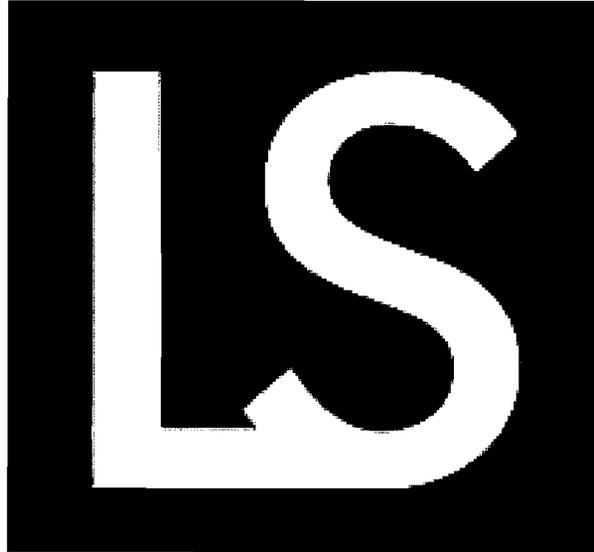


CITY OF LEE'S SUMMIT, MISSOURI



STORMWATER MANAGEMENT PROGRAM

MS4 Permit #MOR040016

**Prepared By;
Department of Public Works**

Executive Summary:

The City of Lee's Summit is at the top of the watershed of 11 watersheds within the corporate boundaries. Nine of these watersheds ultimately flow into the Little Blue River. Therefore, runoff from Lee's Summit impacts adjacent corporate jurisdictions and water bodies, while receiving very little runoff from adjacent communities. There are also six (6) reservoirs in or directly adjacent to Lee's Summit. Water quality impacts are readily discernable within the corporate boundaries. The environmental health of these reservoirs has direct impact on Lee's Summit citizens and as such these resources must be tended wisely. Lee's Summit is unique in that six (6) of the eleven (11) sub-watersheds discharge into local lakes prior to leaving the corporate boundaries. These lakes act as water quality filters in the fact that micro-organisms living in them attack pollutants which would otherwise be discharged from the corporate limits.

The City of Lee's Summit has implemented many of the facets associated with the National Pollutant Discharge Elimination System (NPDES) Phase II permit currently in place. The City of Lee's Summit is refining the NPDES program into full compliance with an executable plan to improve stormwater quality and manage quantity. The current plan includes using bonds to correct some system deficiencies. The City is also evaluating formation of a stormwater utility to support on-going maintenance and regulatory requirements.

The City of Lee's Summit City Council approved an ordinance "Stormwater Discharge Control Regulations" in 2011. This ordinance is thorough in defining allowed and illicit discharges as well as measures to mitigate illicit discharges which may occur.

Lee's Summit Public Works Department was re-accredited by the American Public Works Association, APWA, in June of 2012. City staff revisited the standard operating procedures and updated same as required concerning MS4 duties.

The voters of Lee's Summit passed a \$15.4 million general obligation bond issue in 2007 to correct structural flooding problems. Many gray and several "green solutions" to flooding concerns have been constructed and there are several more "green solutions" which will be constructed within the next few years.

Lee's Summit has large tracts of undeveloped land within its corporate boundaries. Approximately 6 ½ square miles, (4,180 acres), are owned or controlled by Property Reserve Incorporated, (PRI). PRI has chosen not to develop this property at this point in time. Much of this undeveloped land lies at the top of numerous watersheds. Therefore, the City of Lee's Summit has a unique opportunity to control any future development wisely within these undeveloped areas.

General Information on the Permittee:

Name of the Permittee: City of Lee's Summit, Missouri
Type of Entity: City – Municipality
Total Area: 65.87 Square miles
Mailing Address: 220 SE Green Street, Lee's Summit, MO 64063
Primary Contact: Charles E. Owsley, PE, Public Works Director
Phone Number: 816-969-1800
Secondary Contact: T. Scott Edgar, PE, Senior Staff Engineer
Phone Number: 816-969-1800

Information on the Municipal Separate Storm Sewer System:

MS4 System Lee's Summit, Missouri
Location: _____
Name of City of Lee's Summit, Missouri
Organization: _____
County(ies) Permittee Resides: Cass County and Jackson County

There are no major receiving waters within the permitted area as defined by 10 CSR 20-7.01.

There are some waters within the corporate limits which have been listed on the MDNR impaired waters list (303d) as required by the Clean Water Act, (CWA). These waters will be assigned a Total Maximum Daily Load, (TMDL) of that pollutant and specific BMP's may be required to minimize specific additional pollutants. The following table indicates the impaired waterbodies:

Waterbody	Pollutant	Source	Impact Miles/acres	TMDL implementation
Big Creek	Escherichia coli	Rural NPS	70.5 miles	2016
Longview Lake	Mercury	Atmospheric deposition	930 acres	2015
Little Blue River	Escherichia coli	Urban runoff/ storm sewers	35.1 miles	2014

Information on Adjacent Waterways:

The Permittee is within 100 feet of: Numerous small streams, lakes, and reservoirs
The Permittee is within 100 feet of waters classified as major reservoirs:

Various locations within the Permittee's area are defined as wetland. The Permittee has received several CWA, Section 404 permits from the US Army Corps of Engineers for specific jurisdictional wetland impacts on projects affecting same.

Stormwater from Lee's Summit does not discharge to a sinkhole.

Endangered Species:

County	Species	Status	Habitat
Cass	Mead's Milkweed (<i>Asclepias meadii</i>)	Threatened	Virgin prairies
Jackson	Western prairie fringed orchid (<i>Plantantera praeclara</i>)	Threatened	Wet prairies & sedge meadows
Jackson & Cass	Indiana Bat (<i>Myotis sodalis</i>)	Endangered	Hibernacula = Caves and mines, Maternity and foraging habitat = small stream corridors with well developed riparian woods: upland forests

The permittee has met eligibility criteria for protection of critical habitats.

Historic Properties:

There are numerous properties within the jurisdiction of Lee's Summit which are listed on the national historic register. They can be located at the following site:
<http://www.lees-summit.mo.us/hpc/hpcnationalregister.htm>

There are also properties within the jurisdiction of Lee's Summit which are listed on the local historic register. They can be located at the following site:
<http://www.lees-summit.mo.us/hpc/hpclocalregister.htm>

The permittee has met eligibility criteria for protection of historic properties.

MCM #1: Public Education and Outreach on Stormwater Impacts

4.2.1.1 *Permit Requirements*

Lee's Summit continues to implement a public education program by distributing educational materials to the community and conducting outreach activities. The focus of these efforts is to educate the public with activities that highlight the impact of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff. Some examples of this include the following activities:

- Cooperation with the school district to present watershed and environmental stewardship presentations and interactive activities with various student groups including a class from Summit Technology Academy 4 hours per week from February until May since 2002.
- Hosting a yearly environmental fair
- Airing environmental spots on our local public access TV station
- Distribution of environmental stewardship information produced by City of Lee's Summit, Mid-America Regional Council, (MARC), and other environmental entities.
- Each year several specific pollutants are emphasized by the regional MARC campaign. For example, fecal coliform, and nutrients were the pollutants of emphasis last year
- Hosting a yearly equipment show with an environmental booth.

