

CNU27.Louisville

# CONNECTING BEARGRASS CREEK *SOUTH FORK*



# Sponsors

Louisville Metropolitan Sewer District

The Owsley Brown II Family Foundation

# Project Champion

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# CONNECTING BEARGRASS CREEK

*SOUTH FORK*





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# Congress of New Urbanism

The Congress of New Urbanism (CNU) is an international nonprofit organization working to build vibrant communities where people have diverse choices for how they live, work, and get around. We believe that well-designed cities and neighborhoods are crucial for our health, economy, and environment. **We build places people love.**

For 21 years, CNU and its network of over 2,600 have led an international movement of designers, developers, policy makers, and activists working towards a common goal: improved access to a high quality public realm.

## Legacy Projects

Since 2014, CNU has brought the vast expertise of its membership to bear on issues impacting neighborhoods and cities within the host region of our annual Congress.

Each expert-led congress Legacy Project is aimed at empowering local leader, advocates, and residents in underserved communities to implement New Urbanist principles that help people and businesses in their communities to thrive. Through public engagement

and collaboration, CNU's Legacy Projects Strive to demonstrate the power of great urban design beyond the boundaries of each selected community, and targeted communities experience both short-term progress and long-lasting momentum.

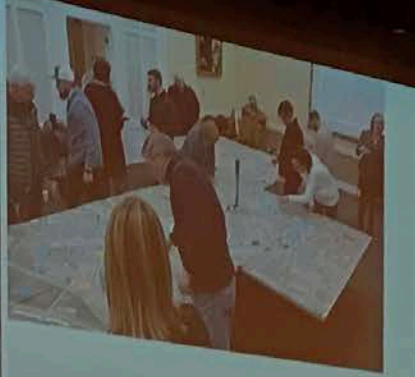
# CONNECTING BEARGRASS CREEK

- CONNECT TO THE CREEK
- IMPROVE THE CREEK'S HEALTH
- DEVELOP DESTINATIONS

Project Team:



Project Sponsors:



CNU



# Gresham Smith

Gresham Smith is a team of diligent designers, creative problem-solvers, insightful planners and seasoned collaborators who work closely with clients to improve the cities and towns we call home. Our employees are diverse in experience, yet we all have one thing in common: genuine care for each other, our partners and the outcome of our work. With each new project we take on, we have the pleasure of designing communities' most vital institutions and infrastructure.







“We leverage the expertise and collaborative thinking of civil engineers, landscape architects and planners to provide custom solutions that help you grow livable communities.”



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# CNU27.Louisville

## CONNECTING BEARGRASS CREEK

Connecting Beargrass Creek began with three distinct goals:



### CONNECT TO THE CREEK

If we ever want Beargrass Creek to be healthy again, people need to see it and love it. Creating better physical and emotional connections to Beargrass Creek is the first step.



### IMPROVE THE CREEK'S HEALTH

We want to explore unique ways to bring back the ecological systems of Beargrass Creek to create a healthier, safer and more vibrant water system.



### DEVELOP DESTINATIONS

Beargrass Creek has shaped the city of Louisville. We want to highlight the history along the South Fork, while also finding new places for people to engage with and celebrate the Creek.

## THE PROCESS

### CREEK CRAWL

**MARCH 7**

We began with a brainstorm. We toured the creek and hosted a visioning session, encouraging big ideas and inspired solutions.

### OPEN STUDIO

**MARCH 8**

During design we left our studio doors open, encouraging the public to ask questions, give feedback and engage in the design process.

### PARTY!

**MARCH 9**

After three days of hard work, we presented our findings, celebrated our efforts and discussed next steps for transforming Beargrass Creek.



A photograph of a residential area. In the foreground, a concrete-lined stream flows through a channel. To the right, a concrete retaining wall borders the stream, with some dry brush and debris. In the middle ground, a concrete bridge with a metal railing spans the stream. Behind the bridge, a two-story yellow house with a white porch and shutters is visible. To the right of the house, a road with a white car and a white pickup truck is visible. Utility poles and bare trees are also present in the background.

**BIG IDEAS  
BUILT ON  
INCREMENTAL  
ACTION**

# Creating a Connected Corridor

Beargrass Creek, especially the South Fork, is a lost environmental asset. The Connecting Beargrass Creek Legacy Project examines the South Fork from the Louisville Zoo to the Ohio River in an effort to identify issues and opportunities for repositioning the vital stream as a community asset. After intensive investigation and abundant research, our team believes that improvements at strategic locations along the creek system are an opportunity to create a network of community spaces and encourage ecological improvements.

**BUTCHERTOWN GREENWAY** \_\_\_\_\_

**BAXTER STATION** \_\_\_\_\_

**MILEWIDE DEPRAVE** \_\_\_\_\_

**PARISTOWN** \_\_\_\_\_

**LOGAN STREET PARK** \_\_\_\_\_

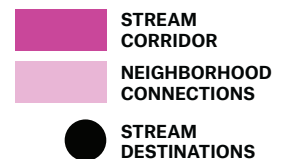
**3-BRIDGES** \_\_\_\_\_

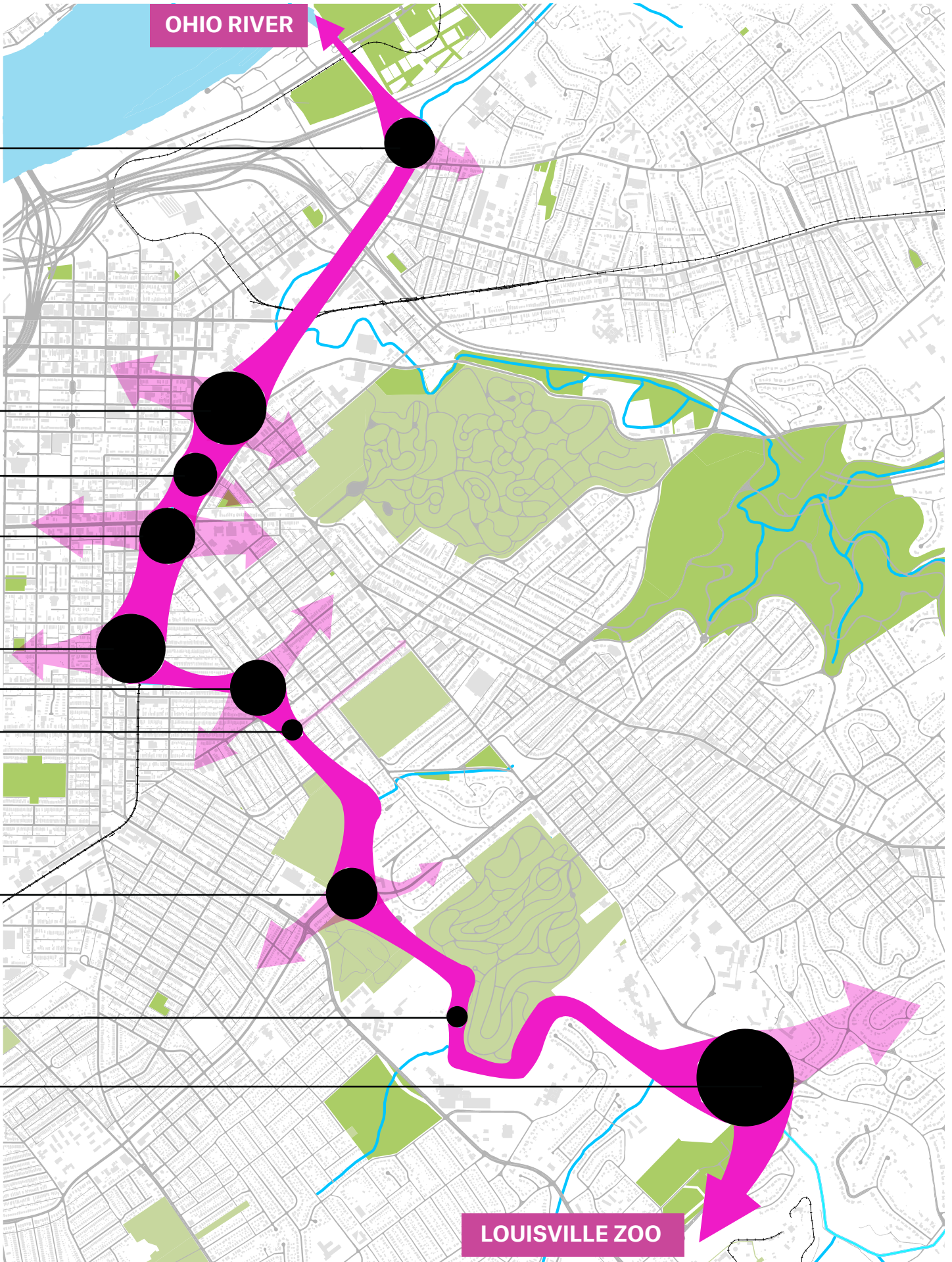
**RUFER POCKET PARK** \_\_\_\_\_

**EASTERN OVERLOOK** \_\_\_\_\_

**GERMANTOWN RIPARIAN FIELD** \_\_\_\_\_

**BLACK CROWN FOREST** \_\_\_\_\_





OHIO RIVER

LOUISVILLE ZOO



# Background

The following section reviews the historical changes, current urban conditions and watershed information for Beargrass Creek. This information will inform and frame the challenges, threats and opportunities surrounding the creek system. Reviewing the historical information outlines changes to the stream channel and how humans



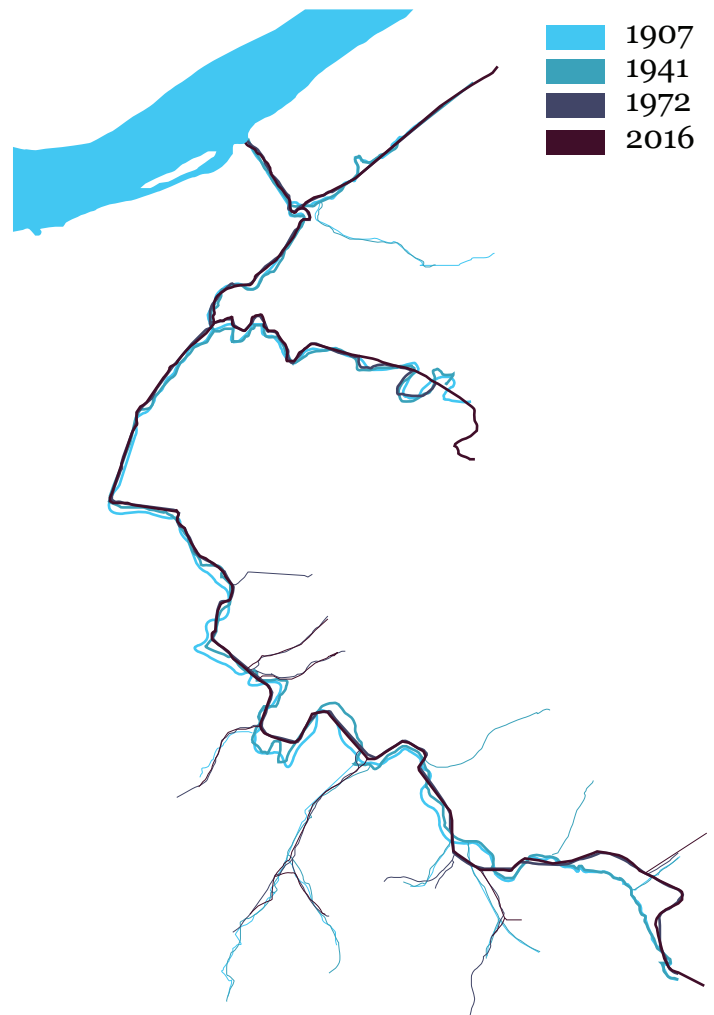




have influenced the system. Examining of the Beargrass Creek watershed will identify the impervious and pervious surfaces that impact the runoff and overall health of the channelized system. Finally, analyzing the surrounding urban context will examine how the areas around the creek system will influence different improvement strategies.

# Understanding the Influences

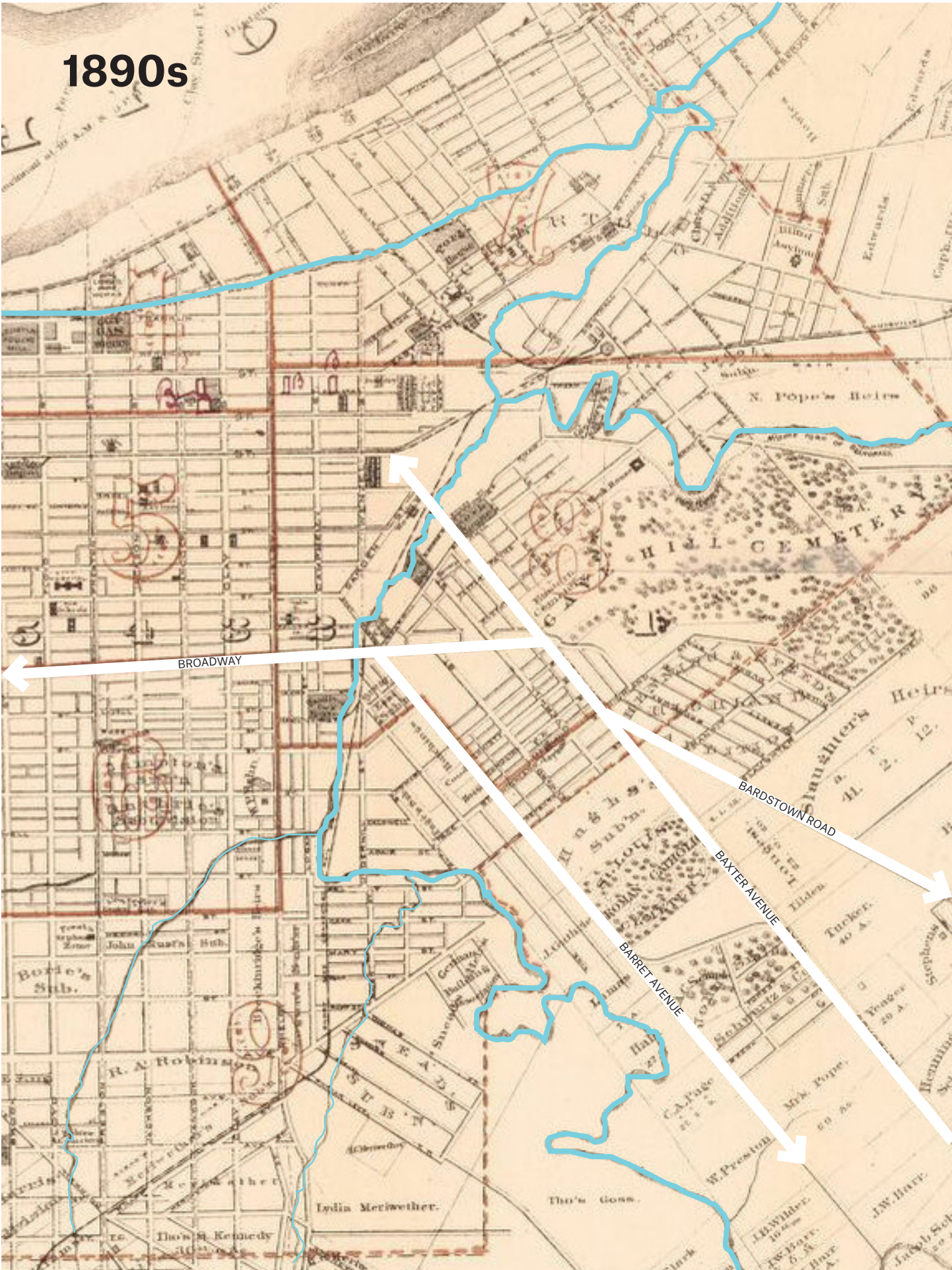
The Beargrass Creek channel has seen many changes as a result of the urbanization of Metro Louisville. Urbanization has forced the stream to transition from a meandering stream channel to a structured and fixed stream system. While these changes were implemented to accommodate additional growth and control flooding, they also had unintended consequences. The changes ultimately impaired and fragmented the ecological systems, reduced overall water quality and turned a once valued natural asset into a forgotten piece of urban infrastructure.



