

# City of Springfield - Greene County, Missouri

## Stormwater Management Task Force Meeting



**Date:** Thursday, February 28, 2013  
5:00 to 7:00 p.m.

**Location:** Public Safety Center  
330 West Scott Street  
Springfield, Missouri 65802

### Meeting purposes:

- Develop Task Force Recommendations (See attached questions to answer).

## AGENDA

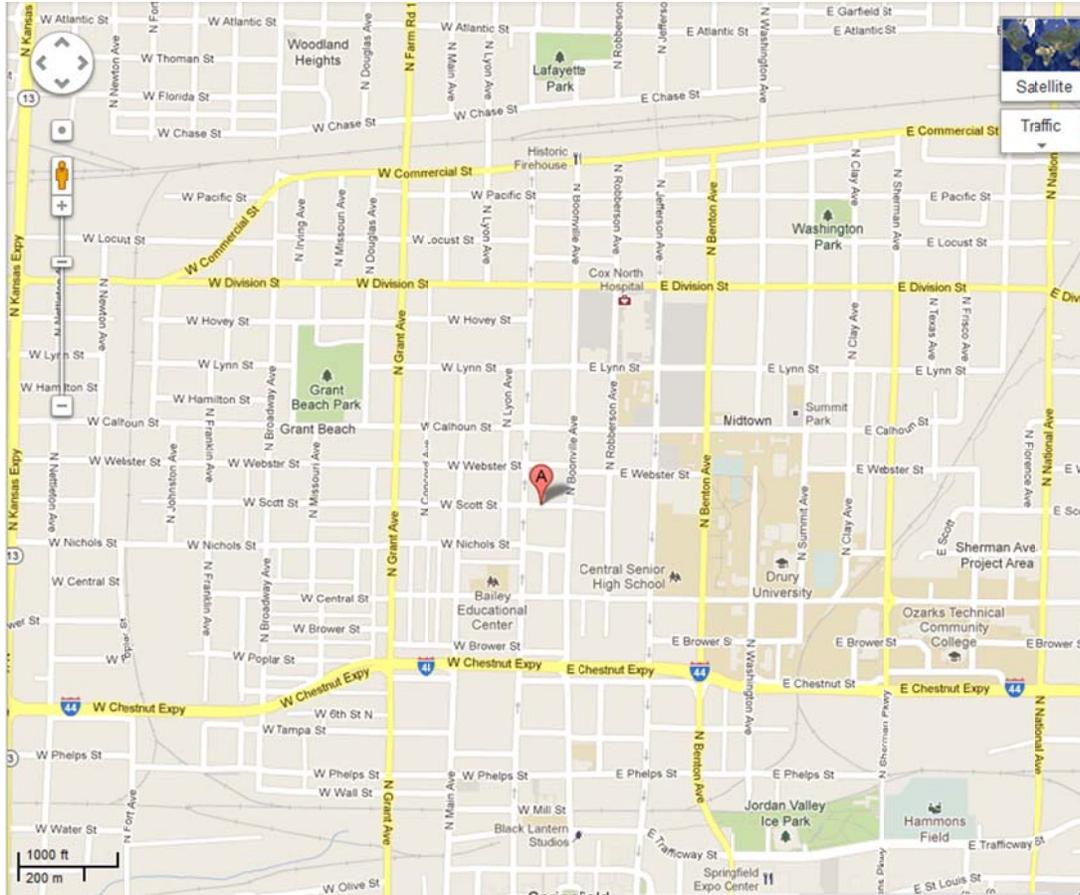
5:00 p.m.	Welcome	Co-Chair Fred Palmerton Co-Chair Dan Hoy
5:10 p.m.	Discussion of Last Meeting Minutes	Task Force Members
5:15 p.m.	Presentation – Follow up from Last Meeting	Project Team Support
5:30 p.m.	Task Force Discussion	Task Force Members
6:45 p.m.	Next steps - Information needed for upcoming meetings	Sheila Shockey
6:55 p.m.	Closing Remarks	Co-Chair Fred Palmerton Co-Chair Dan Hoy
7:00 p.m.	Adjourn	

*In accordance with ADA guidelines, if you need special accommodations when attending any City meeting, please notify the City Clerk's office at 864-1443 at least three days prior to the scheduled meeting.*

## Meeting Site:

Public Safety Center  
330 West Scott Street  
Springfield, MO 65803

For assistance call (417) 864-1901 or (417) 818-6091



## Directions:

From the North: Travel south on N. Kansas Expressway to Chestnut Expressway. Turn left or east and travel to North Booneville Avenue. Turn left and proceed 3 blocks to Scott Street. The Public Safety Center is on your left.

From Highway 65: Take the Division Street exit. Turn west (right if coming from the north, left if coming from the south) and travel to Booneville Avenue. Turn left and travel about 5 blocks to Scott Street. The Public Safety Center is on your right.

From the west and I-44: Take the Chestnut Expressway east to Booneville Avenue. Turn left onto Booneville Avenue and travel 3 blocks to Scott Street. The Public Safety Center is on your left.



## Recommendations to be Prepared

The Task Force will provide the County Commissioners and the Mayor/City Council written recommendations regarding these questions.

- What principles should guide the community stormwater management programs?
- What investments should be made in stormwater management?
  - What amount of capital investment should be made over what time period?
  - Should a permanent dedicated source of funding be implemented for required programs and maintenance?
  - Should the capital funding source have a sunset and specific projects identified?
  - What type of maintenance program should be implemented?
  - Should water quality programs be developed to comply with regulations or exceed standards?
- How should we prioritize capital investments made?
- What source(s) of funding are desired?
- What level of funding is desired?
- How should we explain the issues and task force recommendations to the community?



## Draft Program Goals & Priorities

1. Reduce injury/death caused by flooding events.
2. Protect water quality.
3. Plan for and design projects with multiple benefits.
4. Reduce property damage caused by flooding events.
5. Reinvest in life-cycle repair and replacement of existing infrastructure.

## Draft Guiding Principles

### Conservation:

- The efficient use of resources should be encouraged.

### Economic Development:

- We attract businesses and citizens to our community because of the value gained through investments made in environmental stewardship.
- We safeguard our water resources while keeping tax rates and fees competitive with other jurisdictions to attract and retain business and citizens.

### Effectiveness:

- Stormwater management programs utilize best practices & sound science; investments are effective.
- Springfield/Greene County can't meet all the financial needs that have been identified. Investments must be made that have the most impact for the dollar spent.

### Environmental Stewardship:

- Springfield/Greene County should meet achievable regulatory requirements based in sound science with the goal of protecting water resources.
- It is important to protect & improve drinking water sources and quality of water in streams in Southwest Missouri. Good stormwater management is in everyone's best interest.

### Equity/Fairness:

- Everyone in the community should pay for stormwater management.
- The costs to administer & review permits should be fully recovered from the applicant and not subsidized by other customers.

### Financial Burden:

- Springfield/Greene County should invest in stormwater management programs that are affordable.
- Everyone in the community should pay for stormwater management.

### Innovation/Planning:

- The long-term stormwater management program should be flexible to adapt to new technologies and innovations.
- It is important to develop good plans before implementing projects so funds are spent wisely.
- Master plans of capital improvements should be developed collaboratively on a watershed basis rather than by political jurisdiction.

### Public Acceptance:

- The public perception should be that the stormwater management programs are balanced; decision-making is open and is influenced by public input.
- It is important to continue to prioritize, plan & build projects showing progress to the public.

### Public Benefit:

- The public should benefit from the investments made in stormwater management.

### Understandability/Public Education:

- Citizens should be made aware of how they can protect water quality through their actions.
- Citizens should understand how improvements can help protect water quality and how improvement programs are funded.



## Stormwater Management Task Force Meeting Notes - February 7, 2013

### Welcome & Introductions

The Springfield/Greene County, Missouri Stormwater Management Task Force met in the Springfield-Greene County Public Safety Center. The meeting commenced at 5:00 p.m.

Task Force Co-chair Dan Hoy welcomed the Task Force members and community members in attendance. Those present included the following:

### Task Force

Brain Perdue	Dave Murray	Ronda Headland
Rick Scarlet	Chris Carson	Casey Haynes
Daniel Beckman	Stacey Armstrong	Dan Hoy
Fred Palmerton	Tiffany Frey	Chris Macioce
Matthew Pierson	Fred Schlegel	Tom DeWitt
Eric Dove	Andy Hosmer	

Absent: Aaron Wahliquist, Karen Spence, Jerany Jackson, Geoffrey Butler, Dana Elwell, Patrick Harrington, Patty Hamilton, Erik Fjeseth, King Coltrin, Harlan Hill, Matt Bailey, Tom Kisse, Bill Bretall

### City and County Staff

Kevin Barnes	Chris Coulter	Sheila Shockey
Vanessa Brandon	Tim Davis	Fred Marty
Phil Broyles	Carrie Lamb	Todd Wagner
Greg Burris	Barbara Lucks	Kimberly White
Karen Elmer	Jan Millington	Jon Williams
Rob Dixon		

### Visitors

Mike Kromrey  
Sarah Okeson  
Mike Pessina

### Affordability Task Force Presentation

Rob Dixon, Chamber, summarized the City/County Unfunded Environment Mandates Affordability Task Force Recommendations. The City/County is facing billions of dollars of deficit and it will impact all citizens. Concerns include environmental protection, least able to afford, and protecting economic growth. Affordability & Integrated Planning can provide a solution. The US Environmental Protection Agency (USEPA) may or may not implement. Their charge was to review the Missouri Department of Natural Resources (MDNR) affordability policy. The task force recommended that all environmental mandates be considered in the affordability for the community. MDNR is looking only at water quality (stormwater + wastewater) for the 2% of median household income affordability target.

Mr. Dixon presented 2013-2020-2030 trajectories on income levels. The following recommendations were made by the Affordability Task Force to MDNR:

1. Ask communities for information.
2. Don't penalize for good financial stewardship.
3. Consider all mandates together.
4. Consider law of diminishing returns.
5. Older technology should be allowed to finish its life cycle if still effective.
6. Study the wide impact on lower income residents.
7. Consider environmental investments already made.
8. Consider good faith efforts to maintain environmental compliance.

Questions: Any update on EPA-TMDL decision in Virginia and how does that affect us?

Response: We think USEPA will withdraw from the lawsuit. They will likely start again and use better science to create the TMDL on the stream.

Question: Is HB89 the appropriate the avenue for modifications?

Response: Affordability Task Force recommendations are for agency implementation of HB89.

