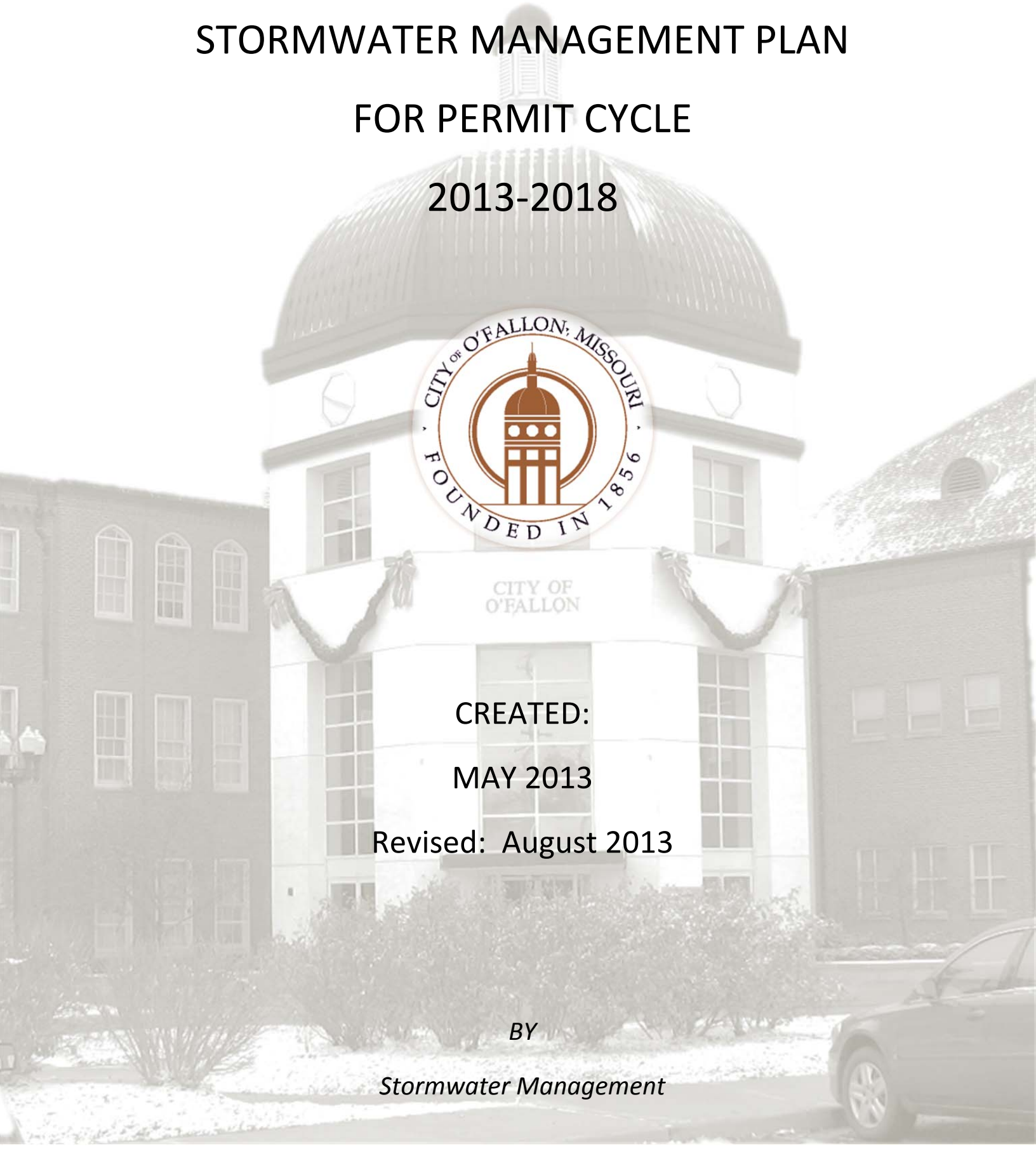
# NPDES PHASE II

# STORMWATER MANAGEMENT PLAN

# FOR PERMIT CYCLE

# 2013-2018




CREATED:

MAY 2013

Revised: August 2013

*BY*

*Stormwater Management*

# City of O'Fallon, Missouri 2013-2018
# Stormwater Management Program Introduction

The City of O'Fallon, Missouri recognizes that stormwater runoff may be polluted and is transported through it's MS4 to local creeks, streams and rivers. We also recognize the land and impervious areas generate and cause pollution in our daily activities. Rain and snow melt, runoff and pick up oil, fertilizers, pesticides, dirt and other pollutants make their way into our storm sewer system and eventually to our local creeks, rivers and lakes.

We are required to submit a five-year Storm Water Management Plan as required under the Clean Water Act. The National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating sources, such as the City's municipal separate storm sewer systems (MS4).

This plan will address the requirements emphasizing the six minimum control measures required and identify specific goals and best management practices associated with these key control measures along with target dates for completion. We will evaluate our effectiveness and assess the progress of each goal and best management practice.

Our plan of action for the next five-year reporting period will address the following six minimum control measures as identified in the permit:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good House Keeping for Municipal Operations

We have seen some success with our previous five years in this program and look forward to continued success in this next reporting cycle.

# CITY OF O'FALLON, MISSOURI

# NPDES PHASE II STORM WATER MANAGEMENT PLAN

PERMIT NUMBER: MO-R040039

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Date: April 23, 2013

## Executive Summary

The City of O'Fallon, Missouri recognizes that storm water runoff may be polluted and is transported through its municipal separate storm sewer system (MS4) to local creeks, streams and rivers. We also recognize the land and impervious areas generate and cause pollution in our daily activities. Rain and snow melt, runoff and pick up oil, fertilizers, pesticides, dirt and other pollutants make their way into our storm sewer system and eventually to our local creeks, rivers and lakes.

We are required to submit a five-year Storm Water Management Plan (SWMP) per the federal regulations as stated in the Storm water Phase II Final Rule, National Pollutant Discharge Elimination System (NPDES) permit program which controls water pollution by regulating sources, such as the City's separate storm sewer systems (MS4). The rule automatically requires compliance for all MS4s that are located in urbanized areas as defined by the Census Bureau and which are not already permitted under the Phase I program. The City of O'Fallon (City) was automatically designated by the Missouri Department of Natural Resources (MDNR) due to meeting the "urbanized area" criteria.

This SWMP plan will address the requirements emphasizing the six minimum control measures required and identify specific goals and best management practices associated with these key control measures along with target dates for completion. We will evaluate our effectiveness and assess the progress of each goal and best management practice.

Our plan of action for the next five-year reporting period will continue to address the following six minimum control measures as identified in the permit:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good House Keeping for Municipal Operations

We have seen some success with our previous five years in this program and look forward to continued success in this next reporting cycle.

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## 1.0 REGULATORY BACKGROUND

The federal Phase II rule requires operators of small MS4 to obtain a NPDES Storm water permit. The Phase II Rule is the follow-up of the EPA Phase I NPDES Program, promulgated in 1990 as part of the Clean Water Act. The Missouri Department of Natural Resources (MDNR) is the regulatory agency having the Phase II NPDES oversight authority for the City. The Final General Storm Water Permit (General Permit) was adopted in 2003.

This SWMP will serve as the City's permit, describing actions that include best management practices (BMPs), measurable goals, and timetables for what are defined throughout the six minimum control measures (MCMs). MCMs are storm water program areas that must be addressed by all regulated MS4s to the "maximum extent practicable". The six MCMs required by the General Permit are as follows:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post Construction Site Runoff Control
6. Pollution Prevention/Good Housekeeping for Municipal Operations

## 2.0 GENERAL DESCRIPTION

The City is located in the center of St. Charles County with two large interstates passing through. Hwy I-70 travels east/west through the northern portion of the City and Hwy 40/64 travels through the southern end. O'Fallon is nearly thirty (30) square miles in length with a year 2010 Census for the State of Missouri population of approximately 79,329 residents which is a 71% increase from the City's 2000 Census. The City is mostly mixed use which consists mainly of residential and commercial land use with a dwindling population of agricultural use. The City Zoning map is shown on Figure 1. The City's storm drain system consists of 228 miles of pipe with approximately 13,925 storm water structures and 35 box culverts. Sanitary and storm sewer systems are separate throughout City limits.

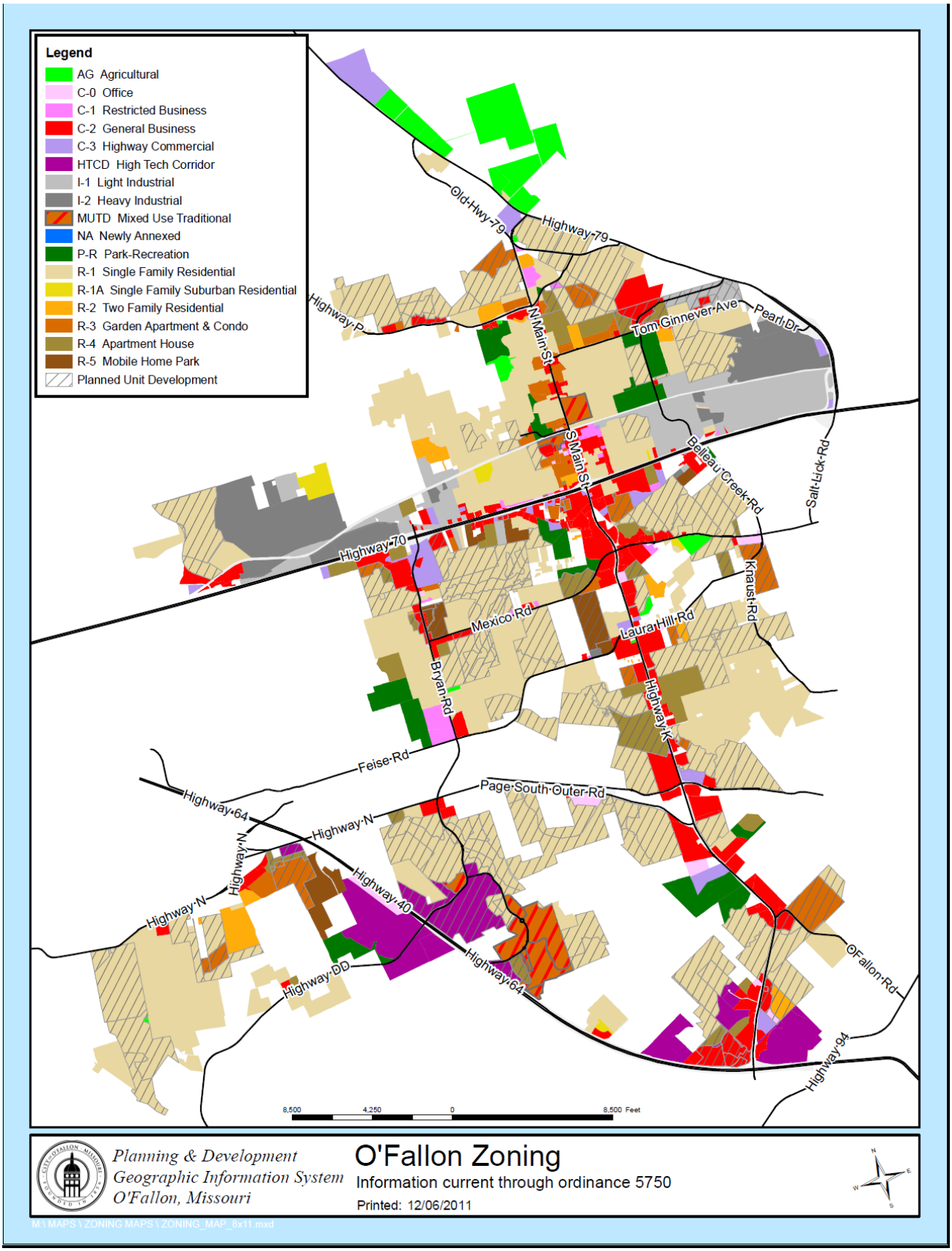
Legend
AG Agricultural
C-0 Office
C-1 Restricted Business
C-2 General Business
C-3 Highway Commercial
HTCD High Tech Corridor
I-1 Light Industrial
I-2 Heavy Industrial
MUTD Mixed Use Traditional
NA Newly Annexed
P-R Park-Recreation
R-1 Single Family Residential
R-1A Single Family Suburban Residential
R-2 Two Family Residential
R-3 Garden Apartment & Condo
R-4 Apartment House
R-5 Mobile Home Park
Planned Unit Development
Old Hwy 79
Highway 79
Highway P
N Main St
Tom Ginnever Ave
Pearl Dr
S Main St
Belleau Creek Rd
Salt Lick Rd
Highway 70
Knaust Rd
Mexico Rd
Laura Hill Rd
Bryan Rd
Highway K
Feise Rd
Page South Outer Rd
Highway 64
Highway N
Highway 40
Highway DD
O'Fallon Rd
Highway 94
8,500 4,250 0 8,500 Feet
Planning & Development
Geographic Information System
O'Fallon, Missouri
O'Fallon Zoning
Information current through ordinance 5750
Printed: 12/06/2011
M:\ MAPS \ ZONING MAPS \ ZONING_MAP_8x11.mxd

***Figure 1***

## 2.1 Watershed description:

The watershed is located in central St. Charles County, MO, and covers about 165 square miles. It contains a variety of land uses and land types, and is typical of watersheds that support a large number of activities, from industrial to open space and from urban to rural. The watershed has experienced environmental degradation due to rapid population growth and economic development, and needs holistic protection and restoration.

There are three large creeks that travel through the City and exit to the Mississippi River. The City uses watershed maps (Figures 2 and 3) as a tool for reference with regards to storm water requirements. Information regarding the three creeks is as follows:

1. Dardenne Creek flows through from the Southwest to Northeast through a mix of residential, commercial and agricultural use and discharges to the Mississippi River after exiting City limits through the City of St. Peters and St. Charles County. Dardenne Creek is currently on the MDNR 303(d) list for impaired waters for decreased dissolved oxygen. There is no current approved TMDL. TMDL Ranking is "scheduled for 2014-2016".The City utilizes a gage station located on Dardenne that is maintained by the USGS. This gage station is maintained through a partnership agreement between the City, USGS, St. Charles County Soil and Water District and City of St. Peters.
2. Belleau Creek flows through the center of City limits from West to Northeast through a mix of residential, commercial and agricultural use. It is a tributary of Dardenne Creek. It is not listed on the MDNR 303(d) list for impaired waters. Belleau does not converge with Dardenne Creek until after it exits City limits.
3. Peruque Creek flows from the Northwest portion to Northeast portion of City limits through a mix of residential, commercial and agricultural use. The headwaters of Peruque Creek within City limits is the discharge point for the Lake St. Louis Dam. Upstream of Lake St. Louis, this creek is also listed on the MDNR 303(d) list of impaired waters for sediment and decreased dissolved oxygen with a TMDL ranking of Medium. Once it leaves City limits, it also discharges to the Mississippi River.

