



Columbia Wastewater and  
Stormwater IMP

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*Our Columbia Waters*  
Integrated Management Plan  
Wastewater & Stormwater

# Technical Memorandum 8 *Community Outreach Results*

Columbia Wastewater and  
Stormwater Integrated  
Management Plan

*Columbia, Missouri*  
November 1, 2017



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## Table of Contents

Section 1. Introduction .....	1
Section 2. Outreach Approach .....	2
2.1 Identifying Key Stakeholders.....	2
2.2 Communication Methods .....	3
2.3 Two-Way Communication Activities .....	4
Columbia City Council Briefings.....	4
Online Community Survey Summary .....	4
Community Workshop #1 .....	4
Community Workshop #2.....	6
Community Workshop #3.....	6
Community Workshop #4.....	7
Section 3. Applying Outreach Results to the IMP .....	8

## List of Figures

Figure 1. Infrastructure Priorities Identified by Workshop Attendees Compared to the Overall Survey Results.....	5
Figure 2. Watershed Prioritization Results. ....	6
Figure 3. Prioritization Criteria Identified by Workshop Attendees Compared to the Overall Results.....	7

## List of Tables

Table 1. Final Community Triple Bottom Line Objectives and Prioritization Weights Used to Evaluate Sewer and Stormwater IMP Alternatives. ....	8
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## List of Attachments

Attachment A. Overall Survey Results.

Attachment B. Watershed Prioritization Activity Results.

## Section 1. Introduction

The City of Columbia, Missouri (City) is working to develop an Integrated Management Plan (IMP) for the City's wastewater and stormwater utilities. The goal of the IMP is to develop an adaptable and affordable long-term plan that addresses the City's wastewater and stormwater management needs and meets Clean Water Act requirements. The IMP will be developed based on guidance presented in US Environmental Protection Agency's (EPA) *Integrated Municipal Stormwater and Wastewater Planning Approach Framework*<sup>1</sup>. According to EPA's framework, municipalities pursue the following principles when conducting integrated planning outreach activities:

- Provide appropriate opportunities that allow for meaningful input during the identification, evaluation, and alternative selection phases of the planning effort,
- Make new information available and provide opportunities for input into the development of proposed modifications of the plan, and
- Allow public involvement to assist in evaluating the opportunities and effectiveness of potential green infrastructure alternatives, if they are relevant to the plan.

HDR Engineering, Inc., Shockey Consulting LLC, and Geosyntec Consultants, Inc., worked with City staff (hereinafter referred to as the "project team") to implement an engagement strategy that described the planning process, provided for continuing input by stakeholders, and ensured that stakeholder concerns received fair consideration. The approach was intended to bring a diverse group of stakeholders together, educate them regarding various options, and gather input in a structured, inclusive, and transparent process.

In the context of EPA's integrated planning framework, community outreach should be an ongoing process that is used to inform and refine IMP goals and outcomes over time. Therefore, the City expects that future IMP activities will be reviewed through outreach activities such as public hearings and Columbia City Council meetings. The purpose of this memorandum is to describe the methods used to conduct outreach activities and document the outcomes for the initial phase of the IMP. Community outreach results will be used to assist in identifying and prioritizing IMP goals and the alternatives necessary to meet those goals. Results from the community outreach activities are documented in the sections that follow.

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<sup>1</sup> Stoner, N. and C. Giles. 2012. *Integrated Municipal Stormwater and Wastewater Planning Approach Framework*. June 5, 2012. Washington D.C.

## Section 2. Outreach Approach

Early and continuous outreach efforts help bring diverse perspectives and values into decision-making processes. The IMP project team attempted to capture this diversity by soliciting input from a variety of stakeholders throughout the process, with the ultimate goal of identifying strategies that achieve water quality outcomes and public health and safety protections that are important to the community. The project team followed five principles in developing the outreach approach:

- Developing an informed group of stakeholders that understand the benefits and strategies of implementing available wastewater and stormwater management strategies.
- Informing the stakeholders by providing balanced and objective information to assist them in understanding the problems, alternatives, opportunities, and solutions.
- Consulting the stakeholders by obtaining feedback on water quality and infrastructure priorities and desired outcomes.
- Involving the stakeholders by working directly with them throughout the process to ensure that concerns and expectations were consistently understood and considered, ensuring stakeholder groups were included and consulted.
- Building partnerships with other agencies and stakeholders, recognizing the effect this effort has on the community and other sustainable infrastructure initiatives.

Using these five principles, the project team identified key stakeholders and communication methods to obtain relevant feedback that would help guide development of the IMP. A summary of these stakeholders and methods are included in the next sections.

### 2.1 Identifying Key Stakeholders

In addition to providing information and soliciting feedback from the general public, the project team worked to identify key stakeholders from a balance of interests across the community. These stakeholders included representatives from the Columbia City Council, government agencies, representatives of economically and socially disadvantaged populations, environmental and conservation groups, the business and development community, nonprofit and civic organizations, large impervious surface property owners, and residents who have experienced chronic building backups.

