GREENE COUNTY, MISSOURI

APPLICATION FOR STORMWATER PERMIT FOR
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

STORMWATER MANAGEMENT PROGRAM

INTRODUCTION

The application for the general permit requires the development of a stormwater management program (SWMP) in accordance with the terms of the general permit. The requirements for the SWMP are set forth in Part IV of the general permit.

It is the intention of Greene County to comply with all aspects of the Phase 2 stormwater regulations. As is the case with many small MS4's, Greene County has not adopted a comprehensive SWMP per se. This is not to say that Greene County has no stormwater management program. On the contrary, the County already has programs and regulations which provide many aspects of the six minimum control measures which are set forth in the general permit. For instance, Greene County has had a program in place for construction site stormwater runoff control since 1991 which addresses sites down to one acre in size. On the other hand, the County does not currently have the staff or funding resources to provide completely for post-construction operation and maintenance of stormwater BMPs. With the passage of the ¼ cent parks and soils sales tax in September of 2006 Greene County began receiving increased funding in the last half of 2007 to fund storm water projects and personnel for five years. The County is currently working on procuring permanent storm water funding beyond 2013.

In order to fully comply with the terms of the permit, it is our intention in this submittal to:

- review our existing program
- update our SWMP document, and
- identify areas where new or additional programs or requirements will be needed to satisfy the new permit requirements.

Where the need is identified for new or additional programs, public input will be sought in developing these programs. Any new regulations or requirements will require the consideration and approval of the County Commission, and other County boards, such as the Planning & Zoning Board or Building Commission, as applicable. Public notice will be given and public hearings held as required by State statute.

In the following sections we will list the SWMP requirements of the general permit, provide a

description of the County's current programs and identify additional activities or requirements which will be needed to comply with the terms of the general permit.

GENERAL PERMIT REQUIREMENTS FOR SWMP

10 CSR 20-6.200 (5)(A) Application Requirements for Small MS4's

Now that short term funding has been secured to support the actions required by our permit we propose to set forth these requirements specifically in a stormwater management ordinance. This ordinance would be adopted as a part of the Greene County Zoning Regulations, and would require public hearings before the Planning & Zoning Board and the County Commission, with final approval by the County Commission. A series of public hearings would be held prior to adoption of the ordinance. The proposed ordinance would be reviewed by a number of stakeholder groups such as the Water Resources Task Force and the Homebuilders' Association. Our goal is to have this ordinance in place by the end of the current five-year permit cycle.

Special Conditions

3.1

Some of the storm water discharge from the regulated urbanized areas of Greene County does enter water bodies that are on the 303(d) list of impaired waters. These water bodies include the James River, Pearson Creek, Wilson's Creek, and McDaniel Lake. At the present time only The James River and McDaniel Lake have a TMDL that has been approved by the EPA. Phosphorus is the nutrient of concern with 64% of the phosphorus loading coming from municipal wastewater treatment facilities which are independently permitted and regulated. The remaining load is attributed to agricultural and urban runoff and sediment loading. We'll be working with other small MS4s in these watersheds to coordinate efforts to monitor several sites for water quality monitoring over the next five year permit period. This cooperative monitoring effort is one of the recommendations of the Data Gap Analysis, conducted to identify areas of needed research on water quality in the area.

The pollutants identified by the EPA approved TMDLs for the James River and McDaniel Lake of most concern are phosphorus and sediment. Greene County feels that the measures already in place for construction site and post-construction runoff control addressed in later sections are very effective in reducing the non point loading of phosphorus from our small MS4

Greene County is cooperating closely with the MoDNR to come up with an acceptable monitoring plan for this permit requirement.

3.1.1

Some discharges from our small MS4 are upstream of 303(d) listed waters

3.1.1.1

Greene County is currently working on a monitoring program to determine if significant contributions of measurable pollutants exist.

3.1.1.2

The James River and McDaniel Lake have TMDLs that have been approved by the EPA. Greene County's regulated MS4 is upstream of both of these water bodies.

3.1.2

As a result of the Fulbright Spring Protection Study completed in 1996, Greene County adopted requirements for permanent structural water quality BMPs in the Fulbright Spring and Pierson Creek watersheds. Requirements for these BMPs are included in Section 115 of the Stormwater Design Standards. In January 2006 the County Commission voted to extend these water quality BMP requirements to all watersheds in Greene County (See Planning Board Case 1625, Appendix E). These BMPs are designed to reduce the amount of sediment which is a major source of phosphorus.

3.1.3.1

The TMDLs are for phosphorus, which is likely to be found in storm water discharges

3.1.3.2

The TMDL does include a load allocation (LA) for non-point pollution sources, but not specifically for storm water discharges.

3.1.3.3

The TMDL does address a flow regime for storm water flows.

3.1.3.4

Monitoring will need to be conducted to determine if LAs are being met

3.1.3.5

The combination of structural and non-structural measures below are currently implemented to reduce runoff pollution

- Comprehensive Plan (Appendix J)
- Zoning Regulations Article IV Sections 25, 27 and 28 (Appendix D)
- Subdivision Regulations Article IV Section 10 and Article V Section 6 (Appendix D)
- Urban Services Area Policy (Appendix J)
- Floodplain Management Regulations: Zoning Regulations Article 21 (Appendix D)
- Stormwater Design Standards Section 115 (Appendix E)

3.1.3.6

Greene County is currently cooperating with the MoDNR and other area small MS4s to come up with a regional monitoring program.

3.1.3.7

If additional controls are necessary the type and scope of controls will be determined by the results of water quality monitoring.

Minimum Control Measures:

4.2.1 Public Education and Outreach

The permittee shall implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps the public can take to reduce pollutants in storm water runoff.

4.2.1.2.1

Even before being required to do so by the MS4 permit, Greene County has been active in efforts to educate the public on the impacts of storm water on water quality and what they can do to help. Greene County plans to continue most of these proven educational efforts and expand others to comply with the detailed requirements of the MS4 permit. Since Greene County does not have the staff to implement all the educational programs necessary to fulfill all the permit requirements the county partially funds both the Watershed Committee of the Ozarks and the James River Basin Partnership. Both of these organizations were formed with the mission of informing the public about water resources and how to protect them. Greene County's cooperation with these two organizations is the main vehicle utilized to inform the public about storm water issues. Additionally, Greene County has a long history of trying to educate individuals, groups, and professionals about the steps they can take to protect water quality.

