



The City of Lee's Summit

Legislation Text

File #: BILL NO. 22-192, Version: 1

An Ordinance approving an agreement between the City of Lee's Summit, Missouri and the Mid-America Regional Council for the Little Blue River Watershed Feasibility Study - Phase Two, for an amount not to exceed \$344,998.00, and authorizing the Mayor to execute the same.

(Note: First read by Council on September 13, 2022. Passed by unanimous vote.)

Issue/Request:

An approving an agreement between the City of Lee's Summit, Missouri and the Mid-America Regional Council for the Little Blue River Watershed Feasibility Study - Phase Two, for an amount not to exceed \$344,998.00, and authorizing the Mayor to execute the same.

Key Issues:

- Pursuant to the FY23 Capital Improvement Plan, the City authorized funding to partner with local and federal agencies to conduct an engineering and planning study to manage stormwater within the Little Blue River Watershed.
- Changes in the Little Blue River watershed's condition related to urbanization and other factors are
 causing more frequent flooding and rapid erosion that threatens significant public infrastructure
 investments, as well as private property throughout the communities in the watershed.
- A comprehensive watershed study is required among the communities and agencies in the area to
 protect infrastructure, private properties, habitat conservation, and storm water management allowing for
 increased economic benefits to the area.
- The United States Army Corps of Engineers (USACE) has authorized federal funding to conduct a comprehensive Little Blue River Watershed Feasibility Study in partnership with local communities to determine the causes and potential solutions to demonstrated watershed impacts.
- The United States Army Corps of Engineers will provide \$1.5 million of the project funding. The remaining \$1.5M of project costs will be split among 8 local agencies.

Proposed Committee Motion:

I move to recommend to the City Council approval of an Ordinance approving an agreement between the City of Lee's Summit, Missouri and the Mid-America Regional Council for the Little Blue River Watershed Feasibility Study - Phase Two, for an amount not to exceed \$344,998.00, and authorizing the Mayor to execute the same.

Proposed City Council Motion:

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I move for adoption of an Ordinance approving an agreement between the City of Lee's Summit, Missouri and the Mid-America Regional Council for the Little Blue River Watershed Feasibility Study - Phase Two, for an amount not to exceed \$344,998.00, and authorizing the Mayor to execute the same.

Background:

The last USACE planning study for the Little Blue River watershed was completed in 1966. That study led to much of the flood control project(s) in the watershed; such as constructing Longview Lake and Dam, Blue Springs Lake and Dam, and levees along portions of the Little Blue River. That study is now obsolete due to the significant changes in land use in the area and more accurate local data relate to topography and rainfall. These changes are evidenced by recurring flooding issues within the basin.

USACE and the local agencies recognize that a best practice to manage stormwater is to manage the entire watershed instead of subdividing into small parcels divided by city limit lines or private parcel boundaries. Rain and flooding follow the watershed, and flooding issues in one community may be inadvertently affected by actions taken outside that community.

Discussion among USACE and the local communities regarding this study began in 2021. At that time, the Mid-America Regional Council (MARC) was facilitating the initial conversations. The local agencies unanimously agreed to have MARC coordinate the project. USACE will manage the project, provide technical expertise, and conduct the watershed analyses. MARC will coordinate the local agencies, to include collecting funds, and day-to-day interaction with USACE. The local agencies are the key stakeholders, customers, and end-users of this study. In order to enter into the is study, it is necessary to execute this agreement with MARC. Since the agreement with MARC includes partnered associations with other jurisdictional communities or governments and USACE, the agreement requires an ordinance per City Charter.

The funding was allocated based on the land area of a community within the Little Blue watershed. The entire watershed covers 224 square miles. The City of Lee's Summit has 51 square miles in the Little Blue watershed; Kansas City has 43 square miles; Blue Springs has 10 square miles; etc. Using that approach, Lee's Summit cost share would be \$346,998, of which the City already paid \$2,000 in 2021 to complete the project management and scoping plan. The remaining balance is the \$344,998 described in this agreement. \$450,000 was authorized in the FY23 Capital Improvement Plan for this work. Essentially, the City will be paying 12% of the total project cost to complete the study.

The study will specifically address flood mitigation and stormwater quality. The study will provide a comprehensive master plan for the watershed that would identify potential flood mitigation projects in the Little Blue River watershed. The goal is to identify projects that would be beneficial to the entire watershed with no adverse effects to other communities.

The project scope included two public meetings to offer opportunities for input and identify key issues. City Staff will be working locally to engage key stakeholders ahead of those meetings to ensure there is opportunity for local input. The technical aspects will be somewhat straight forward through the hydrology modeling. This will create computer models that simulate potential flooding based on current topography and

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rainfall data. Predictive modeling can simulate future drainage and flooding patterns based on assumed development.

The key input will be addressing policies and projects to mitigate flooding issues identified during the modeling process. For example, would the public prefer larger, watershed detention or zero-runoff development? Would the public support larger stream buffers to protect water quality and reduce flooding risks? Would the public prefer a status-quo approach to development and let each project manage stormwater on its own design? Using that policy type of input, then the watershed study can move forward from existing conditions to identify stormwater projects based on local policy decisions.

This study also supports the City's Stormwater Utility rate study currently underway. The rate study is creating a GIS map for all the impervious area in Lee's Summit. This work can be used as local matching work into the USACE study. So, the same work could be used on both projects. The Little Blue River watershed study will create a master plan for flood mitigation projects. Stormwater projects specifically identified in the USACE study become eligible for federal grant money. If the City were to undertake a project identified in this study, the current grant program provides a 65% federal funding with a 35% local match for construction work only.

The City of Lee's Summit would specifically benefit from this study because two-thirds of Lee's Summit is within the Little Blue watershed. Areas included in the study's scope of work are Prairie Lee Lake, East Fork of the Little Blue River (Vista del Verde ditch), Legacy Park, Mouse Creek, Cedar Creek, both of the undeveloped PRI Prosperities, Maybrook Creek, and Oaks Ridge Meadows.

Impact/Analysis:

If not approved, the Little Blue River watershed study could be cancelled if the other agencies do not cover the anticipated contribution from Lee's Summit. Approval by the City will allow MARC to move forward with the USACE Study, contingent upon the other local agencies making their requested funding commitments. If the study is completed, Lee's Summit would gain access to federal grant funding if the City chose to construct projects recommended in this study.

Timeline:

October 2022 through December 2025

George Binger, Deputy Director of Public Works/City Engineer

Staff recommends approval.

Committee Recommendation: [Enter Committee Recommendation here]

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