The MARC environmental page indicates regional events and yearly theme for environmental water quality awareness and may be found at:

<http://www.marc.org/Environment/E-news/>

4.2.1.1.1. *Target Pollutant sources*

As more waters within the jurisdiction of Lee's Summit have been added to the 303D list of impaired waters, the focus will be on the specific pollutants as dictated by the TMDL's scheduled for issuance in future years.

The following is a list of potential sources of pollutants
(1 = Major impact, 2 = Minor impact, 3 = Not an impact)

- | | |
|------------|--|
| <u>1</u> | Construction activities (sediment, construction chemicals and debris, solid and sanitary wastes) |
| <u>1</u> | Over application of fertilizer, herbicides, pesticides |
| <u>1.5</u> | Improper disposal of paint and household hazardous chemicals |
| <u>1.5</u> | Pet waste contamination |
| <u>1.5</u> | Improper disposal of waste oil, grease, and gasoline disposal |
| <u>1</u> | Trash, debris, and illegal dumping |

2	Detergents washed into drains
2	Snow removal (salt, sand and snow disposal)
2	Sanitary sewer overflows
2	Infiltration from cracked sanitary sewers into receiving waters
2	Failing septic systems
2	Sewer service (grey water) connections to storm drainage system
2	Foundation drains connected to storm drainage system
2	Downspouts connected to storm drainage system
2	Lake or water body used for motor boating
2	Spills from roadway accidents or fires
1.5	Connected impervious areas covering large acreages (such as malls, institutions with large parking areas)
1	Stream bank erosion
3	Waste transfer station

The above information is based on Staff's perceptions and reported problems.

4.2.1.1.2 *Target Audience*

During the development of the education program, Lee's Summit identified the sources of stormwater pollutants that needed to be reduced to improve overall water quality. The target audiences were selected because changing their behavior would have a significant stormwater quality impact on the target pollutants. The target audiences for the public education program are:

- Citizens (Homeowners)
- Development Community
- Home Builders / Contractors
- Lawn Service Companies
- Restaurant Owners and Operators
- Car Wash Owners and Operators
- Service Station and Oil/Lube Business Owners and operators
- Outdoor Sportsmen and Recreational Facility Users
- Business Owners
- Students & Children
- Seniors
- Elected Officials
- City Staff

Lee's Summit's outreach strategy is to implement a variety of methods to reach a number of different target audiences multiple times. To change behavior, repetition is important.

4.2.1.1.3 & 4 *Plan to Inform*

Lee's Summit developed a stormwater public education and outreach program in cooperation with other jurisdictions in the region. In addition, the City of

Lee's Summit solicits public input into program elements. A report of recommendations from the Citizen's Stormwater Task Force is located on the city's website. It contains, among other things, recommendations concerning citizen education and involvement in the solution to stormwater quality and quantity concerns.

The public is engaged through various media and public gatherings. Some examples include the city's website, City Council open forums in each district, council presentations on local access TV channel, presentations to civic groups, and through brochures and mailings to citizens.

The public education program is designed to impact the most citizens possible. The MARC TV ads are shown during local news in the spring. It has been shown that local news is typically watched without fast forwarding thru commercials as DVR's are changing the viewing habits of most citizens.

Lee's Summit informs business, civic groups, individuals, and households in the community about the steps they can take to reduce stormwater pollution with the following programs:

Information on Website
Government Channel
Display Posters on Public Transportation
Maintain a Library of Stormwater Educational Materials
Lawn and Garden Activities
Hazardous Waste Disposal
Pet Waste Management
Trash Management
Vehicle Maintenance and Washing
Illicit Discharges
Display Educational Materials at Community Events

*The topics for the brochures will be dependent on the topics in Mid-America Regional Council's (MARC) seasonal campaign for public educational. Additional topics will be included in the program, depending on the immediate needs of the surrounding communities. Detailed information about each seasonal campaign will be included in Lee's Summit's annual report.

The city web site has become an effective and cost effective means of providing public information and soliciting public input. The City's government channel is another cost effective way to educate the public on stormwater pollution prevention practices. Current slides include proper disposal of hazardous waste and pet waste management. In addition, Lee's Summit informs individuals and groups on how to become involved in the stormwater program by providing those instructions in all materials distributed to the public.

This is described in more detail in Public Involvement/Participation. Articles and commentaries in local newspapers of late have raised public awareness of stormwater pollution issues.

4.2.1.1.5 *Outreach Strategy*

The current strategy is to partner with other governmental and non-governmental entities to execute the public outreach strategy. The idea is to share information and resources. The City works closely with Mid-America Regional Council which hosts environmental awareness and education programs for a wide range of topics presented to public and private groups. Mid-America Regional Council is the metropolitan planning organization which serves multiple jurisdictions in the Kansas City metropolitan area preparing and distributing environmental and water quality information to the regions population.

<http://www.marc.org/Environment/Water/publications.htm>

The number of people reached by the public education and outreach strategy is approximately 15,000 per year. There were 1559 page views of the LS website environment page during the month of April 2013. There were also 145 page views for the volunteer page and 101 page views for the stormwater page in April 2013.

<http://cityofls.net/Environment.aspx>

The position responsible for overall management and implementation of the permittee's stormwater public education and outreach program is the Public Works Director. Others will be involved in the execution of each of the individual activities in the programs, but most of the activities will be delegated through the Public Works Department.

The Public Works Department currently has the following full time positions which implement and/or oversee portions of the Phase II permit requirements.
Environmental Coordinator,
Public Works Inspectors
Senior Staff Engineer

4.2.1.1.5 *Evaluate Success*

From a regional perspective success can be measured by gauging citizen knowledge and behaviors concerning waste minimization and environmental restoration. An environmental awareness survey sponsored by MARC of the Kansa City region indicated a higher level of environmental awareness than the last survey. The survey can be found at the following site.

<http://www.marc.org/Environment/Water/surveys.htm>

From a local perspective success will be measured by continuing to offer yearly opportunities for education and interaction with City staff concerning water quality and environmental concerns.

MCM #2: Public Involvement and Participation

4.2.2.1. *Permit Requirements*

Lee's Summit complies with State and Local public notice requirements by soliciting public involvement and participation in program elements. All public meeting notifications are currently posted on the City of Lee's Summit web site, on public bulletin boards in City Hall, and in press releases to local media.

4.2.2.1.1 *Public Involvement Process*

The City of Lee's Summit solicits public input into the stormwater program through various sources some of which are highlighted below.

- City staff has periodically met with concerned civic groups about specific water quality issues in Prairie Lee Lake, Raintree Lake, and Lakewood at their request. These civic groups are extremely concerned with water quality and how it can be improved as it has direct economic impacts to their property.
- The City of Lee's Summit has several publications and reports concerning public driven activities and the findings resulting from them :
 - Sustainability plan
 - Greenway master plan
 - HHW customer service analyses
 - Stormwater task force final recommendations
- These documents and others may be found at:
<http://cityofls.net/Environment/Submenu/Publications-and-Reports.aspx>

4.2.2.1.2 *Target Audience*

The target audiences for the public involvement program are:

1. Citizens (Homeowners)
2. Watershed Organizations
3. Environmental and Conservation Groups
4. Local Elected Officials
5. Local Government Agencies
6. Contractors, Home Builders, and Developers
7. Youth
8. Teachers
9. Seniors
10. Homeowners Associations

4.2.2.1.3 *Types of Public Involvement*

Lee's Summit involves the public through the activities described below:

Ballot Issues
Hold Public Meetings
Adopt –A - Street
Adopt –A – Stream
Stream Team events
Sweep the Summit clean up events
Arbor Day

There are also several citizen groups which have contacted the public to raise awareness of stormwater and environmental concerns and the correction of same. These include: Safer, Greener Lee's Summit, Friend's of Lee's Summit, Stormwater Task Force, Lee's Summit Chapter of Choose Environmental Excellence and Lee's Summit Economic Development Council.

