Walkable Watershed

healthy waters : healthy communities

Urban Stormwater Workgroup Meeting

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skeo SOLUTIONS

What is Walkable Watersheds?

An approach to watershed planning that ***links environmental and social equity goals***.

Based on the principal that ***high quality water goes hand-in-hand with high quality of life***.

What is Walkable Watersheds?

Leverages the potential of water to serve as a significant revitalizing force for communities.

Integrates the ***flow of water and people*** into a cohesive strategy to improve the overall health of a community and the surrounding watershed.

Common Community Challenges

- Neglected creeks and watersheds
- Substandard infrastructure to support walking and healthy lifestyles
- Lack of cohesive community vision and capacity to guide investments
- Lack of connectivity and relationships between community, agencies and resources.

Common Planning Challenges

- Planning tends to focus on ***one topic at a time*** (parks, watersheds, transportation)
- Technical analysis is ***not always integrated*** with stewardship programs.
- Local governments and non-profits can face challenges ***engaging marginalized communities*** due to distrust and disinvestment.

→ Integrate planning across programs at neighborhood scale

→ Integrate technical and stewardship goals

→ Bring everyone to the table by listening to community goals and concerns.

Walkable Watershed Process

1. Bring stakeholders together.
2. Develop a shared understanding of both the technical and the community based issues.
3. Identify strategies that improve conditions for both pedestrians and water quality.
4. Unify strategies into a cohesive vision to leverage funding and partnerships for implementation.

Strategies

Integrating walkability and stormwater improvements

Green Streets

- Enable **safe** access for all users (including pedestrians, bicyclists, motorists and transit riders of all ages and abilities)
- And enhance **water quality** by cleaning stormwater runoff.

Safe Crossings

Stormwater treatment can be integrated with safe pedestrian crossings.

Mid-block Stormwater Bump-out

Corner Stormwater Bump-out

Source: City of Philadelphia Green Streets Design Manual

Stormwater Flow – On Street

Swales are grassy or vegetated channels that safely hold and direct water from one place to another. They can be located adjacent to streets and parking lots to slow and clean the water before it flows to the creek.

Curb extension retrofit

Water-filled planted swale during 25-year storm event

Grassy swale

Stormwater Flow – Off Street

Rain gardens are planted areas that are sunk into the ground to collect rainwater runoff from impervious urban areas (such as roofs, driveways and parking lots). Rain gardens can be added to front yards, public spaces and vacant lots.

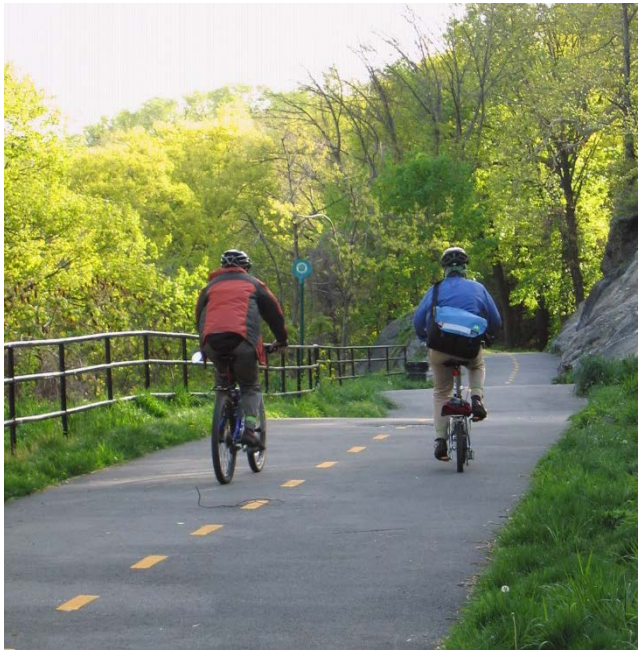
Integrated into a community park

In public spaces with educational signage

Terraced rain gardens provide a visual attraction

Enhance Connections

Celebrating and enhancing community connections to urban waterways provides multiple benefits.



