



United States Department of Agriculture

STEW-MAP in the New York City Region

Survey Results of the Stewardship Mapping and Assessment Project, 2017

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COVER

TOP ROW, FROM LEFT TO RIGHT:

Conserve: community garden preservation sign. Photo by NYC Urban Field Station.

Manage: volunteers at a MillionTreesNYC tree planting. Photo by NYC Parks, used with permission.

Monitor: volunteers monitoring an oyster research station. Photo by Billion Oyster Project, used with permission.

BOTTOM ROW, FROM LEFT TO RIGHT:

Educate: GrowNYC youth urban forestry education program. Photo by NYC Urban Field Station.

Advocate: community gardeners protesting on the steps of City Hall. Photo by Edie Stone, used with permission.

Transform: volunteers with the Lower East Side Ecology Center bagging compost for delivery to NYC residents. Photo by LESEC, used with permission.

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Executive Summary

Who takes care of our environment? The answer is all of us. Our landscapes are shaped by many different institutions, groups, and individuals.

STEW-MAP data demonstrate that people can be positive agents of change in their communities. STEW-MAP supports a model of shared stewardship, where government and civic groups alike collaborate to achieve shared outcomes. Maps and tools derived from STEW-MAP identify opportunities to better engage local communities in caring for the environment and enhance the capacity of the stewards of our communities.

The Stewardship Mapping and Assessment Project (STEW-MAP) began in 2007 as a comprehensive way to understand and map civic capacity to care for the environment across New York City. Civic environmental stewardship groups are defined by their functions or what they do: conserve, manage, monitor, transform, educate, and advocate for the local environment—including land, air, water, and systems (such as energy, waste, and food systems).

STEW-MAP gathers information on civic groups taking part in any of these stewardship functions through a voluntary organizational survey covering group characteristics, geographic catchment area, and organizational networks. By taking care of the local environment in the city, these groups support our social infrastructure, public places where communities can build trust

and foster cooperation.

In 2017, we implemented a ten-year update to STEW-MAP in New York City's five boroughs and expanded to the larger metropolitan area as a regional pilot survey in all identified spots. Key findings include:

Groups exist and persist: Large numbers of stewardship groups not only exist but persist in their work throughout New York City and the region. Over 800 groups responded to this survey representing an estimated 540,000 members and staff and with budgets totaling approximately \$800 million.

Agents of change: Stewardship groups have been found to transform their environments and communities through direct action, management, education and advocacy. Civic groups have developed specific skills and expertise in the field of natural resource management and their work covers over 205,000 acres in New York City. New York City groups' work extends in the New York Harbor, Jamaica Bay, the East River, and up the Hudson River. In the wider region, groups cover over 35 million acres of land and over 8 million acres of water. Across these acres, stewardship groups are affecting both environmental and social conditions. Groups are improving habitat and water quality, but they also create essential social outcomes such as strengthening trust between neighbors.

Not just green: Stewardship groups hail from many different sectors including public health,

social services, transportation, education, housing and faith-based organizations. Yet, these groups share the same belief that the environment can be a catalyst for social change.

The abiding power of the grassroots:

Thousands of stewardship groups have emerged from concerns about their neighborhood and have been active in caring for the New York City landscape since the 1970s. These groups operate with budgets ranging from zero to millions of dollars. Over the years, stewardship groups have harnessed the labor and resourcefulness of hundreds of thousands of volunteers.

...Yet some stewards are professionalized:

Over time, many stewardship groups in New York City have professionalized by transforming from a group of friends and neighbors to a registered nonprofit organization with full-time staff. Eleven percent of groups have budgets that exceed \$1 million, but many still work with no budget at all. While some groups prefer to remain all volunteer, they are still an active force of change at the neighborhood scale.

Stewardship groups are knowledge producers:

In addition to tree-plantings and beach cleanings, stewardship groups are knowledge producers, often collecting and disseminating their own data and research. Many groups track their own metrics, from the number of invasive plants removed to the number of volunteer hours. New York City stewardship groups consider information and data sharing as one of the top services they provide on behalf of the urban environment.

Stewardship comes in different shapes and sizes: Stewardship groups are working at multiple scales: from a single community garden

or vacant lot, to a neighborhood, to a series of parcels across the city, across a borough, the New York Harbor, the entire city, and out into the greater region. Looking across respondent groups' efforts, the spatial distribution of these groups' turfs is not evenly distributed across New York City, raising questions about why civic stewardship action is higher in certain places than others.

Groups do not work alone: Stewardship groups are not working in isolation. For the most part, stewardship groups are highly connected to each other. At the same time, stewardship groups are working alongside or embedded with the work of government agencies and the private sector. It is clear that certain groups are serving as important nodes in New York City's stewardship network. These nodes or brokers serve a critical function in supporting our social infrastructure and have been found to be highly adaptive and responsive every day and particularly during times of crisis.

Not just urban: Stewardship groups work beyond the boundary of New York City. Groups working in the greater metropolitan region are similar in structure to their city cousins but are often working on substantially larger sites and with a focus on conservation efforts. At the same time, there is a porous boundary between the city and suburbs with many groups learning from each other and using similar tactics and approaches to stewardship.

For more information and to view the interactive map, visit: www.nrs.fs.fed.us/STEW-MAP

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Introduction

The Stewardship Mapping and Assessment Project (STEW-MAP) is a mapping tool and database of organizations designed to help understand and strengthen our civic capacity to take care of New York’s neighborhoods.

STEW-MAP aligns with the USDA Forest Service’s model of shared stewardship, which is about working together in an integrated way to make decisions and take actions that will achieve common goals and objectives. As cities and towns face challenges ranging from overstressed infrastructure to extreme weather, community-based civic groups are often on the frontlines of responding to these challenges. Many of these groups are essential in helping their communities, prepare for, respond to, and recover from all types of disturbance. These groups are the stewards of our social infrastructure—places like parks, gardens and other types of public spaces that strengthen social trust and foster cooperation. Yet, visualizing the often “behind the scenes” work of these groups can be challenging. To address this issue, STEW-MAP highlights existing stewardship gaps and overlaps in order to strengthen capacities, enhance and promote broader civic engagement with on-the-ground environmental projects, and build effective partnerships among stakeholders involved in urban sustainability. As a result, a growing number of cities are conducting STEW-MAP as they

seek to engage more directly with their local communities, strengthen civic capacity, and build a model of shared stewardship. Since 2007, STEW-MAP has expanded nationally and internationally. STEW-MAP projects are completed or currently under way in Baltimore; Philadelphia; Seattle; Chicago region; Portland, Maine region; Los Angeles; Denver; Honolulu; North Kona and South Kohala in Hawaii; Paris, France; San Juan, Puerto Rico; Santo Domingo, Dominican Republic; and Valledupar, Colombia.

This report presents the results of STEW-MAP data collected on civic environmental stewardship groups for New York City and its surrounding region (census-defined combined metropolitan statistical area) in 2017. We define stewardship broadly as engaging in acts of conservation, management, monitoring, transformation, education, and advocacy for the local environment—including land, air, water, waste, and toxics (Svendsen and Campbell 2008, Fisher et al. 2012, Campbell et al. in press). In this study, we draw attention to the abiding role of civil society—including both formal nonprofits and informal, community groups—in shaping and caring for the environment. The civic sector is an important component of local environmental governance, as these groups work both independently of and in collaboration with the public and private sectors in the management of ecosystem services (Connolly et al. 2012, 2014). STEW-MAP originated in 2007, when researchers with the USDA Forest Service aimed to

answer the question: *Who takes care of New York City?* The data were collected through a widely-circulated organizational survey and comprise measures of civic stewardship groups' organizational characteristics, geographic turf, and social networks:



Organizational Characteristics:

Characteristics include measures such as year founded, budget, legal status, number of employees and volunteers, mission, site type, and primary focus. These data demonstrate the ways in which environmental stewardship practices are embedded in the work of diverse civic groups. They describe the resources that groups bring in pursuit of their mission and vision and can reveal trends in the form and emphasis of stewardship in a city.



Geographic Turf: A turf refers to the geography of where a group works in the city or region - as

defined by the group itself. It is not only a mailing address. It can be as small as a single tree or as large as a region. It can be defined by where they physically work, in the case of hands-on land managers, or a wider catchment area in the case of social service providers. It helps us better understand the territorial basis of power at the group level, as well as the patterns, gaps, and overlaps in space across groups.



Social Networks: Networks are the relationships between groups - which include information, resources, and

collaborative ties. They can be analyzed by sector to identify relationships between civic, public, and private actors. Networks identify central nodes or “brokers” in the network as well as groups on the periphery. Networks

help us understand that connections can jump scales or transcend physical space.

STEW-MAP 2007 resulted in a publicly-accessible online map and database of more than 500 groups. Of the respondent groups, the most commonly stewarded site types were parks, community gardens, and street trees. The majority of these groups, 65%, were categorized as having low professionalization, based on number of paid staff an annual budget (Fisher et al. 2012). Tools derived from STEW-MAP data have supported government and civic groups alike to effectively coordinate and collaborate, to identify opportunities to better engage New Yorkers, and to enhance the capacity of the stewards of our communities. STEW-MAP can support civic participation, increase neighborhoods' social cohesion, and facilitate the sharing of resources between groups.

Ten years after STEW-MAP 2007, our understanding of the way stewardship supports social resilience and of the importance of cross-sector governance approaches has deepened. In “One New York: The Plan for a Strong and Just City,” Mayor Bill de Blasio acknowledged that New York City is only as strong as its neighborhoods are – our civic groups and social networks are a crucial part of the lifeblood of the city and are the stewards of our community resources. STEW-MAP 2017 was conducted in partnership with the NYC Mayor’s Office of Recovery and Resiliency to update the data and understand how the stewardship landscape of New York has changed since 2007.

In this report, we present the findings on organizational characteristics, turfs, and networks of our STEW-MAP NYC Region 2017 data, for both NYC-based organizations and a pilot survey effort to extend the survey into the larger region.

Methods

The NYC Region 2017 STEW-MAP project collected data on civic stewardship organizations through an organizational survey that draws upon a sampling frame of known civic organizations that may engage in stewardship.

Geography and network responses were used to derive spatial and social network maps. This methods section describes survey data collection methods, data processing, and data analysis (Figure 1).

Data Collection

The sampling frame of groups to receive the 2017 STEW-MAP survey was built over the course of five months. Potential stewardship groups were identified both within the five boroughs of New York City and within the larger metropolitan region. Lists were gathered in three ways and then compiled into an Microsoft Excel® spreadsheet that tracked group name, data provider, and contact information:

1. Data providers: First, all of the partner organizations and data providers from 2007 STEW-MAP were approached and asked to serve as data providers for the five boroughs by sharing their lists of partner stewardship organizations. A working group was created and from there, additional organizations were invited to add to the sampling frame as data providers. Working group members made recommendations for additional types of data providers to approach (see Figure 2). The final list of over 55 data providers covered a wide range of sectors, including natural resource management, food services, disaster preparedness, and education (see Appendix A).

2. Public lists: To fill any gaps that were left out of the sampling frame, additional groups were added from publicly available lists and databases. These included websites where partner organizations and/or grantees were listed, as well as lists of nonprofit environmental organizations and publicly available tax information reported by organizations on Internal Revenue Form 990, commonly referred to as 990 forms.

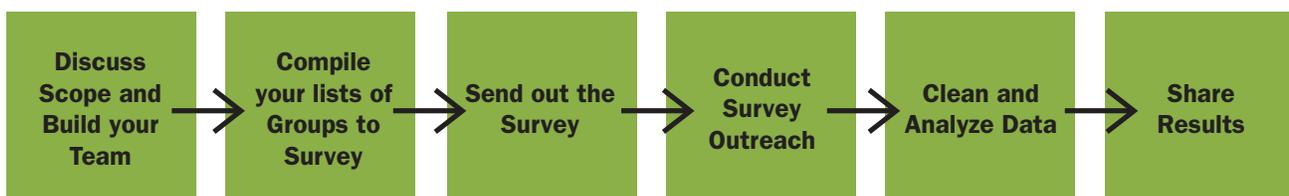


Figure 1. STEW-MAP implementation steps.



Figure 2. Crowd-sourced suggestions of data providers from Mentimeter interactive presentation software (www.mentimeter.com) poll results at NYC STEW-MAP kickoff meeting.

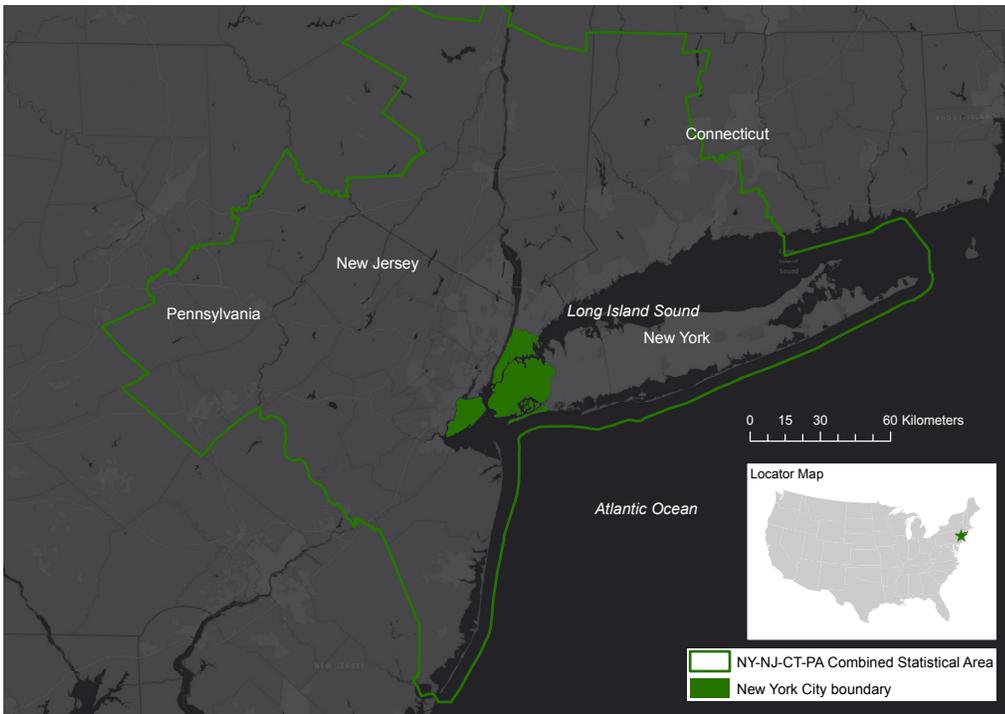


Figure 3. Study area map. Map created by Michelle Johnson, USDA Forest Service.

3. Region: In 2017, the sampling frame was extended beyond the five boroughs for a pilot survey of groups from the 35-county metropolitan region, defined as the New York-Newark NY-NJ-CT-PA combined statistical area (CSA) (Figure 3; see Appendix B for a full list).¹ The geographically extended sampling frame was compiled from publicly available tax information reported on groups' 990 forms. Groups were identified by their activity codes and national taxonomy of exempt entities (NTEE) codes reported on each group's 990 form; we accessed information of groups whose codes corresponded to environmental and environmental causes (see Appendix C for list of codes).

Once the sampling frame was complete and all data providers had shared their lists, a process was created to "clean" the data and remove and duplicate groups that had been on multiple lists. After cleaning, the population consisted of 10,253 groups, 6,999 in the Region and 3,254 in the five boroughs. Unique numbers were assigned for each group (PopID). Groups included in the NYC 2007 sampling frame and 2007 networks already had an assigned PopID; these were retained in the 2017 sampling frame.

Survey Development and Pre-Survey Outreach

The 2017 STEW-MAP survey was based on the 2007 survey, with some additional questions to capture change over time, desired impact, drivers of change, and a more nuanced understanding of social networks. The survey was reviewed by all attendees of the second working group meeting in January of 2017 (n=16) and pretested by a small group of partners (n=12). These partners were selected to represent the range of

groups taking the STEW-MAP survey, both geographically (groups from the city and the region), and characteristically (groups of various size, focus, and formality). All partners participating in the pretesting exercise provided feedback and suggested changes to the questions. The final survey instrument is included in Appendix D.

Prior to launching the survey, stewardship groups were targeted through an outreach process to introduce them to STEW-MAP and encourage them to take the survey when they received it. Data providers and partners were encouraged to share information about STEW-MAP through their website, social media, email blasts, and newsletters. In addition, groups that were willing to host a STEW-MAP table at events and conferences provided an opportunity to hand out postcards and one-pagers introducing STEW-MAP.

Survey Distribution and Follow-up Outreach

The survey launched in May 2017 and remained open for 8 months. For groups with a contact email, the 2017 STEW-MAP survey was implemented using the survey software Maptionnaire (Maptionnaire.com). The survey questions were input into the online platform in English, Spanish, Haitian Creole, Korean, Russian, and Mandarin Chinese. The contact emails from the sampling frame spreadsheet were then loaded into Mailchimp (Mailchimp.com), which was used to send out the email invitation to participate, along with a link to the survey (Figure 4). Three reminder emails were sent at 4- to 8-week intervals to groups that had not previously responded. The second reminder email introduced an incentive of an Amazon gift card through a drawing of all respondent groups.

For groups with no email contact, a postcard was sent to introduce the survey. Approximately 3 weeks later, the paper version of the survey was mailed, along with a prepaid envelope to return the survey. A second paper survey was sent approximately 8 weeks later to the groups that had not responded, including groups that were sent the email survey but had bounced back. The second version included language about the incentive.

Next, a round of phone calls went out to groups that did not respond. Calls were made to all groups that had a phone number associated with them on the population spreadsheet. Phone calls were used to confirm contact information, answer questions, encourage groups to respond, and to offer to send another copy by mail or email to groups who requested one.

In all, 7,003 groups received the survey within New York City's five boroughs, and

If you are a gardener, a park champion, a food justice activist, a kayak club member, an educator, a researcher, or a community organizer—we need your help in putting your group on the map! To complete the STEW-MAP survey, click here: <https://maptionnaire.com/en/1840/>



Don't let your hard work go unrecognized.

STEW-MAP (the Stewardship Mapping and Assessment Project) is the first update in ten years to NYC's citywide map of thousands of civic groups working to strengthen our neighborhoods and environments.

Your work is crucial to our thriving New York neighborhoods. This map can help your group network, build capacity, and gain support. More than 55 citywide agencies and nonprofits are working together with the Mayor's Office of the City of New York and researchers from the US Forest Service to develop this project.

Figure 4. STEW-MAP 2017 survey recruitment email.

another 3,259 outside of New York City received the survey as part of a NYC Region pilot survey. A final round of mail surveys was sent to all email nonrespondents 1 month before the survey closed in November 2017. As the surveys came in, the group names were checked against the sampling frame and marked as complete or incomplete, depending on the extent to which the survey had been completed. As of December, 2017,² when the survey officially closed for research, 847 responses were recorded, resulting in a response rate of 11 percent for the New York City and 3 percent in the Regional pilot survey (Table 1). Responses were calculated as all of the surveys returned, both complete and incomplete. The sampling frame was cleaned to exclude duplicates and errors, as well as lists from data providers that generated a particularly low response.

Table 1. STEW-MAP 2017 NYC survey response rate.

	NYC	REGIONAL PILOT	TOTAL
Groups in Sampling Frame	7,003	3,259	10,262
Number of Responses	754	93	847
Response Rate	11%	3%	8%

Data Processing

Survey Responses

Responses were downloaded from Maptionnaire as a Microsoft EXCEL® spreadsheet and a geospatial shapefile, which included self-defined polygons of turf by some of the respondents. Survey responses were cleaned and standardized for items such as zip code, telephone number, and budget. Data acquired from follow-up outreach (described above) were incorporated with the EXCEL spreadsheet downloaded from Maptionnaire to create a more complete set of responses. Unique numbers were assigned for each group (PopID column). Groups included in the NYC 2007 sampling frame and 2007 networks already had an assigned PopID; these were retained in the 2017 sampling frame.

A data dictionary was developed for the survey responses, and some fields in the survey were recoded to be consistent with STEW-MAP data standards (e.g., Yes/No recoded to 1/0). Open-ended questions for mission, goals, and metrics were coded through applying qualitative methodologies. Responses to questions were coded separately by two researchers via an open coding approach that identified key phrases and concepts (Lofland et al. 2005). These initial codes were then compared and discussed, and discrepancies were examined using an iterative approach until consensus

was reached across both coders, thereby enhancing reliability (Neuman and Kreuger 2003). Thematic clusters were then created to aggregate common codes together into broader themes. These clusters emerged out of key phrases, repeated language, and common ideas (Ryan and Bernard 2003). Specific subcategories were retained.

Turfs

Polygons representing each group's turf were developed either from a self-mapped polygon in Maptionnaire or from a text description provided in the survey. Self-mapped polygons were downloaded in a WGS84 decimal degrees format. All processing of turfs within the NYC Region occurred using the UTM 18N NAD83 projection; turfs occurring outside the NYC Region were kept in a WGS84 decimal degrees format. To minimize slivers, all polygons were adjusted and snapped to existing GIS boundaries of NYC, New York state, New Jersey, Connecticut, and Pennsylvania datasets obtained from NYC Open Data (<https://opendata.cityofnewyork.us>) and state and federal GIS clearinghouses.

The team of GIS mappers consulted regularly to ensure consistency among mappers in terms of interpretation and datasets used. Interpretation of descriptions required identifying the correct location of a turf as well as the intended extent of the

turf. Clarifications were made through follow-up outreach as needed. The mapping effort resulted in both turfs (where a group works, broadest extent) and sites (specific locations where a group works within a turf). This report will only refer to turf datasets, as not all groups identified sites in their responses. See Figure 5 for examples of mapped turfs of various sizes.

Networks

The NYC STEW-MAP 2017 survey included three network questions, asking respondents to list partner organizations in three categories: groups with which they regularly collaborate; groups that they go to for knowledge, data, or expertise; and groups from which they receive resources. Survey responses to these questions were cleaned and standardized to create network datasets (e.g., edgelist) for each of the three networks, which identified the respondent (sender) and alter (receiver) of each network

tie, or edge, on a single row of data. Group names were standardized across all three networks and unique numbers (PopID column) linked or assigned, as needed. These PopID numbers are also consistent with 2007 networks to enable temporal analysis. In addition to standardized alter names and PopIDs, a standardized alter detail column was also created, to parse whether the named group (alter/receiver) was a group or a program or branch of a larger group. Additional information in the dataset identifies whether the alter was a group, individual, or a general category (i.e., “community groups”). A sector (e.g., civic, government, business) was also assigned to each group. General categories and individuals have been excluded from analysis and presentation in this report. Network results include the in-degree statistic, which is a measure of the number of times a group is named by another group as well as a diagram of the organizational collaboration network.

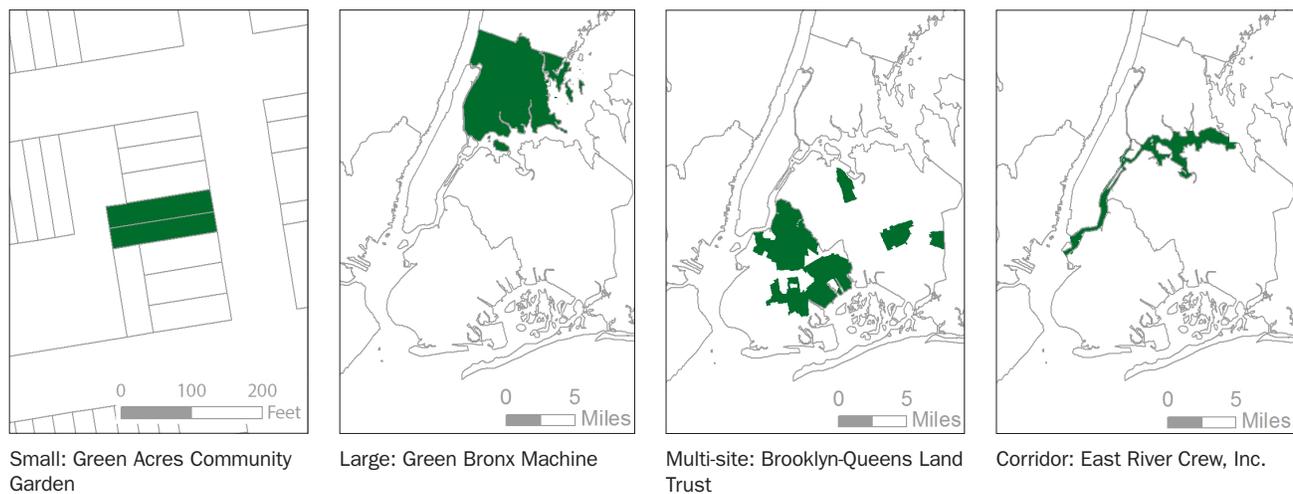


Figure 5. Examples of various turf sizes and geographies.

