

PRELIMINARY URBAN WATERWAY PLAN

These preliminary design concepts for a proposed urban waterway in South Fairmount (Cincinnati, Ohio) were developed by the Metropolitan Sewer District of Greater Cincinnati (MSD) with input from the community and public/private partners. The concepts were presented for public review at the Lick Run Community Design Workshop #3 on February 23, 2012 in Cincinnati as part of a preliminary Lick Run Master Plan. They will undergo additional refinement prior to integration into a final plan. The U.S. EPA has final approval over implementation of this project.



View A (Looking Northwest)



View B (Looking Southwest)



View C (Looking Northwest)



View D (Looking Southwest)

NETWORK OF CSO REDUCTION SOLUTIONS

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1 Rainfall = Stormwater Runoff



On an **undeveloped landscape**, stormwater runoff:

- Slows and filters through vegetation & soil
- Infiltrates into the ground

On a **developed landscape**, stormwater runoff:

- Increases in volume, velocity, pollution, and temperature
- Minimally infiltrates into the ground
- Can negatively impact natural waterways

2 Runoff Diversion



A network of community solutions more effectively manages stormwater runoff by:

- Reducing inputs to the combined sewer system
- Reducing pollutants
- Replenishing groundwater
- Improving natural systems

Stormwater management strategies can be applied at home, in neighborhoods, and throughout the Lick Run Watershed.

3 Household Strategies



Stormwater best management practices (BMPs) that residents can incorporate at home include:

- Downspout disconnection (where permitted)
- Rain gardens & bioswales
- Rain barrels & cisterns
- Green roofs
- Trees and other plantings
- Porous pavements

4 Neighborhood Strategies



Stormwater BMPs that can be implemented in neighborhoods include:

- Reduced pavement width (where possible)
- Porous pavements
- Street trees and stormwater planters
- Collecting and treating stormwater in parks and open spaces

5 Source Control Strategies



Proposed **source control strategies** include:

- New storm sewers to capture stormwater runoff and reduce the volume of stormwater entering combined sewers
- Natural conveyance strategies to capture, infiltrate, and treat stormwater

6 Structural Stormwater BMPs



Structural stormwater BMPs trap heavy sediment like sand, and they collect floatable trash and debris. These structures are designed to be easily accessed and maintained.

7 Proposed Urban Waterway



The proposed urban waterway:

- Conveys captured stormwater runoff to Mill Creek
- Improves water quality
- Provides wildlife habitat
- Includes an open space network
- Provides opportunities for environmental education

