

**SOCIAL DIMENSIONS OF STORMWATER  
MANAGEMENT APPROACHES:  
IMPLICATIONS, APPROACHES, &  
OUTCOMES**

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“It’s about water... but it’s not  
only about the water.”

--Roger Marvel, Roger Marvel Architects

One of the Infill Philadelphia/Soak it Up Design  
Competition Awards Winner

# Questions

1. What are the reasons for involving communities at the local level in stormwater management?
2. What are some different ways to involve the public in stormwater management?
3. What are the potential outcomes for participation in stormwater management?

# Challenges in Addressing Stormwater Management Strategies

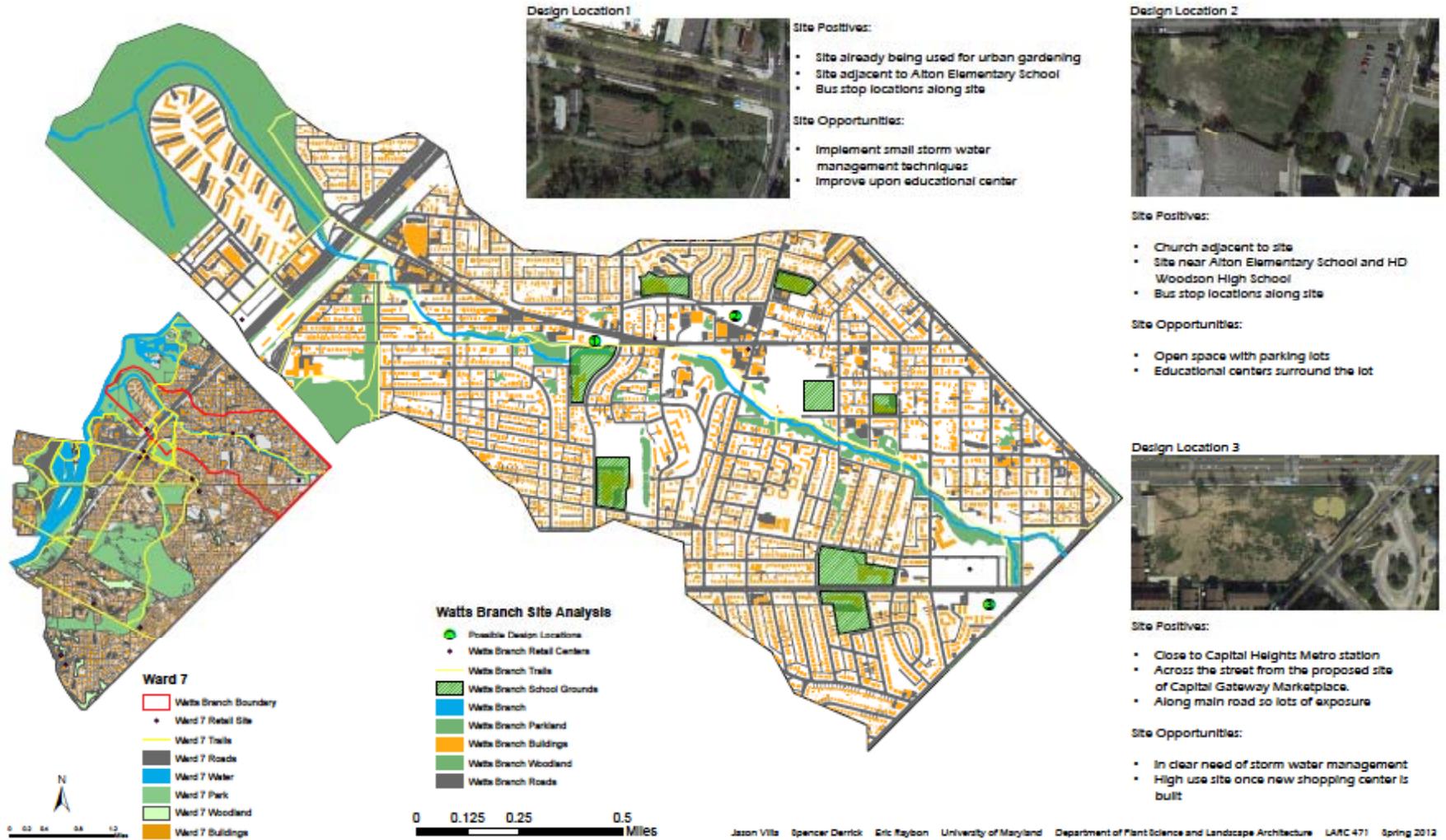
- 1) the **difficulty** in passing along **scientific knowledge** in a simple yet comprehensible form that is also **pertinent** to communities;
- 2) differences in **perception** between the scientists and residents of the landscape;
- 3) taking into account the **culture, history, and values**; and
- 4) lack of **participatory processes** to engage residents

– Luz 2000; Schroth 2011.