4.2.2.1.3.1 *Stormwater Management panel*

Lee's Summit staff coordinates and/or participates in several environmental focus groups such as, the Citizens Stormwater Task Force endorsed by City Council to provide citizen input into the solution of numerous stormwater problems throughout the city.

4.2.2.1.3.2 *Public Hearings*

Regular City Council meetings are open to the public and provide time on the agenda for public comments on any subject.

4.2.2.1.3.3 & 4 *Citizen Volunteers*

Lee's Summit hosts stream team cleanup events in the spring and fall at various locations throughout the City. For the spring of 2013 stream team event 116 volunteers were on hand for the two hour cleanup. We have 40+ adopt-a street volunteer groups and are currently adding adopt-a-stream groups.

4.2.2.1.4 *Involve Public*

Lee's Summit actively involves the public in the development and implementation of the stormwater program through a number of different methods including input from LS360, a citizen driven long range planning process, numerous civic groups, and citizens. The link to the report developed by the LS360 citizen task force groups is located:

<http://cityofls.net/City-of-Lees-Summit/Submenu/Publications-and-Reports.aspx>

The City of Lee's Summit is currently in the implementation phase of the LS360 strategic plan. The primary *Key Performance Areas, KPA*, which emphasizes environmental issues is *Quality of Life*.

Although not sponsored by the City, there are several lake clean up events at various lake communities annually. Council members and staff have participated in these events in the past.

Council formed the Stormwater Task Force specifically to gather input from the public concerning direction and implementation of stormwater corrective measures taken within the City of Lee's Summit. This approach continues in presenting the public with ballot issues concerning stormwater and environmental initiatives. Staff receives public comment almost daily concerning stormwater management ideas and/or requests from impacted citizens and/or businesses.

The position responsible for the overall management and implementation of the permittee's stormwater public involvement/participation program is the Public Works Director. Others will be involved in the execution of each of the individual activities in the programs, but most of the activities will be delegated through the Public Works Department.

4.2.2.1.5

Success could be measured by the amount of contacts logged concerning stormwater issues. The department recently instituted a commitment to track all contacts to Public Works through Cityworks software that allows staff to keep up with multiple contacts and demands from multiple sources.

MCM #3: Illicit Discharge Detection and Elimination

4.2.3.1 *Permit Requirement.*

Lee's Summit has implemented and enforced the detection and elimination of illicit discharges (as defined in 10 CSR 20-6.200) into the corporate boundaries. The "*Stormwater Discharge Control Regulation*" (Chapter 34) may be found at the following address:

<http://library.municode.com/index.aspx?clientId=14757&stateId=25&stateName=Missouri>

4.2.3.1.1 *MS4 Discharge Map*

Lee's Summit has developed a storm sewer system map within the Geographic Information System, GIS. This GIS database shows the location of all outfalls. The names and location of all named waters of the State that receive discharges from those outfalls is indicated in the GIS database.

4.2.3.1.2 *Stormwater Ordinance*

The City of Lee's Summit ordinance 7032, "*Stormwater Discharge Control Regulation*", prohibits illicit discharges per NPDES permit requirements in the jurisdictional boundaries.

4.2.3.1.3 *Illicit discharge detection*

City staff and/or citizens alert the Public Works Department concerning potential illicit discharges. The site is investigated and brought to the attention of the property owner for mitigation. This is normally all that is required for remedial action to occur. Spills generally occur as a result of washing and cleanup activities on private land which discharges to the public system. If the property owner does not mitigate voluntarily, there are measures to mitigate and back charge the owner for expenses incurred.

The City of Lee's Summit Public Works Department sets a goal of yearly inspections of 10% of all storm sewer boxes and discharge points. These visual inspections generate approximately five (2) work orders per day.

These work orders are implemented by our stormwater crew which consists of a staff of three (3) full time personnel.

Outfall/Manhole Inspection Program
Visual Inspection
Public Reporting

The City of Lee's Summit has an on-call environmental consulting firm to advise in matters of compliance and remediation of spills and/or pollutant sources discovered.

The fire department hazardous waste team responds to emergency spills and containment issues. Spill absorbent materials are available at all city refueling stations throughout the city.

4.2.3.1.3.1

City staff uses complete system maps to trace pollutant sources. Lee's Summit has developed a storm sewer map showing the location of regional outfalls and the names and location of all named receiving waters within the corporate boundaries

The City of Lee's Summit Information Technology ,(IT) department use the following sources to compile and update the maps:

- As-built drawings
- Piping Schematic Reviews
- Aerial Photography
- Sewer Maintenance Records
- Survey records

The City of Lee's Summit also has a GIS layer of all known public and private storm sewer piping within the corporate boundaries. It can be viewed at: <http://cityofls.net/City-of-Lees-Summit/Maps-and-GIS-Data/GIS-Data-Downloads.aspx>

4.2.3.1.3.5 *Inform Public Employees*

Lee's Summit informs public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste using the following methods:

Training for City Staff
Distribute Literature
Post Signs on streams
Recycling Program for Household Hazardous Waste

Lee's Summit has and will continue to inform public employees, business and the general public of hazards associated with illegal discharges and improper disposal of waste through the following methods:

Procedural Training for City Staff
Conduct Workshops

Distribute Literature
Post Signs
Recycling Program for Household Hazardous Waste
Storm Drain Stenciling
Illegal Dumping Hotline

Where applicable the information distributed through these means will coordinate with the information distributed in the Public Education minimum control measure (e.g., consistent/coordinated messages in literature).

4.2.3.1.6 *Enforcement Authority*

The Public Works Director and the Director of Codes Administration are responsible for overall management and implementation of Lee’s Summit’s stormwater illicit discharge detection and elimination program. Others will be involved in the execution of each of the individual activities in the programs, but most of the activities will be delegated through the Public Works Department.

The Stormwater Discharge Control Regulations ordinance 7032 allows inspection and enforcement authority for industries and commercial enterprises with the jurisdictional limits of the City of Lee’s Summit.

Evaluate Success

Lee’s Summit will evaluate the success of the program based on the number of illicit connections found and eliminated.

MCM #4: Construction Site Stormwater Runoff Control

4.2.4.1 Permit Requirements

Lee's Summit has in place a program to reduce sediment pollution in stormwater runoff from construction sites greater than 2000 square feet. Lee's Summit will continue to implement and enforce this program. Lee's Summit requires construction site operators to implement effective erosion and sediment control (ESC) measures. Lee's Summit's Design and Construction, (D&C), Manual (Ordinance no. 5813) authorizes actions to enforce compliance. The Design and Construction Manual generally consists of Kansas City Metro Chapter of the American Public Works Association, (APWA), specifications concerning allowable design methodologies and construction practices. However, there are Lee's Summit specific criteria where applicable to fit specific needs and challenges within Lee's Summit. The D&C manual is regularly updated and is available on the web site through the following address:

<http://cityofls.net/Public-Works/Submenu/Publications-and-Reports.aspx>

4.2.4.1.1 Regulatory Ordinance

Within the D&C manual, the General Provisions (Section 1000) references enforcement options available. Section 5100 references design options available for erosion and sediment control and section 2150 outlines allowable construction methodologies for erosion and sediment control.

