the storm sewer system and eventually natural waterways. Informational brochures, trinkets, and an educational display were used to educate the public about the importance of keeping our storm sewer system, creeks and stream clean. For 2014, we had less turn out than previous years. We believe that the weather and make up snow days at local schools played part in the decreased attendance. We also included our Missouri Stream Trash Queen with our display to promote the Stream Trash to Art program and as an education tool for keeping pollutants out of streams.

Each year, there will be revisions, additions or removal of completed goals. This will also be provided in updated copies of the Operation Plan for each MCM. See **Appendix L** for further information.

Status of Measurable Goals

Goal 1: Public Information via Hard Copy and Internet: Ongoing

This goal will be ongoing since we are constantly reviewing for improvements in the information that we provide to local residents, business owners and contractors. There are also several free informational brochures available at City Hall and on the internet for use. A Homeowner's Guide for Creek and Shoreline Maintenance was created that is being reviewed for public use. Copies of educational information for the general public as well as recommendations on how to handle drainage issues are utilized on a regular basis. See **Appendix B** for further information.

Goal 2: Public Education: Ongoing

The City continues to hold environmental education sessions to inform the public about the importance of pollution prevention and its effects. We continue to present information to the public, staff and city representatives at City Council, Planning and Zoning and the Public Works Commission meetings throughout the year. These meetings are recorded and televised on our local access cable channel. We also utilize Project Wet Activities as well with students in school to give them more hands on learning and understanding.

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Goal 3: Rain Garden/Rain Barrel/Native Landscape Workshop: Ongoing

Increase awareness of stormwater benefit from installation of rain garden, rain barrel or native landscape. This goal will be ongoing and occurring a minimum of once a year at the City's Public Works Day event. Rain Barrel handouts have been distributed on a regular basis. See to **Appendix E** for further information.

A rainwater harvest system was installed at the Public Works building in spring of 2014 to collect part of the roof runoff. This system is used to provide water to landscaping, boot washing, etc. A solar powered pump system has also been added to assist with watering landscaping.

Goal 4: Educational Signage for Native Landscape and Rain Gardens: In progress 10% complete

Installation of educational signage at various native landscape and rain gardens throughout the City limits. Currently have an educational sign located at the Renaud Spirit Center Rain Garden. The rest of the signs are in design concept phase, but placed on hold due lack of available funding and installation of the other City-wide identification signs. Once the other sign installations are completed, we can make sure our signs are in line with the other city-wide identification sign requirements and move forward with a request to finish design and begin to install them throughout the City.

2. Overall Compliance with Permit Conditions

The City of O'Fallon continues to work towards compliance with its Public Education and Outreach with a public education program which will continue to distribute educational materials and conduct outreach activities. Educational resources are constantly being reviewed and updated as new information arises and expansion of those resources has continued with development and publishing of the Stormwater Management Website, additional brochures, door hangers and increased efforts to educate the public. Staff continues to attend several workshops to increase their knowledge of NPDES regulations, BMP's, Post Construction Methods, Webcasts, and stormwater pollution awareness as well. It is getting harder and harder to visit schools and perform stormwater education due to state educational requirements. Schools are only allowing us limited access to students usually before or after school to meet with individual clubs which have much smaller groups. A few high schools have us come in for environmental science, but we continue to encourage them to have us. We will continue to utilize Project Wet, Wild and Learning Tree education programs. The Stormwater Coordinator is certified to instruct in all three programs and continues to educate the school district that these programs are certified by the Missouri Department of Education for use in the classroom; therefore substitution of these program activities can be justified for use in the classroom.

3. Results of Information Collected and Analyzed

Public Education has continued in schools and at public meetings. Tracking information has been established so we can evaluate our successes and re-examine failures. We have seen continued increases in requests for education and outreach materials and training sessions since the inception of the program. The Ft. Zumwalt school district utilizes us, but again with more educational constraints, we have been requested less often during class time, but continue to participate in before/after school club activities. See **Appendices A and B** for tracking information and samples of informational outreach materials.

4. Brief Summary of Activities Next Reporting Period

During the next reporting period, continued expansion and updating of education and outreach materials will occur.

5. Proposed Changes to Public Education and Outreach Area

A new SWMP has been submitted for years 2013-2018 which has included new and/or revised goals. For the next reporting cycle we will continue our public education in the schools, public meetings, homeowners associations, website, City Newsletter articles, and cable channel promotion of events.

6. Statement, Relying on Other Governmental Entity

Not applicable

7. Summary of Inspections and Formal Enforcement Actions

Not Applicable

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MCM 2-Public Participation/Involvement

1. Implementation Status

General Summary

For this reporting period, the Public Participation Program has continued under the title of the "Stormwater Awareness Campaign" which utilizes volunteers to address storm drain marking and pollution prevention awareness. We sponsor/coordinate creek clean-ups on Earth Day, Make A Difference Day, and Join Hands Day which are all national volunteer service days. We partner with the surrounding municipalities, Greenway Network, Wal-Mart and a few other organizations for the annual Mission Clean Stream creek clean-up event. **1.44 tons** of trash was removed from local streams for this reporting period. See **Appendix C** for more information.

Utilization of the City cable channel, local newspapers, Stormwater Website, City Volunteer Website, and citizen "word of mouth" for promotion of this program as well as City newsletter announcements also assisted us in getting this program started and promoted stormwater pollution prevention.

Program Elements Changed or Refined Since Previous Report

Public Participation and Involvement and Public Education and Outreach have continued to grow since the inception of the program.

The Stormwater Department continues to have a very good relationship with the Public Relations Department as well as local newspapers. They have been very good about promoting events and distributing stormwater information to the public via informational articles and when announcing upcoming events.

We continue to have residents volunteer their time to storm drain marking throughout the year due their concern over the environment. They also participate in our Volunteer events for Stormwater Awareness Campaign and act as crew leaders. Permanent storm drain markers made of stainless steel have continued to be utilized in the place of painting with stencils. Individual families and groups take on specific tasks or assignments as well. See **Appendix C** for tracking information.

