

# CITY *of* CAPE G I R A R D E A U

---

## **STORMWATER MANAGEMENT PLAN**

**A Continuing Program for Water Quality Improvement  
2013 – 2018**

**DRAFT**

## Table of Contents

<b>Background &amp; Introduction</b> .....	<b>3</b>
<b>Permitting and Reporting</b> .....	<b>5</b>
<b>Additional Information</b> .....	<b>5</b>
<b>Minimum Control Measures &amp; Best Management Practices</b> .....	<b>7</b>
Public Education and Outreach .....	<b>7</b>
Public Participation .....	<b>8</b>
Construction Site Runoff Control .....	<b>9</b>
Post Construction Runoff Control .....	<b>10</b>
Illicit Discharge Detection and Elimination .....	<b>12</b>
Pollution Prevention / Good Housekeeping.....	<b>13</b>
<b>Appendix 1</b> .....	<b>14</b>
<b>MS4 Stormwater Team</b> .....	<b>14</b>
<b>Appendix 2</b> .....	<b>15</b>
City Code Chapters .....	<b>15</b>
Chapter 22 Nuisance Abatement.....	<b>15</b>
Chapter 23 Storm Water .....	<b>15</b>
Chapter 25 Development Code .....	<b>15</b>
Chapter 29 Sewer Ordinance.....	<b>15</b>

## **Background & Introduction**

The City of Cape Girardeau was established in 1806. The 2010 Census reports the City has a population of 37,941. According to the City's GIS information the City of Cape Girardeau covers an area of 27 square miles. The City of Cape Girardeau has a Council – Manager form of government. The City Council consists of a mayor (elected city wide) and six council members (one elected from each of six wards), and all of them are part time. The Council appoints a full time City Manager. The City has mostly residential areas and commercial retail areas. Southeast Missouri State University ins within the city limits. The City is served by two large hospitals and has some light industrial areas.

The City has five major water sheds which are Juden Creek, Sloan Creek, Cape La Croix Creek, Ramsey Branch, and the Headwater Diversion Channel. Each of these discharges into the Mississippi River.

The City has been involved in water quality improvement for over 2 decades. In the early 1990's the City began an effort to separate combined sewers. This had a two fold objective / impact of reducing wet weather flows at the wastewater treatment plant and improving water quality in local waterways. In 2003 the City was included in the Phase II Stormwater Program of the MS4 permitting process. Efforts were taken to comply with the MS4 permit requirements during that first 5 year permit period. In 2008 the City renewed the MS4 permit and took a significant step forward in the compliance effort by hiring a full time stormwater coordinator. Further steps toward improved compliance were creation of the staff Stormwater Team and revision of local ordinances and policies for inclusion of more water quality guidelines and requirements.

The City of Cape Girardeau has a Stormwater Ordinance that was adopted in 1989, and updated as recently as 2012. The Stormwater Ordinance requires that developers:

- Hold pre-design / pre-development meetings with the City Staff to consider opportunities for water quality BMP's to be utilized in the site design.
- Develop effective flood control detention methods that include water quality considerations.
- Develop an effective means of capturing / treating the runoff from the 1 inch rain event (90<sup>th</sup> percentile rain event).
- Provide as part of the design package a detailed SWPPP for the development site, which is to include information on the planned erosion & sediment controls, pollution prevention practices, and future operation and maintenance practices for onsite water quality BMP's.
- Preserve a 50 foot buffer along stream banks.
- Make graded slopes no steeper than 3:1.
- Make cooperative use of landscaping areas for stormwater quality improvement.

The City of Cape Girardeau Stormwater Ordinance provides for control of illicit discharges by listing specific allowable non-stormwater discharges and listing specific prohibited non-stormwater discharges.

The City of Cape Girardeau Stormwater Ordinance provides enforcement authority for all the requirements of the Ordinance. This authority includes a progressive enforcement protocol. The Stormwater Ordinance is enforced within the City limits on all construction sites regardless of size of the area of land disturbed.