Stream alignment changes over time 1907-2016.



1890s



# Channelization

From early 1920s until today, Beargrass Creek has been impacted through various channelization efforts. Many of the channelization efforts, such as bridges, retaining walls and pump stations, can still be seen today.



1935 view in Butchertown



1926 Eastern Parkway



1930 Stone Bridge at Beargrass Creek



1929 Ellison Avenue





1928 Eastern Parkway at Beargrass Creek



1939 Eastern Parkway between Goss Avenue



1929 Kentucky Street at Beargrass Creek



1929 Beargrass Creek and Crown Avenue



1930 Stone Bridge at Beargrass Creek



1930 Retaining Walls at Beargrass Creek



1966 Pumping Station on Beargrass Creek



1933 Eastern Parkway at Beargrass Creek

# Investigating Impervious Surfaces

When evaluating the conditions of a stream it is imperative to take a broader look at the entire watershed to truly understand the issues at hand. We examined impervious surfaces within Beargrass Creek's Southfork watershed to identify areas that affect the overall stormwater runoff and health of the stream system. The South Fork watershed is 26.1 square miles. Nearly 60% of the the South Fork watershed's 26.1 square miles is made of impervious surfaces, such as roads, buildings and parking lots, that do not allow water to drain naturally.

This imperviousness increases water velocity and erosion, decreases water quality, increases issues related to flooding, raises ambient temperatures and impairs natural water cycles.



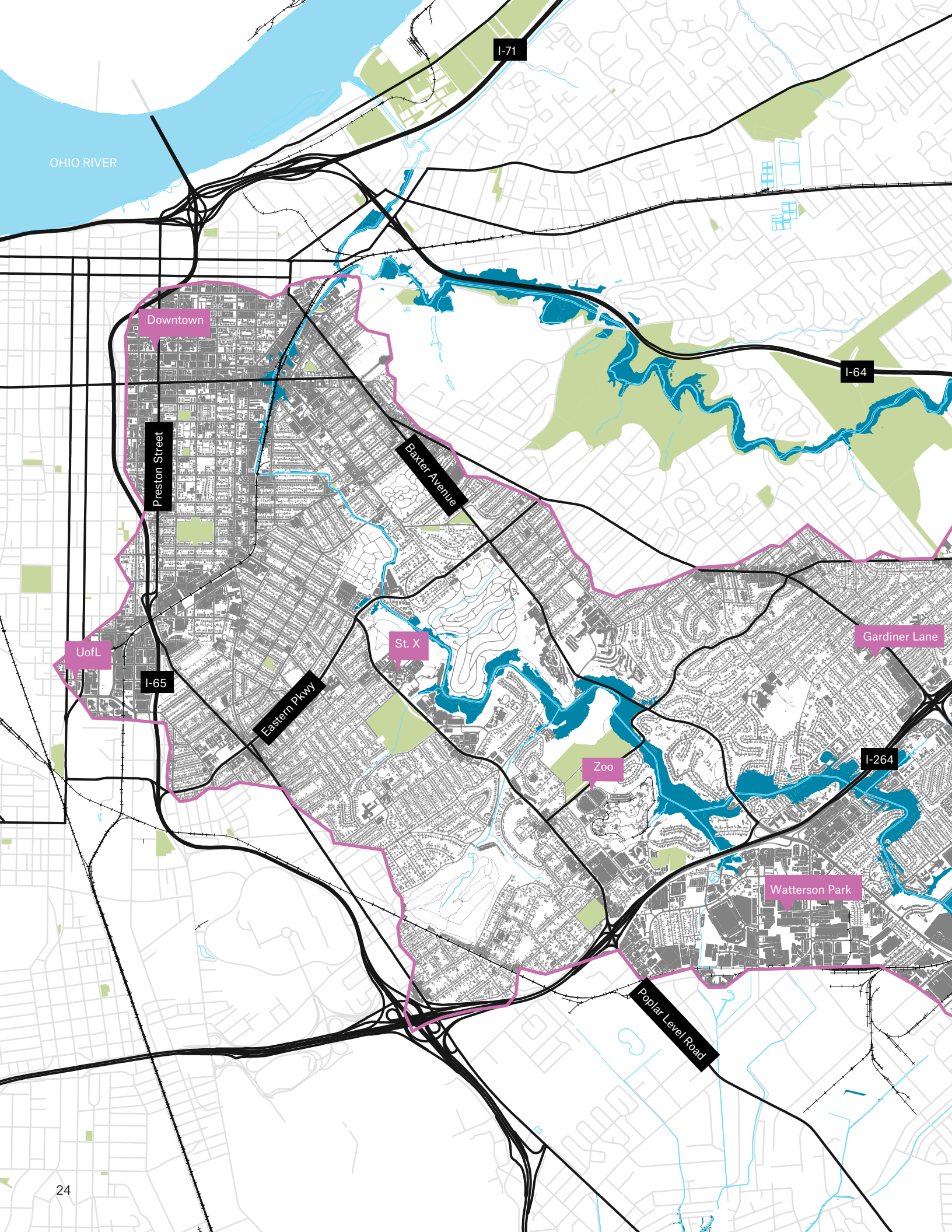


**BEARGRASS CREEK  
SOUTH FORK WATERSHED**  
26.1 Square Miles

BUILDINGS 14%  
ROADS 27%  
OTHER 19%

**TOTAL ESTIMATED IMPERVIOUS**  
15.76 Square Miles (60%)

*1998 Measured at 42%*



OHIO RIVER

I-71

I-64

Downtown

Preston Street

Baxter Avenue

Uofl

I-65

Eastern Pkwy

St. X

Gardiner Lane

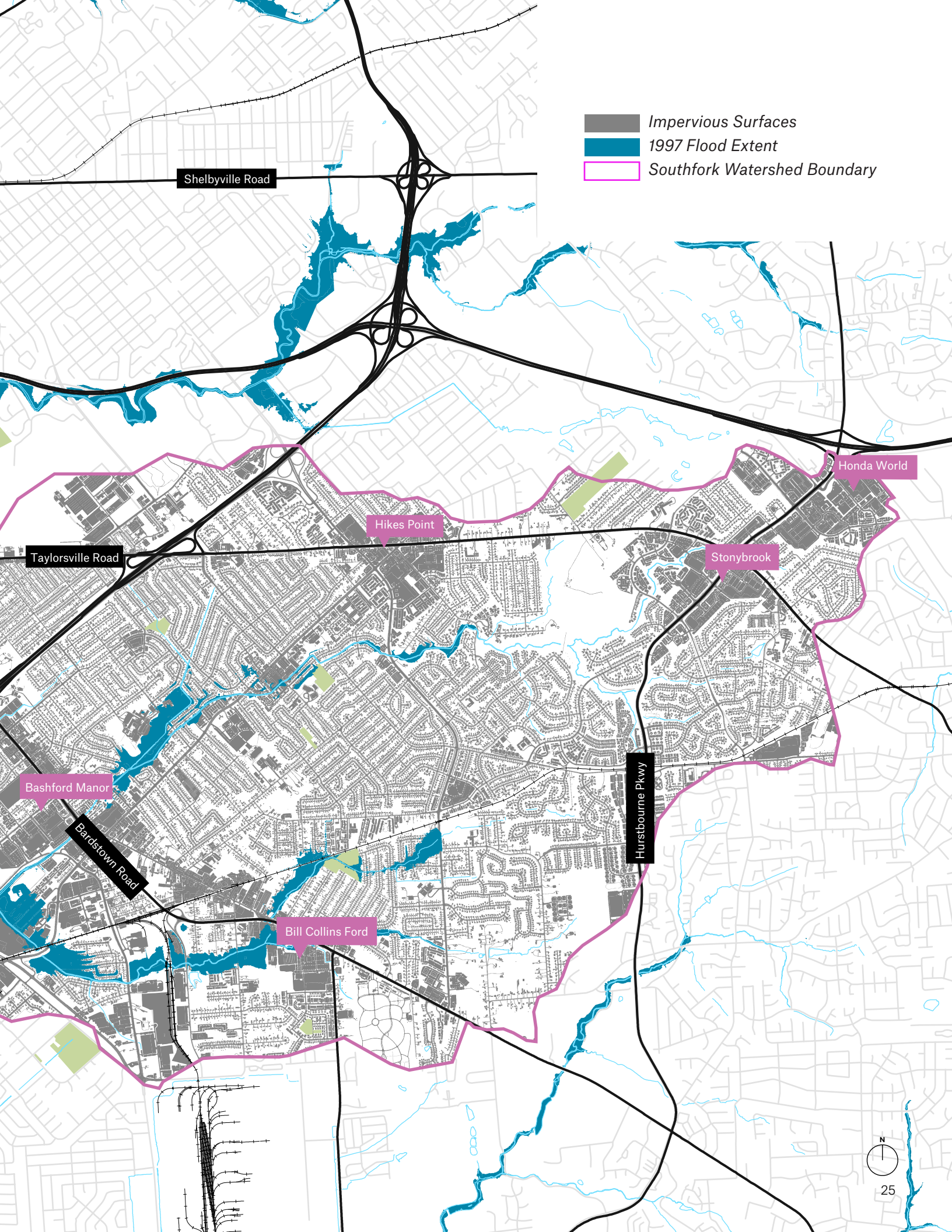
Zoo

I-264

Watterson Park

Poplar Level Road





- Impervious Surfaces
- 1997 Flood Extent
- Southfork Watershed Boundary

Shelbyville Road

Taylorsville Road

Bashford Manor

Bardstown Road

Hikes Point

Stonybrook

Honda World

Hurstbourne Pkwy

Bill Collins Ford



# Analyzing the Corridor

After examining the Creek's current conditions and identifying the constraints and opportunities that could arise during the design process, we began to analyze the Creek in four distinct areas: neighborhoods, land use, transportation and water infrastructure.

The neighborhood analysis indicated that Beargrass Creek traverse eight different neighborhoods within Louisville. The creek also serves as a barrier in four of these neighborhoods, providing an opportunity to

utilize the stream to connect these neighborhoods.

The land use analysis revealed that the creek system interacts with various land types, including commercial, parks, residential, and industrial. Each type of site requires a nuanced approach to addressing the creek that keeps in mind the realities of their specific land use.

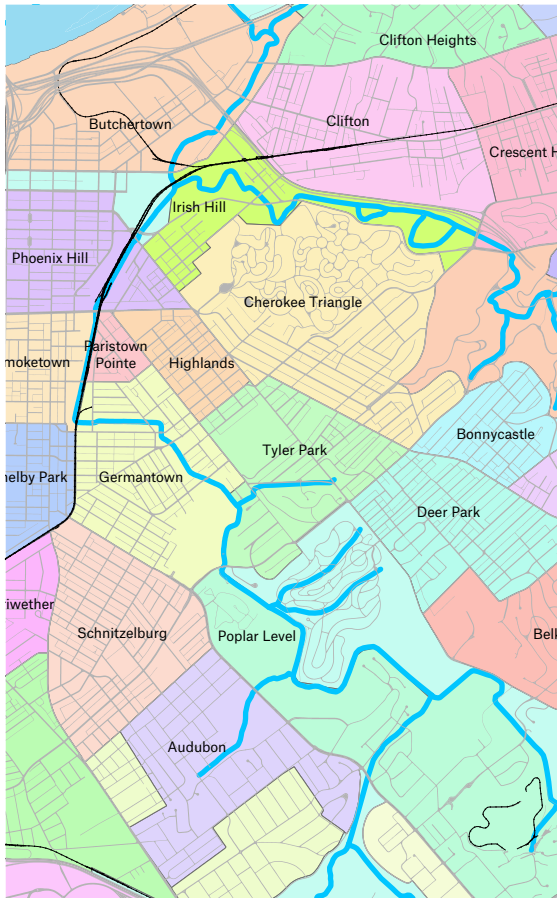
Transportation also has an affect on the creek system , as numerous bridges cross over and run alongside the water way. The transportation

analysis informed us also how people may interact or access this system.

