

# 16 Constructing New York City's Urban Forest

## The Politics and Governance of the MillionTreesNYC Campaign

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### **Introduction**

In 2005–2006, bureaucrats at the New York City Department of Parks and Recreation (DPR) began to marshal quantitative evidence to argue for investment in tree planting as part of Mayor Bloomberg's long-term sustainability plan, PlaNYC 2030, launched in 2007. Concurrently, Bette Midler—the celebrity founder of the non-profit New York Restoration Project (NYRP)—announced her dream of planting one million trees in New York City. These two efforts were brought together as the MillionTreesNYC campaign, a formal public–private partnership to plant and care for one million trees citywide by 2017.<sup>1</sup> Realizing that this effort could not be sustained in isolation, leaders of the campaign created an Advisory Committee that engaged more than 100 environmental organizations. Various programs were then implemented to build public awareness about trees—focusing on the multi-functional benefits of the urban forest—and create a constituency of engaged citizens involved with the campaign. Through engagement in volunteer stewardship programs, residents' labor, support, and enthusiasm was cultivated and harnessed in the planting and maintenance of trees, without devolving strategic decision-making authority to them. At one level, the case demonstrates the role of public, civic, and private actors in the networked governance of a successful, large-scale, urban green-infrastructure campaign.

This chapter probes deeper to explore how a political ecology and discursive approach promotes a critical understanding of the politics surrounding the governance of the urban forest in New York City from 2007 to 2011. It asks: what agendas did actors involved in the governance of urban forestry set? What discourses of the environment and society did they deploy? It explores who participated in decision-making and who did not, what rationales were used, and with what consequences. After briefly situating the study in the literature on political ecology and environmental governance and reviewing my methods, I present an analysis of the MillionTreesNYC campaign to show the complex forces at play in the contemporary construction of the urban forest. The case reveals the presence of pragmatic responses to the neoliberal era simultaneously overlapping with commitments to quality of life, sustainability, and environmental justice. To critique wholesale the neoliberal context is to miss the real commitments to advanc-

ing equity and environmental quality within that space; while to universally laud the achievements of the campaign is to miss the opportunity for further advances toward those ends.

### **Urban Environmental Governance: Actors and Discourses**

Political ecology brings attention to the dynamics among actors involved in environmental governance—including the state, civil society, and the public. Municipal urban forestry campaigns can be understood as strategies used by competitive, global cities investing in environmental quality as part of city image-making, within a political-economic context of rescaled, post-industrial, neoliberalism (While et al., 2004; Jonas and While, 2007). Keil and Boudreau (2006) describe these efforts as “roll out environmentalism,” whereby the state creates new institutions and governance arrangements that address the results of previous, harsher forms of neoliberalism. Perkins (2011) applies this notion to the “roll out” of urban forestry, wherein the state has recently increased its support for urban forestry initiatives via grants and partnership with non-state actors—a practice which he critiques from a Gramscian perspective. Depending upon one’s standpoint, the role of civil society organizations in environmental governance can be celebrated for their progressive potential (Robbins, 2004; Escobar, 2008), as well as critiqued on grounds of accountability, representation, and transparency (Swyngedouw, 2005). In an urban forestry case, Heynen and Perkins (2007) criticize the non-profit Greening Milwaukee for its selective serving of certain residents (e.g. planting trees with homeowners, but not with renters). Despite the debates over accountability, it is clear that civil society is working in networked governance arrangements with the state—including in the management of the urban environment (Bulkeley, 2005; Gustavsson et al., 2009; Connolly et al., 2013).

The public also play a key role in urban natural resource management. Forestry—in both rural and urban contexts—has a long history as a highly scientific, technical, and professionalized field that is managed by bureaucrats and licensed private sector actors, including arborists, foresters, and nursery growers (see, for example Scott, 1998; Ricard, 2005; Konijnendijk et al., 2006). Yet, traditions in community forestry and community-based, natural resource management that came originally from rural contexts and the global South have been adapted more recently for urban and global North settings (Burch and Grove, 1993; Weber, 2000; McCarthy, 2002; Schroeder et al., 2006; Murphy-Dunning, 2009). As well, there is a long tradition of public, voluntary engagement in municipal shade tree commissions and other local environmental stewardship groups (Ricard, 2005). Following a community forestry ethos involves a normative commitment to engaging the public in governance of the urban forest (Konijnendijk, 2013). In some cases, however, the public is engaged as a labor force rather than as decision-makers. Some critical scholars have argued that this practice is a direct result of neoliberalism at work. Because municipalities operating in austere fiscal times lack the resources to ensure the survival of investments in new green infrastructure, volunteers have been enrolled to assist with watering, pruning, and maintenance

of trees as well as the maintenance of neighborhood parks (Perkins, 2009, 2013). Brand (2007) argues that neoliberal discourses work to create ‘green subjects’ whereby people adopt an individualized way of thinking about environmental problems. For example, he critiques this self-regulating environmentalism of personal responsibility, such as encouraging consumers to switch to CFL light bulbs—shifting our focus away from the need for collective action and structural transformation. These individualized appeals can similarly be seen in efforts to get the public to plant or care for trees. Other scholars explore the question of who participates, with what motivations, in the volunteer stewardship of the urban environment, finding stewardship to be a form of individual expression and collective action (Svendsen, 2009). Some have analyzed volunteer tree planting as a form of civic engagement and have found a reciprocal relationship whereby higher levels of volunteer stewardship are linked with higher degrees of participation in other forms of civic activity (Fisher et al., 2011).