## Funding Discussion

Sheila Shockey presented revenue options and how those correlate with the City/County needs, and priorities established by the Task Force. Considering City and County expenditures together, Sheila shared expenditure projections for 2018 as an example scenario for the discussion.

She reported that the costs for City/County expenses together in 2018 would range from \$6 million - \$17 million to \$35 million. This is for water quality, flood risk minimization and infrastructure replacement totaled together.

Question: How do you estimate mandate if we don't know?

Response: Based on other city's TMDL costs and it is a guess. There was a discussion about whether the City/County could implement a funding source that would only be triggered when TMDL's kick in.

Sheila showed graphs of City and County expenditures through 2021 for 5 different scenarios as examples: 1) minimum mandate, 2) maximum mandate, 3) minimum mandate plus proactive, 4) minimum mandate plus reactive plus flood control, 5) minimum mandate plus proactive plus flood control.

Sheila reviewed priorities established by task force surveys:

1. Protect Water Quality
2. Reduce injury/death caused by flooding events
3. Projects with multiple benefits
4. Reduce property damage caused by flooding events
5. Life cycle replacements for infrastructure

The Task Force discussed how much of each circle they want to fund from each of these priority areas.

Sheila offered some potential funding sources: utility, property tax or sales tax and gave the amount of revenue for each.

utility: She explained that utility user fees are usually based on equivalent residential units (ERU's). No entities are exempt.

Question: How was the 3,200 ERU figured?

Response: We took the impervious area of the average residence (roof, driveways, sheds, etc.) which was 3,200 square feet.

Question: Are incentives for good stewardship provided with a utility?

Response: Yes, it is common. She explained several different methods for providing incentives.

Comment: Incentives could be very complicated based on various site scenarios.

Sheila showed what the statutorily available revenue sources would provide as compared to projected expenditure.

- 1 cent property tax- 8% of Water Quality minimum
- 1/10 cent – 75% of Water Quality minimum
- 1/8 cent- 95% of Water Quality minimum, 71% of WQ & 44% of Water Quality maximum
- ¼ cent- 100% Water Quality minimum, 88% of flood mid service level
- \$3/month- 100% of Water Quality minimum, 92% of flood mid-point
- \$5/month- 100% of Water Quality min, 100% flood mid, 98% Infrastructure mid-point
- ½ cent sales tax provides: 100% of Water Quality minimum, 100% of flood mid-point, or 100% of infrastructure mid-point and some extra available revenue.

Question: What is the administrative cost of utility?

Response: There are startup and ongoing costs associated with administering a utility.

Question: Would utility revenue only be collected from CU customers?

Response: Because the stormwater program is county-wide, it would probably be charged to all county residents or charged to Springfield + urban service area property owners.

Sheila discussed the funding options. They are:

- Use multiple sources of revenue which is a common practice.
- Determine whether the community could enact an escalating funding source since it doesn't need the full amount right away.
- Set a dedicated source for mandated portions of the program and a tax that sunset for capital projects.

- Sheila reviewed the latest survey results. She presented the various pros and cons of the different funding sources, and facilitated a task force discussion to identify others. Con: Utility is burden for municipalities and non-profits to pay for their own imperviousness.
- Con: High cost of utility for churches, which is politically unfavorable.
- Con: City would have no incentive to add more impervious surfaces such as streets and sidewalks if they had to pay a utility fee. Response: You could choose to exempt roads/sidewalks.
- Con: For property tax or sales tax, it is a burden on consumers and not businesses. "No new taxes" is the current mantra.
- Pro: Utility is a disincentive for expanding impervious surfaces.
- Pro: Sales tax is easy to administer.
- Pro: The utility option has more opportunity to provide incentives to those that implement good stormwater practices, going above and beyond the required levels. Comment: For any options, we should require new development to pay for its impact on the watershed
- Con: Sales tax has negative perception of no new taxes.
- Con: A sales tax is burdensome for lower income households. It has a bigger negative effect on the poor.

Comment: The hotel/motel tax is not making enough money now. Springfield in the middle on tax rates compared to benchmark communities.

Comment: Utility could create conflict over arguments on credits plus burden of administering the program is too complicated and bureaucratic. We've had success with sales tax and so that seems to be path of least resistance and most chance of success.

Question: Some communities have a maximum cap for ERU. Have we considered this?

Response: No, because we feel it opens up the utility for lawsuit, makes it less a fee and more of a tax.

Comment: With a sales tax, incentives are not easy.

Question: Do current standards prevent future problems?

Response: Detention has evolved and water quality control is evolving. Mimicking the predevelopment hydrology is where USEPA is headed and we're not there yet. For all the different levels of mitigation that exist, depending on when a development was built and if they went above and beyond, a utility fee can be assessed to reflect that.

Comment: That connection and incentivizing good behavior seems important to our community.

Comment: Retrofits are coming, also as part of mandates.

Comment: Incentives are possible with property tax and sales tax as well, in the form of cash incentives, assistance, permitting fast forward, and public/private partnerships, etc. You could implement incentives through cost-sharing, by allocating revenue for a cost-share program in the budget. This is a way of leveraging private funds with public money.

Question: Structure of utility. How is it set up? Would it have a board of directors?

Response: Not usually. It is typically set up similar to a wastewater utility.

Comment: I'm concerned about using sales tax as that takes away the option to fund certain other community priorities.

Sheila asked Task Force how much water quality protection they want to budget for when we bring certain scenarios back at the next meeting.

Comments: We need to budget more than the minimum in case mandate is higher. If unknown, go with minimum.

Question: What is administrative cost to set up and operate a utility?

Response: We will bring more information next time.

Comment: Administering a TMDL could be more costly than we think. We don't want to have zero in reserve for water quality mandates. We should look at the middle level of funding instead of the minimum.

Question: Would a sales tax have to be tied to specific items or generally anything stormwater-related?

Response: Could be generally water quality, flooding, or infrastructure replacement.

Comment: Being able to shift money between the three if mandate cost fluctuates, can increase or decrease funds for the other two. Fund water quality at the maximum level and if not as expensive as expected, funds can be shifted to other two areas.

Comment: Not in support of that, gives too much latitude to staff and that doesn't serve citizens well.

Sheila asked, 'if there is extra left from mandates, could that be used for incentives?'

Question: What is water quality mandate money spent on?

Response: Programs for MS4 and study or projects for TMDLs. Detail on this was provided in meeting #3 but we will bring that back next meeting.

Question: Are credits one time or ongoing?

Response: They can be both.

Question: Can utility be modified to ease burden on commercial?

Response: Again, this could spark a legal challenge of it as a utility fee.

MS4 permit requirements will require an annual BMP self-inspection report. This could also serve as the ongoing verification for a credited BMP. This eases administration.

Question: Can we get clarification on what is mandated? If we are told we need to spend \$7 million but only spend \$3 million and EPA says this is fine, then \$7 million wasn't a mandate. Is the mandate subject to interpretation and ability to pay?

Question: What does city feel is the most likely cost of mandates?

Response: We will bring back a breakdown of MS4 permit vs. TMDL costs for the next meeting.

Comment: Businesses generate revenue. Don't lose sight of the bigger picture.

Comment: Just because our mandate expenditures don't match up, doesn't mean water quality is not important.

Comment: We shouldn't consider a funding level that we can't pass. Then it doesn't matter what we want. What matters is what we can get (by voters). Decide what we can get and then decided where to spend it (how to divvy it up).

Comments: We would like to see a utility and small sales tax scenario.

Question: Which has most effect on economic growth? (sales tax, property tax or utility) Comment: We will ask Chamber their opinion.

Question: How much funding for infrastructure? Response: Somewhere in between minimum and middle 200 year, middle 100 year. Bring both back.

Next meeting: **February 28, 2013, 5:00-7:00 p.m. at the Springfield- Greene County Public Safety Center.**

The meeting was adjourned at 7:15 p.m.

## Introduction

At the last Task Force meeting, the members requested some additional information. The following information is provided to assist in the development of recommendations:

1. Scenarios showing different revenue sources vs. expenditures
2. Breakdown of costs that are current, known and still unknown
3. Answers to a number of questions about the various revenue sources available.

## Section 1: Scenarios for Consideration

At the last Task Force meeting, the members asked for a few scenarios to be brought back for further consideration. The following provides information about revenues, expenditures and overage (shortfalls) for the various sources. The revenue sources considered were: sales tax, property tax and a stormwater utility. Estimated revenues for each source are listed in Table 1.

**Table 1. County-wide Annual Revenue Projections for Each Revenue Source**

County-Wide Funding Source	Projected Annual Revenue
1 cent Property Tax	\$440,000
1/10th Cent Sales Tax	\$4,035,359
1/8th Cent Sales Tax	\$5,147,110
1/4 Cent Sales Tax	\$10,088,389
1/2 Cent Sales Tax	\$20,176,796
\$1/month Utility	\$3,559,227
\$2/month Utility	\$7,118,453
\$3/month Utility	\$10,813,780
\$5/month Utility	\$18,021,134

The following assumptions were used for the expenditures. A more complete breakdown of the expenditures is detailed in Section 2 of this document.

*Operating Costs:* The City and the County will have ongoing costs to administer the stormwater program and those costs will increase primarily due to stricter regulatory compliance. Because the range given at the last several meetings was so wide due to the uncertainty of these regulations, the project team has narrowed these down to what is *known to be required for compliance* with the MS4 permit and to funds for TMDL planning. It does not include the estimated costs to address TMDLs with programs/projects because of the difficulty in estimating costs without more information. Current operating costs for the City and County are approximately \$1.5 million and are expected to increase to approximately \$2.8 million in Fiscal Year 2020.

**Table 2. City & County Known Operating Costs for 2013 – 2020**

Known City + County Ongoing Operating Costs	Current	FY14	FY15	FY16	FY17	FY18	FY19	FY 20
City Operating Costs	\$1,210,000	\$1,755,000	\$1,840,000	\$1,870,000	\$1,960,000	\$1,985,000	\$2,110,000	\$2,110,000
County Operating Costs	\$321,000	\$373,000	\$693,000	\$707,000	\$712,000	\$715,000	\$726,000	\$726,000
<b>TOTAL</b>	<b>\$1,531,000</b>	<b>\$2,128,000</b>	<b>\$2,533,000</b>	<b>\$2,577,000</b>	<b>\$2,672,000</b>	<b>\$2,700,000</b>	<b>\$2,836,000</b>	<b>\$2,836,000</b>

*Capital Costs & Life Cycle Replacement Costs:* At the last Task Force meeting, the members asked that scenarios be developed to include costs to minimize flood risk and repair & replace infrastructure (lifecycle). The targets set were based upon the following:

- Amount the City and County historically has spent annually on flood risk reduction. This funding level supports a good program that makes steady progress to eliminate the most severe flooding problems. This is approximately \$6 million per year for the City and County together.
- A life-cycle replacement program spanning 200 years for the entire system. The life-cycle replacement target is more than is being spent currently. It is not as much as the industry best practice of a 50-year system replacement cycle. We've included approximately \$1.7 million in the scenarios which is less than the 200-year lifecycle cost.
- Staffing needed to support these programs.

