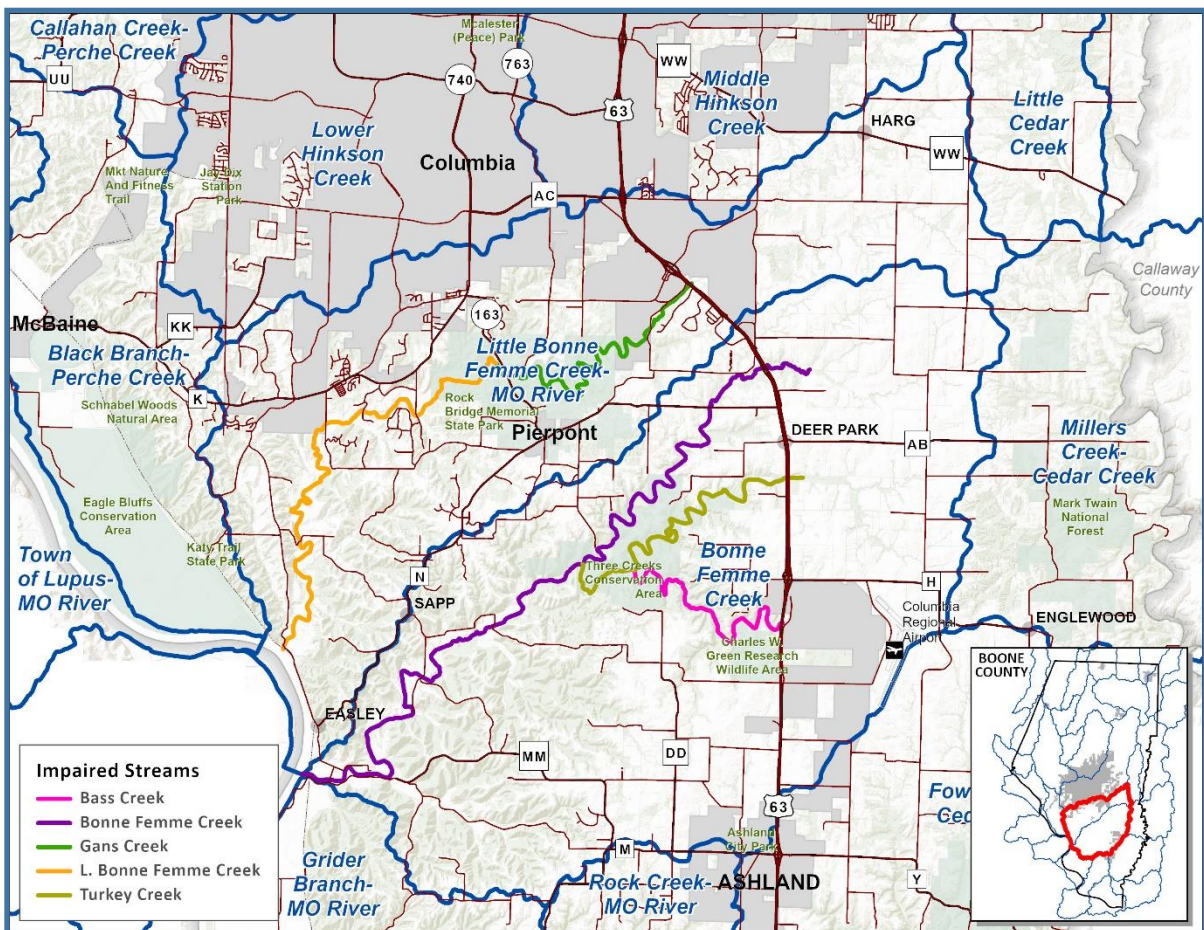


Greater Bonne Femme Watershed Initiative

Report to the City of Columbia, Missouri, City Council
April 30, 2024

Introduction

Boone County and project partners are pleased to announce the launch of the Greater Bonne Femme Watershed Initiative. Boone County requests that the City of Columbia, City Council endorse this project and approve the expenditure of staff time across departments to fully develop a new watershed management plan for the Greater Bonne Femme Watershed. City staff will be asked to participate in monthly meetings of approximately two hours each through the expected date of completion of the plan, which is November 1, 2025. Additional input from City staff may be needed as plan development moves forward, including but not limited to, information about City projects, fielding public questions or comments, and work sessions.



