

EXECUTIVE SUMMARY

Tetra Tech and sub consultants Environs Inc., Jones Landscape Architecture, PLLC, and Geomorphics was contracted by the U.S. Army Corps of Engineers (USACE) to provide planning support for the Beargrass Creek Trail Conceptual Shared Use Path and Ecological Restoration Plan. USACE provided funding for 50% of the planning cost through Planning Assistance to States funds and Louisville Metro Government provided the 50% local match through budgeted and private funds.

The planning study area runs generally along the Beargrass Creek corridor from its confluence with the Ohio River near Waterfront Park to the junction of the Middle and South Forks and then continues along the Middle Fork of Beargrass Creek corridor to the intersection of Lexington Road and Grinstead Drive in Louisville, Jefferson County, KY, a total distance of approximately three miles. The study area encompasses the Irish Hill and Butchertown neighborhoods and progresses through wooded, residential, commercial, and industrial zones.

Historically, Beargrass Creek sustained life for pioneer settlers trying to survive the wild frontier. It became a central, strategic resource and economic catalyst for the development of early Louisville. As catastrophic floods and industry changed the face of Louisville and the neighborhoods surrounding Beargrass Creek, it soon became a forgotten urban waterway overrun by pollution and dumping. For many years, groups such as Kentucky Waterways Alliance and Beargrass Creek Alliance among others have called attention to this neglect and diminishing water quality.

This report studies the possibility of utilizing the creek as a connector between two existing trail systems (Beargrass Creek Greenway and Butchertown Greenway) and explores conceptual ideas to improve the creek's water quality, create habitat for increased wildlife and mitigate current bank erosion. In the broader picture, this shared use path would ultimately connect the Ohio River, and even points north in Indiana by way of the Big Four Pedestrian Bridge, to neighborhoods, parks and greenways as far into the city as Cherokee Park. The wildlife corridor would be re-established and appeal of the creek as an amenity would be restored.

The two major components of this planning study are:

1. Prepare a conceptual alignment plan for a pathway that would complete and connect a shared use pathway between Cherokee Park and Waterfront Park. The order of preference for the conceptual path alignments is:
 - ◆ Off road and along the creek
 - ◆ Off road
 - ◆ On road along existing streets
2. Identify ways to improve water quality, wildlife habitat, and native plant species in the study area by utilizing and building upon biological and ecological studies and reports previously generated by others.





EXECUTIVE SUMMARY (CONTINUED)

SHARED USE PATH

Within this report, shared use path alignments are discussed including transformational concepts such as: a ‘Little Big Four’ pedestrian bridge, ‘Tree Canopy Walk’ and reclamation of brownfields adjacent to the creek. These concepts could become community icons and environmental education tools. Pairing these concepts with ideas for the improvement and preservation of creek buffer zones, wetlands and urban tree canopy, completes the vision of this project.

For ease of presentation, the study team divided the study area into nine sub-areas, designated “A” through “I”. Within each sub-area, the team proposed from one to three options for the multi-use path alignment. Generally option 1 was along the creek, with many elevated sections of the path, and signature bridges; option 2 was mostly along the creek, but veered away from the creek more frequently than option 1, some portions of the existing trail were used, and a limited length of a street was used; option 3 primarily utilized the path and streets, with a limited length of elevated path.

As a rough order of magnitude cost estimate, pathways option 1 should cost in the range of \$42.7 million; option 2 should cost in the range of \$21.3 million; and option 3 should cost in the range of \$6.7 million. These numbers do not include the cost of remediating the River Metals, the Reynolds/ Oakleaf, and impoundment lot properties, which would be required as part of options 1 and 2. It is anticipated that the project could be built in sections as money becomes available, and options could be mixed and matched to postpone an expensive option within a certain area. These costs can be broken down per area as follows:

Area	Option 1	Option 2	Option 3
A	\$700,000	\$3,000,000	\$200,000
B	\$3,000,000	\$4,000,000	\$300,000
C	\$4,700,000	\$2,000,000	\$700,000
D	\$13,000,000	\$4,400,000	\$500,000
E	\$8,800,000	\$3,400,000	\$2,600,000
F	\$3,350,000	\$1,800,000	\$2,000,000
G	\$400,000	\$2,200,000	\$300,000
H	\$100,000	\$100,000	\$100,000
I	\$8,600,000	\$400,000	na
Total	\$42,650,000	\$21,300,000	\$6,700,000

Table ES-1: Summary Cost Estimate of Pathway Options

Turning this vision into reality will need evaluation as funding becomes available. Determining which alignment is the best option depends on ability to acquire properties or easements, feasibility, and cost. Figure ES-1 indicates the three conceptual alignment