The City & County Seven Year Capital Plan is \$53.31 million for projects that improve water quality, minimize flood risk and replace existing infrastructure. These investments are not required.

**Table 3: City & County Capital Costs for 2013 – 2020 (7 Year Plan)**

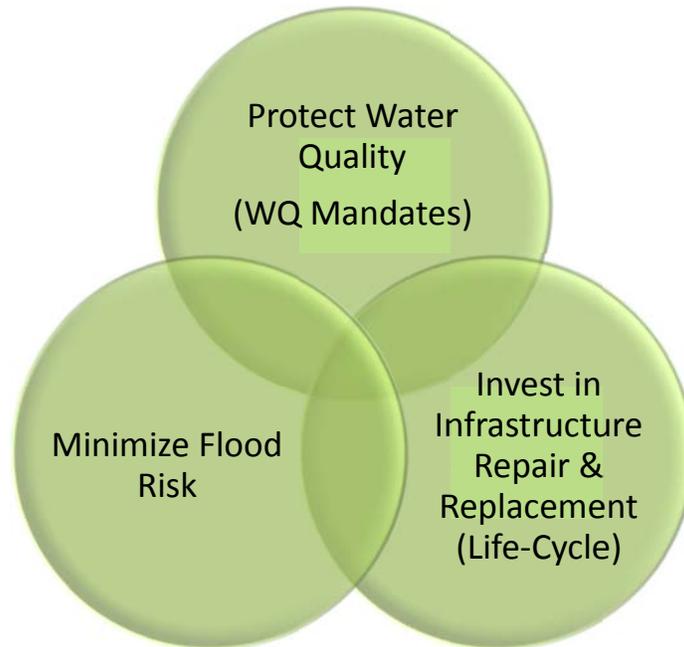
<b>TOTAL CAPITAL &amp; INFRASTRUCTURE REPAIR COSTS -- CITY + COUNTY</b>	Total Project Costs	Annualized Cost
Minimize Flood Risk Capital Projects	\$36,030,000	\$5,147,143
Infrastructure Repair & Replacement (Lifecycle) Program	\$17,280,000	\$2,468,571
<b>TOTAL</b>	<b>\$53,310,000</b>	<b>\$7,615,714</b>

One of the priorities established by the Task Force was to look for ways to stretch the dollars to be spent by looking for ways to spend one dollar to address all three goals:

- Protect water quality and meet environmental regulations.
- Minimize flood risk
- Reinvest in infrastructure repair & replacement (life-cycle)

Figure 1 shows the three goals of the program overlapping. The areas where there is overlap of the circles depicts those programs and projects that are multi-objective or multi-benefit.

Figure 1. Stormwater Management Program Goals



To comply with TMDLs, the City and County will be required to build projects to improve the streams that are designated as polluted. Section 2 of this document describes the streams designated as polluted and what may be required to reduce the pollution. Many of the capital projects proposed will accomplish at least two or three of these goals. Tables 4 and 5 provide a list of prioritized projects that could potentially be completed with a description of the goals achieved through the project investment.

Table 4. City of Springfield, Mo.  
Example Prioritized 7-Year Multi-Objective Capital Program

Project	Cost	Protect Water Quality	Reduce Flood Risk	Replace Infrastructure (life cycle)
Complete Phase 1 of System Evaluation, Condition Assessment & Prioritization	\$1,000,000	x	X	x
Upper Fassnight in area of Grand/National	\$3,000,000	x	X	x
Lower Fassnight in area of Kimbrough/Cherry	\$3,000,000	x	X	x
Boonville and Central to County Campus	\$2,000,000		X	x
Additional Priority Infrastructure Repair & Replacement Projects to be identified through assessment	\$3,000,000	x	X	x
Watershed Planning & Project	\$1,000,000	x	x	x

Prioritization & Program management				
Renew Jordan Creek (USACE match phase 1 & 2)	\$7,000,000	X	X	
Renew Jordan Creek (Grant viaduct to Boonville)	\$4,000,000	X	X	
Fassnight Creek (Jefferson to Holland) to Phelps Grove Park	\$3,000,000	X	X	X
Ravenwood Branch (Charleston/Carleton to Lake Springfield)	\$3,000,000	X	X	
Galloway Stream Stabilization (South of Battlefield Road)	\$1,000,000	X		X
Jordan Creek Stream Stabilization and habitat enhancement (downstream of Grant)	\$1,000,000	X		X
Wilson's Creek Stream Stabilization and habitat enhancement (downstream of RR)	\$2,000,000	X		X
Dickerson Park Zoo channel restoration, water quality enhancement	\$2,000,000	X	X	
Grant Beach Park channel day-lighting & box replacement program	\$1,000,000	X	X	X
Additional Priority Projects to reduce flooding/improve water quality and manage the capital projects program	\$10,000,000	X	X	
<b>TOTAL</b>	<b>\$47,000,000</b>			

**Table 5. Greene County, Mo.  
Example Prioritized 7-Year Multi-Objective Capital Program**

Project	Cost	Protect Water Quality	Reduce Flood Risk	Replace Infrastructure (life cycle)
Watershed Planning & Project Prioritization	\$100,000	X	X	X
Oak Knolls Subdivision	\$1,000,000		X	X
Cherokee Estates	\$1,300,000		X	X
Prairie View Heights	\$500,000		X	X
Chapel Hill	\$400,000		X	X
Comar Addition	\$75,000		X	X

Monta Vista Heights	\$500,000		x	x
Town and Country Estates	\$750,000		x	x
Woodsboro Estates	\$320,000		x	x
Cedar Crest Estates	\$335,000		x	x
Needmore Branch Drainage and Greenway	\$700,000	x	x	x
Trail of Tears Drainage and Greenway	\$130,000	x		
Springday Hills Drainage Project Phase 2	\$200,000	x	x	x
<b>TOTAL</b>	<b>\$6,310,000</b>			

Table 6 is a summary of the 7 – year plan capital and infrastructure repair costs.

**Table 6. City & County Capital & Infrastructure Replacement/Repair (Life-Cycle) Costs**

<b>TOTAL CAPITAL &amp; INFRASTRUCTURE REPAIR COSTS -- CITY + COUNTY</b>	<b>Total Project Costs</b>
City Capital & Infrastructure Repair	\$47,000,000
County Capital & Infrastructure Repair	\$6,310,000
<b>TOTAL</b>	<b>\$53,310,000</b>

## Scenarios

Using the expenditure and revenue assumptions, five scenarios were developed. In all of the scenarios, the capital projects and infrastructure repair total costs are approximately the same but the year in which the projects are completed varies based upon revenue available for the year.

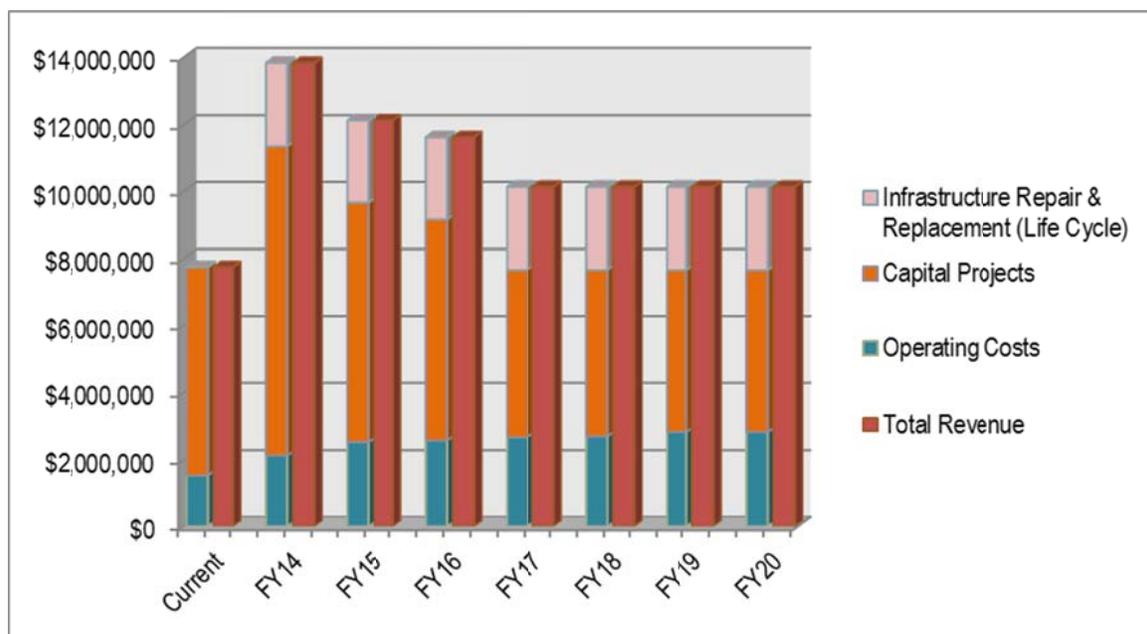
### Scenario #1: 1/10<sup>th</sup> Cent and 1/8<sup>th</sup> Cent Sales Tax

*Scenario #1:* In this scenario, Greene County would enact the 1/10<sup>th</sup> cent water quality sales tax for operating costs and 1/8<sup>th</sup> cent parks/stormwater sales tax to fund capital and infrastructure repair/replacement (lifecycle). This funding strategy provides the funding needed for the proposed seven year plan. Table 7 and Figure 2 provide revenue and expenditure estimates for the scenario.