We have had several subdivisions host their own private creek clean up events and continue to provide assistance with supplies, organization, and debris hauling.

Status of Measurable Goals

Goal 1: Stormwater Advisory Panel: Ongoing

Continue to build and maintain public participation and involvement as well as raise citizen awareness for water quality with utilization of the Public Works Commission as our Stormwater Advisory Panel. We will continue to maintain and get input for water quality, regulations and permit activities or changes, as well as program updates and stormwater improvement.

Goal 2: Public Participation Volunteer Events: Ongoing

Continue to increase public awareness to improve water quality as well as prevent illicit discharges by involving the general public as volunteers in our creek clean ups, storm drain marking events.

Goal 3: Rain Barrel Program: New Goal 2013-2018 SWMP

We will encourage the installation of rain barrels by citizens as a means of stormwater quality and quantity benefits. This will be accomplished by educating the public on the benefits of installing rain barrels and getting them involved with volunteer installation to prevent increased runoff. We have had funds approved to install some on our own municipal properties. Our goal is to create a public rain barrel program similar to the one utilized by other MS4s. A rain water harvesting system has been installed at our Public Works Facility. Rainwater is harvested to rinse work boots and water landscaping using a modified pump and soaker hose. We currently have 300 gallons of storage capacity at this location. See **Appendix D** for a photo.

Goal 4: Riparian Corridor Restoration: New Goal 2013-2018 SWMP

We continue to recommend/installation of trees, shrubs and native plants to restore a riparian corridor along a local stream to prevent flooding, improve water quality and assist in prevention of creek bank erosion. We will continue to educate the public on stormwater quality and flood prevention benefits by re-establishing a riparian corridor.

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2. Overall Compliance with Permit Conditions

The City of O'Fallon is complying with permit conditions relating to Public Participation and Involvement. The Public Works Commission acts as the stormwater advisory committee to help educate City Administration and other city residents on the Stormwater Management Program. This commission is a volunteer position appointed by City council. In the absence of the Public Works Commission however, residents can still utilize the "Citizen's Comment" and "Public Hearing" portion of the City Council and Planning and Zoning meetings.

Whenever a development is proposed in the City, public hearings are held at the Planning and Zoning meetings. The Planning and Zoning commission is a volunteer board whose members are appointed by City Council. The Planning and Zoning Commission will review and approve all developments coming into the City. They include in their discussion stormwater and other issues prior to approving the developments. Once approved, their recommendation goes to City Council for final passage where residents have another opportunity to provide questions or comments during a "Public Hearing" regarding the development.

The City also continues to partner with Greenway Network and several other St. Charles County municipalities for the "Mission Clean Stream" annual event and conduct other City Volunteer events that address stormwater pollution prevention. These events involve creek and road-side cleanups. See Appendix C for further details.

3. Results of Information Collected and Analyzed, if any

Investigations of stormwater concerns received from City's "Citizen First" webpage and hotline, resident or other City department totaled:

June 13, 2013-June 12, 2014

Received:

Stormwater Maintenance: 322
Stormwater Management: 92
Total: 414

Completed:

Stormwater Maintenance: 179
Stormwater Management: 78
Total: 257

Please see Appendix F. for further information

4. Brief Summary of Activities for next Reporting Period

Currently, a majority of storm drains have been stenciled for the City with paint. However, the paint only lasts a few years and requires re-touching. During the next reporting period the City of O'Fallon is planning to continue the volunteer storm drain marking project utilizing the stainless steel storm drain markers in place of paint as well as continue creek clean-ups. We have 1,000 storm drain markers ready to be placed. We will include print ads in the City of O'Fallon Newsletter that goes out quarterly to all residents to draw attention to stormwater.

We will also continue to our City requirements for developers to install the storm drain markers with new development. They can utilize the stainless steel storm drain markers, use pre-cast messages or manhole lids imprinted with no dumping identification.

There are no significant changes or additions to existing goals for the next reporting period and we will continue to increase awareness to pollution prevention and increase our participation in volunteers.

5. Proposed Changes to this Public participation/Involvement Program Area

There are no changes proposed to this area of the program for this reporting period.

6. Statement, Relying on Other Governmental Entity

Not applicable

7. Inspection Summary and Formal Enforcement Actions

Not applicable

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MCM 3-Illicit Discharge Detection and Elimination

1. Implementation Status

General Summary

The City of O'Fallon continues refining its Illicit Discharge Detection and Elimination Program.

The GIS mapping division continues to map all recent constructed stormwater piping and continue to add the older portions as well. Currently, we have approximately **234** miles of storm sewer lines and **35** box culvert infrastructure mapped throughout City limits. See **Appendix G** for map copies.

The City has in place a Stormwater Quality Management and Illicit Discharge Ordinance which prohibits non-storm water discharges into the O'Fallon MS4. This ordinance was passed by City Council and enacted on October 24, 2006 and continues to be utilized. There are also several other ordinances relating to property management (nuisance) that covers illicit discharges as well as an ordinance section for the Police Department with relation to dumping materials into storm sewers, right of way, etc.

The City of O'Fallon Water/Sewer Department monitors all commercial industrial waste permits in its district area within the City. The department continues to jointly educate public employees, businesses and the general public on the hazards and environmental concerns associated with any illegal discharges or the improper disposal of wastes.

Concerns are mostly addressed on a reported basis at this time. Approximately 25 percent of the mapped detention basins and major outfalls have not been inventoried and inspected since the revision of the reporting requirements due to lack of staff. (See **Appendix G** for general map) With only one designated employee, it will be difficult to monitor all outfalls throughout the entire city limits each year. After a re-organization in the fall of 2013, Stormwater Management Coordinator was moved back under the Public Works – from Engineering to Project Management Department which has no extra staff available for assistance.