The City of Lee's Summit is considering adopting portions of the MARC and KCAPWA "Manual of Best Management Practices for Stormwater Quality".

4.2.1.2 Construction site waste

Lee's Summit Public Works Department employs full time construction inspectors for development and capital projects who make a minimum of daily trips to all active land disturbance projects. Construction site operators are required to control wastes that may cause adverse impacts to water quality such as:

- Discarded Building Materials
- Concrete Truck Washout
- Sediment
- Litter or Trash

4.2.4.1.3 Pre-construction Plan Review

Lee's Summit has implemented procedures for multi-departmental site plan review, which incorporate consideration of potential water quality impacts. The public has opportunity to speak concerning significant proposed projects in City

Council sessions and Planning Commission meetings and provide input to staff through the web, e-mails, or phone.

4.2.1.1.4 *Review Considerations*

Lee's Summit has procedures in place for site plan review, including the review of stormwater pollution prevention plans, (SWPPP), which look at the potential water quality impacts. In addition a stormwater master plan is required on all engineered development projects. Lee's Summit has implemented procedures and rationale for those sites that do not require site plan review. All plans are reviewed by multiple departments. Significant development projects are approved by the Planning Commission and City Council prior to issuance of construction permits. The public has opportunity to speak concerning significant projects proposed in City Council sessions and/or the Planning Commission meetings as well as staff contacts thru various media.

4.2.4.1.5 *Enforcement Measures*

Lee's Summit ensures compliance with the ordinance by enforcement mechanisms. Lee's Summit has options for non-monetary penalties including stop work orders, permit revocation, with fines and jail time as options in the most serious situations. Experience show that the vast majority of citations are corrected long before enforcement actions are necessary.

4.2.4.1.6 *Ensure Compliance*

The City currently employs capital Improvement project inspectors, development construction inspectors and building code inspectors. These individuals monitor construction projects within the corporate limits every work day. Lee's Summit has procedures in Ordinance No. 5813, the Design and Construction Manual for site inspection and enforcement of erosion and sediment control requirements. Lee's Summit requires construction site operators to control wastes that may have adverse impacts on water by implementing appropriate water quality BMPs.

The position responsible for overall management and implementation of the permittee's stormwater construction site stormwater runoff control is the Public Works Director. Others will be involved in the execution of each of the individual activities in the programs, but most of the activities will be delegated through the Public Works Department.

4.2.4.1.7

Compliance can be measured by the downward trend of citations, fines, and enforcement actions taken against the development community based on a percentage of permit issued.

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

4.2.5.1 *Permit Requirement*

The City of Lee's Summit seeks to be progressive in its approach to improving the quality of life for residents. The development ordinances have required peak reduction basins since 1993 on projects. The specific design and construction requirements for the detention and/or retention basins have become much more stringent since adoption of APWA standards in 2004 and ongoing revisions to improve water quality and minimize water quantity impacts.

In accordance with MDNR, Lee's Summit has developed, implemented, and enforced a program to address stormwater 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. However, the City of Lee's Summit is more stringent by requiring land disturbance permits for any site disturbance of 2,000 square feet or greater for existing and/or new development areas.

4.2.5.1.1 *Strategy to minimize impacts*

Lee's Summit has implemented APWA section 5600 "default" protection strategy, as defined in 5601.5.A.4.a., which require a combination of structural and/or non-structural Best Management Practices (BMPs).

4.2.5.1.2 *Regulatory mechanisms*

Lee's Summit uses ordinance(s) # 5813, #7032, and other regulatory mechanisms to address post-construction runoff from new development and redevelopment projects to the extent allowable under Federal, State and Local laws.

4.2.5.1.4 *Long-term operation and maintenance*

Lee's Summit ensures compliance with the ordinances by way of enforcement mechanisms. Lee's Summit has implemented the following enforcement actions in the ordinances:

- Stop work orders
- Permit revocation for Non-Compliance
- Fines and jail time

4.2.5.1.5.1 *Policies and Ordinances*

Lee's Summit has implemented Ordinance No. # 5813, #7032, and other regulatory mechanisms to address post-construction runoff from new developments and redevelopments. These mechanisms will help to not only recommend proper practices, but will help enforce the proper use of the practices under certain circumstances.

Lee's Summit implements policies and ordinances that help minimize water quality impacts. The Parks Department owns and/or controls 4.4 miles of stream buffer areas. There are approximately forty nine (49) miles of streams within the city that have regulated floodplains associated with them. Any construction activity within this floodplain generally requires USACE, FEMA, and City permitting. If a regulated stream buffer is eliminated by a development project, the City requires compensatory water quality enhancements, (ie. constructed wetlands).

There are nine hundred and ninety three (993) acres of City of Lee's Summit parks and three thousand three hundred and thirty six (3,336) acres of Jackson County parks within the corporate boundaries of Lee's Summit. These park lands are largely open space which filter runoff and recharge groundwater.

The Unified Development Ordinance stipulates appropriate land uses for areas within the corporate limits.

City operations and grounds crews are encouraged to leave a natural vegetation buffer along streams and water bodies so that native vegetation and ecological biodiversity can be re-established along the littoral zone (water edge).

4.2.5.1.5.2 *Infill development*

Lee's Summit encourages infill development or re-development in higher density areas, and areas with existing storm sewer infrastructure. A large portion of new permitted projects are re-development related.

4.2.5.1.5.3 *Education programs*

Lee's Summit has implemented education programs for developers and the public about project designs that minimize water quality impacts. These include hosting green infrastructure meetings and various environmental workshops.

4.2.5.1.5.4. *Best Management Practices (BMPs)*

Lee's Summit has implemented other measures such as minimization of the percentage of impervious area after development, (80% maximum by code). Detention and/or retention ponds have been required since 1993 by Ordinance No. 3719 and further by Ordinance no. 5813 and as such these basins provide some water quality measures for development projects. Source control measures often thought of as good housekeeping, preventive maintenance and spill prevention are encouraged by offering Household Hazardous Waste collection days twice monthly nine months out of the year at the Resource Recovery Park, within the City.

4.2.5.1.6 *Structural BMP's*

Lee's Summit has implemented APWA section 5600 which includes multiple stage detention and/or retention basins. The basins must match predevelopment peak flow rates for the 1%, 10% & 100% probability storms events and be fitted with a low flow orifice to allow a 40 hour discharge of 90% runoff volume which is 1.37-inches rainfall for KC metro area. Multiple stage discharge risers are necessary to meet the current discharge requirements allowing extended detention of the impounded volume. Infiltration practices are not generally practical in the clay soils typically found in Lee's Summit without soil amendments or an engineered soil matrix. Stream buffers are required for any new development along a tributary with 40 acres or more of contributing watershed.