The City of Cape Girardeau continues to be committed to reducing the levels of contaminants, silt, sediments, and other pollutants reaching area waterways by means of the stormwater flowing from or through the City of Cape Girardeau. However, it should be noted that the City has no control over what occurs outside the City limits. Any contaminants entering the City from outside city limits will pass through. The City will continue to coordinate efforts with Cape Girardeau County and the City of Jackson to reduce the levels of pollution flowing into area waterways.

The City of Cape Girardeau has a Stormwater Management Team (SWMT) that oversees the development and implementation of the Stormwater Management Plan (SWMP). The SWMT meets on a semi-annual basis to review the status of the SWMP and address issues necessary to properly implement the SWMP. Other meetings with part or all of the SWMT, or other appropriate staff will be held as necessary for proper implementation of the elements of the SWMP. The SWMT is comprised of City staff from Public Works, Engineering, Parks and Recreation, Planning, Inspections, GIS, and Airport. The Storm Water Coordinator serves as the head of the SWMT, schedules the meetings, prepares the reports, prepares records of the meetings, provides recommendations for updates to the SWMP or the Stormwater Ordinance, and consults the SWMT on stormwater issues and problems. The SWMT also makes recommendations for changes or amendments to existing ordinances. The current members of the SWMT are listed in Appendix 1.

The City of Cape Girardeau Storm Water Management Plan (SWMP) has specific Best Management Practices (BMP) for each of the six required Minimum Control Measures (MCM). There are measureable goals for the BMP's within each MCM, and the responsible party is identified for each BMP.

The SWMP is set up to work in cooperation with the City's Stormwater Ordinance to provide for review, implementation, oversight, and enforcement of all approved stormwater pollution prevention plans for new development or re-development sites. These plans necessarily include erosion and sediment control plans, water quality improvement BMP's, and other elements in accordance with the City's regulations to comply with the MS4 Permit.

The SWMT will review the SWMP annually in conjunction with the Annual Reporting requirements, or as required by the director of the U. S. Environmental Protection Agency and / or the Missouri Department of Natural Resources, in accordance with statutory provisions of section 402(p)(3)(B) of the Clean Water Act. Changes to the SWMP shall be approved by the SWMT and be forwarded to MoDNR Water Pollution Control Branch. The SWMT has authority to make changes to the SWMP that do not involve ordinance revisions. Ordinance revisions must be approved through the normal City Council process.

### **Permitting and Reporting**

The MS4 Operating Permit is issued by MoDNR. This MS4 Permit provides the objectives to be met through the SWMP. Generally these objectives are:

- Identify pollutants and their sources
- Use structural and non-structural practices to control the discharge of pollutants
- Reduce the discharge of pollutants to the "Maximum Extent Practicable"
- Generally protect the integrity and water quality of area waterways

In order to meet these objectives, the City will enforce applicable ordinances and implement BMP's identified in the SWMP.

Annually a report will be prepared which details the status of compliance with the permit conditions. This report will include an assessment of the appropriateness of the selected BMP's and progress toward achieving the measureable goals for each BMP. The report will provide results of any data collected and analyzed, such as monitoring data from stream water samples. The report will include any recommendations for changes to the BMP's or measureable goals for any of the MCM's. The City's Annual Report to MoDNR will include a summary of the annual report, and a summary of the stormwater activities planned for the next reporting period.

All records and reports will be maintained for a minimum of three years, and will be accessible to the public. Upon request, copies of records and reports will be submitted to the permitting authority.

### **Additional Information**

The Cape Girardeau Airport has a separate Stormwater Management Plan that includes the Airport Fueling Area SPCC Plan.

The Fleet Maintenance Area in the Public Works building has a SPCC plan for that area. The other maintenance areas, such as Parks and the Golf Course, do not store such quantities of oil products as to require a SPCC plan.

Standard Operating Procedures (SOP's) are prepared in written form and kept in these areas: Parks Maintenance Shed, Jaycee Golf Course Maintenance Shed, Fleet Maintenance area, Airport Managers Office, Solid Waste Recycle Center, Solid Waste Transfer Station, Sewer and Stormwater Maintenance area, and Streets Maintenance area.