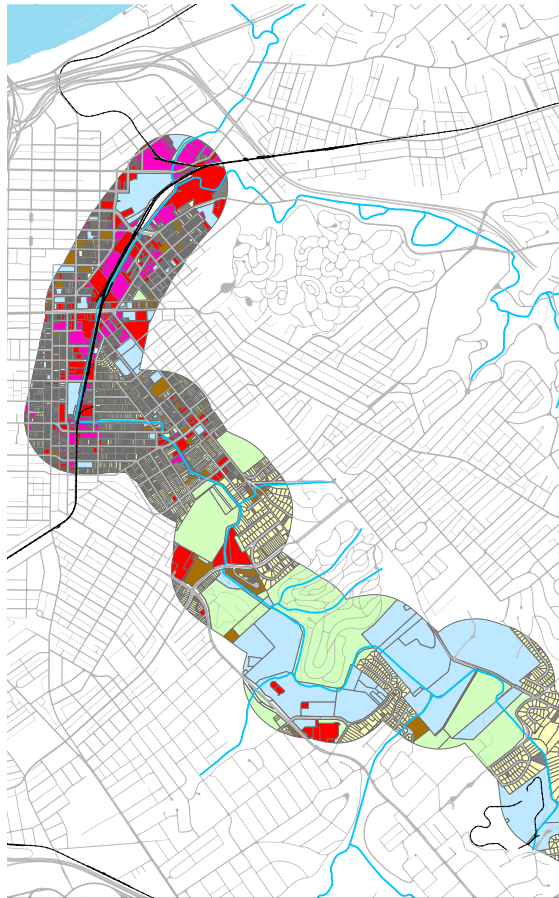
Finally, understanding the current water infrastructure in place helped our team understand the controls and factors that keep the creek from flooding. Additionally, we sought to better understand how sewage along the corridor impacts overall water quality.



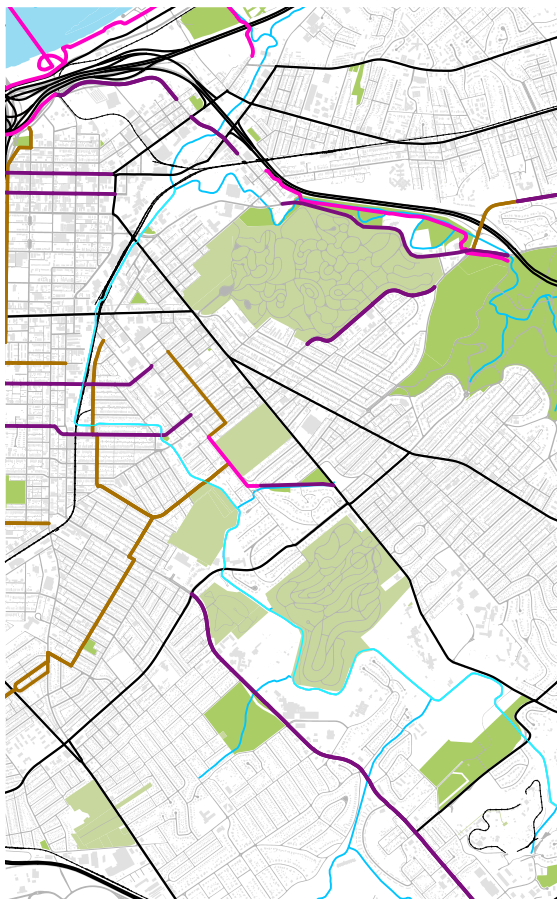
## NEIGHBORHOODS



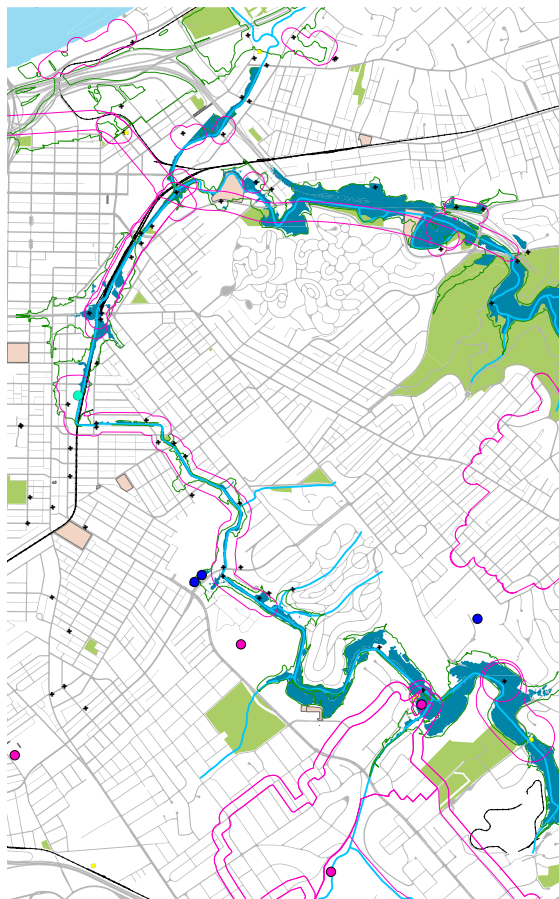
## LAND USE



## TRANSPORTATION



## WATER INFRASTRUCTURE





# The Design Process

As part of the Legacy Project, the project team planned and hosted a three-day event to examine and envision future plans for Beargrass Creek. We used site visits and drone imagery for initial observation and analysis, and once the event started we





organized a “Creek Crawl.” We then hosted an open house and encouraged the public to stop by our studio and voice their opinions and ideas. The following section describes each step of the process and the overall outcomes from our community engagement efforts.

# Initial Observations

We initially observed the site before interacting with the community. Using drone footage, the design team investigated the stream corridor and its surrounding features. During our research we learned that the creek system is heavily urbanized

and that roadway interaction plays a large role in the overall make-up of the site.

Using this information the design team began to identify locations along the creek system for further investigation. These areas included park systems, open

space, industrial locations, residential areas, a railroad located near the creek, and commercial zones.

The information we learned during our initial investigation informed the upcoming community workshops and site tours.





OUR LADY OF PEACE

BEARGRASS CREEK  
STATE NATURE PRESERVE





BELLARMINE  
UNIVERSITY

NEWBURG ROAD

JOE CREASON  
PARK



GERMANTOWN

ST. MICHAELS CEMETERY

PARKWAY REHAB &  
NURSING

EASTERN PARKWAY

TYLER PARK



DOWNTOWN



SCHILER AVENUE





RUFER AVENUE



MARY STREET

ST. CATHERINE STREET

SCHILLER AVE

KENTUC

DOWNTOWN

KEY STREET

ST. THERESE

GERMAN-PARISTOWN  
PARK

E. OAK STREET





KENTUCKY STREET

ALLEY

HIGHWAY

SCHILLER AVENUE



DOWNTOWN

ND AVENUE





DOWNTOWN

SMOKETOWN

LOGAN STREET BASIN

LOGAN STREET

ACTIVE RAILROAD





BRECKENRIDGE STREET

CUMBERLAND ELKHORN  
COAL & COKE

SWAN STREET



SMOKETOWN

LOGAN STREET

BRECKENRIDGE STREET

LOGAN STREET BASIN

PHOENIX HILL

IRISH HILL

PARISTOWN POINT

ACTIVE RAILROAD



HIGHLANDS

PARISTOWN POINT

BROADWAY

BAXTER AVENUE





SMOKETOWN

ACTIVE  
RAILROAD



CHESTNUT STREET

ACTIVE RAILROAD

LEXINGTON ROAD



EASTERN CEMETERY

BARRET AVENUE

MILEWIDE BREWERY



# Hosting a Creek Crawl

The Beargrass Creek Crawl was held on March 7th, 2019, as a kick-off to the intensive three-day workshop. Kentucky Waterways Alliance identified a series of stakeholders who represented local area agencies, non-profits, creek stewards, ecologists and designers to participate. The intent of the walk was to reveal hidden

moments of the hard to reach South Fork and have conversations on-site about opportunities and challenges.

Starting at the Olmsted Conservancy's office in Joe Creason Park, the group of nearly 20 participants walked nearly six miles along the banks of the stream, stopping at key locations along the way. Each participant was

given a "Creek Crawl Field Guide" which included drone aerial photography, maps and other information, as well as places to take notes and make suggestions for potential future trajectories for this urban stream.







Having conversations on-site allowed the design team to discuss big ideas with knowledgeable stakeholders and vet those ideas in reality. Focusing on opportunities and challenges allowed the design team to dive in quickly.







One of the team's major takeaways was the importance of physically getting people to the stream. Even in its extreme urban condition, tour participants loved the unique context and were astounded by all the different perspectives these moments could provide.



K CRAWL

# Welcoming the Community for a Workshop

After completing the Creek Crawl the design team conducted a community workshop. The workshop explored the information obtained during the tour and, ultimately, three core concepts were developed. The concepts include connecting to the creek, improving the creek's health and developing destinations along the creek.



**CONNECT TO THE CREEK**



**IMPROVE THE CREEK'S HEALTH**



**DEVELOP DESTINATIONS**







WEST  
ROAD  
ROAD

STICKY NOTE 1

STICKY NOTE 2

STICKY NOTE 3

STICKY NOTE 4

RIVER AVENUE

STICKY NOTE 5

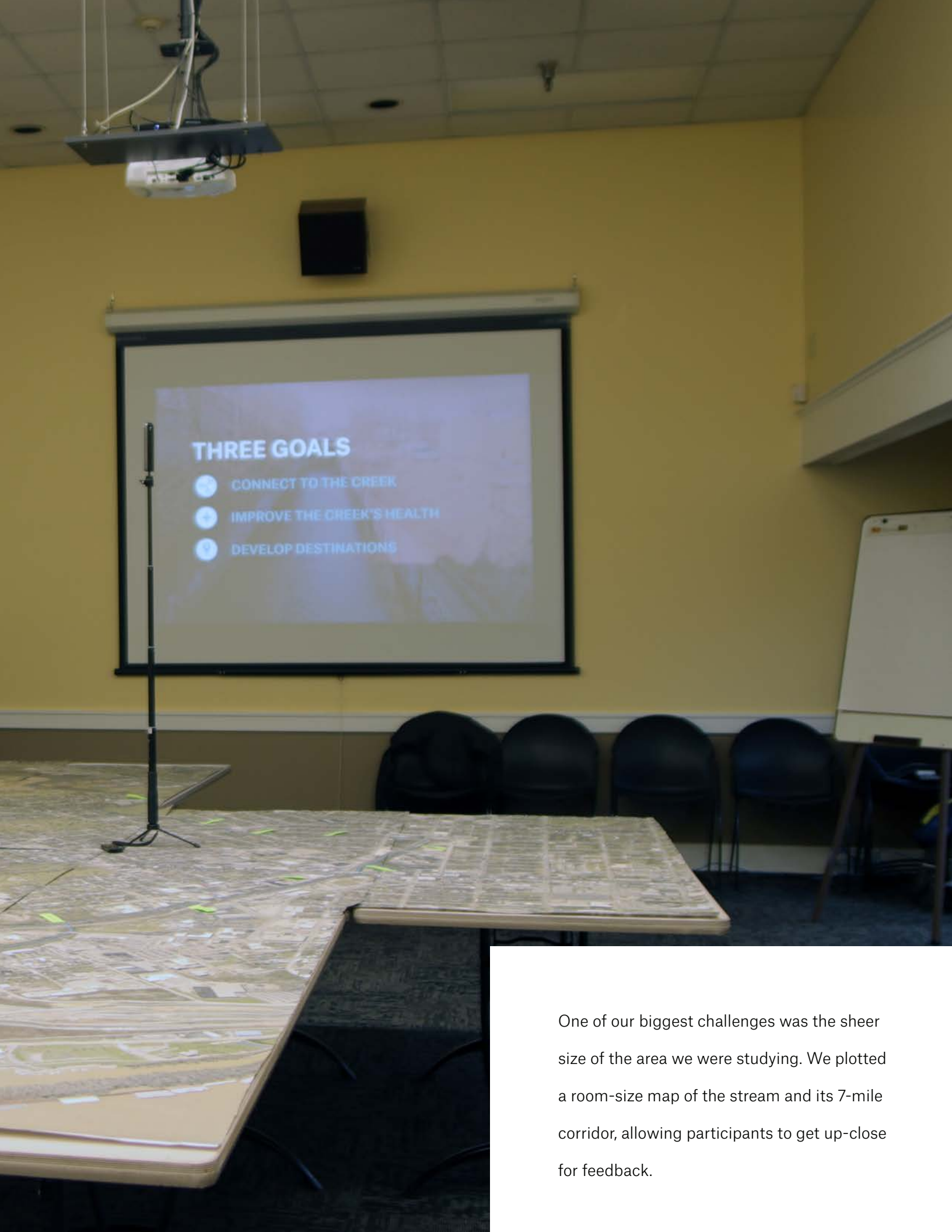
STICKY NOTE 6

STICKY NOTE 7

STICKY NOTE 8

STICKY NOTE 9





## THREE GOALS

- 1. CONNECT TO THE CREEK
- 2. IMPROVE THE CREEK'S HEALTH
- 3. DEVELOP DESTINATIONS

One of our biggest challenges was the sheer size of the area we were studying. We plotted a room-size map of the stream and its 7-mile corridor, allowing participants to get up-close for feedback.



During the workshop each participant was asked to offer suggestions focused on the three main goals of connection, ecological health and developing destinations.







By the end of the workshop the map was covered in hundreds of ideas from stakeholders, the general public, local Council members and City Staff.



Before participants left, the team held a round robin conversation. We asked each participant to provide one BIG idea for the future of the stream and one SMALL idea that could be accomplished tomorrow.