Background

- The WBP outlines a path forward to improve water quality in the GBFW by installation of best management practices (BMPs) on the agricultural landscape—the BMPs have great potential to reduce the loading of *E. coli* into streams, as well as mitigating nitrogen, phosphorus and sediment transport from stormwater runoff
- Additional highlights from the WBP include: a 21-year timeframe to achieve water quality goals as installation of the recommended BMPs by landowners is entirely voluntary; a cover crops pilot project with edge-of-field monitoring to provide feedback on BMP effectiveness; a demonstration project highlighting riparian corridor restoration and management; outreach and education for agricultural landowners; a septic system maintenance program
- Boone County Resource Management and partners felt that the WBP did not offer all of the restoration and protection measures necessary given the bountiful natural resources in the GBFW

The Greater Bonne Femme Watershed Initiative

The Greater Bonne Femme Watershed Initiative takes a broad approach to restoration and protection of water quality in the GBFW:

Overall goal: Creation of a watershed management plan that will be adopted by Boone County, the City of Columbia and the City of Ashland.

Working with project partners, we will integrate four conceptual pillars into the language of the plan:

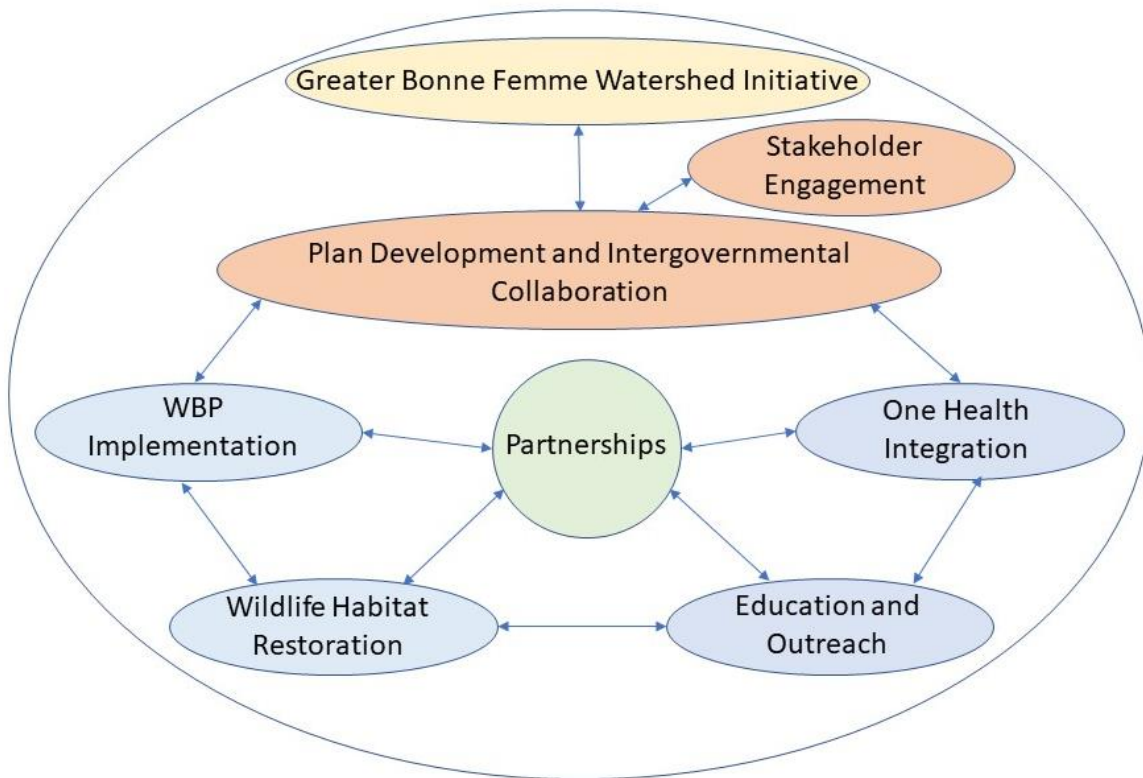
Pillar One, Implementation of the WBP: This involves voluntary installation of best management practices (BMPs), such as cover crops and managed rotational grazing, by agricultural landowners in the watershed and installation of demonstration projects. BMPs will increase the amount of living vegetation on the ground to slow, spread, and infiltrate runoff. Demonstration projects will allow the public to view the best management practices in action.