In 2012, an IDDE Policy/Manual was approved and implementation has begun. See **Appendix I** for a copy.

Construction sites are monitored more closely by Construction Inspection and Building Inspectors as well as the Stormwater Management Coordinator. Steps were taken to free up more time for the Stormwater Management Coordinator to evaluate and map all outfalls as required by the program. With the completion of the IDDE manual, the Stormwater Management Coordinator has continued a formal inspection program for inventory and inspection of detention/retention basins and outfall/discharge pipes.

The City has a “sump pump discharge” section as part of the Nuisance Code currently in place to decrease the amount of sump discharge to City streets. This ordinance requires homeowners to remove their sump discharge from the front of the property by at least ten feet so that it can spread out and soak in prior to discharging onto City streets. The other option is to discharge it to the rear of the property in the drainage swale by using overland flow away from the foundation of the home to again spread it out and soak it in. Discharging of down spouts and sump pumps to rain gardens and other bioretention or native landscape practices are encouraged. If there is too much discharge that causes a nuisance or long term standing water, connection to the storm drain is then encouraged to decrease the over saturation, property damage and removal of the nuisance complaint.

Program Elements Changed or Refined Since Previous Report

There were a total of five (5) Illicit Discharges for from June 13, 2013 through June 12, 2014, all of which have been resolved. For further details, please see **Appendix H**.

The City has implemented a plan to continue to inspect detention/retention basins as well as outfalls for the next reporting period.

The Illicit Discharge Detection and Elimination Program manual has been approved and implementation has begun. This manual will be available to all supervisors to distribute and inform their employees. If training is required and they need assistance they will contact the Stormwater Management Coordinator. This will include inspection of outfalls. See **Appendix I**.

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Status of Measurable Goals

Goal 1: Storm Sewer System Mapping-Ongoing

Develop and maintain storm system inventory that locates outfalls including detention/retention basins, pipes, ditches, flood control facilities and post construction best management practices. The activities included in this goal are to scan all subdivision records so that they are readily accessible and can be entered into the current storm sewer map. We will continue to update new developments as they are constructed.

Goal 2: Private Sewer Treatment Systems (Septic)-Ongoing

Develop and maintain a list of addresses and parcel ID's as available for all private sewer treatment systems and develop a map of on-site sewage disposal systems in the City. This will be coordinated through Water/Sewer and GIS.

Goal 3: IDDE Manual and Screen Outfalls: Ongoing

Implementation of policy/manual will continue to decrease illicit discharges by visual screening of outfalls and discharge pipes throughout City limits. Initial screening has begun in late 2011 and will continue through 2014 for existing developments

Goal 4: Pet Waste Stations: Ongoing

Continue to install pet waste stations to prevent pet waste dumping and improve water quality. We will continue to install stations throughout city-owned properties where pet waste deposit is a concern. There is at least one station on all City parks and others have been added on an as-needed basis.

Goal 5: Municipal Recycling Program: Ongoing

Continue our single stream recycling program to decrease the amount of waste placed in landfills to improve the water quality of the environment. The City has a Green Council that heads our recycling efforts. This council is made up of volunteer residents and employees of our Environmental Services Department. Our recycling numbers for this reporting period are as follows:

Recycle Tonnage Master	2010	2011	2012	2013	2014
Jan	429	545	596	597	570
Feb	372	458	474	445	432
Mar	506	586	573	507	500
Apr	533	587	554	650	632
May	493	565	579	657	609
June	576	604	564	572	
Jul	522	499	533	599	
Aug	508	557	560	605	
Sept	514	522	496	509	
Oct	482	503	560	599	
Nov	566	573	570	541	
Dec	596	594	576	645	
Total Tons	6097	6593	6634	6925	2743
Avg	508	549	553	577	2743

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Goal 6: Stream Water Quality Monitoring: New Goal SWMP 2013-2018

As part of the IDDE Manual/Program implementation, inventory of all discharge pipes and outfalls to streams are to be visually inspected each year and water quality monitored by testing should a concern for IDDE be present. All inventory along with concerns will be tracked. This is new goal established as part of the 2013-2018 NPDES SWMP submission. With the increasing number of outfalls and lack of staff numbers to keep up, this will be done as often as possible. It is our goal to have the complete City inventoried and on a GIS map in the upcoming SWMP reporting period 2013-2018 with the exception for new developments. We plan to utilize volunteers or college interns to complete some of the tasks related to this goal.

Goal 7: Watershed Management Plan: New Goal SWMP 2013-2018

Hire a consultant to evaluate the entire City watershed or smaller portions of watersheds or areas throughout the City to provide hydraulic information, centralized areas of concerns; miles of stream, 303(d) impaired streams, etc. to better manage water quality and quantity in City limits. This is a new goal and its success will depend upon funding approval by City Council. We will propose to begin to investigate and get this goal of the ground in mid-2015.

2. Overall Compliance with Permit Conditions

The City of O'Fallon, Missouri is complying with permit conditions relating to Illicit Discharge Detection and Elimination. Our GIS stormwater map is being updated continuously to show stormwater discharge points in the City of O'Fallon. This map currently shows all new or recent developments and a portion of existing older developments. Currently, we have approximately **234** miles of storm sewer infrastructure mapped throughout City limits.

Along with the ordinance, the City has created documents that are given to residents and subdivision homeowner's associations. We include pool companies, subdivision associations and homeowner's when applying for permits for installing pools. These are also issued when a concern is reported. Subdivisions, homeowners associations or management companies are also issued these documents when contacted regarding discharges of pool water. Examples of these have been submitted with previous reports.

An Illicit Discharge Detection and Elimination Program manual has been completed and has been implemented. Once approved, we will begin to implement training to the employees.

We continue to monitor our current Stormwater Quality Management and Illicit Discharge Control ordinance for potential revisions to improve its effectiveness in deterring or removing illicit discharge concerns throughout the City.

