

Social Dynamics of Stormwater Management Private Property in the Alley Creek Watershed Queens, NY



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Agenda

- Objectives
- Methods
- Site Description
- Typologies
- Outreach and Engagement
- Program Evaluation
- Conclusions
- Future Research



Objectives

Examine community perceptions of private property and identify opportunities for and hindrances to stormwater management within the Alley Creek watershed in Queens, NY

1. Social Network Analysis
2. Typology Characterization of Individual Homeowners
3. Suggest Effective Outreach and Engagement Methods
4. Assess Existing and Possible Management Actions

Conclusions and Future Research Opportunities

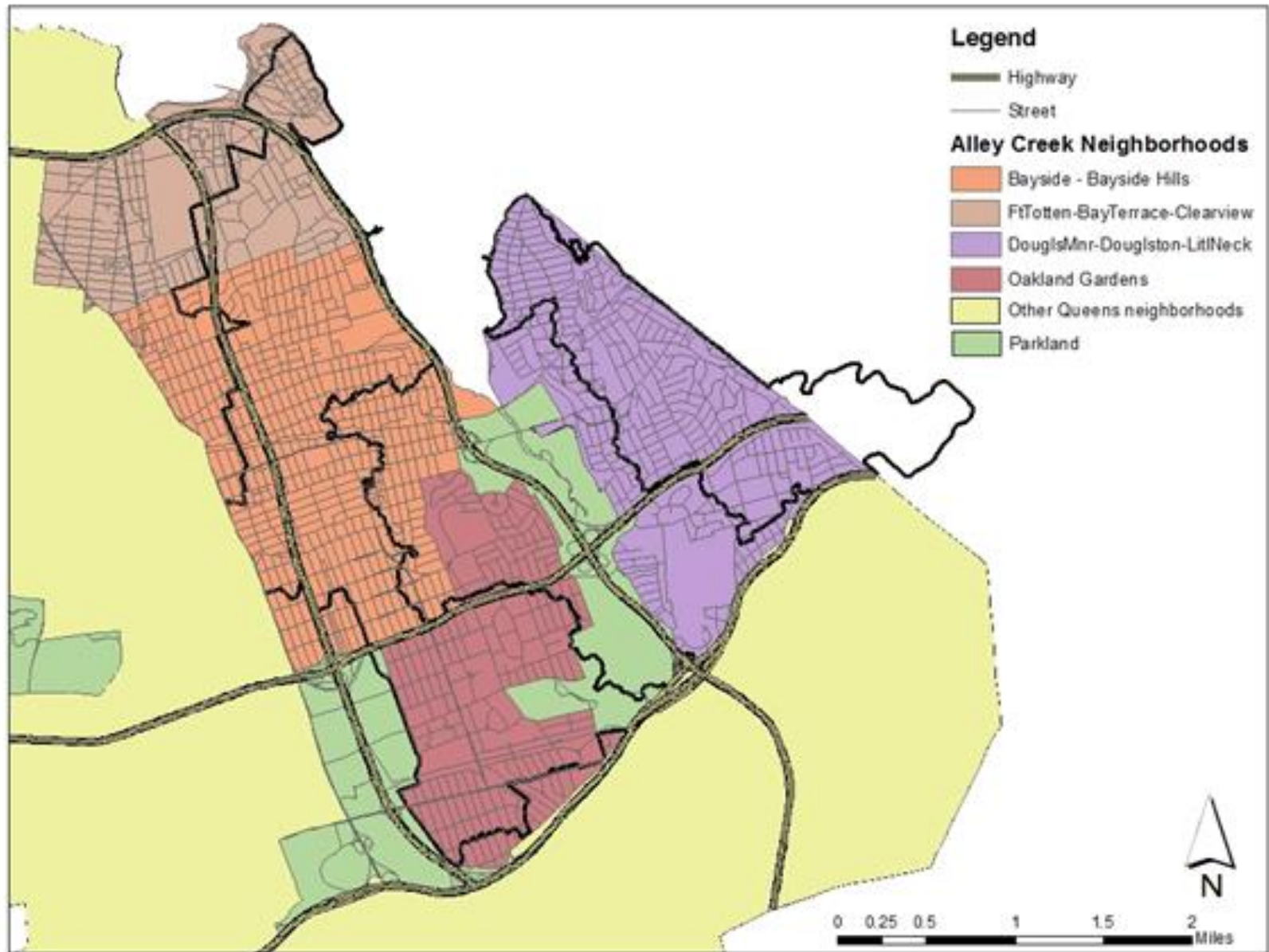
Methods

- Participant observation, interviews
 - Over 50 conversations with representatives from city agencies, civic associations, stewardship organizations, and homeowners
 - 10 of 20 rain barrel owners
- Analysis of public meetings

