



# 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: September 19, 2016

Re: Agreement with the United States Geological Survey for Groundwater Monitoring of the McBaine Bottoms, including the Eagle Bluffs Conservation Area

## Executive Summary

Staff has prepared for Council consideration, an ordinance authorizing the City Manager to execute an agreement for year three of a six year plan with the United States Geological Survey (USGS) for ground water monitoring in the McBaine Bottoms, around the City's wetland treatment units, and on the Eagle Bluffs Conservation property, for a one year period. These wells will be monitored for constituents of interest to the City including, inorganic ions, pesticides, wastewater organics and pharmaceutical compounds. The cost for this monitoring is shared between the Sewer Division and the Water Division of the Utilities Department and funds are included in the operating budgets of both divisions.

## Discussion

In 1992 a collaborative agreement among the USGS, the City of Columbia and the Missouri Department of Conservation began groundwater monitoring in the McBaine Bottoms around the City's wetland treatment units and on the Eagle Bluffs Conservation property. The purpose of the study was to assess the effect of the constructed wetlands on the ground water quality and flow. This initial study was completed in 1999 and a significant conclusion was that the compounds associated with the sewage effluent in the wetlands could potentially migrate from the wetlands toward the City's municipal drinking water supply well field. Based on the results, all parties involved concurred that the water quality monitoring should continue and that all analysis should be performed by the USGS laboratory for consistency. The purpose of performing these studies is to provide the City with the information needed to protect the well field and ensure good quality drinking water.

In 2015, the USGS provided the City a proposal to continue the monitoring for an additional six years, renewable annually. The proposal is attached and includes detailed information on the purpose and objective of the study, the wells to be monitored, analysis to be performed and the annual cost for each of the six years. This agreement is for year three of the six years included in the proposal.

## Fiscal Impact

Short-Term Impact: The cost to the City for year three (FY17) of the proposal is \$62,850.00 with the Sewer Division paying 80% and the Water Division paying 20%. The funding for this has



been included in the operating budgets for both divisions.

Long-Term Impact: The future costs for years four, five and six (fiscal years 2018, 2019 and 2020) are \$64,200.00, \$69,000.00 and \$67,750.00 respectively. These annual amounts will be included in the operating budgets for both utilities.

## Vision & Strategic Plan Impact

### Vision Impacts:

Primary Impact: Environment, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

### Strategic Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

### Comprehensive Plan Impacts:

Primary Impact: Environmental Management, Secondary Impact: Infrastructure, Tertiary Impact: Not Applicable

## Legislative History

Date	Action
N/A	Agreements with the USGS for groundwater monitoring have been authorized since 1997.

## Suggested Council Action

Authorize the City Manager to approve the agreement with the USGS for groundwater monitoring.