# BIG

+

# small

*"Reduce impervious surfaces by 50%."*

*"Elevated multi-use path in and along the channel."*

*"Create observation decks along the corridor."*

*"I want to be able to fish in the stream without fear for my health."*

*"Reintroduce the flood plain along the stream where possible."*

*"Create formal access points to the stream."*

*"Realize the vision for Baxter Station."*

*"Create an educational curriculum (Beargrass Creek Critters) in partnership with schools along the corridor."*

*"Joe Creason Park become a hub for stream and wetland research in partnership with Bellarmine and the Louisville Zoo."*

*"Develop a connective ecological corridor along the stream and injected into adjacent neighborhoods."*

*"Build ramps for turtles so they can get out of the steep stream channel and to educate the public on those ecological details."*

*"Implement short-term educational signage along a tour route."*

*"Formalize a South Fork Walking Tour/Pod Cast."*

*"Educational elements to illustrate impacts of infrastructure, like combined sewers."*

*"Create a place people know they can drop a kayak in the stream."*

*"Adjust height of lawn mower 1" to increase turf length and reduce erosion and slow stormwater down."*

*"Artistically indicate to people when they are crossing the bridge, signage or paint on the bridges."*

*"Inventory invasive species along the stream and develop a pilot under story rehabilitation project."*

*"Improve dangerous street conditions with temporary measures."*

*"Plant trees and other native plants along the corridor."*

# Opening the Studio Doors

The Open Studios Session was held on March 8th, 2019. The intent of the Open Studio session is transparency. With a overall goal of transparency, the design team allowed the public to visit during a specific window of time so that they could visit with the designers, see the vision coming to life and give feedback in real time. The live critiques improved the

design, revealed important details and influenced the overall direction of the project. The design team then continued to work through the night for a public presentation the following day.





# Presenting to the Public

The three-day workshop was capped off with a public presentation at Milewide Brewery, which is adjacent to the stream. The design team recapped the entire process and showcased the design ideas, both BIG and small.

This workshop capped off an intense period of work, and represents the beginning of what ultimately will be a long

journey to realizing the many ideas and transformative vision this community has for this critical ecological and cultural resource.







During the final presentation we unveiled final concepts and had discussions with stakeholders and other project participants. We also took a moment to celebrate our achievements and pivot towards bringing our vision to life.





# Planning for Action

Planning for Action means that while each of these larger transformational projects come with inherent complexity, good ideas must still move forward. Throughout the design process the design team and participants worked to develop a vision that is both transformational and actionable. This section begins by describing a sampling of







incremental action items suggested during the public engagement. Following the action items, are a series of eight site specific, transformational projects. The design team has attempted to illustrate how incremental action items can help jump start larger efforts. These suggestions can be seen by the incremental action icons located on the project illustrations.

# Incremental Actions

Connecting Beargrass Creek will require vision, patience and ingenuity.

These recommendations begin by acknowledging the importance of strategic, incremental actions to kick-start larger transformations.

Through conversations with stakeholders, agency representatives and the public, we developed 10 incremental actions as starting points so that we can ultimately achieve our three main goals:

Connecting people physically and emotionally to this ecological and cultural asset.

Improving human and ecological health along the corridor.

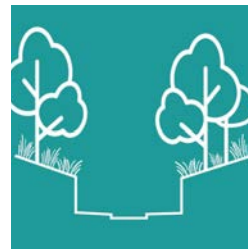
Repositioning the Creek as a community asset that will influence growth and development to reorient toward the water and to support water quality.



In extreme urban stream conditions, miniature and temporary installations to help turtles and other wildlife navigate extremely steep stream banks can also serve as a point of conversation for the public.



**TURTLE RAMP**



**NATIVE BUFFERS**

Due to the extremely narrow urban condition, the stream banks are very limited. Therefore working hard to reduce invasive species and encourage native riparian plant materials along the creek would have big value and can start now.

The stream runs adjacent to and near a number of educational institutions, from elementary schools to Universities. Allowing Beargrass Creek to become a learning laboratory can help improve the stream and create new generations of stewards.



**EDUCATIONAL PARTNERSHIPS**



**PUBLIC FUND RAISERS/AWARENESS**

Partnering with some of Louisville's key economic engines that rely on clean water, such as the bourbon and beer industries, can help raise funding and awareness.

Beargrass Creek is a hidden resource often out of sight out of mind. Developing wayfinding and public art installations, like bridges, at stream crossing moments can help bring awareness to the stream.



**BEARGRASS CREEK BRIDGES**



**TACTICAL URBANISM**

Connecting people to Beargrass Creek may mean making streets and intersections safer for bicyclists and pedestrians. Temporary street improvements can start today to help make it easier to see the stream.

There is no shortage of astounding landscapes or unique stories along and adjacent to the stream. Combining these into a podcast tour could help spur more interest in the stream and help raise awareness about the ecological issues.



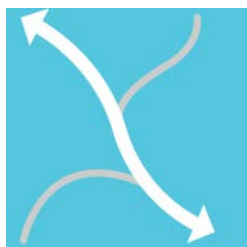
**SOUTH FORK PODCAST TOUR**



**DEPAVE**

Reducing pavement within the watershed is critical if water quality and flooding is ever going to improve. Start by replacing asphalt in underutilized spaces, like disused parking lots, with trees.

The Beargrass Creek's water quality is heavily dependent on the quality of water in the tributaries that feed into it. Often, those smaller streams have no names and are hard to recognize. Formalizing these streams can help raise awareness.



**NAME THE TRIBUTARIES**



**NATIVE BROADCASTING**

Finding low use areas covered in lawns that require mowing or fertilizer and broadcasting native grass and flower seeds can be a low cost investment with big long-term impacts.



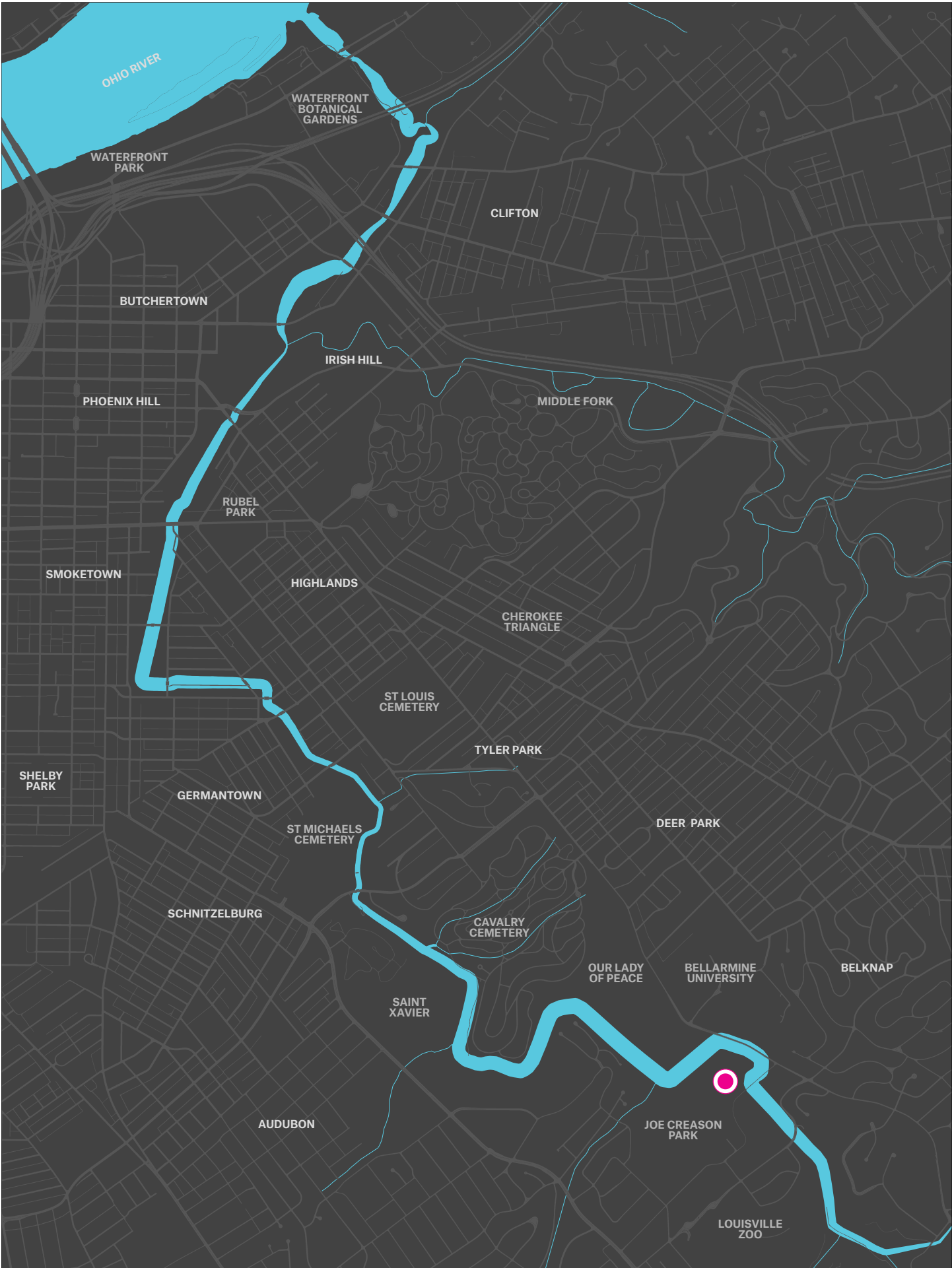
# Black Crown Forest

## *Joe Creason Park*

Black Crown Forest is a concept to re-imagine a portion of Joe Creason park as an ecologically-focused public space that showcases the South Fork of Beargrass Creek. Joe Creason Park offers a major opportunity to address all three of the goals of this project. This existing park has ample space that could allow for more intensive stream restoration

practices. Additionally, it is adjacent to the Louisville Zoo, Beargrass Creek State Nature Preserve and Bellarmine University, making it a logical location for environmentally- and ecologically-focused public space programming and research.





## BLACK CROWN FOREST

### WETLANDS

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Currently, the park is not heavily programmed and is mostly used as a connection point to the zoo, tennis courts and surrounding neighborhoods.

### REALIGN STREAM

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The stream in this area already runs through the Beargrass Creek State Nature Preserve where it is a feature of a series of natural surface trails. Connecting and enhancing those landscapes would be a major benefit to the stream and user experience.

### REHABILITATING RIPARIAN LANDSCAPES

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Within Joe Creason Park, Beargrass Creek has an abundance of surrounding open landscape that could be large opportunity for stream realignment, enhanced riparian edges and wetland landscapes.





## PUBLIC EDUCATION

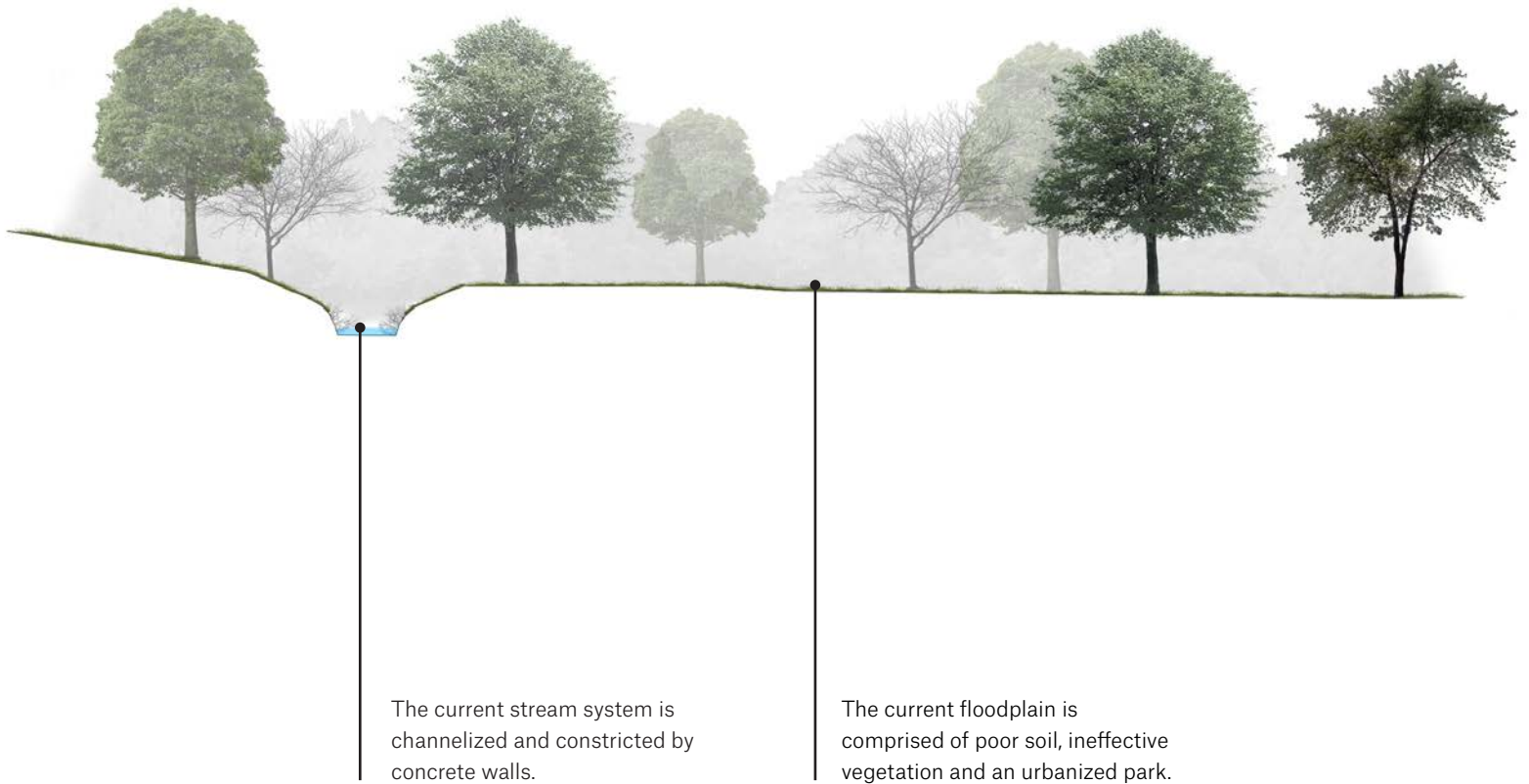
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The image above depicts one of Louisville's major sewer outfalls. As part of a combined sewer system, this infrastructure serves as an outlet for sewage that overflows into Beargrass Creek during periods of heavy rainfall. Making the public aware of this infrastructure and how it works is critical for creating future water quality stewards.

# A Resiliency Park

Black Crown Forest is a concept that creates better functioning ecological system, unique landscapes that allow the public to interact with and learn about the stream instead of simply jogging over it, and creates a unique park that can elevate surrounding neighborhoods and institutions.