Greenways provide access to waterways and recreational areas

Signage celebrates a community's legacy and connection to waterways

Celebrate the Watershed

Stormwater strategies can be designed to celebrate the watershed and highlight how rainwater flows through the neighborhood.

Bridge reflects skeleton of native fish

On street murals and painted storm drains

Signage

Outcome

- Combine strategies into a larger concept plan that represents a shared vision among diverse stakeholders.
- Provides a roadmap to guide investments and engage a range of partners and funding sources.

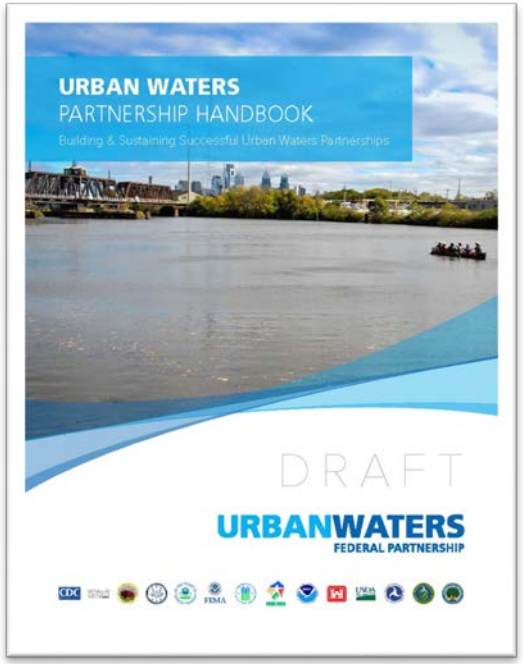
Potential Resources

Potential Funding Opportunities:

- EPA Urban Waters Small Grants
- Stormwater Utility Fee
- NFWF Chesapeake Bay Stewardship Fund Technical Capacity, Small Watershed and/or Innovative Sediment Nutrient Reduction Grants
- Others?

Potential New Resources:

- Urban Waters Partnership Handbook



Outcomes

Community Snapshots

Bellemeade (Richmond, VA)

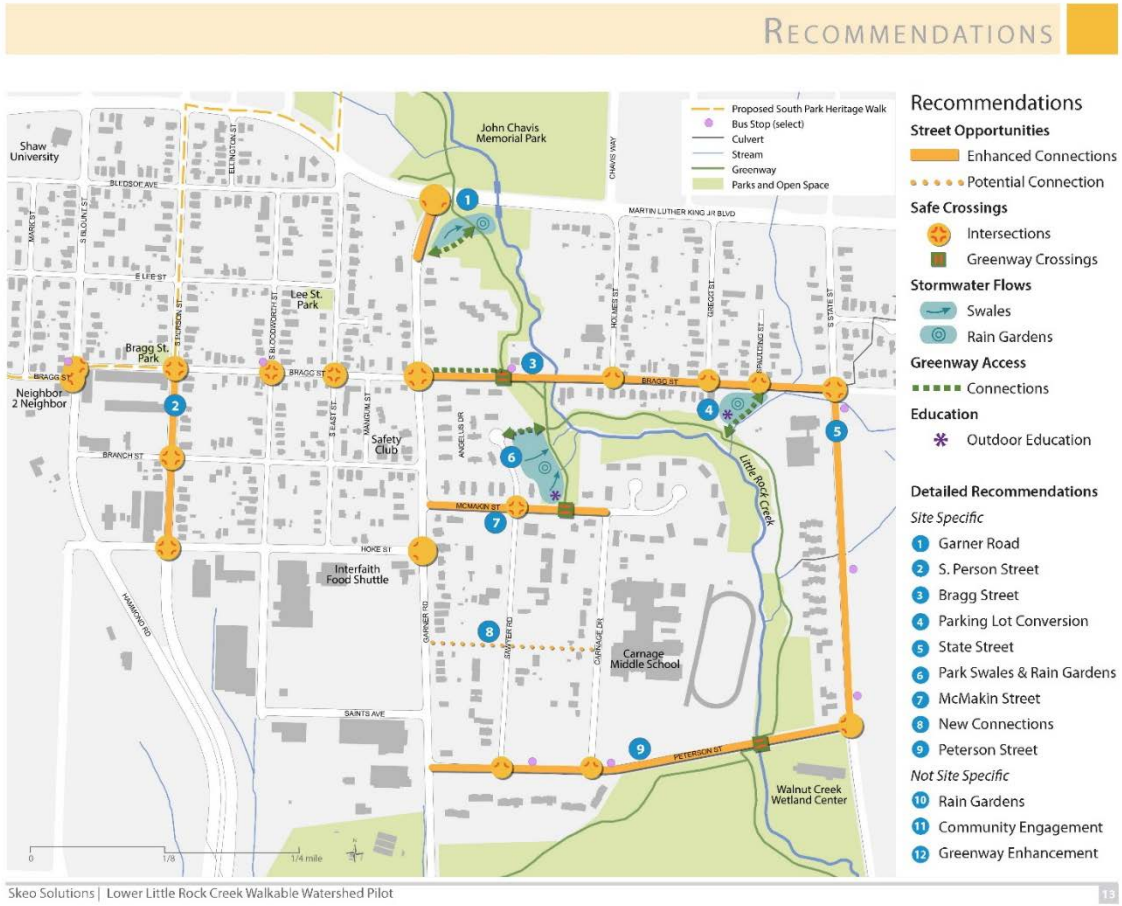
- Informed city stormwater priorities.
- Prioritized student-selected sidewalk improvements.
- Secured funding to support cross-sector coalition and bring other funders to the table.
- Secured additional funding from federal, city and non-profits to implement the plan.