Date	Title	Host Org	Location	Attendance
May-13	Alley Creek Long Term Control Plan Public Meeting #2	NYC Department of Environmental Protection	APEC	10
Jan-14	Alley Creek Habitat Restoration and Watershed Management Plan Community Outreach Meeting	NYC Department of Parks and Recreation	APEC	23
Aug-14	The Waters of Queens: Dirty or Clean?	Graduate Student	Douglaston-Little Neck Library	>45

- Use of public reports, 311 data, newspapers

Site Description



Typology

Clean Landscapers



Driver: Particular aesthetic where nature is controlled and not “messy”

Results in: Highly manicured landscapes, removal of existing vegetation, no trees

Typology

The Jones



Driver: Familiarity, ease of maintenance, fits their particular interests

Results in: Lawns, low skill/wage workers to perform maintenance, paving of front yards for parking

Typology

The Greens



Driver: Aligns with values and what they believe to be good for “the” environment

Results in: A number of activities- woodlands, vegetable gardens, reduced/no use of pesticides and fertilizers, native plants

Typology

Early Adopters



Driver: Water conservation and stormwater management

Results in: Disconnected downspouts directed towards vegetated areas, rain barrel installations, tree plantings

Typology

Historical Preservers



Driver: Deep attachment to neighborhood and sense of place

Results in: Preservation of existing homes and associated aesthetic. Designation of historic districts and downzoning of neighborhoods.