The citizens and leadership of Greene County have long realized the critical importance of protecting water quality. A considerable amount of study and attention have been given to water resources of the county over the past three decades. In the early 1980's concern over the spread of development into the watersheds of Fellows and Mc Daniel Lakes, the water supply reservoirs for the city of Springfield led to the formation of the Watershed Task Force, a blue ribbon panel of elected leaders and citizens. From the report of the Task Force came several recommendations which are important in shaping County policies to this day, including the formation of the Urban Services Area and the creation of the Watershed Management Coordinating Committee, now known as the Watershed Committee of the Ozarks. The overall mission of the Watershed Committee is to educate the public about the importance of protecting the Ozarks surface and ground water resources. Greene County provides annual funding for the Watershed Committee of the Ozarks in the amount of $50,000 to $60,000 and is contributing an additional $250,000 over five years for the construction of the new Watershed Center, a demonstrational facility for educating the public about water quality and quantity issues in the Ozarks. In addition to funding, Greene County also provides engineering expertise, planning, and labor for many of the Watershed Committee's programs and projects.

The Watershed Committee of the Ozarks' recent educational programs and water quality

improvement projects include the following:

1. The Wonder Down Under Program: field trips to a local cave for over 1,000 Springfield elementary students where students are taught about storm water influences on karst systems and ground water quality.
2. Jordan Creek Tours: tours for professionals, and students demonstrating the effects of urbanization on an Ozark stream. Includes discussions of the impact of storm water on pollution and flooding.
3. H2O on the Go: educational workshop designed to instruct teachers on effective techniques for teaching water conservation and water pollution prevention
4. Classroom visits to schools with a stream table to educate students on storm water pollution, groundwater contamination, and karst systems.

As concerns over water quality in Table Rock Lake grew in the 1990's Greene County joined other counties and cities in the James River watershed in the formation of the James River Basin Partnership. Presiding Commissioner Dave Coonrod is the current chairman of the Board of Directors of this organization. Greene County contributes $5,000 annually toward the operating budget of the JRBP. Greene County staff members also provide technical support and field assistance to the JRBP. The JRBP's mission is to implement programs that positively impact water quality and to increase citizen awareness and participation in water quality issues. These goals are accomplished through a variety of programs, grant projects and other initiates that are partially funded by the county. Some of the recent and current programs of the JRBP include the following:

1. Annual River Rescue: Volunteers are organized to clean up trash on the James River. Information on water quality issues is also distributed at the benefit concert that follows the river clean up.
2. Septic Tank Pump Out: Cost share program to encourage homeowners to regularly pump out their septic tank to prevent failures and water pollution.
3. Urban Lawn Testing: Free soil test and nutrient management plan for any homeowner who would like to participate. The reduction in over-fertilization reduces nutrient loads in residential runoff.
4. Rain garden demonstrations: encourage homeowners to install rain gardens and rain barrels to reduce storm runoff and encourage water conservation.

The 1990s also saw the formation of Ozark Greenways, a citizens group dedicated to the preservation of open space and greenway corridors. The County also supports the Choose Environmental Excellence initiative, the Environmental Collaborative of the Community Partnership of the Ozarks, and Show Me Yards & Neighborhoods. Citizens of the County also benefit from City of Springfield's public education program for solid waste management.

Beginning in 2000 the Show Me Yards & Neighborhood program began offering training in environmentally sensitive lawn care to homeowners and lawn care professionals. A number of seminars on proper lawn care have been held with total attendance of several hundred citizens. Sixty-five professional lawn care companies have attended training seminars and received certification. We believe that programs such as these are very effective in influencing water quality.

The Discovery Center is also an active partner in special educational events, such as Earth Day, Let's Make a SPLASH!, celebrating National Water Education for Teachers (WET) Day and others.

Each of the organizations mentioned above plays an active and effective role in public education and outreach, providing a strong framework of existing initiatives for this required minimum control measure.

County staff has also been active in public education and outreach activities. Two training seminars are given annually to on-site wastewater system installers, for whom certification is required to do work in the County. Beginning in 2000, plans were made to install an on-site wastewater system demonstration site to educate installers on correct system installation and design to reduce wastewater pollution of ground water. In 2005 land was acquired by Greene County and the Watershed Committee of the Ozarks to build the center. Construction is currently underway and should be completed in 2008.

Beginning in 1997, the County has offered a series of seminars in stormwater design to professionals who submit stormwater management plans to the county. These seminars are repeated on a triennial basis and were offered again in 2000 and again in the spring of 2003. This training scheduled for 2006 was delayed until 2007 in order to combine the County's efforts with the City of Springfield's Design Criteria Manual training seminars. An average of 50 professionals attended each seminar.

Within this permit cycle the County plans to implement a contractor certification program to train all contractors who work in Greene County in erosion and sediment control regulations and BMP selection and installation.

Greene County cooperated with the City of Springfield on a new Storm Water Design Criteria Manual which will include required stream setbacks, buffer areas, and water quality and sediment control BMP's. Every Thursday from September 6 to November 1 2007 the City and County presented the new requirements to the engineers, architects, and design professionals in the area as a series of ten weekly seminar sessions of one half to a full day of instruction. About 50 professionals attended each session.

Greene County has also taken the lead in trying to bring low impact development (LID) techniques to the area. LID techniques present many storm water benefits by eliminating traditional conveyance systems and replacing them with bio-swales, and disbursed micro-

detention. This allows infiltration, limiting impervious area, and reducing runoff volumes and rates. In 2002 Habitat for Humanity started developing the first LID subdivision in Southwest Missouri. Greene County cooperated in the planning, design and construction of the initial storm water infrastructure as well as cooperating in funding, planning, and labor for native plant establishment and maintenance. The goal of Greene County's involvement in this project is to educate developers in the area on the possibilities of using LID techniques to reduce storm water runoff and its associated pollutants.

Greene County is also conducting the first urban stream restoration in Southwest Missouri to reduce sediment loading from the Ward Branch into the James River. In partnership with many other groups Greene County has installed stabilization structures on nearly 500 meters of stream bank as well as planting over 2000 trees and shrubs. Lessons learned will be used to educate engineers, landscape architects and developers how to protect natural streams from degradation caused by storm water.