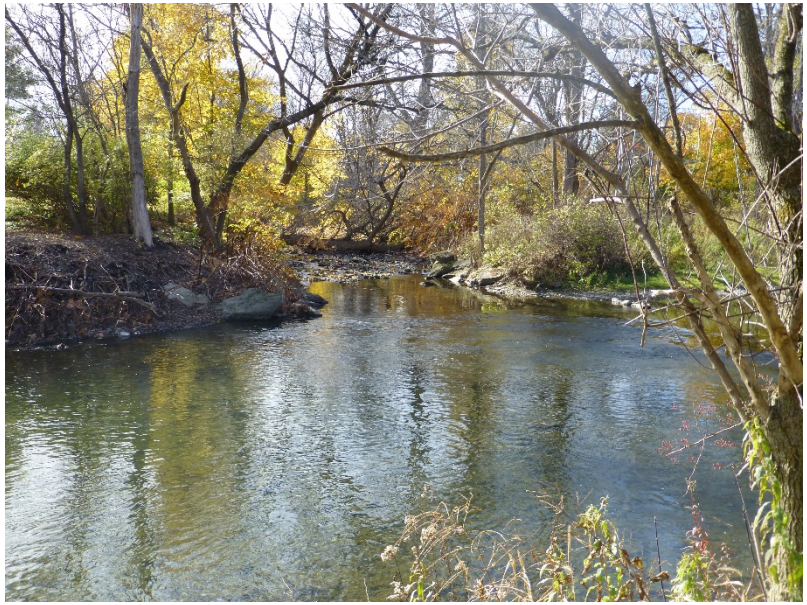
Partnerships for Implementation
(Raleigh, NC)

- Formed city cross-departmental team to integrate stormwater across planning and capital projects.
- Identified partner organizations
- Moving forward with near-term opportunities to serve this neighborhood.
- Adopting process for other city initiatives.



Cortland, NY

- Coordinated green infrastructure opportunities with transportation and corridor investments.
- Developed an action plan to guide design, funding and implementation of green infrastructure improvements.
- Built capacity across jurisdictions to advance green infrastructure solutions in the Tioughnioga River watershed.



Charlottesville, VA

- Building on existing planning efforts to identify early wins that meet multiple program goals.
- Green infrastructure projects identified based on community input.
- Innovative partnerships to build watershed awareness.

Sketch of proposed bioswale and pedestrian connection

Proposed street murals inspired by local youth creek discoveries.

Discussion

- Ideas on how to make this approach more effective?
- Are there other communities where this approach might work well?
- How could this approach support upcoming milestones or other stormwater requirements?
- Could this be a tool to leverage more partners and more support?

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