## EXISTING CROSS SECTION



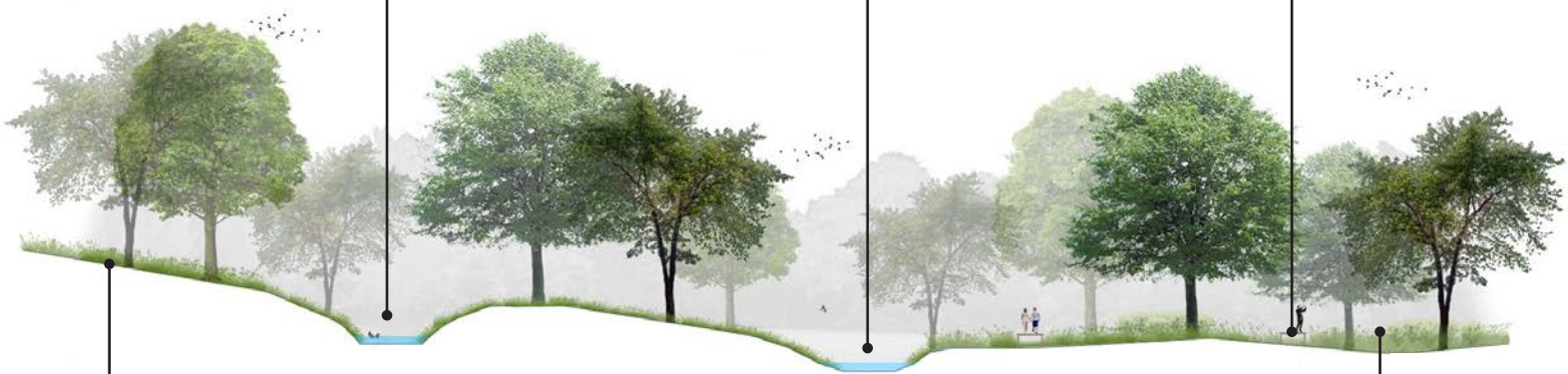


**CONCEPTUAL  
CROSS SECTION**

Realigning Beargrass Creek channel can help support a healthier ecological system.

Establishing oxbow systems can help with the realignment of the channel, while providing connection to the creek system.

Installing a new boardwalk system will provide users with an interactive experience throughout the floodplain and near the creek system.



Improving native buffer can provide the site with comfort and ecological benefits to the floodplain, stream and riparian system.

Improving the floodplain will provide the ecological system with the opportunity to heal and provide a flood management system within the stream system.

OUR LADY OF PEACE

BEARGRASS CREEK  
STATE NATURE PRESERVE

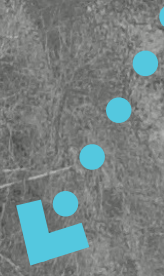
ENHANCE RELATIONSHIP  
WITH NATURE PRESERVE

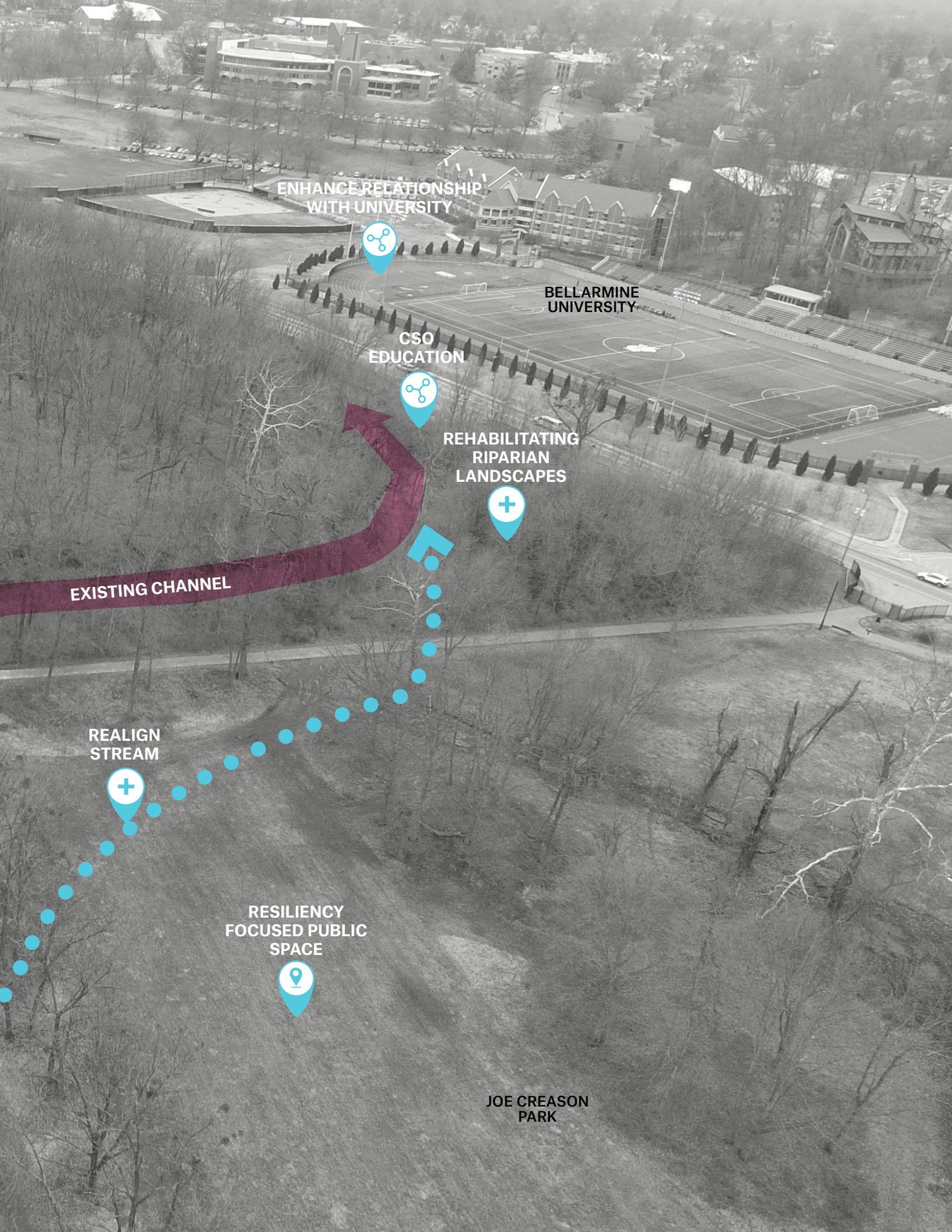


BOARDWALKS  
& OVERLOOKS



REINTRODUCE  
FLOODPLAIN





ENHANCE RELATIONSHIP WITH UNIVERSITY



BELLARMINE UNIVERSITY

CSO EDUCATION



REHABILITATING RIPARIAN LANDSCAPES



EXISTING CHANNEL

REALIGN STREAM



RESILIENCY FOCUSED PUBLIC SPACE



JOE CREASON PARK

# Black Crown Forest



**INTEGRATE WITH STATE  
NATURE PRESERVE**



**SHALLOW  
STREAM BANKS**





CONNECTIONS TO  
BELLARMINÉ

CSO  
OVERLOOK



OXBOW  
OVERLOOK

BOARDWALK  
TRAIL

NATIVE  
WETLANDS

EDUCATIONAL LANDSCAPES





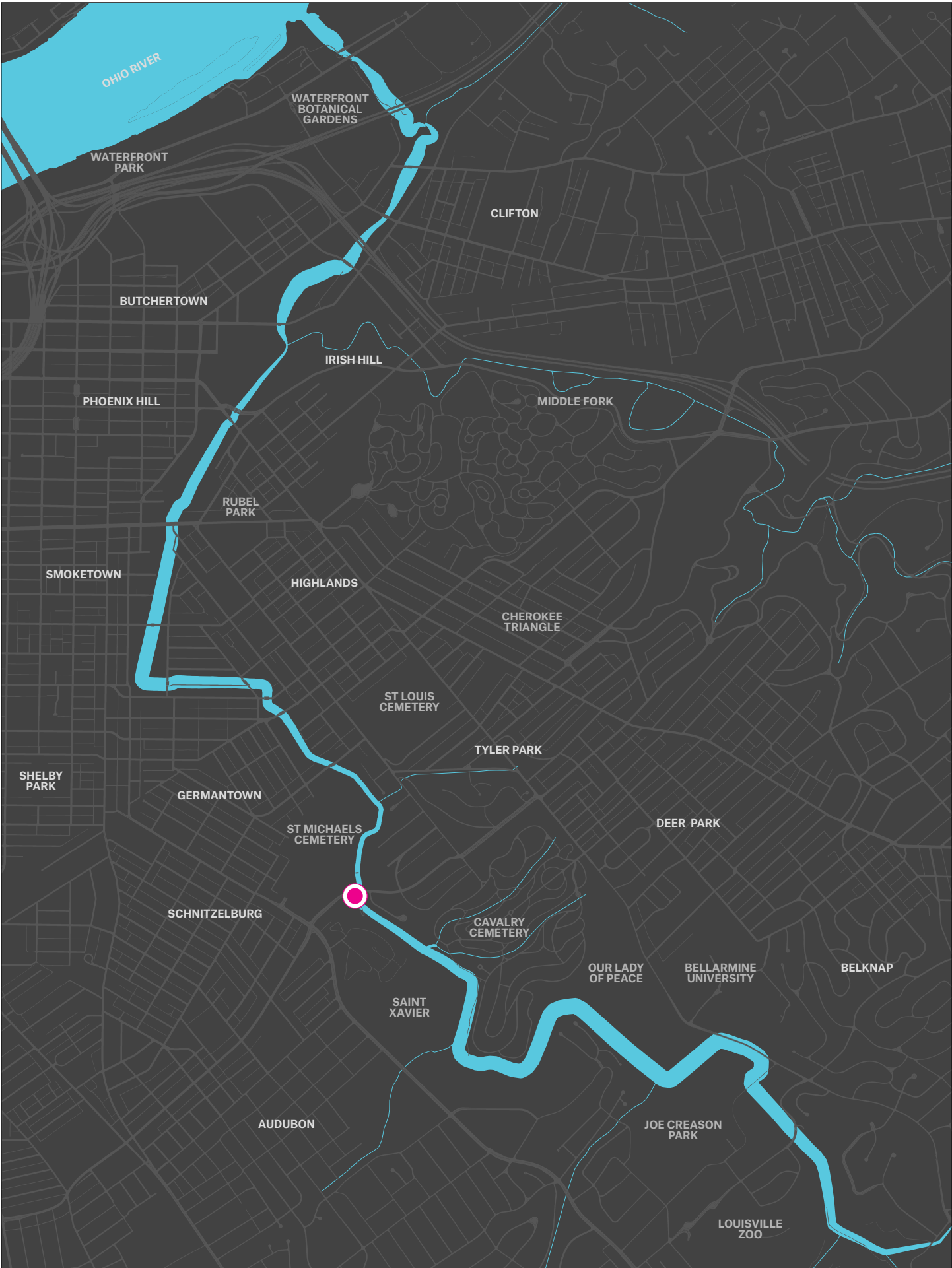
# Eastern Overlook

## *Eastern Parkway*

Two unique opportunities exist at the intersection of Eastern Parkway and Beargrass Creek. To the north, two aging development sites, a senior living center and a medical office complex, could benefit from rethinking their relationship with the

stream. To the south, a former construction storage site could be rehabilitated into a more ecologically functional landscape to protect the stream and offer passive public space opportunities.







RE-PURPOSE VACANT SPACE

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Space that was once used for MSD construction work now could be enhanced as improved riparian landscape and public space.



## OVERLOOK

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The current bridges showcase the fantastic views of the cathedral-like trees growing across the stream corridor. With offices and a senior center adjacent the stream- there is an opportunity for outdoor social spaces that add value to these adjacent land uses.

## PARKING LOT RETROFIT

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Land uses have historically turned their back on the stream, often placing parking lots against its banks. This has led to increased stormwater run off and reduced water quality. Rethinking parking and stream bank edges can add ecological, social and economic value to these aging sites.

