Strategic Lessons in Sustainable Community Building—*the Groundwork USA Network*

By Joseph Schilling with Raksha Vasudevan, Center for Community Progress
In Collaboration with Groundwork USA

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Abstract

Through the project and program work of Groundwork USA (GWUSA)—a national urban greening organization—this report examines the expanding roles and policy influence that community-based organizations play in developing the emergent model of sustainable community building. Over the past decade, GWUSA has led a dynamic network of nonprofits called Groundwork "Trusts" that are working to transform environmental liabilities into community assets in 20 of the nation's most distressed communities. With support from U.S. EPA's Brownfields program and the National Park Service's Rivers, Trails and Conservation Assistance (RTCA) program, the Trusts leverage significant public and private resources to support a wide array of community-based urban greening projects and local sustainability initiatives. More importantly, the GWUSA Network has established an impressive track record of projects yielding measurable outcomes in underserved neighborhoods—a top priority for policymakers and foundations in a field with dwindling resources. Serving as a new type of green community intermediary, the Groundwork Model connects revitalizations of the physical and social environments by engaging local residents in the ecological stewardship of their neighborhoods.

Through its "on the ground" work in diverse places across the country (e.g., the Hudson Valley in New York, Lawrence, Massachusetts, Denver, Colorado, Doña Ana County, New Mexico, and Portland, Oregon), the network has also accumulated practical policy and program insights. This work—engaging thousands of local stakeholders in projects that reclaim brownfields, urban waters, community parks, public squares, and streetscapes—is featured in a series of accompanying case studies. As these demonstrate, several Trusts have become experts at navigating the complexities of federal and state environmental regulations, local land development processes, and the art of civic engagement and coalition building in distressed neighborhoods.

Based on Groundwork's experiences in redeveloping brownfields, restoring urban waters, and promoting equitable development, this report also examines the policy lessons and policy potential of its unique community-building model. Included are a series of practical and far-reaching policy recommendations that policymakers, practitioners, and nonprofit leaders can use for advancing the field of urban greening and community renewal. The report also contains three overarching recommendations for building the internal capacity of GWUSA and taking the sustainable community development movement to scale:

1) Convene a national dialogue on Sustainable Community Building to assess the state of the field and lay the foundation for a nonprofit sustainable community development network.

2) Create a new cohort of Groundwork Trust affiliates to coalesce other national, regional, and local nonprofits around shared goals, facilitating peer-to-peer learning on sustainable community building.

3) Charter the Groundwork Institute to help build capacity of the Trusts and other nonprofits engaged in sustainable community building.

With sufficient guidance and support, GWUSA is well positioned to implement these recommendations by serving as the hub for a national network on sustainable community building.

PART ONE. INTRODUCTION AND BACKGROUND—
What is Groundwork USA? How does Groundwork fit within the Urban Greening Movement?

A growing number of communities across the country are leveraging greening initiatives as catalysts for the social and economic regeneration of urban neighborhoods. Urban greening provides underserved neighborhoods with access to green spaces that improve overall quality of life and begin to address long-standing health and economic disparities of its residents. From an ecological perspective, urban greening involves a menu of policies and strategies that acknowledge, conserve, protect, and infuse nature as an integral element of urban life. These activities seek to reshape the physical and social environments through activities such as restoring degraded urban waterways, promoting low impact development practices, and reclaiming vacant properties for urban agriculture and training low-to-moderate income residents for green jobs. Beyond the myriad programs and initiatives, urban greening is about advancing the principles of social justice and harnessing the collective action of residents through demonstration projects often guided by nonprofit and community-based organizations.

This report focuses on one such community-based greening organization: Groundwork USA and its 20 Groundwork "Trusts" across the country. Borrowing from the successful Groundwork Trust model developed in the United Kingdom,[1] these 20 local nonprofits, or Trusts, manage an impressive portfolio of urban greening projects and programs. Strategic guidance and support for the Trusts comes from the national program office, Groundwork USA, based in Yonkers, New York (the site of one of the early US Groundwork Trusts). Two federal agencies – the EPA Brownfields Program and the National Park Service Rivers and Trails Conservation Assistance Program – helped create the legal and policy foundations that formed the initial Trusts through an Interagency Agreement. EPA and NPS continue to make investments in Groundwork through cooperative agreement allocations and grants[2] as a means of advancing sustainability program goals and their own statutory missions.

WHAT IS MEANT BY THE TERM "TRUST"?

In the United States, Groundwork Trusts are 501c3 nonprofit entities established by local stakeholders in communities struggling with environmental, economic and social decline. Like the Groundwork model itself, the term "Trust" as used in reference to a Groundwork entity originated in the United Kingdom; in British common law, a not-for-profit charity is referred to as a "Trust". However, as the model has been adapted in the US, Groundwork Trusts act as trusted intermediaries between local government and neighborhood residents, and in this way, engender in their communities the more commonly understood definition of the word "trust": *the trait of believing in the reliability and honesty of others.*

Through the process of interviewing Groundwork practitioners and preparing this report, we explored—and answered—three overarching questions:

1) Is urban greening a core strategy for sustainable community building at the neighborhood scale?