In cooperation with the Watershed Committee the county has participated in a number of education seminars over the past 15 years aimed at various groups from developers to property owners. A number of effective informational brochures have been developed by the Watershed Committee which are used by County staff to educate and inform the public on water quality issues. Brochures on septic system maintenance and water well protection are issued by the County to each new homeowner when the occupancy permit for the residence is issued.

The County plans to continue all these efforts to meet the requirements of the permit

4.2.1.2.2

Programs mentioned above such as the JRBP's annual River Rescue and the Watershed Committee's Watershed Center will help fulfill this permit requirement

4.2.1.2.3

The target audience for our storm water education is very diverse. Our professional education seminars are directed to engineers, architects, and designers who have an immediate impact on the design of storm water systems in new developments. We also are trying to reach more developers since they are the driving force behind the final product designed by the engineers. We plan to train contractors on sediment and erosion control regulation and installation. Through the Watershed Committee of the Ozarks school children are taught about the need to protect water quality since they will be managing storm water in the future. By educating school children, homeowners, engineers, developers, and contractors we hope to improve the quality of not just storm water, but all our water resources.

4.2.1.2.4

All of the above organizations and programs are aimed at reducing sediment and nutrients in

surface and ground water.

4.2.1.2.5

These programs utilize brochures, pamphlets, educational workshops, speaking presentations, and media advertisements to get the message out to the public. The Watershed Committee's classroom education efforts have reached thousands of students, as have the JRBP's septic pump-out and lawn testing programs. The County has also reached nearly every storm water engineer, and septic installer in the county.

4.2.1.2.6

The Greene County Resource Management Administrator is responsible for program implementation.

4.2.1.2.7

The best measurable goal is keeping track of the number of people reached by the educational program.

The Watershed Committee of the Ozarks has begun keeping track of the number of attendees at each educational program (See Appendix A).

Greene County currently keeps an up-to-date list of state and county certified on-site wastewater system installers. Measurable goals also will include number of septic installers trained per year when the On-Site Wastewater Demonstration center is completed.

The JRBP also has a specific goal of 1,000,000 gallons of septic effluent pumped out of septic tanks as part of their "Get Pumped" program. In addition their "Get Tested" program has written urban nutrient management plans for over 300 lawns.

Appendix A includes information on the Watershed Committee, James River Basin Partnership, Ozark Greenways, Choose Environmental Excellence, and Show Me Yards & Neighborhoods, including quarterly newsletters and brochures which have been developed.

4.2.2 Public Involvement/ Participation

The permittee shall implement a public involvement/participation program that complies with State and local public notice requirements.

Developments in Greene County are administered under the provisions of the Zoning Regulations, Subdivision Regulations, or Building Regulations. All three regulations reference the Greene County Stormwater Design Standards for specific requirements relating to stormwater, including construction site runoff and post-construction stormwater management. Subdivision of land into more than three lots requires approval of a preliminary plat. For a preliminary plat to be approved, a public hearing before the County Planning and Zoning Board is required and public notice given as required by State statute. For existing lots where subdivision is not required prior to application for a grading permit or building permit, there is no requirement for public hearing.

As a part of the Vision 20/20 comprehensive plan the City of Springfield and Greene County appointed a Water Resources Task Force in 1994. The Task Force was composed of citizens of the City and County. The Task Force submitted a series of recommendations to the City Council and County Commission in 1996. During 2003 the Water Quality Planning Group Task Force was convened, as a part of Vision 20/20, The Future is Now, a process through which citizens were asked to give input on the progress and direction of the Vision 2020 plan, including progress on the recommendations of the Water Resources Task Force and to update the Strategic Plan. Information on the Water Resources Task Force including the Report and Recommendations of the Task Force, which are a part of this stormwater management program, are included in Appendix B.

Beginning in 2002, the Springfield-Greene County Health Department in conjunction with the Springfield-Greene County Choose Environmental Excellence Program began publishing an annual State of the Environment Report as a part of the community health report card. The publication of this report included public forums to receive input and comments from citizens of the community. It is our intention to utilize this program as a vehicle of communication and involvement with the citizens of the community. In 2003 this report changed format to become an easier to read Environmental Report Card. The Environmental Report Cards for 2003 through 2005 are included in Appendix C.

Finally, County expenditures for stormwater management activities are included in the annual budget adopted by the County Commission. The budget is reviewed in public hearings before the County Commission which are open to public comment. Copies of the budget are available to the public in the County Budget Office at 933 N. Roberson Avenue, Springfield, Missouri, 65802.

4.2.2.2.1

Greene County has involved citizens in matters concerning water quality for many years. In the 1980's elected leaders and concerned citizens were included in the Watershed Task Force, which recommended the formation of the Watershed Committee of the Ozarks whose citizen members carry out storm water and water quality education programs and keep the business and professional community informed about water resource issues. The Vision 20/20 report was a community driven initiative in 1994 to identify areas of water resources concern and action plans to address them. The recommendations of these two citizen groups have formed the foundation of all of Greene County's efforts to improve water quality. Greene County adopted sediment and erosion control ordinances for construction sites on January 22, 1991 as a part of the County zoning regulations (Article IV Section 27). The County also adopted post construction ordinances such as Article IV Section 25 which require any new development to provide storm water detention to limit post-construction peak discharges to the pre-construction rate and Article IV Section 10 Part 7 of the Subdivision Regulations and Article XXIV of the Greene County Zoning Regulations which require permanent BMP operation and maintenance in perpetuity (See Appendix D). All these ordinances that satisfy the conditions of this permit were subject to public notice requirements and adopted after publicized zoning hearings open to public input

4.2.2.2.2

Any new ordinance that is required to satisfy the permit conditions will also be held to the same standard of public notice and input. Any revisions to the Storm Water Design Standards, the Zoning Regulations or any other regulations have always been submitted to the public, the local engineering community, and the local development and building community. Any changes needed as part of this permit will also be submitted to the same groups. Additionally, in October of 2007 Greene County began holding public information and input meetings to gather input for the proposed comprehensive plan.

4.2.2.2.3

As many stakeholder groups as possible have been targeted for involvement in the overall storm water program and any changes that are made to it. In 1997 Greene County developed the storm water design standards. These were submitted to the engineering community for comments and input before adoption. Any changes that have been made since have been presented to the engineering community first. Any ordinance changes are also taken to the Home Builders Association through the quarterly information and education meeting with county staff.

4.2.2.2.4

Several different kinds of activities have been used to involve the public in the implementation of the storm water management plan.