ST. MICHAELS CEMETERY

PARKWAY REHAB & NURSING

EASTERN PARKWAY

SINGLE FAMILY HOUSING

LANDSCAPE ENHANCEMENT



OVERLOOK



MEDICAL OFFICE



PARKING LOT RETROFIT

MULTIFAMILY HOUSING

POTENTIAL CREEK INTERACTION



ENHANCED ECO  
CORRIDOR

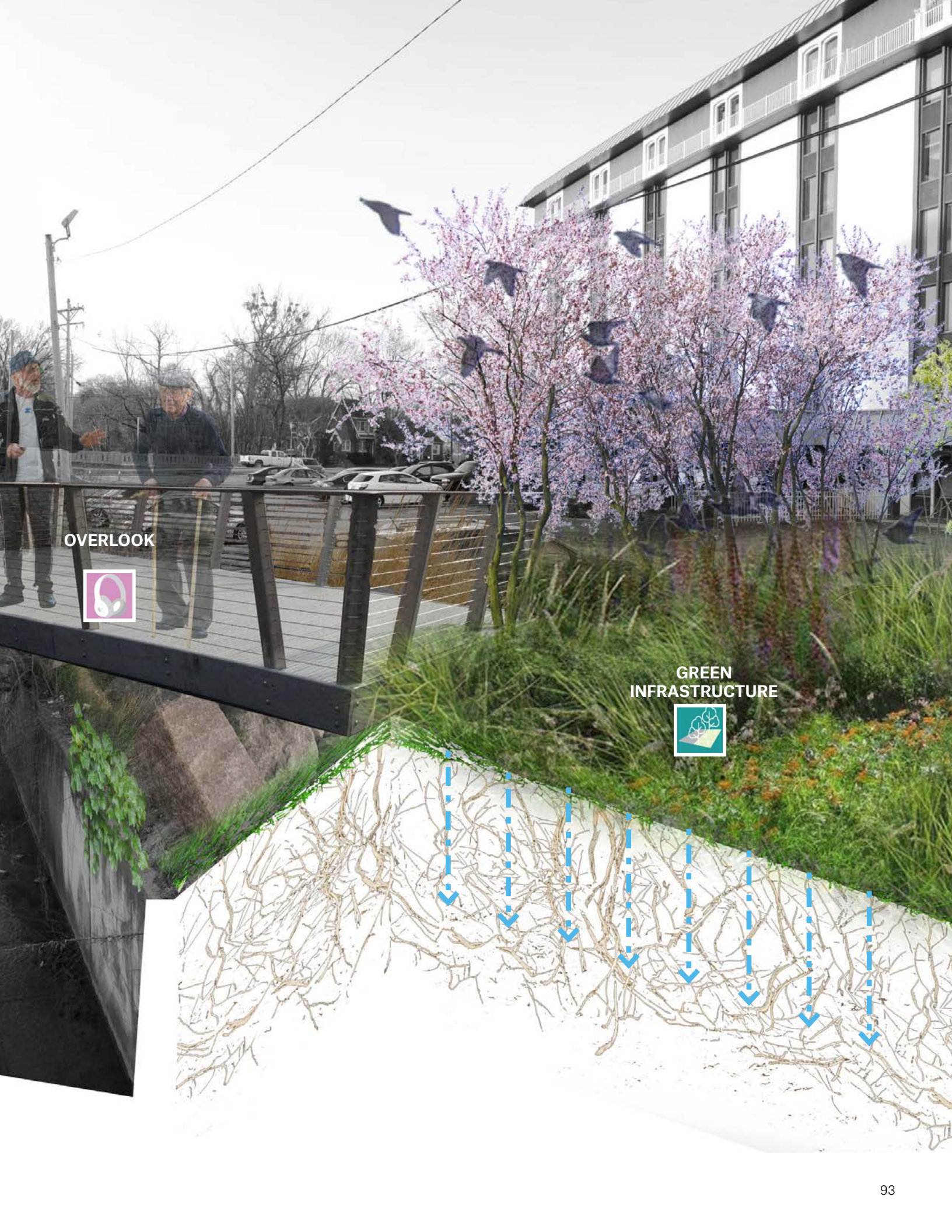


PARKING LOT  
RETROFIT



# Eastern Overlook





OVERLOOK



GREEN  
INFRASTRUCTURE





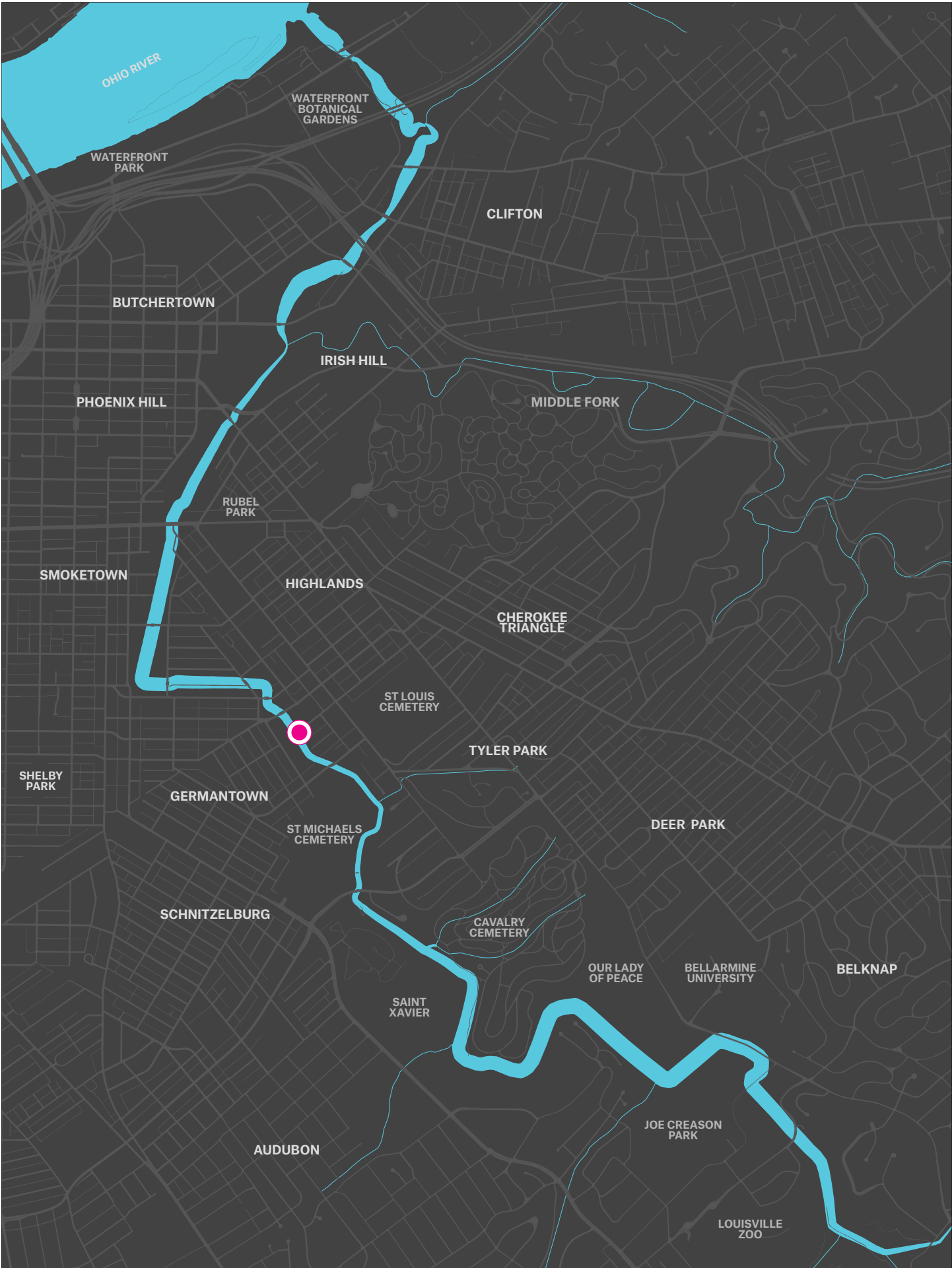
## Rufer Street Pocket Park

### *Rufer Street*

A series of perpendicular streets along Barret Avenue that dead-end into Beargrass Creek. Rufer Street, seen above, dead-ends into an Metropolitan Sewer District (MSD) facility. Part of increasing public awareness around the importance of water quality is providing immersive educational opportunities where people are. The design team sees locations such as this as an opportunity to implement small, incremental public space improvements

that allow people to socialize along the banks of the stream while also providing water quality treatment and green infrastructure opportunities to clean the stormwater runoff. Additionally, installing educational signage in this environment can help create stewards to look after the space and help maintain the infrastructure.





## RUFER STREET POCKET PARK

### NATIVE BUFFER

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Currently, the edges of the stream are comprised of overgrown invasive species. Increasing natural and native plantings will provide ecological improvements to the stream system.

### STREAM OVERLOOK

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Today the site is made of concrete pads and boxes and is only intended for MSD maintenance-related uses. By adding railings, seating and planting areas, the space could double gathering space for neighbors.







**GREEN INFRASTRUCTURE**

Currently, stormwater runoff directly drains into Beargrass Creek. By intercepting the stormwater with pervious materials or green infrastructure, we can improve water quality and slow the water velocity.

NATIVE  
BUFFERS



**STREAM OVERLOOK**



**GREEN  
INFRASTRUCTURE**





NATIVE  
BUFFER



STREAM  
OVERLOOK



# Rufer Street Pocket Park



**GREEN INFRASTRUCTURE  
EDUCATION**





## 3-Bridges

### *Intersection of Kentucky and Schiller*

Named for the three bridges that were built to cross Beargrass Creek as it curves through this part of Germantown, the stream at the intersection of Kentucky and Schiller is truly hidden in plain sight. Today the stream is hidden by dense invasive stream edges, but it only takes stopping on one of the bridges to see how spectacular the stream is in this location. The design team and stakeholders

identified opportunities to improve the complicated, dangerous roadway intersections by creating specific spaces to view the stream, such as German-Paristown Park. Additionally, with the team feels strongly that reorienting aging and underutilized developments toward the stream will create more demand for a walkable and stream-friendly development.





OHIO RIVER

WATERFRONT BOTANICAL GARDENS

WATERFRONT PARK

CLIFTON

BUTCHERTOWN

IRISH HILL

PHOENIX HILL

MIDDLE FORK

RUBEL PARK

SMOKETOWN

HIGHLANDS

CHEROKEE TRIANGLE

ST LOUIS CEMETERY

TYLER PARK

SHELBY PARK

GERMANTOWN

DEER PARK

ST MICHAELS CEMETERY

SCHNITZELBURG

CAVALRY CEMETERY

OUR LADY OF PEACE

BELLARMINI UNIVERSITY

BELKNAP

SAINT XAVIER

JOE CREASON PARK

AUDUBON

LOUISVILLE ZOO



## INFILL SITE

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This existing site, located across from the beautiful church on Schiller Avenue, turns its back to the stream and is nearly 100% impervious. Without some investigation, a site visitor may never even realize the stream is there. Re-orienting the development and improving its physical relationship to the stream are key opportunities for this site.





## STREAM CONNECTION

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In this section, the channelized stream is covered in street art from end to end. Often times the murals are used by neighbors as indicators of water levels and make for a stunning backdrop.

## RETROFIT PARK

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The existing German-Paristown Park does not have a relationship with the stream either. The park could provide an opportunity to educate visitors and create visual connections while treating stormwater.

## INTERSECTION RETROFIT

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The Schiller and Oak intersection is oversized and lacks clear pedestrian and bike connections. By making intersection improvements, we can make it easier for community members to visit the stream and increase the viability of the intersection's commercial properties.