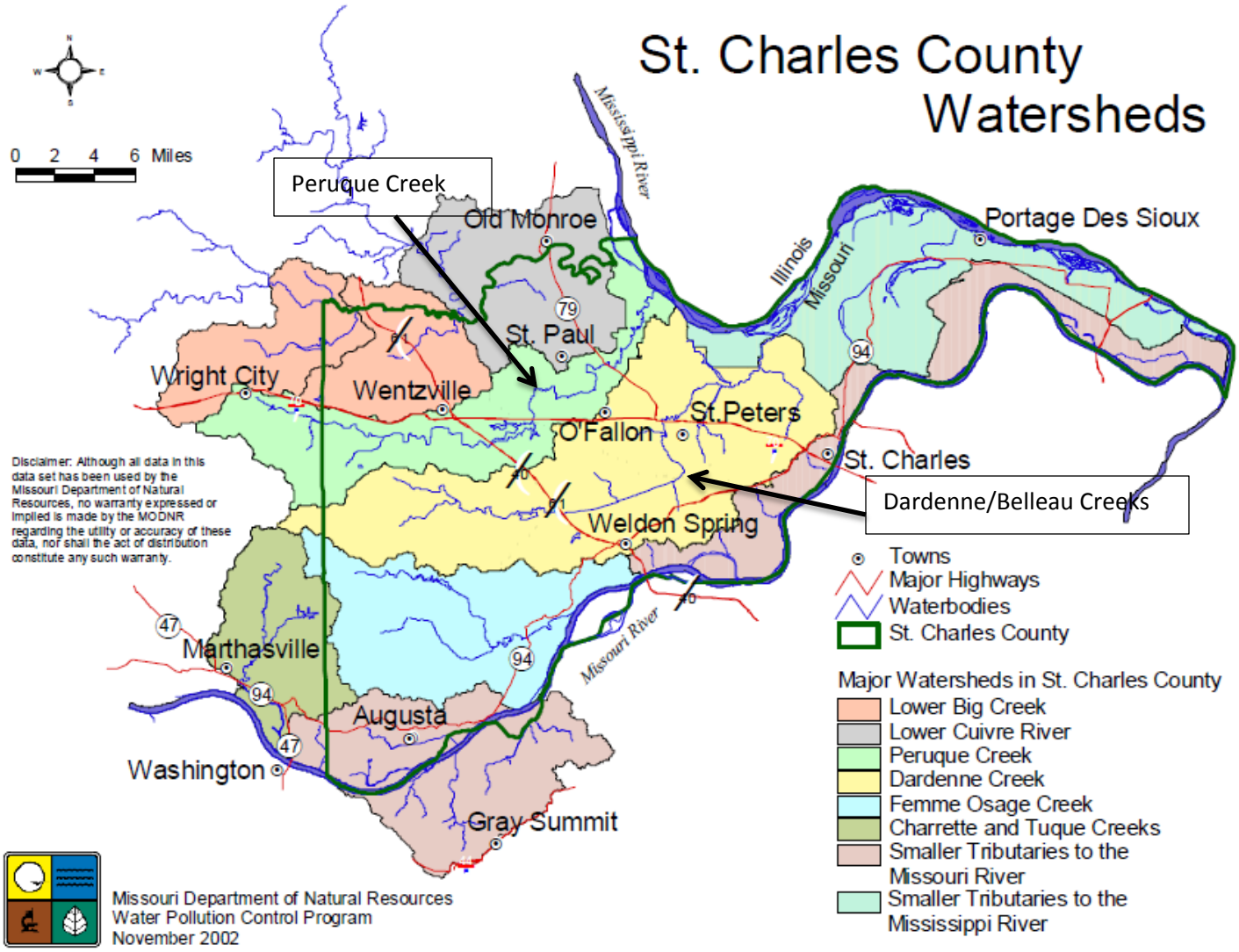
St. Charles County
Watersheds
0 2 4 6 Miles
Peruque Creek
Dardenne/Belleau Creeks
Mississippi River
Missouri River
Illinois
Missouri
Old Monroe
St. Paul
Wright City
Wentzville
O'Fallon
St.Peters
St. Charles
Portage Des Sioux
Weldon Spring
Marthasville
Augusta
Washington
Gray Summit
Disclaimer: Although all data in this data set has been used by the Missouri Department of Natural Resources, no warranty expressed or implied is made by the MODNR regarding the utility or accuracy of these data, nor shall the act of distribution constitute any such warranty.
Towns
Major Highways
Waterbodies
St. Charles County
Major Watersheds in St. Charles County
Lower Big Creek
Lower Cuivre River
Peruque Creek
Dardenne Creek
Femme Osage Creek
Charrette and Tuque Creeks
Smaller Tributaries to the Missouri River
Smaller Tributaries to the Mississippi River
Missouri Department of Natural Resources
Water Pollution Control Program
November 2002

***Figure 2***

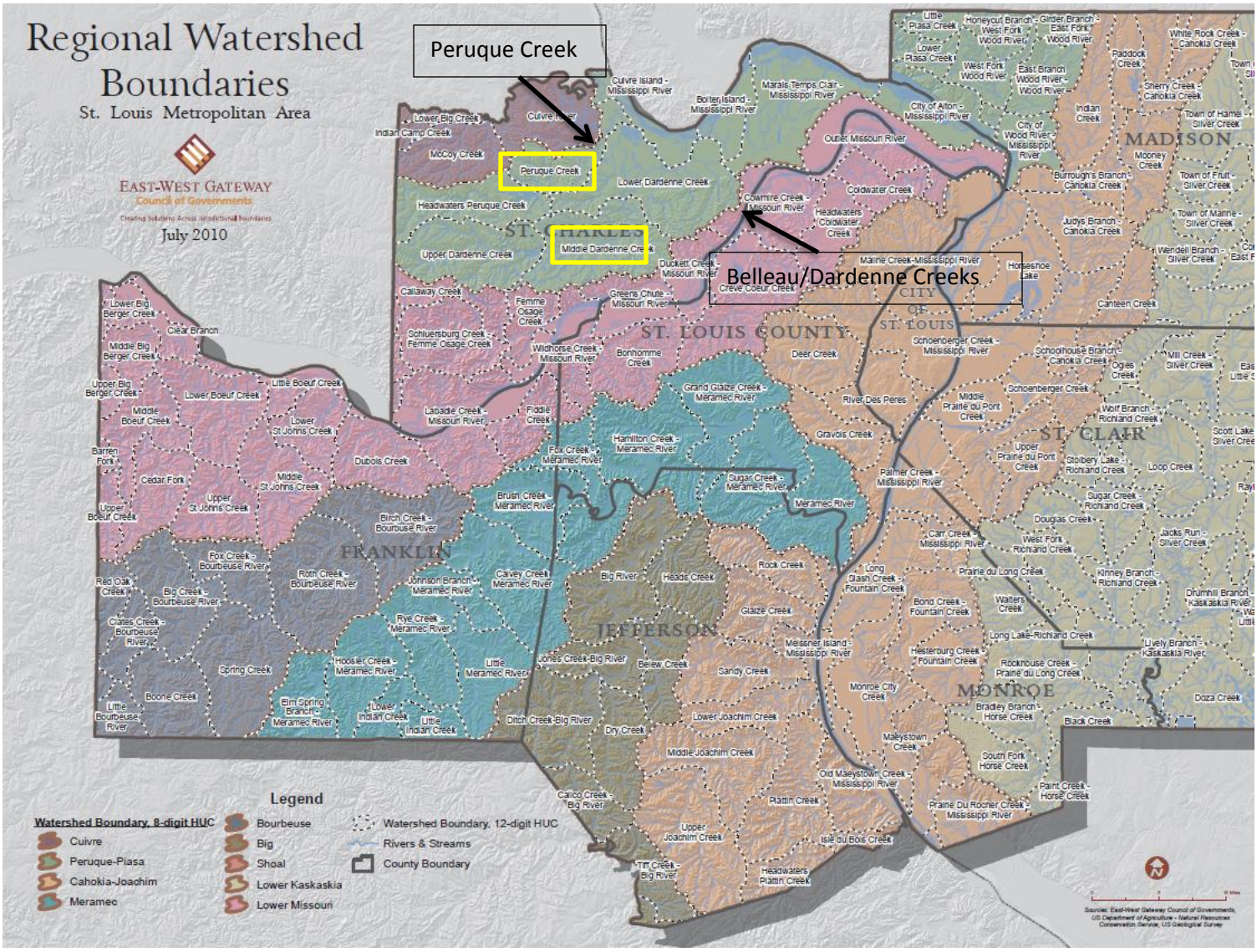


***Figure 3***

## 2.2 Storm Sewer System

The City's storm MS4 operates separate from the sanitary sewer system throughout the entire City limits. It consists of approximately 228 miles of storm water pipe materials such as reinforced concrete pipe (RCP), corrugated metal pipe (CMP), high density polyethylene (HDPE) and poly vinyl chloride (PVC) with varying diameters. The City storm sewer map is depicted in Figure 4. Within the system there are many storm water detention (dry) and retention (wet) basins as well as some designated wetland or mitigated areas which help to provide flood protection, decrease velocity and volume as well as cleanse storm water prior to discharging to the local waterways.

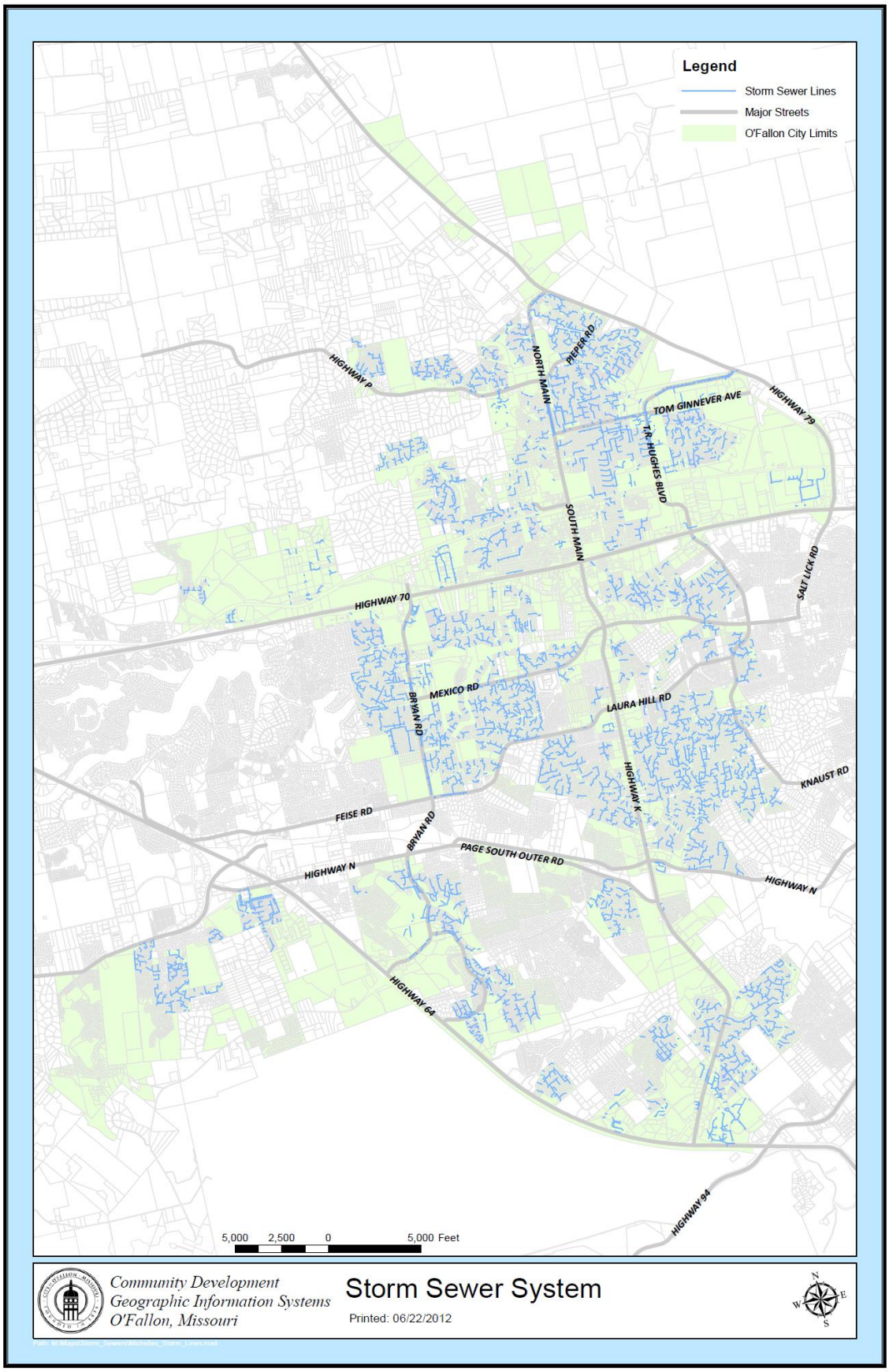
Legend
Storm Sewer Lines
Major Streets
O'Fallon City Limits
HIGHWAY P
NORTH MAIN
PIPER RD
TOM GINNEVER AVE
HIGHWAY 79
T.R. HUGHES BLVD
SOUTH MAIN
SALT LICK RD
HIGHWAY 70
MEXICO RD
BRYAN RD
LAURA HILL RD
HIGHWAY K
KNAUST RD
FEISE RD
BRYAN RD
PAGE SOUTH OUTER RD
HIGHWAY N
HIGHWAY N
HIGHWAY 64
HIGHWAY 94
5,000 2,500 0 5,000 Feet
Community Development
Geographic Information Systems
O'Fallon, Missouri
Storm Sewer System
Printed: 06/22/2012
N
W
E
S

***Figure 4***

## 2.3 Pollutants of Concern

Both the Dardenne and Peruque Creeks are listed on the MDNR 303(d) list of impaired waters. Section 303(d) of the federal Clean Water Act requires that states identify water bodies that do not meet water quality standards. Total Maximum Daily Loads (TMDLs) are then developed for each water body on the list, and include identifying sources of pollutants, defining how much of a pollutant a water body can tolerate while still meeting water quality standards, and specifying actions to create solutions.