Results

We present results for NYC respondents first, followed by regional respondents. Organizational characteristics are presented first, with the majority of survey responses presented as tables and/or figures. These are then followed by maps of stewardship turfs and collaboration networks.

NYC Organizational Characteristics

The STEW-MAP survey asks respondent groups to self-select their functions, site types, and focus. Because environmental stewardship is often nested within other goals focusing on community quality of life and occurs in diverse ways across the landscape, these questions begin to describe the various approaches to stewardship that groups are using. Each of these questions are asked in two forms: select all, and select one. This allows groups to list all of the answers that represent their work and then to narrow down to the one answer that best describes their organization.

Function

STEW-MAP defines six stewardship functions that cover the many ways groups help take care of the environment. The six functions are *conserve*, *manage*, *monitor*, *transform*, *advocate for* and *educate* about the local

environment (see Table 2). Many groups work across multiple functions.

On the survey, groups are also able to select the options *participate in*, *partner with groups*, or *support other environmental work*, or *none of the above*. Groups answer the question: Does your group do any of the following in the New York City region? Select all (Figure 6), and Select one (Figure 7).

The most commonly selected functions in both versions of the question are *manage*, *educate*, and *advocate*. *Participate* is also a common choice, suggesting that groups often engage in stewardship through collaboration with others. Groups that reported no primary stewardship function are not required to complete the survey, and are excluded from these results.³

Site Type

The STEW-MAP survey asks groups to identify the site types where they work in order to understand which kinds of areas are most and least stewarded. These site types include green space such as parks and forests; water, including waterfronts and wetlands; built environment, such as courtyards and green buildings; and systems-related, such as food systems or waste systems. Groups respond to the question, In the last year, what sites has your group's stewardship worked focused on? Select all (Figure 8), and Select one (Figure 9). *Community gardens*, *parks* and *street trees* are the most commonly identified site types in both the select all and select one questions. These site types are also the most

Table 2. Stewardship functions and example practices.

FUNCTION	EXAMPLES
Conserve	<ul style="list-style-type: none"> - Preserving landmarks of cultural significance - Protecting green space - Defending endangered species
Manage	<ul style="list-style-type: none"> - Maintaining and operating parks - Planting flower beds - Hosting volunteer cleanups
Monitor	<ul style="list-style-type: none"> - Sharing data on water quality - Tracking habitat metrics - Surveying the public on park use
Educate	<ul style="list-style-type: none"> - Leading after school classes - Public programming - Preparing employees for green jobs
Advocate	<ul style="list-style-type: none"> - Community organizing - Supporting environmental justice campaigns - Voting for sustainable policies
Transform	<ul style="list-style-type: none"> - Making art from repurposed materials - Collecting compost - Installing solar panels

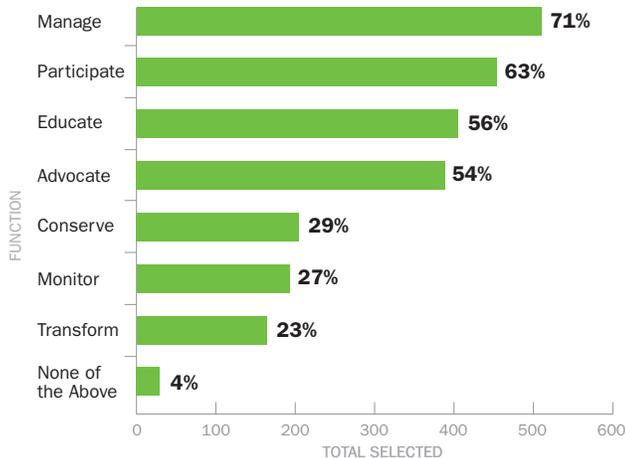


Figure 6. Number and frequency (as %) of NYC groups by function, select all option (n=718).

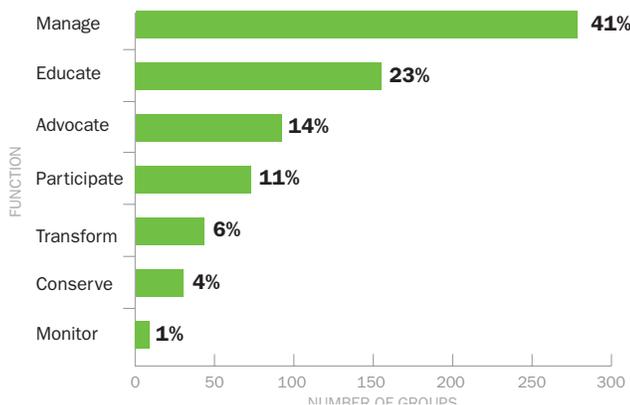


Figure 7. Number and frequency (as %) of NYC groups by function, select one option (n=680).

commonly selected by respondents in STEW-MAP 2007, which only included the select all option (Svendsen et al. 2016, Fisher et al. 2012).

Focus

Groups are asked to identify the overall issues they work on, not just through their stewardship work. Seeing the wide range of groups that take part in stewardship work helps us understand how a variety of civic issues overlap with stewardship. Groups responded to the question, What does your group work on?

The most selected primary focus is *environment* (Figure 10). However, *community improvement and capacity building* are the most frequently selected types of organizational focus when offered the opportunity to select all categories that apply (Figure 11). This suggests that the majority of respondents see their work as somehow impacting community and capacity, even if they focus more specifically on *environment* or *education*.

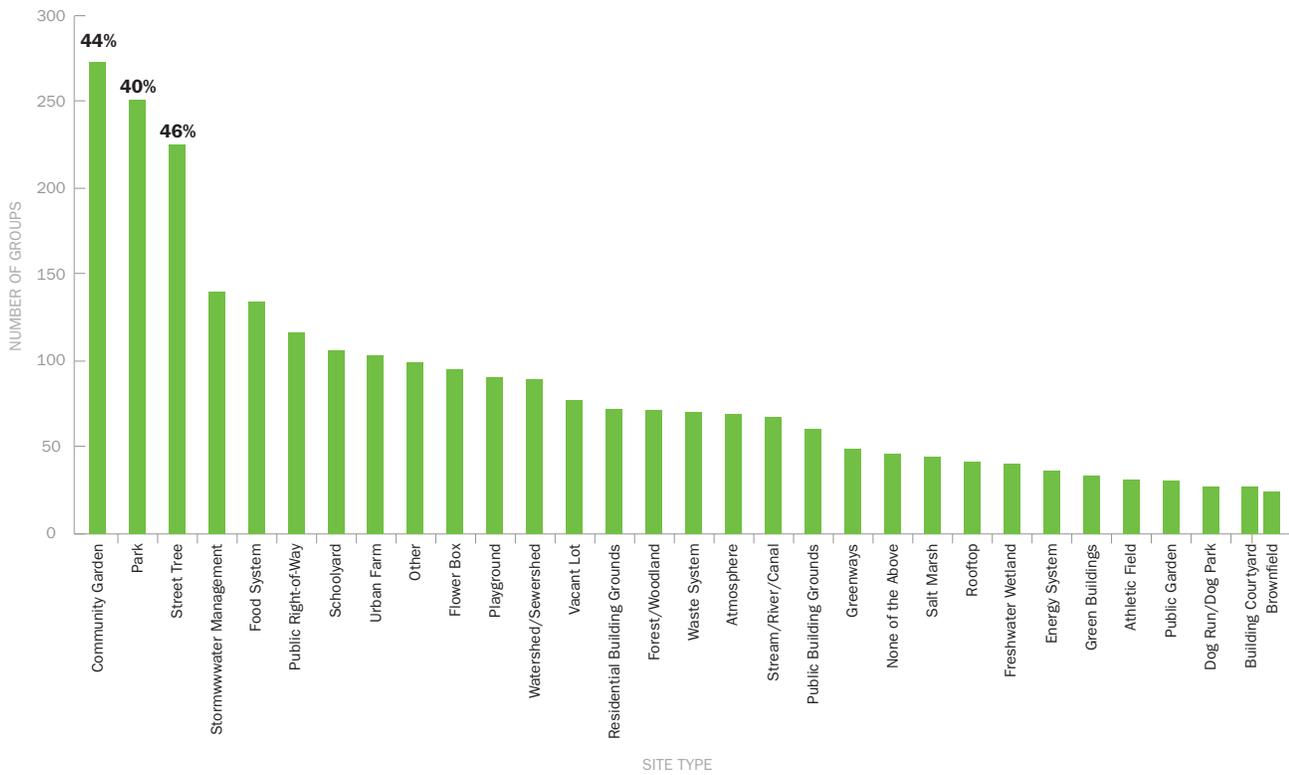


Figure 8. Number of NYC groups by site type with frequencies (as %) identified for the three most common categories, select all option (n=623).

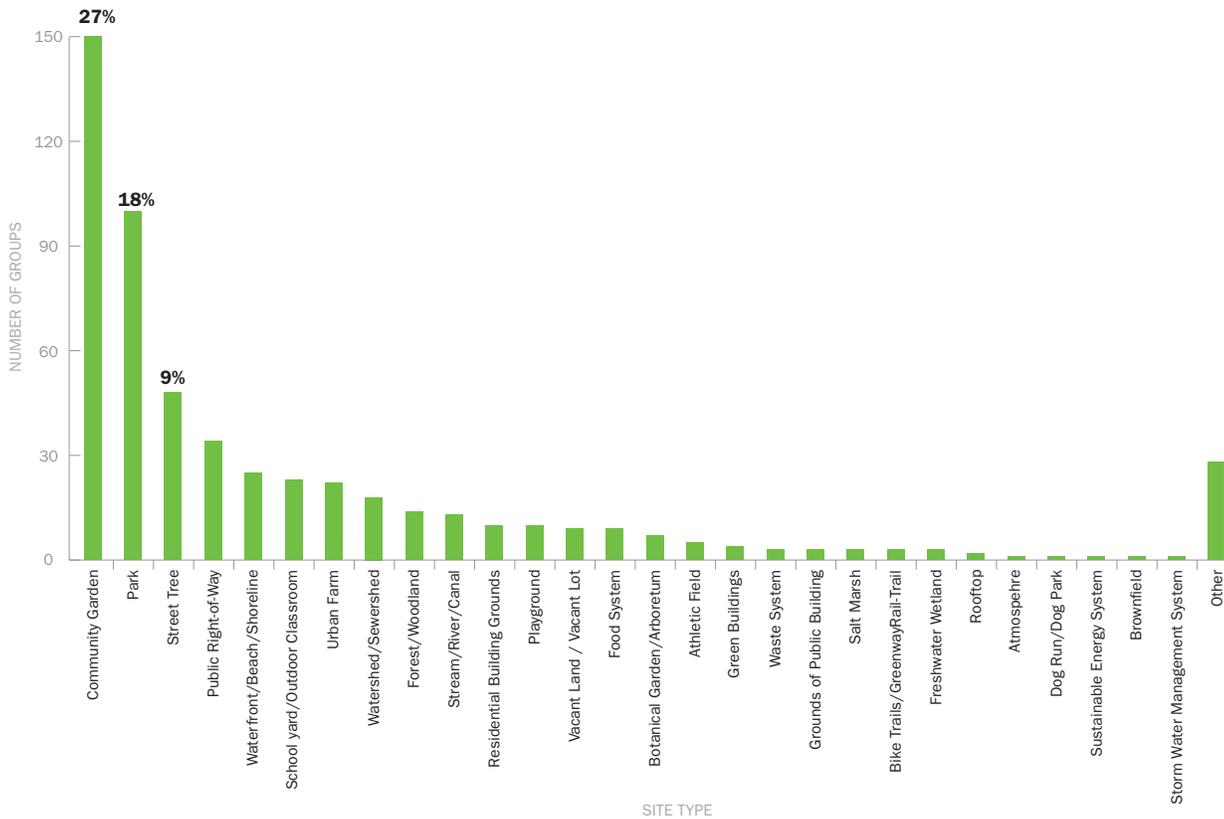


Figure 9. Number of NYC groups by site type with frequencies (as %) identified for the three most common categories, select one option (n=551).

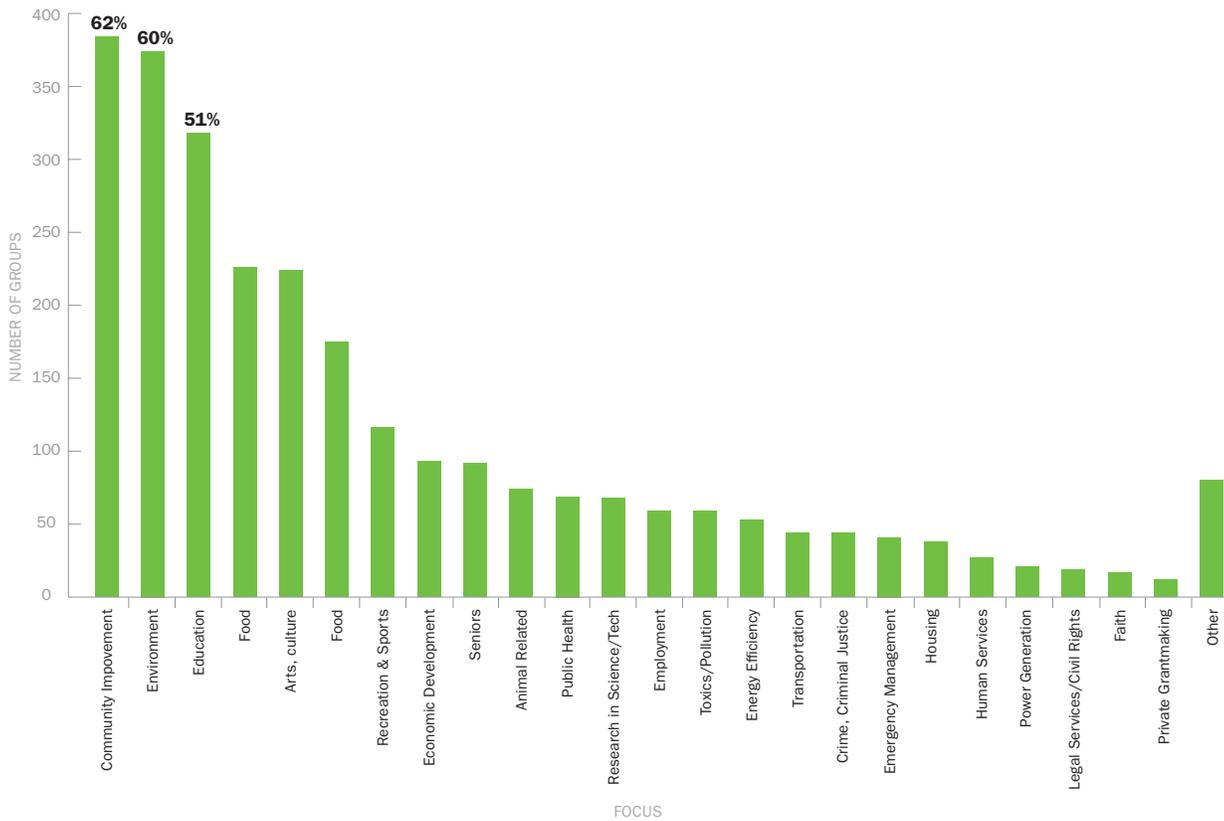


Figure 10. Number of NYC groups by organizational foci with frequencies (as %) identified for the three most common categories, select all option (n = 621).

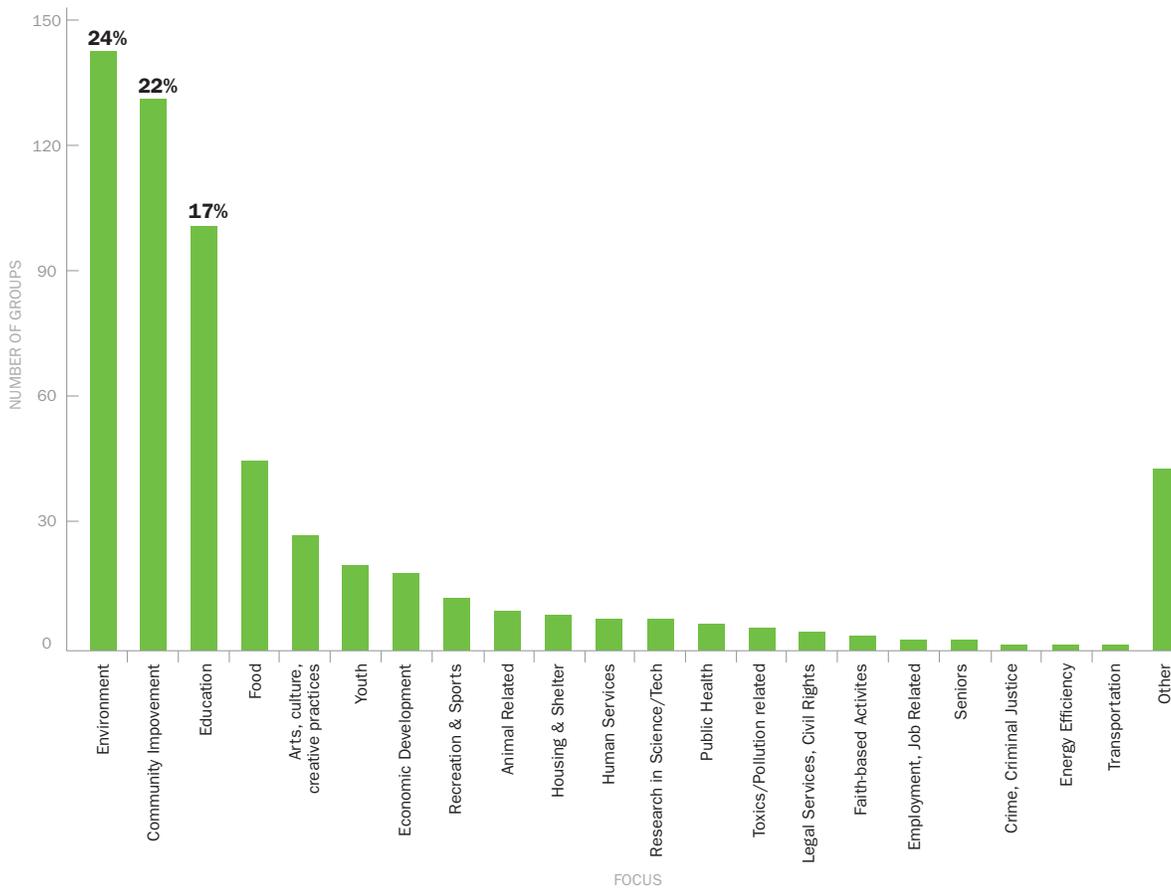


Figure 11. Number of NYC groups by organizational foci with frequencies (as %) identified for the three most common categories, select one option (n=595).

Table 3. Coded actions of stewardship goals.

ACTION	DEFINITION
Access	Improve or provide access to something
Advocate	Advocate and/or plan for the local environment (planning, organizing, direct action, fundraising); promote, encourage better practices/planning for the local environment
Beautify	Beautify a place, make a place more attractive
Collaborate	Collaborate, cooperate, work closely with other groups
Connect	Create relationships, collaborations, partnerships; bring people together
Conserve	Conserve or preserve the local environment in the face of development pressures and threats
Create	Create new programs, events, jobs
Educate	Educate, train, change behavior, increase awareness and better understanding of the public about the local/global environment
Empower	Make people stronger and more confident about stewarding their environment; enhance their pride and interest; make people take ownership of a place
Enjoy	Enjoy, experience a place in the local environment
Improve	Improve, enhance something in the local or global environment; make the local environment cleaner, greener
Increase	Make greater in size, amount, intensity
Maintain	Manage or maintain a site (park/garden/area) or program
Mobilize	Persuade, engage, assemble and organize people; get people involved; have more impact on people
Monitor	Monitor, collect, gather data about the quality of local environment (air or water quality, dumping, species monitoring, citizen science)
Protect	Keep safe from damage
Restore	Restore a place, an ecosystem, an entity in the local environment
Secure	Make a local environment safer
Transform	Transform or completely change local or global environmental systems.

are used by many respondents. This demonstrates that environmental stewardship groups are contributing to the overall sense of well-being in their neighborhoods.

All STEW-MAP respondents are asked to share their groups’ goals and metrics in open-ended answer form. A coding process categorized the responses into multiple categories to help understand the trends among the goals of stewardship groups, as

well as the metrics they collect to help inform their progress. Goals are categorized first by the scale at which the groups are attempting to create change (Figure 14). The vast majority of goals are at the neighborhood scale, such as creating a greener street or improving community engagement. Groups’ goals to create local-scale change align with the number of groups working at a neighborhood or smaller scale (see Geography section, page 27).

A CLOSER LOOK: BLOCK ASSOCIATIONS IN STEW-MAP

More than 60 block and/or civic associations responded to the STEW-MAP 2017 survey. Most indicate either *manage* or *advocate* as their primary function, suggesting actions that focus both on the physical assets of their block as well as the community culture. Many span the environmental and civic realm, with efforts such as unifying neighbors in addition to greening streets. Common themes among the missions in these groups include their desire to build community connections, and to bring more safety and beauty to their blocks. Some encourage care of street trees, and some plan social events or establish small community gardens. A few share specific ways that their group was able to respond to local needs, like organizing to gain historic landmark protection or advocating for better schools and city services.

One such group, the East 34th Street Block Association in Brooklyn, explains the connection between their environmental and civic goals as follows:

“We are trying to improve our neighborhood by caring for our block. When a block is cared for, when neighbors know and work with each member, we improve our community and ensure greater safety for all. In addition, a well-cared-for block, with flowers, shrubs, and trees, maintains the economic value not just of this street, but of our city”.

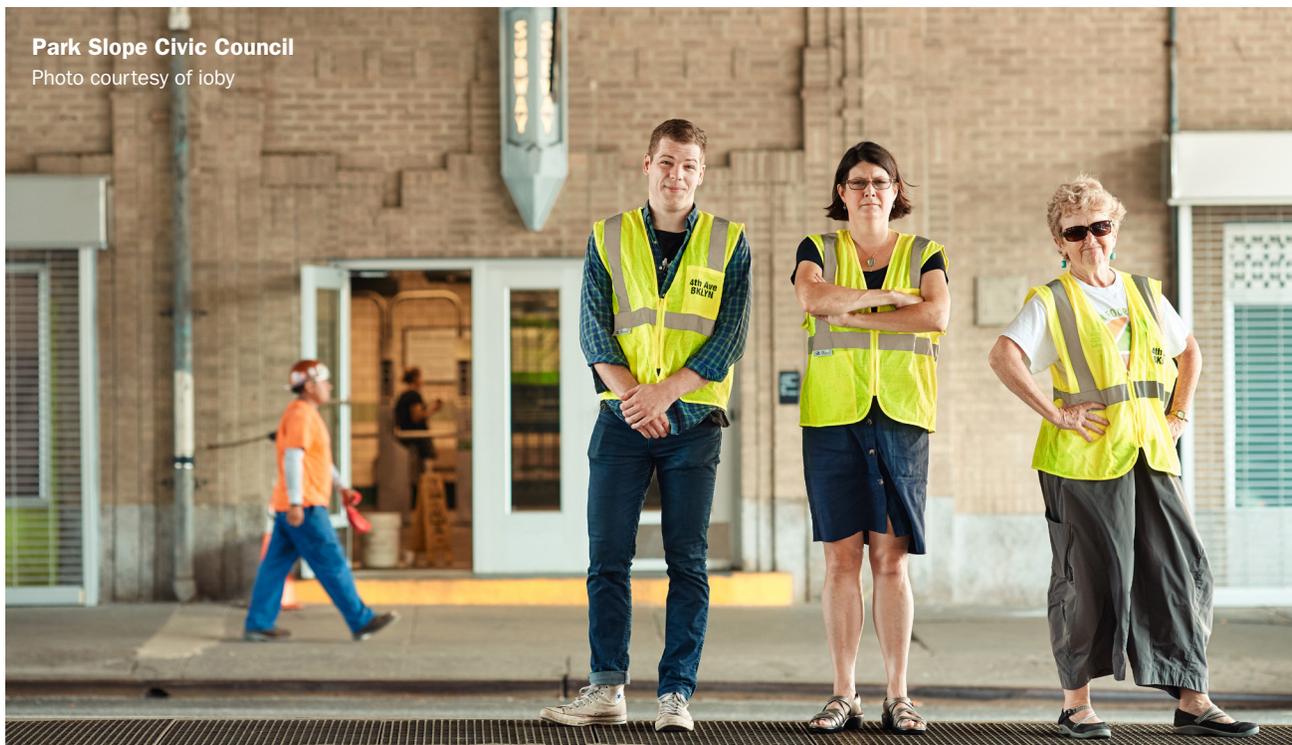


Table 4. Number of staff, members, and volunteers for NYC-based groups responding to the 2017 STEW-MAP survey.