The James River Basin Partnership has conducted a series of stakeholder meeting for citizens and professionals residing in each of the James River's six sub-watersheds. These stakeholder

meetings are designed to collect citizen input on the development of a watershed management plan for each of the six sub-watersheds.

The JRBP also conducts an annual river rescue to clean trash out of the James River and is conducting lawn testing and septic tank pumping initiatives to involve citizens in cleaning up surface and ground water.

4.2.2.2.5

The Administrator of the Greene County Resource Management Department is Responsible for the implementation of this requirement.

4.2.3 Illicit Discharge Detection and Elimination

Develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined in 10 CSR 20-6.200) into the permittee's regulated small MS4;

4.2.3.1.2

Greene County has developed a storm sewer map showing the location of all inlets, pipes and outlets of storm systems in the regulated MS4 as well as the unregulated parts of the county. This map also contains the locations and names of all waters of the State that receive discharges from these outlets and is incorporated into the county's GIS system.

4.2.3.1.3

Currently, County Building Codes address illicit discharges into storm sewers. As a first class non-charter county, Greene County has building code authority, as provided in State statutes. Greene County has adopted the 2006 International Building Codes, including the plumbing codes and codes for one and two family residential dwellings. These regulations include requirements for discharges and connections which are permitted and prohibited to the storm drainage system or to surface waters as well as enforcement and penalty provisions for violations. For areas of the County not served by municipal wastewater systems, the County has adopted regulations for on-site wastewater systems. Applicable sections of the building and plumbing codes are included in Appendix F.

Greene County Zoning Regulations include prohibitions on dumping and disposal of trash and penalties for violations. The Resource Management Department enforces these regulations. Complaints result in an inspection of the property, a notice of zoning violation if this condition is not abated, and prosecution if the violation is not abated. Where violations of State law are suspected, complaints are forwarded to the MDNR Southwest Regional Office. Greene County also has in effect a Solid Waste Management Ordinance (see Appendix G), which includes penalties for illegal dumping. The Greene County Highway Department operates an effective program for pickup of material dumped illegally on County road rights-of-way.

Installers of on-site wastewater systems must obtain a biennial certification from the County. A written examination is required for certification. The County provides annual certification training classes for on-site wastewater system installers.

4.2.3.1.6

None of the discharges described in this paragraph are known to be a significant contributor of pollutants. We do not propose to implement any additional programs for these discharges.

4.2.3.2.1.

Greene County has developed a storm system map by locating all existing inlets, pipes, and outlets with a GPS unit in the field. All new systems are put in by coordinates off of the final

plat submittal.

4.2.3.2.2

As previously noted, Greene County has no stand alone illicit discharge ordinance. An ordinance will need to be developed for inclusion in the Greene County Zoning Regulations to prohibit non-storm water discharges that are contributing significant pollution to Greene County's MS4. Currently we rely on our building regulations found in Appendix F to address illicit discharges. Any new regulations or requirements will require the consideration and approval of the County Commission, and other County boards, such as the Planning & Zoning Board or Building Commission, as applicable. Public notice will be given and public hearings held as required by State statute.

4.2.3.2.3

The County currently has no routine program for inspection of storm drainage facilities for illicit discharges and therefore relies on citizen reports for illegal dumping and discharges. Such reports are investigated by the zoning inspector, and environmental inspector or a building inspector depending upon the nature of the report. Reports of illegal dumping are coordinated with the Springfield-Greene County Health Department, the Springfield-Greene County Emergency Management Office, and MoDNR's Southwest Regional Office and response by these agencies is coordinated per a written Memorandum of Understanding. Any required ordinance will rely on this same basic framework of investigation by the appropriate inspector initiated by any discharge detected by the required dry weather screening. Penalties for violation will be specified in any ordinance.

4.2.3.2.4

At present Greene County does not have sufficient staff to perform dry weather screening of major outfalls. In August 2006 county voters approved a parks and soils tax which took effect in the last half of 2007 (see 2007 approved budget and 2008 proposed budget in Appendix I). This will allow the hiring of additional staff members whose duties will include the required dry weather screening. If an illicit discharge is found the source will be tracked using both the storm system map and visual checks at manholes. At that time samples will be taken to determine the pollutant type and clean up measures will then be decided upon.

4.2.3.2.5

The County is currently cooperating with local pre-cast companies to utilize manhole covers that have an educational "no dumping" message cast in the steel. The lids will inform the public that storm water drains straight to rivers without being treated. This requirement is also addressed by several JRBP and WCO programs that include discussions of non-point sources of storm water pollution. We will develop programs to inform County employees of hazards associated with illegal discharges and improper disposal of waste. We will also work in conjunction with the Local Emergency Planning Committee (LEPC) and the City of

Springfield to educate and inform businesses and the general public.

4.2.3.2.6

The Administrator of the Greene County Resource Management Department is Responsible for the implementation of this requirement.

4.2.3.2.7

Current measures of success are the numbers of sanitary sewer connections and on-site wastewater systems inspected by county staff. Also measures of success include the number of wastewater complaints successfully resolved and the number of failing septic systems that are successfully repaired annually.

As the storm water screening program gets underway the initial benchmark for success will be the number of storm water outfalls screened. As the program matures Greene County will determine the best measures of program success.

4.2.4 Construction Site Storm Water Runoff Control

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

4.2.4.1.1

On January 22, 1991, Greene County adopted sediment and erosion control regulations as a part of the County zoning regulations (Article IV Section 27). These regulations apply to all non-agricultural land disturbance activities in the County. There is no lower limit on the area of land disturbed below which a permit is not required. By policy, permits are not required for sites which disturb an area less than one acre unless construction is proposed near a spring, sinkhole, cave, wetland, watercourse or floodplain.

A grading permit must be obtained from Greene County for any land disturbance activity meeting the criteria described above. A written application and fee are required. A bond is also required. A sediment and erosion control plan (SECP) must be approved by the County Stormwater Engineer. For sites disturbing 5 or more acres a storm water pollution prevention plan (SWPPP) must be approved.

Copies of the Sediment & Erosion Control Regulations and Storm Water Design Standards are included in Appendices D and E respectively.

Greene County has a locally approved program for construction site runoff control under general permit from the Department of Natural Resources. Any land disturbance activity disturbing more than one acre requires a land disturbance permit from the Missouri DNR in addition to a Greene County grading permit. A copy of the information recently submitted to DNR for renewal of the County's program is included in Appendix H. Copies of a sample grading permit application; blank grading permit, bond, and required Greene County SWPPP are also included in this appendix.