Table 7. Scenario #1: 1/10<sup>th</sup> & 1/8<sup>th</sup> Cent Sales Tax

Scenario #1: 1/10th cent + 1/8th cent sales tax (Sunset 1/8th after 7 year)	Current	2014	2015	2016	2017	2018	2019	2020	TOTAL
<b>Revenue</b>									
Existing City Revenues	\$7,000,000	\$3,900,000	\$2,700,000	\$2,200,000	\$700,000	\$700,000	\$700,000	\$700,000	\$18,600,000
Existing County Revenues	\$750,000	\$750,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$3,000,000
1/10th Cent Sales Tax	\$0	\$4,035,359	\$4,035,359	\$4,035,359	\$4,035,359	\$4,035,359	\$4,035,359	\$4,035,359	\$28,247,513
1/8th Cent Sales Tax	\$0	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$36,029,770
<b>Total Revenue</b>	<b>\$7,750,000</b>	<b>\$13,832,469</b>	<b>\$12,132,469</b>	<b>\$11,632,469</b>	<b>\$10,132,469</b>	<b>\$10,132,469</b>	<b>\$10,132,469</b>	<b>\$10,132,469</b>	<b>\$85,877,283</b>
<b>Expenditures -- City + County</b>									
Operating Costs	\$1,531,000	\$2,128,000	\$2,533,000	\$2,577,000	\$2,672,000	\$2,700,000	\$2,836,000	\$2,836,000	\$19,813,000
Capital Projects	\$6,219,000	\$9,235,898	\$7,130,898	\$6,586,898	\$4,991,898	\$4,963,898	\$4,827,898	\$4,827,898	\$48,784,286
Infrastructure Repair & Replacement (Life Cycle)	\$0	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$17,280,000
<b>Total Expenditures</b>	<b>\$7,750,000</b>	<b>\$13,832,469</b>	<b>\$12,132,469</b>	<b>\$11,632,469</b>	<b>\$10,132,469</b>	<b>\$10,132,469</b>	<b>\$10,132,469</b>	<b>\$10,132,469</b>	<b>\$85,877,286</b>
<i>Over (Under)</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Figure 2. Scenario #1: 1/10<sup>th</sup> & 1/8<sup>th</sup> Sales Tax



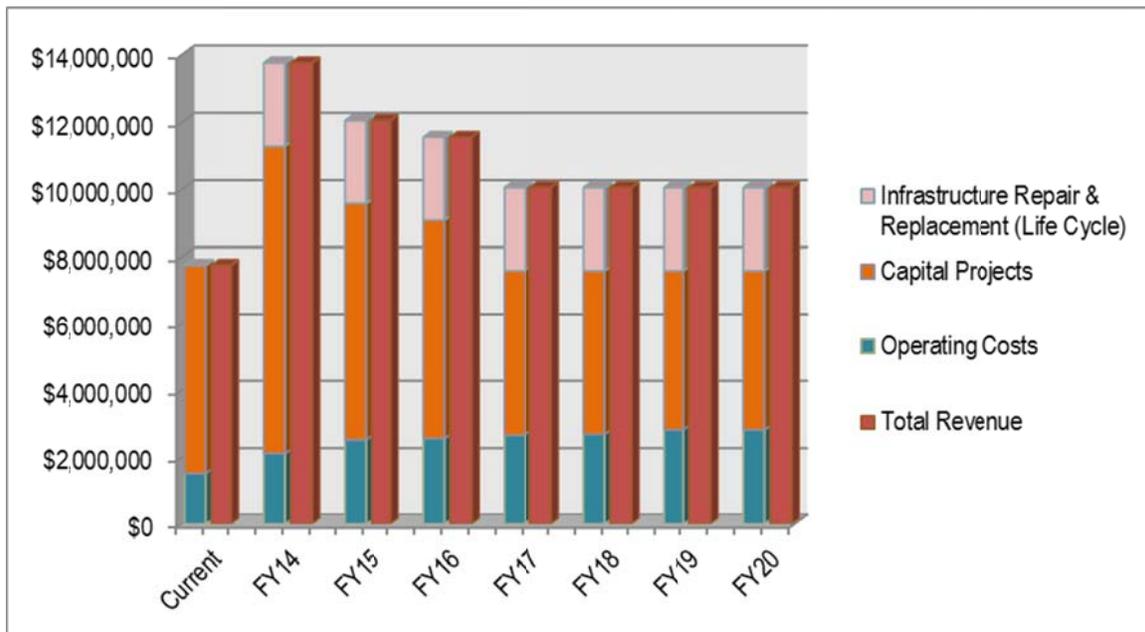
## Scenario #2: Property Tax Increase & 1/8<sup>th</sup> Cent Sales Tax

*Scenario #2:* In this scenario, Greene County would increase property taxes by nine (9) mills per \$100 of assessed valuation to cover operating costs and some infrastructure repair/replacement costs.. Greene County would enact a 1/8<sup>th</sup> cent parks/stormwater sales tax to fund capital and infrastructure repair/replacement (lifecycle). This funding strategy provides the funding needed for the proposed seven year plan. Greene County property tax cannot be designated as a dedicated stormwater property tax levy because that is not authorized by Missouri state law. The City of Springfield could enact a dedicated property tax because they are a charter city. Table 8 and Figure 3 provide revenue and expenditure estimates for the scenario.

**Table 8. Scenario #2: Property Tax Increase & 1/8<sup>th</sup> Cent Sales Tax**

<i>Scenario #2: Property Tax + 1/8th cent (Sunset it after 7 year)</i>	Current	2014	2015	2016	2017	2018	2019	2020	TOTAL
<b>Revenue</b>									
Existing City Revenues	\$7,000,000	\$3,900,000	\$2,700,000	\$2,200,000	\$700,000	\$700,000	\$700,000	\$700,000	\$18,600,000
Existing County Revenues	\$750,000	\$750,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$3,000,000
Property Tax (Increase 9 mills)	\$0	\$3,960,000	\$3,960,000	\$3,960,000	\$3,960,000	\$3,960,000	\$3,960,000	\$3,960,000	\$27,720,000
1/8th Cent Sales Tax	\$0	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$36,029,770
<b>Total Revenue</b>	<b>\$7,750,000</b>	<b>\$13,757,110</b>	<b>\$12,057,110</b>	<b>\$11,557,110</b>	<b>\$10,057,110</b>	<b>\$10,057,110</b>	<b>\$10,057,110</b>	<b>\$10,057,110</b>	<b>\$85,349,770</b>
<b>Expenditures -- City + County</b>									
Operating Costs	\$1,531,000	\$2,128,000	\$2,533,000	\$2,577,000	\$2,672,000	\$2,700,000	\$2,836,000	\$2,836,000	\$19,813,000
Capital Projects	\$6,219,000	\$9,160,539	\$7,055,539	\$6,511,539	\$4,916,539	\$4,888,539	\$4,752,539	\$4,752,539	\$48,256,773
Infrastructure Repair & Replacement (Life Cycle)	\$0	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$17,280,000
<b>Total Expenditures</b>	<b>\$7,750,000</b>	<b>\$13,757,110</b>	<b>\$12,057,110</b>	<b>\$11,557,110</b>	<b>\$10,057,110</b>	<b>\$10,057,110</b>	<b>\$10,057,110</b>	<b>\$10,057,110</b>	<b>\$85,349,773</b>
<i>Over (Under)</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Figure 3. Scenario #2: Property Tax Increase & 1/8<sup>th</sup> Cent Sales Tax**



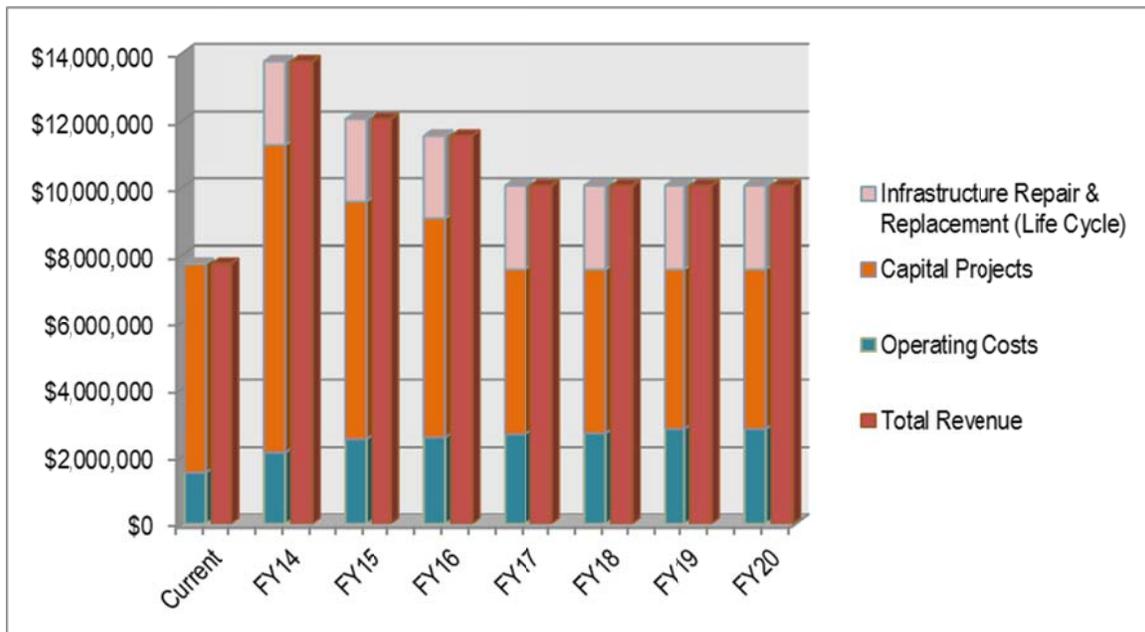
### Scenario #3: Property Tax Increase

*Scenario #3:* In this scenario, Greene County would increase property taxes by 20.7 mills per \$100 of assessed valuation to cover operating costs and to fund capital and infrastructure repair/replacement (lifecycle). This funding strategy provides the funding needed for the proposed seven-year plan. Greene County property tax cannot be designated as a dedicated stormwater property tax levy because that is not authorized by Missouri state law. The City of Springfield could enact a dedicated property tax because they are a charter city. Table 9 and Figure 4 provide revenue and expenditure estimates for the scenario.