DRAFT

## Minimum Control Measures & Best Management Practices

### Public Education and Outreach

The City of Cape Girardeau believes that educating the public is important for successful implementation of the SWMP to reduce the levels of contamination and pollutants entering area waterways. To accomplish the goals set forth in this SWMP for Public Education the City has set the following objectives for this Measure:

- Identify, develop, obtain, and provide educational resources for distribution to the citizens through media such as mailings, print, radio, television, and the internet.
- Implement a program of marking storm drains with “Do Not Dump” message.
- Employee training for Pollution Prevention and Illicit Discharge Detection & Response
- Set measureable goals for the Practices
- Evaluate the effectiveness of the BMP's.

The BMP's selected for the Public Education Measure are listed below. See the chart on page 7A for the list of BMP's, measurable goals, responsible party, and implementation schedule.

- Inform Residents Through Water Quality Notes on Utility Bills
- CG993 Local Access TV Programming
- Storm Drain Stenciling & Marking
- Employee Education
- Public Meetings
- Workshops with area contractors, engineers, developers
- Web Site Postings and Links
- Placement Of Information Signs Along Walking Trails

**Public Education**

**DRAFT**

Best Management Practices

BMP	Description	Status	Responsible Party	Measureable Goals	Implementation Schedule					
					13-14	14-15	15-16	16-17	17-18	
1	Utility Bill Notes	Print water quality related notes on the water bill cards.	Continuing Effort	SWC	Have note on water bill cards for four months each year	x	x	x	x	x
2	Channel CG993 Programming	Use local access channel for broadcast of Water quality educational programs and PSA's	Continuing Effort	SWC, PIO		x	x	x	x	x
2A	Run "Liquid Assets" program		Continuing Effort	PIO	Run once each week	x	x	x	x	x
2B	Run EPA program "After The Storm"		Continuing Effort	PIO	Run once each week	x	x	x	x	x
3	Use Social Media	Use Social media to distribute water quality information	Continuing Effort	SWC, PIO		x	x	x	x	x
3A	Develop plan & content		Continuing Effort	SWC, PIO		x				
3B	Place postings & update		Continuing Effort	PIO			x	x	x	x
4	Storm Drain Stenciling / Marking	Have volunteers and City crews mark storm drain covers with "Do No Dump . . . Drains To River" message	Continuing Effort	SWC	Have 25 inlets stenciled or marked each year	x	x	x	x	x
5	Employee Education	Provide training to City employees for pollution prevention / housekeeping practices and Illicit Discharge issues	Continuing Effort	SWC, SWMT	Have training for 5 divisions 2 times each year	x	x	x	x	x
6	Elected Official Education	Make Storm water quality presentation to City Council and Planning Board	Continuing Effort	SWC, CE	make one presentation to each group annually	x	x	x	x	x
7	Public Meetings	Host a meeting open to the public for presentation of general stormwater water quality information	Continuing Effort	SWC, CE, PIO		x	x	x	x	x
7A	Develop Pollution Prevention Program for Public Meetings		In Development	SWC, CE, PIO	get program prepared	x				
7B	Schedule meetings for public presentation		In Development	SWC, CE, PIO	host one meeting per year		x	x	x	x
8	Web Site Postings & Links	Identify sources of Pollution Prevention information and post it or the links on the City Website	Continuing Effort	SWC, PIO	Add 5 more links		x			
9	Walking Trail Signs	Install water quality information signs along walking trail	In Development	SWT	install 5 signs years 3 and 5			x		x
10	Workshops	Host workshops for local developers, engineers, and contractors	Continuing Effort	SWC, CE	Host one workshop every other year		x		x	

**Responsible Party Notation**  
 SWMT = Stormwater Management Team  
 SWC = Stormwater Coordinator  
 PIO = Public Information Office  
 CE = City Engineer

## Public Participation

The City of Cape Girardeau will strive to engage public participation in the implementation of the SWMP. To accomplish the goals set forth in this SWMP for Public Participation the City has set the following objectives for this Measure:

- Develop educational resources to support the Public Education program
- Coordinate and host Public Meetings for presentation and discussion of the City SWMP and water quality issues in the community
- Preparation of flyers / brochures with water quality information for distribution to public.
- Planning and working on community clean-up efforts such as Hazardous Waste Collection Day and Friends of the Park work days.
- Use volunteers / non-city staff for gathering and testing of water samples in primary watersheds
- Set measureable goals for the Practices in the SWMP.
- Evaluate the effectiveness of the BMP's.