The Dardenne Creek was listed on the 2010 Clean Water Act Section 303(d) for the following:

| Class | Water Body Size | Pollutant | Source | Impaired Use | Other Impaired Use |
|---|---|---|---|---|---|
| Permanent Flow | 6-15 mi | Low DO | Unknown | Protection of Aquatic Life | Whole Body Contact, Livestock and Wildlife Watering, Secondary Contact Recreation (fish/boat) |

MDNR has scheduled a TMDL Development for the following pollutants: 2014 (unknown); 2015 (inorganic sediment); 2016 (low DO). Please refer to ***Appendix L*** for detailed information regarding this TMDL.

The Peruque Creek was listed on the 2010 Clean Water Act Section 303(d) upstream and outside of City limits for the following:

| Class | Water Body Size | Pollutant | Source | Impaired Use | Other Impaired Use |
|---|---|---|---|---|---|
| Permanent Flow | 4-8.5 mi | Inorganic Sediment | Unknown | General Criteria Pertaining to Protection of Aquatic Life | Whole Body Contact, Livestock and Wildlife Watering, Secondary Contact Recreation (fish/boat) |

The TMDL priority for sedimentation was listed as “medium”. The pollutant is listed as non-volatile suspended solids (NVSS) and pollutant source as urban and rural non-point source runoff. Please refer to ***Appendix L*** for detailed information regarding this TMDL.

Because of the TMDL priority for Peruque Creek and scheduled TMDL for Dardenne Creek and reported growth of 71% between 2000 and 2010 (per data from Census for the State of Missouri) as well as O’Fallon’s status as the largest growing community in St. Charles County and listing as “One of the 100 Best Places to Live”, the City considers sediment, temperature and nutrients (including nitrogen, phosphorous that ultimately causes depressed oxygen concentrations) to be the main pollutants of concern. In addition to these, the City’s SWMP addresses other common non-point source pollutants, including yard waste (increased nutrients), hydrocarbons and other chemicals used by homeowners and businesses throughout the City.

## 2.4 Target Audiences

The table below identifies examples of common sources of non-point source pollution as well as target audiences and BMP examples to address the pollutants.

| Pollutant of Concern | Common Pollutant Source | Target Audience | Example of BMPs |
|---|---|---|---|
| Sediment | • Construction Site<br>• Stream bank Erosion<br>• Lack of proper vegetation<br>• Agricultural | • Construction Contractors/Developers<br>• Homeowners<br>• Farmers | • Erosion/Sediment Control Ordinance requirements<br>• Construction Inspections<br>• Educational Pamphlets |
| Nutrients | • Fertilizers<br>• Pet Waste<br>• Improper Restaurant Practices<br>• Yard Waste<br>• Illicit Discharges | • Homeowners<br>• Landscape Contractors<br>• Pet Owners<br>• Public Works<br>• Businesses<br>• Contractors/Developers | • Educational Materials<br>• Restaurant Inspections<br>• Street Sweeping<br>• Pet Waste Signs<br>• Sanitary Sewer Inspections<br>• Environmentally friendly structural and non-structural practices |
| Temperature | • Commercial Parking Lot<br>• Removal of Riparian Habitat<br>• Road pavement | • Owners of property along creek<br>• Public Works<br>• Business Owners | • Riparian Restoration<br>• Creek bank Setback Requirements<br>• Alternative pavement<br>• Environmentally friendly structural and non-structural practices |
| Hydrocarbons | • Parking lots<br>• Streets<br>• Automotive Facilities<br>• Illicit Discharges | • Automotive Facilities<br>• Public Works<br>• Homeowners | • Street Sweeping<br>• Automotive Facility inspection<br>• Educational Materials<br>• Environmentally friendly structural and non-structural practices |
| Pesticides/Herbicides | • Residential Use<br>• Commercial Use | • Homeowners<br>• Contractors<br>• Parks Department | • Educational Materials<br>• Environmentally friendly structural and non-structural practices |

## 3.0 Responsible Parties, Administration, Planning and Funding

The Public Works Engineering Department which comprises Stormwater Management (Stormwater Management Coordinator), Plan Review, Floodplain Administrator and Construction Inspection have the main SWMP implantation responsibilities. To achieve tasks and goals of the SWMP, additional activities have been implemented by existing staff or contract personnel. A flow chart with contact information for the other City Departments that also play a role in implementing the SWMP as included in a flowchart with contact information included in Appendix A.

The planning and preparation of the NPDES Phase II program, including the development of SWMP and permit application package is included in the Storm water budget preparations. The Storm Water Management Program is funded via a ½ cent Parks/Stormwater Sales Tax which was passed by vote of the people in 2008. The funds include all aspects to operate a successful Storm Water Management Program which includes salaries, benefits, assets (purchases) and capital improvement projects. All capital improvement projects must meet criteria included in our Stormwater Policy (Appendix B) in order to qualify for funding for improvements.

The Public Works Department, which includes Engineering, Stormwater Management, Stormwater Maintenance, Construction Inspection, Project Management, Streets, Environmental Services and Water/Sewer, will be the key implementers of the SWMP. This department is involved with a majority of the BMPs, development and enforcement of ordinances, MS4 operational activities and construction related BMPs as well as program evaluation and annual report development.

The Stormwater Management Coordinator has been designated as the Storm Water Program leader. Other key personnel involved within the Public Works Department include the Assistant City Engineer, City Engineer and Public Works Director.

The Planning and Building Departments also play an important role in the City's SWMP. Department personnel will continue to enforce existing policies and ordinances for development and redevelopment with in the City as well as construction site runoff and post construction site runoff control enforcement.

The Director of Planning and Development and Director of Building Safety are key personnel involved with these departments. Other personnel include Building Inspectors, Neighborhood Preservation Team and City Planners.

## 4.0 Minimum Control Measures

The Phase II Rule requires a SWMP to include six MCMs that are expected to achieve significant reductions of pollutants discharged into receiving water bodies. In this section, program goals and BMPs associated with each MCM will be summarized.

## 4.1 Public Education and Outreach (MCM 1)

The City 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 continually reviewed and updated as new information arises and expansion of those resources has occurred. We also publish and maintain a Storm Water Management webpage which includes information to inform the public about storm water education, upcoming events, regulations and ordinances, illicit discharges, report storm water concerns, etc. The website address is http://www.ofallon.mo.us/dept_swm.htm .

Several of the storm water activities listed in the table for goals and outcomes (Appendix C) have been in place since the implementation of our storm water management program in 2002 and will continue to be ongoing as they are a critical piece to the success of the program. We will also continue to look at other methods and utilize new materials to educate the public on the importance of improved water quality throughout the City and beyond.

## 4.2 Public Participation and Involvement (MCM 2)

The City is complying with permit conditions relating to this MCM by hosting multiple public volunteer events, utilization of the Public Works Commission which is comprised of resident volunteers and staff as our Storm Water Advisory Committee (Public Works Commission) and partnering with other non-profit organizations and government organizations to increase the public awareness and involvement with regard to storm water quality awareness.

Several of the storm water activities listed in the table for goals and outcomes (Appendix C) have been in place since the implementation of our storm water management program in 2002 and will continue to be ongoing as they are a critical piece to the success of the program. We will also continue to look at other opportunities to educate and involve the public to emphasize the importance of improved water quality throughout the City and beyond.

## 4.3 Illicit Discharge Detection and Elimination (MCM 3)

The City is complying with permit conditions relating to this MCM by utilizing a GIS storm water map which is continuously updated as new development is completed and performing inventory inspections of the detention/retention basins and storm water discharge pipes throughout City limits addressing any concerns that are observed along the way.

A Stormwater Quality Management Illicit Discharge Control ordinance has been in place since 2006 for enforcement regulating illicit discharges of pollutants and illicit connections. We have created documents that are given to residents, subdivisions and general public relating to pool water discharge as well as discharge of other types of pollutants that affect water quality.

Several of the storm water activities listed in the table for goals and outcomes (Appendix C) have been in place since the implementation of our storm water management program in 2002 and will continue to be ongoing as they are a critical piece to the success of the program. We will continue to look at ways

to reduce illicit discharges by emphasizing the importance of pollutant reduction to the residents of O'Fallon and beyond.

## 4.4 Construction Site Runoff (MCM4)

O'Fallon continues to enforce ordinance and regulatory mechanisms, including fines, and/or civil penalties that provide the ability to regulate storm water runoff from construction sites. The City maintains inspection procedures and maintains these records in an orderly manner. Construction Inspector, Building Inspectors 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 ordinance enforcement.

Several of the storm water activities listed in the table for goals and outcomes (Appendix C) have been in place since the implementation of our storm water management program in 2002 and will continue to be ongoing as they are a critical piece to the success of the program. We will continue to work with general contractors, builders, developers, landscape companies and general public to emphasize the importance of protecting water quality while performing construction related activities.

## 4.5 Post Construction Site Runoff (MCM 5)

O'Fallon has regulatory requirements in the form of City Ordinance (Section 405.247) in place to help ensure a reduction of pollutants associated with post construction site storm water runoff and has identified BMPs to help reduce erosion, siltation and volume reduction. We require a maintenance agreement with storm water quality BMPs that are installed with the owner/inspector being required to submit a copy to the City for review. The City also holds escrow on developments which is not released until all requirements set forth by the City has been met. Such funds are not released until a final inspection has been performed to ensure that proper post construction site runoff BMP requirements have been met and proper vegetation is established.

Prior to construction approval, developers must go through our Planning and Zoning process for record plat and construction site approval. We have made it a policy to meet with developers, engineers, property owners, etc. to prior to submittal to discuss the upcoming submittal and all City requirements including escrows and ordinance criteria. These meeting with staff include but are not limited to Economic Development, Planning and Zoning, Engineering (Plan Review) and Building departments. There are multiple checklists and applications that are available at City Hall and on the City's website that must be filled out and submitted with the plans. As part of this process, post construction requirements are also discussed and reviewed prior to approval.

The City's Comprehensive Plan (2008) includes provisions to address post construction site runoff and stormwater quality which have been incorporated in the plan review and approval process. Included in the Comprehensive Plan there are sections titled Green and Utilities which include goals, action Items and implementation Strategies which water quality and contain post construction measures that are consistent with this SWMP. A copy of the Comprehensive Plan is located on the City's Website at http://www.ofallon.mo.us/images/pubs/planning/CompPlan2008.pdf . ***See Appendix M*** for copies of pertinent sections of the Comprehensive Plan.

We have installed several storm water quality BMPs at multiple City owned property locations to promote the use of post construction practices.

Several of the storm water activities listed in the table for goals and outcomes (Appendix C) have been in place since the implementation of our storm water management program in 2002 and will continue to be ongoing as they are a critical piece to the success of the program. We will continue to evaluate our current ordinances and look into developing new ordinances to address post construction site runoff by continuing to work with the development community to emphasize the benefits of such practices.

## 4.6 Pollution Prevention/Good Housekeeping for Municipal Operations (MCM 6)

O'Fallon continues to comply with permit conditions by developing and implementing programs to reduce and prevent pollutant runoff from municipal operations. We provide internal education to our supervisors and employees to remind them of the importance of storm water quality concerns generated by activities performed. We finalized guidance document in 2011 that was approved and implemented in 2012.

Several of the storm water activities listed in the table for goals and outcomes (Appendix C) have been in place since the implementation of our storm water management program in 2002 and will continue to be ongoing as they are a critical piece to the success of the program. We will continue to educate employees, monitor our practices as a municipality and work together to implement ways to improve how we address pollution prevention.

## 4.7 Evaluation, Record Keeping and Reporting of the Program

The City in accordance with NPDES Phase II requirements conducts yearly evaluations of program compliance, the appropriateness of identified BMPs and progress toward achieving identified measureable goals and satisfying performance standards. Goals that are completed are removed and those updated and/or removed are reported as necessary with revisions to the SWMP included.

The City retains copies of reports required for this permit and are kept in the office of the Stormwater Management Coordinator. These are public records and as such have been made available to the public upon written request and are available for viewing on the City's Storm Water Management webpage at: http://www.ofallon.mo.us/dept_swm.htm to inform the public on how we are progressing.

## 5.0 Missouri Clean Water Commission, Missouri Operating General Permit

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo as amended, hereinafter, the Law) and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended, is authorized to discharge from the facility described herein, in accordance with effluent limitations and monitoring requirements as set forth here in:

Facility Description:

<u>All Outfalls</u>

Discharges from Regulated Small Municipal Separate Storm Sewer Systems

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date: June 13, 2008

Expiration Date: June 12, 2013

The following text is transcribed from the actual permit language. All text not in bold is direct permit language, text in **bold** states the City's necessary response with regard to compliance with the current regulation.

STATE OF MISSOURI

# DEPARTMENT OF NATURAL RESOURCES

## MISSOURI CLEAN WATER COMMISSION

# MISSOURI STATE OPERATING PERMIT

GENERAL PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

MO-R04000

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

## FACILITY DESCRIPTION

All Outfalls

Discharges from Regulated Small Municipal Separate Storm Sewer Systems

SIC 9511/NAICS 924110

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

June 13, 2008
Effective Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

June 12, 2013
Expiration Date

Edward Galbraith, Director of Staff, Clean Water Commission

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    2.2. Additional Designations After the Date of Permit Issuance
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    5.2. Recordkeeping
    5.3. Reporting
6. Standard Permit Conditions
7. Definitions

1. Coverage under this Permit

1.1 Permit Area

This permit covers all areas served by a municipal separate storm sewer system (MS4) for which the applicant is identified as the continuing authority.

1.2 Eligibility

1.2.1 This permit authorizes discharges of storm water from regulated small MS4s, as defined in 10 CSR 20-6.200. The permittee, or co-permittee, is authorized to discharge under the terms and conditions of this general permit if the permittee:

1.2.1.1 Owns or operates a regulated small MS4 as defined in CRS 20-6.200; located fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census or designated for permit authorization by the department pursuant to 10 CSR 20-6.200; and

1.2.1.2 Submits a general permit application in accordance with Section 2 of this permit; and

1.2.1.3 Complies with the terms of this general permit.

1.2.2 The following are types of discharges authorized by this permit:

1.2.2.1 *Storm water discharges.* This permit authorizes storm water discharges to waters of the state from the regulated small MS4s identified in Section 1.2.1, except as excluded in Section 1.3.

1.2.2.2 *Non-storm water discharges.* The permittee is authorized to discharge the following non-storm water sources provided that the permitting authority has not determined these sources to be substantial contributors of pollutants to the permittee's MS4 that require a separate permit:

- Landscape irrigation
- Rising ground waters
- Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.)
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering

- Flows from riparian habitats and wetlands
- Street wash water
- Discharges or flows form emergency firefighting activities
- Individual residential car washing
- Dechlorinated residential swimming pool discharges

1.3 Limitations on Coverage

This permit does not authorize:

1.3.1 Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are:

1.3.1.1 In compliance with a separate NPDES permit; or

1.3.1.2 Determined not to be a substantial contributor of pollutants to waters of the state.

1.3.2 Storm water discharges associated with industrial activities requiring separate NPDEs permits as defined in 10 CRS 20-6.200.