Typology

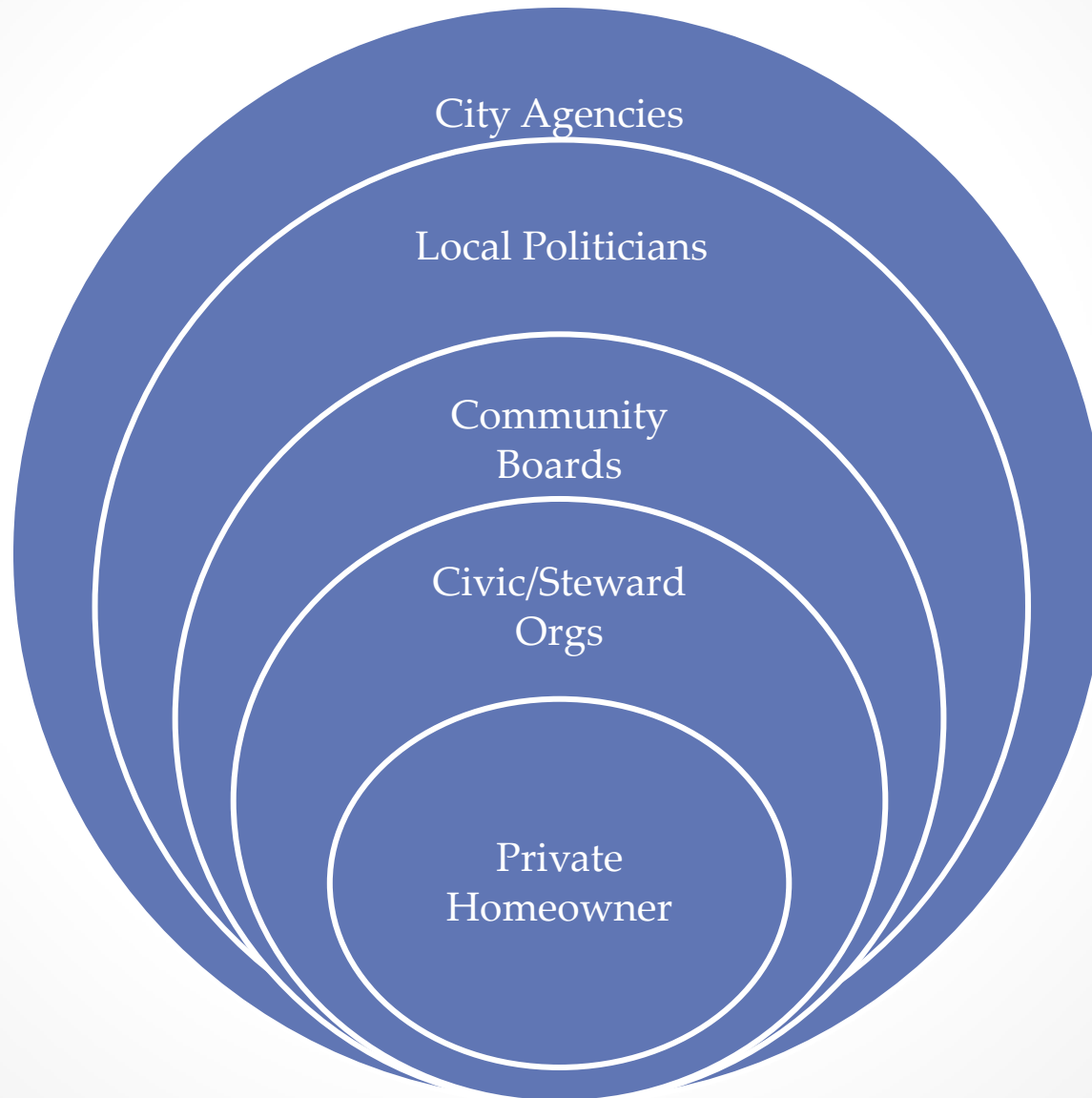
Without Control

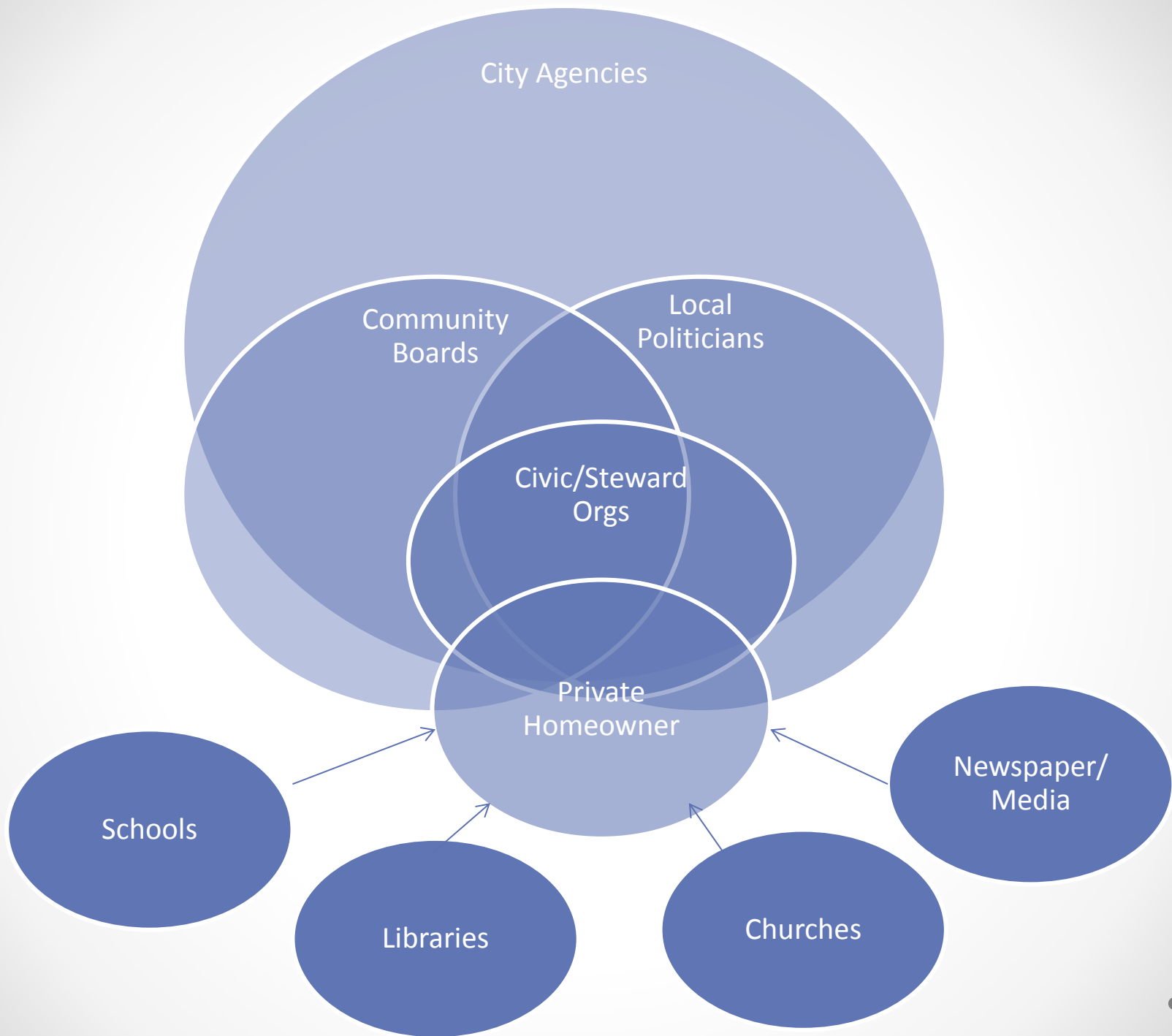


Driver: No direct control over landscape features

Results in: Uniformity, low maintenance features

Outreach and Engagement





Outreach and Engagement

	Major Barriers				
	<i>Cost</i>	<i>Time</i>	<i>Interest</i>	<i>Knowledge</i>	<i>Risk</i>
Clean Landscapers			X	X	
The Jones	X	X	X		
The Greens	X			X	X
Early Adopters				X	X
Historical Preservers		X	X		
Without Control	X	X		X	

- Beyond incentives
 - Cost not only barrier!
 - Aesthetics, risk, time, knowledge of techniques as barriers

Outreach and Engagement

ALLEY CREEK LONG TERM CONTROL PLAN

PUBLIC MEETING #2

Wednesday, May 1, 2013
Alley Pond Environmental Center
228-06 Northern Blvd., Douglaston, New York 11362
6:00pm to 8:00pm

DEP will provide a brief presentation at 6:30pm.

As part of the LTCP Program, DEP is developing comprehensive evaluations of long term solutions to reduce combined sewer overflows (CSOs) and improve water quality in New York City's waterbodies and waterways. The goal of each LTCP is to identify appropriate CSO controls necessary to achieve waterbody-specific water quality standards, consistent with the Federal CSO Policy and the water quality goals of the Clean Water Act.

At the meeting, you will learn about DEP's proposed alternatives, related water quality conditions and recreational uses for Alley Creek and Little Neck Bay.

HOW TO GET INVOLVED?

DEP staff will be available to answer any questions you may have.

To RSVP, please email lhcp@dep.nyc.gov or call DEP's Community Partnerships Office at (718) 595-3406.

Directions: visit the website at <http://www.alleypond.com> for travel by car or mass transit.

For more information on DEP's CSO program, please visit our LTCP Program website at www.nyc.gov/dem/ltcp or follow us on Facebook: www.facebook.com