The BMP's selected for the Public Participation Measure are listed below. See the chart on page 8A for the list of BMP's, measurable goals, responsible party, and implementation schedule.

### Coordinate And Host Public Meetings

- Coordinate Storm Drain Marking Program
- Coordinate Volunteer Water Quality Monitoring Program
- Community Clean-Up Days
- Have Occasional Presentations At City Council Or Planning And Zoning Board Meetings

**Public Participation**

DRAFT

Best Management Practices

BMP	Description	Status	Responsible Party	Measureable Goals	Implementation Schedule				
					13-14	14-15	15-16	16-17	17-18
1	Public Meetings	Continuing Effort	SWC, CE, PIO						
1A	Develop Pollution Prevention Program for Public Meetings	In Development	SWC, CE, PIO	get program prepared	x				
1B	Schedule meetings for public presentation	In Development	SWC, CE, PIO	host one meeting per year		x	x	x	x
2	Storm Drain Stenciling / Marking	Continuing Effort	SWC	Have 25 inlets stenciled or marked each year	x	x	x	x	x
3	Volunteer Water Quality Monitoring	Continuing Effort	SWC	Have samples taken and tested 12 months	x	x	x	x	x
4	Community Clean-Ups	Continuing Effort	SWC, Parks	Host 1 event		x		x	
5	Presentations at City Government meetings	Continuing Effort	SWC, CE	make one presentation to each group annually	x	x	x	x	x

**Responsible Party Notation**  
 SWMT = Stormwater Management Team  
 SWC = Stormwater Coordinator  
 PIO = Public Information Office  
 CE = City Engineer

## Construction Site Runoff Control

The City of Cape Girardeau continues to enforce the Stormwater Ordinance for control of construction site runoff to protect area waterways from pollutants associated with development or re-development sites. The Stormwater Ordinance requires developers to meet with City staff prior to commencing site design for a development or re-development site. The Stormwater Ordinance requires developers to provide a Storm Water Pollution Prevention Plan for construction sites of any size. This SWPPP will include BMP's for erosion and sediment control on construction sites, as well as other potential sources of pollution. The City has provisions for review of all site development plans prior to issuance of a building or grading permit. The Stormwater Ordinance gives the City staff authority to inspect and enforce the regulations for control of pollutant sources, most notably erosion and sediment controls, at a construction site. To accomplish the goals set forth in this SWMP for Construction Site Runoff Control the City has set the following objectives for this Measure:

- Review the Stormwater Ordinance annually and update as needed
- Utilize a checklist for Site Plan Review of development or grading plans.
- Utilize procedures and checklists for inspection of construction sites
- Utilize enforcement protocols to encourage / ensure compliance with required erosion and sediment controls, and other pollutant controls
- Provide a list of common pollutants
- Set measurable goals for the Practices in the SWMP
- Evaluate the effectiveness of the BMP's.

The BMP's selected for the Construction Site Runoff Control Measure are listed below. See the chart on page 9A for the list of BMP's, measurable goals, responsible party, and implementation schedule.