The team reached out to specific organizations within these groups to get a wide variety of input through the process. Specific organizations included:

- Columbia City Council
- Boone County Health Department
- Boone County Regional Sewer District
- Central Missouri Community Action Center
- Central Missouri Opportunity Council
- Churches
- Columbia Audubon Society
- Columbia Chamber of Commerce
- Columbia Housing Authority
- Downtown Columbia Leadership Council
- Downtown Infrastructure Council
- Friends of Rockbridge Memorial State Park
- Hinkson Collaborative Adaptive Management Stakeholders
- Lawn Care Companies
- League of Women Voters of Columbia-Boone County
- Local Developers and Construction Companies
- Local engineers
- Local Industry
- Missouri Department of Natural Resources
- Missouri Department of Conservation
- Missouri River Relief
- MODOT Diversity Council
- MS4 Coordinating Committee
- NAACP
- Neighborhood Associations and Home Owners
- PedNet
- Sierra Club
- University of Missouri

## 2.2 Communication Methods

Outreach efforts with the general public focused on preparing and providing relevant information to educate the community at large and getting high-level, value-based input from interested stakeholders. One-way and two-way communication methods were used to gain this input. One-way communication activities were intended to provide key information to stakeholders, while two-way communication activities allowed stakeholders to provide input to the project team. Two-way communication activities are summarized in **Section 2.3**. One-way communication activities included the following:

- **Fact Sheets:** A project factsheet was developed to introduce the IMP, share the desired outcomes, and provide opportunities for the public to get involved. The factsheet included the date, time, and location for community workshops and provided detailed information at each of the topics to be presented in the series. The factsheet was distributed via email to stakeholders.
- **Project Website:** A dedicated project website ([www.ourcolumbiawaters.com](http://www.ourcolumbiawaters.com)) was created to provide a convenient way for the public to access information at their own pace and schedule. The website included information about upcoming outreach opportunities, provided community workshop results and technical IMP documents, and hosted a community survey.
- **Social Media:** Social media posts were used to keep stakeholders informed and notify the public of opportunities to provide input into the IMP.
- **Media Relations:** Press releases were issued for IMP meetings and media briefings occurred during community workshops.



## 2.3 Two-Way Communication Activities

Two-way communication activities included briefing members of the Columbia City Council (Council), preparing an online community survey, and conducting a series of community workshops. A total of 162 people participated in the survey and 77 unique participants attended at least one of the four community workshops. A summary of these activities is included below.

### Columbia City Council Briefings

In addition to conducting a survey and hosting workshops to obtain input from the general public, the project team met with Council members throughout development of the IMP so that they were informed about the planning process. The project team invited each Council member to meet, both individually and in pairs, and discuss the planning process; these meetings were held early during the Visioning phase of the project to ensure that each person's priorities were captured in the plan and then later to discuss the engineering alternatives, costs, and potential ratepayer impacts associated with addressing those priorities. A draft of the IMP plan was presented to the Council during a work session on August 7, 2017. Upon completion of the planning process, the final IMP will be presented to the Council for their approval and direction in implementing the plan.

### Online Community Survey Summary

The survey focused on obtaining input to prioritize community needs and identify local waterbody uses. The survey was hosted on the website and participants who attended the first community workshop were provided a paper version. The online survey was also sent out to a distribution list of over 150 stakeholders. The online survey received input from 133 respondents, while 29 respondents filled out the paper version. The results of both survey forms are summarized below and included in **Attachment A**.

- Sewage overflows into streams, maintenance of the storm and sewer systems, and the protection of natural resources are the top three infrastructure concerns related to the wastewater and stormwater systems.
- Hinkson Creek, the Missouri River, and Gans Creek/Rock Bridge State Park were identified as the three most important waterbodies to protect.
- Over 40% of respondents indicated that they swim in Stephens Lake. Some respondents indicated that they swim in other area waterbodies.
- A majority of survey respondents indicated that they wade, boat, canoe, or fish on area waterbodies. The Missouri River, Stephens Lake, and Gans Creek/Rock Bridge State Park are the top three waterbodies for these uses.
- Almost all (98%) survey respondents hike, walk, bike, camp, hunt, watch wildlife or participate in social events in or near area waterbodies.