8 Healthier Mill Creek



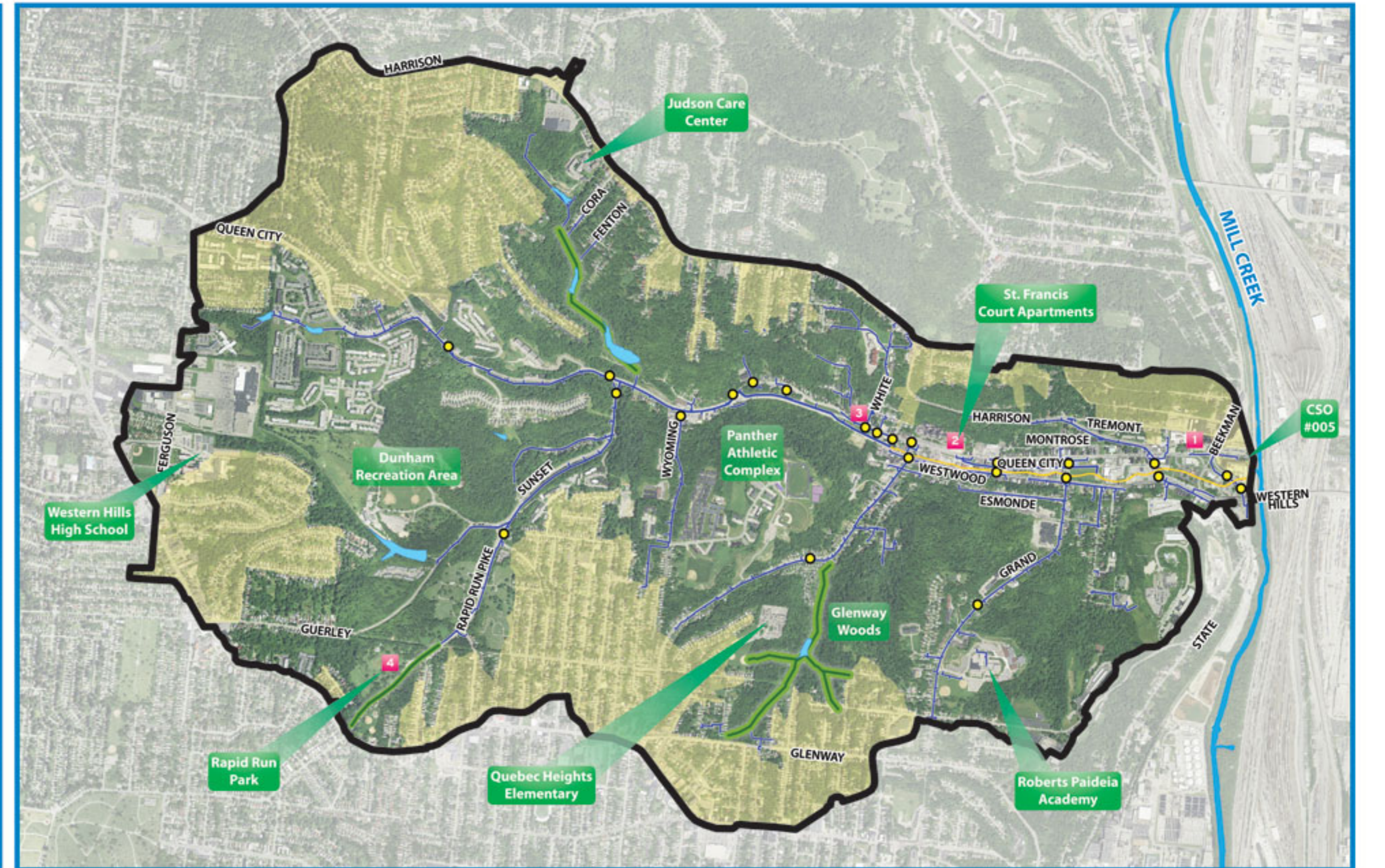
The proposed urban waterway will help reduce combined sewer overflows (CSOs) and improve water quality in Mill Creek.

The integrated source control strategies in the Lick Run Watershed, combined with other sustainable infrastructure projects in the Lower Mill Creek watersheds, will gradually heal this endangered regional resource.