1.3.3 Storm water discharges associated with construction activities requiring separate NPDES permits as defined in 10 CSR 20-6.200.

1.3.4 Storm water discharges currently covered under another permit.

1.3.5 Discharges that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the Endangered Species Act (ESA) or result in the adverse modifications or destruction of habitat that is designated as critical under the ESA.

1.3.6 Discharges that violate the National Historic Preservation Act.

1.3.7 Discharges that cause or contribute to a violation of instream water quality standards. The permittee's storm water management program and plan (WSMP) document must include a description of the best management practices (BMPs) that the permittee will use to ensure that violations will not occur. The department may require corrective action or an application for site-specific permit or alternative general permit if an MS4 is determined to cause or create a significant potential for causing an instream exceedance of water quality standards.

1.3.8 Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been either established or approved by the EPA unless the permittee's discharge is consistent with that TMDL. This eligibility condition applies at the time the permittee submits an application for coverage. If conditions change after the permittee has permit coverage, the permittee may remain covered by the permit provided the permittee complies with the applicable requirements of Section 3. The permittee shall

incorporate any limitations, conditions and requirements required by the TMDL, including monitoring frequency and reporting required, into the SWMP, document in order to be eligible for permit coverage. For discharges for which the permittee is responsible but are not eligible for coverage under this permit, the permittee shall apply for and receive a site-specific or other applicable general NPDES permit prior to discharging.

1.4 Obtaining Authorization

1.4.1 To be authorized to discharge storm water from regulated small MS4s, the applicant/permittee shall submit an application and a written description of the permittee's SWMP in accordance with the deadlines presented in Section 2 of this permit.

1.4.2 The permittee shall submit the information required in Section 2 on the latest version of the application form (or photocopy thereof). The permittee's application shall be signed and dated by an authorized signatory.

1.4.3 Where the operator changes, or where a new operator is added after submittal of an application under Section2, a new application shall be submitted in accordance with Section 2 prior to the change or addition.

2. Application Requirements

2.1 Deadlines for Application

If the MS4 is regulated pursuant to 10 CSR 20-6.200 then the operator is required to seek coverage under the Small MS4 General Permit or a site-specific MS4 permit as follows:

2.1.1 Existing small MS4 permittees shall submit renewal applications 180 days prior to permit expiration unless an extended due date has been granted by the department. If the MS4 permittee is applying for a site-specific permit, the SWMP plan must be included with the application; and

2.1.2 MS4 operators that become subject to 10 CSR 20-6.200 following the 2010 census shall submit permit applications within 180 days following census publication.

2.2 Additional designations after the date of permit issuance

If the small MS4 is specially designated by the department after the date of permit issuance, then the small MS4 is required to:

2.2.1 Submit application for a site-specific MS4 permit or a small general MS4 permit (whichever applies) and a written description of the permittee's SWMP to the department within 180 days of notice.

2.3 Submitting a Late application

The permittee is not prohibited from submitting an application after the dates provided in Section 2.1. The department reserves the right to take appropriate enforcement actions for any unpermitted discharges.

3. Special Conditions

3.1 Discharges to Water Quality Impaired Waters

3.1.1 If the discharges from the MS4 are upstream from a 303(d) listed (impaired) waterbody, the permittee shall, in consultation with the department:

3.1.1.1 Determine whether storm water discharges from any part of the MS4 significantly contribute pollutants directly or indirectly to a 303(d) listed (i.e., impaired) waterbody. If the permittee has discharges meeting this criteria, the permittee shall comply with Section 3.1.2. If the permittee does not, Section 3.1 does not apply to the permittee.

3.1.1.2 Determine whether a Total Maximum Daily Load (TMDL) has been developed and approved by EPA for the listed waterbody. If there is such a TMDL, the permittee shall comply with both Section 3.1.2 and 3.1.3. If no TMDL has been finalized, section 3.1.3 will apply when the TMDL is finalized and approved by EPA.

3.1.2 *Water Quality Controls for Discharges to Impaired Waterbodies.* The permittee's SWMP document required under Section 4 shall include a description of how the permittee's program will control the discharge of measureable pollutants of concern and ensure the permittee's discharges will not cause or contribute to instream exceedances of the water quality standards. This discussion shall specifically identify measures and BMPs that will collectively control the discharge of the pollutants of concern.

3.1.3 *Consistency with TMDL Allocations.* If a TMDL has been finalized and approved by EPA for any waterbody into which the permittee discharges, the permittee shall:

3.1.3.1 Determine whether the approved TMDL is for a pollutant likely to be found in storm water discharges from the permittee's MS4;

3.1.3.2 Determine whether the TMDL includes a pollutant wasteload allocation (WLA) or other performance requirements specifically for storm water discharge from the permittee's MS4;

3.1.3.3 Determine whether the TMDL addresses a flow regime likely to occur during periods of storm water discharge;

3.1.3.4 After the determinations above have been made and if it is found that the permittee's MS4 shall implement specific WLA provisions of the TMDL, assess whether the WLAs

are being met through implementation of existing storm water control measures or if additional control measures are necessary;

3.1.3.5 Document all control measures currently being implemented or planned to be implemented. The permittee shall also include a schedule of implementation for all planned controls and shall document the calculations or other evidence that shows the WLA will be met;

3.1.3.6 Describe a monitoring program to determine whether the storm water controls are adequate to meet the WLA; and

3.1.3.7 If the evaluation shows that additional or modified controls are necessary, describe the measures to be taken and the schedule for their implementation. The permittee shall continue meeting the requirements of 3.1.3.4 through 3.1.3.7 for this permit durations until the department determines WLAs are being met or that water quality standards are being met.

3.2 Duty to Comply

3.2.1 The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Missouri Clean Water Law and is grounds for enforcement action; permit terminations, revocation and reissuance, or modification; or for denial of a permit renewal.

3.2.2 This permit authorizes only the activities described in this permit. Compliance with this permit may not be considered a shield from compliance with any local ordinance, State Regulation or State Law.

3.3 Continuation of the Expired General Permit

3.3.1 If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 10 CSR 20-6.010(10) (E) and remain in force and effect. Any permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

3.3.1.1 Reissuance or replacement of this permit, at which time the permittee shall comply with the application conditions of the new permit to maintain to discharge; or

3.3.1.2 Notice of Termination; or

3.3.1.3 Issuance of a site-specific permit for your discharge; or

3.3.1.4 A permit decision by the Director not to reissue this general permit, at which time the permittee shall seek coverage under an alternative general permit or a site-specific permit.

3.4 Need to Halt or Reduce Activity Not an Excuse

Actions by the permittee in an enforcement action to halt or reduce the permitted activity does not excuse compliance with this permit or any provision of the Missouri Clean Water Law.

3.5 Permit Transfers

This permit is not transferable to any other legal entity except after notice to the department. The department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

3.6 Procedures for Modification or Revocation

3.6.1 If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the owner/operator of the permitted site to apply for a site-specific permit, the department may require any person to obtain a site-specific operating permit [10 CSR 20-6.010(13) and 10 CSR 20-6.200(5)].

3.6.2 The department may require the permittee to apply for and obtain a site-specific or different general permit if:

3.6.2.1 The permittee is not in compliance with the conditions of this general permit; or

3.6.2.2 The discharge no longer qualifies for this general permit due to changed site conditions and regulations; or

3.6.2.3 Information becomes available that indicates water quality standards have been or may be violated.

3.6.3 The permittee will be notified in writing of the need to apply for site-specific permit or an alternative general permit. When a site-specific permit or alternative general permit is issued to the authorized permittee, the applicability of this general permit to the permittee will be terminated up on the effective date of the site-specific or alternative general permit, whichever the case may be. The permittee shall submit the appropriate forms to the department to terminate the permit that has been replaced.

3.7 Requiring a Site-Specific Permit or an Alternative General Permit

3.7.1 *Decision by the department.* The department may require any person authorized by this permit to apply for and/or obtain either a site-specific NPDES permit or an alternative NPDES general permit [10 CSR 20-6.200(6)]. Any interested person may petition the department to require a site-specific permit. Where the department requires the permittee to apply for a site-specific NPDES permit, the department will

notify the permittee in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form(s), a statement setting a deadline for the permittee to file the application, and a statement that on the effective date of issuance or denial of the site-specific NPDES permit or the alternative general permit, coverage under this general permit shall automatically terminate in accordance with Section 3.6. The department may grant additional time to submit the application upon request of the applicant. If the permittee fails to submit a site-specific NPDES permit application in a timely manner as required by the department under the paragraph, then the applicability of this permit to the permittee is automatically terminated on the day specified by the department for application submittal.

3.7.2 *Request by permittee.* The permittee may apply for a site-specific permit in lieu of coverage under the general permit. In such cases, the permittee shall submit an application for the alternate permit in accordance with the requirements of 10 CSR 20-6.200, with reasons supporting the request. The request may be granted by issuance of any site-specific permit or an alternative general permit.

4. Stormwater Management Programs and Plans

4.1 Requirements

The permittee shall develop, implement, and enforce a storm water management program and plan (SWMP) designed to reduce the discharge of pollutants from the permittee's regulated small MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Missouri Clean Water Law. The SWMP should include best management practices; control techniques and system, design, and engineering methods; and such other provisions as the permitting authority determines appropriate for the control of such pollutants. The permittee's SWMP document shall include the following information for each of the sis minimum control measures described in section 4.2 of this permit:

4.1.1 A description of the best management practices (BMPs) that the permittee will implement for each of the storm water minimum control measures;

***Please refer to Appendix C for further details***

4.1.2 The measurable goals for each of the BMPs including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and frequency of action;

***Please refer to Appendix C for further details***

4.1.3 The person primarily responsible for the SWMP, and the person(s) responsible for each minimum control measure if different from the primary responsible person; and

***Please refer to Appendix A for further details***

4.1.4 The permittee shall implement a program designed to protect water quality in potentially affected waters and ensure that the permitted activities do not a cause a violation of Water Quality Standards:

4.1.4.1 Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria; and

4.1.4.2 The following general water quality shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination of other substances, shall prevent the waters of the state from meeting the following conditions:

4.1.4.2.1 Water shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;

4.1.4.2.2 Water shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;

4.1.4.2.3 Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;

4.1.4.2.4 Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;

4.1.4.2.5 There shall be no significant human health hazard from incidental contact with the water;

4.1.4.2.6 There shall be no acute toxicity to livestock or wildlife watering;

4.1.4.2.7 Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community; and

4.1.4.2.8 Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

4.1.5 For facilities under the control of the permittee good housekeeping practices shall be maintained to keep solid waste from entry to waters of the state to the maximum extent practicable;

4.1.6 All fueling facilities under the control of the permittee shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures;

4.1.7 Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that are transported, stored, or used for maintenance, cleaning or repair by the permittee shall be managed according to the e provisions of RCRA and CERCLA;

4.1.8 All paint, solvents, petroleum products and petroleum waste products (except fuels) under the control of the permittee shall be stored so that these materials are not exposed to storm water. Sufficient practices of spill prevention, control, and/or management shall be provided to prevent any spills of these pollutants from entering a water of the state. Any contaminated system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater;

4.1.9 In addition to the requirements listed above, the permittee shall document the decision process for each minimum control measure and include rationale statements for each BMP And measure goal defined;

4.1.10 The permittee shall inspect any structures that function to prevent pollution of storm water or to remove pollutants from storm water and the facility in general to ensure that all BMPs are continually implemented an defective, an a monitoring schedule shall be specified in the SWMP document;

4.1.11 The SWMP document shall include interim milestones, measurable goals, an implementation schedule and measures for success; and

4.1.12 The permittee shall develop and fully implement each minimum control measure within five (5) years of receipt of its first MS4 permit. At each reissuance of this MS4 permit, the permittee shall comply with new or revised standards as soon as practicable, but no later than 5 years from the date of reissuance.

4.2 <u>Minimum Control Measures</u>

The six (6) minimum control measures that shall be included in the permittee's SWMP document are:

4.2.1 Public Education and Outreach on Storm Water Impacts

***See Appendix C, Table 1-Public Outreach and Education Permit Plan (MCM1)***

4.2.1.1 *Permit requirement.* The permittee shall implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and steps the public can take to reduce pollutants in storm water runoff. As part of the SWMP, the public education and outreach program shall include the following information, at a minimum:

4.2.1.1.1 The target pollutant sources the permittee's public education program is designed to address;

***The City continues to address non-storm water discharge pollutants throughout our public education program by utilizing storm water articles in the City newsletter, local papers, local cable channel, use of informational door hangers and public events. This will continue through the next reporting cycle and implemented to maximum extent practicable.***

4.2.1.1.2 Identification of target audiences for the permittee's education program who are likely to have significant storm water impacts (including commercial, industrial and institutional entities);

***There are many audiences that are focused on with regard to our education program. The City works closely with homeowners associations, schools, and general public at our outreach events. Numerous handouts for both commercial and residential population have been created and continue to be distributed and available to the public.***

4.2.1.1.3 A plan to inform individuals and households about steps they can take to reduce storm water pollution;

***The City will continue to utilize the articles, informational door hangers, City website, local cable channel, newspaper, homeowner's association newsletters, and hold meetings to inform individuals about steps to prevent storm water pollution. The City also works closely with surrounding municipalities to expand the knowledge of storm water pollution***

4.2.1.1.4 A plan to inform individuals and groups on how to become involved in the SWMP (with activities such as local stream and lake restoration activities);

***The City currently utilizes local newspapers, the City website, Public Works Commission meetings, etc. to notify the public of how to become more involved with the SWMP. We post it on our City website for the general public to see and they can submit comments from there. We will also continue our existing partnership with surrounding municipalities and not for profit organizations to continue to get the word out and participate in pollution prevention/restoration activities.***

4.2.1.1.5 The permittee's outreach strategy, including the mechanisms (e.g., printed brochures, newspapers, media, workshops, etc.) to reach target audiences, and how many people expected to be reached over the permit term; and

***The City has a have a carousel in the lobby of City hall where we place informational handouts regarding storm water pollutants and storm water BMP information which are monitored and refilled on an as needed basis.***

***Last year, 14-15 informational door hangers were utilized for localized dumping of pet waste, yard waste and trash and debris. These door hangers are also provided to the Stormwater Maintenance Crew to utilize on an as needed basis in the field when they come across such activities. The City anticipates posting the same amount if not less as residents become more aware of preventing pollution.***