	FULL-TIME STAFF	PART-TIME STAFF	MEMBERS	VOLUNTEERS
Mean	13.28	7.28	1,144.82	228.68
Standard Deviation	62.81	34.36	9,137.47	2,145.71
Minimum	0	0	0	0
Maximum	877	500	150,000	30,015
n	423	406	428	516

Goals are also categorized into a series of actions, or ways in which a group goes about attempting to achieve their goals (Table 3). Each group received multiple codes, depending on how many different actions were mentioned. The most popular action by far is *improve*, defined as “Improve, enhance something in the local or global environment, make the local environmental cleaner, greener,” followed by *educate*. The rest of the actions are similar in frequency and include *mobilize*, *beautify*, and *connect* (Figure 15).

Groups are also asked whether they track any metrics and, if relevant, to list the metrics they track. These are coded similarly to goals, into categories classifying the metrics’ type, action, and subject. Figure 16 shows the metrics groups identify as tracking, organized by subject. The subjects are further categorized into environmental and social metrics. Of both of those categories, the most popular types of metrics collected by groups are *labor* (i.e., number of volunteers), *participation* (i.e., number of participants, members, visitors), and *activity* (i.e., everything related to programs and events).

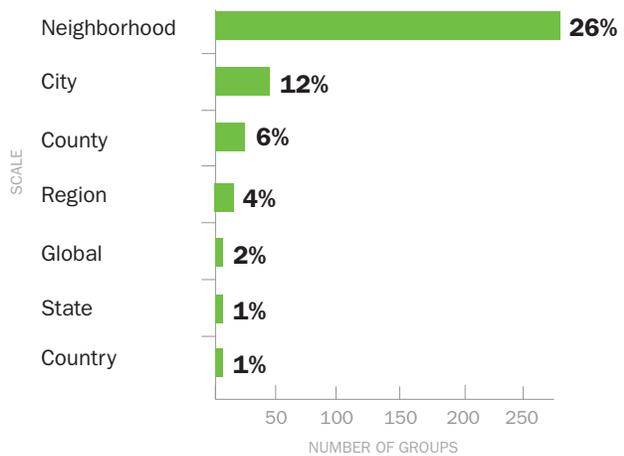


Figure 14. Number and frequency (as %) of NYC stewardship groups’ goals (n=434).

Staff and Year Founded

Groups are asked to report on the number of full-time and part-time staff, members, and volunteers (Table 4). The minimum reported number for all of these categories is zero, because many groups have no paid staff, and some groups do not work with volunteers, nor do they operate with a membership structure. In the STEW-MAP survey, volunteers refer to regular volunteers and excludes participants in one-time volunteer events. Members can refer to members of a group, groups that are members of a larger coalition, or those who pay dues and/or membership fees to larger organizations. Numbers of volunteers and members have an especially large range,

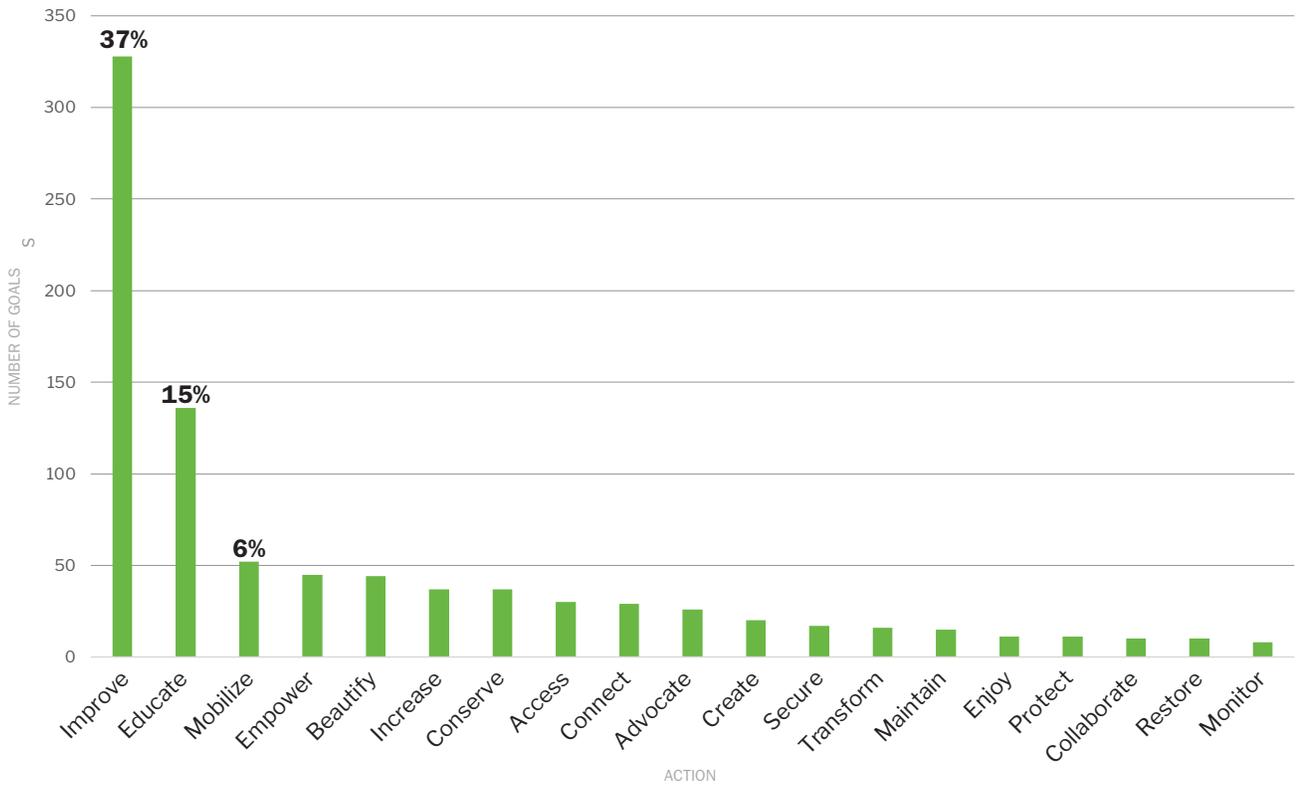


Figure 15. NYC stewardship groups' goals by action with frequencies (as %) identified for the three most common categories (n=215).

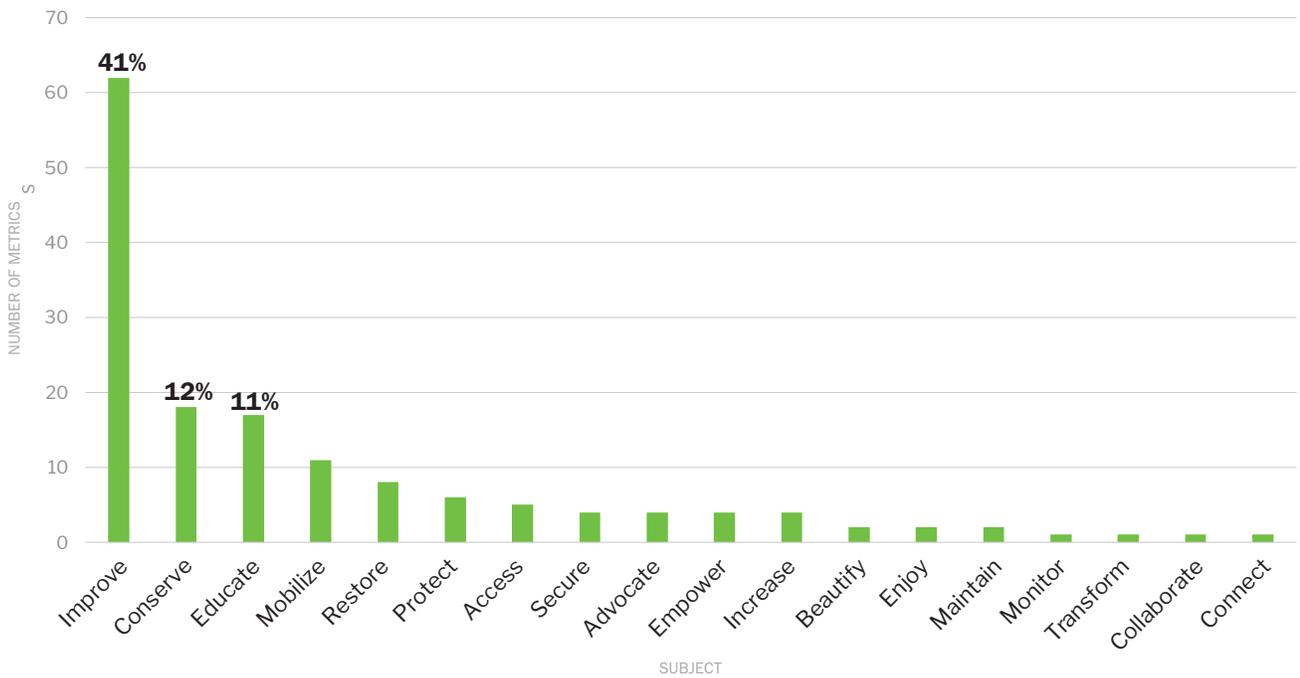


Figure 16. NYC stewardship groups' metrics by subject with frequencies (as %) identified for the three most common categories (n=215).

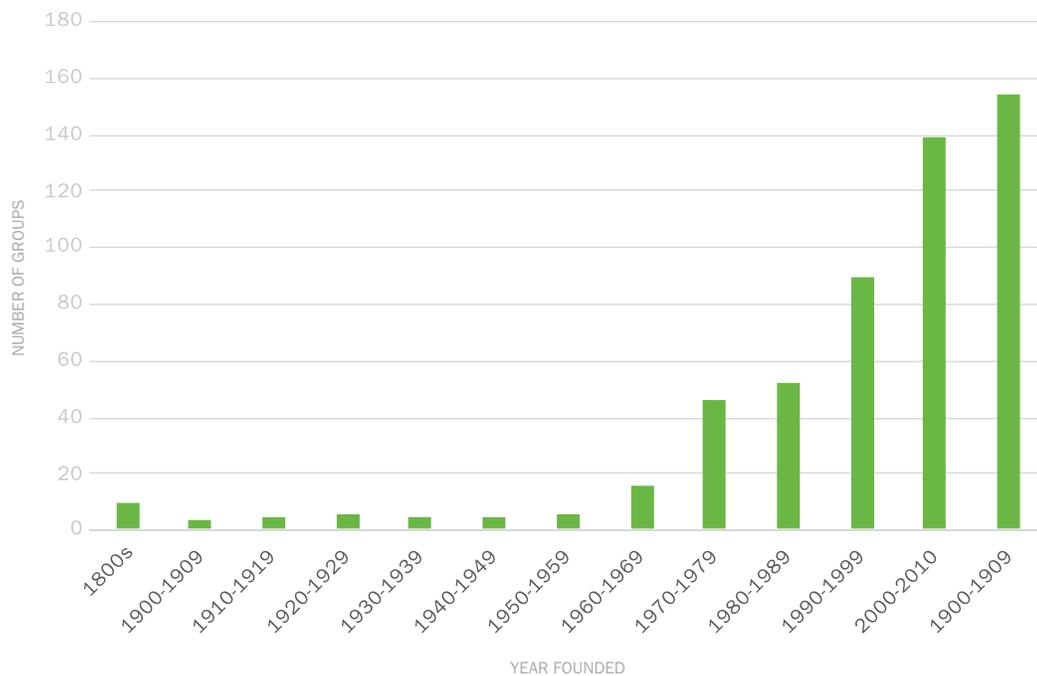


Figure 17. Number of NYC stewardship groups by year founded (n=520).

due to the sizes and natures of responding groups. For example, citywide groups that rely on volunteers for public events, such as Partnerships for Parks and New Yorkers for Parks had over 5,000 volunteers. Certain groups with a broad geographic scope, such as League of Conservation Voters, have a large membership base. Trout Unlimited, which counts all donors as members, has 150,000 members.

Groups are also asked to report their year founded. The data indicate an increase in groups since 1950, with the caveat that this does not take into account groups that have disbanded or ended prior to 2017. The increase in groups after 2007, when the last STEW-MAP survey was conducted, suggests that grassroots stewardship is becoming more popular (Figure 17).

Legal Designation and Land Ownership

The majority of the NYC-based groups responding are registered nonprofit groups,

though there were also many informal community groups, such as block and civic associations with no official legal designation (Figure 18). For the purpose of this study, civic stewardship groups excludes groups that identify as part of government or the private sector.

Most of the responding groups work primarily on NYC government-owned land (Figure 19). This accounts for public spaces such as *parks*, as well as *sidewalk/street tree* and *other public right-of-way* site types.

Communication and Services Offered

Groups are asked to choose all methods of communication used. *Word of mouth* was the most commonly selected communication for NYC stewardship groups, followed closely by *social media*, *flyers*, *email blasting*, and *website*. All of these methods are either free or low-cost, and are therefore accessible to groups regardless of budget. In fact, the more expensive methods of communication

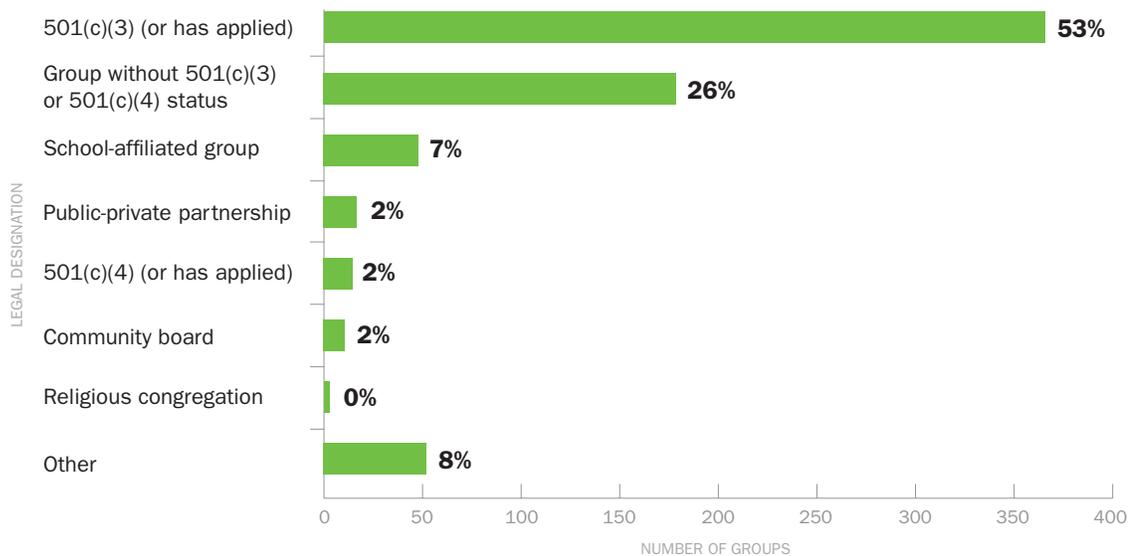


Figure 18. Number and frequency (as %) of NYC stewardship groups by legal designation (n=691).

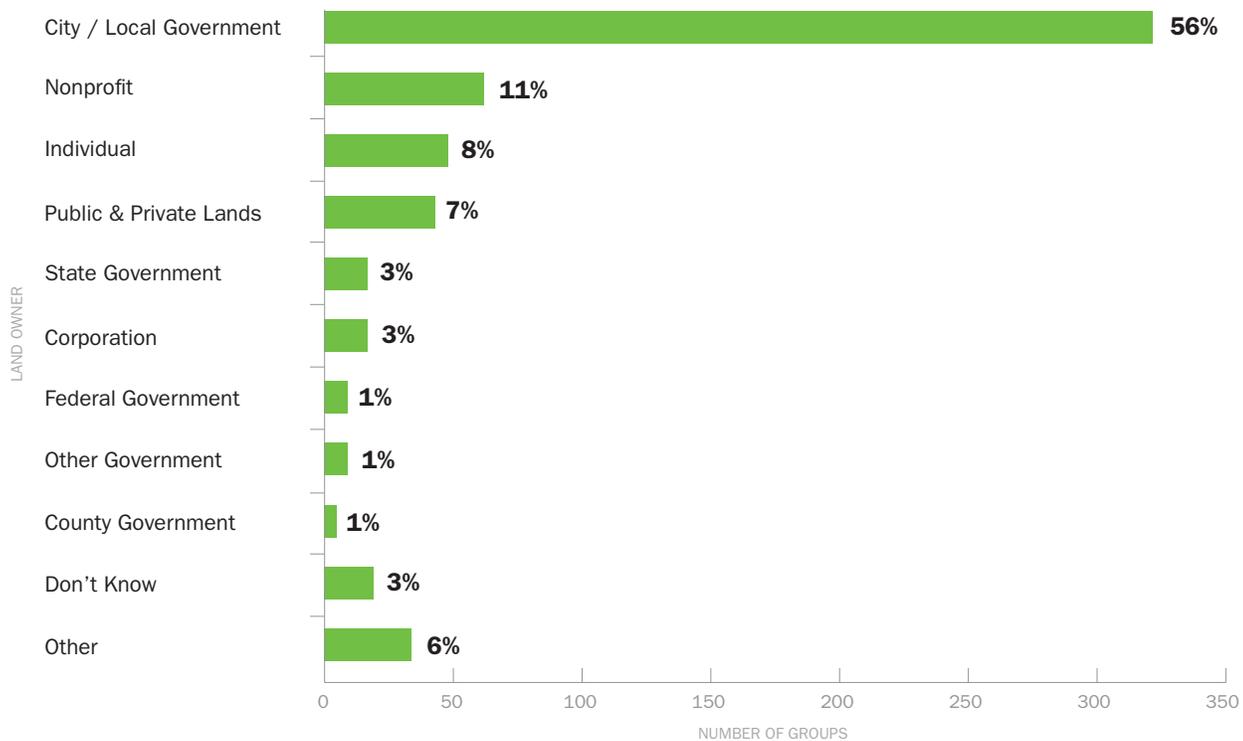


Figure 19. Number and frequency (as %) of NYC stewardship groups by primary land owner (n=574).

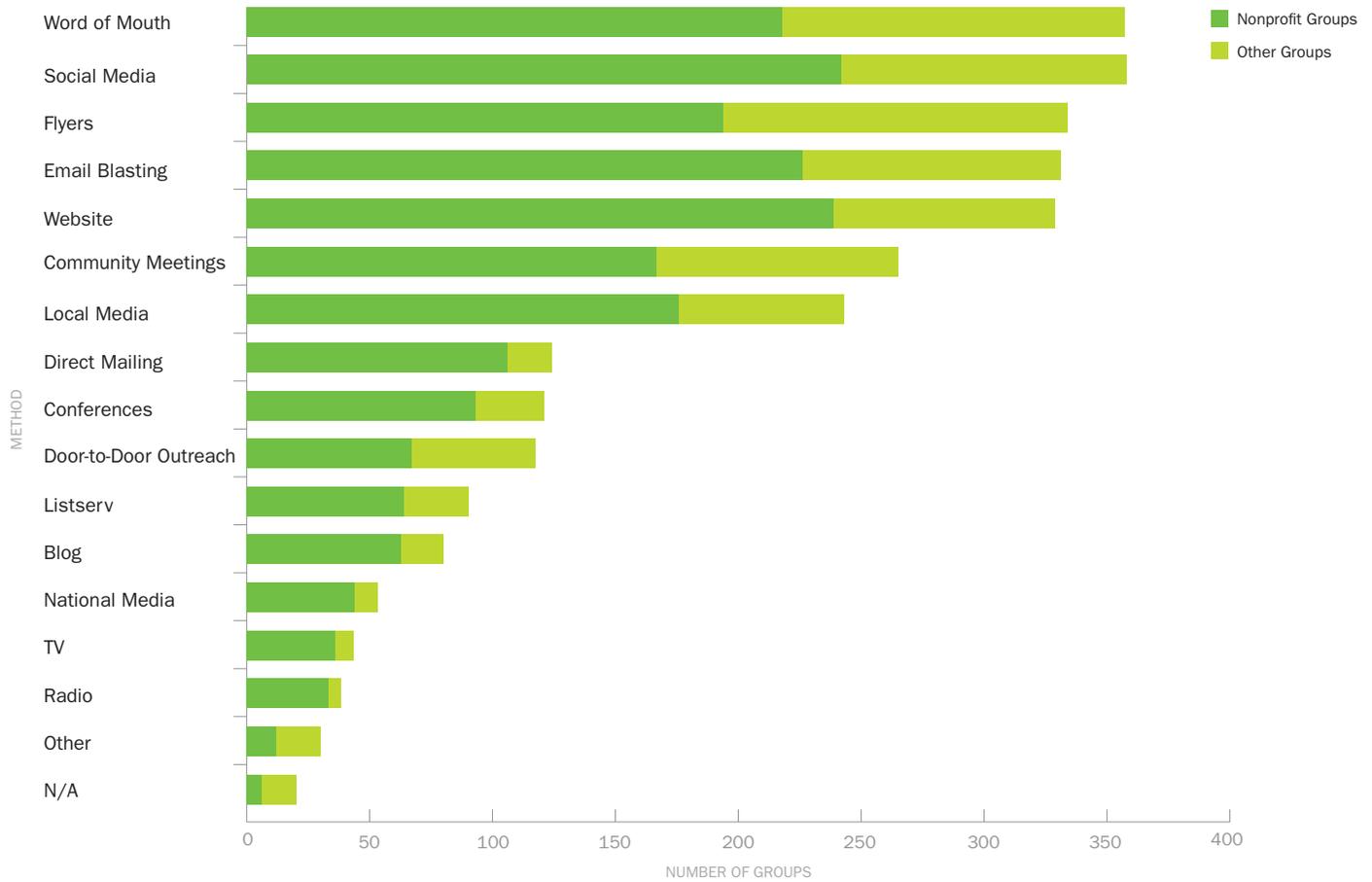


Figure 20. Number of NYC stewardship groups by communication methods and sector (n=522).

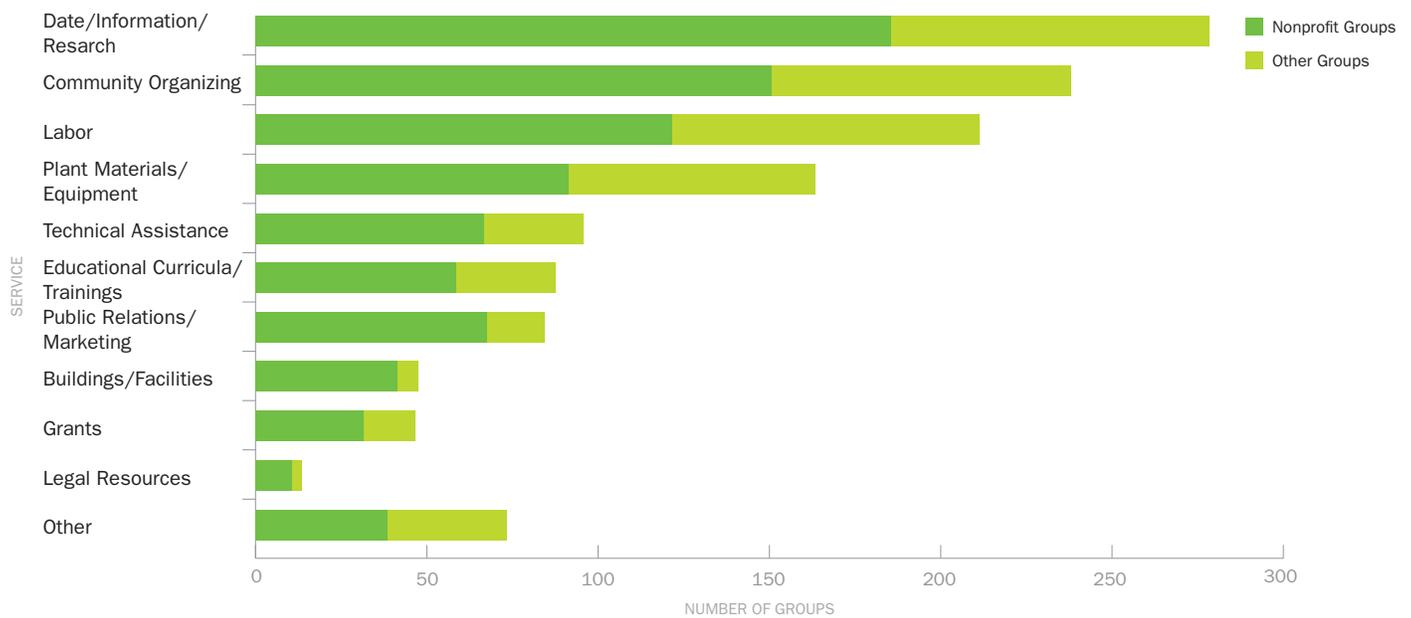


Figure 21. Number of NYC stewardship groups by services provided (n=488).