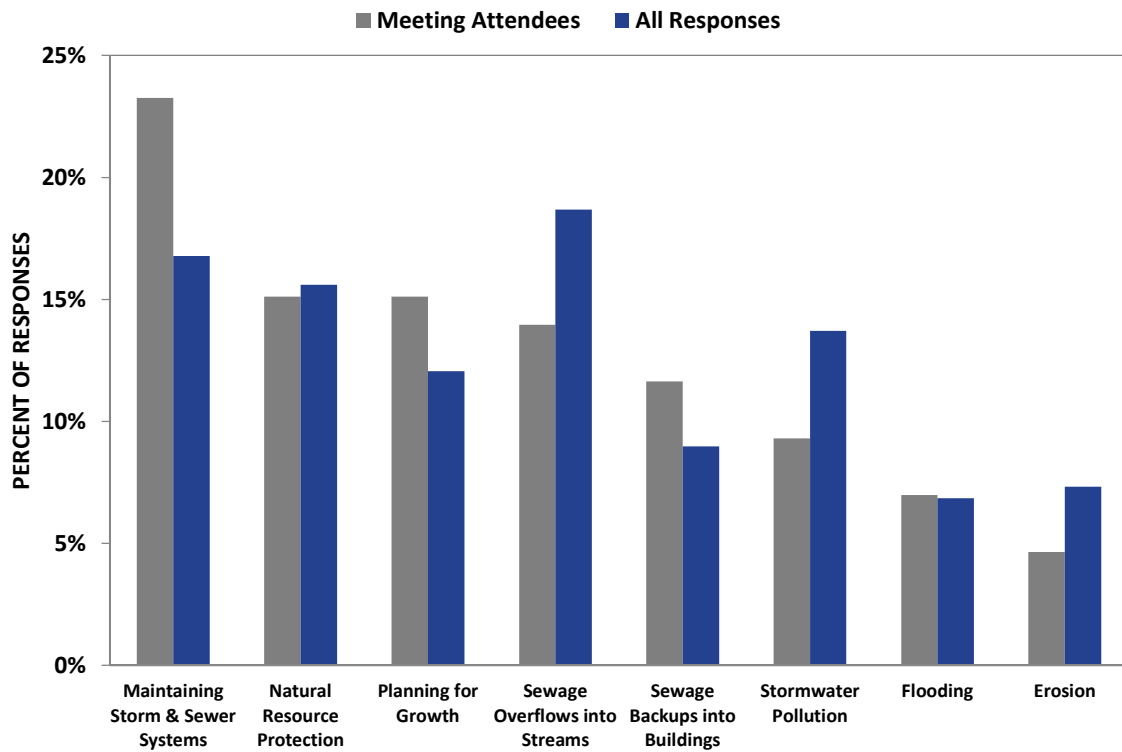
### Community Workshop #1

The first community workshop was held on October 12, 2016 where input was gathered from 42 stakeholders. The goal of Workshop #1 was to identify the community's highest wastewater and stormwater infrastructure concerns.

Through a series of survey questions and group activities, workshop attendees prioritized the following issues:

- Erosion,
- Flooding,
- Maintaining storm and sewer systems,
- Natural resource protection,
- Planning for growth,
- Sewage backups into buildings,
- Sewage overflows into streams, and
- Stormwater pollution.

Workshop attendees identified maintaining storm and sewer systems, natural resource protection, and planning for growth as the highest infrastructure priorities. These results are similar to the overall survey results which indicated that sewage overflows into streams, maintaining storm and sewer systems, and natural resource protection were most important (Figure 1).



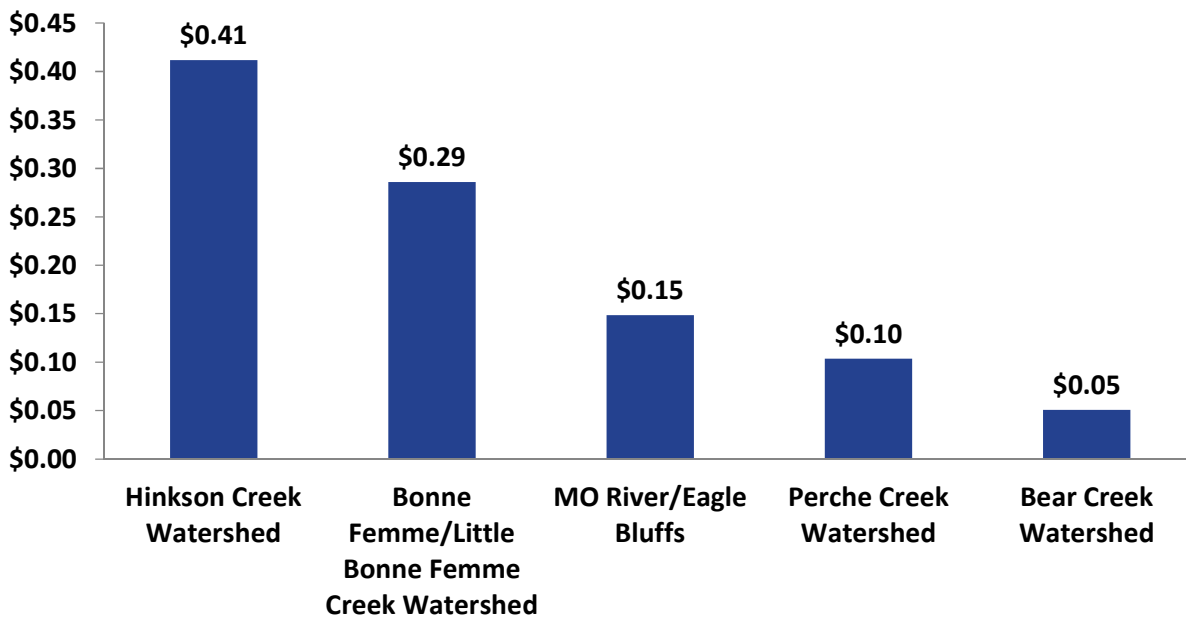
**Figure 1. Infrastructure Priorities Identified by Workshop Attendees Compared to the Overall Survey Results.**

## Community Workshop #2

The second community workshop was held on October 26, 2016 where input was gathered from 40 stakeholders. The goal of Workshop #2 was to identify how the community uses and prioritizes protection of regional waterbodies. Through a series of short presentations and group activities, the workshop attendees provided input on the following questions:

- How do we use our waterbodies?
- What are our water quality and waterbody priorities?

In one exercise, participants provided input on how waterbodies in the area are used. In the second exercise, each workshop participant was given \$1.00 and was asked to allocate their money to watersheds they felt were most important to protect. Participants had a choice from among 19 watersheds. Participants could split the money equally, put money only in the watersheds most important to them, or even put their entire dollar in one watershed. The Hinkson Creek watershed, Bonne Femme watershed, and Missouri River/Eagle Bluffs Conservation Area were identified as most important (**Figure 2**).