Construction site storm water runoff control is administered and enforced by the Environmental Section of the Greene County Resource Management Department. This section consists of seven employees: the stormwater engineer, one administrative clerk, one assistant stormwater engineer, one water quality specialist/inspector and three environmental inspectors. Approved 2007 and proposed 2008 budget are included in Appendix I.

4.2.4.1.2

Before issuance of a County grading permit the property developer is required to submit an EPA mandated storm water pollution prevention plan (SWPPP) to be reviewed by County staff. The design engineer is also required to submit a sediment and erosion control plan (SECP) for review by county personnel. See Section 114.3.2 and 114.5.2 – 114.5.5 of the Storm

Water Design Standards in Appendix E. See also the Sediment and Erosion Control Regulation included in Article IV Section 27 of the Zoning Regulation (Appendix D).

4.2.4.1.3

Construction site operators are required to follow the SWPPP regulations to control other wastes. See the standard SWPPP in Appendix H.

4.2.4.1.4

All site plans are reviewed for approval by the assistant storm water engineer. The sediment and erosion control plan is reviewed by the water quality specialist. See Section 103 of the Storm Water Design Standards for submittal and review procedures.

4.2.4.1.5

Before any proposed development can submit a preliminary plat they must present their proposal to the Greene County Zoning Board at a public hearing. Zoning hearings are posted 15 days in advance and adjoining landowners are contacted by personal courtesy letter (See PZ Application, Appendix D). The hearings are a forum for the public to express their sentiment for, or against the proposed development.

4.2.4.1.6

All land disturbance sites are regularly inspected by the water quality specialist as part of required job duties.

4.2.4.2.1

Article IV section 27 of the Greene County Zoning Regulations requires sediment and erosion controls as applicable at construction sites. This section can be found in Appendix D.

4.2.4.2.2

Inspection requirements and penalties for violation are found in Article IV Section 27 part F of the Zoning Regulations

4.2.4.2.3

Construction site operators must follow the requirements of the SWPPP as mandated by the USEPA.

4.2.4.2.4

As previously stated all plans must be submitted for review by the assistant storm water engineer and the water quality specialist. Review procedures are found in Section 103 of the Storm Water Design Standards. Before construction may begin all developers and contractors must have a pre-construction conference with the Greene County Highway Department and Storm Water Section as required in Section 101.12 of the Storm Water Design Standards

4.2.4.2.5

As required by Missouri Revised Statutes Chapter 64 The Greene County Zoning Board is required to hold public meetings when considering preliminary plat approval. See procedure above in section 4.2.4.1.5

4.2.4.2.6

Procedures and requirements for site inspections by Greene County staff are set forth in Section 101.12 of the Storm Water Design Standards. The water quality specialist conducts inspections of sediment and erosion control measures. In addition, construction site operators are required under the requirements of the MoDNR issued land disturbance permit to perform weekly and post rainfall self-inspections of erosion control measures. All active sites are inspected by the water quality specialist no less than once a month and inspection logs are kept in the site grading permit files.

4.2.4.2.7

The Greene County Resource Management Administrator is responsible for program implementation.

4.2.4.2.8

The success of this minimum control measure can be measured by the number of county grading permits issued per year and the number of those sites that require a MoDNR land disturbance permit. Success can also be measured by the number of inspections by county staff through the year and the number of grading permits that are successfully closed.

We feel that our present program substantially meets the requirements of the general permit. The following actions appear to be needed:

- Develop and formalize reporting procedures.
- Define measurable goals for BMP's.
- Coordinate requirements with TMDL's established for the James River and McDaniel Lake.

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

Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the permittee's regulated small MS4. The permittee's program shall ensure that controls are in place that would prevent or minimize water quality impacts;

4.2.5.1.2

As with most communities, Greene County's regulations and requirements for stormwater management have traditionally focused on stormwater facilities for conveyance of stormwater runoff and flood control. The County has adopted requirements for the design and construction of storm sewers, drainage channels and stormwater detention basins to serve new developments.

However, due to the County's sensitive geologic setting water quality concerns have received a higher priority than in most communities. A number of studies and reports have been instrumental in focusing County policies with regard to water quality protection. These reports are cited in the references.

For the purposes of the stormwater management plan, we define **post-construction stormwater management** as "a combination of non-structural and structural BMP's which control both the planning of new developments and the design, construction, operation and maintenance for *permanent* stormwater management facilities in those developments", as opposed to stormwater management for construction sites, which should be by its very nature, temporary.

Our definition of non-structural and structural BMP's may be somewhat different than the commonplace usage at MDNR. However, our definitions are consistent with the way these terms are used nationally and by USEPA:

Non-structural BMPs include practices which affect stormwater quality by activities and requirements which do not include construction of stormwater facilities per se. Examples of non-structural BMP's are public education, standards for land use planning and design, etc.

Structural BMPs are those which result in the actual construction of a stormwater management facility. Permanent structural BMPs include extended detention basins, bioswales, vegetative filter strips, sand filters, etc. Structural BMP's may be "hard" (a concrete sand filter chamber, for example) or "soft" (bio-swale, vegetative filter strip) depending upon their design and application.

4.2.5.1.3

All new developments in Greene County are required in Article IV Section 25 of the Zoning Regulations to provide storm water detention to limit post-construction peak discharges to the pre-construction rate or lower. See also Section 112.5 of the Storm Water Design Standards.

4.2.5.1.4

At present the County only provides operation and maintenance for permanent stormwater facilities located on County road right-of-way. Operation and maintenance for permanent stormwater facilities located on private property are the responsibility of the property owner. For commonly owned private facilities, the Subdivision Regulations include requirements for formation of homeowners' or property owners' association and mandatory collection of dues to provide for operation and maintenance. Covenants including the formation of the association must be approved by the County Counselor prior to recording of the subdivision plat. All permanent BMPs are required to be located within one single lot where maintenance is the property owner's responsibility, or in dedicated common space where maintenance is the responsibility of the homeowner's association. Article IV Section 10 Part 7 of the Subdivision Regulations and Article XXIV of the Greene County Zoning Regulations addresses permanent BMP operation and maintenance (Appendix D). See also Section 112.4 of the Storm Water Design Standards.