KY ALLEY  
CONNECTION



KENTUCKY STREET

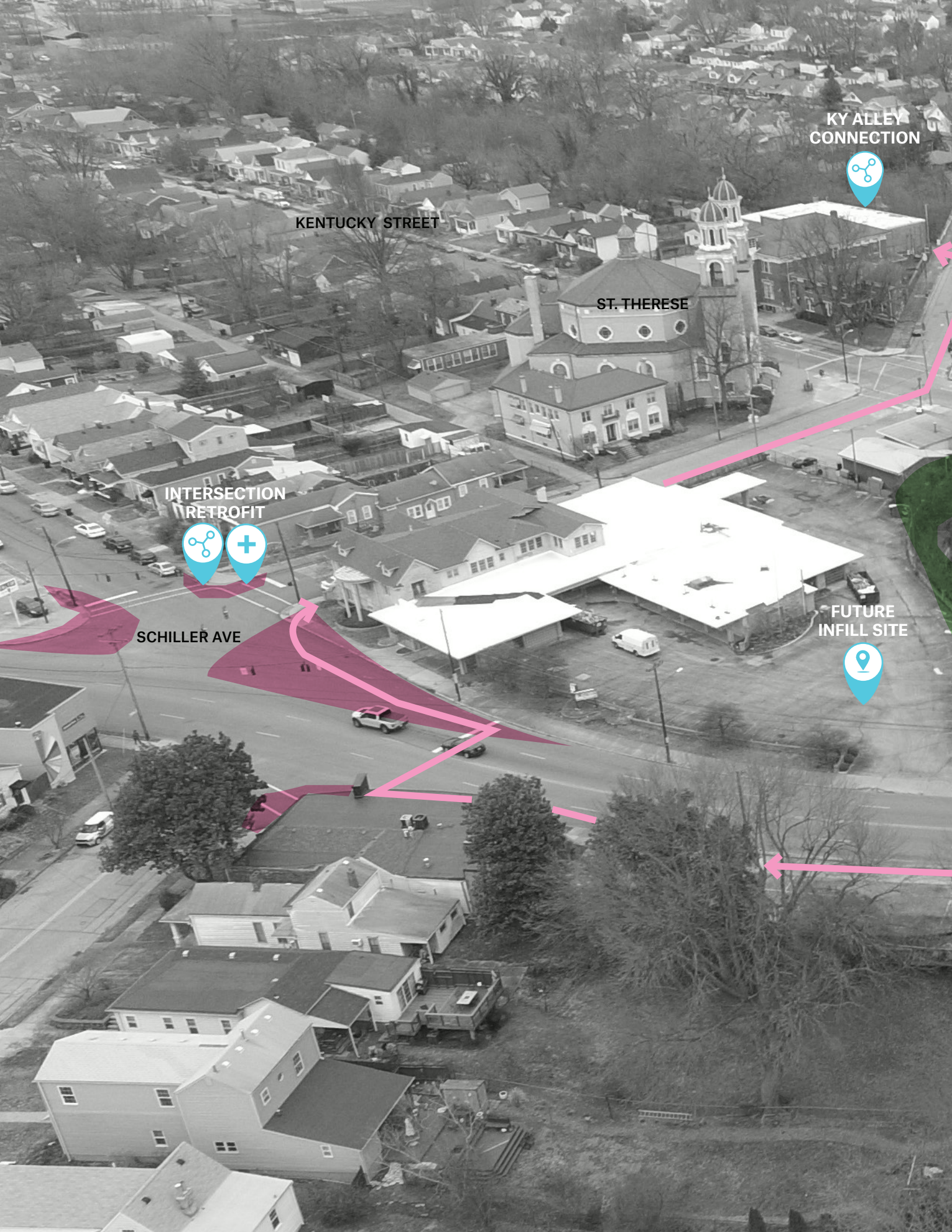
ST. THERESE

INTERSECTION  
RETROFIT



SCHILLER AVE

FUTURE  
INFILL SITE





RETROFIT PARK



GERMAN-PARISTOWN  
PARK

E. OAK STREET

STREAM  
CONNECTION





KY ST  
ALLEY

INTERSECTION  
RETROFIT



3-Bridges District





STREAM OVERLOOK



MULTI-USE TRAIL

NATIVE BUFFER





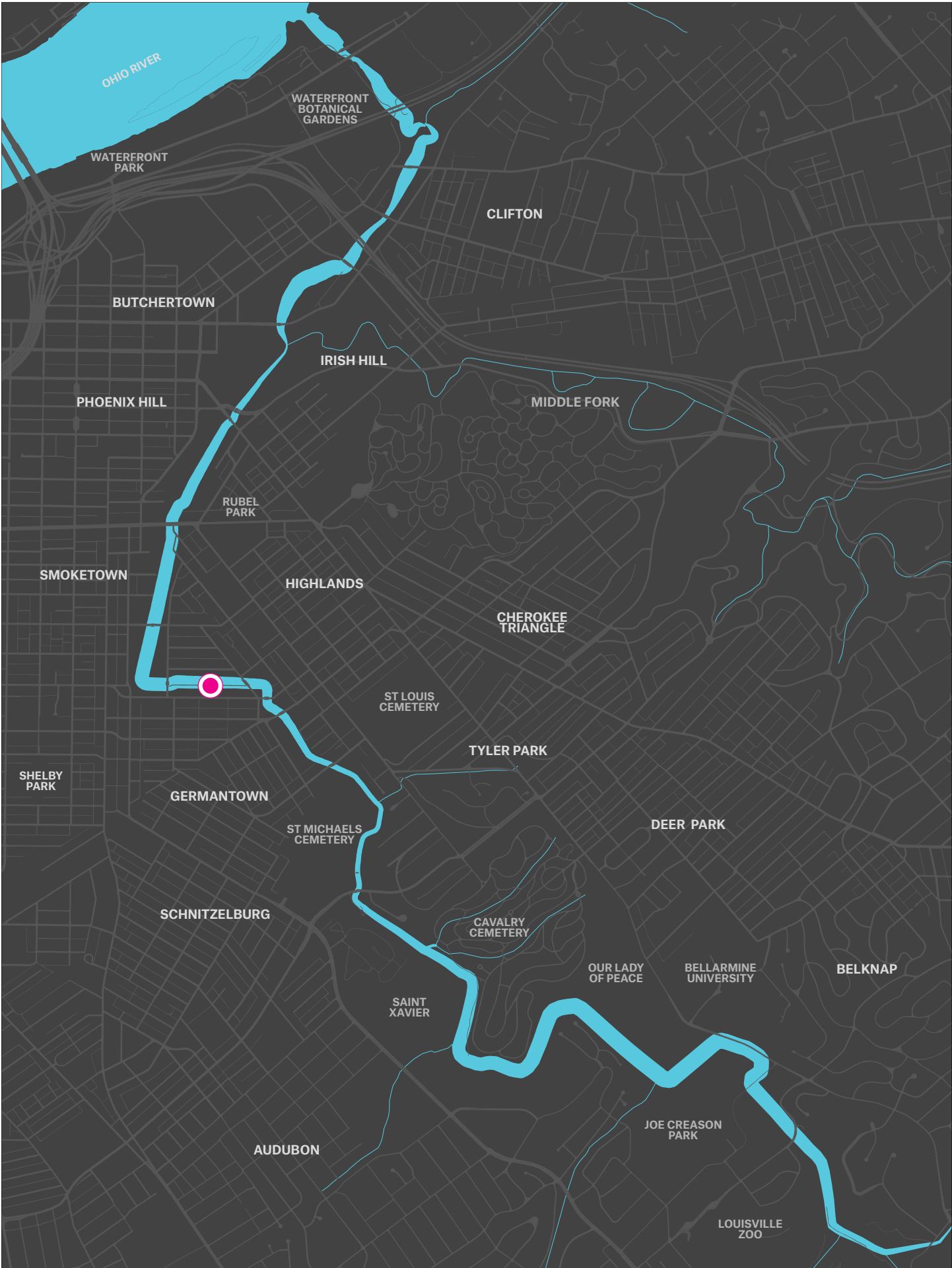
## Kentucky Street Alley

*Alley parallel to Kentucky Street*

Throughout the study area Beargrass Creek has heavily influenced overall community growth and the street network. This part of Louisville is heavily impacted by one-way streets in a dense urban fabric, making opportunities for ample active transportation infrastructure hard to come by. Kentucky Street Alley's three-block stretch along the stream could be utilized to create an

uninterrupted trail that showcases the stream. This trail could be built with coordinated green infrastructure elements to actually clean stormwater runoff from adjacent homes and the alley itself.





OHIO RIVER

WATERFRONT BOTANICAL GARDENS

WATERFRONT PARK

CLIFTON

BUTCHERTOWN

IRISH HILL

PHOENIX HILL

MIDDLE FORK

RUBEL PARK

SMOKETOWN

HIGHLANDS

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AUDUBON

LOUISVILLE ZOO

## KENTUCKY STREET ALLEY PROMENADE

### NATIVE BUFFER

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An improved native buffer area could help with user experience and comfort. Additionally, providing more native species could help support stronger ecological function.

### MULTI-USE TRAIL

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Utilizing the available space for a wide pathway could help fill a gap in the overall neighborhood bike network, as well as get people closer to the stream corridor.

### CLEAN STORMWATER

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Currently, stormwater runs into Beargrass Creek with little infrastructure filtration. Improvements to the infrastructure system could help alleviate the pollution into the creek system from runoff surrounding the site.







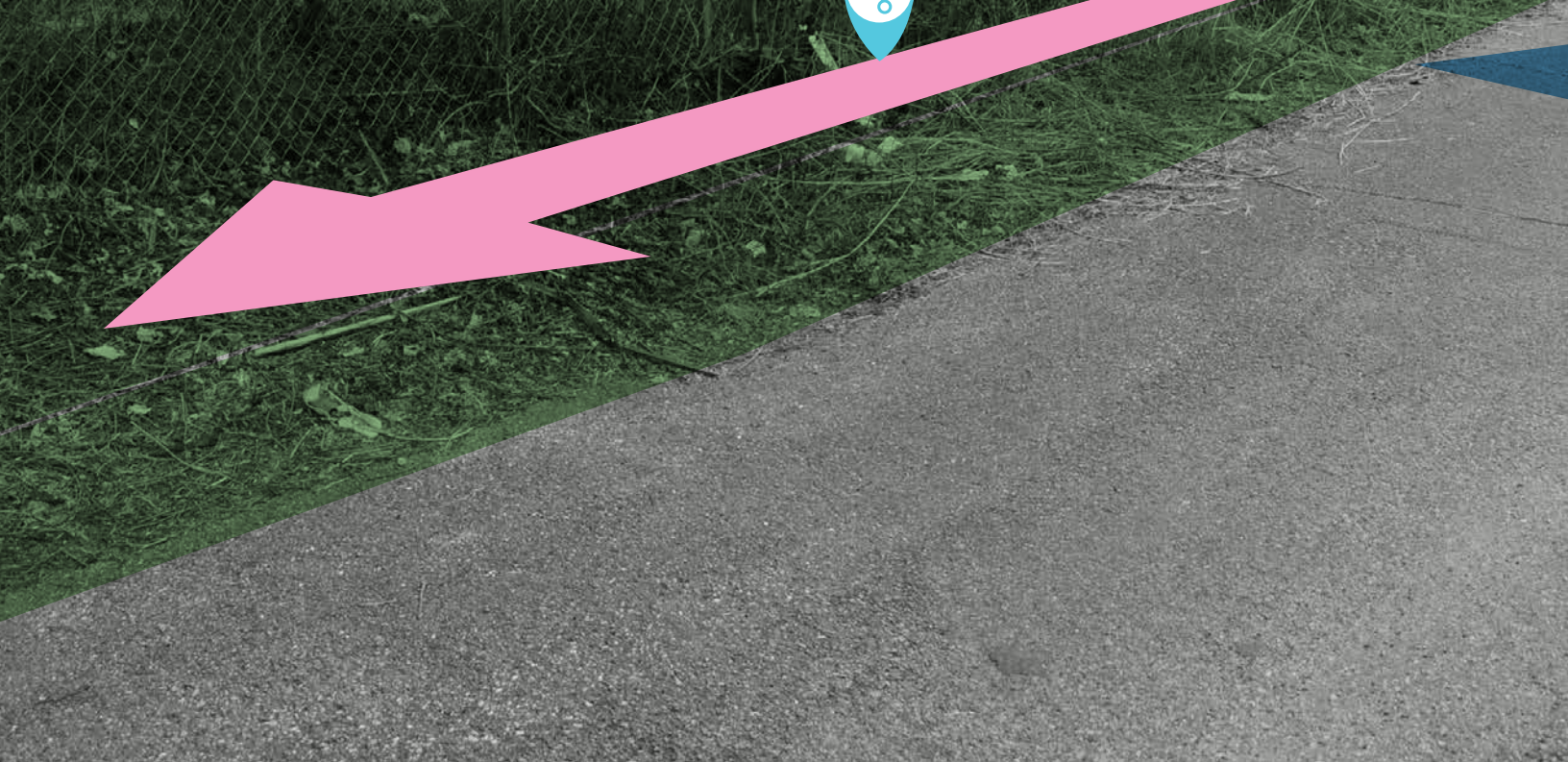
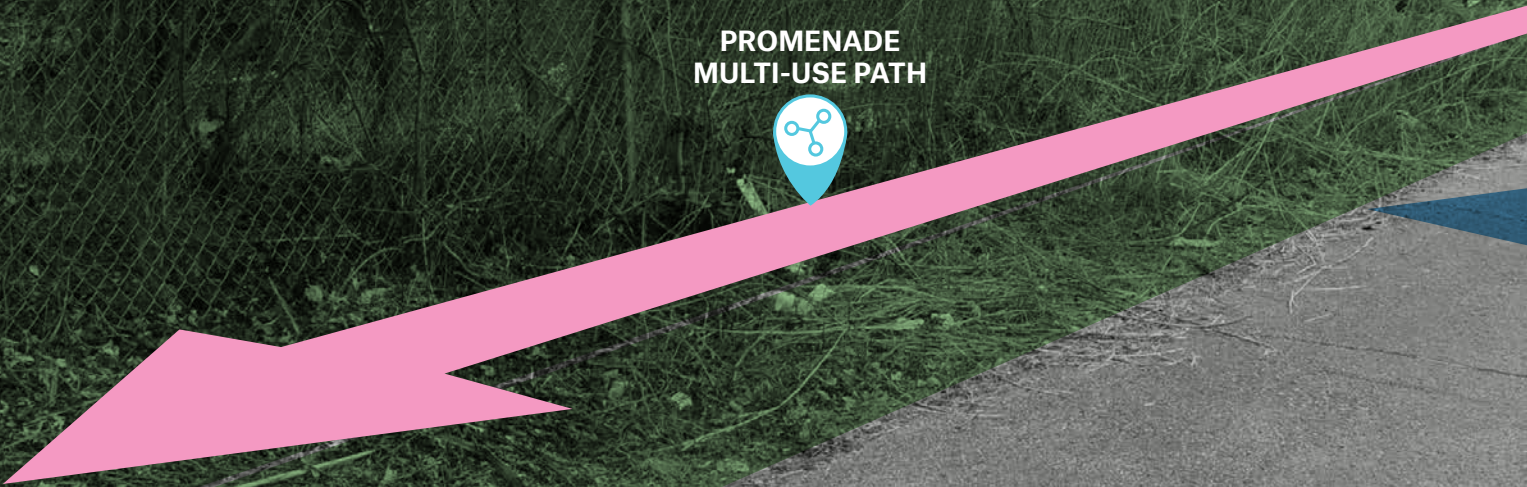
## CONNECTIVITY

Taking advantage of the alley is could increase connectivity, improve ecological and human health and even create greater connectivity to sites like the vacant Blue Bird Bread building.

**NATIVE  
BUFFER**



**PROMENADE  
MULTI-USE PATH**





CLEAN  
STORMWATER





NATIVE UNDERSTORY



STREAM OVERLOOK

MULTI-USE PATH





# Kentucky Street Alley Promenade



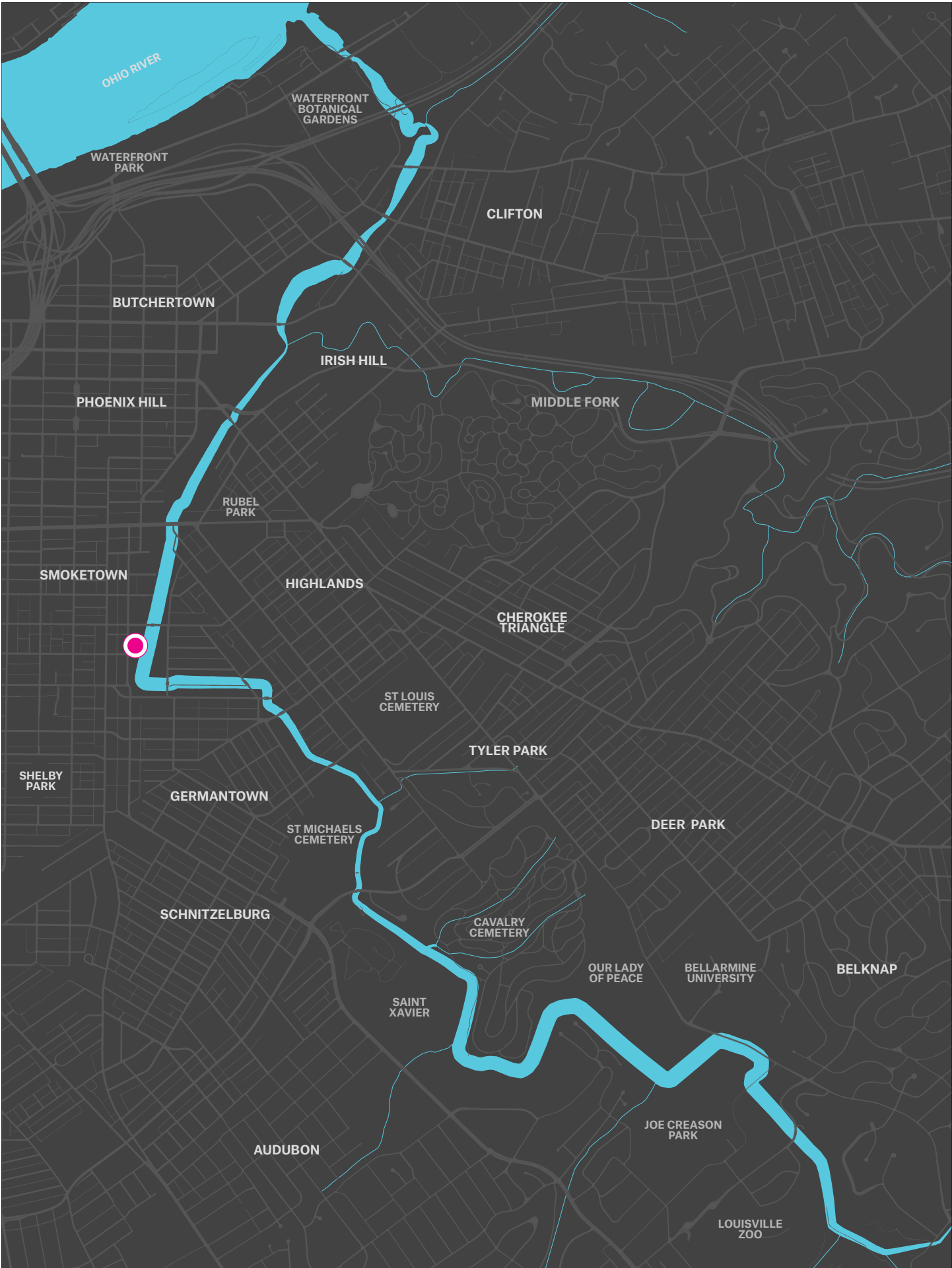
# Logan Street Park

## *Logan Street Basin*

Located between Beargrass Creek and a commercial/industrial district, Logan Street Basin is surrounded by industrial warehouses. To the east the site is bordered by a large industrial site and the railroad tracks, while the west hosts smaller commercial uses. This basin has an opportunity to directly connect to the stream system while hosting a series of

retention and green infrastructure elements that could help improve the health of the creek system. Situated within an industrial area, this site could also provide public amenity space in addition to the infrastructure systems already on site.