3. Results of Information Collected and Analyzed, if any

During this reporting period a total of four hundred fourteen (**414**) stormwater concerns or inquiries were reported and responded to. Of those four hundred fourteen (**414**), two hundred fifty seven (**257**) were completed. Of these inquiries, five (**5**) reported resulted in an illicit discharge which is an increase from the last reporting period due re-classifying what is deemed an "illicit discharge" as well as increasing enforcement. The vast majority of the concerns received were maintenance issues pertaining mostly to sink holes near the inlet or missing lids. A total of in **10,864** feet of lines were checked and cleaned from June 1, 2013 through June 1, 2014. Inspections are performed with crews dedicated to stormwater maintenance with emphasis on removing accumulated debris and making repairs to infrastructure in an on-going fashion. Though we have increased staff by two, increased reported concerns and special storm projects have caused the maintenance crew not to be able to check as many feet of lines or structures as in the previous years.

Several other municipalities have requested copies of our current ordinance(s) relating to illicit discharges to alter to fit their municipality.

Along with our Illicit Discharge Ordinance, our Nuisance code has also been revised to assist with controlling illicit discharges. Copies of both ordinances have been submitted with previous reports and available online at www.ofallon.mo.us .

4. Brief Summary of Activities for next Reporting Period

Activities for the next reporting cycle will include, continued investigation of stormwater concerns reported to the Stormwater Management Program via, Citizen's First, City Website and the Stormwater Management Coordinator, as well as other departments. We will continue to inspect, repair and remove any accumulated debris that is found during inspection of the stormwater pipelines as routine preventative maintenance. We will continue to look at our ordinance and ways in which to improve on it. Work will continue to update the GIS stormwater mapping. Ongoing training of our employees within departments such as: Building, Construction Inspection, Streets, Neighborhood Preservation, Parks and Recreation, etc. will continue to keep them abreast of maintaining our stormwater system efficiently and help prevent illicit discharge acts. With enactment of the ordinance, we have had more enforcement of these discharges and are able to keep the system as clean as possible.

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The Illicit Discharge Detection and Elimination Program manual has been completed and implementation has begun. It is available to all supervisors and training sessions will be set up if requested.

5. *Proposed Changes to this Illicit Discharge Detection and Elimination Program Area*

The main goal for next reporting period is to continue to improve our existing program. We will continue to educate the public on the importance of prohibiting Illicit Discharges and re-enforce to them that this is not an acceptable practice and that they are enforceable by the City. The Stormwater Management Coordinator and Construction Inspection Inspectors are to complete this task so that funds can be utilized elsewhere in the Stormwater Management budget to better assist the residents and address more capital improvement projects. The inspections began late 2011 with an estimated completion date of the end of 2014, pending availability of staff.

6. *Statement, Relying on Other Governmental Entity*

Not applicable

7. *Inspection Summary and Formal Enforcement Actions*

414 concerns were reported with 257 completed for this reporting period.

10,864 feet of stormwater lines were inspected during this reporting period.

5 illicit discharges were discovered for this reporting period in comparison to 14 last reporting period.

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MCM 4-Construction Site Runoff Control

1. Implementation Status

General Summary

O'Fallon has been compliant with the implementation of construction site runoff controls by means of regulatory requirements and on-site inspections. Ordinances have been put in place with regards to Erosion and Storm Water Run-Off Control, Illicit Discharges and Grading. Exhibits of such ordinances have been submitted with previous reports and have not been revised since approved by City council. There are also measures in place that require developers to submit plans for approval prior to construction which encompasses the completion of a grading plan checklist and application approval form. Copies of these documents have also been submitted with previous reports. Contractors are required to follow St. Charles County Soil and Water Conservation District Erosion (NRCS) and Sediment Control Guidelines. We also reference the MDNR "Protecting Water Quality Manual" as a guide for site runoff control as well to engineers, developers and contractors.

Our Grading Plan and Construction Plan Process further enforce proper erosion and sediment control and grading operations. Under the grading operations, it requires that erosion and sediment control plans be implemented prior to grading operations beginning, erosion and sediment control measures be implemented per SWPPP and corrected within 48 hours after a ½ inch rain event. It also states that graded areas shall be seeded and mulched within fourteen (14) days of stopping land disturbance activities and vegetative growth established within six weeks of stopping grading work on the project. The growth established shall be sufficient to prevent erosion and the standard shall be as required by EPA and MDNR (70% coverage per sq. ft).

If a contractor is non-compliant in a request to correct improper construction site runoff control, then a summons to appear in court may be issued or a stop work order may be placed by until the situation is corrected. Initially, Construction Inspectors or Building Inspectors will work with the contractor/developer to get items corrected. If they do not cooperate or the situation is not corrected, then it is referred to the Stormwater Management Coordinator for further action and a monetary fine may be sought/applied. This is referenced in section 405.100, and 405.070 of the O'Fallon Municipal Code. Copies of these ordinances have been submitted with previous reports. See **Appendix M** for more information.

There is also an ordinance requiring developers to maintain detention/retention basins prior to escrow being released and it being turned over to the Homeowner's Association. Ordinance Section 405.240 Stormwater Detention (f) states that an inspector will perform an inspection and each property owner has the responsibility and duty to properly operate and maintain any stormwater management system which has not been accepted by the City. Upon release, responsibility shall be vested in the trustees of the subdivision. Penalties can be assessed for not maintaining the basin. Copies of this ordinance have been submitted with previous reports.

Other processes that need mentioned prior to construction commencing are that there are several plan review and planning and zoning processes that developers and builders must go through. All developments must be approved by the Planning and Zoning Commission via the site plan approval and preliminary plat approval. Copies of checklists have been submitted with previous reports and explain in detail what must be submitted and fees that are incurred. The developer/builder then submits their plans to the Engineering Department for review and approval of their project. The project cannot move forward until Engineering Plan Review gives final approval that all City Ordinances are met. Once plans are approved, a pre-construction meeting is scheduled with all necessary parties prior to construction beginning. In this meeting erosion and sediment control requirements are reviewed and need for compliance is emphasized.