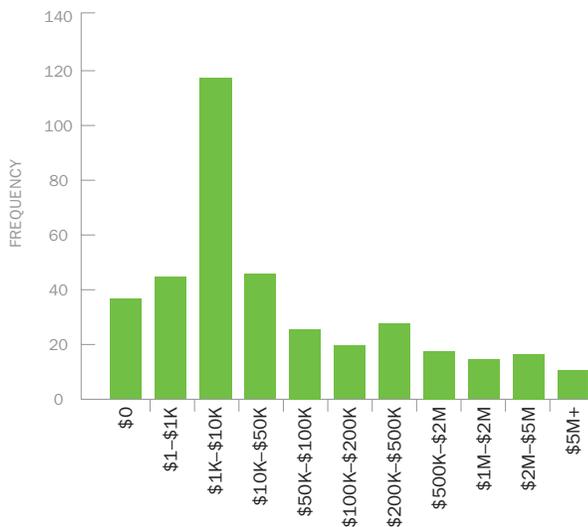


Figure 22. NYC stewardship groups' budgets (n=369). An additional 86 groups reported "no budget" and 105 groups declined to respond to this question.

involving media are disproportionately selected by nonprofit groups that presumably have a budget dedicated to outreach (Figure 20). It is also notable that only 51 percent of groups communicate via community meetings, suggesting that less time-consuming and costly methods are more popular.

The next question asks groups to check off all of the services they provide. *Data/information/research* is the most frequently selected, followed closely by *community organizing and labor*. More tangible services, like *labor* and *plant materials/equipment* are slightly less common. In 2007, respondents also said that *community organizing and labor* were among the top three, but *data* was not (USDA Forest Service 2007). The least common services of *marketing, facilities, grants, and legal resources* all require more funding and specialized staff, and it is therefore expected that they are provided more frequently by nonprofit groups (Figure 21).

Budget

The STEW-MAP survey asks groups to share their budget in an open-ended question format. Many groups chose not to answer this question (105 groups), but of the 369 groups that responded, the vast majority have an annual budget that falls between \$1,000 and \$10,000. This was not the case in the 2007 STEW-MAP survey, where respondents said that they most common budget category was \$0 to \$1,000 (USDA Forest Service 2007). In 2017, 36 groups report a budget of \$0 and a total of 86 check a box indicating that they are operating with no budget at all. At the same time, 10 have a budget of over \$5 million (Figure 22). Some groups indicate that they do not wish to share their budget details (105 groups). The largest budget category in the 2017 data is \$1,000 to \$10,000, proportionally larger than the same category in 2007. This could be because of professionalization over time, or could be the result of more micro grants and other funding opportunities for stewardship groups.

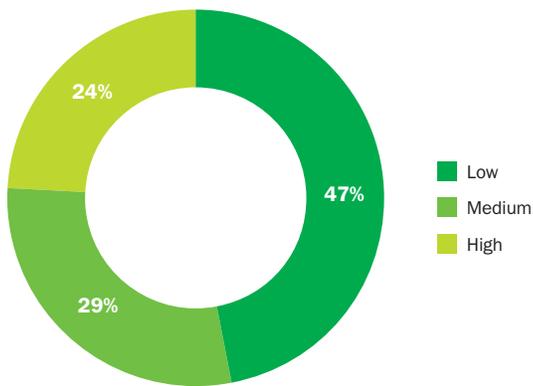


Figure 23. Professionalization scores for NYC groups (n=294).

Professionalization Index

To understand the overall professionalization of respondent groups, the professionalization index used for the 2007 NYC STEW-MAP data was replicated for the 2017 data (Fisher et al. 2012). Professionalization is based on staff and budget and is one way to understand group capacity. To recreate the index, the open-ended budget responses are binned into one of five categories:

1. Less than \$1,000
2. \$1,000–\$9,999
3. \$10,000–\$999,999
4. \$100,000–\$1 million
5. \$1 million+

Number of staff are also assigned to five categories:

1. 0–1.5
2. 2–3.5
3. 4–5.5
4. 6–10.5
5. 11+

Each full-time staff member counts as 1, and part-time staff count as 0.5 each. The staff and budget for each group are then averaged, resulting in a number between 1 and 5. An overall professionalization score is assigned based on this average, where 1–2 = low,

2.5–3.5 = medium, 4–5 = high. Of the New York City respondents, 47 percent are assigned a low professionalization score (Figure 23), suggesting that many of the city’s stewardship groups are operating with low professionalization.

Next, professionalization indices are compared to year founded in order to understand when groups of varying professionalization scores were founded (Figure 24). Beginning in the 1960s, we see a steady increase of stewardship groups with a low professionalization score. This supports the idea that smaller grassroots stewardship groups are on the rise in New York City. Further, it takes time for groups to professionalize, and many groups that start out as small grassroots groups with low budgets eventually grow and sometimes even obtain nonprofit status. Professionalization and site type are visualized together (Figure 25), and the top three site types all have low professionalization scores.

Impacts and Influences

The 2017 STEW-MAP survey includes a set of questions to understand groups’ perceived impacts. This question was answered on a seven-point Likert scale indicating level of agreement with a number of outcomes (1=strongly disagree, 7=strongly agree).

Stewardship groups most commonly identify as having an impact on *community participation* and *plants and habitat quality* – demonstrating that they aim to achieve both social and environmental outcomes (Figure 26).

Groups are also asked to comment on other influences on a seven-point Likert scale (1=not influential, 7=highly influential). We seek to understand the ways in which city plans and programs affect groups, as these have been demonstrated to serve as

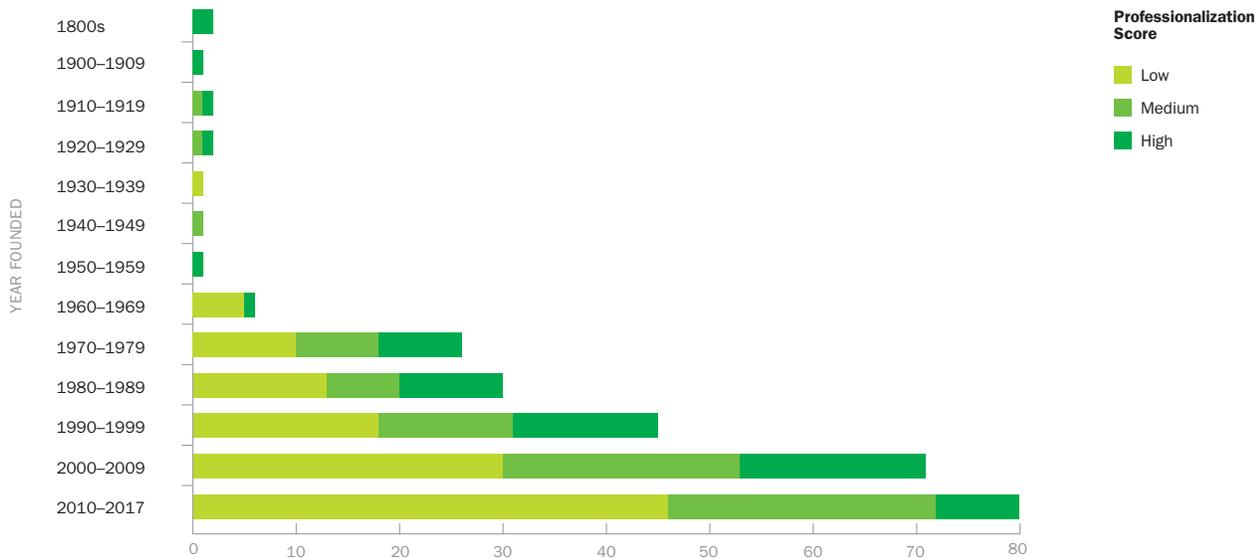


Figure 24. Number of NYC stewardship groups by professionalization and year founded (n=294).

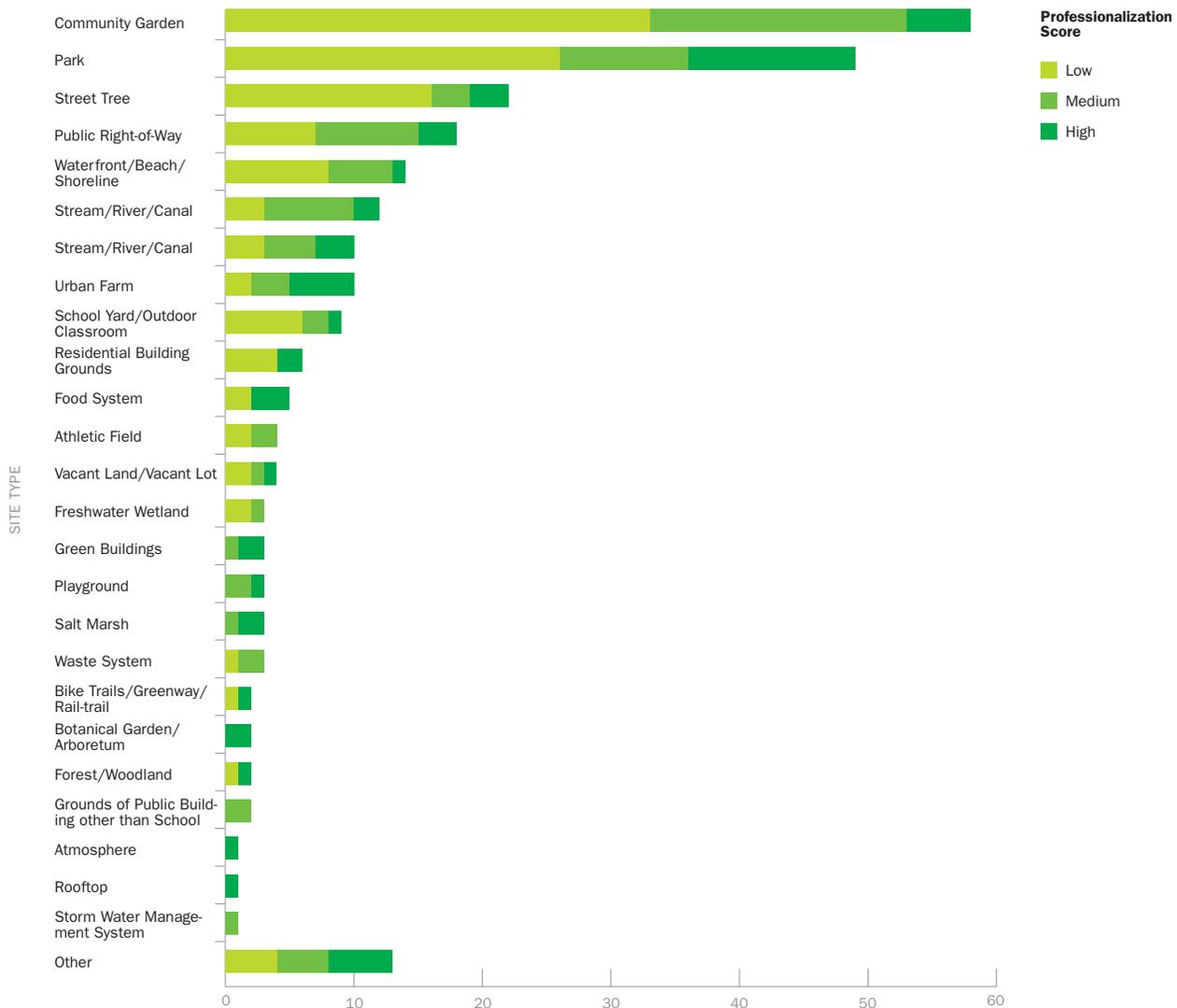


Figure 25. Number of NYC stewardship groups by professionalization and site type (n=294).

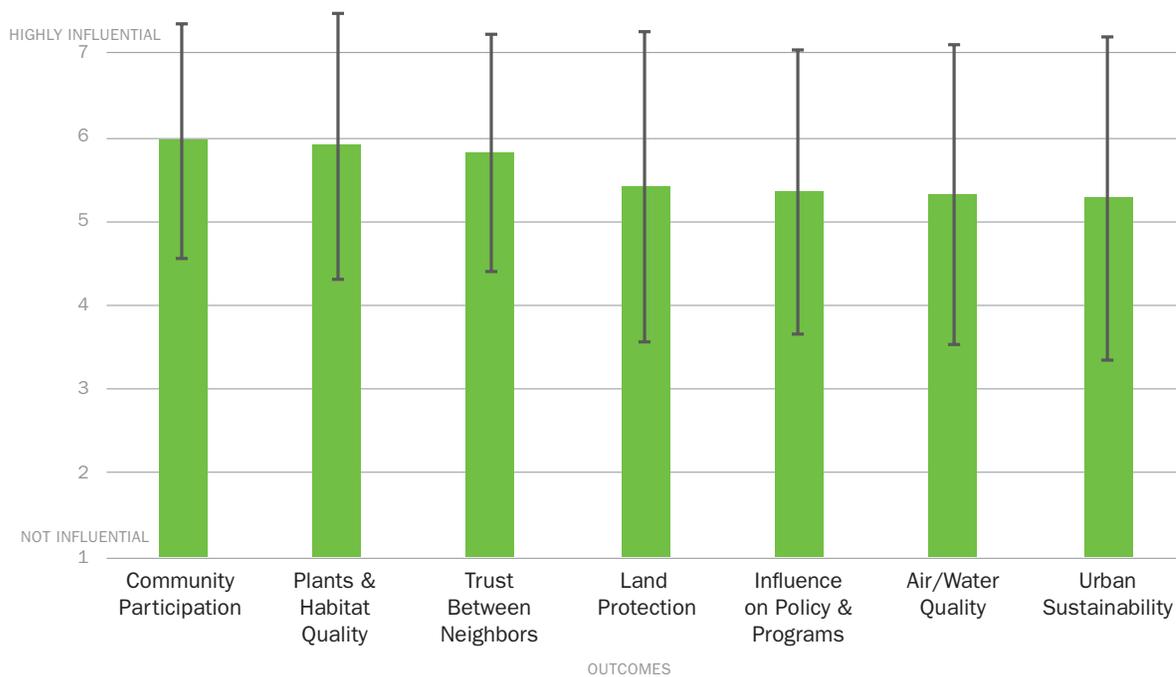


Figure 26. Average perceived outcomes of NYC stewardship groups. Error bars show standard deviation (n=523).

key moments in which governance networks rearrange (e.g., Campbell 2017). Looking across a wide range of efforts related to sustainability and resilience—including urban forestry, transportation, and arts—we find that groups were most strongly influenced by MillionTreesNYC—the plan to plant and care for 1 million trees citywide from 2007–2015—and PlaNYC, the city’s first sustainability plan from 2007 (Figure 27).

Finally, in addition to city plans, a broad range of environmental and social drivers also influence group practices. The most commonly identified influences are *climate change*, *neighborhood redevelopment*, and *extreme weather*. Through these questions, we see the way in which stewardship groups shape and are shaped by the dynamic urban environment (Figure 28). Error bars have been provided to demonstrate the standard deviation of responses, indicating whether responses were highly varied or uniform across responding groups.

Geography

New York City groups work on areas that span a variety of size classes, with most working at a neighborhood level or smaller, 10 acres or less (Figure 29). Some groups based in New York City work at larger regional extents, others work in a single community garden or parcel.

Often, public spaces such as community gardens and parks have many groups working in the same area. Sometimes turfs overlap or are stacked on top of one another. STEW-MAP survey results allow us to calculate the number of turfs in an area. Figure 30A shows density patterns and make it easier to visualize how many groups work in a given area. Parts of NYC have more turfs of responding groups than other parts, and some of these groups’ turfs also extend out into the region, including the entire state of New York (Figure 30B). The inset map (Figure 30C) zooms in to highlight a few of these smaller turfs in lower Manhattan and northern Brooklyn.

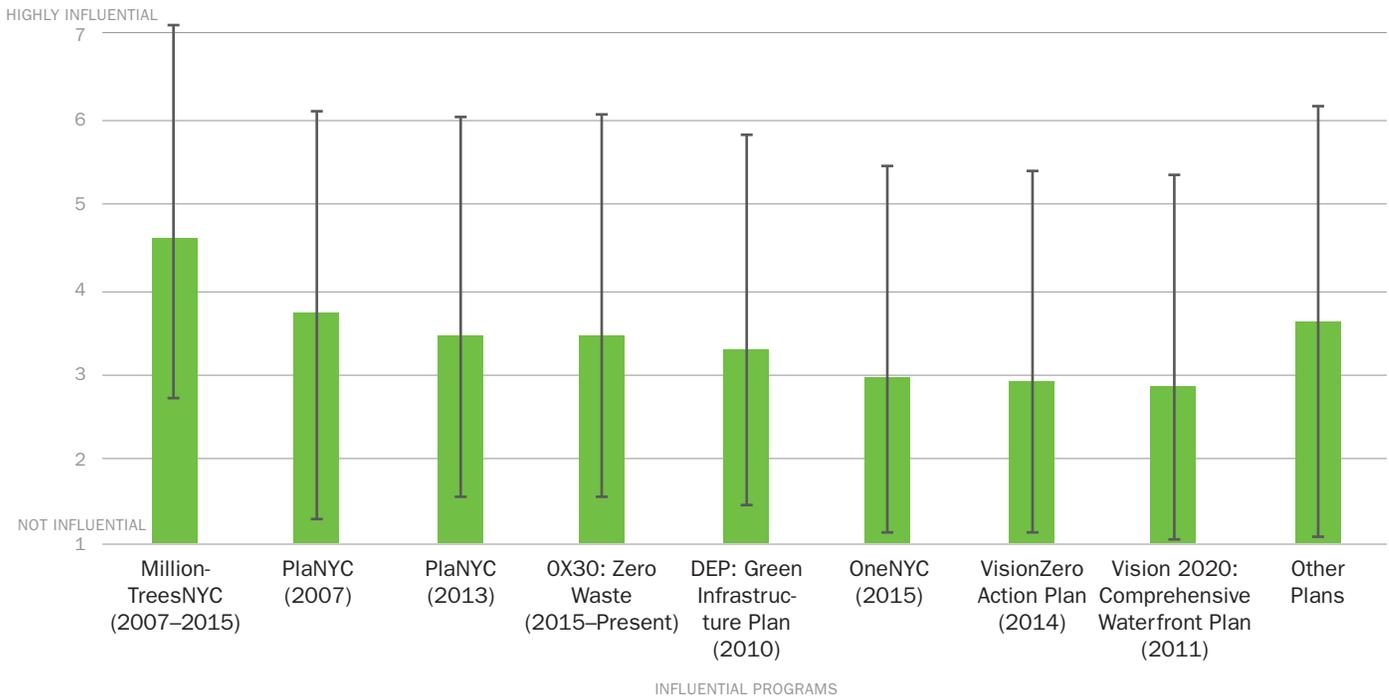


Figure 27. Average influential plans and programs for NYC stewardship groups. Error bars show standard deviation (n=466).

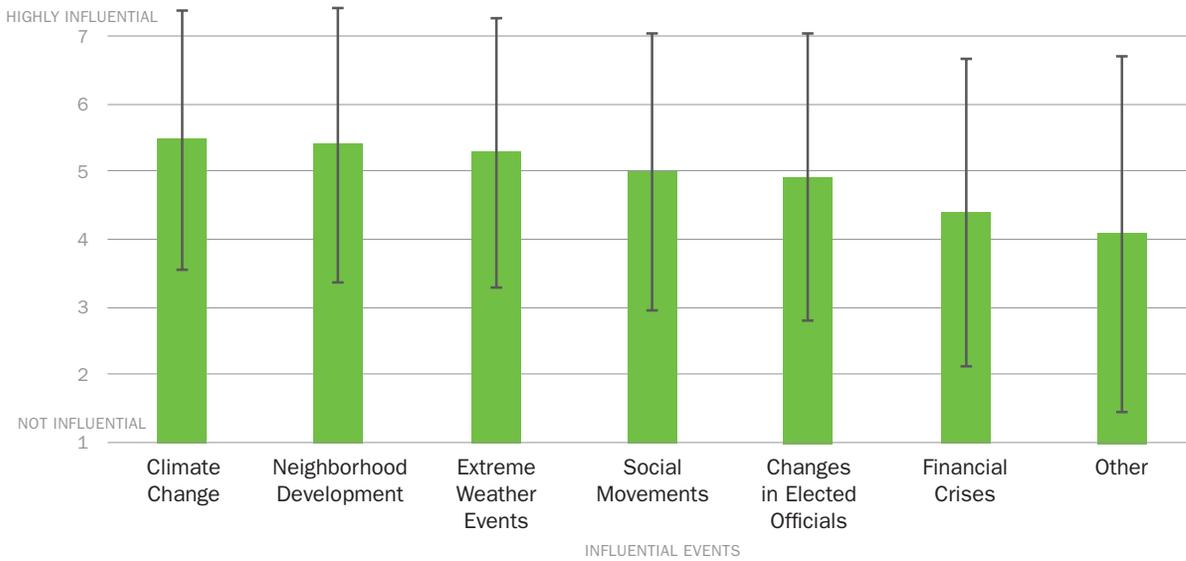


Figure 28. Average influential events and processes for NYC stewardship groups. Error bars show standard deviation (n=478).

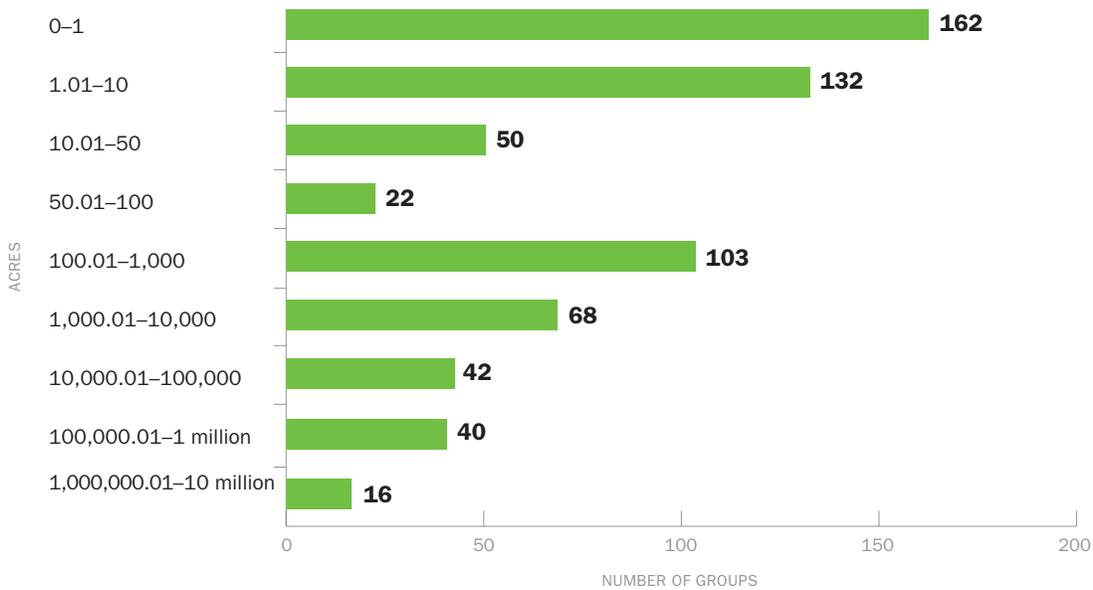


Figure 29. Distribution of turf sizes for NYC-based civic environmental stewardship groups (n=635).

Also notable is that some groups are working not just on land but into the waters surrounding New York City. The Hudson River and Jamaica Bay have more responding groups working in those areas compared to the waters between Long Island Sound and the East River, or waters between Staten Island and New Jersey.

Networks

The STEW-MAP survey includes questions on three types of networks: collaboration, knowledge, and resources. We present results for only the collaboration network, limited to NYC respondents and their named collaborators. The collaboration network includes 2,042 groups, including 455 respondents and 1,774 named groups (some respondents are also named groups). Figure 31 identifies the collaboration network of NYC respondents and named groups. Most of the groups in the network are civic organizations (85.2 percent), with school groups comprising 7.3 percent, government comprising 5.5 percent, and businesses

2.1 percent of the network.