Table 9. Scenario #3: Property Tax Increase

Scenario #3: Property Tax Only	Current	2014	2015	2016	2017	2018	2019	2020	TOTAL
<b>Revenue</b>									
Existing City Revenues	\$7,000,000	\$3,900,000	\$2,700,000	\$2,200,000	\$700,000	\$700,000	\$700,000	\$700,000	\$18,600,000
Existing County Revenues	\$750,000	\$750,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$3,000,000
Property Tax (increase 20.7 mills)	\$0	\$9,108,000	\$9,108,000	\$9,108,000	\$9,108,000	\$9,108,000	\$9,108,000	\$9,108,000	\$63,756,000
<b>Total Revenue</b>	<b>\$7,750,000</b>	<b>\$13,758,000</b>	<b>\$12,058,000</b>	<b>\$11,558,000</b>	<b>\$10,058,000</b>	<b>\$10,058,000</b>	<b>\$10,058,000</b>	<b>\$10,058,000</b>	<b>\$85,356,000</b>
<b>Expenditures -- City + County</b>									
Operating Costs	\$1,531,000	\$2,128,000	\$2,533,000	\$2,577,000	\$2,672,000	\$2,700,000	\$2,836,000	\$2,836,000	\$19,813,000
Capital Projects	\$6,219,000	\$9,161,429	\$7,056,429	\$6,512,429	\$4,917,429	\$4,889,429	\$4,753,429	\$4,753,429	\$48,263,003
Infrastructure Repair & Replacement (Life Cycle)		\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$17,280,000
<b>Total Expenditures</b>	<b>\$7,750,000</b>	<b>\$13,758,000</b>	<b>\$12,058,000</b>	<b>\$11,558,000</b>	<b>\$10,058,000</b>	<b>\$10,058,000</b>	<b>\$10,058,000</b>	<b>\$10,058,000</b>	<b>\$85,356,003</b>
<i>Over (Under)</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Figure 4. Scenario #3: Property Tax Increase



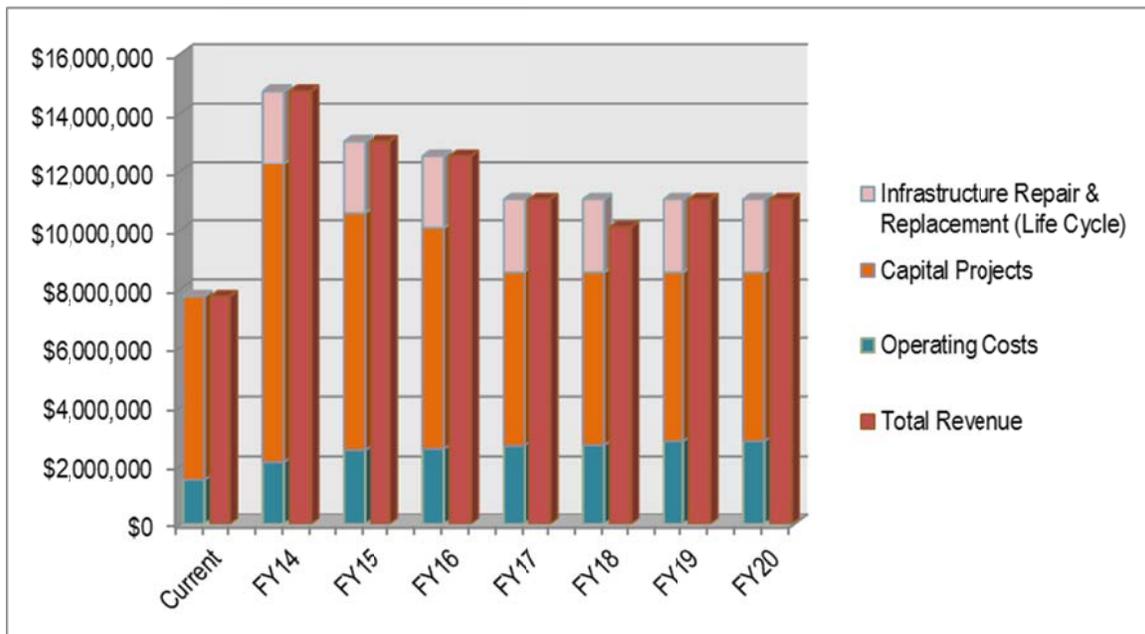
## Scenario #4: ¼ Cent Sales Tax Increase

*Scenario #4:* In this scenario, Greene County would enact the 1/4 cent parks/stormwater sales tax to fund operating costs, capital projects and infrastructure repair/replacement (lifecycle). In this scenario, an additional \$7 million total in capital projects could be funded versus the other scenarios. Table 10 and Figure 5 provide revenue and expenditure estimates for the scenario.

Table 10. Scenario #4: ¼ Cent Sales Tax Increase

Scenario #4: 1/4 Cent Sales Tax	Current	2014	2015	2016	2017	2018	2019	2020	TOTAL
<b>Revenue</b>									
Existing City Revenues	\$7,000,000	\$3,900,000	\$2,700,000	\$2,200,000	\$700,000	\$700,000	\$700,000	\$700,000	\$18,600,000
Existing County Revenues	\$750,000	\$750,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$3,000,000
1/4 Cent Sales Tax	\$0	\$10,088,389	\$10,088,389	\$10,088,389	\$10,088,389	\$10,088,389	\$10,088,389	\$10,088,389	\$70,618,723
<b>Total Revenue</b>	<b>\$7,750,000</b>	<b>\$14,738,389</b>	<b>\$13,038,389</b>	<b>\$12,538,389</b>	<b>\$11,038,389</b>	<b>\$11,038,389</b>	<b>\$11,038,389</b>	<b>\$11,038,389</b>	<b>\$92,218,723</b>
<b>Expenditures -- City + County</b>									
Operating Costs	\$1,531,000	\$2,128,000	\$2,533,000	\$2,577,000	\$2,672,000	\$2,700,000	\$2,836,000	\$2,836,000	\$19,813,000
Capital Projects	\$6,219,000	\$10,141,818	\$8,036,818	\$7,492,818	\$5,897,818	\$5,869,818	\$5,733,818	\$5,733,818	\$55,125,726
Infrastructure Repair & Replacement (Life Cycle)	\$0	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$17,280,000
<b>Total Expenditures</b>	<b>\$7,750,000</b>	<b>\$14,738,389</b>	<b>\$13,038,389</b>	<b>\$12,538,389</b>	<b>\$11,038,389</b>	<b>\$11,038,389</b>	<b>\$11,038,389</b>	<b>\$11,038,389</b>	<b>\$92,218,726</b>
<i>Over (Under)</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Figure 5. Scenario #4: ¼ Cent Sales Tax Increase



## Scenario #5: Stormwater Utility and 1/8<sup>th</sup> Sales Tax

*Scenario #5:* In this scenario, Greene County would enact a stormwater utility to fund operating costs and part of the infrastructure repair/replacement (lifecycle) costs and 1/8<sup>th</sup> cent parks/stormwater sales tax to fund capital and infrastructure repair/replacement (lifecycle). This funding strategy provides the funding needed for the proposed seven year plan. The utility fee would start out in FY 14 at \$1.00/month per Equivalent Residential Unit (ERU) and increase to \$2.00/month ERU in FY 2019. The revenues are reduced by 20% to account for credits and incentives. The cost estimated to set up the utility is \$150,000. The annual estimated cost to administer is \$40,000. Table 11 shows the gradual phase in of the utility fee. Table 12 and Figure 6 provide revenue and expenditure estimates for the scenario.

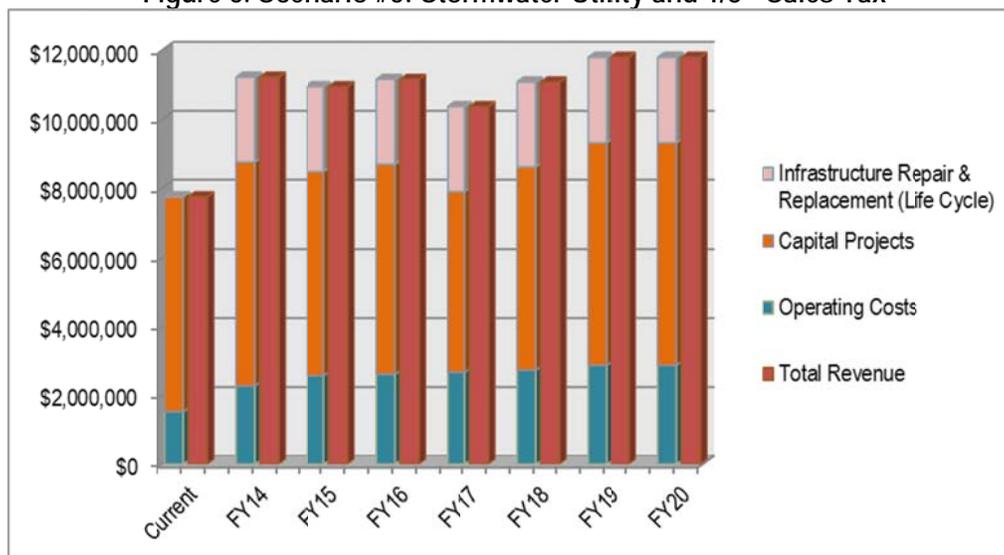
Table 11. Stormwater Utility Monthly Fee Per ERU for FY13 to FY20

Current	2014	2015	2016	2017	2018	2019	2020
\$0.00	\$1.00	\$1.00	\$1.25	\$1.50	\$1.75	\$2.00	\$2.00

Table 12. Scenario #5: Stormwater Utility and 1/8<sup>th</sup> Sales Tax

Scenario #5: \$1.00 - \$2.00/month ERU Utility + 1/8th cent sales tax (Sunset it after 7 year)	Current	2014	2015	2016	2017	2018	2019	2020	TOTAL
<b>Revenue</b>									
Existing City Revenues	\$7,000,000	\$3,900,000	\$2,700,000	\$2,200,000	\$700,000	\$700,000	\$700,000	\$700,000	\$18,600,000
Existing County Revenues	\$750,000	\$750,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$3,000,000
\$2.00/month ERU Utility (phased-in with credits)	\$0	\$1,423,711	\$2,847,422	\$3,559,277	\$4,271,132	\$4,982,988	\$5,694,843	\$5,694,843	\$28,474,216
1/8th Cent Sales Tax	\$0	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$5,147,110	\$36,029,770
<b>Total Revenue</b>	<b>\$7,750,000</b>	<b>\$11,220,821</b>	<b>\$10,944,532</b>	<b>\$11,156,387</b>	<b>\$10,368,242</b>	<b>\$11,080,098</b>	<b>\$11,791,953</b>	<b>\$11,791,953</b>	<b>\$86,103,986</b>
<b>Expenditures -- City + County</b>									
Operating Costs	\$1,531,000	\$2,278,000	\$2,573,000	\$2,617,000	\$2,672,004	\$2,740,000	\$2,876,000	\$2,876,000	\$20,163,004
Capital Projects	\$6,219,000	\$6,474,249	\$5,902,960	\$6,070,816	\$5,227,667	\$5,871,526	\$6,447,382	\$6,447,382	\$48,660,982
Infrastructure Repair & Replacement (Life Cycle)	\$0	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$2,468,571	\$17,280,000
<b>Total Expenditures</b>	<b>\$7,750,000</b>	<b>\$11,220,820</b>	<b>\$10,944,531</b>	<b>\$11,156,387</b>	<b>\$10,368,242</b>	<b>\$11,080,097</b>	<b>\$11,791,953</b>	<b>\$11,791,953</b>	<b>\$86,103,986</b>
<i>Over (Under)</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Figure 6. Scenario #5: Stormwater Utility and 1/8<sup>th</sup> Sales Tax



## Section 2

### Known & Unknown Costs to Protect Water Quality

At previous meetings, the Task Force members indicated that protecting water quality is a high priority for the City and the County. Water resources in the region are important to quality of life and the economy. Increasing state and federal water quality regulations will increase the required City and County investment. At the third and last Task Force meetings, a cost range was given for future environmental compliance. The range was wide because costs to comply with some future known permit requirements were given as an estimated range and the cost of compliance with TMDLs is unknown.