Program Elements Changed or Refined Since Previous Report

The City has increased its awareness of construction site runoff controls. Water quality monitoring testing equipment has been purchased and used by Stormwater Management Coordinator for field testing for turbidity and TSS at construction sites as needed for suspected ordinance violations. The Stormwater Quality Management and Illicit Discharge Ordinance and Grading Plan and Construction Plan Process Ordinance are established and in place for enforcement. Copies of such ordinances have all been submitted with previous reports. We have continued requesting a weekly Land Disturbance Checklist (see **Appendix M**) from sites as well as performing our visual inspections and their SWPPP requirements. Pre-Construction site meetings are also conducted with the Builder/Developer with Construction Inspection and Stormwater Management to go over plans and Erosion and Sediment Control.

The Stormwater Management Coordinator is also a Certified Erosion, Sediment and Stormwater Inspector (CESSWI) and Certified MS4 Specialist (CMS4S).

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Status of Measurable Goals

Goal 1: Construction Site Inspections-Ongoing

Ensure construction sites are inspected to ensure compliance with approved plans and SWPPP. Currently the Construction Inspectors, Building Inspectors and Stormwater Management Coordinator, perform site inspections both randomly and scheduled to determine overall how the developer and builder compliance rates in following and maintaining construction site runoff controls. They are making sure that the "Construction Plan Requirements" pertaining to subdivision and land developments ordinance 5384, Title IV, Land Use, Section 405.100 are being followed and enforced. This ordinance sets requirements for submitting and following grading plans including cross-sections and contour sheets. Plans must be approved prior to the start of any grading and all other applicable permits from other governing agencies such as MDNR, St. Charles County, or EPA must be received prior to any work performed. Copies of such ordinance have been submitted with previous reports.

The Grading Plan Application and Checklist has been developed and implemented and requires sediment and erosion controls as established by the St. Charles Soil and Water Conservation District, Protecting Water Quality Guidance Manual and City Ordinances. Additionally, grading plan review and development checklists are in use so that developers and contractors are aware and know which requirements to follow. Copies of such documents have been submitted with previous reports.

On subdivision developments, developers are to place monies in an escrow account to help assure all work is completed satisfactory and according to approved plans. The Grading Plan and Construction Plan Process ordinance also requires an "Improvement Installation or Performance Guarantee". These ordinances contain a breakdown of the escrow procedures. Also, escrows for grading permits are required prior to release for grading activities.

Total Construction Inspection Inspections for this reporting period:

Avg. 46-Active sites (increased from last reporting period)

Avg. 16-Semi Active sites (decreased from last reporting period)

Avg. 19-Inactive sites (decreased from last reporting period)

A total of 183 Excavation Permits were issued for this reporting period. (Decrease from last reporting period)

Inspections are performed 3-5 times per week for active and semi-active sites and 1 time per week for inactive sites.

Building Inspections/Permits for this reporting period:

Inspections totaled **7,307** and Permits totaled **2,701** for this reporting period.

Goal 2: Site Plan Review Procedures-Ongoing

Review the process for pre-construction SWPPP plan review for all residential and commercial projects that disturb one or more acres. We will continue to review existing procedures and track the number of site plans reviewed.

Goal 3: Construction Site Water Quality Monitoring: New Goal SWMP 2013-2018

Implement process and procedures for water quality monitoring on sites that are adjacent to streams. This is a new goal being implemented with the NPDES 2013-2018 SWMP. The goal is to have the contractors monitor and provide results to the City.

Goal 4: Enforcement Procedures: Ongoing

Enforce City Regulations. We will continue to enforce City ordinances and state/federal regulations for all construction activity that disturbs one or more acres. Modify existing policy/ordinance to better define proper disposal of construction waste and include increased enforcement. This will continue to be an ongoing process.

2. Overall Compliance with Permit Conditions

O'Fallon is in general compliance with permit conditions relating to construction site runoff controls. We continue to enforce the ordinance and regulatory mechanisms, including fines and/or civil penalties that provide the ability to regulate stormwater runoff from construction sites. O'Fallon maintains inspection procedures and maintains these records in an orderly manner. Construction Inspectors, Building Inspector's and the Stormwater Management Coordinator will continue to make random and scheduled inspections of construction sites to determine overall compliance of our construction site runoff BMP's, regulations, and ordinances.

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3. Results of Information Collected and Analyzed

Nothing to report at this time.

4. Brief Summary of Activities Next Reporting Period

We will continue to monitor and address Construction Site Runoff Control. Ongoing training for new and current employees on current and new BMP measures will continue.

The Stormwater Management Coordinator has retained certification requirements for CESSWI Certification received in 2009 and CMS4S Certification received in 2011.

5. Proposed Changes to Construction Site Runoff

We will continue to encourage "First Flush" detention/filtration, better sedimentation and erosion control BMP's. We will continue to be stringent on post grading, seeding, and mulching in our efforts to improve the stormwater quality.

We will continue to address construction site runoff in more of the post construction site approach so that Stormwater quality can be addressed as well as quantity in addressing sedimentation and erosion control efforts.

6. Statement Relying on Other Governmental Entity

Not applicable.

7. Summary of Inspections and Formal Enforcement Actions

Each new development approved by the City of O'Fallon undergoes various plan review states and inspections during the entire development process beginning with grading and ending with a final inspection prior to release of escrow funds. Improvements or changes required by the City are enforced when necessary through the building permit process also.

Building Department Inspections totaled **7,307** and Permits totaled **2,701** for this reporting period.

Construction Inspection performed site inspections **3-5 times per week** for capital improvement projects, active and semi-active sites and **once a week** for in-active sites for this reporting period.