Table 5 presents the 20 groups with the highest in-degree statistic in this collaborative network. In-degree is a measure of the number of times a group is named by another group. Evaluating in-degree can be one way of assessing broker organizations, or those organizations in a network that can serve as connectors of people, information, and resources. Of the most named groups, five are government agencies (NYC Parks, NYC Department of Sanitation, NYS Department of Environmental Conservation, NYC Department of Environmental Protection, and NYC Department of Education), one is a public-private partnership (Partnerships for Parks), and the other 14 are civic organizations. The most named group is the NYC Department of Parks and Recreation, which is the largest land manager in the city. This is followed by Partnership for Parks, which is a public-private partnership between NYC Parks and City Parks Foundation that builds local community capacity to engage with parkland, including by helping to foster

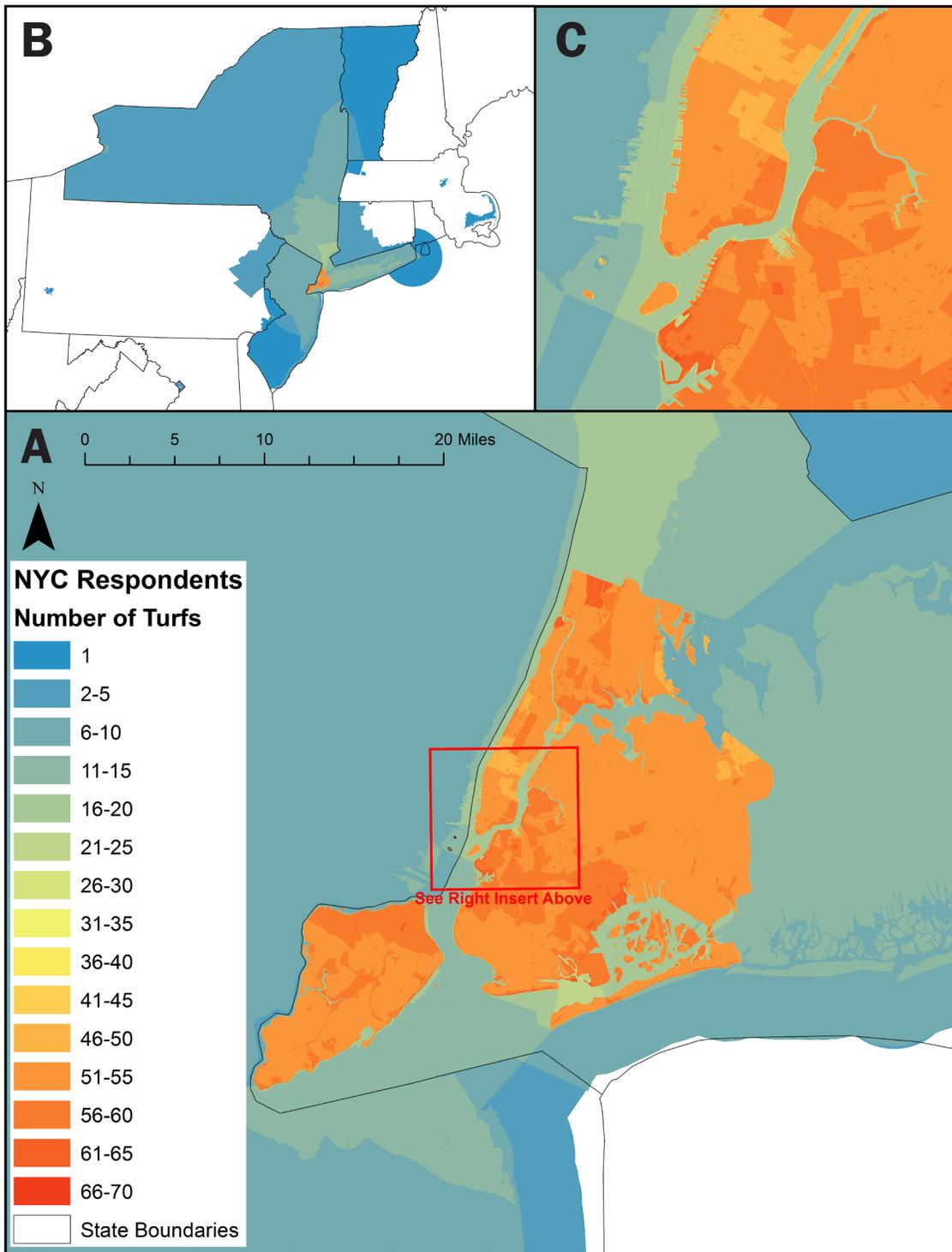


Figure 30. Density of NYC-based civic stewardship groups (n = 635). Map inset B shows areas outside the NYC metropolitan region where NYC-based groups work. Map inset C shows areas in NYC with high density of stewardship groups. Map created by Michelle Johnson, USDA Forest Service.

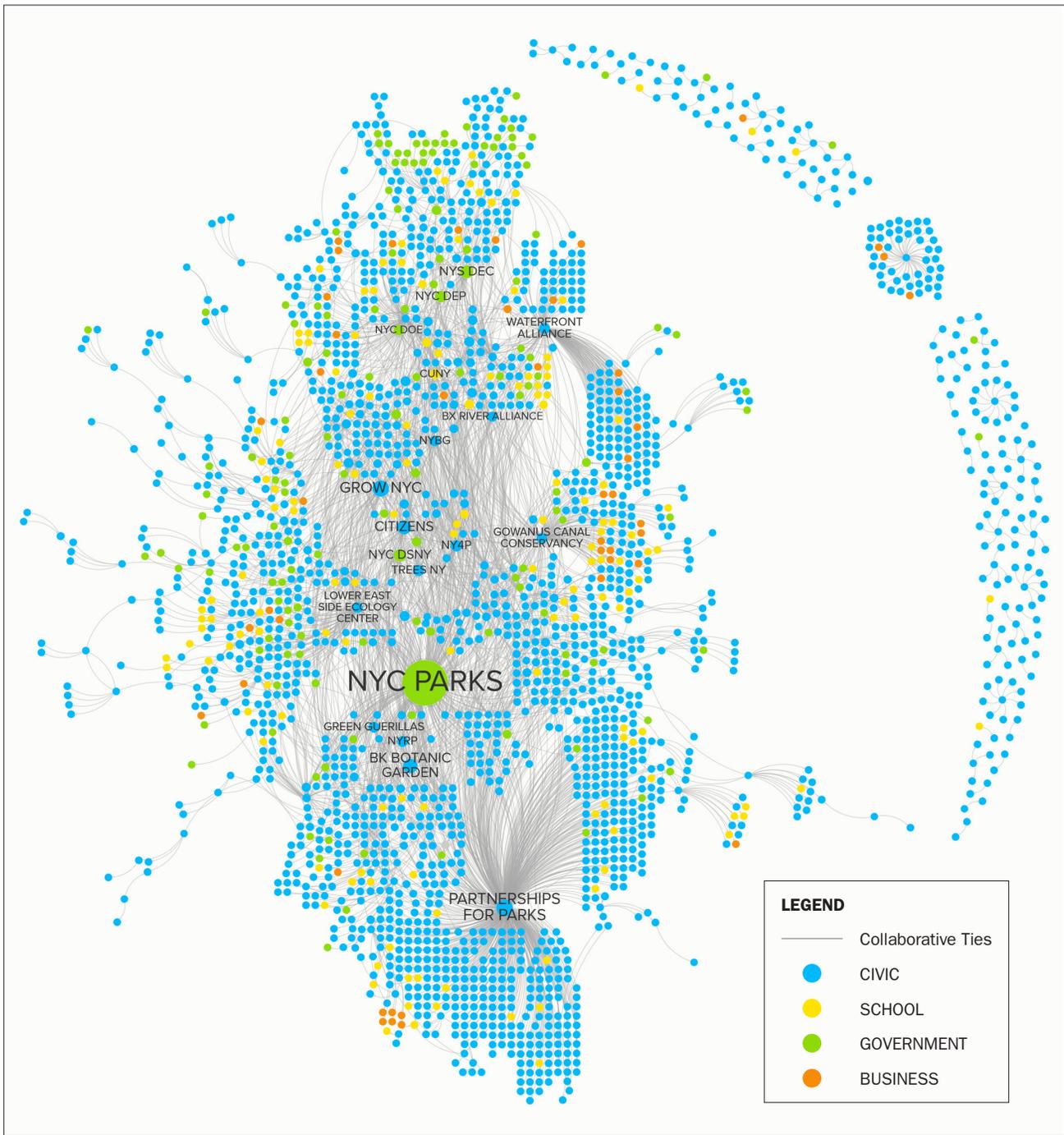


Figure 31. Organizational collaboration network of NYC respondents and groups they named, color-coded by sector and size-coded by in-degree statistic (n = 2,042, including 455 respondents, 1,774 named groups). Network graph created by Michelle Johnson, USDA Forest Service.

Table 5. In-degree statistics for the 20 most-mentioned groups in the NYC-only collaboration network.

ORGANIZATION	IN-DEGREE STATISTIC
New York City Department of Parks and Recreation	182
Partnerships for Parks	50
Grow NYC	43
Brooklyn Botanic Garden	36
Citizens Committee	36
Department of Sanitation of New York City	27
New Yorkers for Parks	21
Trees New York	21
Waterfront Alliance	20
New York Restoration Project	19
Green Guerillas	19
New York State Department of Environmental Conservation	19
New York City Department of Environmental Protection	18
Gowanus Canal Conservancy	16
New York Botanical Garden	16
Lower East Side Ecology Center	16
Bronx River Alliance	15
New York City Department of Education	14
City University of New York	14
Riverkeeper	13

hundreds of “Friends of Parks” groups citywide. While many of these broker groups have citywide mandates, it is important to note that several neighborhood-scale groups also appear, such as the Gowanus Canal Conservancy and Lower East Side Ecology Center. These brokers also span the range of site types in the dataset, focusing on parks, waterways and waterfronts, gardens, trees,

waste, and the built environment. In addition to these central brokers with large networks, it is also important to understand the role of groups with smaller networks or subsets of the full network. Critical to this understanding is that the number of network ties is not the sole indication of capacity or impact; innovation can often occur on the periphery.

Regional Groups Organizational Characteristics

STEW-MAP 2017 included a pilot survey to begin to examine the stewardship work occurring in the region outside of the five boroughs (see methods). The regional sample only includes 501(c)(3) organizations; these organizations were identified through 990 forms. The sample size for the region is 93 groups.⁴

Function

The survey asks groups to identify which of the six stewardship functions (*conserve, manage, monitor, educate, advocate, transform*) best capture their work. In contrast to the NYC data, the most common function among the regionwide groups is *educate* (Figures 32 and 33). *Participate*, which accounts for all forms of working with stewardship groups, is also a common selection.

Site Type

Site type captures the kinds of places that are stewarded by respondents. *Parks, forests and woodlands, and watersheds and sewersheds* are the most common site types for the regional groups (Figure 34). *Forest/woodland* stands out as the most commonly selected primary site type (Figure 35). This is not surprising, as there are more forested and wooded areas in the region outside of the five boroughs. Further, small informal groups are not included in the regional sampling frame because of the methods, and these groups might be more likely to care for so the site types such as vacant lots, residential building grounds, and playgrounds.

Focus

The survey also asks groups to identify their overall organizational focus, by answering the

question *What does your group work on?* *Environment, education, and community improvement and capacity building* are the most common foci for groups throughout the region (Figure 36) with *environment* being the most common single focus (Figure 37). *Community improvement and capacity building* is a less common focus for the regional groups than for the city (compare Figure 10 and Figure 36). This could also be because the groups surveyed in the region were formal environmental nonprofits, and did not include smaller groups like block associations.

Percent Stewardship

Forty percent of regional respondent groups indicate that between 80–100 percent of their overall work was dedicated to stewardship (Figure 38).

Mission, Goals, and Metrics

Mission, goals, and metrics were coded using the system as described for the NYC groups (see page 17). The mission statements of the regional groups have many of the same themes as the NYC groups' missions, and similarly center around community. However, the regional sample responses show a proportionally higher use of words such as "natural", "land", "watershed", and "wildlife", suggesting that outside of highly urban areas, natural areas are more of a focus (Figure 39).

The coded goals of the regional groups reflect their regional focus. While *neighborhood* is still the most common scale, 35 percent of the goals were coded as having a regional scale (Figure 40), as opposed to only 4 percent of the NYC groups' goals (Figure 14). Like New York City, *improve* is the most common action for goals, and *labor, activity and participation*, are the most common codes for metrics (Figures 41 and 42).

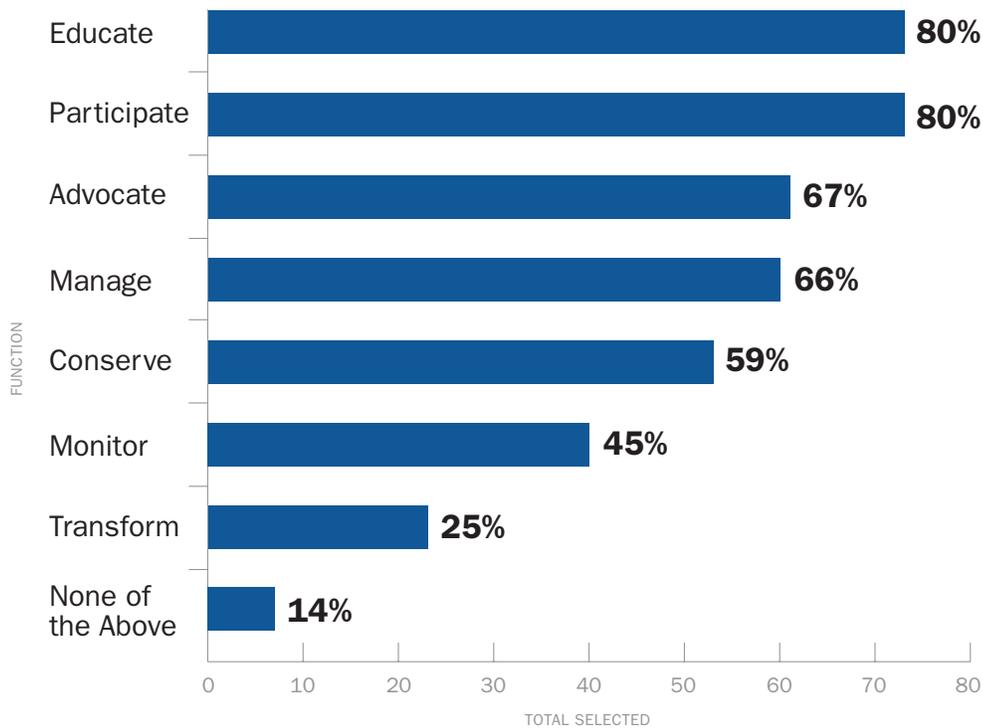


Figure 32. Number and frequency (as %) of regional groups by function, select all option (n=92).

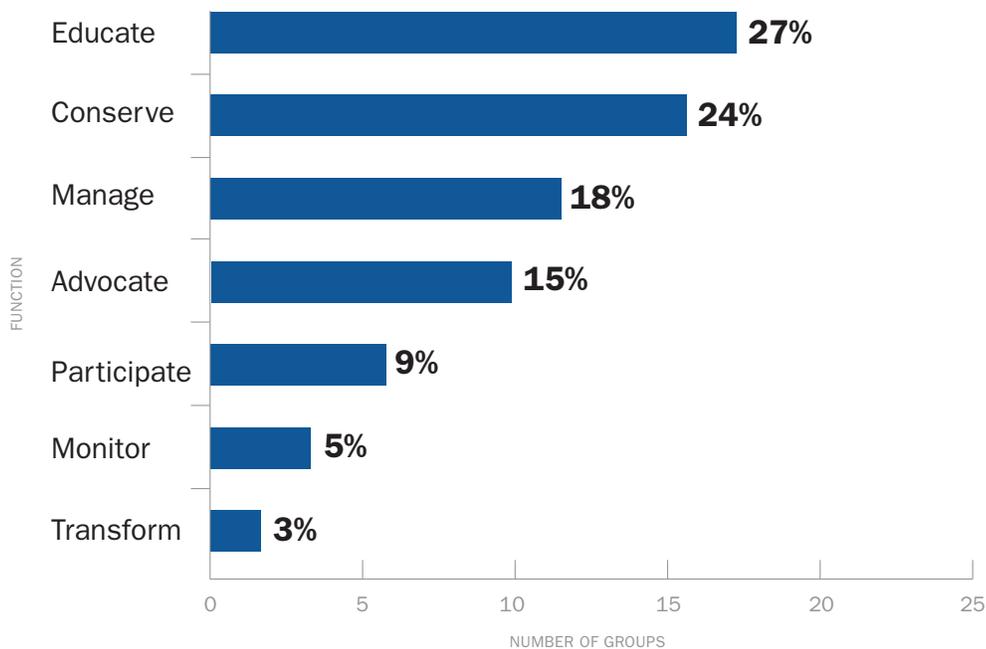


Figure 33. Number and frequency (as %) of regional groups by function, select one option (n=79).

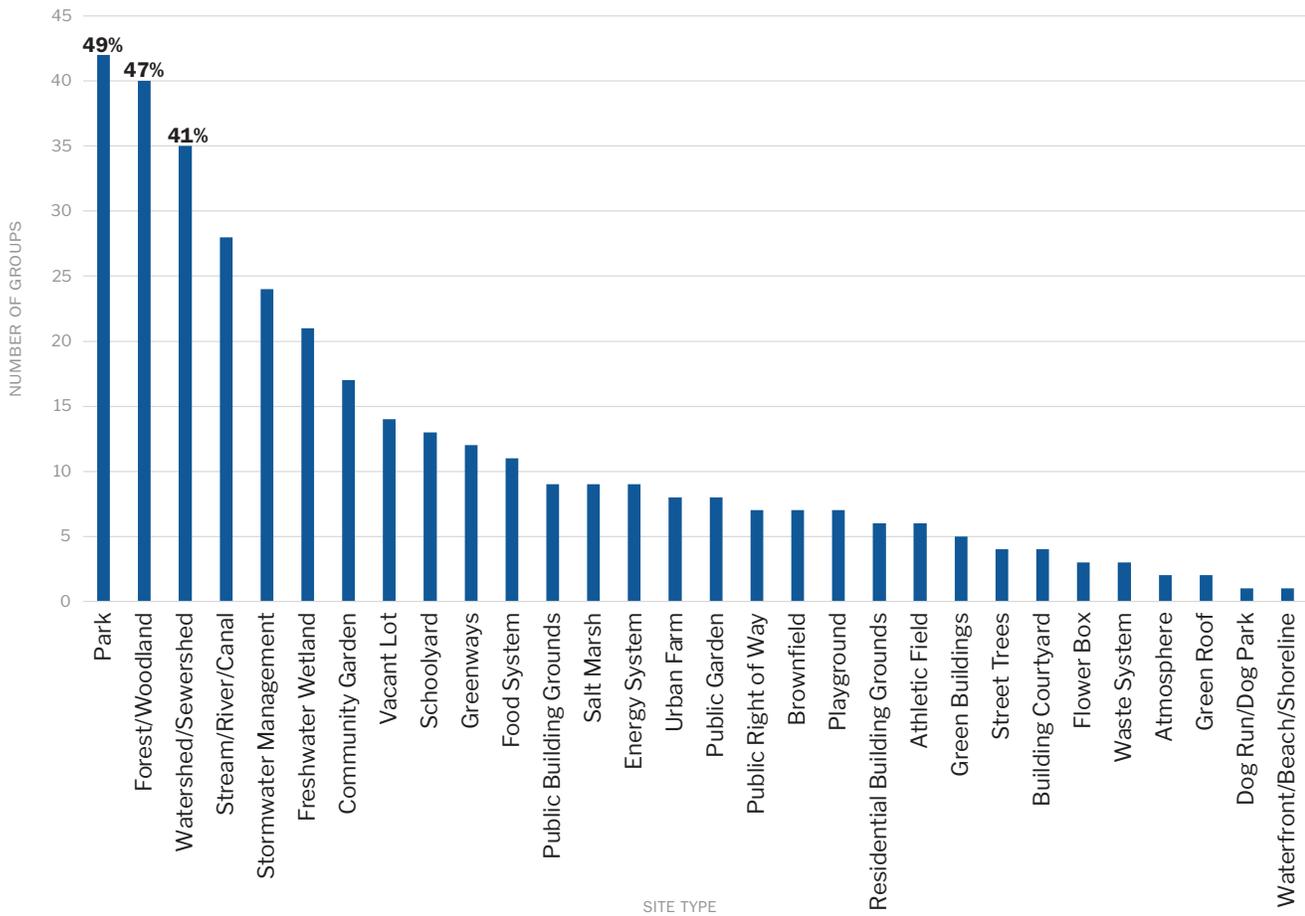


Figure 34. Number of regional groups by site type with frequencies (as %) identified for the three most common categories, select all option (n=85).

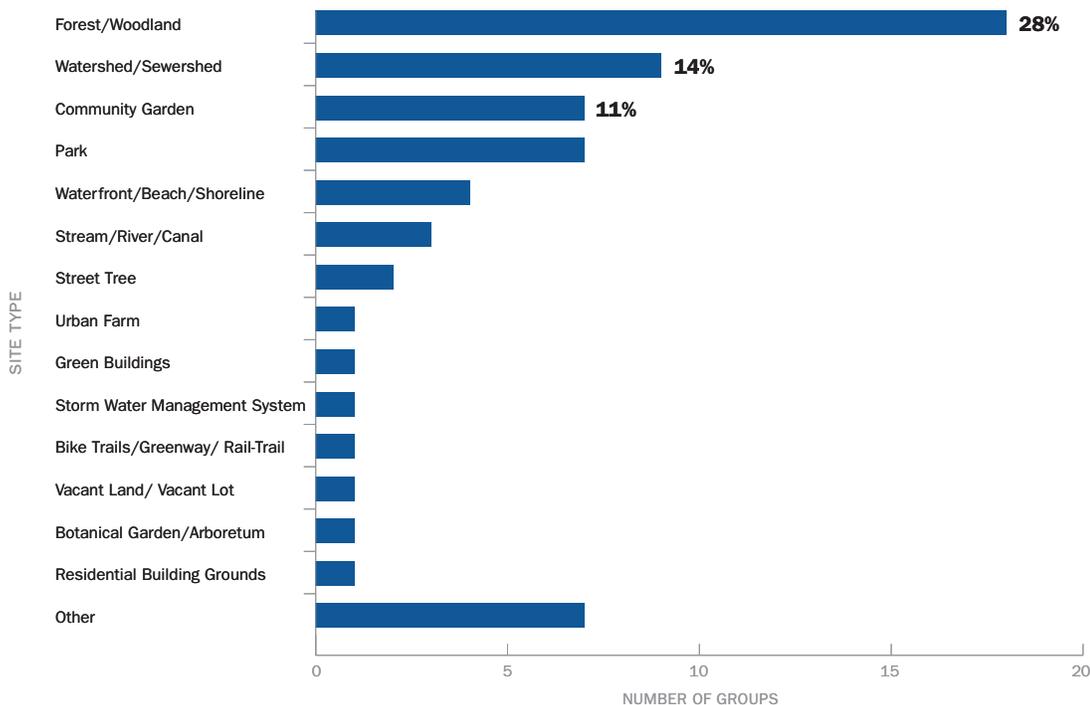


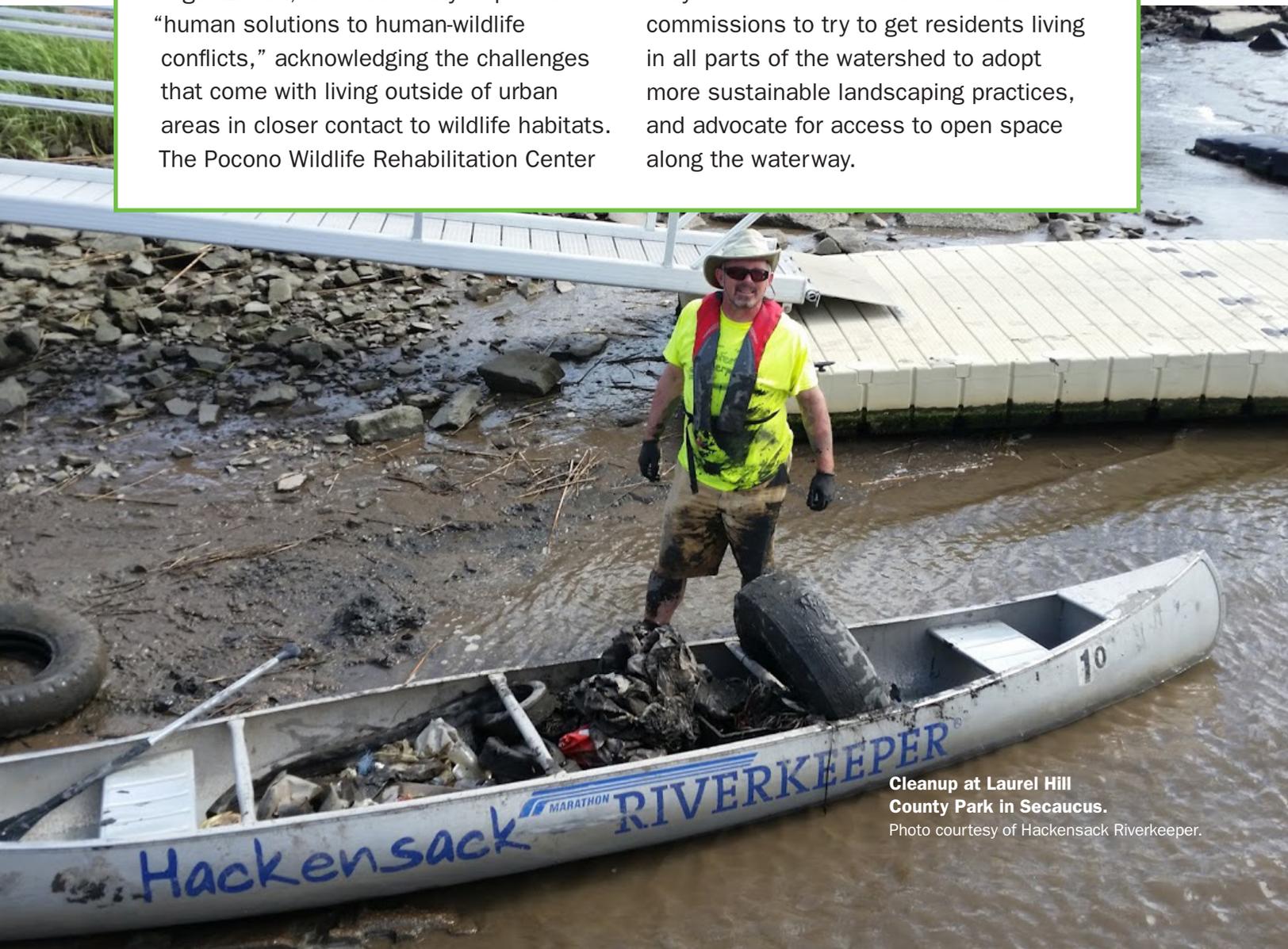
Figure 35. Number of regional groups by site type with frequencies (as %) identified for the three most common categories, select one option (n=64).