2) Are the Groundwork Trust Model and the Groundwork USA Network worthy of enhancement and expansion?

3) Do Groundwork's programs and project work provide policymakers with important insights into the design and implementation of environmental and land development policy?

Groundwork USA's mission is "to bring about the sustained regeneration, improvement and management of the physical environment by developing community-based partnerships which empower people, businesses and organizations to promote environmental, economic and social well-being."[3]

[1] History of Groundwork UK: www.groundwork.org.uk/who-we-are/history.aspx
[2] www.nps.gov/ncrc/programs/rtca/whoweare/wwa_partners_GW.html
[3] Groundwork USA Mission Statement derived from its official incorporation documents.

A. Report Development and Goals of Report

The report explores two major aspects of the Groundwork USA network's efforts to design and develop sustainable communities: 1) observations and insights about what the Trusts do and how they do it—extracting program lessons for policymakers and practitioners interested in replicating and adapting aspects from Groundwork's successful model; 2) lessons about environmental, sustainability, and land development policies (federal, state, and local) based on the Groundwork Trusts' experiences working the front lines of regenerating underserved neighborhoods through urban green programs and projects. The policy lessons focus on three core program activities of the Trusts: 1) Brownfields Redevelopment; 2) Urban Waters Restoration; and 3) Equitable Land Development.

Given the numerous levels and dimensions of the Groundwork model, the report is organized into 3 major components: 1) Background of the Urban Greening Movement—how does Groundwork fit within sustainable community building?; 2) Policy Lessons in Sustainable Community Building—exploring the intersections of environmental, equitable development, and sustainability policy; and 3) Future Directions of Sustainable Community Building—the policy and program opportunities for enhancing and expanding the Groundwork USA Network.

1. Developing the Report:

The report was created for Groundwork USA by project consultants Joe Schilling and Raksha Vasudevan from the Center for Community Progress. In order to understand Groundwork's efforts around the country, over the course of the past year the consultants engaged in a series of activities with the Trusts and with the national network. First, the consultants attended the annual Groundwork Assembly, where Executive Directors, practitioners, and youth leaders from each Trust spoke about their achievements and challenges in the last year. During the Executive Director Assembly, Schilling and Vasudevan facilitated a session introducing the policy project, during which they established relationships with each of the executive directors and elicited initial insights and reactions. The consultants then spoke one-on-one with each of the Executive Directors of Trusts featured in this report in order to gain further insight on the types of policy barriers that the Trusts have faced in their respective communities. The case studies discussed here typify the work of all the Trusts, and are intended to illustrate the scope of the work that all Groundwork Trusts engage in on a daily basis. These in-depth interviews, in combination with research on current literature and best practices in urban greening and sustainable community building, have provided the basis for the policy recommendations in this report. Feedback on preliminary drafts from Groundwork USA leaders, key federal agency partners, and several national experts helped to inform the framing of the report and its final recommendations.

2. Multiple Dimensions for Using this Report:

This report is intended be used by policymakers and practitioners alike in order to generate constructive dialogue on the issues of brownfields development, urban water restoration, and equitable development. As stated above, the report uses Groundwork's accumulated experience to inform larger policy discussions around these three issues. Additionally, the report highlights particular characteristics of the Groundwork model—such as the place-based and community-led nature of the organization's urban greening efforts—to demonstrate the types of programs that may most efficiently channel and utilize investments from foundations, the federal government, and other funding entities.

The audience for this report is not only policymakers involved in urban greening and sustainable community development, but also non-governmental organizations (NGOs) that may find value in the experiences of a national network of local Trusts. Additionally, the process of creating this report has offered an opportunity for local Groundwork Trusts to reflect on and share their own work over the last decade. We believe this report could well serve as the impetus for the creation of a "community of practice" of committed elected officials, practitioners, and residents engaged in sustainable community development. Groundwork's role as an intermediary between local and federal entities has allowed the organization to use its "on the ground" examples of successes and failures to inform policy discussions as a means for generating dialogue amongst various groups working to move the sustainable community development field forward.

B. Background on the Urban Greening Movement in the United States—Understanding the Roots of Sustainable Community Building

The thesis of this policy project and report is that Groundwork USA and its 20 trusts represent a new model of sustainable community building that is worth enhancing and expanding. In order to support such a statement, it is important to understand the foundations of the urban greening movement and how it continues to evolve into "sustainable community building".[4] The Groundwork organization and program activities exemplify the work of many community-based organizations (CBOs) dedicated to regenerating distressed and underserved neighborhoods by teaching, promoting, and fostering sustainability.

1. Legacy Cities and Forgotten Voices

Over the past 50 years market dynamics, global economic forces, and inconsistent urban and land use policies have drastically altered the economic trajectories and physical landscapes of cities in the US. The popularity of land use and transportation policies that facilitated suburbanization and sprawl, and heightened racial tensions, followed by the rapid decline of traditional manufacturing jobs, led to the loss of jobs, depopulation and mounting inventories of vacant properties and abandoned buildings in many

American cities.[5] These so-called Legacy Cities or Cities in Transition, marked by perpetual disinvestment, have been left to their own devices to manage the remnants of an industrial past that benefitted the whole country.