To more adequately address the long term operation and maintenance of permanent storm water BMPs Greene County is investigating long term funding options to enable the county to play a larger role in storm water system maintenance.

4.2.5.2.1

As stated above all new developments in Greene County are required in Article IV Section 25 of the Zoning Regulations to provide storm water detention to limit post-construction peak discharges to the pre-construction rate or lower. See also Section 112.5 of the Storm Water Design Standards Section 112.5.

4.2.5.2.2

All new developments in Greene County are required to provide storm water detention volume for the 100 year storm event with discharge rates of all required frequencies (2,10, and 100 year) not to exceed the pre-developed conditions (Section 112.5 of Storm Water Design Standards). In addition, water quality enhancement was mandated on all detention basins as of January 3, 2006 by the Greene County Commission Planning Board Case 1625 as an amendment to Section 115.1 of the Storm Water Design Standards (Appendix E). This requires restricting the discharge from the first one inch of site runoff or the first one half inch of runoff from directly connected impervious area to the water quality riser. This perforated riser pipe is required on all outlet structures with a gravel filter to increase settling time and reduce sediment loadings in discharge water. See Figure 114.1 in Greene County Storm Water Design Standards.

As a proactive and innovative step, Greene County has spearheaded the design and construction of the first LID development in Southwest Missouri as an attempt to rely on infiltration and dispersed micro-detention rather than the traditional pipe and detention basin system. Techniques learned from this development will be used to try to convince developers to incorporate these techniques into future projects to reduce storm water discharges.

4.2.5.2.3

Greene County has adopted a number of regulations and policies which are very effective non-structural BMPs with regard to water quality protection. These include:

- Comprehensive Plan (Appendix J)
  -Limits high density urban growth to specified areas
  -Began public input meetings in October 2007
- Zoning Regulations Article IV Sections 25, 27 and 28 (Appendix D)
  -Section 25 requires storm water detention for any new development
  -Section 27 regulates sediment and erosion control on new developments
  -Section 28 sets specific restrictions on development activities in sinkholes
- Subdivision Regulations Article V Section 6 (Appendix D)
  -Requires storm water detention, erosion control, and storm water BMPs
- Urban Services Area Policy (Appendix J)
  -Encourages urban growth close to established infrastructure
- Floodplain Management Regulations: Zoning Regulations Article 21 (Appendix D)
  -Prevents development of any kind from the floodway, and sets strict limits on floodplain encroachment
- Stormwater Design Standards (Appendix E)
  -Sets specific standards for storm water system design and erosion control

4.2.5.2.3.1

Currently high density development is allowed only within the urban service areas in the immediate periphery around the urbanized areas. In order for plans to be approved a new development must connect to a central sewer system. Only lots greater than 3 acres are allowed to have on-site waste water systems. This greatly encourages centralized growth around already urbanized areas where sanitary sewer can be easily extended. The Greene County Planning and Zoning Section of the Resource Management Department has developed a long range comprehensive plan with new requirements to restrict urbanization to certain areas in order to preserve farm and open land in the county. See pages 64-85 of the Comprehensive plan draft (Appendix J). To be enacted this plan will undergo public hearings, a vote by the Planning Board, and a vote of the County Commission.

4.2.5.2.3.2

See Urban Service Area Policy and Comprehensive Plan (Appendix J). Both policies limit high density growth to areas close to existing infrastructure

4.2.5.2.3.3

The Habitat for Humanity LID project is the first step in developing storm water design techniques that work in the local soils and hydrologic regime to limit water quality impacts. Once the project is more complete Greene County will be encouraging developers to utilize

the techniques developed. In addition, The City of Springfield and Greene County held informational seminars every Thursday from September 6 to November 1, 2007 for engineers and design professionals on the new storm water standards implemented by the City to improve water quality. Beginning in 1997, the County has offered a series of seminars in stormwater design to professionals who submit stormwater management plans to the county. These seminars are repeated on a triennial basis and were offered again in 2000 and again in the spring of 2003. This training seminar was combined with the City of Springfield's Design Criteria seminars in 2007. An average of 50 professionals attended each seminar.

4.2.5.2.3.4

Greene County is in the beginning stages of trying to bring low impact development (LID) techniques to the attention of the area's development community. The pilot development features dispersed micro-detention and narrower streets with bio-swales instead of curb and gutter to minimize impervious area. In 2007 a developer applied to the Planning Board to incorporate LID techniques into his next development design featuring bio-swales and rain gardens.

As a result of the Fulbright Spring Protection Study completed in 1996, Greene County adopted requirements for permanent structural water quality BMPs in the Fulbright Spring and Pierson Creek watersheds. Requirements for these BMPs are included in Section 115 of the Stormwater Design Standards. In January 2006 the County Commission voted to extend these water quality BMP requirements to all watersheds in Greene County (See Planning Board Case 1625, Appendix E). A description of required BMPs is found in section 4.2.5.2.2

In 1992, Greene County adopted restrictions and standards for development in sinkhole areas in the Zoning Regulations Article IV Section 28 (see Appendix D). Specific standards for development around sinkhole and karst features are included in Section 107 of the Stormwater Design Standards.

An issue that we feel needs to be addressed is the stability of stream channels in urban and urbanizing areas. We feel that urban stream channel erosion is likely a significant contributor to water quality impairment. The Ward Branch Preservation, Restoration, and Enhancement Project provided an initial step in learning how to protect streams from erosion This ongoing stream restoration project is funded by a DNR 319 grant to install several different stream stabilization techniques in an urban stream to assess which methods work the best in this area.

4.2.5.2.4.1

In January 2006 the Greene County Commission voted to require water quality BMPs on all new developments in the County. All detention basins are required to have extended detention to allow greater settling time for sediment and are further filtered by a required perforated riser with gravel filter as a low flow outlet structure. See Planning Board Case 1625 and Greene County Storm Water Design Standards Section 115 (Appendix E) which applies to all new

development in Greene County.

4.2.5.2.4.2

The soils in Greene County are generally not suited for standard bioretention cells and sand filters. However, in the sediment and erosion control plan review process engineers and designers are required to leave existing grass and vegetation undisturbed wherever possible as a means of erosion and sediment control.

4.2.5.2.4.3

As mentioned above the LID development is helping to establish filtration practices that work in this area.

4.2.5.2.5

As mentioned above Greene County already has several ordinances and policies in place to reduce post-construction runoff.