MCM 5-Post-Construction Runoff Control

1. Implementation Status

General Summary

Various BMP's are used to control siltation and erosion of development areas until such time as vegetation can be re-established. The City of O'Fallon requires all developments to meet stormwater detention or retention requirements to help minimize the impacts of flooding, post-construction runoff, including runoff from increased impervious areas created by development.

On January 14, 2008 City Council approved an Ordinance requiring Stormwater Quality Post Construction BMP measures. Copies of this ordinance have been submitted with previous reports (See **Appendix M**).

On March 3, 2009, Procedures for Post Construction BMP Maintenance Agreement and an Agreement were put in place and are continued to be utilized. These procedures do require that the agreement be recorded and provide a contact to the City. (See **Appendix M**)

Program Elements

We have continued requesting more stringent erosion and sediment controls for construction site runoff control and are requiring engineering firms and developers to think outside of the box within the guidelines of our current city ordinances to allow for more of these types of developments and BMP usages.

Section 400.170 of the City Municipal Code entails a section for "*Environmental protection planned developments*" which is an alternative to standard planned unit development or other types of development. The purpose of these developments are for a residential, commercial, office, high-tech or industrial site that must, to the satisfaction of the City Council, provide for the permanent protection and preservation of the natural features and environmentally sensitive areas of the site. Copies of this ordinance have been submitted with previous reports.

In 2007, the City drafted an ordinance adding a new section to the Stormwater Quality Management and Illicit Discharge control Requirements addressing Best Management Practices for Post Construction and was passed in January, 2008 and remains in effect today. This new section requires new development and redevelopment to address both water quantity and water quality. In this ordinance, requirements for creek bank setback was added Post Construction Water quality requirements addressing impervious cover, BMP, offsite drainage, and extended detention are all included. A maintenance agreement has been in place since March, 2009 and is being currently being evaluated for improvements. (See **Appendix M**)

Promotion of stormwater ponds, wetlands, infiltration practices and open channel practices are all part of this ordinance. The City worked together with the Home Builders Association for several months to put this ordinance together. It was presented to the City's Planning and Zoning Commission for approval in December, 2007 and then passed by City Council January 14, 2008.

Several rain gardens, drop inlets, and other methods of post construction have begun to be utilized throughout the City. We have developed a tracking mechanism (database) so we know where they are. To date, they have been installed primarily on commercial properties. **See Appendix K**

The City has two rain gardens currently. The first rain garden is a cost share project that was installed at the Renaud Spirit Center, recreation center as an educational tool to promote them in 2007. The second rain garden was completed in April, 2009 at the Street Department. The Street Department rain garden recently underwent 5-year maintenance to re-establish plants, replace soil medium and add fresh mulch. The Street Department rain garden was installed in lieu of stormwater infrastructure to capture and treat runoff from the parking lot and building. The rain garden has been a good site to test salt tolerance of plants as this lot has the potential for the highest instance of salt use due to snow removal operations being headquartered here. The Street Department also installed a Snout drop inlet filter in their parking lot and has added more native landscape plants to their facility. By the end of 2014 a rain water harvesting system will be installed on the main building. A second building is being considered. The Street Department would like to begin recycling rainwater to use in equipment such as their concrete saw to conserve water sources.



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A grassy paver parking lot extension has been added to our Veteran's Memorial Site in 2009 and continues to be utilized.

A pervious paver crosswalk was added in the City's parking lot in front of the entrance as a demonstration project to encourage use of alternative stormwater BMP's in 2007.

A bioretention swale in a new parking lot addition at Westhoff Park was constructed in 2012. There are also several areas and landscape beds consist of native landscaping in other parks throughout the City.

A Rainwater harvesting collection was installed at the Public Works Facility in 2014. A portion of the roof runoff is captured in 2-150 gallon tanks. This rainwater is being utilized to water landscaping and other uses such was boot wash.

Commercial Developers, Builders and Residents are encouraged to install native landscape, rain gardens and rain barrels as well as infiltration trenches to address grading and drainage concern in their yards rather than install hard armor solutions.

The City funds the Stormwater Program by a Parks/Stormwater Sales Tax Fund that was established in 2008. Sales tax revenue is divided between Parks and Stormwater. The portion of funds approved for Stormwater are utilized to operate the program, pay staff, purchase equipment and correct stormwater concerns that qualify for full funding by the City per the approved "Stormwater Policy" that was implemented in 2011 (see **Appendix N**). If a concern is accepted as a fully funded Capital Improvement Project, it is placed on our "Stormwater Priority List" and listed via a ranking and rating system. The concern with the highest ranking points and priority level are listed first. This list is updated continuously with the addition of new stormwater projects and removal of projects that have been completed. Post Construction BMP's are always recommended and considered as part of the projects completed.

A 50/50 cost sharing program has also been developed and implemented in 2012 to assist residents with funding stormwater issues that do not qualify for full City funding assistance as per parameters set in the "Stormwater Assistance Policy" (see **Appendix N**). This program offers a 50 percent cost share reimbursement from the City to residential property owners once the project is completed for projects that do not use the "Rock" portion of the program in which the City provides recycled concrete that is broken in to rip rap sized rock that can be utilized for minor creek erosion projects. The City delivers the recycled concrete to the front yard and homeowner is responsible for placement of such rock. The homeowner accepts that the delivery of the recycled concrete accounts for 50 percent of the cost of the "Rock" program and no other funds are reimbursed to the homeowner with the "Rock" portion of the program. With all projects completed as part of the 50/50 program, the City accepts no responsibility for the work done; agreements made with contractors, contractor warranty and no easement agreements with the City are completed.

Status of Measurable Goals

Goal 1: Ordinance or Other Regulatory Mechanism: Ongoing

Adopt/revise ordinance addressing stormwater runoff from new development/redevelopment projects disturbing one more acres. We have a current ordinance in place; however, we will continue to look at ways to improve it as necessary. We will look toward including more detailed information regarding redevelopment projects and continue to educate the development community.