# Watts Branch, Washington, D.C. Example: Students & Research



# Ward 7: Demographics, Development, and Economic Drivers



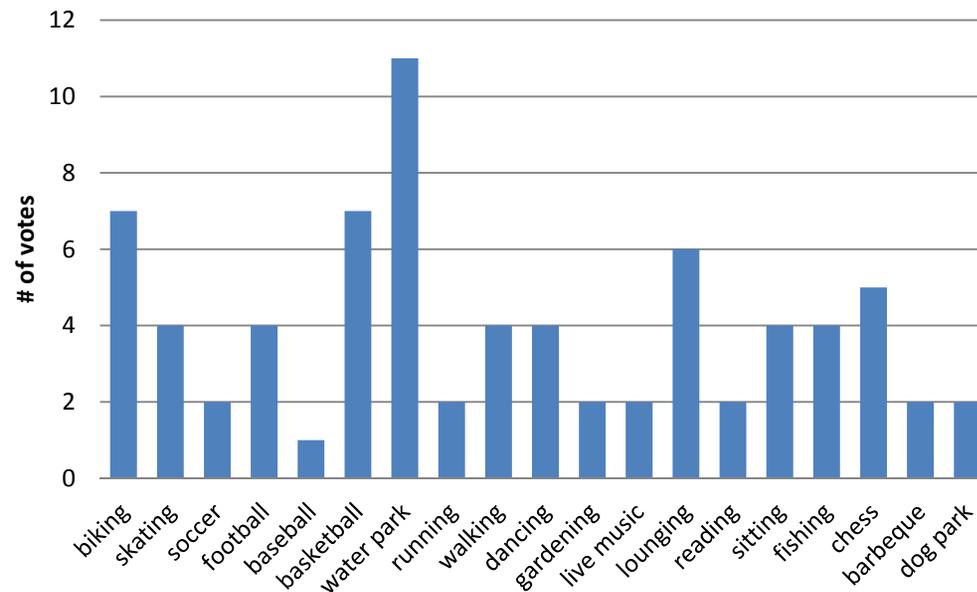
# Design Game: Activities



Activity	# of Votes
biking	7
skating	4
soccer	2
football	4
baseball	1
basketball	7
water park	11
running	2
walking	4
dancing	4
gardening	2
live music	2
lounging	6
reading	2
sitting	4
fishing	4
chess	5
barbeque	2
dog park	2

# Themes and Findings

- Water parks were the most popular
- Biking and basketball came in second
- Lounging in an open field was next
- A place to play chess was the fourth popular activity
- The graph below represents all totals



# Design Games

What improvements can you see in your community?



Impervious Street



Green Street



Contaminated Stream



Stream Restoration



Aged Trails



Pooling Areas



Rain Garden



Traditional Swale



Bioswale



Graffiti



Neighborhood Mural

Other Suggestions?

# Results: Improvements

<b>IMPROVEMENTS</b>	<b>COUNT</b>
<b>Green Street</b>	3
<b>Stream Restoration</b>	3
<b>Greenway Trail</b>	5
<b>Rain Garden</b>	7
<b>Bio-swale</b>	0
<b>Neighborhood Mural</b>	4

# How do you envision your neighborhood parks?

## Paths:



1) Wider Sidewalks



2) Gravel Woody Path



3) Paved Bicycle Path



4) Other

## Open Space:



1) Shady



2) Sunny



3) Plaza



4) Other

## Water Features:



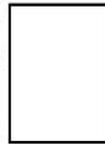
1) Fountains



2) Streams



3) Interactive Water



4) Other

## Playgrounds:



1) Themed Playground



2) Wooded Playground



3) Maze Playground



4) Other

## Games:



1) Open Field Sports



2) Court Sports



3) Table games



4) Other

## Seating:



1) Park Benches



2) Un-conventional Seat



3) Table Seat



4) Other

## Gardening:



1) Community Gardening



2) Landscaped Gardening



3) Vertical Gardening



4) Other

## Vendors:



1) Food Vendors



2) Arts & Crafts Vendors



3) Open Market



4) Other

The results of this design game:

Of the 20 participants:

- 9 wanted an interactive water feature
- 8 wanted interactive playgrounds
- 6 wanted open sports fields
- 5 each wanted paved bike paths, fountains, sunny open spaces, sports courts, and landscaped gardens.

# Outcomes

- Identifying and Prioritizing Community Needs, Concerns, and Preferences
- Longer-term relationships with neighborhood and community partners such as Groundwork DC and Anacostia Watershed Society
- Determining how community and cultural needs, concerns, and preferences may inform stormwater management