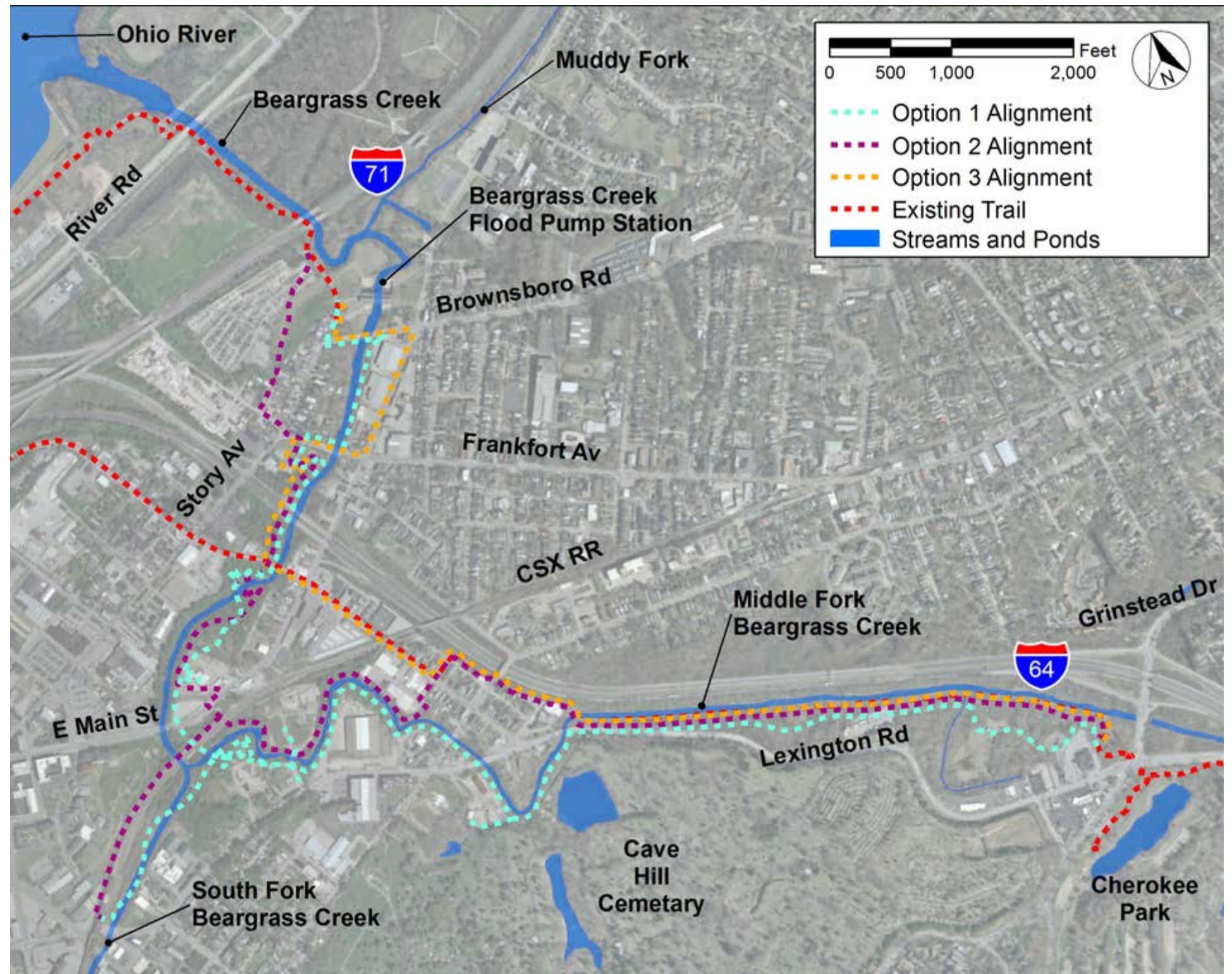


Figure ES-1: Map with Trails

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options presented in this report. Table ES-1 identifies the rough order of magnitude cost for each option. Refer to Section 5 for an in-depth description and discussion of each proposed shared use path option. See Figure ES-1: Map with Trails.

ECOLOGICAL RESTORATION

The ecological team evaluated the existing conditions of the creek and information presented in previous studies to identify restoration opportunities throughout the project area. Twelve restoration measures are presented in this report to improve water quality, wildlife habitat, and native plant species in the study area. Restoration opportunities include measures to treat stormwater runoff, preserve and enhance bottomland hardwood forests, improve in-stream habitat, reduce bank erosion, and reduce sedimentation.

Once again there are some big ideas proposed for restoring Beargrass Creek such as: meandering the straight section of the stream located between I-64 and Lexington Road, which will create opportunities for in-stream structures that will improve water quality, native habitat and restore the eroding banks; reclaiming the City operated vehicle impound lot by removing impervious pavement, providing stormwater detention, water quality treatment and re-establishing a vegetative stream buffer; and community interactive environmental learning stations that will allow users to link to real time stream flow and water quality data. Figure ES-2 identifies the twelve restoration measures presented in this report. Table ES-2 identifies the rough order of magnitude cost for each measure, which all together total \$6,010,000. Refer to Section 6 for an in depth description and discussion of each proposed restoration measure throughout each sub area of the project. See Figure ES-2: Restoration Measures.

Measure ID	Measure	Cost
A1	Wetland Restoration	\$100,000
B1	Invasive Species Management	\$200,000
B2	Stream Restoration Along I-64	\$2,000,000
C1	Bioretention at MSD	\$200,000
D1	Bank Stabilization	\$300,000
D2	Trash Removal	\$100,000
E1	Wetland Preservation	\$10,000
F1	Interactive Environmental Station	\$500,000
G1	Impound Lot Treatment	\$800,000
G2	Live Crib Wall	\$1,500,000
G3	Native Meadow and Stream Buffer	\$100,000
H1	Rock Vanes	\$200,000
Total		\$6,010,000

Table ES-2: Summary Cost Estimate of Restoration Measures

Investment into the health of Beargrass Creek and the shared use path project would not only help the community gain an amazing recreational amenity but also spur economic development. Beargrass Creek can once again become a catalyst, similar to what the creek provided to early Louisvillians. Now more than ever, we need to protect and maintain our community asset, Beargrass Creek.



Figure ES-2: Restoration Measures