A CLOSER LOOK: REGIONAL GROUPS IN THE STEW-MAP PILOT SURVEY

The data collected from the STEW-MAP regional pilot survey show the breadth and depth of stewardship work happening outside of urban areas. For the purposes of the STEW-MAP 2017 survey, the region includes counties across New York, New Jersey, Connecticut, and Pennsylvania. Responses came from all four states, with the majority from New York and New Jersey.

All of the functions and site types are represented in the regional data, but there is more of an emphasis in their work on natural areas such as forests and wildlife. For example, the East Hampton Group for Wildlife, a nonprofit organization, uses advocacy to promote “human solutions to human-wildlife conflicts,” acknowledging the challenges that come with living outside of urban areas in closer contact to wildlife habitats. The Pocono Wildlife Rehabilitation Center

in Stoudsburg, Pennsylvania, takes in abandoned and injured animals and, after caring for them, transitions them back to live in the wild. Land trusts also serve a slightly different purpose in areas with more open space. The Bethlehem Land Trust in Connecticut serves to preserve open meadows and forested land for public uses such as hiking. There are also many groups in the region focused on protecting natural resources that span political boundaries. Bergen Save the Watershed Network, Inc., works across multiple towns in the entire area of the Hackensack River Watershed. They work with local environmental commissions to try to get residents living in all parts of the watershed to adopt more sustainable landscaping practices, and advocate for access to open space along the waterway.



Cleanup at Laurel Hill
County Park in Secaucus.
Photo courtesy of Hackensack Riverkeeper.

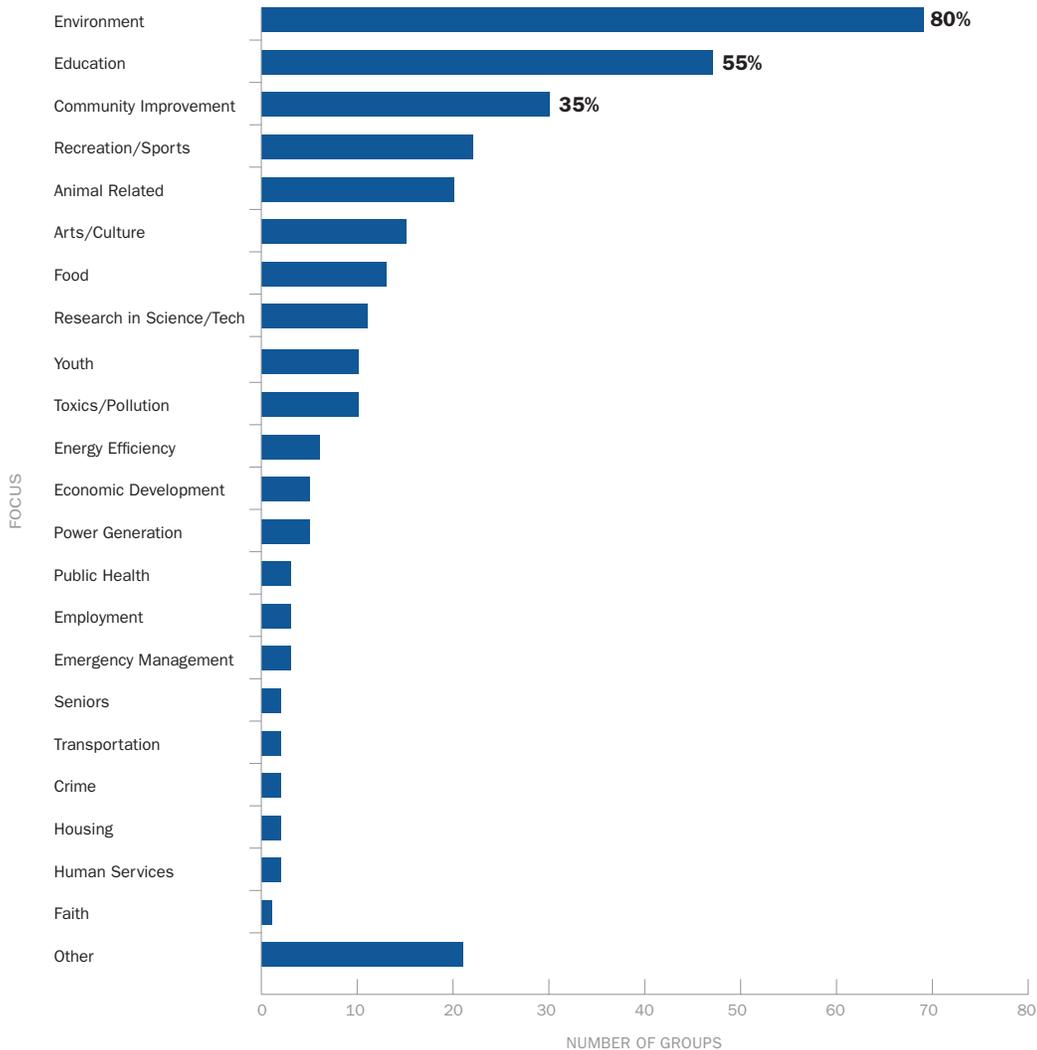


Figure 36. Number of regional groups by organizational foci with frequencies (as %) identified for the three most common categories, select all option (n=86).

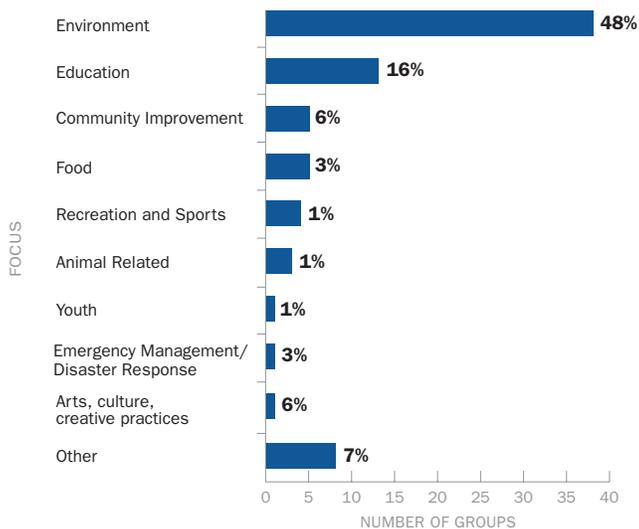


Figure 37. Number of regional groups by organizational foci with frequencies (as %) identified for the three most common categories, select one option (n=79).

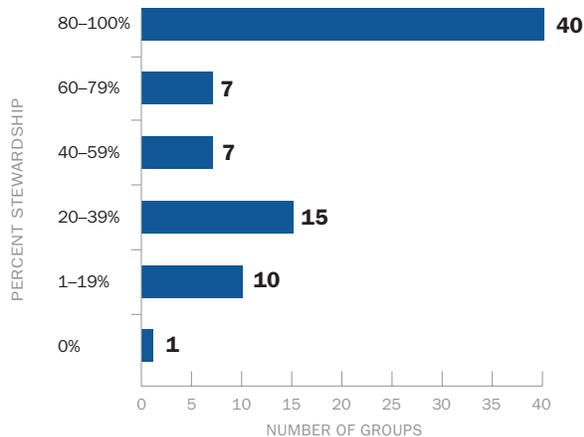


Figure 38. Proportion of groups' work focused on stewardship in region (n=80).

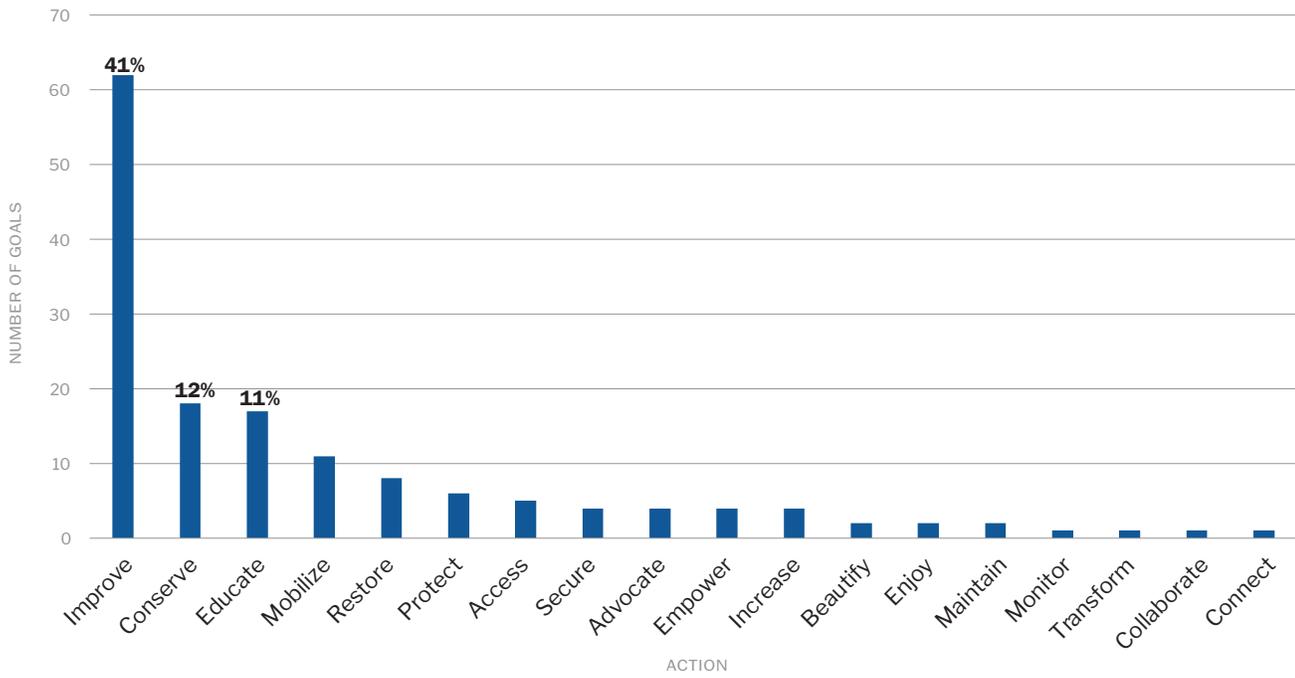


Figure 41. Regional stewardship groups' goals by action with frequencies (as %) identified for the three most common categories (n=74).

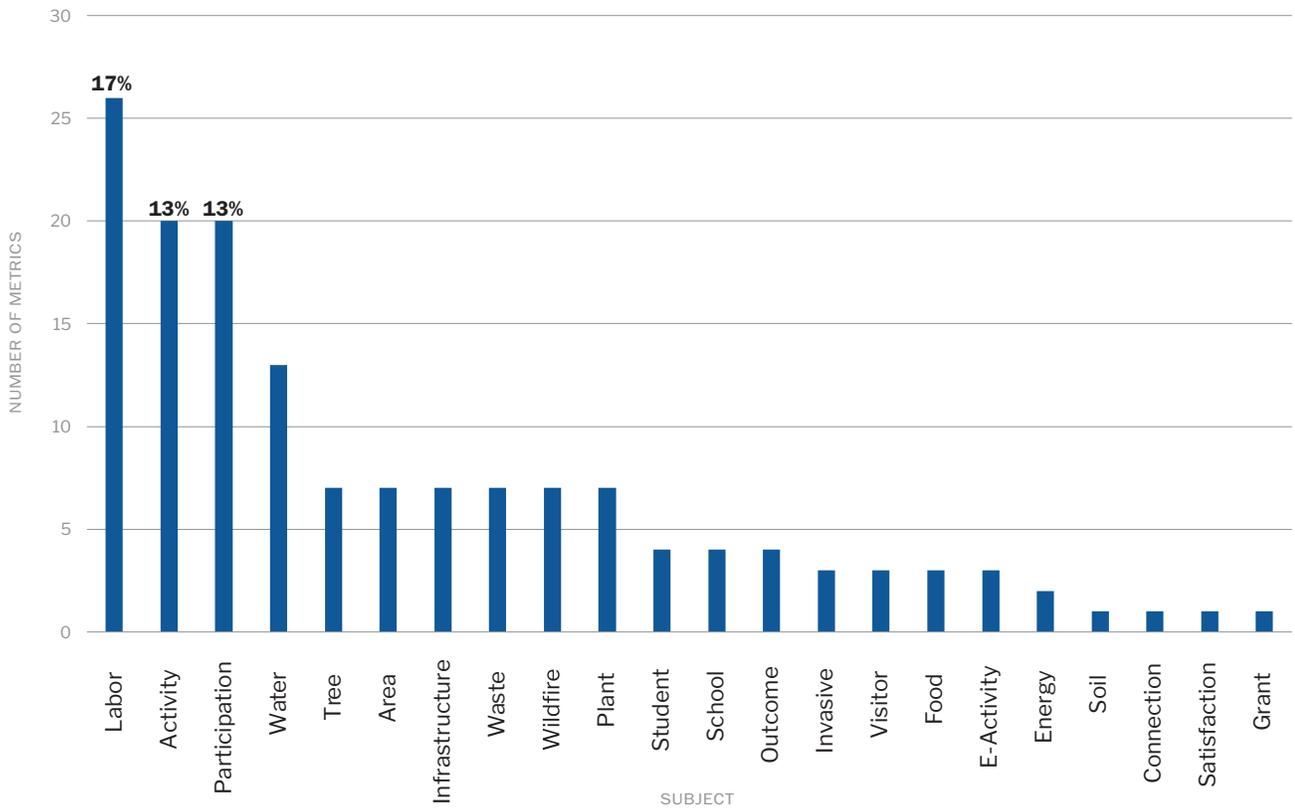


Figure 42. Regional groups' metrics by subject with frequencies (as %) identified for the three most common categories (n=53).

Table 6. Average staff, members, and volunteers for regional stewardship groups.

	FULL-TIME STAFF	PART-TIME STAFF	MEMBERS	VOLUNTEERS
Mean	4.05	4.79	635.37	167.54
Standard Deviation	6.38	13.48	1428.68	572.33
Minimum	0	0	0	0
Maximum	30	100	9000	3500
n	60	63	65	78

Staff and Year Founded

In general, the regional respondents report fewer staff, both part time and full time, than the NYC respondents (Table 6).

The fact that our pilot survey was only sent to registered nonprofit groups may explain why there is a smaller number of reporting groups in recent years (Fig. 43). Publicly available tax information accessed was for 2015, so any informal groups or groups founded after 2015 would not have received the survey and would not be reflected in this data.

Legal Designation and Land Ownership

The regional sample was created from publicly accessible nonprofit tax information, so we can assume that all of the groups that

responded are nonprofit organizations. These groups are also most commonly working on land that is owned by nonprofit organizations (Figure 44), which stands in contrast to the NYC sample, where groups primarily worked on government-owned land (Figure 11).

Communications and Services Offered

Website is the most commonly selected method of communication (Figure 45). Regional groups also use a range of digital and in-person communication strategies, but *local media* in the region is a far more common method than in the city. *Data/information/research* is the most commonly selected service offered in the region by far (Figure 46).

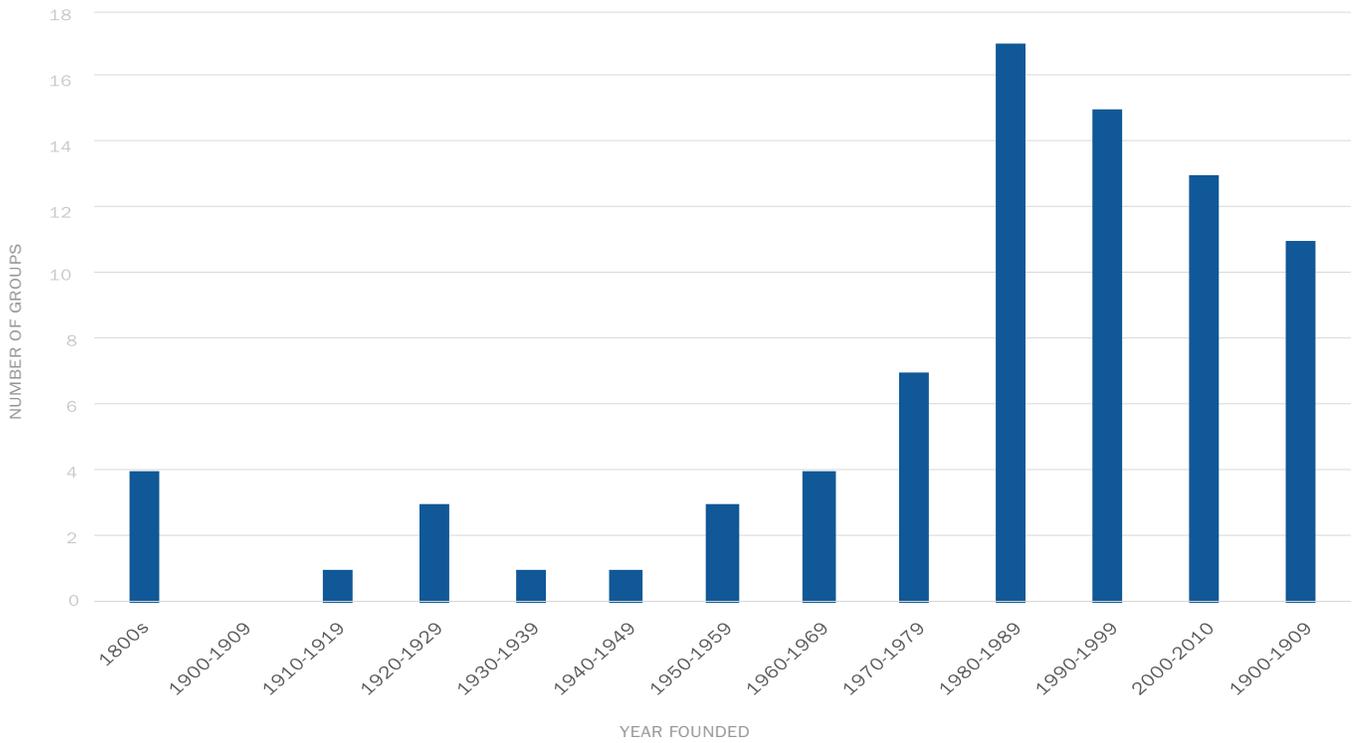


Figure 43. Number of regional stewardship groups by year founded (n=80)

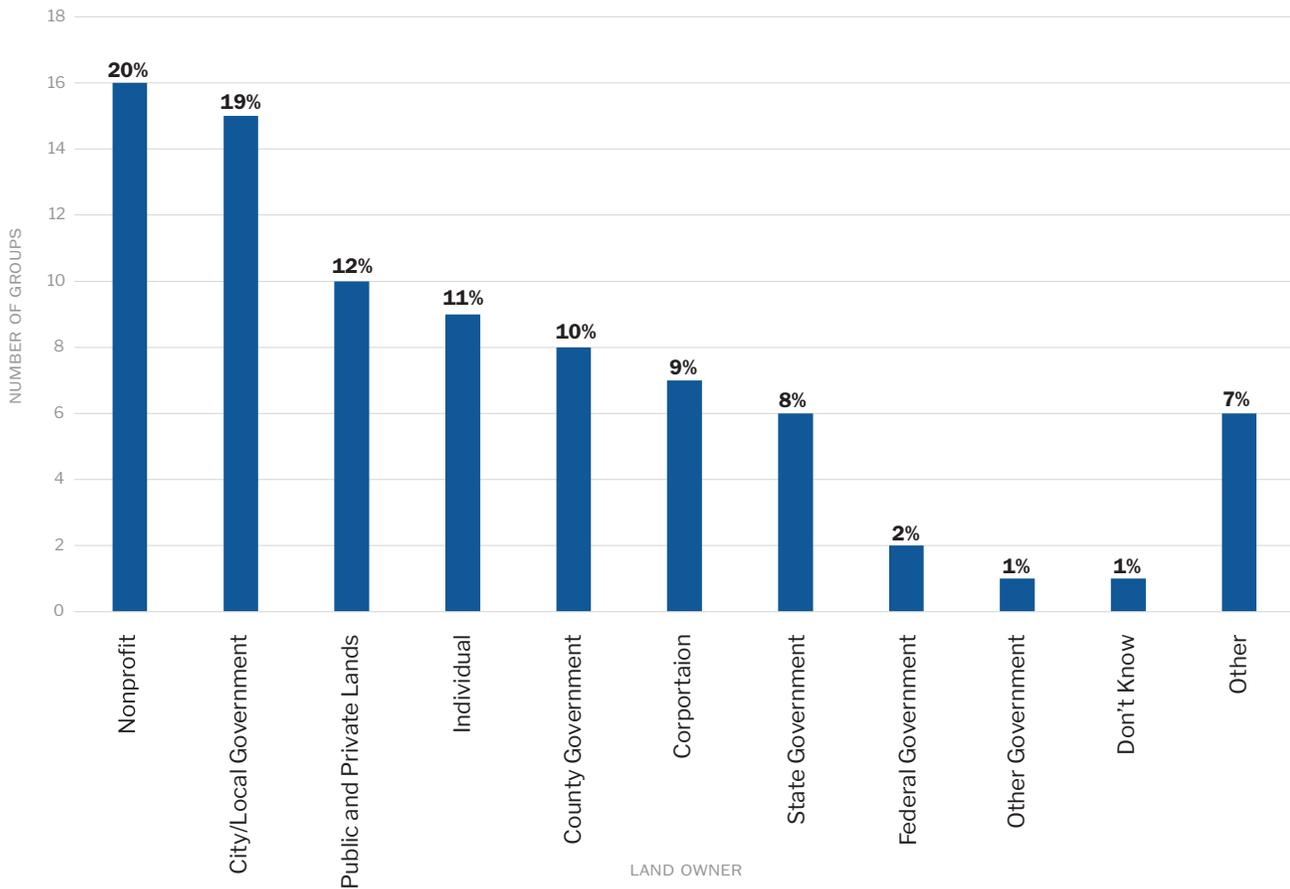


Figure 44. Number and frequency (as %) of regional stewardship groups by primary land owner (n=81).

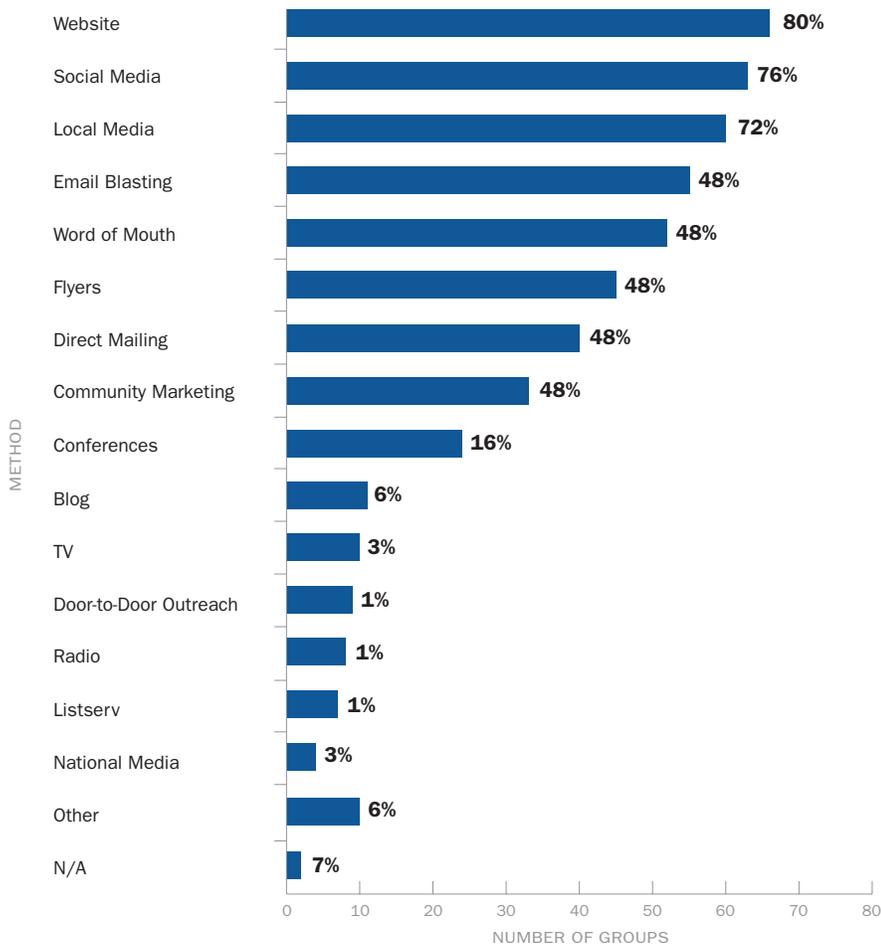


Figure 45. Number of regional stewardship groups by communication methods with frequencies (as %) identified for the three most common categories (n=83).