Finally, discursive acts also construct the urban forest. Political ecologists examine the discursive construction of nature—urban and otherwise—and bring critical scrutiny to forms of ‘official’ knowledge codified in state practices (Demeritt, 2002; Robbins, 2004; Castree, 2005). Scott (1998) demonstrates the state’s tendency toward calculation, quantification, and simplification in natural resource management, relying upon an instrumental and rationalized view of the environment as a bundle of goods and services. There have been numerous academic and applied efforts to quantify and commodify the value of the urban forest, including the United States Department of Agriculture (USDA) Forest Service models STRATUM and UFORE, both of which are now incorporated into the i-Tree software suite for analyzing urban forest characteristics and benefits. These models, as well as other approaches to urban tree canopy analysis and prioritization are used widely by public land managers and decision-makers to make the case for investing in trees and to advance urban forestry agendas (Grove et al., 2005; Peper et al., 2007; Nowak et al., 2010; Pincetl, 2010). At the same time, qualitative researchers have pointed to the limits of quantification in capturing the full range of values associated with the urban forest, nature, or any phenomena (Livingstone, 1992; Enticott, 2001; Heynen et al., 2007; Robertson, 2007). Perhaps some of the most prominent socio-cultural values associated with trees—such as beauty or aesthetic value, sacredness, personal and place attachment, and cultural heritage—are precisely those that are most difficult to represent in quantitative models (Westphal, 2003; Svendsen, 2009; Svendsen and Campbell, 2010). Further, critical scholars argue that current neoliberal discourses of quantification cast the urban forest as an amenity that creates value for landowners, which varies depending on one’s status as a homeowner or renter, thereby creating inequalities (Heynen and Perkins, 2007). Finally, recent work in the urban political ecology tradition seeks to connect the discursive and the material: “The material production of environments is necessarily impregnated with the mobilization of particular discourses and understandings (if not ideologies) of and about nature and the environment” (Heynen et al., 2006: 7). Clearly, the way we understand ‘nature’ fundamentally shapes our policies and practices of how we build and manage our cities.

## **Methods and Data Analysis**

The selection of New York City as a qualitative case study was grounded in my situated understanding of MillionTreesNYC, as well as my access to gatekeepers who could inform this research (Rose, 1997; Dowling, 2005; Dunn, 2005).<sup>2</sup> My primary method was to conduct semi-structured interviews with municipal and non-profit representatives in planning, urban forestry, and parks. I interviewed a total of 35 subjects: 20 from the public sector, 11 from civil society,<sup>3</sup> and 4 from the private sector. This composition came from using snowball sampling until reaching saturation in interview content. All participants gave informed consent to participate as confidential subjects and to be audio recorded (IRB # 11-714M). Interviews averaged 1–2 hours and covered involvement in urban forestry and sustainability planning; organizational values; program activities; and partnership networks. Recordings were transcribed in full and supplemented with field notes. As secondary methods, I conducted discourse analysis and participant observation. I reviewed documents, plans, and websites released between 2007 and 2011, including: PlaNYC (2007), PlaNYC 2.0 (the April 2011 update to the plan), and MillionTreesNYC documents. This analysis focuses on the broad ideological contours and attendant power relations of these documents (Waitt, 2005). I also utilized participant observation. As a member of the MillionTreesNYC Advisory Committee since 2007, I participated in meetings related to the implementation of the campaign. In addition, I shadowed urban foresters as they selected sites for new trees and received tree deliveries; participated in volunteer planting days; and attended a tree giveaway and a tree composting event. The qualitative analysis software, NVivo, was used to store, code, and analyze the transcripts and documents. My approach is one of grounded theory—where the thematic categories emerged directly from my data (Dey, 1999).

## **Case Study: Constructing New York City's Urban Forest**

### ***The Public Sector: The Mayor, Bureaucrats, and Quantification***

New York City has long-standing capacity in creating and maintaining its urban forest and has more recently engaged in municipally led sustainability planning that helped trigger the MillionTreesNYC campaign. DPR is one of the largest urban natural resource management organizations in the world, with approximately 7,000 employees (including seasonal staff) and expenditures of \$382 million in fiscal year 2010 (NYC MMR, 2011: 112). The agency manages 29,000 acres of open space and cares for approximately five million trees citywide (NYC DPR, 2012). Created in 2007, PlaNYC 2030 is New York City's long-term sustainability plan. It was the product of top-down leadership from the Bloomberg mayoral administration working across city agencies to identify measurable goals toward 'sustainability' in the areas of land, water, transportation, energy, air, and climate change (City of New York, 2007). DPR bureaucrats marshaled evidence to convince City Hall of the merit of investments in tree planting as a core component

of PlaNYC. The agency used information it had spent years collecting and analyzing through data management systems, geographic information systems and remote sensing, and tree censuses. In particular, they used the STRATUM model, which offered a quantitative—and monetized—view of the urban forest. Then-DPR Commissioner Adrian Benepe was quoted in *The New York Times* as saying: “Trees are great for a variety of reasons, but how do you explain that to the Office of Management and Budget?” (Randall, 2007).