The following section provides a brief review of these mandates. The projected costs to comply that were provided in meeting #3 has been further refined into the following categories. Previous estimated ranges for future known permit requirements have been refined into a single best estimate as requested by the task force.

- Current costs
- Future known costs
- Future unknown costs

#### Current Costs

The City and County federally-mandated MS4 permits require that programs, policies, and procedures are in place to address the following items.

- **Public Education and Outreach on Stormwater Impacts**
- **Public Involvement**
- **Construction Site Runoff** (land disturbance programs)
- **Post Construction Stormwater Management in New Development and Redevelopment**
- **Municipal Operations/Good Housekeeping**
- **Illicit Discharge Detection & Elimination**
- **Water quality monitoring**
- **Industrial Runoff** (City permit requirement only)

More detail on these costs is provided in the following pages.

**Table 13: City of Springfield, Missouri  
Current and Future Known Costs for Compliance with MS4 Permit Mandates & TMDL Planning**

Water Quality Compliance Program Costs	Current	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Programs	\$350,000	\$590,000	\$590,000	\$640,000	\$640,000	\$640,000	\$660,000	\$660,000
Education	\$50,000	\$65,000	\$70,000	\$75,000	\$85,000	\$85,000	\$90,000	\$90,000
Monitoring	\$50,000	\$50,000	\$55,000	\$55,000	\$60,000	\$60,000	\$60,000	\$60,000
BMP Maintenance	\$130,000	\$150,000	\$175,000	\$200,000	\$225,000	\$250,000	\$250,000	\$250,000
MS4 Cleaning	\$0*	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$300,000	\$300,000
Retrofits	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
TMDL Planning	\$30,000	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
<b>TOTAL</b>	<b>\$610,000</b>	<b>\$1,155,000</b>	<b>\$1,240,000</b>	<b>\$1,320,000</b>	<b>\$1,360,000</b>	<b>\$1,385,000</b>	<b>\$1,510,000</b>	<b>\$1,510,000</b>

\*Current MS4 cleaning program is funded out of the Streets/Public Grounds budget.

**Table 14: Greene County, Missouri  
Current and Future Known Costs for Compliance with MS4 Permit Mandates & TMDL Planning**

County Ongoing Costs	Current	FY14	FY15	FY16	FY17	FY18	FY19	FY 20
<b>MS4 Permit Requirements</b>								
Education	\$34,000	\$44,000	\$54,000	\$64,000	\$64,000	\$64,000	\$75,000	\$75,000
Public Involvement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Illicit Discharge Elimination	\$147,000	\$147,000	\$147,000	\$147,000	\$147,000	\$147,000	\$147,000	\$147,000
Construction Site Inspection	\$120,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
Post-Construction Management	\$0	\$0	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000
<b>Current Nutrient TMDL</b>								
Assessment of Compliance	\$20,000	\$22,000	\$23,000	\$24,000	\$26,000	\$26,000	\$26,000	\$26,000
<b>Future TMDLs</b>								
Assessment of Compliance	\$0	\$0	\$69,000	\$72,000	\$75,000	\$78,000	\$78,000	\$78,000
<b>TOTAL</b>	<b>\$321,000</b>	<b>\$373,000</b>	<b>\$693,000</b>	<b>\$707,000</b>	<b>\$712,000</b>	<b>\$715,000</b>	<b>\$726,000</b>	<b>\$726,000</b>

**City MS4 Permit:**

The City's current annual cost to comply with its MS4 permit is \$610,000. The following provides an explanation for the breakdown shown in Table 14:

- Programs:** This cost includes the equivalent of 4 FTE's, associated staff costs including hardware/software, vehicle fuel/maintenance, supplies, and training, and legal/technical consulting costs to provide review and input on the program. These staff persons coordinate and administer all aspects of the permit requirements listed above including the land disturbance program, development review for the post-construction program, pollution investigations/enforcement, industrial monitoring and inspections, management of water quality monitoring contracts, maintaining the GIS stormwater system inventory, and annual reporting.
- Education:** The City and County believe that the most effective use of limited education funds is to support efforts by non-profits to educate the public regarding water resources issues. This cost includes partial funding of an educator position with the Watershed Committee of the Ozarks, partial funding of the Project WET (Water Education for Teachers) educator position, cooperative projects with James River Basin Partnership (ex. rain barrel rebate program and Storm Drain Reveal), Show-Me Yards & Neighborhoods program activities, printing of educational materials, and various special projects and events such as public service announcements, workshops, and educational signage.

- **Monitoring:** The City and County have found that contracting monitoring services is an effective way to meet monitoring requirements, and partnering with the County and other local MS4 communities provides for efficiency and data consistency. Water quality monitoring costs including two contracts with Missouri State University for water sampling and macro invertebrate sampling of streams, supplies for in-house industrial water quality monitoring, and a portion of the annual service fees for the City's rain gage network which is utilized for the monitoring program.
- **BMP Maintenance:** The current permit requires that city-owned BMPs be inspected and maintained. Currently, this consists of periodic inspections and removal of sediment/debris by Street Maintenance, and vegetation maintenance by Public Grounds. These activities have been partly funded by Streets and Public Grounds as activities that would be conducted regardless of permit requirements to ensure functionality and aesthetics of the system. This funding is assumed to continue. The current cost shown in Table 1 is the portion that has been funded by the now expired 2006 Parks/Waterways sales tax to ensure a level of service that meets permit requirements.
- **MS4 Cleaning:** The current permit requires a program to remove trash/debris from the stormwater system. Currently, this consists of periodic removal of material from grate inlets and certain bridge, waterway, and sinkhole locations where accumulation is a known problem. The costs of these activities are not reflected in the current cost of MS4 permit compliance because they are funded out of the budget for Street Maintenance who has had this program in place since prior to the MS4 permit in order to maintain the functionality of the storm system for street safety. The City wishes to fund cleaning of the MS4 outside of the street right-of-way with funds dedicated for that purpose rather than with transportation funds.
- **Retrofits:** The current permit requires that city-owned detention basins that were designed primarily for flood control are evaluated for retrofitting to provide a water quality benefit. The City has evaluated the basins and determined that 5 basins are good candidates for retrofitting and 8 basins are possible candidates that would need further evaluation. Part of the requirement is to locate sources of funding to construct these retrofits. Therefore, funding for these construction projects is included in the projected cost of MS4 permit compliance beginning in FY14.
- **TMDLs:** A portion of the City's current monitoring cost shown in Table 2 is a direct cost of monitoring for the James River and Little Sac River TMDLs, while the remainder of it is monitoring that the City is required to conduct regardless of TMDLs. Additionally, the programs and policies (e.g. development requirements, land disturbance, public education) that the City and County have in place to meet MS4 permit requirements also address these TMDLs by targeting the pollutants that impair these streams. Therefore, there is not an additional current cost for compliance with the James River and Little Sac River TMDLs.

### Greene County MS4 Permit

Like the City's MS4 permit, Greene County's MS4 permit gives authorization to discharge stormwater as defined in 10 CSR 20-6.200. The County's current cost to comply with its MS4 permit is \$321,000. The following provides an explanation for the breakdown shown in Table 15.

The permit requires the County to address six minimum pollution control measures that were outlined in the packet for meeting #3. The six control measures are:

- **Public Education and Outreach on Stormwater Impacts** – Educate citizens on what they can do to reduce pollutants in stormwater. This cost includes funding for the Watershed Committee of the Ozarks, James River Basin Partnership, and Project WET (Water Education for Teachers)

- **Public Involvement** – Actively seek public input on the development of the Stormwater Management Program Plan (SWMP), and consider other public involvement activities such as volunteer stream clean-ups.
- **Construction Site Runoff** – A program that requires erosion and sediment control and other stormwater pollution best management practices (BMPs) on construction sites, and includes plan reviews, inspections, and enforcement. This cost includes the salary for 2.5 full-time employees for site inspection and plan review
- **Post Construction Stormwater Management in New Development and Redevelopment** – A program that requires new developments to address the long term quality of runoff from their property after initial construction is over, by using BMPs to provide water quality treatment and/or reduce runoff. The current Phase II permit language requires that developments design their sites to reasonably mimic the pre-construction runoff conditions. Currently post construction BMP's are inspected only at the time of construction. Expected changes to the new permit will likely require additional GIS mapping and database tracking of maintenance performed as well as field inspection. While this may not yet require additional staff, the added staff time taken up will necessitate moving existing staff salary out of general revenue and onto any new funding source.
- **Municipal Operations/Good Housekeeping** – Projects undertaken by or for the MS4 regulated community must follow the same regulations they enforce. This element also includes requirements for street sweeping and minimizing pollution that may enter runoff from salt storage, vehicle maintenance, or other municipal operations.
- **Illicit Discharge Detection & Elimination** – Map and routinely inspect the storm drainage system to ensure that pollutants are not being dumped or discharged into it, and investigate and address citizen complaints of pollution. This cost includes two full time wastewater inspectors and ½ salary for a GIS technician.

Currently, water quality monitoring is being done for the James River TMDL at a cost to the County of \$20,000 annually. Based on current monitoring results, additional controls will likely be required to address this TMDL.

### Future Known Costs

MS4 permits are issued for 5 years at which time they are revised by MDNR as needed and reissued. The City has been working closely with MDNR on revision of the City's permit, which is an individual permit written specifically for each Phase 1 community (population > 100,000). The City's permit may be issued sometime in 2013. The County's permit, which is a general permit issued to all Phase II communities (population < 100,000) is expected to be reissued by June 2013.