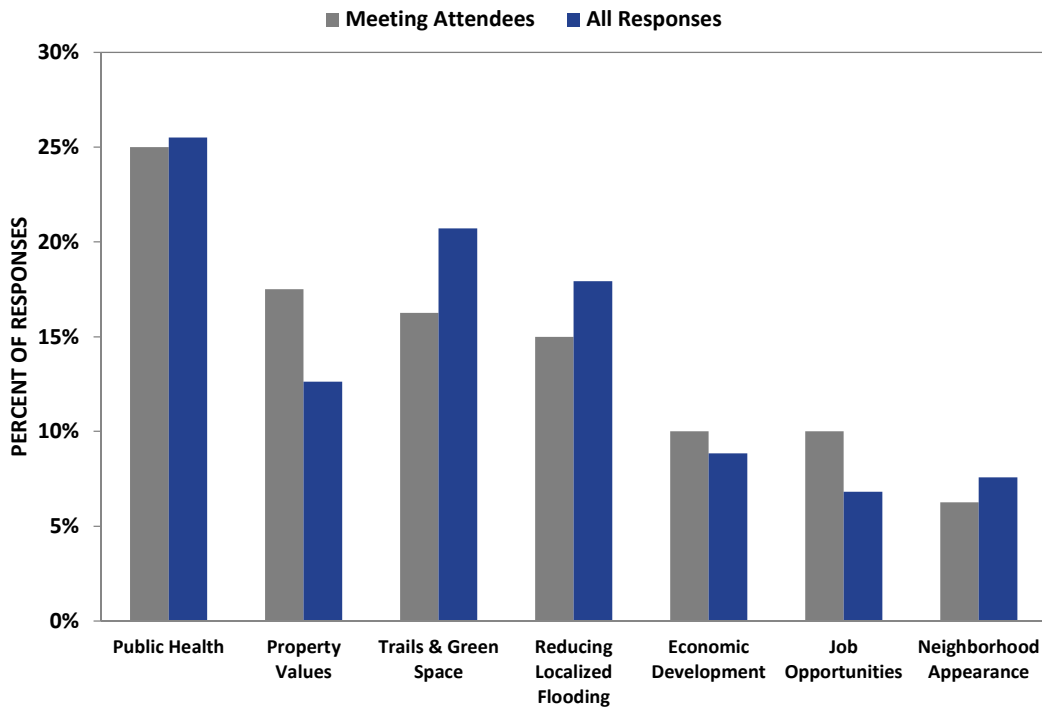


**Figure 2. Watershed Prioritization Results.** Results were grouped by major watershed or waterbody for presentation purposes. For results of all 19 watersheds and/or waterbodies evaluated, see Attachment B.

## Community Workshop #3

The third community workshop was held on November 14, 2016 where input was gathered from 23 stakeholders. The focus of Workshop #3 was discussing the complexities associated with balancing infrastructure improvements, regulatory requirements, and ratepayer affordability. The project team described these issues in detail and explained the importance of identifying decision criteria that could be used to differentiate between and prioritize the various wastewater and stormwater alternatives considered in the IMP.

Building on prior workshops and survey results, potential prioritization criteria and investment strategies were presented in an effort to show participants how the City could evaluate investments using triple bottom line (social, economic, and environmental) factors. Participants provided input into the pros and cons of the criteria and investment strategies. In general, the group identified protecting public health, improving or maintaining property values, improving or maintaining trails and green space, and reducing localized flooding as the most important prioritization criteria (Figure 3). These results are similar to the online survey results, which identified protecting public health, improving or maintaining trails and green space, and reducing localized flooding as most important.



**Figure 3. Prioritization Criteria Identified by Workshop Attendees Compared to the Overall Results.**

### Community Workshop #4

Workshop #4 was held on June 28, 2017 and was attended by more than 20 stakeholders. At the workshop, the project team described how the infrastructure needs, water quality priorities, and prioritization criteria identified in the first three workshops were used to develop preliminary wastewater and stormwater alternatives and investment strategies. Stakeholders then participated in an exercise to help refine the prioritization of those strategies. Results from this exercise are discussed in greater detail in **Section 3**. During the workshop, the team also outlined the multiple criteria decision analysis (MCDA) process that will be used to compare benefits and costs of each alternative. Details regarding the MCDA evaluation are presented in Technical Memorandum 9.

## Section 3. Applying Outreach Results to the IMP

Results from the community outreach activities will directly inform development of the IMP by highlighting important infrastructure, environmental, and public health needs; informing development of targeted alternatives to address those needs; and identifying criteria by which potential solutions should be evaluated to identify projects that most directly address the community's objectives for the IMP.