The STRATUM report to DPR is infused with the language of business sense and inter-city competition:

New York City’s street trees are a valuable asset, providing approximately \$100.2 million or \$172 per tree (\$15 per capita) in net annual benefits to the community. Over the years, the city has invested millions in its urban forest. Citizens are now receiving a return on that investment—trees are providing \$5.60 in benefits for every \$1 spent on tree planting and care. New York City’s benefit–cost ratio of 5.60 exceeds all other cities studied to date, including Fort Collins, Colorado (2.18), Glendale, Arizona (2.41), and Charlotte, North Carolina (3.25).

(Peper et al. 2007: 2–3)

Much of the economic benefit identified is associated with increases in real estate value and commercial activity on tree-lined streets (Anderson and Cordell, 1988; McPherson and Simpson, 2002; Wolf, 2005; Donovan and Butry, 2010). This appealed to the mayor, who viewed investments in green infrastructure as part of a strategy to attract global talent to live and work in New York City.

Once so convinced, City Hall committed major financial and political support to tree planting. Approximately \$400 million in capital funds went to DPR for urban forestry as part of PlaNYC in 2007 (Table 1). A DPR memo said “PlaNYC represents the most significant change in municipal urban greening since the Parks Department first funded citywide curbside tree planting under Robert Moses in 1934” (Watt, 2007). This campaign also became a mayoral priority, which drove an aggressive timeline, reporting, and tracking. This mayoral enthusiasm was catalyzed by the argumentation of long-time DPR bureaucrats; interviewees note that Bloomberg differed from his predecessors in empowering his agency staff to exercise leadership. Finding this space for entrepreneurialism and creativity in hierarchic institutions was no small feat.

### ***Civil Society: An Elite Non-profit Sets its Sights***

Concurrently and completely outside of the PlaNYC process, a professionalized non-profit organization with a celebrity founder became interested in developing a citywide tree-planting effort. NYRP is a greening group founded in 1995 by entertainer Bette Midler; at their 2006 spring picnic fundraiser, Midler announced that she wanted to “plant one million trees in New York City.” The announcement surprised many of the staff at both NYRP and DPR, who did not view NYRP as

Table 16.1 DPR's PlaNYC funding, with urban forestry related capital funding in bold

8 regional parks	\$386 million
290 open schoolyards	\$96 million
36 field lighting sites	\$42 million
25 synthetic turf fields	\$22 million
<b>800 greenstreets</b>	<b>\$15 million</b>
<b>natural area reforestation</b>	<b>\$150 million</b>
<b>220,000 street trees</b>	<b>\$226 million</b>
Total capital budget:	\$906 million
7-year pruning cycle	\$2.7 million
Stump removal	\$2.0 million
Maintenance staff (227)	\$10.4 million
Total annual expense budget increase	\$15.1 million

Source: NYC DPR, 2011. "MillionTreesNYC-PlaNYC." Presentation. May 16, 2011.

having a forestry agenda or expertise. One interviewee elaborated on the way in which the founder's changing interests shaped the programmatic focus of NYRP:

I think NYRP really didn't know what it wanted to be . . . This comes from the very leader of the organization, Bette, who—every day there's a priority and a new idea. And so this chaos that surrounds her is what the organization is. 'Cause when Bette picks up the phone and says, "Oh my gosh, I was just driving down 157th Street and there's plastic bags in the trees. Stop everything and get everybody up there." Now we're focused on plastic bags and then the next day it's something else . . . NYRP is doing too many things instead of being really good at two things.

(Respondent 35)

But, Midler's celebrity offered her a platform for courting donors, attracting media attention, and gaining audience with public officials. One respondent said, "Bette can definitely pick up the phone and talk to the mayor" (respondent 35). Similarly, this billionaire mayor was comfortable working with high-powered elites, like business magnate and philanthropist George Soros, to support city initiatives with private dollars. The sequence of what exactly transpired between the announcement at the picnic and the formal announcement of NYRP as a partner in MillionTreesNYC remains murky, but it centers on high-level contact between Midler and City Hall—including Mayor Bloomberg and Deputy Mayor Patti Harris, known as one of the key gatekeepers to Bloomberg. Leadership at the Mayor's Office, DPR, and NYRP worked together—initially behind closed doors—to craft a joint tree-planting campaign.