- Review Stormwater Ordinance Annually And Update As Necessary
- Site Plan Review With A Focus On Water Quality Issues
- Site Inspection And Ordinance Enforcement Procedures
- Maintain Procedures To Receive Information From The Public

**Construction Site Runoff Controls**

**DRAFT**

Best Management Practices		Implementation Schedule								
BMP	Description	Status	Responsible Party	Measureable Goals	13-14	14-15	15-16	16-17	17-18	
1	Stormwater Ordinance	Periodically review the stormwater ordinance for necessary amendments	Continuing Effort	SWC, CE SWMT	Review ordinance annually	x	x	x	x	x
2	Pre-development meetings	Have meetings with developers / designers to discuss site layout with specific attention to sediment & erosion controls, and other pollutant controls	Continuing Effort	SWC, CE	Have 40 meetings each year	x	x	x	x	x
3	Site Plan Review	Have all proposed developments provide a site plan and SWPPP. This plan to be reviewed by SWC and City Engineering office.	Continuing Effort	SWC, CE	Review 40 site plans	x	x	x	x	x
4	Site Inspections	Continue to use procedures and checklists to perform and document construction site inspections.	Continuing Effort	SWC	Perform 200 site inspections by SWC, Inspections Division staff, and Engineering Division staff	x	x	x	x	x
5	Public Input	Continue receive and process calls from citizens. The calls could be complaints, suggestions, or observations. Stormwater Division staff responds to the calls	Continuing Effort	SWMT, SWC	Respond to 24 calls in a timely manner, according to the nature of the call.	x	x	x	x	x

**Responsible Party Notation**  
 SWMT = Stormwater Management Team  
 SWC = Stormwater Coordinator  
 PIO = Public Information Office  
 CE = City Engineer

## Post Construction Runoff Control

The City of Cape Girardeau continues to promote the use of structural and non-structural design and management practices to reduce the post construction runoff of pollutants into the MS4. At present the City ordinances require developers to:

- Hold pre-design / pre-development meetings with the City Staff to consider opportunities for water quality BMP's to be utilized in the site design.
- Develop effective flood control detention methods that include considerations for water quality.
- Develop an effective means of capturing / treating the runoff from the 1 inch rain event (90<sup>th</sup> percentile rain event).
- Provide as part of the design package a detailed SWPPP for the development site, which is to include information on the planned erosion & sediment controls, pollution prevention practices, and future operation and maintenance practices for long term onsite water quality BMP's.
- Preserve a 50 foot buffer along stream banks.
- Make graded slopes no steeper than 3:1.
- Incorporate use of landscaping areas for stormwater quality improvement
- Encourage use of Low Impact Development practices and design elements

To accomplish the goals set forth in this SWMP for Post Construction Runoff Control the City has set the objectives listed below for this Measure.

- Evaluate the recommended structural and non-structural BMP's and revise as necessary
- Evaluate local ordinances & policies to insure implementation of Post Construction Runoff Controls and amend as necessary
- Ensure adequate and proper long-term operation and maintenance of onsite water quality and pollution controls
- Set measurable goals for the Practices in the SWMP
- Evaluate the effectiveness of the BMP's.

The BMP's selected for the Post Construction Runoff Control Measure are listed below. See the chart on page 11A for the list of BMP's, measurable goals, responsible party, and implementation schedule.

- Identify Structural And Non-Structural BMP's For Long Term Control Of Water Runoff And Pollutants From Development And Re-Development Sites
- Maintain A Catalog Of Recommended BMP's

- Utilize Early Discussion And Review Procedures For Incorporating Water Quality Elements Into Site Designs
- Maintain 50 Foot Buffer Along Stream Banks
- Maintain Development Controls Within Floodplain Areas
- Control Direct Connections Of Onsite Runoff Water To The Public Conveyance System
- Capture / Treat The One Inch Rain Event Runoff
- Control Utility Extensions Along Stream Banks
- Develop Database Of Post Construction BMP's For O&M Purposes
- Consider Variances For Parking Space Requirements Where Appropriate
- Continue To Responsibly Enforce Procedures And Implementation Of Water Quality Improvement Elements In The Design, Construction, And Operations Phases Of A Development