Lee's Summit is unique in that six (6) of the eleven (11) watersheds in the corporate boundaries discharge into local lakes. These lakes act as water quality filters in the fact that micro-organisms living in them attack pollutants which otherwise could be discharged from the corporate limits. The City of Lee's Summit encourages the minimization of detrimental water quality impacts, and attempt to maintain pre-development runoff conditions by implementation of codes and ordinances.

The position responsible for overall management and implementation of the Post-Construction Stormwater Management in New Development and Redevelopment is the Public Works Director. Others will be involved in the execution of each of the individual activities in the programs, but most of the activities will be delegated through the Publics Work Department.

4.2.5.1.7. *Evaluate success*

The City of Lee's Summit will evaluate the success by a downward trend in percentage of citations and fines issued to the development community as a result of education and compliance with ordinances and codes in place.

MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations

4.2.6.1 *Permit Requirement.*

Lee's Summit has developed and will continue to improve 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. Lee's Summit's program includes employee training to prevent and reduce stormwater pollution from municipal operation activities.

4.2.6.1.1. *Municipal operations*

All departments who have potential to impact water quality including Public Works, Water Utilities, Police, Fire, and Parks are covered by this operating permit. The municipal airport and landfill owned by the City of Lee's Summit each have separate and distinct NPDES permits and specific limits associated with them.

4.2.6.1.2. *Maintenance*

Lee's Summit has implemented pollution prevention and good housekeeping measures in the following areas:

Catch Basin Cleaning
Street Sweeping
Recycling Program
Maintenance Schedule
Maintenance Activities
Minimize Pesticides Used

4.2.6.1.3. *Pollution reduction*

Lee's Summit reduces potential pollutants from public operations by street sweeping operations. The City owns a downtown parking garage for City Hall employees and downtown shoppers which reduces oil and grease runoff into the storm sewer system. Hazardous materials are stored indoors in appropriate spill containment facilities. Road salt storage is under several covered domes. Fleet maintenance is performed in covered areas with appropriate spill containment. All streets are swept twice yearly with some areas weekly. This encompasses approximately 495 centerline miles of roadways.

The following controls and/or programs have been implemented to reduce or eliminate the discharge of pollutants from facilities owned by Lee's Summit:

Catch Basin Cleaning
Street Sweeping

Recycling Program
Maintenance Schedule
Maintenance Activities
Minimize Pesticides Used
Employee Training

4.2.6.1.4 *Waste Disposal*

Lee’s Summit standard procedure for the disposal of dredge spoil, accumulated sediments, floatables, and other debris from the storm sewer system is disposal in the landfill which is regulated by state and federal guidelines.

4.2.6.1.6 *Water Quality*

The APWA Section 5600 requirements for water quality are implemented by the City of Lee’s Summit on all projects and practices.

4.2.6.1.7 *Training program*

Lee’s Summit has a limited implementation of employee-training program in the following areas:

Park and Open Space Maintenance
Fleet and Building Maintenance
New Construction and Land Disturbances
Stormwater System Maintenance

Staff plans to use “Storm Watch” as produced by EXCAL Visual as base format to build a specific LSMO training program. The initial presentation yielded many questions from the participants, so the program needs to be modified to reduce confusion on the part of participants.

The Public Works Director will be responsible for overall management and implementation of the pollution prevention and good housekeeping program for Lee’s Summit. Others will be involved in the execution of each of the individual activities in the programs, but most of the activities will be delegated through the Public Works Department.

4.2.6.1.8. *Evaluation of Success*

Lee’s Summit will evaluate the success of the pollution prevention/good housekeeping minimum control measures by compliance by staff and acceptance by the citizens.

Additional Information

Program Areas: Attachment

2013 NPDES permit status summary

City of Lee's Summit, Missouri

Small MS4 Phase II permit

Re: Form MO 780-1846

Item address on form MO-780-1846 are noted for reference:

Item 1. A.

General Summary: The City of Lee's Summit has implemented many of the facets associated with the National Pollutant Discharge Elimination System, (NPDES), permit currently in place. The City is generally in a mode of maintenance rather than implementation of the Phase II permit requirements. City staff is working toward full compliance with an executable plan to improve stormwater quality and manage quantity. The current plan includes using bonds to correct structure flooding. We are reopening consideration of a stormwater utility to support on-going maintenance and regulatory requirements.

Permit form item C: Program Areas – Minimum Control Measures, (MCM's)

MCM #1 Public education:

A combination of City staff and Mid-America Regional Council, (MARC), venues are used to educate the public concerning water quality issues. MARC produces educational materials concerning environmental stewardship including but not limited to water quality concerns. The 2010-2011 MARC annual report as well as a Lee's Summit specific clean water brochures are included in the appendix. We distributed these materials and others at public events and keep literature in public venues such as libraries and city hall. There were numerous facebook , website, and government TV channel postings concerning environmental stewardship. The Lee's Summit environmental web site address is :
<http://cityofls.net/Environment.aspx>

The MARC water quality web site address is :

<http://www.marc.org/Environment/Water/index.htm>

MCM #2 Public Participation/Involvement:

There are numerous avenues that are used to engage the public in the City of Lee's Summit. The City has several on-going input groups as a result of the LS360 citizen strategic planning process and implementation. The final report of the LS360 planning process may be found at the following location:
<http://cityofls.net/LinkClick.aspx?fileticket=Pbt%2f5eq0858%3d&tabid=844>

LS360 is a citizen driven planning group which recommends short and long range goals to City Council.

Several specific strategies were recommended within this planning document which will improve and protect water quality. These include:

Local Government Key Performance Area, KPA:

Strategy #2, Promote and implement select “green” initiatives:

Create a stormwater utility

Strategy #4, Protect natural resources of community

Quality of Life, KPA:

Strategy #3: Share a community commitment to environmental sustainability

Lee’s Summit hosted the following public events this reporting period:

- Twenty household hazardous waste collection days occur throughout the year
- Three paper shred events
- One electronics recycling event
- One Green/Sustainability fair
- Installed additional native plantings at the north recycling center/outdoor classroom
- Adopt –a –street: 58+/- volunteer groups collect litter 4 times annually
- Adopt-a-stream program initiated
- One “Sweep the Summit” event, litter collection
- Earth day celebration
- St. Patrick’s day environmental themed float
- National Public Works event environmental booth

There are several citizen based organizations which continue to monitor lake quality in part as a result of a MDNR presentation given to the Jackson County Stormwater Commission, (JCSC), several years ago. Representatives of Property Owners Associations, POA, of the Lake communities were invited to this presentation by City staff. As a direct result, Prairie Lee Lake POA is now monitoring lake water quality, Raintree Lake POA has been monitoring water quality for years, and Lakewood POA is considering monitoring.

MCM #3 Illicit Discharge Detection and Elimination:

We implemented an Illicit Discharge Ordinance, (IDO).

- Several enforcement letters concerning IDO compliance were issued.
- Several meetings with property owners occurred who immediately mitigated a private source illicit discharge without impacts to downstream properties.
 - These discharges were generally due to lack of understanding were the storm sewer system discharges. The most recent was a wash down of cooking equipment and grease holding container behind a restaurant.

We have also monitored a single discharge event during the reporting period associated with wastewater collection system operations. This event occurred when a force main air relief valve failed, resulting in the discharge of 250 – 500 gallons of untreated waste which was then collected and returned to the collection system. An SSO report was filed with MDNR at the time of the incident.