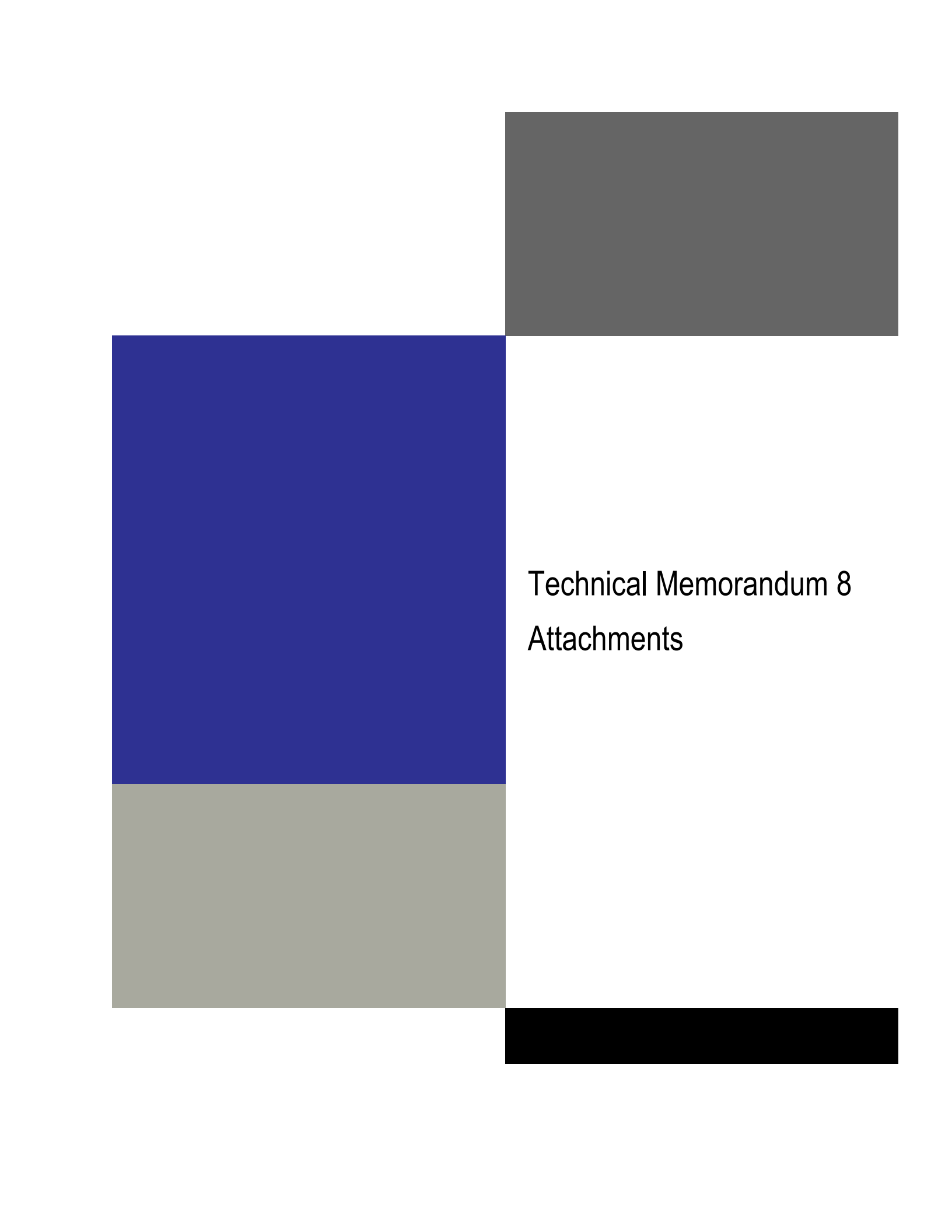
The project team reviewed feedback received over the course of the IMP outreach activities and found that maintaining storm and sewer systems was consistently the highest programmatic and infrastructure-related priority for Columbia stakeholders. However, other issues such as natural resource protection, planning for growth, building backups, sewage overflows into streams, and flooding were also important concerns that should be addressed through the IMP. Although all waterbodies in and around Columbia are important to Columbia residents, Hinkson Creek and its tributaries, Eagle Bluffs Conservation Area, and regional high quality streams (Bonne Femme and Little Bonne Femme Creeks) are generally valued highest.

Based on these results, the project team developed a series of potential wastewater treatment, wastewater collection, and stormwater system alternatives to specifically address the infrastructure needs and waterbody concerns identified by the community. The alternatives are outlined in Technical Memoranda 5, 6, and 7. The alternatives will be evaluated with respect to overall triple bottom line IMP objectives that were identified and prioritized by the community. The triple bottom line objectives and rankings (**Table 1**) were initially developed by the project team based on feedback received in the online survey and first three community workshops, and revised based on community input from the last workshop. Final objectives and weights reflect feedback received from all outreach activities as well as input provided by Council members during individual briefings.

**Table 1. Final Community Triple Bottom Line Objectives and Prioritization Weights Used to Evaluate Sewer and Stormwater IMP Alternatives.**

Prioritization Scenario	Community IMP Objectives				
	Social Objectives		Economic Objective	Environmental Objectives	
	Protect Public Health and Safety	Improve Quality of Life	Provide Sustainable Services for the Future	Improve Water Quality	Regulatory Compliance
<b>Initial Community Prioritization Results</b>	25%	10%	25%	25%	15%
<b>Final Community Prioritization Results</b>	36%	15%	19%	16%	14%
<b>Final IMP Prioritization Weighting</b>	<b>30%</b>	<b>15%</b>	<b>20%</b>	<b>20%</b>	<b>15%</b>