Poverty-stricken neighborhoods present conditions that lack mechanisms of social control that discourage crime.[6] Blighted areas and substandard housing are economic liabilities to local government, because their cost in terms of public services such as infrastructure and welfare assistance exceeds their realized tax revenues. The drag of these areas on government revenues exacerbates fiscal problems, creating a downward cycle in which underfunded infrastructure and public services contribute to declining property values and local government revenues, forcing cities to raise taxes, which in turn prompts further residents to flee.[7] The growth of extremely poor urban areas can be accompanied by surge of the crime rate. In many inner city neighborhoods and urban communities, the concentrated and combined effects of high rates of unemployment, poverty, and environmental injustice have led to concerns about the breakdown of social order and enormous demographic disparities.

People residing in low-income, predominantly non-white, economically segregated neighborhoods, spatially isolated from the rest of the city, often suffer the burden of high amounts of air and water pollution.[8] Historically, manufacturing and industrial plants have often been built in or near impoverished neighborhoods.[9] As environmental hazards tend to be related to past and current patterns of industrial activity, residents of impoverished neighborhoods are most likely to suffer their effects. Furthermore, industries have often targeted disadvantaged communities for siting of waste landfills because poor neighborhoods lack political power and community resources to fight back. A neighborhood where a hazardous waste facility is located is likely to become home to more disadvantaged people, spurring the cycle of poverty and urban decline.[10]

[5] Hoyt, L. and Leroux, A. (2007). Voices from Forgotten Cities: Innovative Revitalization Coalitions in America's Older Small Cities. PolicyLink and CHAPA.

[6] Krivo, L. J., & Peterson, R. D. (1996). Extremely Disadvantaged Neighborhoods and Urban Crime. Social Forces, 75(2), 619-648.

[7] Schilling, J. and Mallach, A. (2012). Cities in Transition: a Guide for Practicing Planners. American Planning Association.

[8] Bolin, B., Grineski, S. and Collins, T. (2005). The Geography of Despair: Environmental Racism and the Making of South Phoenix, Arizona, USA. Research in Human Ecology, 12 (5): 156-168.

[9] Boer, Tom J., Manuel Pastor Jr., James L. Sadd, and Lory D. Snyder. (1997). Is There Environmental Racism? The Demographic of Hazardous Waste in Los Angeles County. Social Science Quarterly, 78 (4).

[10] Cole, Luke W., and Foster, Sheila R. (2001). From the ground up: Environmental racism and the rise of the environmental justice movement. New York University press.

2. Community Development Movement

During the 1950s and 1960s the federal government took on the challenge of blighted neighborhoods in post-industrial American cities through programs such as urban renewal. Local and state governments, for lack of financial and other resources, could not initiate and implement effective action to solve the issues of urban blight and substandard housing facing urban communities. Public agencies took a leading role acquiring and clearing blighted areas for private redevelopment.[11] Urban renewal programs were often concerned with slum removal, which led to displacement of local low-income communities. Thus, the current constellation of thousands of Community Development Corporations (CDCs) emerged in response to groups protesting redlining, displacement of residents from urban renewal[12] and associated civil disorders of the 1960s. They concentrated primarily on economic development activities including housing and commercial projects, and human service programs. A "second wave" of CDCs, formed during the 1970s, focused on housing development over economic development.[13]

When the federal government reduced subsidies to developers of low-income housing, and debt-weary governments at all levels scaled back programs addressing urban poverty in the 1980's, CDCs experienced a resurgence in activity and the number of corporations expanded to as many as 2,000 in the late 1980s and 1990s. While municipal and federal governments have played major roles in encouraging large-scale investment in urban communities, community-based economic development organizations focused on the neighborhoods. Many of the early CDCs received most of their funding from federal agencies, but as the movement gained momentum, private philanthropy and foundations, starting with the Ford Foundation's Grey Areas Program, stepped in. By the 1990's, CDCs received federal support from the Community Development Block Grant (CDBG) and HOME programs.[14]

CDCs succeeded in integrating economic development activities with community development strategies to improve poverty-stricken neighborhoods. By focusing their efforts on housing, public safety, community revitalization, community-building initiatives, and reclaiming vacant properties, CDCs aim to recreate the social fabric and institutions of distressed communities. Lately, a growing number of CDCs have embraced the sustainable development movement and sought to green their community development activities by developing green affordable housing, creating green parks and playgrounds, and fostering green jobs.[15]

3. Urban Greening Movement Arrives

The urban greening movement can trace its roots to broad social and policy reform movements including advocacy for environmental justice, equity in urban infrastructure, and prevention of community factors that cause health disparities. By reclaiming vacant lots and polluted areas and improving access to green space and locally grown food, urban greening projects are part of a growing range of environmental justice, economic development, and health equity activities. Strategic community gardening and land reclamation projects in underserved neighborhoods facilitate urban food security, improve water quality, and reduce urban air pollution, providing health benefits to city dwellers. Improved access to greenways and parkland promote public health by providing increased opportunities for physical activities and enjoyment of green space, thus addressing infrastructure and health equity issues in disinvested neighborhoods.[16] Furthermore, green space enhances urban aesthetics and safety, creating attractive environments for businesses and residents.[17]