We have operations staff checking portions of our storm sewer conveyance system. These inspections result in many work orders for repair and/or maintenance of the storm sewer infrastructure.

MCM #4 Construction Site Stormwater Runoff Control:

We are generally compliant in this program area with daily inspections of active projects over one acre of disturbance. We use the latest version of Kansas City Chapter of the American Public Works Association, (KC-APWA), design criteria and construction specifications as a basis for design and construction. SWPPP's are required for new development projects and a master drainage plan is also required. We also have formal sediment and erosion control inspection procedures in place as previously submitted.

The following actions were taken during the reporting period concerning violations to our runoff ordinances.

- Six erosion and/or sediment control warning letters were issued to property owners within the last six months as construction activities are picking up.
- A large majority of cases are resolved without escalation to enforcement upon City staff discussions with owner and/or contractor concerning the infractions

MCM #5 Post Construction Stormwater Management:

Our IDO includes stipulations against numerous activities that could result in impacts to water quality. We require land disturbance permits for anything within the corporate boundaries which disturbs 2,000 square feet or greater.

The City of Lees' Summit has completed three "green infrastructure" projects to minimize flooding and/or offset stream impacts. There are three more City of Lee's Summit "green infrastructure" projects in the design or construction phase.

MCM #6 Pollution Prevention/ Good Housekeeping for Municipal Operations:

Public Works Operations Division has Standard Operating Procedures in place that include instructions for operations and these SOP's include good housekeeping measures such as stabilization of disturbed areas and cleaning up materials on the job site.

Two training sessions during Public Works University were given covering Illicit Discharges, stream degradation, and fluvial geomorphology.

We have developed specific LSMO specific pollution prevention series based on the Storm watch materials supplied by EXCAL Visual. This training program will be refined and rolled out in the next reporting cycle.

C.2.b.

See form MO-780-2049 attached

3.

The Raintree Lake community has been recording lake quality indicators during the summer months since 1998. The results of their sampling may be found at <http://rlpoa.com/water.htm>

C.5.a.

We are reviewing the Kansas City Chapter of the American Public Works Association, (KC-APWA). Best Management Practices, (BMP), manual to consider incorporating some or all into our codes and ordinances.

C.5.b.

No change in measurable goals this reporting period.

Re: Form MO 780-1800

Item address on form MO-780-1800 are noted for reference:

11.

Outstanding resource water;

Little Blue River

Endangered Species and/or Critical Habitat:

Indiana Bat

Pallid Sturgeon

Mead's Milkweed

Western Prairie Fringed Orchid

12.

(L2) reservoir:

Longview Lake

(P) streams:

Big Creek

East Fork of Little Blue River

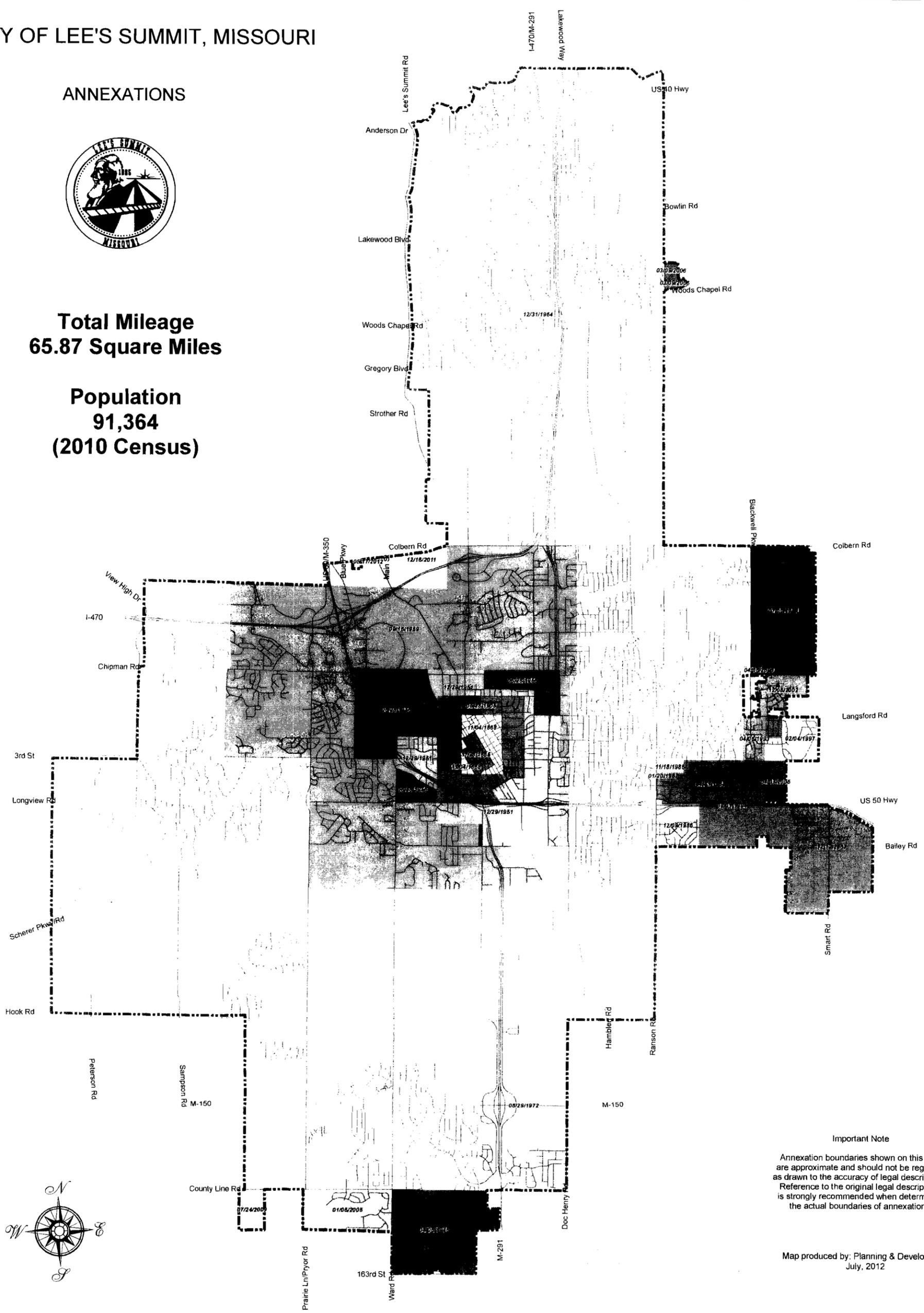
CITY OF LEE'S SUMMIT, MISSOURI

ANNEXATIONS



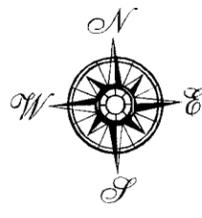
**Total Mileage
65.87 Square Miles**

**Population
91,364
(2010 Census)**



Important Note
Annexation boundaries shown on this map are approximate and should not be regarded as drawn to the accuracy of legal descriptions. Reference to the original legal descriptions is strongly recommended when determining the actual boundaries of annexations.