#### City MS4 Permit

The following provides an explanation for the cost breakdown shown in Table 14 for FY14-FY20. These costs have been projected with reasonable certainty based on the currently proposed permit language.

- **Programs:** This cost includes the equivalent of 6.25 FTE's, associated staff costs, and legal/technical consulting costs. The increase from 4 FTE's is due to increased mandates in the draft revised permit for the Post-Construction and Municipal Operations programs. Specifically, these increased mandates will require BMP construction inspections, private developer maintenance agreements and inspections for long-term

BMP operation and maintenance, and increased requirements for minimizing pollution from municipal facilities and operations.

- **Education:** The draft revised permit requires the City to continue to implement and improve the public education program. The increase for education beginning in FY14 in Table 14 includes additional funding support for James River Basin Partnership and Watershed Committee of the Ozarks, and for other education costs such as printing of educational materials, public service announcements, workshops, and incentive programs such as the rain barrel rebate.
- **Monitoring:** The water quality monitoring requirements are anticipated to be similar to current requirements. Costs shown in Table 14 are budgeted to cover normal increases in contract costs with MSU and small equipment/supplies costs.
- **BMP Maintenance:** The City's projected future cost includes an increasing level of funding to ensure the same level of service for city-owned BMPs as will be required for privately-owned BMPs, and due to the expected increase in city-owned BMPs as the City continues to construct more regional water quality basins and more BMPs such as rain gardens, bioswales, and pervious pavement as part of streetscapes, and city-owned buildings and parking lots.
- **MS4 Cleaning:** The draft revised permit requires that the City update this program. The City's projected future cost includes additional funds beginning in FY14 to increase MS4 cleaning to a level of service consistent with EPA guidelines and comparable with other communities, and to fund system cleaning outside of the right-of-way with dedicated stormwater funds rather than transportation funds.
- **Retrofits:** The projected costs include funding for the 5 detention basins that have been identified as good candidates for retrofits, to be completed in years 1-3. This level of funding is continued in years 4-5 for further evaluation and possible retrofit of the additional 8 basins that have been identified as potential candidates.
- **TMDLs:** On February 20, 2013, the United States Environmental Protection Agency (EPA) withdrew both "flow" TMDLs that were issued on January 28, 2011 for Wilsons/Jordan Creeks and Pearson Creek. The City believes this was a wise decision on EPA's part, to avoid the unnecessary costs of going forward with the legal challenge; however, new TMDLs will be developed by EPA for these three creeks. The City and Greene County have decided to take a proactive approach to addressing the impairments in these three creeks to reduce the potential cost of the future TMDLs. The common sense approach would be to continue to monitor the creeks for priority pollutants, locate the sources of those priority pollutants, and work to eliminate those sources. The City and County will also work with EPA in the development of the next round of TMDLs. This coordination was agreed to by EPA in exchange for the City voluntarily agreeing to not oppose their Motion to Vacate from the legal challenge by withdrawing the TMDLs. Table 14 provides a best estimate of the funding needed to move forward with this proactive TMDL planning approach.

### County MS4 Permit

The County future known costs are the same as the current costs. Once the permit is reissued, we will know more about the future costs.

## Future Unknown Costs

Both the City's & County's MS4 permits require compliance with any approved TMDL within the area subject to MS4 regulation. The County's MS4 permit spells out specifically the TMDL implementation steps that are required in order to meet the permit requirements, which are listed below. The City's MS4 permit language is different but the process would generally be similar.

1. Determine if water body on 303 (d) list of impaired waters (classified water bodies)
2. Determine if there is an EPA approved TMDL
3. Implement Waste Load Allocation Provisions (meet pollutant limits set in TMDL)
4. Assess if loads are being met by existing control measures
5. Determine if additional controls are needed
6. Plan and document the controls that will be implemented to meet pollutant limits
7. Monitor to see if stormwater controls are adequate to meet pollutant limits

The currently approved TMDLs which the City and County must address as part of their MS4 permits are the James River and Little Sac River TMDLs. As explained under Current Costs, the County is currently required to conduct water quality monitoring for the James River TMDL (step 4 above) at a cost of \$20,000 annually. A portion of the City's current monitoring cost shown in Table 14 is a direct cost of monitoring for the James River and Little Sac River TMDLs, while the remainder of it is monitoring that the City is required to conduct regardless of TMDLs.

Additionally, the programs and policies (e.g. development requirements, land disturbance, public education) that the City and County have in place to meet MS4 permit requirements also address these TMDLs by targeting the pollutants that impair these streams. Therefore, there is not an additional current cost for addressing the James River and Little Sac River TMDLs. Based on current monitoring results, additional controls will likely need to be implemented (step 5 above) and represent a future unknown cost. Some possible types of projects that could be implemented to meet this potential requirement for additional controls are listed in Table 15.

**Table 15: Currently Approved TMDLs and Possible Future Required Actions**

Waterways	TMDL Status	Pollutant and Source	Current Action	Possible Future Action
James River	Issued 2001; Updated 2004	Nutrients: Urban Point and Nonpoint Sources (e.g. wastewater treatment plants and stormwater runoff); Agricultural Nonpoint Sources	Water Quality Monitoring (City and County) and MS4 programs/policies.	Streambank Stabilization Stream corridor restoration/grazing exclusion cost share Detention basin retrofits Retrofits of existing development Increased education
Little Sac River	Issued 2006	Fecal Coliform: Point and Nonpoint Sources	Water Quality Monitoring (City only) and MS4 programs/policies.	Stream corridor restoration/grazing exclusion cost share Detention basin retrofits Retrofits of existing development Increased education

On February 20, 2013, the USEPA withdrew both “flow” TMDLs that were issued on January 28, 2011 for Wilsons/Jordan Creeks and Pearson Creek. The City believes this was a wise decision on USEPA’s part, to avoid the unnecessary costs of going forward with the legal challenge; however, new TMDLs will be developed by USEPA for these three creeks. The City and Greene County have decided to take a proactive approach to addressing the impairments in these three creeks to reduce the potential cost of the future TMDLs. A common sense approach would be to continue to monitor the creeks for priority pollutants, locate the sources of those priority pollutants, and work to eliminate those sources. The City and County will also work with USEPA in the development of the next round of TMDLs. This coordination was agreed to by USEPA in exchange for the City voluntarily agreeing to not oppose their Motion to Vacate from the legal challenge by withdrawing the TMDLs. As explained under Future Known Costs, Tables 13 and 14 provide a best estimate of the funding needed to move forward with this proactive TMDL planning approach. They do not include the cost to build any water quality improvements or implement other actions that may be required by the TMDLs.

The cost for compliance once EPA develops and issues new TMDLs for these three creeks represents a future unknown cost. Best estimates of a potential minimum and maximum range of annual costs for the City and County to comply with these TMDLs were given in the third meeting and are shown in Table 16. The cost of TMDL compliance may increase or decrease depending on the effectiveness of efforts to address these TMDLs, as well as requirements for additional controls to meet the current James River and Little Sac River TMDLs as discussed above, and requirements to meet other additional TMDLs that will be issued in the future.

**Table 16: Potential Range of Future Unknown Costs for Compliance with Pearson and Wilson/Jordan TMDLs**

	Year 1*		Year 3		Year 5	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
City	\$100,000	\$300,000	\$1,000,000	\$3,000,000	\$2,000,000	\$5,000,000
County	\$85,000	\$250,000	\$850,000	\$3,150,000	\$1,500,000	\$4,000,000

\*To be determined based on development and issuance of new TMDLs for these creeks.

The following are other federal and state regulatory changes on the horizon that could have an impact on the community and on the City’s and County’s costs to comply with water quality mandates.

- EPA has initiated a national rulemaking to strengthen the stormwater program and intends to propose a rule by June 2013 and complete a final action by December 2014. This rulemaking could impact new development/redevelopment standards and require a program to retrofit existing developed areas with stormwater practices to address water quality. These changes could result in the need for additional City and County staff to ensure compliance with the new rules. As part of this rulemaking, EPA is also considering expanding the geographic areas that must comply with MS4 regulations. This will have a proportionately greater impact on the County as more residential and rural areas are regulated.
- EPA is revising the federal construction site runoff regulations and will issue a final action in February 2014. The City and County will be responsible through their MS4 permits for enforcing these changes on local construction sites.

- DNR is considering changes to the state's water quality standards that would greatly expand the number of small streams in the City and County that have beneficial uses and water quality criteria automatically assigned to them. The City and County would need to devote staff time and resources to evaluating and documenting the condition of these streams in order to remove beneficial use designations that are incorrect. These changes may also result in additional streams being listed as impaired by DNR, followed by TMDLs that the City and County would need to address in their MS4 permits.
- It is anticipated that numeric water quality criteria for nutrients will be promulgated by DNR in the near future that may result in the need for increased efforts to address the James River TMDL and could also result in Springfield Lake, Table Rock Lake, and possibly other smaller streams being listed as impaired for nutrients. Lowering the allowable pollutant level for metals and other water quality criteria are being considered by DNR as well.

## Section 3

### Task Force Questions & Answers regarding Potential Funding Sources

At the last task force meeting, members discussed the pros and cons of each funding source. The funding sources are:

- Property Tax
- Sales Tax
- Utility

Table 18 lists the pros and cons discussed by the Task Force members at the last meeting.

**Table 18. Pros and Cons of Various Funding Sources**

Pros & Cons to Consider	Property Tax	Sales Tax	Utility
All entities in the community pay.	No	No	Yes
Visitors from outside the community pay.	No	Yes	No
Those who generate more stormwater runoff pay more.	No	No	Yes
Cost to establish billing system is minimal.	Yes	Yes	No
Easy to administer billing system.	Yes	Yes	No
Requires a vote of the people.	Yes	Yes	Yes
Stable source of revenue -- doesn't fluctuate with the economy.	Yes	No	Yes
Voters have approved in the past.	Yes	Yes	No
Structure considers ability to pay.	No	No	No
Stormwater competes with other funding needs unless dedicated specifically to stormwater	Yes	Yes	No

The task force members also asked for additional information about these sources of revenue for the February 28<sup>th</sup> meeting. The following are the questions and answers for consideration.