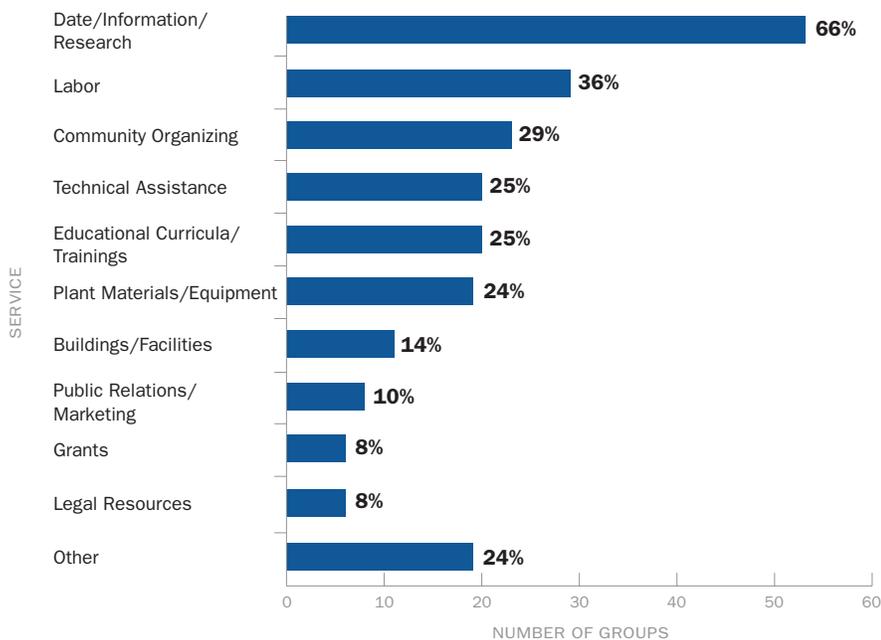


Figure 46. Number and frequency (as %) of regional stewardship groups by services provided (n=80).

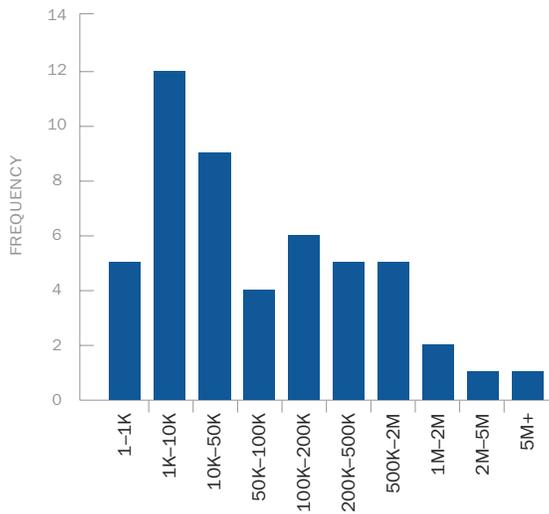


Figure 47. Regional stewardship groups' budgets (n=50). An additional four groups reported "no budget" and 28 groups declined to respond to this question.

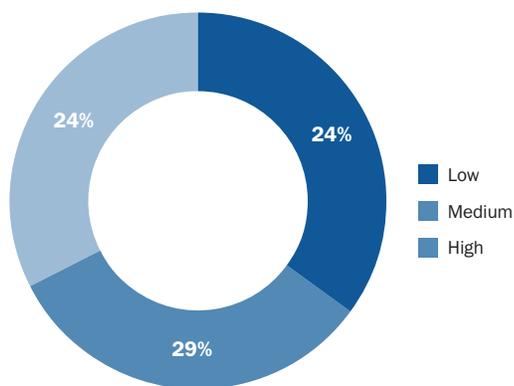


Figure 48. Professionalization scores for regional groups (n=40).

Budget

Most regional respondents report a budget, in contrast to the NYC groups. This is likely due to the fact that the regional survey was only sent to 501(c)(3) organizations. The majority of regional groups' budgets fall between \$1,000 and \$10,000 (Figure 47). Of the regional respondents, 28 groups prefer not to share their budget and four groups report no budget.

Professionalization

The professionalization methodology described earlier in the report was also applied to the regional data. In the region, we see a relatively even split between groups with low, medium, and high professionalization, in contrast to the majority of low professionalization scores of NYC groups (Fig. 48). Looking at professionalization score by year founded, the 1980s show the biggest increase in both high and low professionalized groups (Figure 49).

Impacts and Influences

Regional stewardship groups most commonly identify with having an impact on *land protection* and *plants and habitat quality*, based on 7-point Likert scale responses (Figure 50). Like with NYC groups, *extreme weather events* and *climate change* rank high on the list of influential events and processes, and *neighborhood development* is understandably less influential in the broader region (Figure 51).

Geography

Responding regional groups work on areas that span a variety of size classes (Figure 52). Some groups are working at large regional extents, while others are working on a single

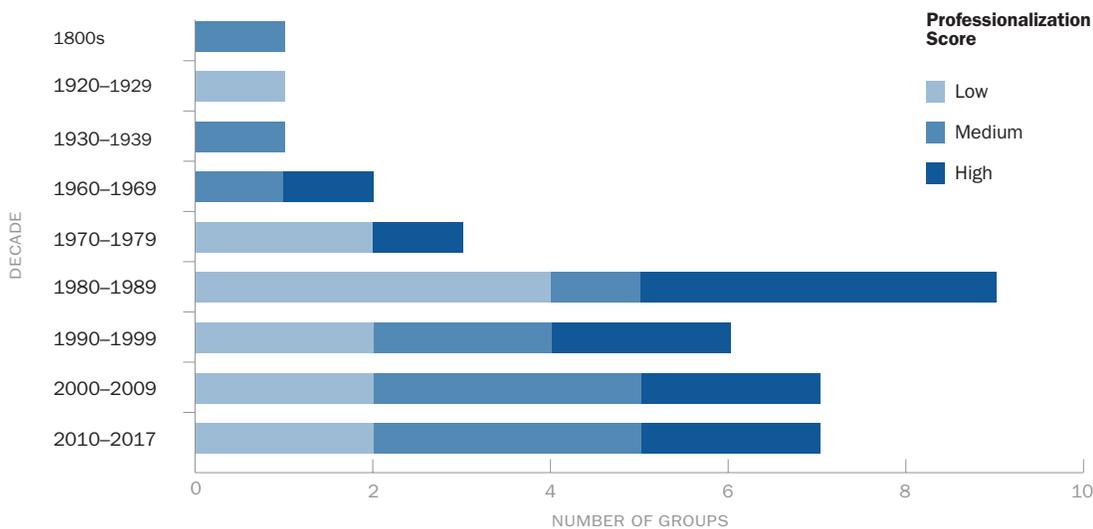


Figure 49. Number of regional stewardship groups by professionalization and year founded (n=40).

parcel. In contrast to NYC respondents, the majority of responding organizations work on large turfs.

When turfs are stacked on top of one another, patterns in the distribution of where groups work can be visualized (Figure 53). Regional respondents note working well beyond the NY-NJ-CT-PA CSA, up into Maine and southwest into West Virginia, and the distribution within the CSA is not even, with more turfs in northern and coastal New Jersey, the Hudson Valley, and parts of Long Island than elsewhere in the region.

Networks

Because the regional dataset is a pilot survey and, therefore, incomplete, we have not presented a region-only collaboration network. Note, the same network questions were included to the regional groups. Instead, we have looked for overlaps of groups named both by NYC- and region-based groups, out of the 2,298 groups included in the combined NYC/region network (Table 7). Groups named multiple times at the regional level and also named by NYC-based civic groups include two state agencies: New York Department of Environmental Conservation and New Jersey Department of Environmental Protection. Some local government agencies were named by both NYC-based and regional groups, and national and regional civic groups like The Nature Conservancy, Regional Plan Association, and American Legion were also named. Some NYC-focused civic groups like Gowanus Canal Conservancy and Partnerships for Parks were also named by regional groups.

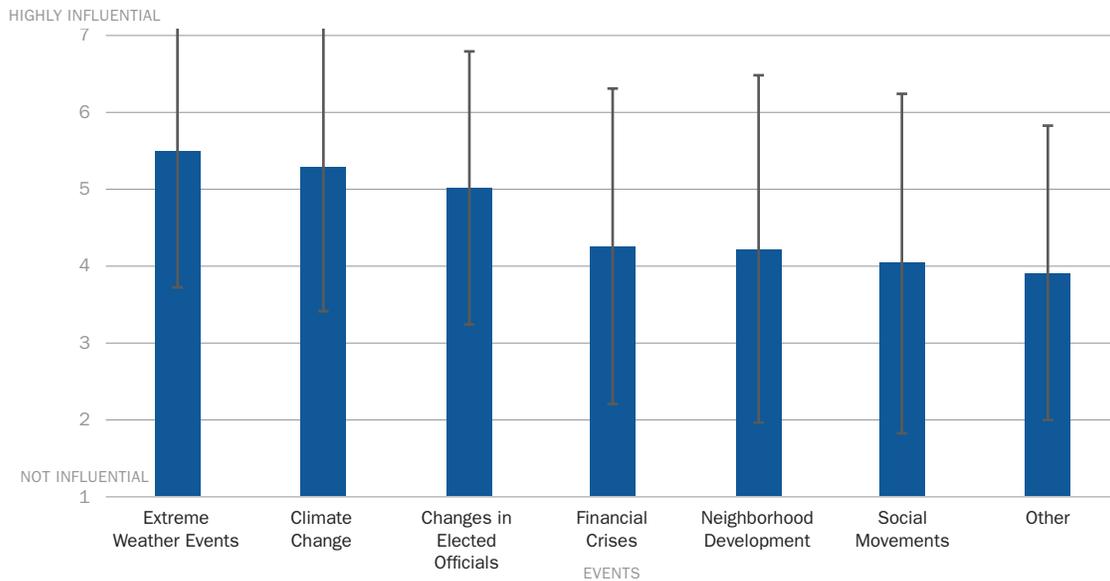
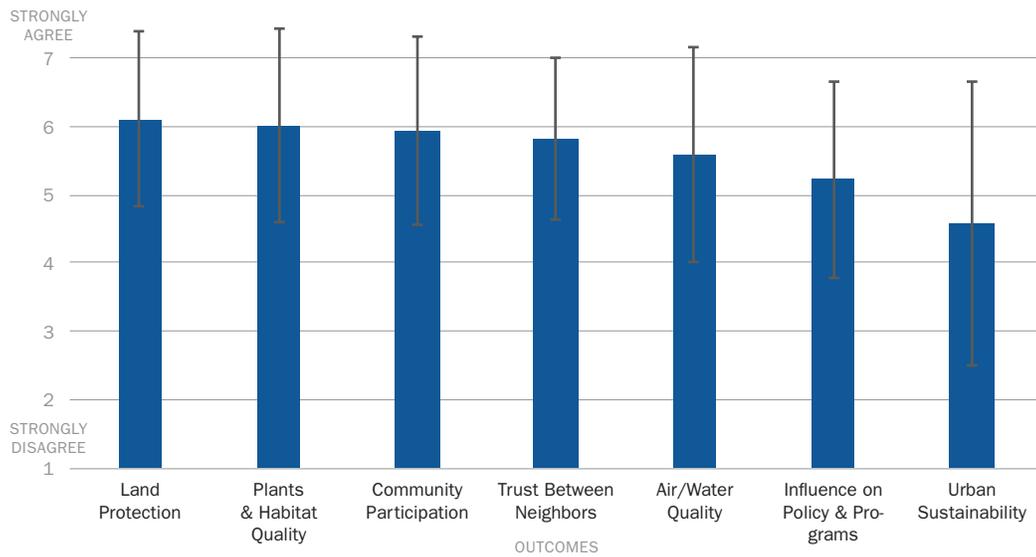


Figure 51. Average influential events and processes for regional stewardship groups. Error bars show standard deviation (n=80).

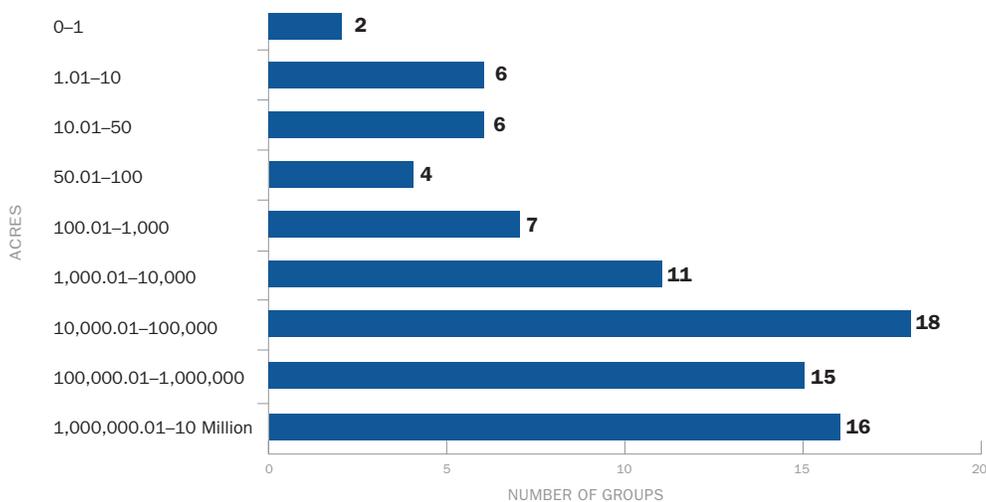


Figure 52. Distribution of turf sizes in the region (n=85).

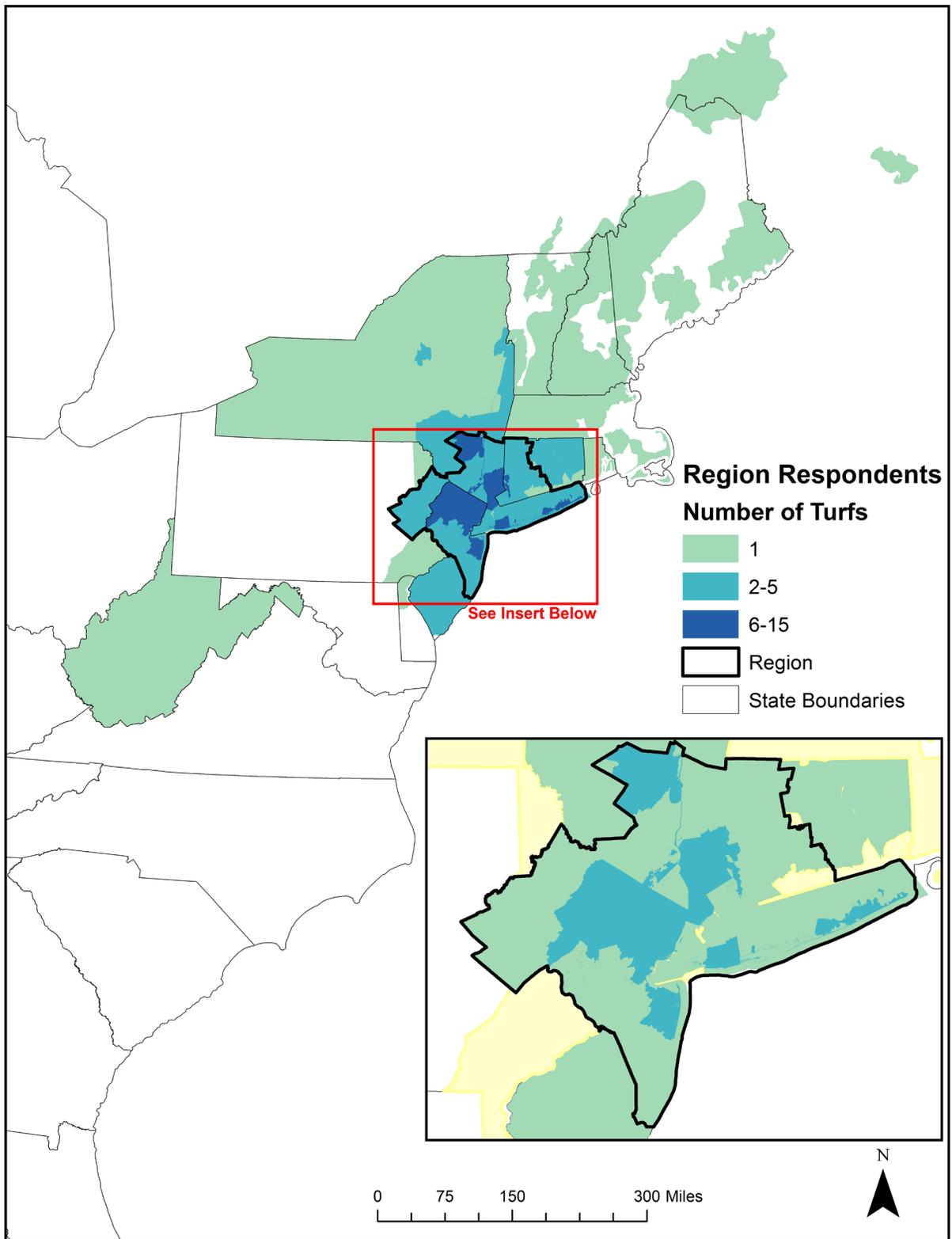


Figure 53. Density of regional civic stewardship groups responding to the NYC Region 2017 STEW-MAP survey (n = 85). Map created by Michelle Johnson, USDA Forest Service.

Table 7. Overlaps in named groups between NYC and regional collaboration networks.

NAMED ORGANIZATION	SECTOR	NUMBER OF TIMES NAMED BY	
		NYC RESPONDENTS	REGION RESPONDENTS
NJ Department Of Environmental Protection	Government	1	9
NYC Department Of Environmental Conservation	Government	11	8
NYC Parks	Government	110	1
NYC Department Of Environmental Protection	Government	18	1
Gowanus Canal Conservancy	Civic	11	1
Riverkeeper	Civic	11	1
Boy Scouts Of America	Civic	10	1
National Parks Service	Government	10	1
Partnerships For Parks	Civic	10	1
Girl Scouts Of America	Civic	9	1
Trust For Public Land	Civic	9	1
American Legion	Civic	1	1
Appalachian Mountain Club	Civic	1	1
Clean Ocean Action	Civic	1	1
Cornell University	School	1	1
Cornell Cooperative Extension	School	1	1
Environmental Protection Agency	Government	1	1
Hudson River Sloop Clearwater	Civic	1	1
Key Club	Civic	1	1
Land Trust Alliance	Civic	1	1
Lower Hudson Prism	Civic	1	1
National Wildlife Federation	Civic	1	1
Nature Conservancy	Civic	1	1
Newtown Creek Alliance	Civic	1	1
NRDC	Civic	1	1
NY League Of Conservation Voters	Civic	1	1
NYC Department Of Health And Mental Hygiene	Government	1	1
NY-NJ Baykeeper	Civic	1	1
NY-NJ Trail Conference	Civic	1	1
New York State	Government	1	1
New York State Parks	Government	1	1
Randalls Island Park Alliance	Civic	1	1
Regional Plan Assoc	Civic	1	1
Rutgers University	School	1	1
Sarah Lawrence College	Civic	1	1
Scenic Hudson	Civic	1	1
Sierra Club	Civic	1	1
Student Conservation Assoc	Civic	1	1
State University Of New York	School	1	1
Storm Water Infrastructure Matters Coalition	Civic	1	1
Tri-State Transportation Campaign	Civic	1	1
United Way	Civic	1	1
Watershed Agricultural Council	Civic	1	1

Discussion

Stewardship groups exist and persist over time: STEW-MAP 2017 data reinforced many of the findings from the 2007 data.

Broadly speaking, we still observe the presence of groups who take care of the local environment in large numbers and go beyond the traditional institutions that are commonly credited with stewardship work. These groups are varied in their geographies and spatial distributions and pursue diverse actions and agendas. The sheer number of groups claiming stewardship as part or all of their mission demonstrates the persistence of environmental stewardship over time, and the newer groups founded since the last STEW-MAP survey show that the trend of environmental stewardship is growing. Beyond this abiding presence, we find a number of ways in which civic stewardship groups shape governance and urban ecology.

Agents of change: Stewards care for and transform the urban ecosystem in many different ways.

Beyond simply maintaining the environmental status quo, stewardship groups serve as positive agents of change in their communities, caring for and transforming the urban ecosystem. This is shown in the diversity of functions identified by respondents. While *manage* is a common function, many of the groups also take part in *education* and *advocacy*. The addition of *transform* as a function on the 2017 STEW-MAP survey revealed that groups see themselves as transforming the local

environment both through pursuing more sustainable systems and by drastically altering the physical landscape in its many forms.

Not just green: Environmental stewardship is embedded in efforts to improve community quality of life.

Environmental stewardship also exists beyond the strictly defined environmental realm. The environmental goals of many groups overlap with social goals, showing that these groups work to improve the entire social-environmental system. The centrality of “community” in the mission statements, both in NYC and the wider region, indicates that stewardship groups aim to improve overall quality of life. Stewardship groups also have a wide range of areas of interest—from strictly environmental to other civic foci such as public health and faith-based—but they all take part in stewardship work in some capacity. The embracing of environmental work by social service organizations points to a wider recognition of the importance of the landscape in communal well-being.

The abiding power of the grassroots: Stewardship persists at local levels and among all volunteer groups.

One finding that is evident in from our data is the importance of the grassroots in civic stewardship. The groups surveyed represent a range of professionalization; budgets from zero to millions; and leadership from volunteer-only to hundreds of staff across multiple

offices. Since 2007, many new groups have been founded, mainly informal groups with low professionalization. This could be indicative of the growing trend of stewardship work, and could also suggest that many groups start out lower on the professionalization scale, growing in size and budget over time. The scale of stewardship groups' goals also hints at the power of the grassroots. In New York City, where the full range of stewardship groups were surveyed, the large majority of the groups' goals were focused on the neighborhood level, meaning that most seek to make small-scale tangible improvements in the areas where they live rather than attempting to transform the entire city or region.

...Yet some stewards are professionalized: With paid staff, substantial budgets, and 501c3 status.

A subset of groups reflects a more professionalized organizational structure. Fifty-seven percent of groups have formalized nonprofit, 501(c)(3) status, and 42 percent have more than one full-time staff person. While budgets range widely, 11 percent of groups have budgets of over \$1 million. From the 2007 STEW-MAP data, we found that many—but not all—of the key brokers in the stewardship network were these professionalized groups (Connolly et al. 2012, 2014). It is important to note that professionalization is not the goal of all stewardship groups; some groups prefer to remain all volunteer or informal based on the mission and vision of their group.

Stewardship groups are knowledge producers: Groups collect data, track metrics, and monitor the local environment

We also found that stewardship groups do far more than organize tree-plantings and beach

cleanings. Stewardship groups are knowledge producers, often collecting and disseminating their own data and research. Groups who selected *monitor* as their primary function make a point to not only collect and track data, but to share it with the public so that residents gain insight to the quality of their environmental resources. Many groups track their own metrics, from number of invasive plants removed to number of volunteer hours. Of all of the services provided, *data/information* is the most frequently selected in both the city and the region. This was not the case in 2007, and suggests a rising value of research and citizen science in the stewardship world.

Stewardship comes in different shapes and sizes: Groups are working everywhere in the city, at different scales.

As in 2007, we find stewardship groups are working at multiple scales: from a single community garden or vacant lot, to a neighborhood, to a series of parcels across the city, across a borough, the New York Harbor, the entire city, and out into the greater region. From our intensity maps, we can see the spatial distribution of these groups' turf is not evenly distributed across New York City, raising questions about why this distribution is uneven. Is government already there? Are funds available for certain neighborhoods? Is civic action higher in certain places? We know from previous research on 2007 turfs that characteristics of stewardship groups themselves affect the number of groups working in a single place,⁵ yet more remains to be unpacked in this story. From an application standpoint, by looking at the distribution of groups across the city, places for resource allocation and new groups to focus on can be identified.