Pillar Two, Creation of a Watershed-wide Wildlife Habitat Restoration Project: The County will collaborate with agency partners, including the Missouri Department of Conservation and private wildlife groups, to work with landowners in the watershed to improve wildlife habitat on their property. Wildlife habitat restoration is projected to have similar water quality benefits to installation of agricultural best management practices.

Pillar Three, Education and Outreach: This element is more focused on residential landowners than the WBP, encouraging protection of riparian corridors and the use of more native vegetation in landscaping.

Pillar Four, One Health Integration: Healthy water and soil for humans, wildlife and the ecosystem will be the focus of this element, incorporating a variety of concepts from regenerative agriculture to increasing health benefits from recreation in the GBFW.

Framework



Boone County Resource Management is working with a suite of partners, including federal and state agencies, conservation organizations, and local landowners to build a watershed management plan (the Plan) for the Greater Bonne Femme Watershed.

Boone County Resource Management is in the process of hiring two consultants to assist with development of the Plan. The Plan should be finalized and ready for adoption by Boone County, the City of Columbia, and the City of Ashland by November 1, 2025. Boone County requests that City staff be allowed to fully participate in development of the Plan.

Future iterations of the Plan will be developed every 3-5 years.

Intersection with City of Columbia Policy

The goals of the Plan intersect with the City of Columbia's Climate Action and Adaptation Plan:

- Increasing native vegetation – provides carbon storage and trees will provide shade
- Restoration and protection of stream corridors
- Reduction of chemical inputs on the landscape

Plan Objectives

The Plan is intended to assist Boone County, the City of Columbia and the City of Ashland in formulating a shared vision for the future of the Greater Bonne Femme Watershed (GBFW). It will take collaboration and engagement with this shared vision to restore and protect streams, ecosystems and the health of citizens in the GBFW.

Potential topics to explore with the City of Columbia that would be beneficial to water quality in the GBFW:

- a. Careful consideration of new infrastructure in the GBFW
 - i. Gans Road project as an exception
- b. Planning
 - i. Formalization of karst setbacks with distance specified, including potential revision of stormwater ordinance with special rule for GBFW karst setbacks
 - ii. Revision of subdivision and commercial development ordinances by cross-referencing updated stormwater ordinance
 - iii. Recommendations for additional native vegetation during plan review
- c. Sustainability
 - i. Partnership in residential landowner educational project, particularly for landowners living adjacent to streams
- d. Parks and Recreation (and any other city departments working within the watershed)
 - i. Policy recommendations for reducing chemical inputs near streams
 - ii. Riparian corridor protection and restoration during construction projects (including trail system)
- e. Stormwater
 - i. Continued participation in Greater Bonne Femme Watershed Initiative for the municipal separate storm sewer permit collaboration
- f. Wastewater
 - i. Consideration of policy revisions to allow effluent to cross watershed lines to connect environmentally damaging on-site wastewater systems to central sewer

Concluding Remarks

Boone County, the City of Columbia and the City of Ashland have an opportunity to work together with project partners to restore and protect the waters of the Greater Bonne Femme Watershed.

Boone County Resource Management and project partners request that the City of Columbia City Council authorize participation of City staff in this multidimensional effort. Staff participation will ensure that the Plan incorporates City of Columbia policy concerns.