### **Hybrid Governance: A Formal Public-Private Partnership**

PlaNYC's process has been critiqued by some as lacking transparency, with public input seen as token or after the fact (Angotti, 2010). Non-governmental input was

formally incorporated into PlaNYC through the Sustainability Advisory Board (SAB). Yet, because of the clear leadership and expertise of DPR in the PlaNYC goal-setting process, respondents noted that the SAB played little role in crafting the forestry-related goals. After the internal agency work was complete, a six-month, public-outreach process was held (ICLEI, 2010). Public engagement largely served to get the word out about PlaNYC to those who were most inclined to care, but did not substantively shift its goals. Some argue that the MillionTreesNYC campaign was used to help cement stronger public buy-in for the overall plan. In fact, the million trees goal was released to reporters one day in advance of the public release of PlaNYC on April 22, 2007 (Rivera, 2007). The tree-planting goal was viewed as a “feel good” issue, in sharp contrast to the political divisiveness of goals like the failed attempt at congestion pricing (ICLEI, 2010).

The MillionTreesNYC campaign fits Konijnendijk’s (2013) description of “new hybrid models of urban forestry” (4). The rationale behind this partnership was threefold. First and foremost it was a funding strategy to leverage municipal funding with private dollars. MillionTreesNYC attracted \$10 million in donations from Bloomberg Philanthropies and David Rockefeller—demonstrating how the mayor drew on his private wealth and networks to support his “signature initiatives.” Then, NYRP secured lead corporate sponsors: Toyota, BNP Paribas, and Home Depot. Over the course of 2007–2010, NYRP grew from a \$6 million to a \$13 million organization—an astronomical leap for the local environmental non-profit sector. Second, the joint effort sought to employ the strengths of each partner. In an ideal view, the bureaucratic expertise in tree planting and economies of scale of the large municipal agency would be balanced by the nimble innovation of the non-profit organization—particularly given NYRP’s savvy in outreach, marketing, and special events. Third, the campaign needed both partners to plant citywide, across land jurisdictions. DPR, working with private contractors, would plant street trees, in parks, and reforest thousands of acres of “natural areas.” NYRP would plant on public housing grounds, schoolyards, “publicly accessible private lands,” and give away trees to residents.

Both formal and informal “rules of the game” were articulated in this new hybrid partnership (Konijnendijk, 2013). The partnership was institutionalized through a formal Memorandum of Understanding (MOU) that articulated goals, roles, and responsibilities. Although not written into the MOU, partners agreed on a ratio of planting targets: 60 percent DPR and 40 percent NYRP. The MOU also established a \$35 million fundraising goal for the campaign for NYRP (MTNYC, 2008: 7). The parties routinized their contact through a number of means: constant email contact, monthly tree-operations meetings about planting decisions, biweekly meetings between the directors of MillionTreesNYC at DPR and NYRP, and biweekly joint meetings called the MillionTreesNYC Taskforce. Some respondents saw the Taskforce as an important means of communication, but others argued that these meetings consisted of “reporting back” tree-planting metrics rather than making joint decisions. Despite the regular contact, some respondents leveled the critique that MillionTreesNYC was a divided partnership.



*Figure 16.1* Launching the MillionTreesNYC campaign as a public-private partnership. From left to right: Drew Becher, former Executive Director, NYRP; Adrian Benepe, former Commissioner, DPR; Michael Bloomberg, former Mayor of the City of New York; Bette Midler, founder of NYRP; Patricia Harris, former First Deputy Mayor of the City of New York.

Source: Malcolm Pinckney, City of New York Department of Parks and Recreation, 2007.

The two sides differed in mandate and capacity. A sense of accountability or public trust was seen as being crucial to DPR's ability to successfully meet the targets of the campaign and appropriately spend public funds. NYRP, in contrast, was motivated by a "moral obligation"—the passions, commitments, and interests of its founder (respondent 28). One manager elaborated on these differences:

I think basically [NYRP's] involvement is optional . . . They get the credit no matter what they do . . . Who's going to sit down and analyze who did what and who claimed what credit? And have they really met their goal? . . . I think [DPR is] held much more to account within the government structure partly 'cause its public money. We're entrusted with this money and how we spend it is deeply important to how . . . we're perceived . . . that's part of the public trust.

(Respondent 27)

Finally, several respondents indicated a stark contrast in the capacity of these groups as tree-planting entities. These differences necessitated mutual learning across DPR and NYRP and required a re-working of tree-planting targets to 70 percent DPR and 30 percent NYRP.

Leaders on both sides of the partnership, however, brought a sense of distributive justice to the implementation of the campaign. DPR bureaucrats were cognizant of the way in which the urban forest had developed unevenly over the course of the past several decades, because street trees were previously planted via a request-based system. The managers saw this large-scale campaign as a chance to correct these inequalities, planting first in the neighborhoods that were most lacking in trees. This built on an existing DPR program that preceded PlaNYC called ‘Trees for Public Health.’ One respondent reflected on the city’s process of setting PlaNYC’s tree-planting goals:

We started doing the math with [DPR] about where there were and were not street trees, [and] it became clear that this was an initiative that was actually as much or more about environmental justice as it was about creating elite property values. And so once we set the goal that says, “Look, every place that it is feasible to put a sidewalk tree, we would like to put a sidewalk tree,” you immediately have a policy that fills in the valleys. And, frankly, there aren’t that many places on the Upper East Side that you can put more street trees, but there are lots of places in the South Bronx. And so it was one of these things that turned a transition from a hard infrastructure plan into a sustainability plan, and an elitist, global competitive story into a quality of life-for-all story, [this] is to my mind a lot of the magic of what we did.