The urban greening initiatives in many legacy cities started to gain momentum in the 1990's, when increasing levels of property abandonment and urban decay spurred the interest of community groups to address problem properties in their neighborhoods. Perhaps the most notable example is Philadelphia Green, managed by the Pennsylvania Horticultural Society. Philadelphia Green's record of accomplishments in revitalizing rundown neighborhoods by reclaiming urban green space and attracting investment, new businesses, and residents[20] has made it a model program for vacant land management. Urban greening, however, is not one-size-fits-all, as groups and organizations vary depending on their particular green lens. A wide range of models exists

CONVERGENCE OF URBAN GREENING AND SUSTAINABILITY

There are many ways one could trace the history and evolution of urban greening. Our exploration relies on two books, including a compendium of essays from scholars, practitioners, citizens, developers, policymakers, that explain the history of urban greening and its conceptual foundations, and highlight model practices and examples. The basis for these books—*Humane Metropolis* from 2002[18] and *Growing Greener Cities* from 2006[19] —was two university-hosted symposia that each brought together over 300 participants and covered a wide range of disciplines and perspectives on urban greening. Together they encompass the landscape of, dimensions of, and document model practices within the emerging field of sustainable community development.

[11] Fisher, R. M. (1962). Public Cost of Urban Renewal. The Journal of Finance, 17: 379–386

[12] Clay, R. A., Jones, S. R., & American Bar Association. (2009). Building healthy communities: A guide to community economic development for advocates, lawyers, and policymakers. Chicago, IL: American Bar Association.

[13] Id.

[14] Id.

[15] The Massachusetts Association of Community Development Corporations. (2010). Community Development Goes Green: How MACDC Members are Embracing Environmental Sustainability. Available at http://macdc.org/MACDC_Green_CDCs_Report_October_2010.pdf.

[16] Dunn, A. D. (2010). Siting Green Infrastructure: Legal and Policy Solutions to Alleviate Urban Poverty and Promote Healthy Communities. Boston College Environmental Affairs Law Review, Vol. 37, 2010.

[17] Wolf, K. L. (2005). Business district streetscapes, trees, and consumer response. Journal of Forestry, 103(8), 396-400.

[18] Platt, R.H. (2006). The Humane Metropolis: People and Nature in the 21st Century City. Amherst & Boston: University of Massachusetts Press and the Lincoln Institute for Land Policy.

[19] Birch, E., and Wachter, S. (2011). Growing Greener Cities: Urban Sustainability in the 21st Century. Philadelphia, PA: University of Pennsylvania Press.

[20] Wiland, H. and Bell, D. (2006). Edens Lost and Found: How Ordinary Citizens are Restoring Our Great American Cities. White River Junction, VT: Chelsea Green Publishing Company.

for greening organizations within the US, from volunteer stream monitoring groups to regional and local environmental advocacy organizations. Many of these are nonprofits sharing a common purpose: to improve, enhance, restore, and reclaim some aspect of distressed and, in some cases, damaged urban environments. Most tend to specialize in one or two environmental or green activities within a narrow geographic focus. These "green" groups typically have roots in particular neighborhoods, along with a focus on local environmental issues, such as watershed protection or urban forestry.

Today larger cities such as Detroit, Cleveland, and Buffalo, as well as hundreds of smaller to mid-size cities and towns such as Youngstown and Yonkers, are actively finding solutions to managing abundant vacant and abandoned properties, legacy industrial pollution, and aging infrastructure that plague their neighborhoods.[21] Their challenges have only been exacerbated by the recent economic downturn, the housing burst, and subsequent foreclosure crises that have deeply affected all cities in the United States, and particularly those that were already suffering from disinvestment. Within this environment, a larger community renewal movement (housing, jobs, health, food security, and the environment) and within that, a forceful community greening front, strive to reimagine cities and revive downtrodden places. The greening component of this urban renewal effort has largely been led by community-based organizations and neighborhood groups.[22] Recently, cities and their mayors have expressly joined the greening effort, especially as quality of life is more closely tied to environmental health, beautification, and meaningful resident engagement in such efforts, and as interest in urban living among young people, families, and seniors has grown.

4. Sustainable Community Development

The urban greening movement, while still robust and alive, is now involved with sustainable community development as community-based organizations tackle the challenges of sustainability on the front lines of neighborhood revitalization. More CDCs are seeking to transform economically distressed neighborhoods into viable, thriving, and sustainable communities by merging economic development operations with environmental sustainability and community building strategies.

Today, more community development corporations employ a holistic approach to neighborhood revitalization: they not only provide affordable homes and home-ownership counseling services, but also focus on greening their projects, programs and initiatives and on addressing other issues affecting quality of life in their communities.[23] CDCs adopt green building techniques in new construction or rehabilitation of newly developed projects, including energy efficiency, water con-

[21] Id. at 2
[22] Id. at 16.
[23] See, for example, www.nkcdc.org/ and www.pushbuffalo.org./ .
[24] Id. at 11.
[25] Id. at 19.