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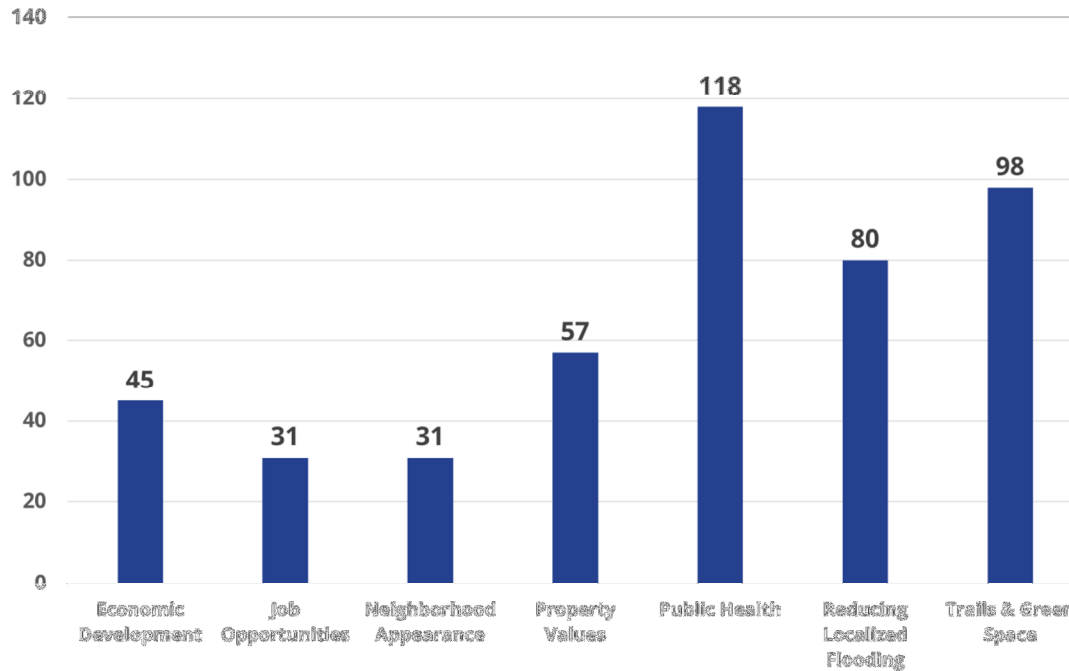
Technical Memorandum 8  
Attachments

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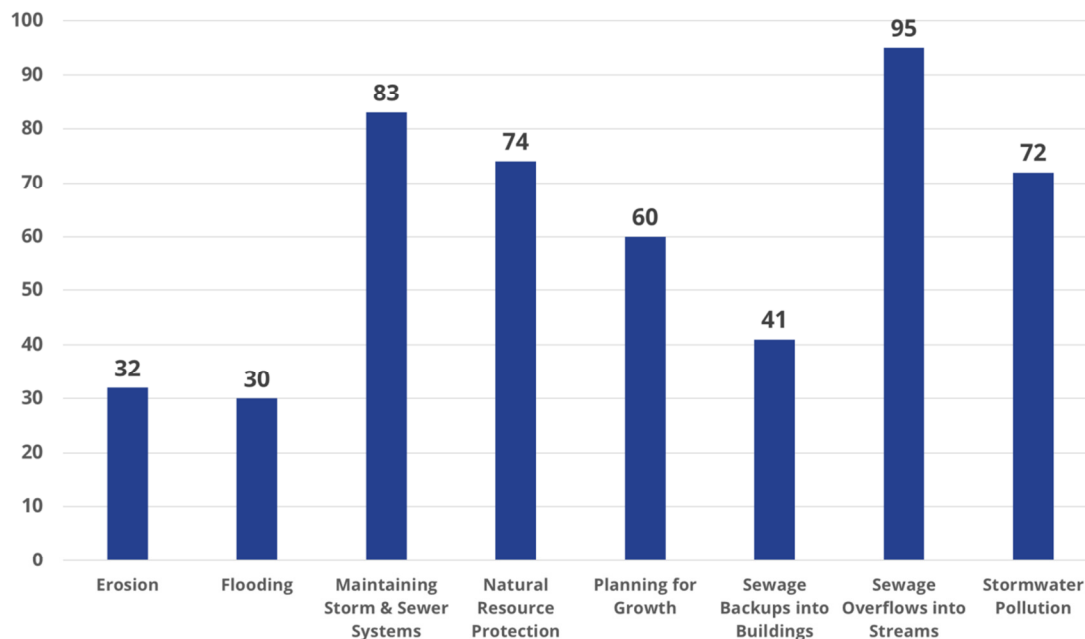


## Attachment A. Survey Results

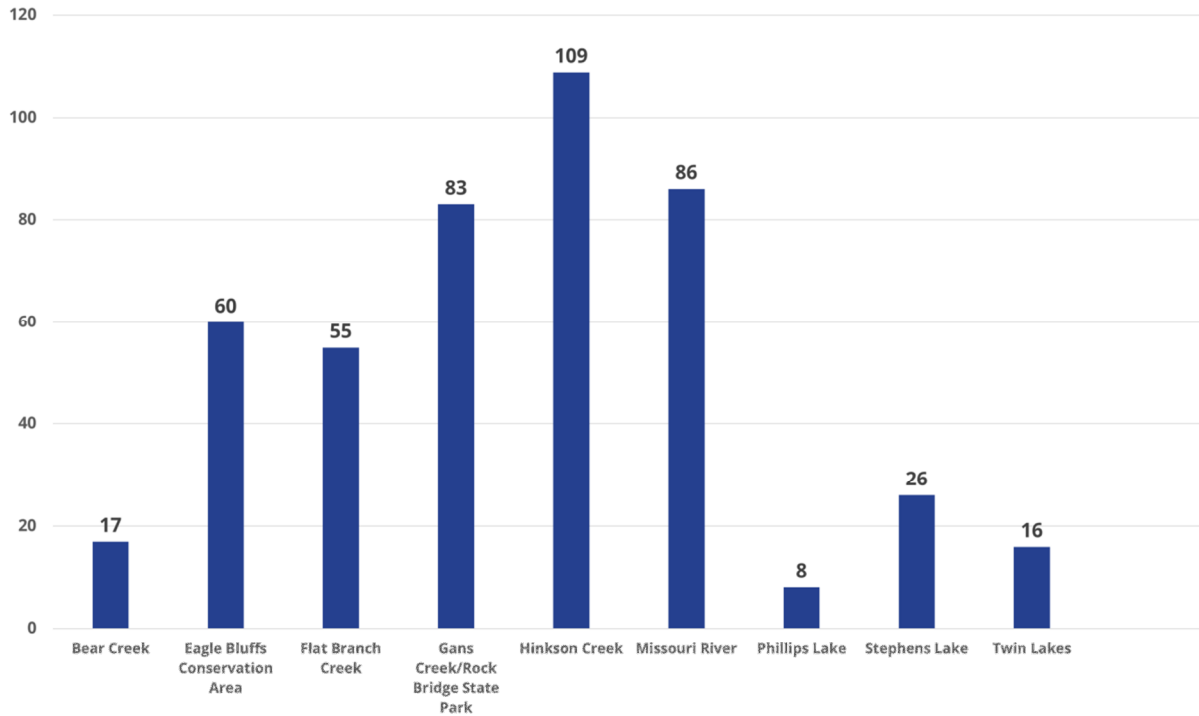
**Question 1: As we are making improvements to our stormwater & wastewater systems, there are ways we can efficiently and effectively spend our resources in an effort to achieve multiple community benefits. Which benefits do you feel are most important for your community? Choose THREE of the benefits most important to you.**