- Comprehensive Plan (Appendix J)
- Zoning Regulations Article IV Sections 25, 27 and 28 (Appendix D)
- Subdivision Regulations Article V Section 6 (Appendix D)
- Urban Services Area Policy (Appendix J)
- Floodplain Management Regulations: Zoning Regulations Article 21 (Appendix D)
- Stormwater Design Standards (Appendix E)

4.2.5.2.6

At present the County only provides operation and maintenance for permanent stormwater facilities located on County road right-of-way. Operation and maintenance for permanent stormwater facilities located on private property are the responsibility of the property owner. For commonly owned private facilities, the Subdivision Regulations include requirements for formation of homeowners' or property owners' association and mandatory collection of dues to provide for operation and maintenance. Covenants including the formation of the association must be approved by the County Counselor prior to recording of the subdivision plat. Article IV Section 10 Part 7 of the Subdivision Regulations and Article XXIV of the Greene County Zoning Regulations (Appendix D) address permanent BMP operation and maintenance. See also Section 112.4 of the Storm Water Design Standards.

The County does not presently have sufficient staff to monitor maintenance activities by private property owners. Staffing needs to effectively address this requirement will need to be assessed. Minimum maintenance requirements will need to be drafted and adopted. An inventory of privately owned storm drainage facilities will need to be made and a schedule of maintenance developed. The provision of operation and maintenance drainage facilities off of County road right-of-way is permitted by State statute. However, the County does not currently have the financial or staffing resources to provide this service. This is a significant issue and will require community input and discussion. If this service is provided by the

County a source of additional revenue will be needed. Greene County is also investigating long term funding options to enable the county to play a larger role in storm water system maintenance.

4.2.5.2.7

The Resource Management Administrator is responsible for the implementation and management of the post construction program.

4.2.6 Pollution Prevention/Good Housekeeping for Municipal Operations

Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations;

"Municipal" operations for Greene County include two functions:

1. The Greene County Highway Department operates and maintains over 1500 miles of public roads, including the storm drainage system contained with the public road right-of-way. County Highway Department operations are located on a central yard about 12.5 acres in size. The County Highway Department also provides upkeep and maintenance for all County - owned vehicles, including operation of a fueling station and a vehicle washing facility.

2. Operation of buildings and grounds on the main county campus is provided by the Building Operations Section of the Resource Management Department.

Both the County Highway Department and the Resource Management Department are under direct control of the Greene County Commission. Park facilities in Greene County are operated by the Springfield-Greene County Park Board, which functions as a department of the City of Springfield. Greene County does not own or operate any other facilities or services.

4.2.6.2.1

The County Highway Department presently manages the following programs for operation and maintenance:

Salt Storage

The Greene County Highway Department presently utilizes two enclosed salt storage facilities located at 2065 N. Clifton Springfield, Missouri. Even though it is enclosed, any runoff leaving the area will flow into the northwest detention basin lined with 6x10 filter stone. The second facility is located at the City of Springfield's enclosed storage on Kaufman Road. Calcium Chloride is stored in approved above-ground containers and located on Highway Department property.

Equipment Washing

Trucks, and heavy equipment are washed at the Highway Department Complex. Products such as EC-510 Citrus Solvent are utilized in place of petroleum or chlorinated solvent products. A new truck washing facility was built in 2004. wash water is routed through a sediment trap and trash baffle before being released in to the city of Springfield's storm sewer system.

Shop Activity

Parts are washed in hot baths with EC-510 Citrus Solvent. Used oil is channeled into a double walled storage tank. A licensed contract vendor pumps out used oil and disposes of used oil filters and other fluids. Anti-freeze which is used in heavy equipment tires for weight is of the R/V environmental type. Storage of any product involving an MSDS, (material safety data sheet) is reported on Tier Two annual reports by the Safety Division.

Fuel Storage Facility

Under new EPA guidelines the Greene County Highway Department's old fuel storage facility was closed. On December 01, 1998 new FRP Clad Steel storage UST, (underground storage tanks) were installed and meets EPA 1998 upgrade. The fuel system services all County vehicles. The new fuel system is automated with safety controls, example: if an employee accidentally departs the fuel facility without properly removing the filler nozzle and the nozzle breaks off, the fuel system will shut down.

Herbicide Program

The Greene County Highway Department retains two currently certified herbicide applicators. Started in year 2002 the program utilizes the following herbicides. Roundup Pro, Plateau, Outrider and Escort. Additives are chelating liquid with the trade name of Water Soft. Surfactant is Freeway. All containers are triple rinsed and disposed of as prescribed by labeling. Chemicals are applied per labeling direction. Chemicals are stored in a locked fire proof storage cabinet located in the sign shop bay area.

County Road and Special Projects

Environmental concerns are dealt with through preliminary plan and monitored through phases of construction.

Pug Mill Operation

The Greene County Highway Department operates a cold mix plant for road improvement. The operation runs mostly in the summer months and is located on Conco properties just east of Willard, Missouri. Trucks prior to being loaded use a release agent for asphalt material, trade name React S. The chemical is sprayed on dump beds; excess runoff goes onto top of soil. Safety Division has addressed concern on the use of React S. There have been no measures to remove contaminated soil, if any. Nevertheless, the Safety Division is presently in touch with Operations and the use of an environmentally safe release compound is being considered. Oil at the site is trucked in and no oil is stored at the Greene County Highway Department facility at 2065 North Clifton, Springfield, Missouri. The operation of the pug mill is being phased out and is seldom in operation at all. In 2007 no React S was used by the county.

Surface Water

Water flows from south to north across 12.46 acres at the Greene County Highway Department Complex. Water is directed into two retention areas. One at Clifton and High Street and the

other is the 6x10 stone filter retention located just northwest of the Salt Storage Building. Overflow diverts into the City of Springfield storm water system.

4.2.6.2.2

Currently the Greene County Highway Department Safety officer is responsible for the training of county employees in the safe handling, storage, and disposal of materials such as salt, calcium chloride, and fuel. A greater effort will be made throughout this permitting period to coordinate this employee training with the public information minimum control measure.

4.2.6.2.3.1

The County will need to develop procedures for routine maintenance and inspection to prevent floatables and other pollutants.

4.2.6.2.3.2

As stated above, all salt and sand storage facilities are enclosed from the weather. Any runoff with entrained pollutants is captured in the highway department's detention basin. Tier Two reports for all chemical storage are submitted yearly to SEMA and are kept at the highway department.