MSD's Proposed Solutions in the Lick Run Watershed



Lick Run Watershed: Stormwater Flow Diagram

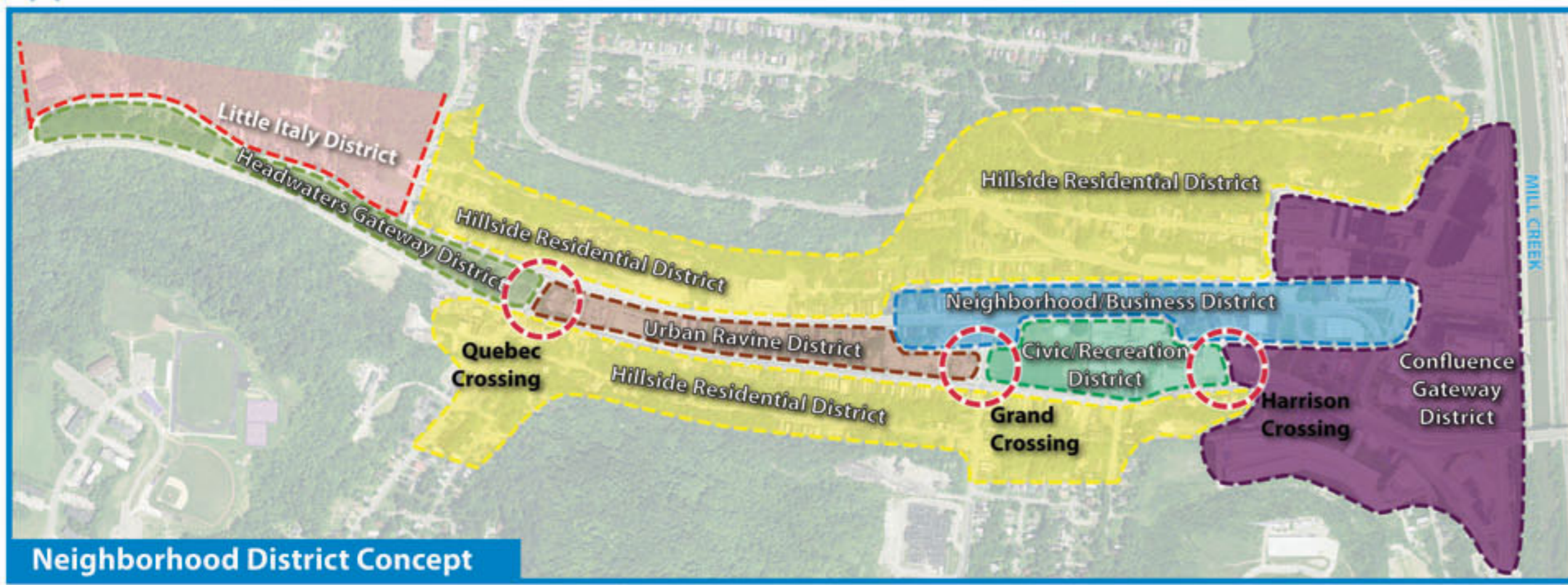


0 500 1,000 Feet
Watershed Boundary
Proposed Storm Sewer
Proposed Urban Waterway
Proposed Detention Feature
St. Francis Enabled Impact Project

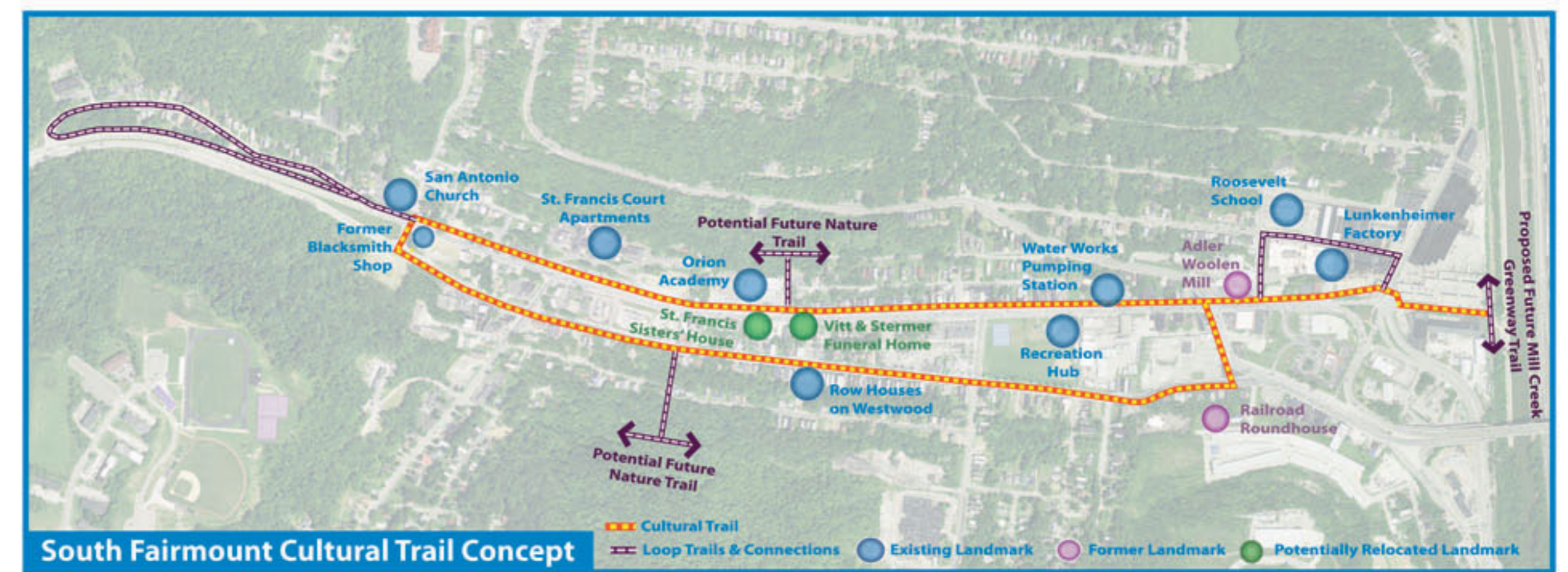
Watershed Neighbors
Proposed Natural Conveyance
Proposed Structural BMP
Immanuel United Church Enabled Impact Project
Rapid Run Park Enabled Impact Project

PRELIMINARY LONG-TERM VISION PLAN

These preliminary design concepts for the Long-term Watershed Vision Plan in the Lick Run Watershed (Cincinnati, Ohio) were developed by the Metropolitan Sewer District of Greater Cincinnati (MSD) with input from the community and public/private partners. The concepts were presented for public review at the Lick Run Community Design Workshop #3 on February 23, 2012 in Cincinnati to help the community more clearly understand the potential long-term opportunities that may be achieved through public and private investments. They will undergo additional refinement prior to integration into a final plan.