Post Construction Runoff Controls

DRAFT

Best Management Practices			Implementation schedule						
BMP	Description	Status	Responsible Party	Measureable Goals	13-14	14-15	15-16	16-17	17-18
1	List of Post Construction Runoff Control BMP's	Continuing Effort	SWC, SWMT	Complete the preparation of the BMP list and update as necessary	x	x	x	x	x
2	Design criteria for the recommended BMP's	Continuing Effort	SWC, CE	Prepare a set of BMP design criteria for use by designers / contractors. Update annually	x	x	x	x	x
3	SWPPP review	Continuing Effort	SWC, CE		x	x	x	x	x
3A	Stream Bank Buffer Zone	Continuing Effort	SWC, CE		x	x	x	x	x
3B	Disconnect Onsite Storm Water Flows	Continuing Effort	SWC, CE		x	x	x	x	x
3C	90th percentile rain event control	Continuing Effort	SWC, CE		x	x	x	x	x
3D	Post Construction BMP O&M	Continuing Effort	SWC, CE	Check 20% of database elements each year	x	x	x	x	x
3E	Flood control detention	Continuing Effort	SWC, CE		x	x	x	x	x
3F	Use of landscape areas for storm water quality improvement	Continuing Effort	SWC, CE		x	x	x	x	x
3G	Maximum graded slope 3:1	Continuing Effort	SWC, CE		x	x	x	x	x
4	Pre-development meetings	Continuing Effort	SWC, CE	Have 40 meetings each year	x	x	x	x	x
5	Flood Plain Development Controls	Continuing Effort	SWC, CE		x	x	x	x	x
6	Utility extension controls	Continuing Effort	SWC, CE	Maintain control of utility extensions along stream banks. When such extension is necessary design to minimize impact to vegetation and stream.	x	x	x	x	x
7	Post Construction BMP database	Continuing Effort	SWC, CE	Update database quarterly	x	x	x	x	x
8	Parking Space Variances	Continuing Effort	SWC, CE	Review parking space requirements for specific developments to see if variance may be justified to lower the minimum number of required spaces	x	x	x	x	x
9	LID design practices & elements	Continuing Effort	SWC, CE	Encourage us of Low Impact Development design practices and elements	x	x	x	x	x

**Responsible Party Notation**

SWMT = Stormwater Management Team

SWC = Stormwater Coordinator

PIO = Public Information Office

CE = City Engineer

## Illicit Discharge Detection and Elimination

The City of Cape Girardeau continues efforts to reduce the occurrence of illicit discharges. To accomplish the goals set forth in this SWMP for Illicit Discharge Detection and Elimination the City has set the following objectives for this Measure:

- Coordinate Periodic Household Hazardous Waste Collection Events
- Storm Drain Inlet Marking With “Do Not Dump...Goes To River “ Message
- Maintain GIS Information Of Identified Outfalls For Outfall Reconnaissance Inventory (ORI) Purposes
- Perform Periodic Inspection Of Outfalls for Outfall Reconnaissance Inventory Purposes
- Maintain Stormwater System Information On The GIS Mapping System
- Continue Employee Training For Illicit Discharges
- Evaluate City Codes Related To Illicit Discharges And Pollution Control And Revise As Necessary

The BMP's selected for the Illicit Discharge Detection and Elimination Measure are listed below. See the chart on page 12A for the list of BMP's, measurable goals, responsible party, and implementation schedule.

- Inform Residents Through Water Quality Notes On Utility Bills
- Perform Periodic Inspections For Illicit Discharges
- Continue Training For City Staff In Public Works, Engineering, Parks, Airport, And Building Inspections Regarding Illicit Discharges
- Expand Outfall Inventory For ORI
- Perform Dry Weather Stream Inspections For ORI Purposes
- Confirm City Emergency Response Staff Are Trained For Vehicle Accident Liquid Waste Containment Or Capture
- Inspect Marked Storm Drains And Have Remarked As Necessary
- Evaluate IDDE Program Effectiveness
- Identify and Keep Updated List of Common Pollutants