Goal 2: Post Construction Requirements: Ongoing

We will adopt/revise our current post construction stormwater management requirements as per MDNR/EPA general construction permit. We will continue to evaluate and review BMP's and alternatives. A database has been developed to track BMP installation throughout the City and will continue to be updated and revised as necessary.

Goal 3: Site Plan Review Procedures: Ongoing

We will continue to adopt/revise our current policies that requires construction stormwater management per MDNR/EPA general construction permit. We will continue to evaluate and review our procedures, educate the development community on changes as they occur to make the process flow more smoothly. Emphasis will continue to promote post construction practices.

Goal 4: Site Inspection Procedures: Ongoing

All post construction (structural and non-structural) BMPs will be inspected prior to acceptance of the project by the City to ensure BMP's are installed and functioning properly. We will develop and implement an inspection schedule over the next five year reporting period 2013-2018.

Goal 5: Long-Term O&M Plans/Agreement: Ongoing

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All sites will have an O&M plan for their post construction BMP's. We will adopt requirements for all projects and report number of sites with agreements. This was completed initially in 2008, however is under review for improvements and increased ability to enforce. This goal will be ongoing as we continue to review and update/revise our post construction ordinance as necessary for improvements/changes. A database has been developed to track BMP installation throughout the City and will continue to be updated and revised as necessary.

2. Overall Compliance with Permit Conditions

The City of O'Fallon has regulatory requirements in place to help ensure a reduction of pollutants associated with the post-construction stormwater runoffs and has identified BMP's to help reduce stormwater quantity, erosion and siltation. A full site review is conducted as part of the pre-construction approval. There is an escrow release procedure to ensure that BMP's are installed correctly and vegetation is established prior to the escrow monies being released. We also require monitoring of detention/retention basins to ensure proper function and maintenance is kept up through our Neighborhood Preservation Department and Stormwater Management. We ensure that the responsible parties are doing their part in this maintenance requirement.

As a condition of approval through the Planning and Zoning Commission, the City requires Phase II Post Construction BMP's for all sites as a "Condition of Approval". An example of such has been submitted with previous reports.

Plan review continues to recommend post construction methods for projects coming into the City as well as for capital improvement projects funded by the City.

Changes to our detention basin requirements for 2006 has also occurred to address "first flush" rainfall. Previously, concrete swales were required in all detention basins this has been removed and changed vegetated swales to better address this. A copy of this ordinance has been provided in previous reports. We also work with homeowners associations and property owners with retrofit recommendations to existing detention and retention ponds to make them more post construction/environmentally friendly with regard to stormwater quality when requested. We communicate frequently with the NRCS and MDC with regard to potential grant monies to assist these property owners with more native solutions for retrofits.

Stormwater Management Coordinator and other City Staff attended several seminars and webinars this reporting period to refresh, increase knowledge and obtain PDH's for our current certifications.

3. Results of Information Collected and Analyzed

Nothing to report at this time.

4. Brief Summary of Activities Next Reporting Period

For the next reporting period, the City plans to continue to conduct site review, and look into more efficient and effective ways to prevent post construction runoff. We will compare impervious and non-impervious developments and the information gathered will hopefully assist us in updating the listing of BMP's that would be allowed. We will continue enforcing our BMP ordinance.

5. Proposed Changes to Post Construction Runoff

Continue to look at zoning regulations and more environmental friendly development strategies for better water quality and quantity controls. Increased involvement with Planning and Zoning, Engineering and Stormwater as well as continue to educate Public Works Commission, City Council, Engineers, Builders and Developers.

6. Statement Relying on Other Governmental Entity

Not applicable.

7. Summary of Inspections and Formal Enforcement Actions

Upon the developer's request for occupancy, a final inspection is performed to see that all requirements set forth by the City of O'Fallon have been met. Also, at the time the developer requests escrow monies released, an inspection is performed to ensure that proper post construction run off BMP's have been met, installed properly and proper vegetation established. No escrow monies are released for unsatisfactory inspections. If the developer does not perform necessary corrections, O'Fallon has the legal authority to perform those repairs or cause those repairs to be completed to its satisfaction.

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MCM 6-Pollution Prevention and Good Housekeeping

1. Implementation Status

General Summary

During this reporting period, O'Fallon Water/Sewer at the Water Treatment Plant and Waste Water Treatment Plant has addressed pollution prevention and good housekeeping on a continual basis since MDNR placed Oil and Grease permit limits onto our effluent discharge NPDES permit. They have also begun to enforce removal sump discharge to floor drains to prevent increased potential for Infiltration and Inflow (INI) into the sanitary system. An education campaign regarding use of "flushable wipes" has also been started and presented to the Public Works Commission in June, 2014.

The City of O'Fallon Street Department swept **7,417.85** miles of City streets for this reporting period. This routine street sweeping program as part of its good housekeeping efforts to protect the environment will continue. The street sweeper is manned and operated by the Street Department employees experienced in its operations and helps prevent floatable from reaching the storm sewers, creeks, streams and rivers. A new more efficient street sweeper was purchased in 2013 to replace our current one. A "Dustless Slurry Vac" from Dustless Technologies is being purchased as well to vacuum up saw cut slurry instead of washing it down the street curb for other collection methods.

Any fluids from motor vehicles fixed at the city repair sheds are captured and hauled off for recycling. Most vehicles are washed at a commercial car wash and not onsite.

A "Municipal Pollution Prevention and Good Housekeeping Guidance Document of Best Management Practices" has been approved and implemented. A copy of this document has been distributed to all supervisors and is available to all employees.

A "Stormwater Pollution Prevention Plan" (SWPPP) template for all required facilities has been created and distributed to supervisors for completion and a copy held on file by the Stormwater Management Coordinator. This document was created and implemented as a result of a Target Audit by MDNR of MCM 6 that occurred in 2012.

Program Elements Changed or Refined Since Previous Report

We underwent a target audit for MCM 6 in June of 2012. Results of the audit were minimal recommendations only, no notice of violation were issued. Many measures have already been or are in the process of being implemented.