Neighborhood District Concept

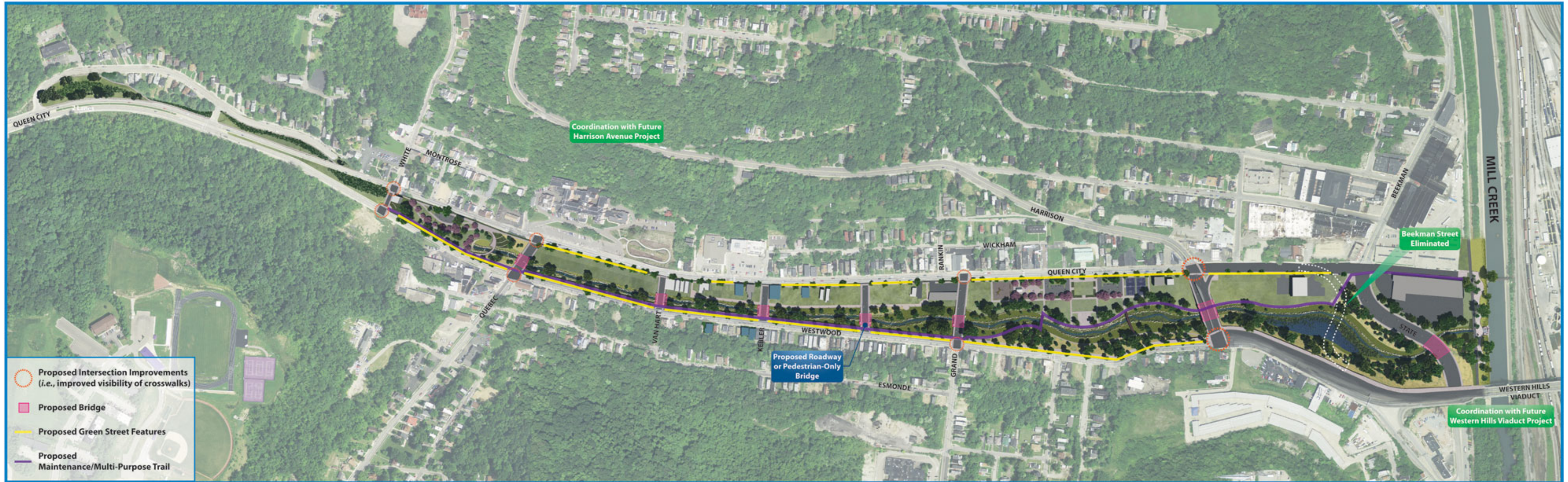


South Fairmount Cultural Trail Concept

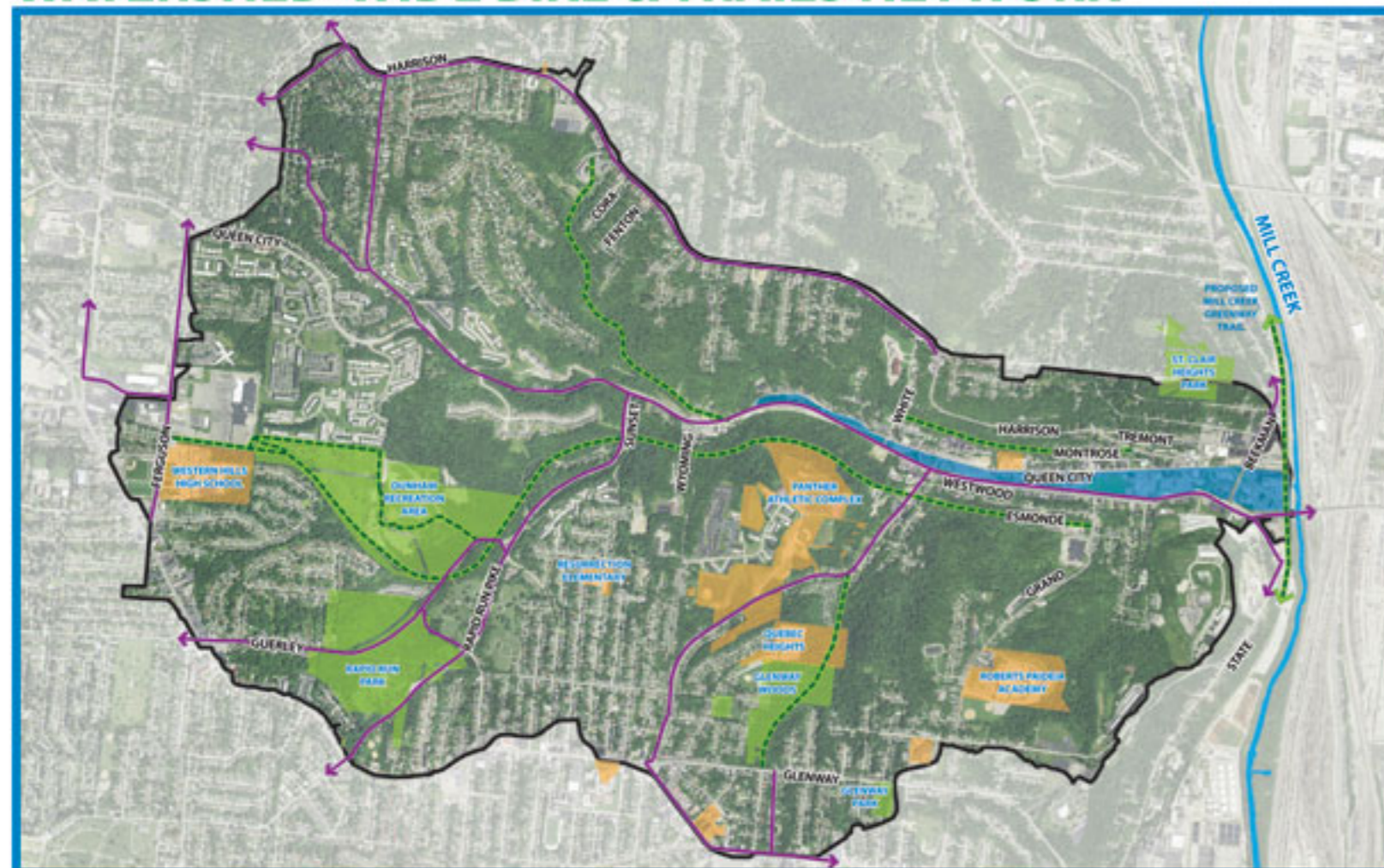
TRANSPORTATION NETWORK & TRAILS

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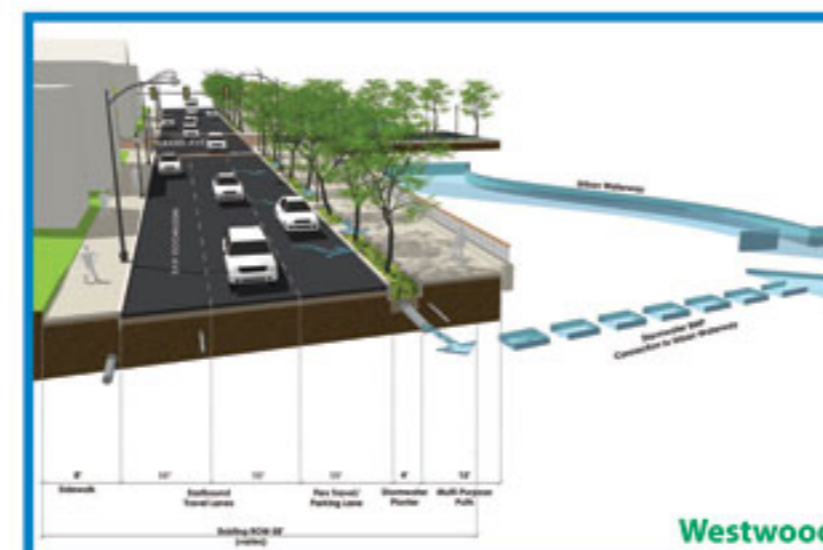
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WATERSHED-WIDE BIKE & TRAILS NETWORK



Based on Cincinnati Bicycle Transportation Plan (June 2010)
Plan Review & Assessment are Underway



NEAR-TERM RECOMMENDATIONS

One-way Traffic Remains
Pedestrian Safety Improvements
Integrated Stormwater Planters (south side of Queen City and north side of Westwood)



LONG-TERM STUDY

Two-way Travel Lanes
Integrated Stormwater Planters and Bump-Outs with Street Trees
Expands Existing Right-of-Way
Requires Further Technical Refinement, Agency Coordination, and Community Engagement