(Respondent 49)

So, while certain rationales around the global, competitive city might have motivated Bloomberg and his City Hall staff, other sets of values and practices—including commitments to quality of life and environmental justice—were introduced by agency staff through the implementation of the tree-planting initiative. In parallel, the belief that everyone deserves access to clean, green neighborhoods was also one of the core driving forces behind Midler’s creation of NYRP. Thus, the organization is committed to greening in “high need neighborhoods” (respondent 10). Even when managers didn’t use the language of ‘justice,’ they sought to have a defensible rationale that they could present to the public for why they planted in what places and in what sequence.

### ***Networked Governance: Advisory Committee***

The politics of resource management in this case do not stop with the relations between DPR and NYRP; a broader set of stakeholders are involved with MillionTreesNYC. Realizing that the campaign would be prominent in the organizational landscape of New York City, its leaders deliberately crafted roles for their allies via the MillionTreesNYC Advisory Committee—a group of approximately 400 individual members from 109 organizations. The campaign sought to cast a wide net and include the broad network of experts, leaders, and line staff engaged in urban forestry and natural resource stewardship citywide in this effort. Research reveals the existing diversity and number of civic, public, and



Figure 16.2 Tree stewardship in East New York, Brooklyn, NY, USA—one of the Trees for Public Health neighborhoods prioritized for block planting due to low street tree stocking levels.

Source: Susan Kornacki, MillionTreesNYC, City of New York Department of Parks and Recreation, 2013.

private organizations involved in environmental work in New York City, with nearly 2,800 civic stewardship groups identified citywide as of 2007 (Fisher et al., 2012; Connolly et al., 2013). One respondent described the city's existing "baggage of people, personalities, organizations, and events" as something that had to be addressed in the creation of this campaign (respondent 28).

The Advisory Committee offered a threefold benefit: (1) it provides a means for outside experts to contribute ideas, resources, skills, and programs to the campaign. Leaders noted the procedural importance of the committee in light of critique of PlaNYC as top-down. One respondent noted a desire not to "reinvent the wheel" with this campaign, and to build on the existing expertise and investments of dozens of groups citywide. (2) The committee helped head off critique before it emerged. By being asked to participate, potential critics or competitors—especially in the crowded context of the non-profit world—would feel invested in the campaign. (3) The broad committee membership aimed to support the longevity of the campaign, particularly beyond the 2014 change in mayoral administration. One campaign leader used the language of creating a "movement" around urban forestry (respondent 15).

Although the intention of the Advisory Committee was one of shared governance, it did not always live up to this ideal. The body was organized into seven thematic subcommittees (Tree Planting; Stewardship; Education and Programs; Community Outreach; Marketing and Public Relations; Public Policy Initiatives; and Research and Evaluation). The structure of the subcommittee leadership was intended to include representatives from DPR, NYRP, and an outside organization. As entirely volunteer positions, the level of engagement of outside entities waxed and waned over time and across issue areas, depending on organizational circumstance and challenges each subcommittee faced. For example, the stewardship subcommittee ended up giving rise to a formalized, funded stewardship program called StewCorps. For the research and evaluation subcommittee, academic and governmental researchers were interested in accessing data and field sites, conducting research, and publishing articles about MillionTreesNYC; this productive self-interest helped keep the subcommittee active. Of the overall Advisory Committee, one respondent acknowledged the varying levels of engagement of different committee members: “There’s always going to be great lists of organizations and only 5 percent are really going to do the work” (respondent 28). Moreover, while some participants valued the opportunity to give input, others argued that it felt ‘token’ and their expertise underutilized. One leader within the campaign asked: “Are they advising us or are we advising them? . . . The relationship between the Advisory Committee, Parks, and NYRP is very unclear” (respondent 11).

### ***Engaging or Harnessing the Public? Outreach and Stewardship Programs***

MillionTreesNYC also sought to educate the public about the urban forest through outreach and public relations. Building from the language of PlaNYC around greening the growing city, MillionTreesNYC advanced a storyline that trees help make communities more liveable—and competitive—in the face of that growth. An excerpt from the campaign’s website demonstrates this framing:

#### **Why Plant a Million Trees?**

New York City is **growing!** You can see it—and **feel** it—in every neighborhood in every borough. It’s exciting, and it’s what makes New York the greatest city in the world. But, like in any thriving metropolis, it’s important to make sure the Big Apple and its residents—meaning **you!**—are healthy and happy while adjusting to the growth and the many changes it will bring with it.