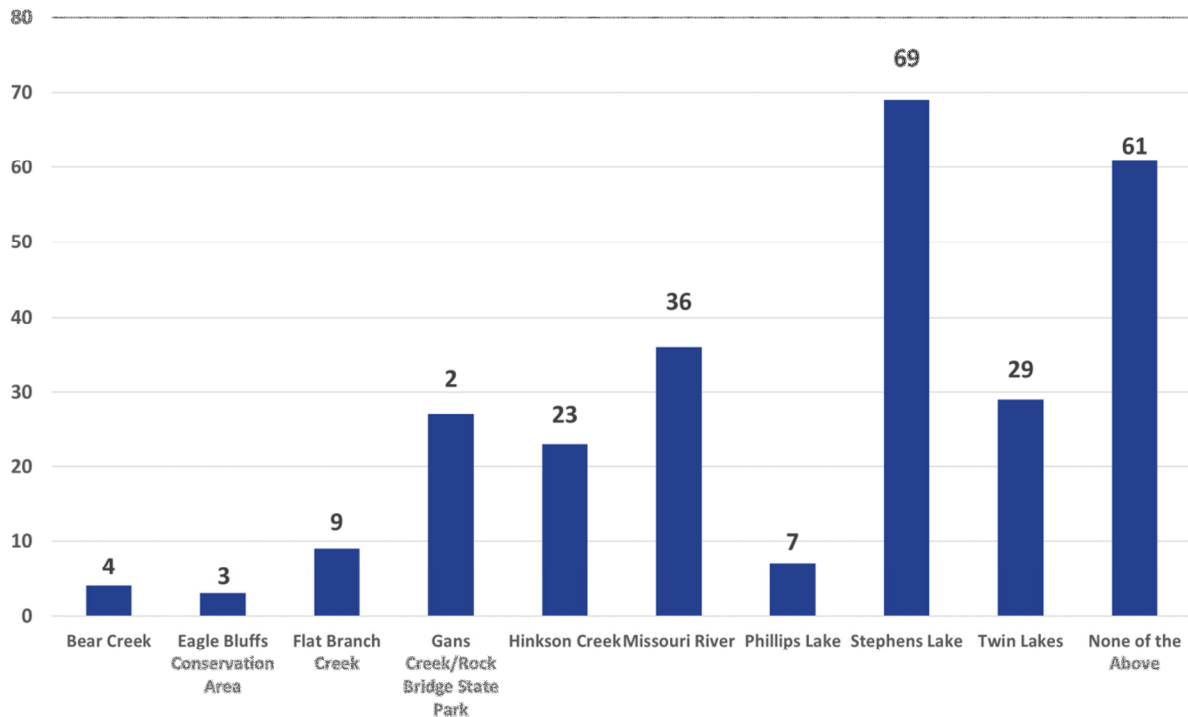
**Question 2: Our stormwater and wastewater systems can impact our community in many different ways. What issues are most important to you? Choose THREE of the issues most important to you.**