## UNDERSTANDING THE SUBTEXT

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Having been through multiple design iterations, the Logan Street basin ended with a solution that is intended to allow public access to the site. Under a two foot soil cap is a basin for sewage overflow to help improve water quality. This detail means that plantings and improvements must be strategic and take into account what is underground.



## ECO BUFFER

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Improvement to the ecological buffers connecting to Beargrass Creek can help the overall health of the creek system.

## NATIVE GRASSLAND

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An establishment of native grassland can help improve the ecological system located on this site and will allow for environmental improvements.

## BIOSWALE OVERLOOK

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Currently, this site has a retention pond that helps the site's overall floodplain and ecosystem of the site. Improving this with additional plantings, educational materials and public space elements, like a boardwalk, could help create more stream stewards.





ACTIVE  
RECREATION



NATIVE  
GRASSLAND



GREEN  
BRECKENRIDGE



ECO  
BUFFER



# Logan Street Park



GREEN STREET

EDUCATIONAL BIOSWALE



NATIVE BUFFER





SPORTS  
FIELD

GREEN  
STREET



NATIVE  
PRAIRIE TRAIL



NATIVE  
BUFFER





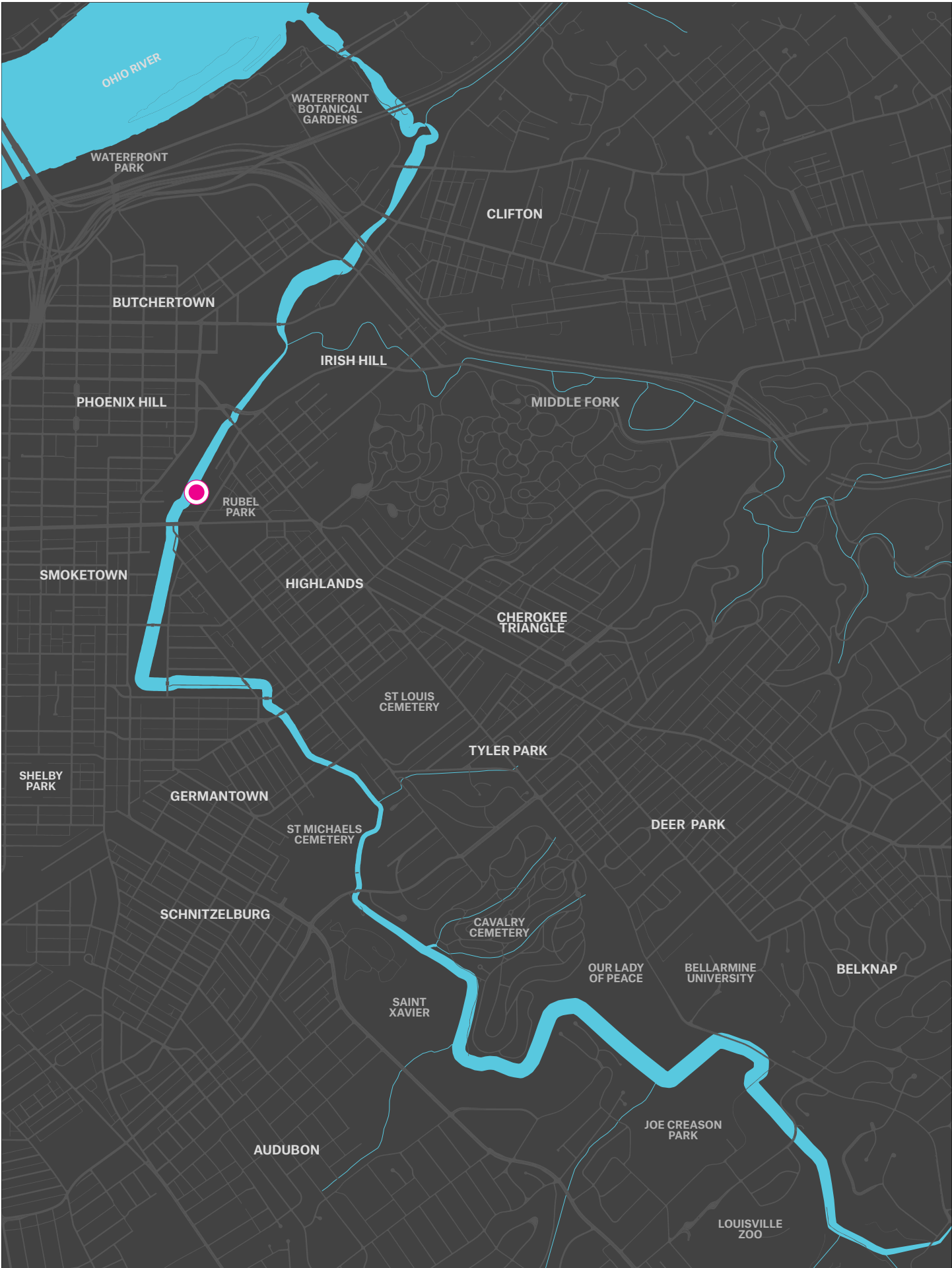
# Milewide Depave

## *Milewide Brewery*

Located near Rubel Park, Milewide Depave is an old industrial site that houses a brewery and event space. This area, once an active site, is now an underutilized and impervious parking lot. With improvements to the parking lot and overall creek edge, this site can impact the overall health of and ecological system of

the creek and its surrounding environment. By developing the brewery's outdoor space and creating a site amenity, such as a beer garden, we could benefit the brewer while also helping improve overall water quality.





## MILEWIDE DEPAVE

### RESTORATIVE PLANTINGS

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Throughout the site there is little vegetation of ecological significance and simply improving the plantings could play a big role in improving the health of the site.

### ECO BUFFER

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Space along the stream and along the abandoned rail spur has become fallow. Creating an intentional native planting along the stream would help encourage a more successful ecological environment.

### PARKING LOT DEPAVE

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Vast amounts of parking lot creates a sense of vacancy and does not help the permeability of the site. Improvements to the overall parking lot could provide safe and clear access, while also improving ecosystem services including water quality.







## INDUSTRIAL SITE

Creating a stronger relationship to the stream could help position this dramatic post-industrial site as a future mixed-use redevelopment opportunity.

BEER GARDEN DEPAVE



NATIVE ECO  
BUFFER





RESTORATIVE  
PLANTINGS



PARKING  
LOT DEPAVE





NATIVE  
BUFFER



STORMWATER  
BEER GARDEN



DEPAVE  
EXCESS  
PAVEMENT



# Milewide Depave

**CELEBRATE  
INDUSTRIAL  
ARCHITECTURE**



**GREEN  
INFRASTRUCTURE**





# Baxter Station

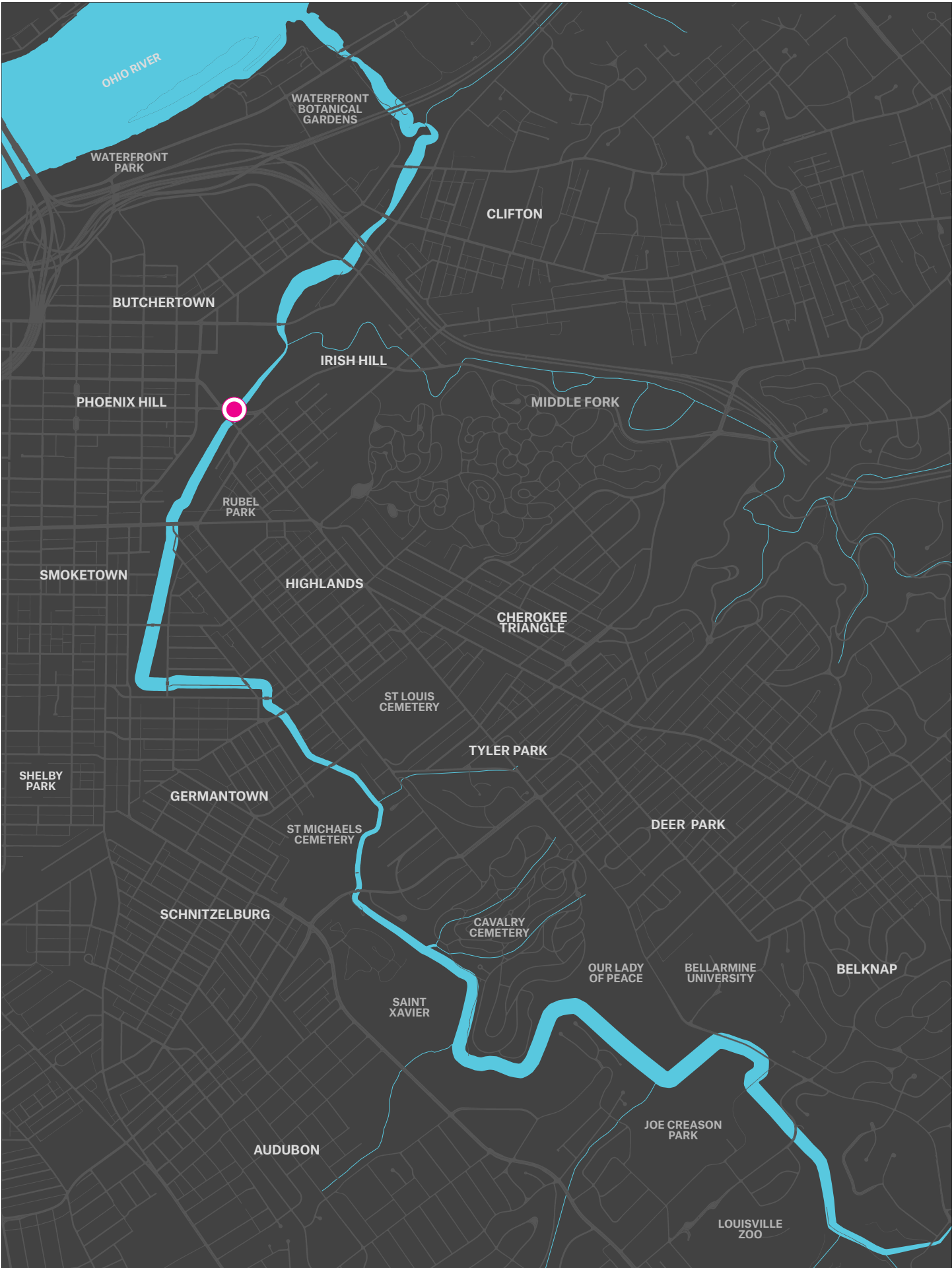
*Intersection of Liberty and Baxter*

Located at the intersection of Liberty Street and Baxter Avenue, Baxter Station is surrounded by a high-traffic road and intersection, while an active railroad runs over the site. Once an active rail station, this area is now underutilized and poorly accessible.

Capitalizing on the sites, dramatic infrastructure and history through strategic

interventions, we can make it safe, accessible and beautiful. Rethinking the Liberty crossing and providing key public space improvements at and around the main intersection would transform this site.







**GRAFFITI**

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Currently, the site's bright graffiti gives it a unique identity. This urban "art" adds a place-making quality to the area and identifies areas of vacancy and potential.



## CONNECTION

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Connection to the stream system is very limited due to the existing infrastructure elements surrounding the creek system. Providing an improved pedestrian access to this area can provide users with safe and clear access points.

## NATIVE BUFFER

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Improved native vegetation can provide users with a comfortable space that removes them from the high volumes of traffic in the area.

## STREET RETROFIT

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The current street conditions are not welcoming or safe for pedestrian users. Through strategic retrofitting and improved bike and pedestrian lanes, this area can be comfortable and safe for users to interact with.

NATIVE  
BUFFER



OPPORTUNITY TO IMPROVE  
CONNECTION



BAXTER  
STATION



STREET  
RETROFIT



AUTOMATIC AIR CORP.



NATIVE  
BUFFER



NATIVE  
BUFFER



BAXTER STATION  
OVERLOOK



MULTI-USE  
PATH



# Baxter Station

CORNER  
PLAZA



NATIVE  
BUFFER



# Next Steps

Large Logan Street development planning to incorporate Beargrass Creek access after reading about the legacy project in LEO Weekly



Logan Street Basin Native Tree Replanting



Landowner has interest in depaving project near Irish Hill



Discussed potential improvements to Logan Street Basin field with Louisville MSD and Housing Authority



Potential grant for tree planting in Joe Creason Park on nearby site



Metro Louisville working to improve intersection of Liberty and Baxter



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Photography: Louis Johnson, Jared Kaelin and Patrick Henry









**Gresham Smith**

Genuine Ingenuity