Planting trees is one of the most beneficial [hyperlink to a page about urban forest benefits] and cost-effective ways to help ease these growing pains. Trees help clean our air, and reduce the pollutants that trigger asthma attacks and exacerbate other respiratory diseases. They cool our streets, sidewalks, and homes on hot summer days. Trees increase property value, and encourage

neighborhood revitalization. And trees make our City an even more beautiful and comfortable place to live, work, and visit.

(MillionTreesNYC website, 2010: [milliontreesnyc.org](http://milliontreesnyc.org))

The multiple benefits of trees were celebrated in public remarks and outreach campaigns. Citing research that trees help mitigate urban heat island effect, improve air quality, create liveable streets, and provide broad psycho-social benefits (Nowak et al., 2010), the campaign could leverage different arguments with different constituencies. For example, a large-scale print advertisement featured images of trees and people in the city, touting trees as ‘Zen masters’ (“Trees do more than you think. They promote relaxation and fitness, enhance our emotional and mental health, and even encourage us to drive a little slower”) and ‘exercise partners’ (“While protecting us from the sun, they encourage outdoor play and exercise—helping in our fight against obesity”). Interviewees felt that outreach was successful in making MillionTreesNYC one of the most visible efforts of PlaNYC, but converting public awareness to public engagement required developing hands-on stewardship programs, as illustrated by three examples.

First, street trees in New York City are planted by private firms that are contractually obligated to guarantee the trees for two years after planting. For all of PlaNYC’s capital commitments to tree planting, managers, critics, and advocates felt that it needed a greater commitment of maintenance funds. This became more acute following cuts to the maintenance budget in 2008 after the global financial crisis. One municipal employee said, “Nobody wants to be the mayor of a city with a million dead trees” (respondent 1). Cognizant of this danger, MillionTreesNYC developed stewardship programs including an online Adopt-a-Tree website and free tools giveaways for gardening in tree pits. A StewCorps program offered formal tree-care training and certification. But, as of November 2012, just 5,506 trees were adopted citywide and approximately 1,500 stewardship actions were reported online. A campaign leader noted that many more trees were adopted than were reported online, but there is no clear mechanism for tracking that activity. Moreover, developing sustained grassroots stewardship of street trees remains a challenge, not just in New York City, but in many cities across the country.

Second, approximately two-thirds of the first 500,000 trees planted were on so-called ‘natural areas’ through afforestation and reforestation practices.<sup>4</sup> The 2008 recession led to 30 percent budget cuts in all city agencies. This led DPR to shift its reforestation from working with city employees and contractors to using volunteers. Now, each fall and spring, approximately 20,000 trees are planted in single-day, volunteer-planting events. Despite the significant professional preparatory work that is required, using volunteers for their physical labor still remains a significant cost-cutting measure. Although cost-savings was one driving rationale, DPR also hoped that these volunteers would come to feel more invested in park sites that are often overlooked or less visible than traditional recreational sites. From the perspective of leaders developing MillionTreesNYC as a volunteer program, active engagement with tree-planting events is one of the key points of contact



*Figure 16.3* Volunteer stewards at a MillionTreesNYC reforestation planting.

Source: Malcolm Pinckney, City of New York Department of Parks and Recreation, 2013.

between the public and the campaign, and, indeed, many volunteers have become sustained participants in MillionTreesNYC events each season.<sup>5</sup>

Third, NYRP organizes free, public tree giveaways in order to build awareness about trees, facilitate planting on private land, and develop support for the campaign amongst the public. Finally, ‘influence plantings’ are perhaps the grayest area in terms of tracking the effect of the campaign. Included in these counts is an estimate that 25 percent of trees sold at area tree retailers, such as Home Depot, are planted by New York City residents.

## **Discussion**

This study follows Swyngedouw and Heynen (2003) and others in the project of bringing political ecology to the global North and urban realms, by tracing the politics of actors involved in the governance of the urban forest in New York City. While some critical scholars have considered current state–civil society arrangements around urban forestry as neoliberal hegemony at work (Perkins, 2011), I reveal a more complicated picture. First, the municipal government commitment of leadership, funding, and staff in support of PlaNYC’s tree-planting goals reflects the strong, on-going role of local government in urban forestry. We can critique that these capital funds were a one-time infusion in the face of on-going cuts to the maintenance budget, particularly after the 2008 financial crisis. But the net effect

of the strategic goal setting and implementation of the campaign was increased investment in both the extent and equity of the urban forest over a multi-year campaign. The spending of those public funds and the targeting of neighborhoods with low tree canopy was first guided by the bureaucrats within city government pursuing a distributional justice agenda. Indeed, as Keil and Boudreau (2006) have noted, municipal workers can be agents of progressive change.