Groups do not work alone: Stewardship happens in networks.

Stewardship groups are not working alone or in a classic command and control structure. From the network diagrams, we see the 2017 stewardship landscape is highly connected and predominantly comprised of civic actors, with a few civic groups and government agencies serving as brokers among other groups. NYC Parks plays a central and highly connected role in this system. In the 2017 data, we observe water-focused groups like Waterfront Alliance and Bronx River Alliance serving as brokers for the larger stewardship network, in addition to land-based broker groups. Linking together the network and spatial data, we observe some groups are serving as cross-scale brokers, linking groups working citywide and at the parcel level. We also see brokers in the network are clustered in Manhattan and Brooklyn.

Not just urban: Stewardship groups span across the region.

The 2017 STEW-MAP regional pilot survey, while small in scale, gives us a sense of how the stewardship network expands past the city. Environmental stewardship exists beyond urban areas and changes based on environment. In the region, we see a greater percentage of groups with *conserve* as their primary function, and see substantially larger turfs. The pilot survey identifies some key brokers in the region, but fully understanding the network would require a deeper dive into each area. Overlaps in the NYC and regional networks were few, with NJ Department of Environmental Protection and NY Department of Environmental Conservation providing the strongest linkages between the city and region, based on these data.

Conclusion

STEW-MAP is both a research project working to understand civic stewardship and a set of tools aimed to support a model of shared stewardship.

Civic groups are important to urban ecosystems in many ways—performing a broad range of functions and working at a range of site types. They help manage the biophysical environment, but also aim to benefit community well-being, which is central to many of their missions and goals and evident through their metrics and outcomes. Further, beyond maintaining natural resources, stewardship groups see themselves as agents of change, transforming lives and landscapes through action and care. They are caretakers of our social infrastructure, places where people have the opportunity to meet face-to-face and build social trust and understanding. Groups themselves also create community through their work. Stewardship groups do not work alone but rather are part of broad networks with other civic groups and as partners with government—including in hybrid governance arrangements where civic action plays a critical and shared role.

These findings are made public in order to support the work of the very stewardship groups who participated in the project. We are creating a public map and geodatabase

that can be accessed via the STEW-MAP multi-city web portal: www.nrs.fs.fed.us/STEW-MAP. Exploring a public map and database can allow groups to realize their own achievements and, at the same time, connect their efforts to a larger system of stewardship. STEW-MAP can benefit natural resource managers, funders, policymakers, educators, stewardship groups, and the general public, by providing data to back up the prominence and importance of civic groups as part of shared stewardship. Visualizing the geographies of these groups highlights existing stewardship gaps and overlaps in order to focus and strengthen capacities. It can also help promote broader civic engagement with on-the-ground environmental projects, and build effective partnerships among stakeholders involved in urban sustainability. By visualizing the sometimes less visible role of stewards, groups can identify new partners and strengthen linkages and existing networks. Our hope is that with greater knowledge of these groups and their impacts, we will be able to collectively help to create, shape, and sustain a healthy environment for all.

This report presents the overall results of STEW-MAP 2017 with some general analysis, but we plan to conduct further research in order to answer some of the questions raised. Future survey analyses will take into consideration the variation in number of responses to various questions through a more detailed missing data analysis. Additional data will be collected

through interviews with groups representing a variety of turf sizes and levels of network connectivity.

STEW-MAP 2017 New York City Region is part of a growing network of STEW-MAP projects around the globe. In many of these places, the question is the same as policy-makers and planners want to know more about the everyday change-makers in their communities. STEW-MAP is a first step toward identifying many of these groups by shining a light on the varied place-based approaches to improve human well-being and the environment.

Footnotes

1. Combined statistical area (CSA) is a U.S. Office of Management and Budget term for a combination of adjacent metropolitan and micropolitan statistical areas in the United States and Puerto Rico that can demonstrate economic or social linkage.

2. The online survey closed at the end of December (12/24/17), but mailed surveys that were assumed to be completed by that date but delivered in January 2018 were also included.

3. Eighteen groups that selected “none of the above” were recategorized as stewardship groups based on their other survey answers. If they continued taking the survey and included stewardship in their mission and/or indicated that more than 0 percent of their work was focused on stewardship, it was assumed that they made an error when selecting “none of the above.”

4. Eighteen groups from the NYC responses are actually located outside of NYC in the region pool. They were categorized as NYC groups because they were added to the sampling frame by New York City data providers and not through the 990s like the other regional groups.

5. Johnson, Michelle, et al. unpublished manuscript titled, “Context matters: influence of organizational, environmental, and social factors on civic environmental stewardship group intensity”, submitted to journal *Ecology and Society*.

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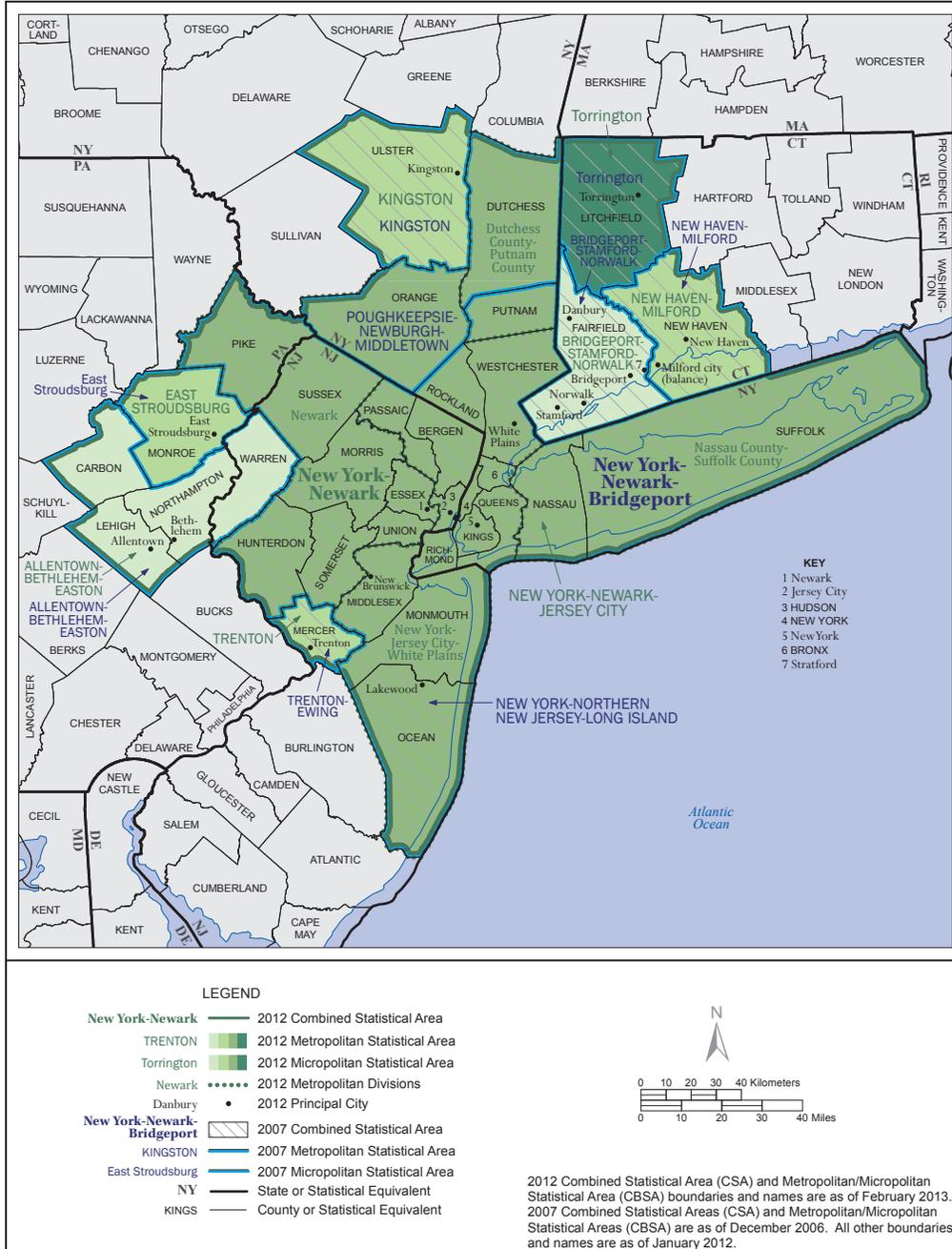
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Appendix A: Data Providers and Lists Shared

DATA PROVIDER	LISTS SHARED
New York City Department of Parks and Recreation (NYC Parks)	Parks Greening Partners; Parks Super Stewards; Conservancies; General Events Groups
City of New York Mayor's Office of Recovery and Resiliency (NYC ORR)	Building Healthy Communities Groups; Partner Organizations
596 Acres	Community Garden Groups and Community Organizers
Bronx River Alliance	Local Partners
Brooklyn Arts Council	Grantees and Community Partners
Brooklyn Borough President	Friends of Parks Partners
Brooklyn Botanic Garden	Community Gardens; Greenest Block in Brooklyn; Local Partners
Central Park Conservancy	Local Partners; School Groups
Citizen's Committee	Grant Recipient Project Contacts
The Compost Project	Compost Project Host Organizations
CultureAID	Local Partners
Department of Environmental Conservation	Working Groups
The Design Trust for Public Space	Five Borough Farm Groups
El Puente	Local Partners
Farm School NYC	Local Partners
Federal Emergency Management Agency Region II	Sandy Contact List
The Forest Park Trust, Inc.	Local Partners
Friends of the Highline	Local Partners; Green Roofs
GreenThumb	Community Gardeners
GrowNYC	Greenmarkets
Historic Districts Council	"Six to Celebrate" Neighborhood Organizations
The Horticultural Society of New York	School Groups; Plaza Groups
ioby	Community Crowdfunding Project Leaders
Just Food	CSAs and Community Gardens
Lower East Side Ecology Center	Stewardship Partners
Lower Manhattan Cultural Council	Artists; Community Partners
National Fish and Wildlife Foundation	Organizations working on Newtown Creek; Grantees
National Parks Service	Community Boards; Civic Associations; Local Partners
Natural Areas Conservancy	Nature Goals 2050 Partners
The Nature Conservancy	Greenprinting Partners; Stakeholders
New York Botanical Garden	Local Partners; Bronx Green Up Partners
New York City Community Garden Coalition	Community Gardeners
New York City Department of Social Services	Soup kitchens and food pantries
New York City Environmental Justice Alliance	Organization Partners
New York City Housing Authority	Tenant Associations; Civic Associations; NYCHA Farms
New York-New Jersey Harbor & Estuary Program	Community Advisory Council Members; Organization Partners
New Yorkers for Parks	Daffodil Project Recipient Groups
Partnership for Parks	Parks Friends Groups and Organization Partners
Pratt Institute SAVI Lab	Local Partners
Prospect Park Alliance	Local Partners
Queens Botanical Garden	Local Partners
Regional Plan Association	Local Partners
Science and Resilience Institute at Jamaica Bay	Stakeholders
Soil and Water Conservation District	Local Partners
Staten Island Arts	Future Culture Partner Organizations
Staten Island Borough President	Civic Associations
Staten Island Greenbelt Conservancy	Local Partners
Storm Water Infrastructure Matters Coalition	Coalition Member Organizations
University of Pennsylvania – Social Impact of the Arts Project	Project Participants
Waterfront Alliance	Local Partners
Wave Hill	Community Partners
Public lists	
Small Business Services	BIDS
Dorris Duke Foundation	Environmental Grant Recipients
New York Immigrant Immigration Council	NY State Immigration Groups
Association for Neighborhood and Housing Development	Environmental Grant Recipients
NYC Mayor's Office Community Affairs Unit	Community Centers
United Neighborhood Houses	Community Centers
Rockefeller Brothers Fund	Local Grantees
Healthy Food Retail NYC	Local Partners
Imapacct BK	Local Partners
Pratt Center	Local Partners
Wallerstein	Local Partners
DSNY	Recycling Champions and Zero Waste Schools
LISC	Community Development Corporations

Appendix B: Map and List of Counties in the Study Area

New York-Newark, NY-NJ-CT-PA Combined Statistical Area



U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau 2012 Economic Census

Counties included in the study area: Bergen; Bronx; Carbon; Dutchess; Essex; Fairfield; Hudson; Hunterdon; Kings; Lehigh; Litchfield; Mercer; Middlesex; Monmouth; Monroe; Morris; Nassau; New Haven; New York; Northampton; Ocean; Orange; Passaic; Pike; Putnam; Queens; Richmond; Rockland; Somerset; Suffolk; Sussex; Ulster; Union; Warren; Westchester.

Appendix C: 990 Activity Codes and NTEE Codes Used

National taxonomy of exempt entities (NTEE) codes and activity codes used to identify groups to target for the STEW-MAP survey.

NTEE CODES	NTEE CATEGORY	ACTIVITY CODE	ACTIVITY CATEGORY
C01	Alliance/Advocacy Organizations	350	Preservation of natural resources (conservation)
C02	Management & Technical Assistance	351	Combating or preventing pollution (air, water, etc)
C03	Professional Societies, Associations	352	Land acquisition for preservation
C05	Research Institutes and/or Public Policy Analysis	353	Soil or water conservation
C11	Single Organization Support	354	Preservation of scenic beauty
C12	Fund Raising and/or Fund Distribution	402	Combat community deterioration
C19	Nonmonetary Support N.E.C.	355	Wildlife sanctuary or refuge
C20	Pollution Abatement and Control Services	356	Garden club
C27	Recycling Programs	379	Other conservation, environmental or beautification activities
C30	Natural Resources Conservation and Protection	230	Farming
C32	Water Resource, Wetlands Conservation and Management	231	Farm Bureau
C34	Land Resources Conservation	232	Agricultural Group
C35	Energy Resources Conservation and Development	233	Horticultural Group
C36	Forest Conservation	234	Farmers Cooperative Marketing or Purchasing
C35	Energy Resources Conservation and Development	404	Community Promotion
C36	Forest Conservation	296	Community Center
C40	Botanical, Horticultural, and Landscape Services	297	Community Recreational Facilities
C41	Botanical Gardens, Arboreta and Botanical Organizations	325	Camp
C42	Garden Club, Horticultural Program	324	YMCA, YWCA, etc.
C50	Environmental Beautification and Aesthetics	400	Area development, redevelopment of renewal
C60	Environmental Education and Outdoor Survival Programs	524	Zoning or Rezoning
C99	Environmental Quality, Protection, and Beautification N.E.C.	900	Cemetery or burial activities
D30	Wildlife Preservation, Protection	903	Community Trust or component
D31	Protection of Endangered Species	923	Indians (tribes, cultures, etc.)
D32	Bird Sanctuary, Preserve	529	Ecology or conservation
D33	Fisheries Resources	322	FFA, FHA, 4-H club
D34	Wildlife Sanctuary, Refuge	286	Hunting or fishing club
D50	Zoo, Zoological Society	284	Dog club
K20	Agricultural Programs	280	Country club
K25	Farmland preservation	320	Boy Scouts, Girl Scouts, etc.
K28	Farm Bureau, Grange	401	Homeowners association
M20	Disaster Preparedness and Relief Services	533	Urban renewal
P28	Neighborhood Centers, Settlement Houses	320	Boy Scouts, Girl Scouts, etc.
K30	Food Service, Free Food Distribution Programs	322	FFA, FHA, 4-H club, etc.
K31	Food Banks, Food Pantries	324	YMCA, YWCA, YMCA, etc.
K01	Alliance/Advocacy Organizations	325	Camp
K02	Management & Technical Assistance		
K03	Professional Societies, Associations		
K05	Research Institutes and/or Public Policy Analysis		
K26	Livestock Breeding, Development, Management		
K36	Meals on Wheels		
K11	Single Organization Support		
K12	Fund Raising and/or Fund Distribution		
K19	Nonmonetary Support N.E.C.		
N32	Parks and Playgrounds		
N31	Community Recreational Centers		
N20	Recreational and Sporting Camps		
N61	Fishing, Hunting Clubs		
O41	Boy Scouts of America		
O42	Girl Scouts of the U.S.A.		
O40	Scouting Organizations		
O43	Camp Fire		
O52	Youth Development — Agricultural		
P21	American Red Cross		
P27	Young Men's or Women's Associations (YMCA, YWCA, YWHA, YMHA)		
S31	Urban, Community Economic Development		
S32	Rural Development		
Y50	Cemeteries, Burial Services		

**Appendix D:
STEW-MAP Survey Instrument**

Stewardship Mapping and Assessment Project

**STEW-MAP
Survey:
New York
City Region
2017**

Section 1: Contact Information

Your personal information is confidential. We will not share your name, personal email, personal phone number, or other identifying information with anyone outside of the research team. We may contact you if we have questions about information you provide on this survey.

Are you a member of a group or organization?

(We define a group as having two or more members. This survey is intended for groups and organizations, not for individuals working alone, as sole proprietors, or as independent contractors.)

Yes

No

If you are a member of a group with multiple programs, please answer for your entire organization. If you are a respondent from a national organization, please answer for your local chapter. If you answered no, you do not need to complete the rest of the survey. Please mail back the survey. Thank you for your time!

Section 2: Basic Information

If you are not able to answer all of the questions, please reach out to someone else in your group or organization and ask them to fill out the survey.

Does your group wish to be on the online stewardship map?

The information associated with your group on the map will be limited to group information and stewardship territory, which will be addressed later in the survey.

Yes

No

Does your group do any of the following in the New York City region?

Please select all that apply.

Conserve or preserve the local environment (e.g. hold conservation easements, protect water)

Manage or take care of a place in the local environment (e.g. beautify, improve, or restore a garden, trees, yard)

Transform local environmental systems (e.g. changing the waste stream; transitioning toward sustainable energy)

Monitor the quality of the local environment (e.g. air or water quality, dumping, species monitoring, citizen science)

Advocate and/or plan for the local environment (e.g. planning, organizing, direct action, fundraising)

Educate the public about the local environment (e.g. curriculum, research, science, training, outreach)

Participate in, partner with groups, or support other environmental work

None of the above

Welcome to the New York City region STEW-MAP survey!

STEW-MAP stands for the Stewardship Mapping and Assessment Project

Burden Statement

Paperwork Reduction and Burden Estimate: According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0240. The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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LAND & BUILT ENVIRONMENT

- Forest / Woodland
- Park
- Community garden
- Urban farm
- Vacant land / Vacant lot
- Brownfield
- Athletic field
- Playground
- Dog run / Dog park
- Botanical garden / Arboretum
- Bike trails / Greenway / Rail-trail
- Public Right of Way
(Sidewalk, street ends, traffic island, public plaza)
- Street tree
- Flower box
- Residential building grounds
(apartment courtyard, back yard, etc.)
- School yard / Outdoor classroom
- Grounds of public building other than school
(e.g. city hall, library, hospital, rec center)
- Building courtyard / Atrium
(e.g. privately owned public spaces)
- Rooftop
- Green buildings

SYSTEMS RELATED

- Waste system (e.g. e-waste drop off location)
- Energy system (e.g. solar array, windmill)
- Food system (e.g. grocery stores, CSA, compost site)
- Storm water management system
(e.g. rain barrels, permeable paver, bioswales)
- Atmosphere (e.g. air quality, urban heat island)

- None of the above
- Other—please specify

If you had to choose just one site type, what would you say is your group's primary site type? Please select one.

WATER & WATER-RELATED

- Watershed / Sewershed
- Stream / River / Canal
- Waterfront / Beach / Shoreline
- Freshwater wetland
- Salt marsh

LAND & BUILT ENVIRONMENT

- Forest / Woodland
- Park
- Community garden
- Urban farm
- Vacant land / Vacant lot
- Brownfield
- Athletic field
- Playground

- Dog run / Dog park
- Botanical garden / Arboretum
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- Food system (e.g. grocery stores, CSA, compost site)
- Storm water management system
(e.g. rain barrels, permeable paver, bioswales)
- Atmosphere (e.g. air quality, urban heat island)

- None of the above
- Other—please specify

Who owns the majority of the properties where your group worked within the past year? Please choose one.

- City / Local government
- County government
- State government
- Federal government
- Other government (e.g. NY-NJ Port Authority)
- Individual
- Corporation
(including joint ventures, real estate investment groups)
- Nonprofit
- We work across public and private lands
- Don't know
- Other—please specify

Our group has improved the following environmental outcomes in the community(ies) in which we work:

PLANTS AND HABITAT QUALITY

Strongly Disagree Neutral Strongly Agree
 1 2 3 4 5 6 7

I don't know/not applicable

AIR AND/OR WATER QUALITY

Strongly Disagree Neutral Strongly Agree
 1 2 3 4 5 6 7

I don't know/not applicable

LAND PROTECTION

Strongly Disagree Neutral Strongly Agree
 1 2 3 4 5 6 7

I don't know/not applicable

URBAN SUSTAINABILITY

(e.g., food systems, waste systems, energy systems)

Strongly Disagree Neutral Strongly Agree
 1 2 3 4 5 6 7

I don't know/not applicable

Section 7: Other Influences

Please tell us how influential the following plans and programs have been on your group's work.

PlaNYC: A Greener, Greater New York (created 2007)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

MillionTreesNYC Campaign (2007–2015)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

DEP: Green Infrastructure Plan (2010)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Vision2020: Comprehensive Waterfront Plan (2011)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

PlaNYC: A Stronger, More Resilient New York (2013)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Vision Zero Action Plan (2014)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

OneNYC: The Plan for a Strong and Just City (2015)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

OX30: Zero Waste (2015–present)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

CreateNYC: A Cultural Plan for All New Yorkers (2016-present)

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Other plan, program, or report

(not limited to City of New York), please name it:

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Not applicable

Please tell us how influential the following events and processes have been on your group's work.

Extreme weather events

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Climate change

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Financial crises

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Social movements

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Changes in elected officials

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Neighborhood development or rezonings

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Other, please name it:

Not Influential Neutral Highly Influential
 1 2 3 4 5 6 7

Not applicable

Section 8: Tell Us a Bit More About Your Group

What types of services does your group provide?

Please select all that apply.

- Educational curricula / Trainings
- Legal resources
- Buildings / Facilities
- Plant materials / Equipment
- Technical assistance
- Labor (volunteers / students / interns)
- Grants
- Community organizing
- Public relations / Marketing
- Data / Information / Scientific research
- Other—please specify

How does your group share information with the public?

Please select all that apply.

- N/A, We don't share information
- National media
- Local media
- Direct mailing
- E-mail blasting
- Door-to-door outreach
- Word of mouth
- Flyers
- Website
- Social media (e.g. Facebook, Twitter)
- Listserv
- Blog
- Conferences
- Community meetings
- Radio
- TV
- Other—please specify

What is your group estimated annual budget for the current year?

- Prefer not to answer

Approximately what proportion of your budget comes from the following funding sources?

Make sure your percentages total to 100%.

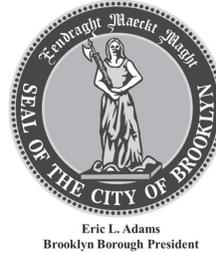
	Percent (out of 100)
Government
Foundations
Corporations
Individual giving
Memberships
Fee for service
Other:

- We have no budget
- Prefer not to answer

New York City Urban Field Station



Special thanks to our data providers

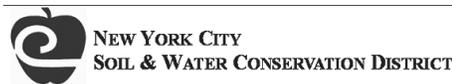


New York - New Jersey
Harbor & Estuary Program
www.harborestuary.org



THE ADVOCATE FOR NEW YORK CITY'S HISTORIC NEIGHBORHOODS





HOW TO CITE THIS DOCUMENT

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ABSTRACT

The Stewardship Mapping and Assessment Project (STEW-MAP) began in 2007 as a way to understand and map civic capacity to care for the environment across New York City. In 2017, we implemented a ten-year update to STEW-MAP in New York City's five boroughs and expanded it to the larger metropolitan area as a regional pilot survey. In this report, we share our preliminary findings about the civic stewardship groups working to care for the local environment through conservation, monitoring, management, transformation, education, and advocacy. The data presented include organizational characteristics, collaboration networks, and geographic turf. The results from the STEW-MAP survey show that civic environmental stewardship is a vital force in the neighborhoods of New York City and the surrounding region. Combined, the respondent stewardship groups represent an estimated 540,000 members and staff, working in every borough and county and with budgets totaling approximately \$800 million. This capacity is spread across groups from different sectors including public health, social services, transportation, education, housing and faith-based organizations. They work at different geographic and professional scales, but many share the goal of improving their communities. The work of civic stewardship groups impacts not only the physical environment but the social fabric of the places they live. This report highlights some key findings, and also points to further research questions to consider for future publications.

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