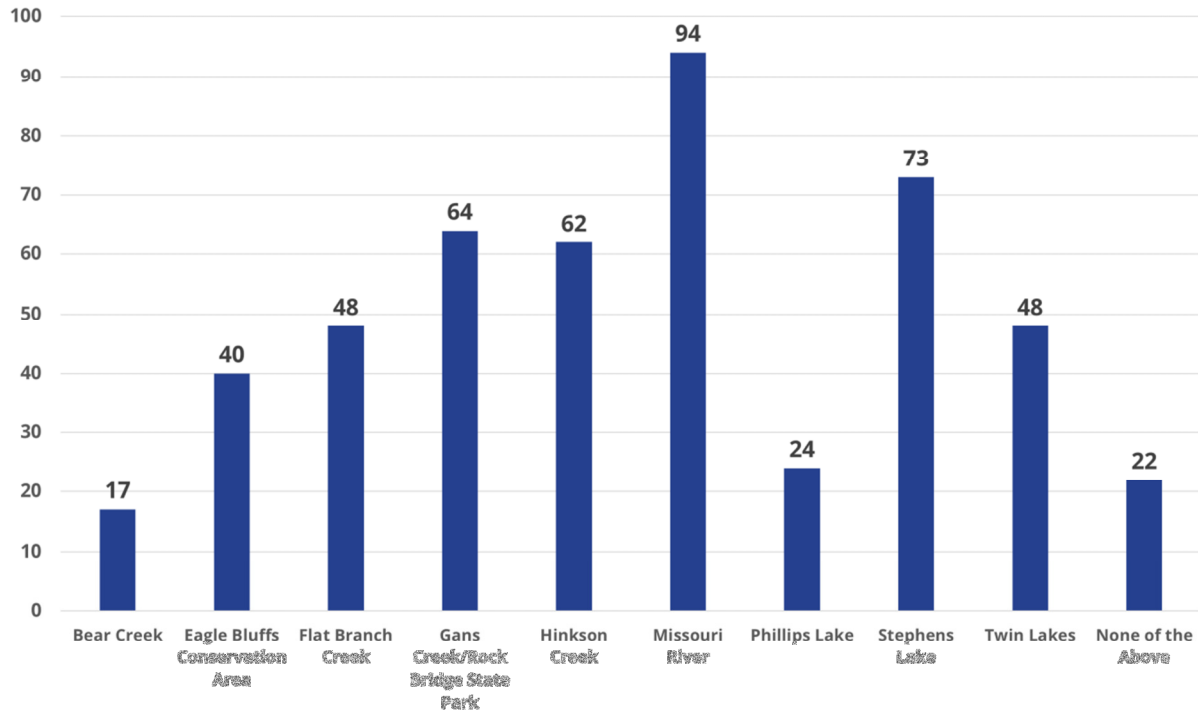
**Question 3: Which water bodies do you think are the most important to protect? By checking the boxes below, choose THREE of the water bodies most important to you.**



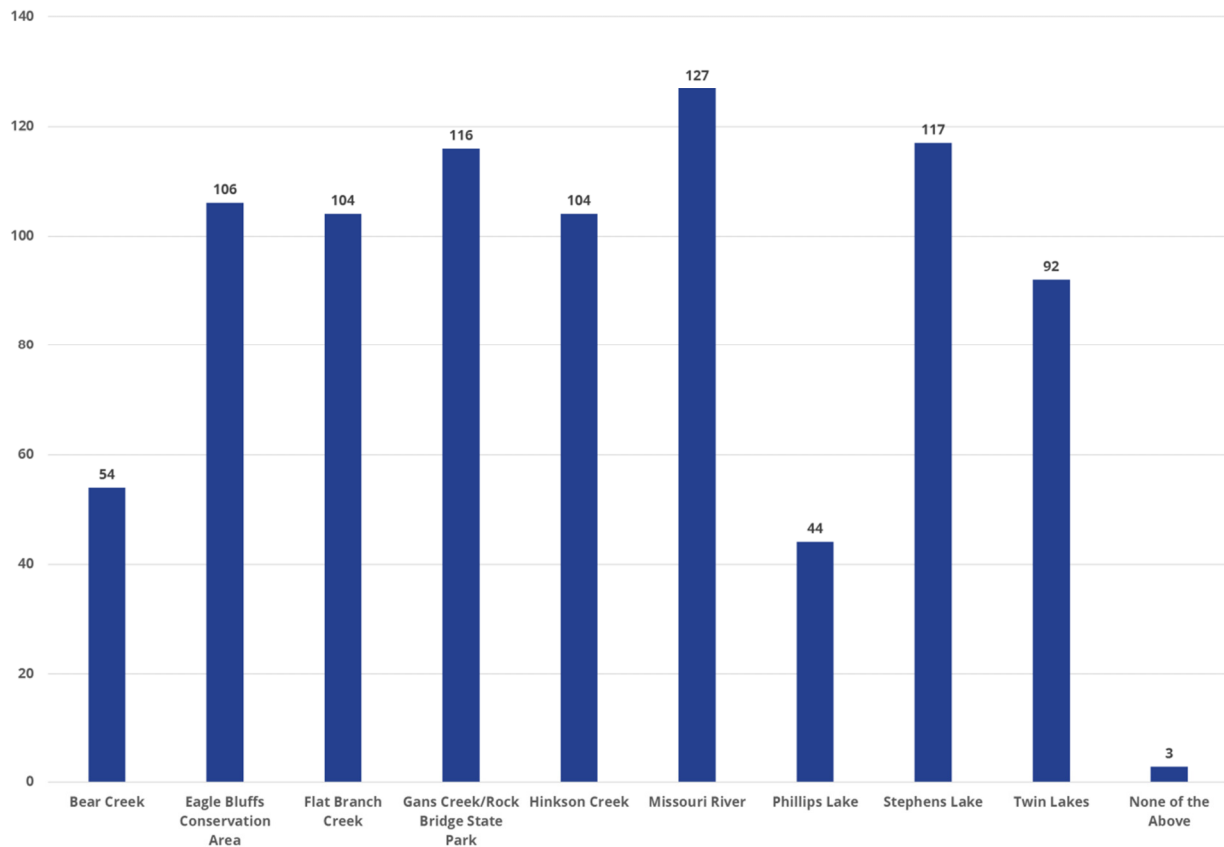
**Question 4: Do you or your family members swim in the following water bodies?**



**Question 5: Do you or your family members wade, boat, canoe or fish on these water bodies?**



**Question 6: Do you or your family members hike, walk, bike, camp, hunt, watch wildlife or participate in social events on the banks of these water bodies?**



# Attachment B. Watershed Prioritization Results

**Question to Workshop Participants:** If you could only spend \$1 to protect watersheds in and around the City, how would you spend it?