THE NEW KENSINGTON COMMUNITY DEVELOPMENT CORPORATION AND PUSH BUFFALO

The New Kensington Community Development Corporation (NKCDC) is a nonprofit organization established in 1985 and dedicated to revitalizing the Kensington, Fishtown, and Port Richmond neighborhoods in Philadelphia.[25] During its first ten years, the organization focused primarily on rehabilitating vacant homes and providing housing counseling services to low-income families. Since then, however, NKCDC broadened the scope of its work to address other issues affecting quality of life in its community. Working with local residents and businesses, the city, and other partners, NKCDC engages in a variety of urban revitalization and community development activities. As an example, in partnership with local artists, NKCDC uses public and performing art projects as a tool of community revitalization and local economic reinvestment. NKCDC not only provides affordable housing to first-time homebuyers by renovating old buildings and converting old factories to new uses; it also cooperates on several brownfield redevelopment and urban greening projects. NKCDC supports and coordinates urban greening activities such as maintenance of clean open spaces, volunteer greening projects and tree plantings, and stabilizes and maintains vacant lots. NKCDC's Garden Center, a plant-filled urban oasis, has been offering low-cost plants, gardening supplies, and informative workshops to the community at large since 1997. In addition, NKCDC assists residents and businesses in creating neighborhood plans guiding future development. For example, NKCDC coordinated a community-driven plan for four miles of the Delaware Riverfront. The overall goal of the plan was to reconnect residents to the river through a series of gateways and make the waterfront more accessible and enjoyable.

People United for Sustainable Housing (PUSH Buffalo) is a local membership-based community organization in Buffalo that collaborates with various partners to create a healthy and equitable city that includes community control of resources, living wage jobs and access to quality education, healthcare and transportation.[26] PUSH Buffalo aims at building a replicable model of grassroots neighborhood organizing and redevelopment. Through the Community Housing Co-operative program, PUSH acquires abandoned properties, oversees their rehabilitation by community-based nonprofit developers and trains low-income residents to become housing co-op owners, a model which could be employed in other low-income neighborhoods throughout the Rust Belt.

As it continues to renovate housing in the Buffalo's West side, the organization has broadened its commitment to green construction and energy by creating PUSH Green. PUSH Green is an energy efficiency program launched in January 2012 and is part of a statewide effort to create jobs and help homeowners reduce their energy usage. PUSH Green is designed to help homeowners reduce energy usage and cost by providing Erie County residents access to free or reduced-cost comprehensive home assessments, energy efficiency upgrades, low-cost financing, and workforce opportunities.

servation measures and indoor air quality controls. Capitalizing on the specific benefits of urban forestry, they engage residents in activities such as community gardening and parks clean-up, and educate residents and community members about the importance of sustainability.[24] Many CDCs are integrating cultural development into their existing priorities. Art and other cultural development programs are becoming common practices of community and economic development. The New Kensington Community Development Corporation, operating in Philadelphia, and People United for Sustainable Housing (PUSH) in Buffalo represent two good examples of CDCs that have succeeded in combining economic development activities with community development and environmental sustainability strategies.

Nonprofits and CDCs remain in the forefront of working with the public, private and community sectors to advance environmental sustainability, equitable development and global smart growth. Achieving sustainable community development means creating jobs to improve economic and social well-being, fostering social capital through community building, education and cultural development programs, and preserving and nurturing the stock of natural capital.

C. What is special about the Groundwork Model?

In the context of the community greening movement, Groundwork is somewhat unique. In many instances, its successes and challenges speak to how the organization was originally conceived. The Groundwork USA Initiative was launched in 1996 by the National Park Service Rivers & Trails Conservation Assistance program and the Groundwork USA Steering Committee, which sought a more long-term strategy for engaging in urban communities to improve public access to open space. They were joined by the U.S. EPA in 1997, which provided seed funding to establish Trusts in three pilot communities: Bridgeport, CT, Lawrence, MA and Providence, RI. There are now 20 Groundwork communities across the United States.

Development of Groundwork USA was based on the model of Groundwork UK, a successful environmental justice movement that has renewed hundreds of economically distressed areas of the United Kingdom since 1982. In the recession of the early 1980s, the environment and social cohesion of many parts of the UK was under threat. The collapse of traditional industries with associated environmental degradation and conflict within communities called for a new response. The Groundwork model was born out of an inter-city competition won by an English community called St. Helens. "Operation Groundwork" was described by the then Environment Secretary Michael Heseltine as "an entrepreneurial team, which could act independently as an enabler to mobilize all the resources in the community - public, private and voluntary".