4.2.6.2.3.3

All debris, sediment, and floatables are disposed of in accordance with state law. These disposal procedures will be formalized.

4.2.6.2.3.4

All flood management projects are reviewed by the storm water engineer to ensure consideration of water quality impacts.

4.2.6.2.4

The Resource Management Administrator is responsible for the implementation and management of the pollution prevention and good housekeeping program.

In order to comply with this requirement we need to:

- inventory stormwater facilities on public road right-of-way
- develop a routine maintenance schedule for maintenance activities related to stormwater quality
- formalize documentation and schedule for employee training

The County Highway Department has further set the following goals:

1. Alternative to React S (Pug Mill environmental issue)

2. Training annually for employees on environmental awareness issues (re-engineering or in place modifications)
3. Safety Committee meets once every month. Training priority is discussed and implemented through the Safety Officer. An annual training program on mentioned issues will be one of the goals of the Greene County Highway Department.

Although the highway department safety officer provides training in the following areas the county needs to incorporate more emphasis on storm water pollution prevention during training. We need to document and formalize training for County employees, including training in the following specific areas:

- Routine inspection of equipment yards, material storage facilities, and stormwater facilities.
- Procedures for cleaning inlets, manholes, storm sewers, culverts and outfalls.
- Waste disposal from maintenance activities
- Procedures for storage, handling, application, and disposal of herbicides and pesticides.
- Spill response and clean-up.
- Salt and de-icer storage and application.
- Used oil recycling
- Vehicle maintenance procedures.

4.3
Sharing Responsibility
As noted in the foregoing sections, most of the activities included in Public Education and Outreach and Public Involvement and Participation are funded jointly by the City of Springfield, Greene County, and other agencies. These activities are also a part of the Phase 1 MS4 permit for the City of Springfield. Though it is not the intention of Greene County to apply as a co-permittee with the City of Springfield, we do intend to develop a number of programs in close coordination and cooperation with the City's activities under their permit.

4.4
Reviewing and Updating Storm Water Management Program
The plan will be reviewed and updated annually in conjunction with preparation for the annual report.

5 Monitoring, Record Keeping and Reporting

5.1

Greene County is working with the surrounding MS4s to develop a comprehensive regional water monitoring program. The sampling techniques will comply with the requirements of this permit.

5.2

Records of all permits and inspection reports are kept on file for the requisite time period in the offices of the Greene County Resource Management Department and are available for public inspection upon request during normal business hours.

Copies of the general permit will be kept on file and will be available of inspection by public as required in the general permit

5.3

Annual reports will be submitted as required.

The annual report will be prepared and submitted to the Director of the Department of Natural Resources by January 31st of each calendar year. In accordance with the requirements of the general permit the annual report will contain the following:

- status of compliance with permit conditions
- assessment of the appropriateness of identified best management practices
- progress toward achieving measurable goals for each of the six minimum control measures
- progress toward the statutory goal of reducing the discharge of pollutants to the maximum extent practicable.
- results of information collected and analyzed including monitoring data, if any
- a summary of stormwater activities which are plan during the next reporting cycle, including an implementation schedule
- any changes in identified measurable goals that apply to the program elements

PROPOSED SCHEDULE FOR IMPLEMENTING PERMIT REQUIREMENTS

In the foregoing sections we have proposed a number of activities to be undertaken in order to comply with the terms of the general permit. These are summarized below along with our best estimate of the timetable for completing these activities. It is our intention to complete all proposed activities during the 5-year term of the permit and to be in full compliance with all terms of the general permit by the conclusion of that period on March 10, 2008.

ACTIVITY	PERMIT CYCLE YEAR
Revise and update stormwater management plan	Annually
Revise and update BMPs and goals for minimum control measures	Annually
Post permitting information and stormwater management program on County website	Year 2
Formulate program for illicit discharge detection and elimination. Evaluate staffing and funding needs.	Year 2
Adopt program for illicit discharge detection and elimination.	Year 3
Hire new staff members to carry out field screening	Year 1
Coordinate with other MS4s to sample water quality to meet James River TMDL requirements	Throughout permit cycle
Complete 319 grant activities for Ward Branch stream stabilization project	Year 2
Complete 319 grant activities for urban stormwater BMP demonstration and on-site wastewater system demonstration	Year 2
Inventory privately owned and maintained stormwater management facilities	Year 2
Develop maintenance procedures and schedule of required maintenance for stormwater management facilities	Throughout permit cycle
Develop policy for maintenance of stormwater facilities on private property	Throughout permit cycle
Receive input from citizens and stakeholder groups on County's role in operation and maintenance of stormwater facilities on private property	Throughout permit cycle
Determine staffing and funding needs for level of service which the community will support	Year 3
Seek methods of acquiring permanent funding sources that the community will support	Ongoing
Seek public input on preferred means of funding stormwater program	Year 2
Seek public approval of permanent funding for stormwater program	Year 2
Develop written procedures and policies for pollution prevention and good housekeeping for County operations	Year 2

Develop maintenance schedule for stormwater management facilities operated and maintained by the County	Year 2
Develop and document employee training programs for pollution prevention and good housekeeping for County operations	Year 2
Prepare and submit annual report	January 31, each year
Formalize procedures for disposing of dredged material, accumulated sediments, floatables, and other debris from the MS4.	Year 3
Develop a grading contractor certification program	By end of permit cycle
Develop outreach program to homeowners associations to assist in long term water quality basin maintenance.	Year 4

BUDGET AND COST CONSIDERATIONS

Significant among the requirements of the permit, is the requirement for the County to demonstrate that it has sufficient staffing and funding resources to implement and maintain programs for compliance with terms of the general permit. During Year 1 of the permit cycle we will document budgeted funds for existing activities as well as develop estimates for proposed activities which are not funded.

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APPENDICES

APPENDIX A: Public Education & Outreach Activities

APPENDIX B: Water Resources Task Force Recommendations

APPENDIX C: Environmental Report Card

APPENDIX D: Zoning & Subdivision Regulations

APPENDIX E: Storm Water Design Standards

APPENDIX F: Building and Plumbing Codes

APPENDIX G: Solid Waste Management Ordinance

APPENDIX H: Land Disturbance Program and General Permit Information

APPENDIX I: Environmental Section, Personnel Detail & 2007 and 2008 Budget

APPENDIX J: Urban Services Area Policy and Comprehensive Plan draft

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