Status of Measurable Goals

Goal 1: Employee Training: Ongoing

Continue to train key staff on issues related to MS4 permit in general, possible emphasis on MCM 3 and 6. Implementation of our MCM 6 guide has occurred. In-house training via power point, articles and staff training sessions will continue.

Goal 2: MS4 Maintenance: Ongoing

Maintain ongoing scheduled maintenance. Continue current schedule for inspecting and cleaning storm structure. Summarize maintenance activities in annual report.

414 concerns were reported with **157** completed for this reporting period.

10,864 feet of stormwater lines were inspected during this reporting period.

7,417.85 miles of streets were swept.

Fleet maintenance recycles used oil and properly stores chemicals utilized at these facilities.

SWPPP documents have been developed and a template distributed to all facilities necessary. A general template for all facilities has been created so that we remain consistent across the board. Each department affected has been met with independently to better tailor their document. Once the SWPPP is in place and implemented, then they will begin their formal inspection process.

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Goal 3: Road Salt: Ongoing

Properly apply salt in a way that minimizes over-usage. The Street Department Director is responsible for implementation of this goal. The department constantly reviews ways that snow and ice operations are handled. They continue to research and implement ways to improve on snow removal with use of less chemical where possible. Beet juice has been incorporated and utilized over the last several years as part of our snow removal operations. They present the snow and ice operations to the Public Works Commission every year and to City Council when requested. This will remain an ongoing goal.

Goal 4: Disposal of Wastes

The goal is to properly manage and dispose of waste. We will continue to expand, develop and implement proper waste disposal practices. This will be an ongoing goal as more waste has become recyclable. We have implemented a recycled concrete program in as part of our Stormwater Cost Share Policy in which we offer it as rip rap for creek bank stabilization for residents that qualify per program guide lines of our Stormwater Assistance Policy free of charge. This keeps this material out of landfills. See **Appendix N**.

Goal 5: MS4 funding Mechanism: Ongoing

We will continue to evaluate and recommend/revise funding mechanism to support program requirements as required by EPA. We are currently funded by a park/stormwater sales tax in which council determines every budget year the amount of funds that will be appropriated to stormwater. No general funds are allocated to the stormwater budget. This goal will investigate different types of funding mechanisms outside of the parks/stormwater sales tax. Once we have prepared alternatives we will present to City council and request implementation.

2. Overall Compliance with Permit Conditions

The City of O'Fallon is complying with permit conditions by developing and implementing programs to reduce and prevent pollutant runoff from municipal operations. Although we do have a formal document in place, we also continue to have both formal and informal measures in place to perform Pollution and Good Housekeeping. For example, each facility performs a visual inspection and performs trash pickup and debris removal on a regular to daily basis. At the Water Treatment Plant and Wastewater Treatment Plant, employees training has continued on regular basis since MDNR has placed Oil and Grease permit limits onto our effluent discharge, NPDES permit.

Our Street Department has also installed a rain garden and Snout storm sewer inlet filter to assist with maintenance on their lot. They also continue to operate a street sweeping program.

The Public Works Facility installed a Rainwater Harvesting System to capture partial roof runoff.

We continue to evaluate and improve our salt storage for snow removal operations. We have a salt dome building, a covered area, and tarps and bins in place over our outside storage which is monitored and maintained on a regular basis.

3. Results of Information Collected and Analyzed

For this reporting period, a total of **7,417.85** miles of streets and highways were swept and cleaned by the Street Department. A total of **10,864** feet of stormwater lines were inspected during this reporting period.

4. Brief Summary of Activities Next Reporting Period

We will continue to strengthen and fine tune our "Stormwater Pollution Prevention Plan" by utilizing the "Municipal Pollution Prevention and Good Housekeeping Guidance Document of Best Management Practices". Ongoing and annual training for new and current employees on pollution prevention measures will continue. Pollution Prevention and Good Housekeeping Plan will continue to be addressed with emphasis on salt storage, equipment maintenance, street sweeping, pipe and culvert cleaning, recycling and disposal guidelines.

5. Proposed Changes to Pollution Prevention/Good Housekeeping

As stated previous a guidance document for municipality pollution prevention/good housekeeping best management techniques has been developed, approved and being implemented. The document has been provided to all departments for training and facility implementation. We will begin finalizing and implementation of a SWPPP for each City facility in the next reporting period. See **Appendix J**.

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6. *Statement Relying on Other Governmental Entity*

Not applicable.

7. *Summary of Inspections and Formal Enforcement Actions*

Pollution prevention and good housekeeping measures are one function of each of our employees' job. This is a daily, ongoing routine and employees are reminded to be aware of our own operation and maintenance practices to help and ensure a reduction in the amounts and types of wastes that collect on our streets, parking lots, and maintenance areas. City staff also maintains compliance with contractors and developers sites by the enforcement of existing codes and ordinances that assist with prevention.

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Listing of Attachments

- A. Training Tracking and Public Outreach and Education Information
- B. Resident Handout Examples
- C. Storm Drain Marking and Creek Clean-Up Information
- D. Rainwater Harvesting System-Public Works Facility
- E. Rain Garden and Rain Barrel Brochures
- F. Reports Stormwater Concerns June 12, 2013 to June 13, 2014
- G. GIS Maps
- H. Illicit Discharge Report- June 12, 2013 to June 13, 2014
- I. Illicit Discharge Detection and Elimination Program Manual
- J. Pollution Prevention/Good Housekeeping for Municipal Operations SWPPP Site Example
- K. BMP Tracking Database (Sample Entry)
- L. Stormwater Management Operation Plan for MCM's 1-6 for 2013-2018 Permit Cycle and SWMP Org Chart
- M. Ordinance 405.100, 405.070, Weekly Land Disturbance Checklist, 405.247, BMP Agreement Example
- N. Stormwater Policy and Stormwater Assistance Program (SWAP)