The first Groundwork Trust was so successful that areas around the United Kingdom applied to duplicate the experiment. Over the following decades, Groundwork UK expanded geographically, and the work became more diverse as each Trust responded to local circumstances and innovated. Today, Groundwork UK comprises a federation of independent nonprofits with a membership based on a mixture of local Trusts and regional organizations, with Groundwork UK acting as a national voice and coordinator. Groundwork Trusts are now present across English regions, Wales and Northern Ireland.[27]

[26] Id. at 19.
[27] www.groundwork.org.uk/who-we-are/history.aspx

Groundwork UK endorsed the establishment of the GWUSA Network and their role in technical assistance in March 2000, when the Groundwork UK – Groundwork USA Memorandum of Agreement was signed to formalize their working relationship. It has been renewed twice in subsequent years. The agreement establishes opportunities for staff exchanges, training, resource development and sharing of technical expertise between the two Groundwork Networks.

Over time, the Groundwork approach in the United States has largely maintained its core components, and has some distinguishing features that make it a successful model for sustainable community building. These features are explored in greater detail below.

- **Groundwork — a broad mission with a tight geography:** Unlike many other environmental groups that have a single-issue focus and a broad geographic scope, Groundwork has a tight geographic focus and a broad programmatic scope. Groundwork

GROUNDWORK DESCRIBES ITS ACTIVITIES AS FOLLOWS:

- **Land & Rivers** We help people transform derelict land, wasted public space and forgotten waterways into valued community assets such as pocket parks, community gardens, greenway trails, recreation facilities and nature preserves.
- **Brownfields** We partner with government agencies and the private sector to engage residents in the remediation of brownfields to build consensus on reusing these sites for community benefit.
- **Education** We work with schools to improve their outdoor facilities for recreation and education. We help provide after school activities that engage students in improving their community.
- **Business** We work with businesses to enhance their sites, improve their environmental performance and involve them in volunteer service days benefiting their community.
- **Youth** We work with young people to develop job and leadership skills by engaging them in our projects and programs as staff and volunteers.
- **Health** We encourage healthier lifestyles by improving access to fresh fruits and vegetables and safer, more walkable neighborhoods through community garden development, healthy corner store campaigns, operation of farmer's markets and CSAs, and healthy lifestyle workshops.
- **Communities** We make a long-term commitment to specific neighborhoods and work closely with other organizations and initiatives in those areas to maximize impact and improve quality of life.

Groundwork catalyzes a more holistic and synergistic revitalization effort where everyone is "pulling together" to achieve consistent goals.

Trusts are located in every region of the United States, with focus areas that range in size from small cities (such as Lawrence, MA) to neighborhoods in larger cities (such as Anacostia, DC) and rural counties (such as Doña Ana County, NM). In each case, the local Trust is "on the ground" responding to the specific needs and opportunities in that community. Regardless of size or location, all of the Groundwork communities are facing common challenges, including legacies of industrial activity, environmental degradation, and marginalization from the economic mainstream. Within these geographic focal areas, Groundwork's mission is broad and inclusive. This allows the organization to identify and pursue crosscutting initiatives that are deemed important within a specific community, and to substantively advance long-term goals alongside local partners and allies.

Unlike many other environmental groups that have a single-issue focus and a broad geographic scope, Groundwork has a tight geographic focus and a broad programmatic scope. Groundwork Trusts are located in every region of the United States, with focus areas that range in size from small cities (such as Lawrence, MA) to neighborhoods in larger cities (such as Anacostia, DC) and rural counties (such as Doña Ana County, NM). In each case, the local Trust is "on the ground" responding to the specific needs and opportunities in that community. Regardless of size or location, all of the Groundwork communities are facing common challenges, including legacies of industrial activity, environmental degradation, and marginalization from the economic mainstream. Within these geographic focal areas, Groundwork's mission is broad and inclusive. This allows the organization to identify and pursue crosscutting initiatives that are deemed important within a specific community, and to substantively advance long-term goals alongside local partners and allies.

- **Groundwork engages underserved communities in smaller cities and neighborhoods, and looks to the community for solutions.** While the greening movement has reached many places around the country, from a nonprofit perspective it is still predominantly centered in large cities. Hundreds, if not thousands, of smaller and mid-sized cities have very few professionally-run and robust greening nonprofits. Groundwork occupies such a niche function in places like Yonkers, NY; Bridgeport, CT; and Lawrence, MA. Even in larger cities, Groundwork tends to focus on neighborhoods that are typically marginalized or have borne a disproportionate amount of disinvestment, such as along the Chollas Creek in San Diego, the Trinity Forest in Dallas, and in the Globeville neighborhood of Denver. While many cities have active efforts to address major brownfield sites or downtown waterfronts, Groundwork is, by contrast, more likely to work on some of the hundreds of small vacant lots in adjacent neighborhoods, or the smaller tributary or creek to the major waterway that is dramatically degraded, where quality of life can be impacted directly and tangibly. By focusing on the distressed places that seem to most urgently need equitable and sustainable redevelopment, Groundwork engages residents, local businesses, institutions, government, and others at the grassroots level to establish a unified vision for renewal, identifies existing assets, and deliberately connects seemingly disparate programmatic efforts across the community. In this way, Groundwork catalyzes a more holistic and synergistic revitalization effort where everyone is "pulling together" to achieve consistent goals. Groundwork Trusts find that the holistic and synergistic program model works especially well.