Map produced by: Planning & Development
July, 2012



Regional Water Quality
Public Education Program

2012



Clean Water Fund

Regional Water Quality Public Education Program

Annual Report

January—December 2012

COMMITTEE HISTORY

Since 2003, MARC has convened a committee of representatives from local governments and environmental organizations to develop a regional watershed public education program. The committee was formed in response to numerous requests from local governments to develop a cooperative approach to water quality public education and to meet federal NPDES Phase I/II regulatory requirements. The committee's efforts have provided a firm foundation for its goal of educating the general public about actions they can take to reduce non-point source (NPS) pollution.

PROGRAM DETAILS

The Regional Water Quality Public Education Program is a comprehensive approach to raising public awareness about watershed issues and water quality in the Kansas City region. The long-term water quality public education strategy capitalizes on momentum created by past water quality awareness topics and community initiatives such as the Kansas Healthy Yards and Communities program. The program's outreach campaign structure identifies several specific water quality issues to address throughout the year; however, the structure remains flexible by promoting additional messages as opportunities arise. Campaigns consist of varying levels of support and methods of outreach, as explained below.

PROGRAM FOCUS

During the past nine years the program has addressed several top NPS pollution issues facing our region. The program's theme — "Clean Water. Healthy Life." — focuses on changing behavior throughout the region in order to improve water quality, community health and quality of life. Each year the Regional Water Quality Education Committee (WQEC), with MARC staff support, develops an NPS pollution-focused message that supports the program's theme and determines the most effective means for disseminating the message. The committee's education and outreach activities vary each year but typically consist of a media campaign, a mini-grant program, training, and education and outreach materials.

PUBLIC ATTITUDE SURVEY

The committee administers a biennial public attitude survey* to gauge the public's knowledge of and attitudes about water quality in the metropolitan area. Survey questions are designed to measure the impact that education efforts have on the public's overall awareness of water quality concerns and on behaviors that impact water quality in the region. The water quality survey provides a benchmark for objectively evaluating water quality public education initiatives over time, and provides guidance for future public policy, planning and education efforts.

The 2012 Survey results showed the following:

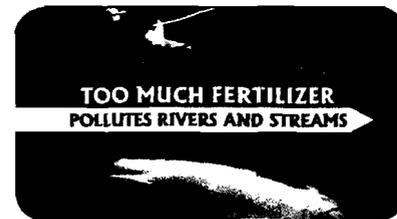
- 82 percent of residents are very or somewhat concerned with pollution in lakes, streams and other waterways;
- 47 percent do not know where stormwater goes after entering storm drains;
- 67 percent feel water pollution from stormwater runoff is a major or minor problem;
- Regarding development, 89 percent support requiring conservation of areas along streams, 88 percent support requiring preservation of trees and natural areas, 83 percent support adopting plans to restore urban waterways and 83 percent support providing incentives to plant native flowers and grasses;
- 88 percent feel it is important to prevent sewer overflows;
- 78 percent feel it is important to improve water quality in the community;
- 75 percent support local government working with other cities and counties to improve water quality.

Full survey results are available online at www.marc.org/Environment/Water/surveys.htm.

**Baseline survey conducted in 2003; most recent survey conducted spring 2012.*

CAMPAIGN ELEMENTS

Healthy Yards video
"Healthy Yards, Healthy Communities"



Storm Drain video
"If it's on the ground, it's in our water"



2012 PROGRAM ACCOMPLISHMENTS

Media Campaign

MARC staff assists the committee with strategic planning for media campaigns, including message development, writing, graphic design and advertising purchasing. Campaigns can include a variety of elements such as paid advertising, earned media, printed materials and other activities. In 2012, the public outreach campaign continued to target residents and homeowners, focusing on two topics: **storm drain awareness and healthy lawn care.**

The primary **storm drain awareness** campaign maintained the message developed in 2010: "If it's on the ground, it's in our water." The campaign addressed issues such as improperly throwing waste

CAMPAIGN ELEMENTS

Newspaper ads



Web ads



Sub-campaign videos

"Creating and Maintaining Native Landscapes"



"Inviting Native Plants into your Community"



down storm drains, fertilizer runoff and pet waste. Advertising efforts highlighted the connection between certain activities and regional water quality, emphasizing the role storm drains play in transporting materials to area waterways.

The secondary focus was **healthy lawn care** ("Healthy Lawns. Healthy Communities."). Messages addressed actions that impact water quality, including proper fertilizing habits and yard waste disposal.

The year's media campaign was divided into spring and fall outreach periods. Total campaign elements for 2012 included:

- Two 30-second TV commercials (stormwater and healthy lawn)
- On-air advertising:
 - Time Warner Cable (five stations, 380 total spots)
- Online ads
 - Ads on four TV station websites and The Kansas City Star's website, kansascity.com
 - More than 2 million online impressions earned
- Targeted newspaper ads
 - Approximately 30 ads in 15 regional publications
 - Approximately 2 million readers reached

Each commercial is available to committee members on the MARC YouTube channel, (www.youtube.com/MARCKCMetro).

A new informational brochure about stormwater was also developed in 2012. It was designed as a tie-in to the media campaign, reiterating both the storm drain and healthy lawn messages.

SUB-CAMPAIGNS

To supplement the messages of stormwater awareness and proper lawn and garden maintenance, the committee elected to build on the momentum of past campaigns by revisiting topics such as native plants and pet waste. Messages targeted specific audiences and were disseminated via workshops, public events, Web-based resources, publications, social media and public signage.

MARC air and water quality staff partnered on a three-part educational series "Planting a Prairie" that included a tour of local demonstration projects, a public policy forum and a design and maintenance workshop. The effort resulted in four new videos, available online at <http://bit.ly/PlantingPrairie>, that highlight the benefits of native plants and key management principles.

GRANT PROGRAMS

The committee offers funding opportunities to local nonprofit and educational organizations for education and outreach events related to reducing stormwater runoff and improving water quality in area creeks and streams. Proposals undergo a competitive selection process and are evaluated by a selection subcommittee. The WQEC budgeted \$20,000 for grant awards in 2012, with a cap of \$5,000 per proposal. Six proposals were chosen for funding in 2012:

- ***Green Works of Kansas City (\$3,000 awarded)***
Funds awarded to Green Works of Kansas City supported its fall Urban Water Session, which took place between September and November 2012. During this 12-week educational session, 22 high school students completed 60 program hours covering green solutions and native plants, created water systems models and learned about non-point source pollution and healthy ecosystems. Students also took a guided ride on the Missouri River, participated in local park rain garden improvements, and learned about Kansas City's storm and sewer system during a tour of water and wastewater treatment facilities.
- ***South Grand River Watershed Alliance (\$3,128 awarded)***
Grant funding to the South Grand River Watershed Alliance (SGRWA) supported a partnership of Peculiar Lions Club International, the Cass County Sustainability Committee, Missouri Stream Team Amarrugia Ridge Runners, Missouri Master Naturalists, the Peculiar Farmers & Artisans Market, the City of Peculiar, and the Missouri Department of Conservation. These partners hosted the Peculiar Know Your Watershed Festival in July 2012. More than 100 adults, 30 children and more than 31 volunteers participated. The educational event provided workshops and information to attendees about the adverse impacts of excessive stormwater runoff and nonpoint source (NPS) pollution and actions individuals, local governments, and businesses can take to minimize these impacts. The event also promoted policies and management practices to reduce stormwater runoff and NPS pollution through demonstrations, activities and informative stations.
- ***Missouri River Relief (\$5,000 awarded)***
Grant funds allowed Missouri River Relief to expand existing educational opportunities by increasing its work with a pilot program of classroom presentations for younger students and adults, a watershed festival for grade-school and middle-school students, and a "Day on the River" program for high-school students. The educational events finished with a Big Muddy River Clean-up in October. Over 129 students participated and 303 volunteers, to make a "Day on the River" and the KC Big Muddy Clean-Up events a success. Students, parents and metro area citizens had the opportunity to observe the highly visible effects of stormwater runoff and non-point source pollution on the river and help with debris removal during the river clean-up.
- ***Roanoke Park Conservancy (\$2,300 awarded)***
Roanoke Park Conservancy received grant funding to provide community education about using native species and best management practices to minimize erosion and improve stormwater absorption and water quality. Approximately 30 community members and volunteers helped construct a vegetated swale of approximately 1,200 square feet in Roanoke Park in Kansas City, Mo. The swale addresses erosion and stormwater absorption issues, improves upland water quality and beautifies the park. From this participatory activity,