***The City will continue to conduct at least two educational events each year at local schools, meetings and workshops in which approximately 200 residents are educated on the importance of preventing storm water pollution and use of BMPs. The City will continue to perform two to three events annually for this reporting cycle with an average of 100-300 residents educated annually.***

***One to three articles will be placed in our City newsletter and local newspapers annually and continue to update our Storm water webpage on the City's website for this for the next reporting cycle.***

4.2.1.1.6 A plan to evaluate the success of this minimum control measure.

***The City will continue to track and record the number of items distributed and attendees at education events.***

4.2.2 Public Involvement/Participation

4.2.2.1 *Permit requirement.* The permittee shall implement a public involvement/participation program that complies with State and local public notice requirements, and involve the public in the development and oversight of the SWMP, policies and procedures. As part of the SWMP document, the public involvement/participation program shall include the following information, at a minimum:

4.2.2.1.1 How the permittee has involved the public in the development and submittal of the application and SWMP document;

***The Public Works Commission is made up of ten (volunteer) residents throughout the City as well as City staff. They provide input regarding the Storm water Management Program as well as other divisions throughout Public Works. Goals for the program as well as permit submittal are discussed with them prior to submission to MDNR.***

***The SWMP and Annual Reports are published on the City's Storm water Management webpage so that residents can view and/or provide feedback.***

4.2.2.1.2 The target audiences for the permittee's public involvement program, including a description of the types of ethnic and economic groups engaged. The permittee is encouraged to actively involve all potentially affected stakeholder groups, including commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and educational organizations, among others; and

***O'Fallon strives to achieve demographic representation and an increased level of community involvement in plan development and implementation. Advertising and soliciting help from other local organizations will target specific population sectors, including minority and low-income communities; academic institutions; neighborhood and community groups; watershed alliances; and business industry. We will continue to focus on the following audiences:***

- ***K-12 Educators***
- ***Subdivision Associations***
- ***Dardenne and Peruque Creek Watershed Alliances***
- ***Construction site builders, contractors, and developers***
- ***Pet owners***
- ***Municipal Supervisors in Streets, Parks, Engineering, etc.***
- ***Garden Clubs***
- ***Property owners near illegal dump sites***
- ***Religious and Minority groups***

4.2.2.1.3 The types of public involvement activities included in the permittee's program. Where appropriate, the permittee must consider the following types of public involvement activities:

***See Appendix C, Table 2-Public Participation and Involvement Permit Plan (MCM2)***

4.2.2.1.3.1 Citizen Representatives on a storm water management panel;

***Please refer to the information provided in 4.2.2.1.1***

4.2.2.1.3.2 Public hearings;

***Any public hearing for public input may presented at the Public Works Commission, Planning and Zoning Commission or City Council Meetings.***

4.2.2.1.3.3 Working with citizen volunteers willing to educate others about the program; and

***O'Fallon supports and interacts regularly with a cross-section of citizen volunteers in various organizations (City Volunteer Services Department, Missouri Stream Team,***

***Greenway Network, Subdivision Association Trustees, etc.) that have developed core groups of informed constituents that are energized in promoting our storm water messages.***

4.2.2.1.3.4 Volunteer monitoring or stream/lake clean-up activities

***In addition to Mission Clean Stream, and several other planned events, O'Fallon supports Missouri Stream Team, Greenway Network, Inc. and local high school activities within multiple watersheds within the city to perform water quality monitoring and/or cleanup activities.***

4.2.2.1.4 The permittee's plans to actively involve the public in the development and implementation of their program; and

***Please refer to Appendix C table 2, Public Participation and Involvement Permit Plan (MCM 2) for further details.***

***This is also explained in 4.2.2.1.1***

***The City will continue to build on the success of partnerships with resident interest from the previous permit cycle. Partnerships with other governmental entities for involving the public include at a minimum, the cities of St. Peters, St. Charles, Lake St. Louis, Wentzville, St. Charles County, St. Charles County Soil and Water District.***

***The City will also continue to host annual stream/creek clean up events, storm drain marking events and participate in the City's annual Public Works Day to bring awareness to the prevention of storm water pollution prevention. Some of the events will contain partnerships with not-for-profit groups as well as other governmental agencies.***

4.2.2.1.5 The method for evaluating success of this minimum control measure.

***Tools to measure project success are already weaved into existing operating procedures. Data from methods used in the previous permit cycle has helped produce cost estimates and anticipated goals for this permit cycle. Quantitatively, employees record measurable indicators of success:***

- ***Number of related inquiries and/or complaints***
- ***Tons of illegally-dumped waste collected***
- ***Number of volunteers***
- ***Number of quality surveys received***
- ***Number of storm drains marked***

***Qualitative progress will be tracked through observations, stakeholder surveys, public conversations, and applied field analyses.***

***Please refer to Appendix C table 2, Public Participation and Involvement Permit Plan (MCM 2) for further details.***

4.2.3 Illicit Discharge Detection and Elimination

4.2.3.1 *Permit requirement. The permittee* shall develop, implement and enforce a program to detect and eliminate illicit discharges (as defined in 10 CRS 20-6.200) into the permittee's regulated small MS4. As part of the SWMP document, the permittee's illicit discharge detection and elimination program shall include the development and implementation of, at a minimum;

***See Appendix C-table 3-Illicit Discharge Detection and Elimination Permit Plan (MCM3)***

4.2.3.1.1 A storm sewer map showing the location of all outfalls and the names and locations of all receiving waters of the state that receive discharges from those outfalls. The permittee shall describe sources of information used for the map(s), and how the permittee plans to verify the outfall locations with field surveys. If already complete, the permittee shall describe how the map was developed and how the map will be regularly updated. The permittee shall make the map information available to the department upon request;

***Over the last several years, the GIS staff has developed a detailed map of all storm water structures that are on record with the City. This data has been transferred to a digital map accessed through the GIS Department. This map is continually updated as new development and redevelopment occur. We will continue to add old infrastructure that we do not have construction plans for using hand held devices as staff is available. See Appendix J for sample copies***

4.2.3.1.2 To the extent allowable under State, or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and actions. The permittee shall identify the mechanism (ordinance or other regulatory mechanism) the permittee will use to effectively prohibit illicit discharges into the MS4. If the permittee needs to develop this mechanism, describe the permittee's plan and implementation schedule. If the permittee's ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with the permittee's program; and

***Please refer to Appendix D-Ordinance #5082, Section 405.245, Storm Water Quality Management and Illicit Discharge Control.***

***The Stormwater Management Division is primarily responsible for the administration of the ordinance and the Neighborhood Preservation team assists as well when deemed necessary.***

4.2.3.1.3 A plan and implementation schedule to detect and address non-storm water discharges, including discharges from illegal dumping and spills, to the permittee's system. The permittee's plan shall include dry weather field screening for non-storm water flows and field tests of selected chemical parameters as indicators of discharge sources. The plan shall also address on-site sewage disposal systems that flow into the permittee's storm drainage system. The permittee's description shall address the following, at a minimum;

***In 2011, a draft policy/manual for Illicit Discharge Detection and Elimination was completed and is currently under review. Once revisions are completed and the manual approved, then implementation will begin. This manual includes assessing inventory, dry weather field screening, and further addressing potential IDDE.***

***Please see Appendix C-table 3-Illicit Discharge Detection and Elimination Permit Plan (MCM3)***

***The Division of Stormwater Management has primary oversight of the IDDE plan. As part of this plan, all storm water related complaints will be directed to the Division of Stormwater Management, as the clearinghouse for tracking and directing complaints to the appropriate departments.***

***The Division of Environmental Services of St. Charles County operates two drop-off recycling centers and conducts free household chemical collections from April through October. City of O'Fallon residents are encouraged to take their chemical and household collections to these facilities free of charge. The City of O'Fallon Environmental Services Division operates free of charge, a bulk drop off event quarterly for specific items at our transfer station as well as curbside single stream recycling for all residents. These programs provide an outlet for common pollutants such as automotive fluids, appliances, and household chemicals.***

4.2.3.1.3.1 Procedures for locating priority areas which include areas with higher likelihood of illicit connections (e.g., areas with older sanitary sewer lines, for example) or ambient sampling to locate impacted reaches;

***As part of the mapping of the storm water infrastructure system, the GIS Department has added all locations with private sewer disposal systems in O'Fallon in which the City can verify which properties have not been upgraded or connected to sanitary sewer service over the years and work to bring these properties into compliance***

4.4.3.1.3.2 Procedures for tracing the sources of an illicit discharge, including the specific techniques the permittee will use to detect the location of the source;

***Please refer to section 4.2.3.1.3***

4.2.3.1.3.3 Procedures for removing the source of the illicit discharge

4.2.3.1.3.4 A plan to ensure through appropriate enforcement procedures, including fines, and actions that the permittee's illicit discharge ordinance (or other regulatory mechanism) is implemented;

***Please refer to section 4.2.3.1.3***

***The City Stormwater Management Division utilizes the IDDE ordinance which includes enforcement actions including fines***

***Please refer to Appendix D-Ordinance #5082, Section 405.245, Storm Water Quality Management and Illicit Discharge Control.***

4.2.3.1.3.5 A plan to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. The permittee shall describe how this plan will coordinate with their public education minimum measure and the pollution prevention/good housekeeping minimum control measure programs; and

***The City plans to continue to inform employees, businesses, and the public about the hazards through a variety of outreach tools.***

***Public meetings and education through school programs and subdivision meetings will educate residents about storm water issues and permit requirements and provide an opportunity for input regarding possible dumping areas and to determine community needs. In this way, the City might better understand who the target audience is for illegal dumping control while implementing a valuable service for the watershed community.***

***Please also refer to sections 4.2.2.1.3.4, 4.2.2.1.4-Public Participation (MCM 2) and sections 4.2.1.1.3, 4.2.1.1.5-Public Education (MCM 1).***

***Residents can also report illicit discharges through the City's website either on the Stormwater Management webpage or use of our Citizen's First WebQA program in which residents record their concerns through a database and the concern is assigned to the designated department to address.***

4.2.3.1.3.6 Procedures for program evaluation and assessment of this minimum control measure.

***See Appendix C-table 3-Illicit Discharge Detection and Elimination Permit Plan (MCM3)***

***The Illicit Discharge Detection and Elimination (IDDE) program will be evaluated throughout the permit cycle utilizing MCM 1, 2 and 3 (See Appendix C). We will perform:***

- ***Informal and formal residential surveys to assess changes in resident awareness about sources of illicit discharges and methods to reduce non-point source pollution***
- ***The Stormwater Management Coordinator will track trends in internal and public concerns or complaints before and after outreach programs or strategies are conducted.***

4.2.3.1.4 Address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if the permittee identifies them as significant contributors of pollutants to the permittee's regulated small MS4: landscape irrigation, rising ground waters, uncontaminated ground water infiltration (as defined in 10 CSR 20-6.200), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, lawn watering, flows from riparian habitats and wetlands, and street wash water (discharges or flows from emergency firefighting activities are excluded from the effective prohibition against non-storm water and need only be addressed when they are significant sources of pollutants to waters of the state).

***The listed non-storm water discharges are not significant contributors of pollutants and are exempted per our Illicit Discharge Ordinance (See Appendix D).***

4.2.3.1.5 The permittee may also develop a list of other similar occasional incidental non-storm water discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-storm water discharges shall not be reasonably expected (based on information available to the permittees) to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions the permittee has established for allowing these discharges to the permittee's MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies, BMPs on the wash water, etc.). The permittee shall document in their SWMP any local controls or conditions placed on the discharges. The permittee shall include a provision prohibiting any individual non-storm water discharge that is determined to be contributing significant amounts of pollutants to the permittee's MS4.

***The listed non-storm water discharges are not significant contributors of pollutants and are exempted per our Illicit Discharge Ordinance (See Appendix D).***

4.2.3.1.6 The permittee should inventory, inspect, and have enforcement authority for industries and commercial enterprises within their boundary that may contribute pollutants via storm water to the MS4.

***The City has begun an inventory and inspection program as per the drafted IDDE manual that will inspect all discharge pipes that discharge to waters of the United States. This will continue throughout the next permit cycle and ongoing after.***

***Commercial enterprises that are required to apply for an "Industrial Waste Permit" are monitored by the Sanitary Sewer Division as they operate our Public Owned Treatment Works where this discharge flows.***

***Please refer to Appendix D-Ordinance #5082, Section 405.245 Storm Water Quality Management Illicit Discharge Control.***

4.2.4 Construction Site Storm Water Runoff Control

***Refer to Appendix C-table Construction Site Runoff Control Permit Plan (MCM 4)***

4.2.4.1 *Permit requirement.* The permittee shall develop, implement, and enforce a program to reduce pollutants in any storm water runoff to their regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre shall be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. As part of the SWMP, the permittee's construction site storm water runoff control program shall include the development and implementation of, at a minimum:

***The City currently has Section 405 for Subdivision and Land Development of the City Code. Provisions of this section dictate the protection of all watercourses within the watershed of the project. The use of erosion and sediment BMP prevent runoff the site into the storm water management system and natural watercourses.***

4.2.4.1.1 An ordinance or other regulatory mechanism:

***Sections 405.070, 405.240 (Appendix E) of the Subdivision and Land Development and Chapter 520 of the Building and Construction Code provide an enforcement process by utilizing Erosion and Sediment Control Inspections. The ordinances provide for prevention at the plan review stage as well as inspection in the field. All site inspections will continue as prescribed.***

4.2.4.1.1.1 To require operators to implement erosion and sediment control BMPs at construction sites;

***Contractors are required to follow approved Storm Water Protection Plans (SWPPP's) that have been reviewed by the Missouri Department of Natural Resources and are required to submit sediment and erosion control plans to the City for review and approval prior to construction. This procedure will continue as prescribed.***

4.2.1.1.2 To include sanctions to ensure compliance, to the extent allowable under State or local law; and

***All City Ordinance Sections relating to Construction Site Runoff Control contain an enforcement section to ensure compliance.***

4.2.4.1.1.3 If the permittee needs to develop this mechanism, the permittee shall describe the plan and scheduled implementation. If the permittee's ordinance or regulatory mechanism is already developed, the permittee shall include a copy of the relevant sections with the permittee's SWMP.

***Please refer to Appendix E for ordinance sections 405.070, 405.240 and Chapter 520***

***Refer to Appendix C-table Construction Site Runoff Control Permit Plan (MCM 4)***

4.2.4.1.2. Requirements for construction site operators to control construction-site waste that may cause adverse impacts to water quality, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste;

***Contractors are instructed to follow all regulations set forth by EPA, DNR and the City of O'Fallon. This procedure will continue as prescribed.***

***Wash-out areas are currently monitored as part of the Engineering review as part of the Sediment and Erosion Control Plan. Other hazards are continuously looked at for improvement action. This will continue to be reviewed and expanded as necessary upon in the next five years.***

4.2.4.1.3 Procedures for the permittee to consider and review all pre-construction site plans for potential water quality impacts.