MillionTreesNYC also fits Konijnendijk's (2013) description of "hybrid models of urban forestry" with the thorough entanglement of public and private, planting across spatial turf and over time. We see the pragmatic leveraging of public resources with private resources via the partnership. There is space in this political arena for certain, well-positioned, non-profit actors to engage. We must attend to the variation in the degree of professionalization of civil society groups (Carmin, 1999; Andrews and Edwards, 2005; Fisher et al., 2012), as not all civic groups are grassroots or represent 'the public.' We can certainly raise questions about the accountability of non-profits and call attention to the need for transparency and responsiveness in governance (Swyngedouw, 2005). In addition, I note differences in: mandate, motivation, capacity, and expertise of the two sides of the public-private partnership. DPR, motivated by a sense of the public trust and accountability to spend public monies, brought technical expertise and economies of scale in urban forestry operations. NYRP, motivated by the commitments of its founder, brought the nimble ability to raise private dollars, do marketing and outreach, and hold innovative events. This case shows, however, that leaders of the campaign attempted to create a structure for consultation and advising through the Advisory Committee. I therefore complicate the notion of hybridity to one of *networked* governance—noting the dozens of civic, public, and private actors who were brought into this campaign as advisors. The role of those advisors varied over the course of the campaign and across the issues their subcommittee was addressing.

More work remains to be done to fully engage the public as citizens of the urban forest. Despite normative calls for the engagement of the public as stakeholders in urban forestry, we are not seeing the devolution of decision-making authority to residents (Perkins, 2009). For the most part, the public is viewed as recipients or *consumers*: of messages, of educational activities, of stewardship programs, of trees, and of ecosystem services. Indeed, MillionTreesNYC successfully built a constituency of allies for the urban forest, while at the same time harnessing their labor in its planting and care. This model can be contrasted with other forms of community forestry (such as New Haven's Urban Resources Initiative) where decision-making is devolved; where tree planting is the means to community empowerment, not the end goal (Murphy-Dunning, 2009). But we must continue to explore the public's role as active agents or *producers* even when a community forestry model is not explicitly in use—including their positive experience as volunteers and as stewards. For example, in a study of MillionTreesNYC volunteer stewards, Fisher et al. (2011) found that participation in volunteer tree stewardship correlates with other forms of civic engagement. We need to more fully explore what 'participation' and 'meaningful involvement' in a tree-planting campaign entails, as well as who benefits in that process and how.

The case also reveals how a large-scale, urban tree-planting campaign discursively frames the environment and the city, both through internal agenda-setting and external public relations. The urban forest is quantified, monetized, and promoted for its multiple benefits. And trees and other green infrastructure are seen as part of the strategy for building a 21st-century sustainable city. This discourse fits, in part, with a neoliberal understanding of the urban forest as an amenity that gets harnessed into image-making of the city as 'green' (Heynen and Perkins, 2007). It is important to note, however, that while leaders at City Hall were convinced by economic arguments, part of the success of the campaign comes from its flexible discourse that was broad enough to incorporate diverse sets of actors with very distinct motivations to engage with the urban forest. The messaging of the campaign focused on the multi-dimensional benefits of the urban forest, including socio-cultural benefits that are much harder to monetize. Moreover, throughout the implementation of the campaign, we also see discursive and material practices that show a commitment to environmental justice and quality of life.

We can raise questions of what is missing or lost in the promulgation of these discourses across countless plans and campaigns. In terms of governance: how do we square the notion of 'infrastructure' as something that the state provides with the neoliberal (and pragmatic) notion that residents must be involved in the care and maintenance of green infrastructure in order to ensure that it survives and functions? What complexity is obscured in the quantification of benefits and services? What are the reasons for planting trees that are simply not quantifiable? Finally, we can pose the question of: sustainability for whom? Future research should more fully examine the question of who benefits from these investments in green infrastructure and who is excluded. And we must explore how those benefits and beneficiaries evolve over time as the multi-year campaign unfolds and as the city changes politically, ecologically, and demographically. It is clear that leaders of the MillionTreesNYC campaign are attuned to the need for distributional justice at the local scale in the implementation of the campaign. But also, particularly if the campaigns are using rhetoric around climate change and global environmental phenomena, we need to examine justice in a multi-scalar way to ask if there any trade-offs within the region or globally (Heynen, 2003). What are the benefits, costs, and opportunity costs of such a campaign? Normatively, why should we plant one million more trees in New York City? What other programs must go hand-in-hand with our tree-planting efforts? Many critical scholars note the way in which local environmental programs can enhance quality of life, but caution against pursuing such policies in the absence of or as a substitute for explicit social justice policies.

## Notes

- 1 The original completion date was scheduled for 2017, but because the campaign is ahead of schedule as of October 2013, MillionTreesNYC leaders expect to finish by the end of 2015.
- 2 I am uniquely situated to reflect on the politics of natural resource management in New York City. I have been working as a researcher with the USDA Forest Service at the New York City Urban Field Station since 2002 (See: [www.nrs.fs.fed.us/nyc/](http://www.nrs.fs.fed.us/nyc/)).

My professional role puts me in direct involvement with leaders in the environmental field in New York City. I am situated as both a participant in and a researcher of the MillionTreesNYC campaign, as I have served on the Advisory Committee and the Research and Evaluation Subcommittee in addition to conducting this study. As such, a critical stance that simply dismisses the effort as neoliberalism at work is not sufficient to me; I am working to explore and unravel the full complexity of the case from critical and embedded standpoints.