The desire to ensure community-led change and encourage community participation throughout the process characterizes Groundwork apart from a typical greening organization focused solely on land-use change. In fact, the organization's deep commitment to involving even the most marginalized members of the community has its roots in the community development field rather than the greening or community renewal fields. Groundwork's holistic approach to problem solving moves beyond creating connections with a physical landscape to developing synergies between various programmatic areas, and as a result the organization's own role within a given place is constantly evolving to ensure that these connections continue to be made. A Trust may be working on any number of identified issues in the community—such as job creation and healthy living—and may take on any number of roles—from community organizer to intermediary – to facilitate change. As a result, the organization works at the nexus between community renewal and community development, which Groundwork refers to as "Sustainable Community Development."

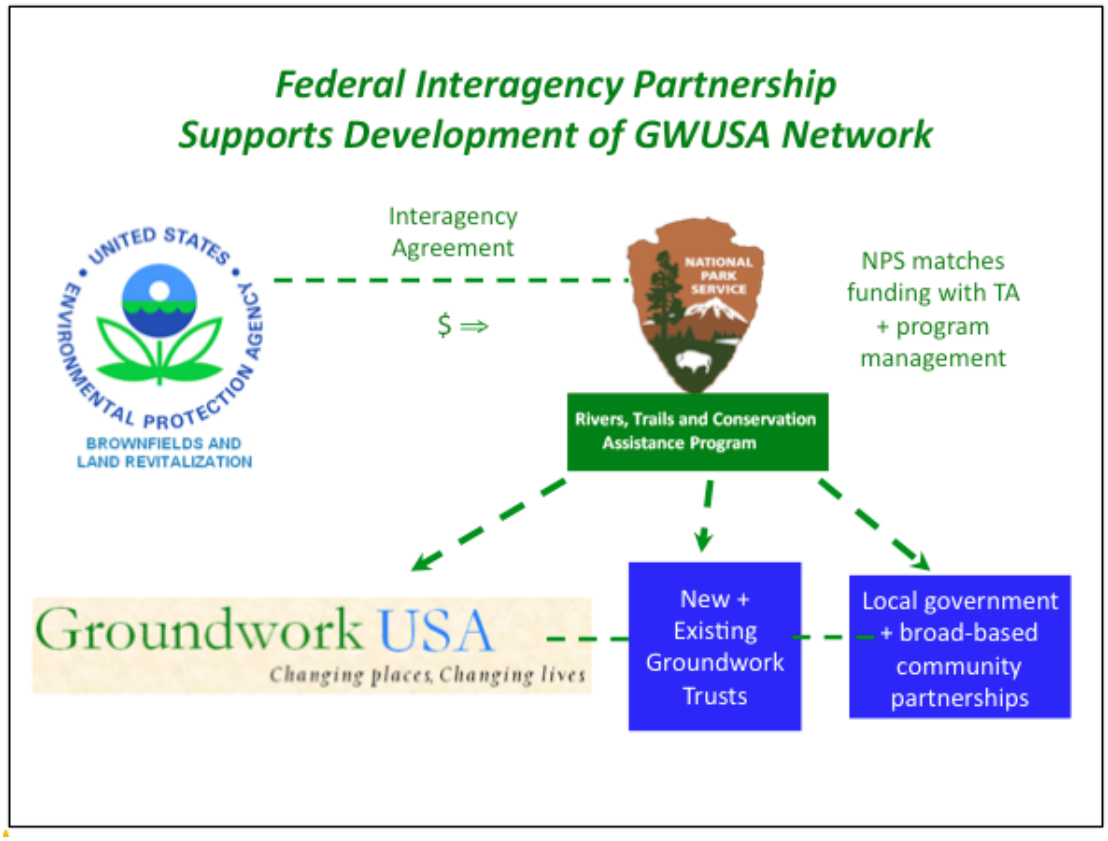
- **Groundwork operates at the critical intersection of environmental, equitable development, and sustainability policy.** Groundwork's project activities often test the limits of various environmental policy rules and regulations. Groundwork policy expertise is different than traditional community development, neighborhood revitalization groups and initiatives; they are often more familiar with environmental policies and challenges of social equity in the context of sustainability, instead of housing and economic development programs and grants. Although policy is not the focus of the Groundwork mission, through their concrete project work, the Trusts offer important insights into the implementation of environmental policies, such as apply to brownfields and urban waters.

Moreover, several Trusts are involved in local land development decisions, and thus have valuable insights into how local, community-based organizations can influence land development policy.

- **Groundwork operates as a trusted intermediary between local, regional, and federal agencies:** Groundwork Trusts forge new partnerships among many different sectors, agencies, organizations and actors working on revitalizing neighborhoods and restoring their natural environment. They promote collaborative approaches to long-standing environmental problems and imbalances of power in regional and local land development decisions. This partnership model is embedded in the DNA of the organization, which was born out of a successful interagency partnership between NPS and EPA. To accomplish its mission, Groundwork serves as a "backbone" organization at the local level, engaging a diverse mix of community groups, volunteers, businesses, and municipal leaders. Groundwork also brings together many different levels of government, from local officials to state and federal agency partners, to accomplish specific place-based projects and address a variety of public policy goals. At the state and federal level, Groundwork engages multiple agencies to address a host of public policy priorities. The most prominent example of this integration at the federal level is the interagency partnership between NPS and EPA, which remains a vital part of the organization's functionality and identity.