***All site plans are reviewed by the City of O'Fallon Engineering Plan Review staff. This review includes the review of the erosion and sediment controls recommended for the site, the impact of storm water on the onsite as well as its impact off the construction site. Also required is approval from Missouri Department of Natural Resources and any other required agency prior to final approval from the City before grading or construction can begin.***

4.2.4.1.4 Procedures for the permittee to receive and consider information submitted by the public, including coordination with the permittee's public education program.

***Public concerns are received by the Stormwater Management Coordinator, Construction Inspectors or Building Inspectors. The concerns are inspected as they are received. Determinations of violations are made and then the contractor is given a notice to correct, if necessary. The site is re-inspected to ensure compliance. This procedure will continue as prescribed.***

4.2.4.1.5 Procedures for the permittee to inspect sites and enforce control measures, including prioritization of site inspections;

***Inspections are performed on every permitted site within the City with scheduled inspections as well as spot inspections. Enforcement is currently handled through the issuance of a stop work order or citation through the municipal court system in O'Fallon.***

4.2.4.1.6 A plan to ensure compliance with the permittee's erosion and sediment control regulatory mechanism, including the sanctions and enforcement mechanisms the permittee will use to ensure compliance and procedures for when certain sanctions will be used. Possible sanctions include non-monetary penalties (such as stop work orders), fines, bonding requirements, and/or permit denials for non-compliance; and

***Refer to Appendix E for regulatory mechanism, sanctions and enforcement***

***The Engineering Division measures for compliance include inspections, notice to correct, storm work orders, fines and use of the performance guarantee. Inspections performed by the Inspector provide enforcement of the BMPs employed on each site. If the BMPs are not being followed or the BMPs are not working a notice to correct is issued. If compliance is not met within the allocated time, a Stop Work Order may be issued. Fine not to exceed five hundred dollars ($500.00) per violation per day could be levied by the courts.***

4.2.4.1.7 A description of how the permittee will evaluate the success of this minimum control measure.

***Refer to Appendix C-table Construction Site Runoff Control Permit Plan (MCM 4)***

***All inspections are a measurable goal. Identification of deficiencies, correction of deficiencies, and the protection of the site can be tracked by reviewing all inspections performed. Tracking of public concerns will facilitate code compliance of the site. The goals are to make sure that the water quality does not vary during construction activities, contractors are learning the best us of BMPs approved by the City and to keep public concerns to a minimum.***

4.2.5 Post-Construction Storm Water Management in New Development and Redevelopment

***See Appendix C-Table 5-Post Construction Site Runoff Permit Plan***

4.2.5.1 *Permit requirement.* The permittee shall develop, implement, and enforce a program to address the quality of long-term storm water runoff from new development and redevelopment projects 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, that discharge into the permittee's regulated small MS4. The permittee's program shall ensure that controls are in place that have been designed and implemented to prevent or minimize water quality impacts by reasonably mimicking pre-construction runoff conditions on all affected new development projects and by effectively utilizing water quality strategies and technologies on all affected redevelopment projects, to the maximum extent practicable. The permittee shall assess site characteristics at the beginning of the construction design phase to ensure adequate planning for storm water program compliance. The purpose for this approach is to arrive at designs and practices that provide for most effective water quality treatment through infiltration, flow rates and similar site-design opportunities. As part of the SWMP document, the post-construction runoff control program shall include the following information at a minimum:

***The city has looked at many other municipalities post construction ordinances and programs and currently has in place a Post Construction BMP ordinance (Ordinance Section 405.247) that was created in cooperation with the local Home Builders Association. The ordinance addresses impervious area, preserves, protects natural watercourses/riparian buffers and disconnects impervious areas and development requirements to allow more flexibility for low impact development and use of BMP's to manage storm water on site. O'Fallon's Design Criteria is used to regulate design standards for storm water runoff for all development. Currently we also have a tree preservation and Floodplain ordinance.***

***We have made sure that the most recent City Comprehensive Plan (2008) included post construction site runoff requirements to meet permit requirements and ensure the public that the City is very conscious of water quality throughout the City for both new and re-development.***

***We have installed a demonstration rain garden at a City Park, porous pavers at City Hall, grassy pavers at our Veteran's Memorial Park extended parking lot, as well as a rain garden at our Street Department to help promote the use of BMP's. Various sites have submitted plans with other forms of BMP's, but no full low impact development or sustainable site has been submitted as of yet. Most installations have been on commercial properties.***

***We have several Silver ranked LEED facilities in the City that has utilized BMP's as part of their site design, the most recent being Progress West Hospital.***

4.2.5.1.1 A strategy to minimize water quality impacts, by reasonably mimicking pre-construction runoff conditions in affected new development and incorporating water quality protection in affected redevelopment projects to the maximum extent practicable, and include a combination of structural and/or non-structural BMPs appropriate for the permittee's community;

- ***Stormwater Quality Best Management Practices (Section 405.247) which requires incoming developments to address post construction site runoff requirements. This ordinance requires both new development and redevelopment follow parameters to meet water quality requirements by addressing the Water Quality Volume. The Water Quality volume is the storage needed to capture and treat the runoff form 90% of the recorded daily rainfall events. In numerical terms, it is equivalent to 1.14 inches of rainfall multiplied by the volumetric runoff coefficient and the site area. This is directly related to the amount of impervious cover created at a site. Both Pre-development and Post-Development site runoff is considered with every submittal. We are currently reviewing revisions to this ordinance to include more defined re-development requirements and should have in place by the end of this next reporting period. Responsibility for this lies with the Engineering Department.***
- ***Natural Watercourse Riparian Buffer – We have included this section in our Stormwater Quality Management and Illicit Discharge Control Requirements Add a New Section 405.247 Stormwater Quality Best Management Practices (See Appendix F). Responsibility for this lies with the Engineering Department.***
- ***Tree Preservation Ordinance – Use current ordinance (requires preservation based on a percentage of existing trees in residential developments). Responsibility for this lies with the Planning Department.***
- ***Parking/Driveway Requirements Commercial Sites – Review parking requirements and consideration the use of porous pavement or pavers for overflow parking in excess of City requirements. Responsibility for this lies with the Planning Department. They meet with the applicant, review submittals and request comment and input from the Engineering Department prior to approving use of these types of alternative pavements.***
- ***Floodplain Ordinance – Use current ordinance (restricts land use in floodplain/floodway). Responsibility for this lies with Flood Plain Manager of the Engineering Department.***
- ***Wastewater Disposal Regulations – Use current ordinances. Responsibility for this lies with the Water/Sewer, Building and Planning Department.***
- ***Detention Facility & Water Quality BMP Inspection – Section 405.240 Storm Water Detention Ordinance (Appendix E) regulates and requires periodic inspection of detention facilities in the City. The Engineering Department has***

***begun instituting standards for water quality BMP inspection either by ordinance or policy. Responsibility for this lies with the Engineering and Stormwater Management Department.***

- ***Partner with Private/Public Groups – Grants, tax receipts, donations and organizations are available to support clean water initiatives, preserve open space, create greenways, linear parks, and trailways through private and volunteer efforts. The City will continue to advance our partnerships with municipalities and/or non-profits such as: Greenway Network, St. Charles Soil and Water Conservation District, Missouri Department of Conservation and Great Rivers Greenway District, etc. Responsibility for this lies with the Engineering and Stormwater Management Departments.***

4.2.5.1.2 An ordinance or other regulatory mechanism to address post-construction runoff control from new development and redevelopment projects to the extent allowable under State, or local law. If the permittee needs to develop a mechanism, the permittee shall describe the plan and a schedule for implementation. If the permittee's ordinance or regulatory mechanism is already developed, the permittee shall include a copy of the relevant sections with the SWMP document;

***Ordinances regulating development standards discussed in 4.2.5.1.1 are found in Section 400 and 405 of the City Code, a Post Construction BMP ordinance has been approved and enacted in early 2008. BMP's are regulated under O'Fallon's "Design Criteria" stated within the City Code and listed on our design "checklists" for residential, commercial and grading. See Appendix F***

4.2.5.1.3 A plan to ensure adequate long-term operations and maintenance of selected BMPs, including types of agreements between the permittee and other parties such as the post-development landowners or regional authorities;

***The City has enacted a BMP Maintenance Agreement that is currently undergoing revisions for improvement in enforcement. See Appendix F***

***All infrastructure and structural BMPs are inspected by the Building Department, Construction Inspectors or Water/Sewer Department as they are being constructed. Construction is regulated by St. Charles County's "Standard specifications for Highway Construction" and Metropolitan St. Louis Sewer District's (MSD's) "Standard Construction Specifications for Sewers and Drainage Facilities".***

***Performance guarantees are required to be established with the City for the cost of the proposed construction as well as grading escrow Section 405.070 (G). See Appendix E***

***The City maintains all storm sewers dedicated to public use and all drainage ditches, storm sewers culverts and bridges located in public rights-of-way/easements. The***

***City has a program to provide routine inspection of its storm water facilities. The City will also inspect and inventory our natural watercourse vegetated buffers preserved over the initial permit period.***

***By the nature of the business of park and land management and maintenance, there is a constant awareness of adverse activity in the watersheds of public property. On-site staff as well as administration and management are all attuned to the identification and notification of problems to the appropriate authorities as the need requires.***

***As for lands owned and operated by the City of O'Fallon Parks and Recreation, there are regular and routine efforts to not only minimize storm water effects from construction and development, but to take action to remedy pre-existing conditions of moderate to severe erosion. These actions have the effect of not only protecting the watershed and storm water runoff, but also improving the stability of the areas to an improved storm water control situation.***

***Projects undertaken by the Department of Project Management are very diverse and include, but are not limited to the following:***

- ***Major renovation to existing city property and buildings***
- ***Expansion of existing facilities***
- ***New construction of city facilities***
- ***New construction of roads, sanitary, storm sewers and water lines.***

***All project development, design and construction is monitored, supervised and administered by the Department of Project Management. Violations are handled the same as for other contractors and developers. If out of compliance, warnings and/or stop work orders can be issued by the inspectors and monetary fines can be issued by our courts.***

4.2.5.1.4 Specific priority areas for this program; and

4.2.5.1.5 Any non-structural BMPs in the permittee's program, including, as appropriate:

***See Appendix F-BMP Ordinance***

4.2.5.1.5.1 Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation;

***Floodplain Ordinance and BMP ordinances (Appendix F) are in place to protect such areas.***

***The City's Comprehensive Plan, is used as a guide for development and proposes appropriate densities and land uses throughout the City. Responsibility for this lies with Planning Department.***

***The Parks Department and other City entities and affiliates work to acquire land and maintain open space. Tax funds have been provided to for development of parks/linear parks/trails/open spaces including the "Dardenne Creek Greenway Conceptual Plan." Responsibility for this lies with the Planning Department and Parks & Recreation, Engineering and Stormwater Management Divisions.***

***Under Section 405 of the Subdivision and Land Development Code, developers are required to abide by and obtain permits from other jurisdictional authorities such as Corps of Engineers (wetland/404 issues), MDNR (water quality 401/land disturbance), local Flood Plain Development Permit (including "no-rise" certification), etc. before city approval of plans, permits, and construction. Responsibility for this lies with Engineering Department.***

4.2.5.1.5.2 Policies or ordinances that encourage infill developments in higher density urban areas, and areas with existing storm sewer infrastructure, and redevelopment of Brownsfield sites or grayfields which may include abandoned malls or similar properties;

***O'Fallon does not have any ordinances precluding infill development in higher density urban areas and areas with storm sewer infrastructure. Some projects of this type have occurred in 2005-2007 and our current ordinances seem to be adequate to support this type of development. For the most part, the City is still growing and infill development has not been a problem.***

***The City is also considering a revision to our current storm water detention requirements for improved stormwater management on infill/redevelopment projects.***

4.2.5.1.5.3 Education programs for developers and the public about project designs that minimize water quality impacts; and

***Refer to Appendix C-Table 1-Public Outreach Permit Plan***

***O'Fallon participates and partners with other organizations regarding education programs and seminars for developers, contractors, engineers, inspectors, and the general public regarding water quality issues. The Protecting Water Quality manual represents a productive collaboration between St. Charles County and various state/federal partner agencies including NRCS and MDNR. This product is promoted through these partnering agencies as guidance for BMPs.***

***The City meets with subdivision associations, subdivision trustees to speak and distribute educational material on water quality, erosion, dumping, stream side***

***maintenance, and detention facility maintenance. The City will continue to hold or partner with annual and special seminars to help educate our citizens and the development community. The City also participates and partners with other organizations, such as St Charles Soil and Water Conservation District and NRCS regarding education programs/seminars for developers, contractors, engineers, inspectors, and the general public regarding water quality issues, including field trips to construction sites. Reference is also made to a document entitled "Protecting Water Quality." This "manual of practice" represents a productive collaboration between St. Charles County and various state/federal partner agencies including NRCS and MDNR.***

4.2.5.1.5.4 Other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, site designs that provide for integration of a variety of infiltration practices and source control measures often thought of as good housekeeping, preventative maintenance and spill prevention.