- 3 Interviewees included employees of formal non-profits and members of informal community groups involved in the campaign, but did not include members of the general public.
- 4 These 51 sites include woodlands, meadows, marshes, and wetlands; they are larger in acreage than typical recreational parks and comprise a total of more than 8,700 acres citywide (City of New York DPR, 2012).
- 5 Having participated in MillionTreesNYC volunteer plantings and thoroughly enjoyed it, I recognize the dissonance between the abstract notion of my labor being 'harnessed' and the felt, affective experience of planting trees as a voluntary, leisure, or civic engagement practice. This study does not explore the motivations and experiences of volunteer stewards engaging with the campaign, including the multi-dimensional benefits of participation (but see Fisher et al., 2011).

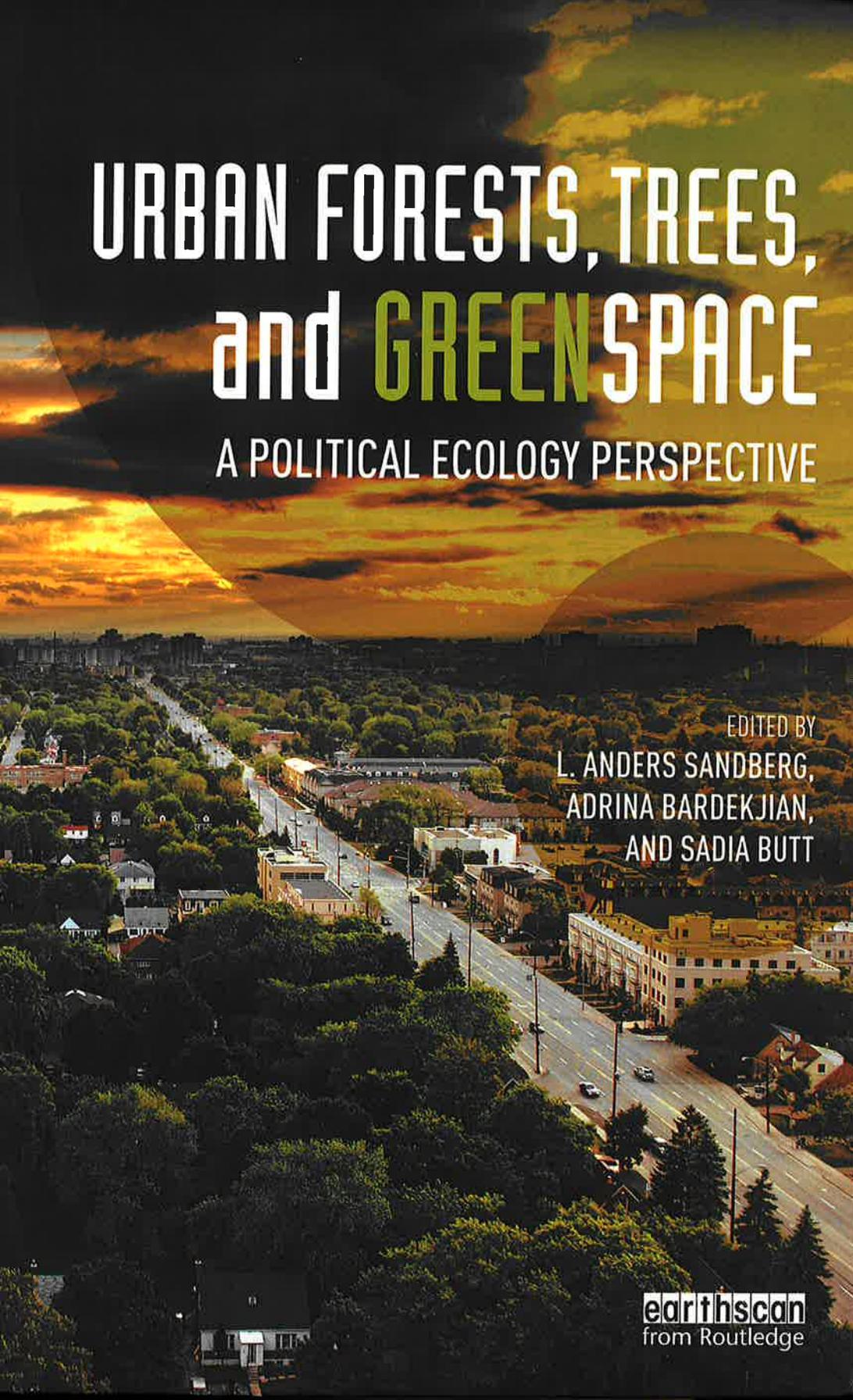
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An aerial photograph of a city street, likely in a residential or urban area, showing a mix of green trees and buildings. The sky is filled with dramatic, golden-orange clouds from a sunset or sunrise. The overall tone is warm and atmospheric.

# URBAN FORESTS, TREES, and GREENSPACE

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