**Illicit Discharge Detection & Elimination**

**DRAFT**

Best Management Practices		Description	Status	Responsible Party	Measureable Goals	Implementation Schedule				
BMP						13-14	14-15	15-16	16-17	17-18
1	GIS Data Entry for Stormwater System	Maintain and update graphical and data information for stormwater system components in the GIS mapping system.	Continuing Effort	SWC, CE	Continue entry of new system information as additions or changes are made	x	x	x	x	x
2	Storm Drain Stenciling / Marking	Have volunteers and City crews check markings for "Do No Dump . . . Drains To River" message on drain inlets	Continuing Effort	SWC	check 20 inlets each year	x	x	x	x	x
3	Household Hazardous Waste Collection	Periodically host household hazardous waste collection effort	Continuing Effort	SWC, PIO, CE	Hold an event as grants allow		x			x
4	Utility Bill Notes	Print water quality related notes on the water bill cards.	Continuing Effort	SWC	Have note on water bill cards for four months each year	x	x	x	x	x
5	Expand Outfall Inventory for ORI purposes	Define, identify, and map stormwater outfalls for Outfall Reconnaissance Inventory purposes		SWC, GIS, CE		x	x	x	x	x
6	Stream Inspections	Coordinate and perform stream inspections for Outfall Reconnaissance Inventory database	Continuing Effort	SWC,SWMT	perform stream inspection 3 years over permit cycle	x		x		x
7	Ordinance Enforcement	Continue enforcement activities when illicit discharges are found. Coordinate with Abatement Officer for issuing summons and court action when necessary	Continuing Effort	SWC	Track occurrences of illicit discharges and cite offending party if found.	x	x	x	x	x
8	Employee Education	Provide training to City employees for Illicit Discharge issues	Continuing Effort	SWC, SWMT	Have training for 5 divisions 2 times each year	x	x	x	x	x
9	Training for liquid waste handling related to traffic accidents	Continue training for employees in Fire Department, Police Department, Street Division, Airport, and Stormwater Division for proper actions to control and capture liquid waste at accident scenes.	Continuing Effort	SWC, SWMT	One training session for each division per year	x	x	x	x	x
10	Identify Pollutant Types	Identify common pollutants and develop procedures for control of them.	Continuing Effort	SWMT, SWC	Update list every other year	x		x		x

**Responsible Party Notation**  
 SWMT = Stormwater Management Team  
 SWC = Stormwater Coordinator  
 PIO = Public Information Office  
 CE = City Engineer

## Pollution Prevention / Good Housekeeping

The City of Cape Girardeau continues a thorough program of self assessment for pollution prevention through good housekeeping practices. To accomplish the goals set forth in this SWMP for Pollution Prevention & Good Housekeeping the City will continue the numerous established procedures. To accomplish the goals set forth in this SWMP for Pollution Prevention & Good Housekeeping the City has set the following objectives for this Measure:

- Maintain and update SPCC plans
- Maintain and update Standard Operating Procedures in each work area
- Maintain and update / screen MSDS information for each work area
- Continue use of calibrated meters for salt spreading
- Conduct periodic inspections of work areas
- Continue periodic training of City staff for Pollution Prevention
- Perform periodic self assessment to evaluate ways to improve pollution prevention efforts

The BMP's selected for the Pollution Prevention & Good Housekeeping Measure are listed below. See the chart on page 13A for the list of BMP's, measurable goals, responsible party, and implementation schedule.

### Continue Training For Maintenance Staff for Pollution Prevention

- Develop Periodic Training Schedule For Maintenance Staff
- Maintain in good condition the Computerized Metering Devices For Ice Control Spreader Boxes
- Maintain in good condition the salt dome storage structure
- Continue use of brine and calcium chloride for snow and ice control
- Continue Scheduled Cleaning of Storm Drains
- Continue Used Motor Oil Reuse Program
- Continue practice of marking drain inlets built by city crews with the "Do Not Dump" message
- Keep and update Standard Operating Procedures for pollution prevention for each work area
- Maintain training and certification for spraying for weed abatement
- Continue use of larvicide for vector control
- Maintain and update SPCC plans
- Maintain and update / screen MSDS information for each work area
- Continue Street Sweeping operations
- Continue solid waste recycling program
- Continue battery recycling program
- Continue automobile tire recycling program
- Continue program of land application for wastewater sludge
- Continue program for household appliance disposal
- Maintain the vehicle wash bay in good condition
- Continue city wide leaf collection program