**Question:** *What are the limitations of the various sources of revenue?*

*Is it legal to develop a funding option that would be variable and tied to the degree of EPA's mandates?*

**Answer:** Any ballot language must be answerable by 'yes' or 'no'. Variable language such as "if \_\_\_\_\_ (EPA mandates certain requirements), then \_\_\_\_\_ (stormwater tax will be collected)" will not be allowed.

For the specific Stormwater/Parks tax provided in Mo. Rvsd Statute §644.032 (1/2 of 1% of all retail sales), the statute provides specific ballot language which "*submission shall contain, but need not be limited to, the following language:*

*Shall the municipality (county) of \_\_\_\_\_ impose a sales tax of \_\_\_\_\_ (insert amount) for the purpose of providing funding for \_\_\_\_\_ (insert either storm water control, or local parks, or storm water control and local parks) for the municipality (county)?"*

For any tax ballot submission, the language should be as broad as possible so it can be used for as many purposes as possible. For example, more generalized 'storm water control' ballot language could allow the monies to be spent on EPA stormwater mandates, or stormwater infrastructure, or flooding, etc. Such generalized ballot language, if passed, would allow the City to have available funding if the EPA mandates are expensive, or use the stormwater tax/fee for other stormwater control needs if the EPA mandates are less expensive than anticipated. An example of a ballot question may be:

*"Shall the municipality (county) of \_\_\_\_\_ impose a sales tax of \_\_\_\_\_ (insert amount) for the purpose of providing funding for storm water control and storm water pollution abatement, for the municipality (county)?"*

**Question:** *What is the estimated cost to administer a stormwater utility? Cost to set up, and ongoing annual cost to administer the billing, etc.*

**Answer:** The cost to establish a stormwater utility and administer the collection of the fee varies widely. The set up cost is a one-time cost and is typically between \$50,000 and \$400,000. Cost is dependent upon the simplicity or complexity of rate method selected and the level of GIS data available. The cost to bill customers annually is typically \$0.50 to \$3.00 per customer.

Overland Park, Kansas and Lenexa, Kansas use the Johnson County tax collector to send out the bills. The County charges \$0.10/parcel for fee collection annually. For these communities, property owners receive one bill per year and it is included on the invoice with property taxes. The cities prepare the database showing number of ERUs to be charged. The start-up costs were minimal since both cities had extensive GIS data and a simple rate structure.

Kansas City, Missouri sends out stormwater fee bills on a monthly bill with water and sewer bills. They do not have an estimated cost to bill monthly. The cost to establish the utility included the development of a GIS system so it is not comparable to Springfield/Greene County who already has a system in place.

City Utilities charges Springfield's wastewater program 4% of the wastewater revenues to process their bills monthly.

**Question:** What type of incentives could be instituted for the utility, property tax and sales tax revenue sources?

**Answer:** Financial incentives are given more often in communities with a stormwater utility fee. One-time incentives are given during the development process, one-time residential incentives, such as technical assistance for rain gardens (Indianapolis) or discounts for rain barrels (Cleveland). The City and Greene County, along with City Utilities, have been funding a rain barrel rebate for Greene County residents since 2007. Some utilities give ongoing credits on the monthly bill. These are typically because the property has a stormwater management system that goes above and beyond the required levels. Financial incentives, such as cost-sharing and grants are used in programs that do not have a utility but are funded by taxes.

Table 19 below provides a summary of the more common types of credits (Reese 2007). In order for credits to be both legal and technically sound, a thorough process needs to be employed when developing the credits.

**Table 19. Examples of Two Approaches to Stormwater User Fee Credits**

Credits Based on Individuals Parcel or Parcel Grouping Reduction of Use or Impact	Credits Based on Private Actions Leading to a Reduction of Overall Local Stormwater Program Cost
Peak flow credit for detention Volume reduction credit for infiltration Volume credit for extended detention Pollution credit for BMP's designed according to local standards Green design credit for the provision of green sheet flow and infiltration areas with disconnected imperviousness Green design credit for the provision of green sheet flow and infiltration areas with disconnected imperviousness LID or green design credit for designing a neighborhood with embedded LID principles and approaches	Stormwater education credit for schools and/or other Area maintenance credits for performing maintenance on large urban area or roadways Oversize credits for provision of additional storage volume above design standards Industrial NPDES credit for complying with an individual NPDES stormwater industrial permit Non-structural BMP credit for certain non-structural practices such as parking lot sweeping, trash recycling, household Habitat credit for the provision of, or conservation of habitat for, specific species or of specific types

(Source: Stormwater Utility User Free Credits by Andy Reese in *Stormwater Magazine*, November/December 2007)

### Examples from Other Communities

Each community selects the areas they want to focus on for engaging residents and where they get the most benefit for the investment. Older municipal programs, such as Portland, Oregon and Bellevue, Washington have altered their programs with time and maturity. Programs with stormwater utilities offer more financial incentives. Some examples are listed below.

- One-time payment or stormwater utility credit for installation of rain barrels and rain gardens.
- Reimbursement of materials to install stormwater BMPs such as bioswales and green roofs.
- Grants or matching funds to non-profits for sustainable and LID projects on their properties.
- Credits on stormwater utility bill for installation of stormwater management practices that infiltrate runoff or eliminate discharges to the municipal storm system.

#### City of Austin, Texas

- Credits to stormwater utility bill for privately owned and maintained detention ponds.

#### Fort Wayne, Indiana

- Reimbursement for plant material with installation of residential rain garden and signed 'contract'. A direct cash payment and a plant matching program are available. Incentives are only available to residential properties inside the City of Fort Wayne.

- Fort Wayne is encouraging businesses to become involved. In order to provide maximum flexibility, four strategies have been outlined for supporting the installation of rain gardens on commercial properties: Construction of a Rain Garden on a Small Commercial Site; Corporate Host Program; Corporate-Sponsored Off-Site Rain Garden; Construction of a Rain Garden on a Large Commercial Site.

### **City of Minneapolis, Minnesota**

- 50 percent or 100 percent credit (reduction) in your stormwater utility fee for management tools/practices that address stormwater quantity.
- Note that maximum credits are cumulative and cannot exceed 100 percent credit.

### **Burnsville, Minnesota**

- Free installation or rain garden in street right-of-way with signed contract agreeing to maintain the rain garden. Contract stays with the property if owner sells.

### **Milwaukee Metropolitan Sewer District**

- Matching funds (up to 50% of qualified expenses) for green infrastructure projects in watersheds and along streams and rivers. Focus on methods that capture, infiltrate, and filter stormwater such as porous pavement, bioswales, cisterns and green roofs.

### **City of Portland, Oregon**

- *Treebates* - Reimbursement of \$50 for planting select native trees in yard; \$40 for select non-native trees.
- Grants of up to \$10,000 to support projects that improve neighborhoods and communities while also improving the health of Portland's watersheds.
- SW fee discounts up to 35% of the monthly stormwater management charge for private on-site facilities that manage stormwater runoff and 100% of the monthly on-site stormwater management charge for Drainage District residents and businesses.
- *GreenBucks* allows customers to contribute \$1, \$3, or \$5 per billing period to help public schools maintain green stormwater management facilities on school property.
- Groundwork Portland used CWSP 2012 funds to organize a leadership program for a dozen teens from underrepresented communities. These young people worked on a variety of environmentally-focused projects, including bioswales, ecoroofs and natural area restoration. They received stipends for their work and gained valuable experience in green jobs fields. PSU's Institute for Sustainable Solutions recently published a brief article about CWSP and Groundwork's project.
- Historical - One-time payment or SW utility credit for installation of rain barrels and rain gardens.

### **City of Indianapolis, Indiana**

- Technical assistance (free) to homeowners on rain garden design and installation.
- Grants for green infrastructure installations – green roofs, bioswales, infiltration BMPs emphasized. Funded in part by United Water, the private water supply company for Marion County.

### **City of Seattle, Washington**

- Rebates for installation of rain gardens and cisterns.

## City of Chattanooga, Tennessee

- Exemption for users that do not discharge into a municipal stormwater system.
- Multi-family and non-residential users with 3 ERUs or more may be qualified to receive up to 85% in Water Quality Fee reduction. The Fee reduction is provided for facilities with enhanced water quantity and quality controls measures.

**Question:** *What are the penalties if the City/County decides not to comply with regulations?*

**Answer:** The City can be penalized for violations of the Clean Water Act, 1) through federal statute penalties and 2) through the City's MS4 permit. The last MS4 permit (running 2007 to 2012) is still in effect, pending issuance of the new MS4 permit. The penalty section in the current MS4 permit essentially tracks the Clean Water Act and provides as follows:

### Penalties for Violations of Permit Conditions.

#### 1. *Criminal Penalties.*

A. Negligent Violations: The Act provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

B. Knowing Violations: The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

C. Knowing Endangerment: The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

D. False Statement: The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. (See Section 309(c) (4) of the Act).

2. *Civil Penalties.* The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for each violation.

3. *Administrative Penalties:* The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

A. Class I penalty: Not to exceed \$10,000 per violation, nor shall the maximum amount exceed \$25,000.

B. Class II penalty: Not to exceed \$10,000 per day for each day during which the violation continues, nor shall the maximum amount exceed \$125,000.

The EPA Regional offices are increasing their enforcement of the Clean Water Act regulations, especially those under the MS4 stormwater requirements. EPA Region 2 (New York state area) has ordered the Village of Port Chester, New York to clean up water quality impairments from elevated bacteria levels. In another case, fines totaling \$110,000 were issued against two private companies for Clean Water Act stormwater violations related to construction activities. EPA Region 1 (New England) issued MS4 violations to nine municipalities in Massachusetts and New Hampshire. The potential fines range from \$40,000 to \$70,000 for each municipality.

The Washington Department of Ecology has fined King County, Washington for violations to stormwater regulations. In an agreement with the State of Washington, King County will pay a penalty of \$36,300, complete three green infrastructure projects for stormwater system improvements worth \$108,900 by January 2014, and complete the three-year water quality monitoring requirements.

In May 2006, the City of Dallas, Texas, reached an agreement with the federal government requiring the City to spend in excess of \$3.5 million in a comprehensive effort to decrease the amount of pollution entering the city's stormwater system. The settlement requires the City to construct two wetlands at an estimated cost of \$1.2 million-one along the Trinity River, and one along Cedar Creek near the Dallas Zoo-and to pay a civil penalty of \$800,000. The settlement resolves allegations-first made by the federal government in an EPA order issued in February 2004-that the City failed to implement, adequately fund and adequately staff the City's stormwater management program. Under the agreement, the City is required to fill staff positions, inspect hundreds of industrial facilities and construction sites, and improve management systems at several facilities.