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Dawn Henning, a graduate student at Yale University, has spent the last decade working in New York City on urban water projects and community-based planning.

Refreshments will be served.

**Friday, August 1
4:00 p.m.**

Douglaston-Little Neck
249-01 Northern Boulevard, Little Neck
718-225-8414
Train: LIRR
Bus: Q12, N20, N21

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301-07/14

Existing Initiatives



- Stewardship Activities
- 2008 Yards Text Amendment
- 2012 Stormwater Performance Standard
- Rain Barrel Giveaway Program
- NYC GI Grant Program



- Bioswale Implementation
- Post-development SW Mgmt Ordinance, Atlanta
- Water Audit Program, Baltimore and DC
- SW Facility Credit Program, Seattle

Recommended Initiatives

Impact (biophysical and social)

- Area of impervious cover disconnected
- Number of homeowners reached by initiative
 - Goal of even distribution to all populations
- Priority to initiatives that promote vegetation over detention

Investment

- Estimated financial and human resources needed
- Feasibility and ease of implementation

Impact	High	Train Local Leaders Revise SW Performance Standard Engage Immigrant Populations	Enforcement of Yards Text Amendment Water Audit Program w/rebates Rain Barrel Giveaway Program
	Low	Educational Programming for Adults	NYC GI Grant Program
		Low	High
		Investment	

Conclusions

- Protect existing pervious area
- Capitalize on existing social networks and engage new populations
- Pilot more GI projects on private property
- Increase trust and communication between “public” and the “city”



Future Research

- Testing the typology
- Controlled studies examining the impact of different outreach and engagement methods
- Comparative research with another watershed
- Linking typology to a spatially available source
- Community mapping project



Thank You!

- Erika, Lindsay and the UFS Staff
- Marit, Vjeko and the Parks Department
- Colleen, Gabe and URI
- Dana and Uma

