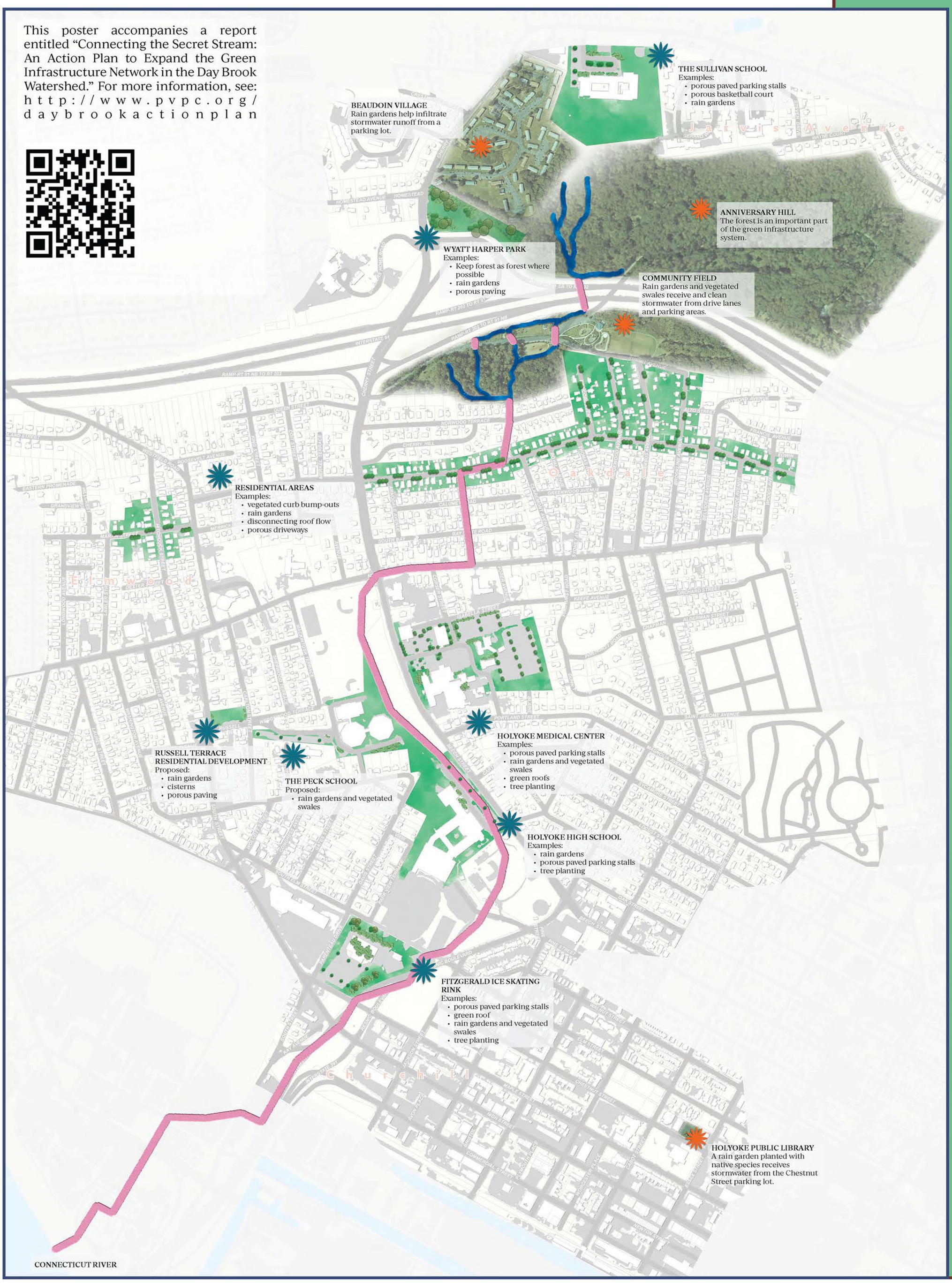
CONNECTING
THE SECRET STREAM

A CONCEPTUAL PLAN FOR EXPANDING THE GREEN INFRASTRUCTURE NETWORK IN HOLYOKE'S DAY BROOK WATERSHED

For much of its journey through the City of Holyoke, Day Brook's waters are joined in an underground pipe with sewage and stormwater flows. Day Brook—unseen by most people—has become known as "the secret stream," or "la corriente secreta."

This poster accompanies a report entitled "Connecting the Secret Stream: An Action Plan to Expand the Green Infrastructure Network in the Day Brook Watershed." For more information, see: http://www.pvpc.org/daybrookactionplan



Examples of Green Infrastructure Facilities

"Connecting the Secret Stream" is a vision for revitalizing the Day Brook corridor with a network of green infrastructure. This network includes planting more trees and constructing facilities—such as green roofs, rain gardens, or cisterns—that capture and control stormwater near to where it falls. This map shows new locations for such facilities and locations where these facilities already exist.

Rain Gardens & Vegetated Swales

Rain gardens (and bioretention basins) are designed to receive and soak up rainfall. They often include an outlet that allows overflow from larger storms to move into the storm drain system. A vegetated swale looks similar to a rain garden, but is meant to soak up rainfall while also slowly conveying flow from one place to another.

Vegetated Curb Bump-Outs

Photo Credit: Flickr user Philadelphia Water Department

Street edges provide opportunities to receive and manage storm flow from roadways. These facilities, typically in the municipal right-of-way, can also be designed to make streets safer and more comfortable for pedestrians and cyclists by providing shade and separation from motor vehicles, and by "calming" fast-moving vehicular traffic.

Porous Athletic Surfaces

Photo Credit: Flickr user Philadelphia Water Department

Traditionally surfaced with impervious materials, athletic facilities—including basketball courts—can make use of porous materials instead. While such surfaces enable rainfall to soak through to soils, they can also be more shock absorbing, protecting players from injury.

Porous Paved Parking Stalls

Porous asphalt, concrete, and pavers can greatly reduce stormwater impacts without sacrificing the number of spaces in a parking lot. A combination of traditional asphalt in drive lanes and porous asphalt in parking stalls allows heavy vehicles, such as school buses or delivery trucks, to drive without risk of compacting the porous material.

Green Roofs

Green roofs provide important control for stormwater flows as plants and soils soak up rainfall. They also provide important benefits in lowering heating and cooling costs for buildings and can be an attractive amenity, particularly where windows of a building give views to a green roof.

Porous Driveways

Photo Credit: Flickr user Arlington County

Many residential driveways need not be paved with asphalt or concrete. There are many attractive options, such as grass pavers or porous pavers. These alternative materials can also help to prevent pooling of water and ice on driveways during winter months.

Map Legend

Day Brook (piped) — Day Brook — Proposed Green Infrastructure Facilities — Existing Green Infrastructure Facilities

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