***Ordinance Section 400.405 of the Landscaping and Screening regulations, City Code was enacted to establish healthy environmental conditions. Responsibility for this lies with the Planning Department.***

***The City has also included recommendations and fact sheets on the Stormwater Management Website which reference ways to address increased water quality by integrating a variety of infiltration practices as well as making these handouts available to the public by request as well as a brochure carousel at City Hall.***

***Our Stormwater Maintenance crew maintains all publicly dedicated storm sewers throughout the City. They conduct a periodic inspection program of all of the storm sewer system. These storm sewer systems are inventoried on the City GIS map.***

4.2.5.1.6 Any structural BMPs in the permittee's program, including, as appropriate:

***The City Street Department has installed a "Snout" which is a vented hood that can reduce floatable trash and debris, oils and other solids from storm water discharges as a demonstration project in a storm sewer inlet in their parking lot.***

***The City's Waste Transfer Facility has an oil/grease separator installed at their site.***

***Storm Water Detention is required and regulated under Section 405.240 of the City's code (Appendix E). Responsibility for this lies with the Engineering Department.***

***Revisions to the "Design Criteria" regulating detention standards will be reviewed which would require a post-construction hydrology that more emulates a pre-construction hydrology.***

***Any changes to federal or state regulations will be reviewed for the treatment of runoff in detention facilities. Responsibility for this lies with the Engineering Department.***

4.2.5.1.6.1 Practices that provide infiltration, evapotranspiration or re-use such as grassed swales, bioretention cells, cisterns and green roofs; and

***Renaud Spirit Center, Recreation Center has a large demonstration rain garden.***

***Street Department has rain garden which accepts runoff from their parking lot.***

***Veteran's Memorial has installed grassy pavers with turf for a parking lot extension.***

***City Hall has Pavestone porous pavers installed in a pedestrian walkway that crosses the drive. These were installed as a demonstration project with materials donated by Pavestone.***

***Under the Section 405.240(H) City Code, undisturbed drainage easements have been established. Responsibility for this lies with the Planning and Engineering Departments.***

***Open drainage (grassed, roadside swales) is allowed for developments with a minimum one half (1/2) acres lot sizes (curb, gutter, storm sewers not required) to accomplish filtration/attenuation. Revisions to current zoning and the "Design Criteria" will be examined that would reduce curb and gutter requirements and allow open drainage in cluster/low inpact developments. Responsibility for this lies with the Planning and Engineering Departments.***

***Currently there is an Environmental Protection Planned Development ordinance (Section 400.170, Appendix G) that has been in place for quite some time that encourages permanent protection of the environmentally sensitive areas of a site while allowing for the site's development by concentrating development away from these environmentally sensitive areas.***

***We will continue to partner with Parks and Recreation and Private/Public to help preserve open space, create regional stormwater detention/management to help reduce flooding, preserve and enhance riparian buffers, and obtain funding and create projects that will both enhance water quality and provide recreational opportunities.***

***Storm Sewer Inspection and Maintenance Program will continue to assure that storm sewers are not in disrepair, are cleaned out (removal of debris and pollutants), and that pipe outfalls are non-erosive.***

***Our current tracking mechanism for storm water concerns will continue. An inventory of the locations of the complaints will be established and a comparison will be tracked regarding the amount of storm water complaints in areas developed prior to water quality regulations versus those developed with water quality BMPs.***

***Water Quality Standards have been implemented into the "Design Criteria" via the City Code Section 405.247 (Appendix F) allowing the design of grass swales, sand filters, bio-retention cells and vegetative filter strips. Responsibility for this lies with the Planning and Engineering Departments.***

4.2.5.1.6.2 Redevelopment practices such as planter boxes, street retrofits, parking-lot infiltration and green roofs.

***Redevelopment projects are subject to the BMP Ordinance Section 405.247 (Appendix F).***

***Veteran's Memorial has installed grassy pavers with turf for a parking lot extension.***

***The Engineering Department will continue to work with industry professionals to develop design standards for porous pavements. They will continue to work with developers to encourage use of porous type pavements on projects. They will also explore more possible residential uses as more information about this technology becomes available. Responsibility for this lies with the Engineering Department.***

4.2.5.1.7 How the permittee will evaluate the success of this minimum control measure.

***Section 405.240 (Appendix E) of the Storm Water Detention requires the inspection, maintenance, and repair of storm water detention facilities. It also requires easements of access for the purpose of City Inspection. Inspections are made by City staff on a periodic interval or when a complaint is received. Any required maintenance or repair must be made by the subdivision homeowners association or private property owners. Stormwater Management is responsible for inspections.***

***The City will continue to evaluate the effectiveness and areas for improvement of current ordinances, evaluating departmental policy to provide increased inspection and evaluation of structural water quality BMPs, particularly where infiltration BMPs are being used in place of storm water detention. We will continue to enforce the BMP Maintenance Agreement which requires maintenance by property owners or subdivision homeowners associations by ordinance. Engineering and Stormwater Management are responsible for inspections.***

***Stormwater Management and Engineering staff will inspect the condition of existing natural watercourse vegetative buffers preserved under current ordinance and assess their condition and the need to consider an increase the buffer width requirements.***

***The City has in place a program to inspect publicly owned storm sewer facilities developed a program to provide routine inspection of private storm sewer facilities and storm water outfalls.***

4.2.6 Pollution Prevention/Good Housekeeping for Municipal Operations

***See Appendix C, Table 6 and Appendix H-Pollution Prevention/Good Housekeeping for Municipal Operations Permit Plan***

4.2.6.1 *Permit requirement.* The permittee shall develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. As part of the SWMP, the pollution prevention/good housekeeping program shall include the following information, at a minimum:

***The Stormwater Management Department will continue to collaborate with Facilities, Environmental Services, Landscaping, Parks and Recreation, Streets, Water/Sewer and Fleet Maintenance to implement an Operations and Maintenance Program to prevent and/or reduce pollutant runoff from its municipal operations. The program will include but not necessarily be restricted to the following categories:***

- ***Building Maintenance***
- ***Landscaping Operations***
- ***Storm Sewer System Maintenance***
- ***Vehicle Maintenance and Operation***
- ***Fuel Storage***
- ***Outdoor Bulk Material***
- ***Land Disturbance and Soil Stabilization***
- ***Roadway Maintenance***
- ***Waste Disposal***

***City departments will be responsible for compliance with the City's Operations and Maintenance Program. Please refer to the MCM Responsibility Flow Chart (Appendix A) for a more detailed list.***

***Employee training shall be held on a regular basis. The training will be held at each facility at least once annually and shall cover topics both on site and throughout the City.***

***A Pollution Prevention/Good Housekeeping for Municipal Operations Guidance Document (Appendix H) has been completed and implemented. Each department has been issued a copy, and training sessions will begin. This will be completed within this next five year cycle of the permit.***

4.2.6.1.1 A list of all municipal operations that are impacted by this operation and maintenance program. The permittee shall also include a list of industrial facilities the permittee owns or operates that are subject to NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to the permittee's MS4. The permittee shall include the permit number or a copy of the industrial application for each facility;

***Fleet Operations, Street Sweeping, Street Maintenance, Landscaping and Mowing Operations, Capital Improvement Projects, Facilities Maintenance, Storm Sewer System Maintenance are just a few of the operations impacted by this program.***

***The City owns and operates our Public Owned Treatment Works (Water Plant and Wastewater Plant) and Waste Transfer Facility which all have their own independent state/federal permit regulations which are similar with our NPDES permit requirements. (See Appendix I for copies of permits)***

***City of O'Fallon Regional Waste Transfer Station and Recycling Center Permit No: 0418303***

***O'Fallon Wastewater Treatment Plant Permit No: MO-0028720***

***O'Fallon Water Treatment Plant Permit No: MO-0129623***

4.2.6.1.2 Maintenance BMPs, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to the permittee's regulated small MS4

***Maintenance schedules, inspection procedures and controls are delineated in the SWMPPP documents previously cited for the maintenance facilities. The procedures to accomplish the reduction of floatables and other pollutants from the maintenance activities will be addressed as follows:***

***A universal SWPPP template will be created for use by all affected facilities. Each facility will be responsible for the completion, implementation and recordkeeping activities for the document. It will be made available at all times for staff and other agencies review. This will be completed by end of 2013.***

***O'Fallon will continue to operate the current program to inspect a portion of our storm sewer system on an annual basis. This will continue throughout the entire system and be ongoing without an end date.***

***The City plans to continue to sweep all residential, collector and arterial streets that it maintains on an annual basis. We will continue to operate on a scheduled rotation to cover the entire City and City Facilities.***

4.2.6.1.3 Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas the permittee operates;

***SWPPP documents,*** c***ontrols and practices for reducing or eliminating the discharge of pollutants can be reviewed in section 4.2.6.1.2 and table 6-pollution prevention/good housekeeping for municipal operations (Appendix C)***

***The Street Department has a "Snout" installed in an inlet to help to decrease floatables and is checked and/or maintained on a regular basis.***

***Storage bins are utilized for storage of salt, mulch, sand, soil, etc. Salt storage is covered to prevent unnecessary runoff discharge. If a storage bin is not in place, proper erosion and sediment controls are in place to prevent unnecessary runoff.***

***Fleet maintenance is performed indoors. All liquids are captured and properly disposed of.***

***The Waste Transfer Facility picks up trash that has blown on site several times throughout the day. They also have an oil and grease separator installed in their sanitary line which is maintained by our Water/Sewer Department.***

***The City will continue our Adopt-A-Street Program that is currently in place. More emphasis by our Volunteer Services department to get these groups more active in roadside trash pickup has taken place and continues to be successful. These activities will continue through the next permit cycle and be ongoing from there.***

***A bioretention swale has been installed in a parking lot addition at Westhoff Park.***

4.2.6.1.4 Controls described in Sections 4.1.5 through 4.1.8 of this permit;

4.2.6.1.5 Procedures for the proper disposal of waste removed from the permittee's MS4 area of jurisdiction, including dredged material, accumulated sediments, floatables, and other debris;

***All such materials are disposed of via hauling contractor, trash collection to the transfer station, or if allow disposed of at our no longer utilized Waste Water Lagoon site located off of Hoff Rd.***

4.2.6.1.6 Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices;

***All flood management projects that require approval from the Panning & Development Division and must follow guidelines set in the Floodplain ordinance of the City code. All plans are submitted to the Floodplain Manager for review in the Engineering Division to assess the water quality impacts and recommend the necessary water quality protection device(s) or practice(s). See Appendix F for ordinance copy.***

4.2.6.1.7 A government employee training program to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. The permittee shall describe any existing, available materials the permittee plans to use such as those available from EPA, State or other organizations. The permittee shall describe how this training program will be coordinated with the outreach programs developed for the public information minimum measure and illicit discharge minimum measure; and

***Please refer to section 4.2.6.1***

4.2.6.1.8 How the permittee will evaluate the success of this minimum control measure.

***SWPPP will be evaluated annually to ensure that the facilities are being inspected and adjustments made as necessary. As time progresses, we should see documentation of improvements made to each location.***

***Training materials and attendance logs will be evaluated, tracked and maintained by the Stormwater Management Coordinator.***

4.3 Sharing Responsibility

Implementation of one or more of the minimum measures may be shared with another entity, or another entity assumes responsibility for the measure if:

4.3.1 The other entity, in fact, implements the control measure;

4.3.2 The particular control measure, or component of that measure, is at least as stringent as the corresponding permit requirement; and

4.3.3 The other entity agrees to implement the control measure of permittee's behalf. Written acceptance of this obligation is required. This obligation shall be maintained as part of the documented description of the permittee's storm water management program. If the other entity agrees to report on the minimum measure, the permittee shall supply the other entity with the reporting requirements contained Section 5.3 of

this permit. If the other entity fails to implement the control measure on the permittee's behalf, then the permittee remains liable for any discharges due to that failure to implement.

4.4 Reviewing and Updating Storm Water Management Programs and Plans

4.4.1 *Storm Water Management Program and Written Plan (SWMP) Review:* The permittee shall do an annual review of the permittee's SWMP in conjunction with preparation of the annual report under Section 5.3; and

4.4.2 *SWMP Update:* The permittee may change the SWMP during the life of the permit in accordance with the following procedures:

4.4.2.1 Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to the department; and

4.4.2.2 Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP with an alternate BMP may be requested at any time. Unless denied by the department, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If request is denied, the department will send the permittee a written response giving a reason for the decision. The permittee's modification requests shall include the following:

4.4.2.2.1 An analysis of why the BMP is ineffective or infeasible (including cost prohibitive);

4.4.2.2.2 Expectations of the effectiveness of the replacement BMP; and

4.4.2.2.3 An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.

4.4.2.3 Change requests or notifications must be made in writing and signed in accordance with Section 6.

4.4.3 *SWMP Updates Required by the Department:* Changes requested by the department must be made in writing, set forth the time schedule for the permittee to develop the changes, and offer the permittee the opportunity to propose alternative program changes to meet the objective of the requested modification. All changes required by the department will be made in accordance with 10 CRS 20-6.200. The department may require changes to the SWMP as needed to:

4.4.3.1 Address impacts on receiving water quality caused or affected by discharges from the Municipal Separate Storm Sewer System;

4.4.3.2 Include more stringent requirements necessary to comply with new federal or state statutory or regulatory requirements; or

4.4.3.3 Include such other conditions deemed necessary by the department to comply with the goals and requirements of the Missouri Clean Water Law.

4.4.4 *Transfer of Ownership, Continuing Authority, or Responsibility for SWMP Implementation:* The permittee shall implement the SWMP on all new areas added to the permittee's portion of the municipal separate storm sewer system (or for which the permittee becomes responsible for implementation of storm water quality controls) as expeditiously as practicable, but not later than one year from addition of new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.

4.4.4.1 Within 90 days of a transfer of ownership, continuing authority, or responsibility for SWMP implementation, the permittee shall submit a revised plan, if necessary, for implementing the revised SWMP on all affected areas. The plan shall include revised schedules for implementation. Information on all new annexed areas and any resulting updates required to the SWMP shall be included in the annual report.

4.4.4.2 Only those portions of the SWMP specifically required as permit conditions shall be subject to the modification requirements of 10 CSR 20-6.200. Addition of components, controls, or requirements by the permittee(s) and replacement of an ineffective or infeasible BMP implementing a required component of the SWMP with an alternate BMP expected to achieve the goals of the original BMP shall be considered minor changes to the SWMP and not modifications of the permit.

5. Monitoring, Recordkeeping, and Reporting

5.1 <u>Monitoring</u>

5.1.1 The permittee shall evaluate program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. If the permittee discharges to a water for which a TMDL has been approved, the permittee will likely have additional monitoring requirements under Section 3.1.3.6.

5.1.2 When the permittee conducts monitoring at the permittee's regulated small MS4, the permittee is required to comply with the following:

5.1.2.1 *Representative monitoring.* Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity;

5.1.2.2 *Test Procedures.* Monitoring shall be conducted according to test procedures approved under 10 CSR 20-7.015(9) (A).

5.1.3 Records of monitoring information shall include:

5.1.3.1 The date, exact place, and time of sampling or measurements;

5.1.3.2 The name(s) of the individual(s) who performed the sampling or measurements;

5.1.3.3 The date(s) analyses were performed;

5.1.3.4 The names of the individuals who performed the analyses;

5.1.3.5 The analytical techniques or methods used; and

5.1.3.6 The results of such analyses.

5.1.4 *Discharge Monitoring Report.* TMDL monitoring results shall be reported to the department on a Discharge Monitoring Report form (DMR). Monitoring results collected as part of the routine illicit discharge detection and elimination program shall be documented, retained on site and made available upon request by EPA, DNR and the public.

5.2 Recordkeeping

5.2.1 The permittee shall retain records for all activities requiring recordkeeping by the SWMP and monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of Discharge Monitoring Reports (DMRs), a copy of the NPDES permit, a copy of all ordinances, policies and formal procedures for all six minimum control measures and records of all data used to complete the application for this permit, for a period of a least three years from the date of the sample, measurement, report or application, or for the term of this permit whichever is longer; and

5.2.2 The permittee shall submit the permittee's records to the department only when specifically asked to do so. The permittee shall retain a written description of the SWMP required by this permit (including a copy of the permit language) at a location accessible to the department. The permittee shall make the permittee's records, including the application and the description of the SWMP, available to the public if requested to do so in writing.