Roanoke Park Conservancy was able to promote and continue the complete, native ecological restoration of the overall landscape found within the boundaries of the park, while improving water quality in the Turkey Creek Watershed with stormwater capture and pollution filtration. A link to view more about the bio-swale and a video of this project can be found at, <http://www.roanokeparkkc.org/plans/planting-the-future>.

- ***Blue River Watershed Association (\$3,500 awarded)***

Blue River Watershed Association received funds for a partnership with the West Branch Sni-A-Bar Creek Watershed Consortium for education and outreach for fifth-grade students in the west branch of Sni-A-Bar Creek Watershed. This educational opportunity provided seven classes to teach students about watersheds, runoff and pollutant causes and the impact on water quality. The funding provided to this four-session educational opportunity allowed students to participate in water quality and stream monitoring activities and relate their analysis to changes in societal behaviors.

- ***New Reflections KC (\$3,000 awarded)***

Grant funding was dedicated to New Reflections KC for green collar job training and coordinated demonstration projects of rain barrel and rain garden installation near 69th and Prospect. Program participants were trained on disconnecting downspouts, and building and installing rain barrels and rain gardens. The New Reflections KC program dedicated and installed 50 rain barrels for community members in the service area and installed two rain gardens. In addition, two workshops were held in the Middle Blue River Pilot area to address the importance of water quality and best management practices.

TRAININGS

The committee continues to house and expand a library of training videos for local communities' use. Available videos, with accompanying training materials, include:

- *Storm Warnings: Stormwater Pollution Prevention — Everyday Best Management Practices*
- *Septic Systems Revealed: A Guide to Operation, Care and Maintenance*
- *Stormwater Pollution Prevention: A Drop in the Bucket*
- *Ground Control: Stormwater Prevention for Construction Sites*
- *Rain Check: Stormwater Pollution Prevention for MS4s**
- *IDDE (Illicit Discharge Detection and Elimination) — A Grate Concern**

* *New in 2012*

The committee hosted and/or partnered to host three webinars in 2012:

- *Get the Dirt on Stormwater, Sept. 19, 2012*
- *Leaving You Out in the Rain — Design & Implementation of Monitoring Projects, Oct. 24, 2012*
- *Customizing Your Stormwater BMP Design for Specific Pollutants, Dec. 12, 2012*

PRINT MATERIALS

MARC developed a new stormwater education piece tied to the *If it's on the ground, it's in our water* outreach campaign. The brochure was available and distributed in 2012.

MARC staff researched and ordered native plant seed packets and storm drain decals for distribution and use by member communities. Also, Green Works KC, a committee partner and grantee, developed a native plant guide entitled *A Little Bit of Wild* that MARC purchased for distribution.

Native Plants and Rain Gardens

- Purchased 1,000 wildflower seed packets for distribution
- Continued to distribute *How to Build Your Own Rain Garden* and *Know Your Roots* brochures
- Continued to provide informational rain garden signs for local community demonstration projects
- Distributed 100 copies of *A Little Bit of Wild* native plant and rain garden booklets

Pet Waste

- Purchased 100 *Pick Up After Your Pet* waterproof signs for distribution to local municipalities
- Continued distribution of *Pick Up After Your Pet* brochures

Lawn Care

- Continued to distribute *Build Your Own Rain Barrel*, *Redirect or Disconnect Your Downspout*, *Know Your Soil*, *Making and Using Compost*, and *Use Lawn Chemicals Wisely* brochures

Brochure Translations

- Continued to use existing supply of Spanish-language brochures

General Stormwater Education

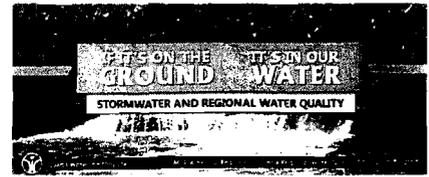
- Purchased 500 Storm Drain Inlet Marker Stencils for local municipalities
- Continued to distribute *Keep Sediment Out of Our Water*, *Know Your Watershed*, *Protect Our Streams*, and *Storm Drain Stewardship* brochures
- Continued to make available the committee's Water Quality Education Program banner for community events and functions

Youth Stormwater Education

- Continued to distribute youth giveaways to help promote stormwater education: "From Rain to River – Keep it Clean"

CAMPAIGN ELEMENTS

Stormwater Education Brochure



Promotional Items



bracelets, *Discover Stormwater* activity booklet and *Healthy Water, Healthy People* activity booklet.

- Continued to make the committee's watershed display and marble game available for local community events.

ADDITIONAL WORK

Provided various information and material (brochure templates, images, etc.) to organizations in communities that are either outside the MARC region or local groups that are not part of the Water Quality Education Program. All organizations agreed to acknowledge MARC's Water Quality Education Program as the information source.

FUNDING

In January 2012, MARC submitted a program funding request to local governments budgeted at \$160,049. During the course of the year, 20 local governments supported the program. Participating governments are listed below.

PARTICIPATING GOVERNMENTS

Belton, Mo.	Kansas City, Mo.	Raymore, Mo.
Blue Springs, Mo.	Platte County, Mo.	Raytown, Mo.
Clay County, Mo.	Lake Waukomis, Mo.	Weatherby Lake, Mo.
Excelsior Springs, Mo.	Liberty, Mo.	Unified Government of Wyandotte County / Kansas City, Kan.
Gladstone, Mo.	Lenexa, Kan. **	
Independence, Mo.	Lee's Summit, Mo.	
Jackson County, Mo.	Overland Park, Kan. **	
Johnson County, Kan. *	North Kansas City, Mo.	

**(Contributes for all Johnson County cities and unincorporated areas)*

*** (Contributes additional funding above standard per capita rate)*

WQEC COMMITTEE CHAIR

Nate Baldwin, Platte County, Mo.

MARC STAFF

Tom Jacobs, Director of Environmental Programs

Lesley Rigney, Watershed Planner

Amanda McGee, Environmental Planning
& Water Quality Intern

Brett Shoffner, Environmental Planning
& Water Quality Intern

CONTACT To learn more about the Regional Water Quality Education Committee,
contact Lesley Rigney at lrigney@marc.org or 816/701-8355



Clean Water. Healthy Life
www.marc.org/water