**Pollution Prevention & Good Housekeeping**

**DRAFT**

Best Management Practices		Implementation Schedule								
BMP	Description	Status	Responsible Party	Measureable Goals	13-14	14-15	15-16	16-17	17-18	
1	Training for City Staff	Continuing Effort	SWC, SWMT	Have training 2 times each year for Fleet Maint, Parks, Stormwater, Sewer, and Solid Waste	x	x	x	x	x	
2	Computerized Metering Equipment for Ice Control	Continuing Effort	SWC	Keep computerized equipment used to spread chemicals for ice control in good operating condition and properly calibrated	x	x	x	x	x	
3	Salt Storage	Continuing Effort	SWC	Keep salt storage dome in good condition.	x	x	x	x	x	
4	Use brine and calcium chloride for snow and ice control	Continuing Effort	SWC	use brine and calcium chloride for snow and ice control instead of rock salt when feasible	x	x	x	x	x	
5	Systematic Cleaning of Storm Drains	Continuing Effort	SWC	Continue program of scheduled cleaning for storm drains around the City	x	x	x	x	x	
6	Continue Used Oil Reuse Program	Continuing Effort	SWC, SWMT	Continue collection and use of used oil for heaters in maintenance shop area	x	x	x	x	x	
7	Standard Operating Procedures	Continuing Effort	SWC, SWMT	Keep and update Standard Operating Procedures for pollution prevention in each work area	x	x	x	x	x	
8	Weed Abatement certification	Continuing Effort	SWC, SWMT	Continue to have weed abatement staff trained to maintain certifications	x	x	x	x	x	
9	Vector Control (mosquitoes)	Continuing Effort	SWC, SWMT	Continue to use larvicide for vectro control	x	x	x	x	x	
10	SPCC Plans	Continuing Effort	SWC, SWMT	Continue to keep SPCC plans updated	x	x	x	x	x	
11	MSDS Information	Continuing Effort	SWC, SWMT	Continue to keep MSDS informatin updated and screened	x	x	x	x	x	
12	Street Sweeping	Continuing Effort	SWC, SWMT	Continue street sweeping operations	x	x	x	x	x	
13	Soild Waste Recycling Program	Continuing Effort	SWC, SWMT	Continue soild waste recycling program	x	x	x	x	x	
14	Battery Recycling Program	Continuing Effort	SWC, SWMT	Continue equipement and vehicle battery recycling program	x	x	x	x	x	
15	Automobile Tire Recycling Program	Continuing Effort	SWC, SWMT	Continue tire recycling program	x	x	x	x	x	
16	Wastewater Sludge Application program	Continuing Effort	SWC, SWMT	Continue program to land apply wastewater process sludge	x	x	x	x	x	
17	Household Appliance Disposal	Continuing Effort	SWC, SWMT	Continue program to accept and dispose of household appliances	x	x	x	x	x	
18	Vehicle Wash Bay	Continuing Effort	SWC, SWMT	Keep vehicle wash bay in good condition for washing machinery and equipment	x	x	x	x	x	
19	Citywide Leaf Collection Program	Continuing Effort	SWC, SWMT	Continue the citywide leaf collectin and disposal program	x	x	x	x	x	

# Appendix 1

## MS4 Stormwater Team 2013

Stan Polivick	Stormwater Coordinator
Steve Cook	Assistant Director Public Works
Stacey Beasley	Stormwater Maintenance Supervisor
Casey Brunke	City Engineer
James Price	GIS Division
Brock Davis	Division Manager Parks & Recreation
Tim Morgan	Inspection Services Director
Nicolette Brennan	Public Information Office
Ryan Shrimplin	Planner
Bruce Loy	Airport Manager
Anna Kangas	Plan Review Specialist

# Appendix 2

## City Code Chapters

Chapter 22 Nuisance Abatement

Chapter 23 Storm Water

Chapter 25 Development Code

Chapter 29 Sewer Ordinance