5.3 Reporting

The permittee shall submit annual reports, using the annual report form provided by the department, to the Director by July 28 of each year of the permit term; the report shall include:

5.3.1 The status of the permittee's compliance with permit conditions, an assessment of the appropriateness of the identified best management practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for each of the minimum control measures;

5.3.2 Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;

5.3.3 A summary of the storm water activities the permittee plans to undertake during the next reporting cycle (including an implementation schedule);

5.3.4 Proposed changes to the permittee's SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements; and

5.3.5 Notice that the permittee is relying on another government entity to satisfy some of the permittee's permit obligations (if applicable).

6. Standard Permit Conditions:

This permit includes Standard Permit Conditions attached as Part 1 to this permit

7. Definitions:

All definitions contained in 10 CRS 20-6.200 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the event of a conflict, the definition found in the regulation takes precedence.

***Control Measure:*** as used in this permit refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

***Director:*** refers to the Director of Staff, Water Protection Program, and Department of Natural Resources.

***Illicit Connection:*** means any man-made conveyance connecting with an illicit discharge directly to a municipal separate storm sewer.

***Illicit Discharge:*** refers to any discharge to a municipal separate storm sewer that tis not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDEs permit for discharges from the MS4) and discharges resulting from emergency firefighting activities.

***Maximum Extent Practicable:*** refers to the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in storm water

discharges that was established by CWA § 402(p). A discussion of how it applies to regulated small MS4s is found at 40 CRF 122.34,

***MS4:*** is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to either a Large, Medium, or Small Municipal Separate Storm Sewer System (e.g. "the Springfield MS4).

***Permittee:*** as used in this permit refers to the holder of this general permit.

***Site-specific permit:*** also means individual permit.

***Storm Water:*** means storm water runoff, snow melt runoff, and surface runoff and drainage.

***Storm Water Management Program and Plan (SWMP):*** refers to a comprehensive documented program and plan to manage the quality of storm water discharged from the municipal separate storm sewer system.

# Appendix A

(MCM Responsibility Flow Chart)

# Appendix B

(Stormwater Policy)

# Appendix C

(Six MCM Goal and Outcomes Tables)

# Appendix D

(IDDE Ordinance)

# Appendix E

(Ordinance Sections 405.070, 405.240 and Chapter 520)

Compliance with Construction Site Runoff Control

# Appendix F

(Ordinance Section 405.247, Section 415)

BMP Ordinance, Checklists, BMP Maintenance Agreement and Floodplain Ordinance

# Appendix G

(Ordinance Section 400.170)

Environmental Protection Planned Development

# Appendix H

(Pollution Prevention/Good Housekeeping For Municipal Operations

Guidance Document of Best Management Practices)

# Appendix I

(Permit copies Waste Transfer Station, Water Plant, Wastewater Plant)

# Appendix J

(Storm Sewer System Maps)

# Appendix K
# Missouri Department of Natural Resources
# Fact Sheet – Master General Permit Renewal for Small MS4's

The Federal Water Pollution Control Act ("Clean Water Act: Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Director of the Missouri Department of Natural Resources (department) under an approved program, operated in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). NPDES operating permits are issued for a period of five (5) years unless otherwise specified.

A Fact Sheet gives pertinent information regarding the applicable regulations, rational for the development of the NPDES Missouri State Operating Permit (operating permit), and the public participation process for operating permit listed below.

A Fact Sheet is not an enforceable part of an operating permit.
This Fact Sheet is for Major ☐, Minor ☐, Industrial Facility ☐; Variance ☐;
Master General Permit ☒; and/or permit with widespread interest ☐.

## Part I – Facility Information

The following Facility Information shall appear on the coverage document issued to a General Permit Covered Facility.

NPDES #: MO-R040039
Facility name: City of O'Fallon
Facility Address: 100 N Main St, O'Fallon MO 63366
Owner's Name: City of O'Fallon
Owner's Address: 100 N Main St, O'Fallon MO 63366

Facility Region: Region 7
Facility County: St. Charles County

Facility Type: Municipal
Facility SIC Code: 9511
Facility NAICS Code: 924110

Facility Description: Discharges from Regulated Small Municipal Separate Storm Sewer Systems

_____

Comments: _____

_____

## Part II – Outfalls

It is adequate to submit a representative subset of outfall information with the application. Specifically, outfalls needed for the application should be representative of discharges nearest the MS'4s jurisdictional boundaries or nearest the receiving classified waters running through the MS4's jurisdiction. The more comprehensive outfall information and maps required for the MS4's illicit discharge program shall be retained on site and made available to EPA, DNR and the public upon request.

A full description of the representative outfalls in the application shall appear on the coverage document issued to a General Permit Covered Facility. The following information is required for each outfall.

Outfall #001
Legal Description: ¼, 1/4, Section, Township, Range, Direction
Latitude/Longitude: +0000000/-0000000 (Degrees, Minutes, and Seconds)
Receiving Stream: Name and Classification
First Classified Stream and ID: Name, Class, Water Body ID – currently provided by the Department
USGS Basin & Sub-watershed No.: (#-#) [14 digit USGS Hydrologic Unit Code (HUC)]

This permit allows regulated MS4s to discharge storm water to the following waters, depending on location of the regulated MS4.

Missouri or Mississippi River, lakes or reservoirs, losing streams, metropolitan no-discharge waters, special streams, subsurface waters and other waters of the state.

10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water commission wate rquality objectives in the terms of "water uses to be maintained nd the criteria to protect those uses."

## Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

**INTRODUCTION:**

This is a municipal storm water discharge permit which authorizes the discharge of storm water from regulated small municipal separate storm sewer systems (MS4s). The permit also aurhorizes the discharges or flows from emergency fire fighting activities. The permit does ***not*** authorize any additional non-storm water discharges, such as: process wastewater, storm water discharges that are mixed with process wastewater, or storm water associated with industrial activity, as defined in 10 CSR 20-6.200 or other discharges identified in Section 1.3 of this permit.

The permit is intended to authorize discharge of storm water even as jurisdictional boundaries change through the life of the permit. This rationale will explain which entities are covered under this permit, how to apply for coverage, and what the basic permit requirements are, including the general requirement of a storm water management program and written plan (SWMP).

This permit authorizes only the activities described in this permit. Compliance with this permit may not be considered a shield from compliance with any local ordinance, State Regulation or State Law.

**TYPES OF ENTITIES COVERED UNDER THIS PERMIT:**

This permit is intended to cover new or existing discharges composed entirely of storm water from small MS4s required by State regulation to obtain a permit. This permit is not intended to cover the discharge of storm water from MS4s that have been designated by the department as requiring coverage under an alternative general permit or a site-specific permit.

The criteria for permit coverage are contained in the Missouri Storm Water Regulations 10 CSR 20-6.200. In general, this includes any municipality, and federal or state facility/organization that owns or operates a regulated small MS4 as defined in 10 CSR 20-6.200 (i.e. serving a population of 1,000 or greater and located fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census, or having a population of 10,000 or greater if outside an urbanized area.) MS4s discharging entirely too combined sewer systems are exempt based on their coverage under NPDES wastewater permits.

**APPLICATION REQUIREMENTS:**

The regulated small MS4 is required to see coverage under the Small MS4 General Permit or a site-specific permit by submitting completed application forms (Forms M & K if an individual applicant or Forms M & L if applying as a co-permittee), a jurisdictional boundary map showing perimeter outfall locations and a written description of the operator's SWMP. Note: If the small MS4 is seeking renewal of the revised general permit, they may submit the updates SWMP document separately up to 90 days following public notice of the general permit. Note: Form M is currently being revised to include additional information for site-specific small MS4s. (The regulated medium or large MS4 must submit new or renewal applications according to requirements identified in 10 CSR 20-6.200.) MS4 operators that become subject to 10 CSR 20-6.200 following the 2010 census shall submit permit applications

within 180 days following census publication. MS4 operators specifically designated by the department shall submit permit applications within 180 days following notice by the department.

**STORM WATER MANAGEMENT PROGRAM (SWMP):**

This SWMP is a documented and implementable plan to schedule activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state.

This permit in accordance with 10 CSR 20-6.200 and 40 CFR parts 9, 122, 123, and 124, requires the permittee to develop and implement a SWMP. The SWMP shall address the sis minimum control measures – public education and outreach, public involvement/participation process, illicit discharge detection and elimination, construction site storm water runoff control, post-construction storm water management and pollution prevention/good housekeeping for municipal operations. The SWMP shall include, but not limited to, best management practices, pertinent local regulations, interim milestones, measureable goals, measures of success and responsible persons for each of the measurable goals.

**ORDINANCES:**

To the extent allowable under State or local law, ordinances (or other regulatory mechanisms) are required to be developed, implemented and enforced within five years of initial permit issuance under the following sections:

1. Illicit discharge detection and elimination – to prohibit non-storm water discharges into the storm sewer system, and implement appropriate enforcement procedures and actions
2. Construction site storm water runoff control - to require erosion and sediment controls at construction sites, as well as sanctions to ensure compliance
3. Post-construction – to address post-construction runoff from new development and redevelopment projects, and sanctions to ensure compliance

**SWMP UPDATES REQUIRED BY THE DEPARTMENT:**

Changes requested by the department must be made in writing, set forth the time schedule for the permittee to develop the changes, and offer the permittee the opportunity to purpose the alternative program changes to meet the objective of the requested modification. All changes required by the department will be made in accordance with 10 CSR 20-6.200. The department may require changes to the SWMP as needed to: include components deemed necessary by the department to comply with the goals and requirements of the permit and Missouri Clean Water Law; address impacts on receiving water quality caused or affected by discharges from the MS4; or include more stringent requirements necessary to comply with new federal or state statutory or regulatory requirements.

The permittee may also change the SWMP during the life of the permit in accordance with procedures described in Section 4.4 of the permit.

**ANNUAL REPORTING:**
The permittee is expected to annually review and provide a written report on their SWMP in accordance with Sections 4.4 and 5.3 of the permit. The permittee shall submit the report by July 28 of each year utilizing the department's annual report form MO 78-1846 or latest version.

**MONITORING:**
Sampling and testing of storm water for specific parameters is not required on a routine basis under this permit. However, the department reserves the right to require sampling and testing, on a case-by-case basis. As per [10 CSR 20-2.010(78)], a waste load allocation is the amount of pollutants each discharger is allowed by the department to release into a given stream after the department has determined to total amount of pollutant that may be discharged into that stream without endangering its waste quality.

Usually waste load allocations are not calculated. All permittees are subject to the Maximum Extent Practicable per [10 CSR 20-6.200] & [40 CFR 122]. However, if a storm water-based TMDL and WLA have been put into place for any waterbody into which the permittee discharges, monitoring may be required for discharges affecting that waterbed. Regulated MS4s must have been procedures in place to investigate findings of illicit discharges further, also potentially resulting in monitoring. In such cases, the permittee shall follow regulations in 10 CSR 20 and Chapter 6 and monitoring requirements set forth in the permit.

**303(d) LIST, TOTAL MAXIMUM DAILY LOAD (TMDL) AND WASTELOAD ALLOCATIONS**
Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

**PERMIT REQUIREMENTS:**
The permit includes additional requirements that apply if a Total Maximum Daily Load (TMDL) has been approved for any waterbody into which the permittee discharges (Section 3.1. of the permit). In general, these requirements do not, in themselves, dictate additional measures that must be taken by the permittee. Instead, the permit requires the permittee to comply with any requirements included in a TMDL that address storm water discharges covered in the permit.

New requirements affecting the permittee's discharges could be in the form of additional narrative requirements for implementation of BMPs, or in the form of a Waste Load Allocation (WLA) that prescribes a specific quantitative limit for pollution from a specific source.

The permittee may maintain coverage under the general permit provided they comply with the applicable requirements outlined above. The Department reserves the right to require site-specific or alternate general permit coverage.

**ANTI-BACKSLIDING:**
A provision in the Federal Regulations [CWA § 303(d) (4); CWA §402 (c); CFR § 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

All limits, requirements, and/or conditions in the Fact Sheet are at least as protective as those previously established; therefore, backsliding does not apply.

**ANTIDEGRADATION:**
Policies which ensure protection of water quality for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreations on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation plans are adopted by each State to minimize adverse effects on water.

As per [10 CSR 20-7.031(2)(D), three (3) levels of protection provided by the antidegradation policy in subsections (A), (B), and (C) of this section shall be implemented according to procedures developed by the department. On April 20, 2007, the Missouri Clean Water commission approved *Missouri Antidegradation Rule and Implementation Procedure* (Antidegradation Rule), which is applicable to new or upgraded/expanded facilities. The implementation of the Antidegradation Rule will be implemented upon promulgation, which is tentatively scheduled for August 2008.

**COMPLIANCE AND ENFORCEMENT:**
Action taken by the department to resolve violations of the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of any operating permit.

Dischargers of storm water from regulated small MS4s, as defined in the Missouri Storm Water Regulations (10 CSR 20-6.200) who do not obtain coverage under this or other Missouri general permits, or under a site-specific NPDES permit, will be in violation of the Missouri Clean Water Law and its implementing regulations and subject to civil penalties of up to $10,000 per violation per day. For entities covered under a NPDEs permit, failure to comply with any NPDES permit requirement also constitutes a violation of the Missouri Clean Water Law and its implementing regulations.

## Part IV – Administrative Requirements

**PUBLIC NOTICE AND COVERAGE FOR AN INDIVIDUAL ENTITY:**

As per the Missouri Clean Water Law, the Missouri Clean Water Commission, and the federal Clean Water Act, persons wishing to comment on Missouri State Operating Permits are directed to do so by a department-approved Public Notice coversheet. This Public Notice coversheet is attached to a Missouri State Operating Permit during the Public Notice period.

The need for an individual public notification process shall be determined and identified in the general permit. [10 CSR 20-6.020(1) (C) 5.]

Applicable ☒;
Issuance of coverage to an individual facility under this Master General Permit shall be placed on Public Notice for 30 days in accordance with 10 CSR 20-6.020(1)(B) & (C).

Not Applicable ☐;
Public Notice is not required for issuance of coverage under this Master General Permit to individual facilities for the first time.

The Public Notice period for this operating permit is tentatively scheduled to begin on January 11, 2008.

**Date of Fact Sheet:** March 20, 2008

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# Appendix L

(Peruque Creek and Dardenne Creek TMDL)

# Appendix M

(Excerpts from City Comprehensive Plan)