



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: December 3, 2018

Re: Public Hearing - Our Columbia Waters Wastewater and Stormwater Integrated Management Plan

Executive Summary

This Public Hearing is to consider the adoption of the Our Columbia Waters – Wastewater and Stormwater Integrated Management Plan.

Discussion

The final document for the Our Columbia Waters – Wastewater and Stormwater Integrated Management Plan (IMP) is attached. Included with the plan are all appendices to the plan as well as a summary five year action plan.

In 2011, the City received notification from the Missouri Department of Natural Resources (MDNR) of a potential Administrative Order on Consent (AOC) to address wet weather sanitary sewer overflows. In 2011, the City also became a party to the Hinkson Creek Collaborative Adaptive Management (CAM) process to address the Total Maximum Daily Load (TMDL) for water quality impairments based on macroinvertebrate sampling. In 2012, the United States Environmental Protection Agency (EPA) released a new framework to help local governments meet Clean Water Act obligations. This framework is titled "Integrated Municipal Stormwater and Wastewater Planning Approach Framework" (IMP). The IMP framework assists EPA regional offices, states and local governments with developing voluntary storm and wastewater management plans and implementing effective integrated approaches by reducing overflows from wastewater systems and pollution from urban storm water runoff. This framework provides flexibility to pursue innovative solutions and allows communities to develop plans that prioritize their investments in storm and wastewater infrastructure.

Utilizing the IMP framework can benefit the City by allowing more flexibility and local control in prioritizing and scheduling projects necessary while still addressing system operation and maintenance needs. This flexibility allows for better decision making based on the community's priorities while maintaining more affordable user rates and rate adjustments. The traditional approach typically involves an AOC with a rigid schedule and specific spending requirements. AOC and operating permit requirements can often overlap resulting in rapidly rising user rates.

MDNR agreed with the approach to use the IMP framework to address wet weather overflows, system rehabilitation needs and other future regulatory requirements. As a result of negotiations, in December 2016 the City agreed to develop an IMP for the wastewater and



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stormwater systems and MDNR agreed to use the plan as a basis for future regulatory decisions and compliance schedules in future operating permits.

The City has selected HDR Engineering, Inc., to assist with developing the IMP. Development of the IMP began with identifying existing issues and evaluating current infrastructure and resources. Public outreach activities have occurred to support the plan including: an online survey, four public workshops, individual meetings with Council members, multiple meetings with MDNR, a Council work session and a 45-day comment period on the draft plan.

Attached are the comments received during the 45-day comment period ending July 13, 2018 and staff responses to the comments. Also attached is a letter of support for the Integrated Planning process from multiple organizations to the United States Congress. Additionally, specific letters of support for Columbia's IMP are included from Missouri Water Environment Association, Missouri Public Utility Alliance and Boone County Commission.

The IMP includes alternatives and timelines that identify efficiencies and resolve competing regulatory requirements from separate wastewater and storm water programs. The IMP will help the City meet regulatory obligations while continuing to address related challenges in operating and maintaining existing infrastructure investments. An affordability analysis was performed to inform a long-term plan that allows the Utilities to maintain affordable user fees and leverage expenses to meet multiple goals. Finally a long term plan with a 5-year action plan to address the prioritized investments for the Sewer and Storm Water Utilities was completed. This flexible long-term IMP provides some control of the magnitude and timing of regulatory uncertainties and prioritizes sustainable and comprehensive solutions that improve water quality and provide multiple benefits to the community.

Several high priority, early actions will be implemented in the near term to directly and expeditiously reduce significant public health risks, improve water quality, provide sustainable services, and address regulatory compliance. These early actions include the following:

- Wet Weather Improvements and planning to reduce wet weather overflows and backups, addressing regulatory compliance and improving water quality by developing a hydraulic model of the collection system and installing storage improvements at the wastewater treatment plant.
- Digester Rehabilitation to address aging infrastructure and provide sustainable services for the future by upgrading facilities.
- Collection System Renewal to more proactively maintain the existing system by collecting and analyzing critical data to more appropriately identify and address system needs.
- Private Common Collector Elimination to improve public health and water quality by continuing to fund replacement of deteriorated private systems.
- Building Backup Reduction to improve public health through participation in reimbursement programs.
- System Capacity Enhancements and Inflow and Infiltration Reduction to address regulatory compliance and protect water quality by continued funding of sewer main



and manhole rehabilitation and the identification and reduction of hydraulic restrictions in the collection system.

- Municipal Separate Storm Sewer System Program Enhancements to improve water quality by increasing efforts to identify illicit discharges and updating construction erosion and sediment control guidelines.

MDNR has provided comments on the draft plan. If this plan is adopted by Council, Staff will submit the plan to MDNR for final approval. The final approved plan will be used by the City and MDNR to meet regulatory requirements and compliance schedules for future operating permits. Approval of the plan will most likely result in a memorandum of understanding between the City and MDNR where both entities agree to follow the timelines included in the final plan for the initial five year period and require evaluating and updating the plan at regular intervals.

The IMP will be implemented in phases to address critical issues first while allowing time to gather information for thoughtful infrastructure planning. The short and long term aspects of the IMP will be re-evaluated regularly to address new regulatory drivers, affordability, funding and necessary system investments. A flexible plan to prioritize spending will allow the city to balance wastewater and storm water improvements with community needs and financial capability.

Fiscal Impact

Short-Term Impact: There is no cost associated with adoption of the plan and submittal to MDNR. If accepted by MDNR, long term impacts will occur with implementation of the plan. Long-Term Impact: The five year action plan identifies additional costs of approximately \$5.4 million for the Storm Water Utility over the initial five year period. The five year plan identifies additional costs of approximately \$17.6 million for the Sewer Utility over the initial five year period.

Strategic & Comprehensive Plan Impact

[Strategic Plan Impacts:](#)

Primary Impact: Infrastructure, Secondary Impact: Operational Excellence, Tertiary Impact: Tertiary

[Comprehensive Plan Impacts:](#)

Primary Impact: Environmental Management, Secondary Impact: Infrastructure, Tertiary Impact: Livable & Sustainable Communities

Legislative History

Date	Action
11/05/2018	R166-18 Setting a Public Hearing: consider adoption of Columbia Wastewater and Stormwater Integrated Management Plan Final Report



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08/07/2017	City Council Work Session Wastewater/Stormwater Integrated Management Plan Update
12/19/2016	B331-16 Authorizing a memorandum of understanding with the Missouri Department of Natural Resources relating to the development of an integrated management plan for City of Columbia wastewater and stormwater systems; authorizing approval of an Abatement Order on Consent with the Missouri Department of Natural Resources.
01/19/2016	B18-16 Authorizing an agreement for engineering services with HDR Engineering, Inc. for development of an Integrated Management Plan (IMP)
11/21/2011	Abatement Order on Consent Presentation at the November 21, 2011 Pre-Council Meeting

Suggested Council Action

Authorize the accompanying Resolution to approve the Our Columbia Waters – Wastewater and Stormwater Integrated Management Plan for submittal to MDNR.