One of the fundamental ideas carried on from Groundwork UK to Groundwork USA is that the local government needs to be a heavily involved partner in order for effective land use changes to take place. Additionally, within the Groundwork network, there is a common belief that in order to affect community change at the local level, power sharing between and amongst local, state, and federal partners must occur. The word "Trust," referring to one of twenty locally-based Groundwork establishments in the United States, aptly symbolizes this critical intermediary role that Groundwork assumes on the field. Groundwork Trusts are action-oriented on the ground, but also actively promote partnerships across power structures in order to facilitate this action. Potential partnerships are often stalled at the local level due to historical, social and political conflicts. Groundwork Trusts depart from the typical role of environmental activists and greening organizations to emerge as a "convener," bringing together a variety of stakeholders at various scales. Rather than viewing the community as solely residents of a neighborhood, Groundwork operates on the belief that broadening the scope of a community to create collabora-

> The Trusts often capitalize on their "honest broker" role to become a vehicle of communication between the community, political leadership, and other stakeholders in their communities.

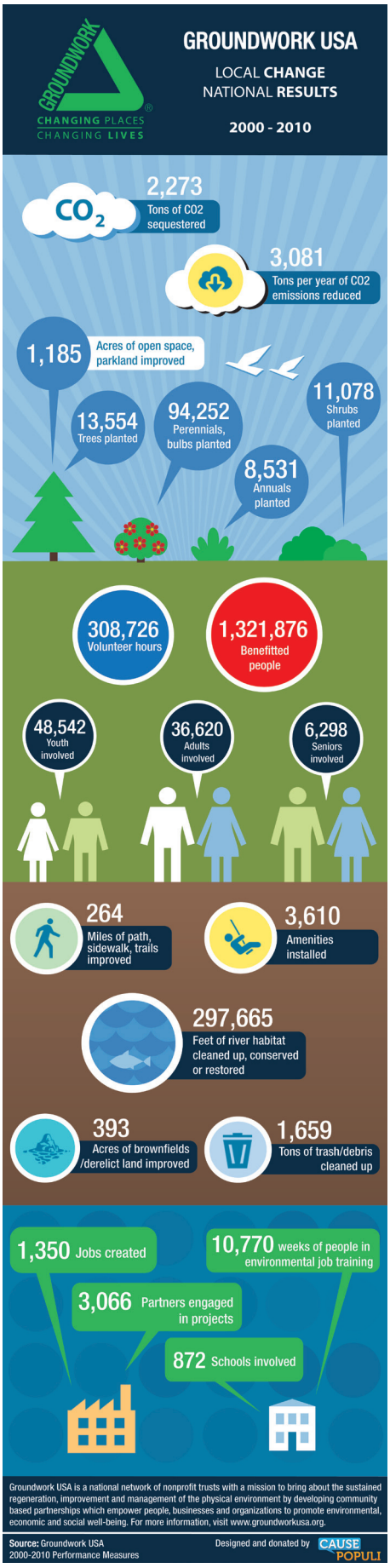


Groundwork USA has the unique ability to document and disseminate lessons learned, program models, and success stories that are continually emerging from this national "learning lab" of community action.

tion between neighborhoods, local governments, and businesses will leverage more capacity towards affecting land use change. Therefore, the Trusts often capitalize on their "honest broker" role to become a vehicle of communication between the community, political leadership, and other stakeholders in their communities.[28]

Due to the continued support and engagement from federal agencies, and by utilizing federal environmental laws to do local community building, Groundwork also serves as a policy intermediary, constantly negotiating the space between local, state, and federal policy players. The ongoing partnership of two federal agencies — EPA and NPS — has created an opportunity for Groundwork and similar organizations to establish relationships across various levels of government. Specifically, Groundwork Trusts have directly benefitted from the uncommon partnership between EPA's Office of Brownfields and Office of Water and the National Park Service's *Rivers, Trails, and Conservation Assistance Program*, which supports community-led natural resource conservation and outdoor recreation projects. This type of interagency partnership has allowed the Trusts' work in various programmatic areas to stay interconnected from the early stages of the process. Therefore, the importance of creating such partnerships at the federal level is not lost to local governments and community organizations that recognize the opportunity for and importance of partnerships to sustainable community development at the local level.

- **Groundwork Cultivates a Culture of Innovation and Long Term Commitment:** Among the hallmarks of a Groundwork Trust are the organization's willingness to develop and test new projects and programs, to tailor a broader concept for the local community, and to adapt and learn from past experience. In practice, this means that each Groundwork Trust has a unique mix of projects and programs, and that many new initiatives are launched across the network each year. All of these initiatives share a thematic focus on one or more of the Groundwork interest areas, including youth engagement, community education and job training, brownfields redevelopment, urban rivers, community forestry, food security, and health and wellness. This approach has allowed Groundwork to be highly responsive to local needs, and to be nimble and adaptive when circumstances change on the ground. As a national organization overseeing the network, Groundwork USA has the unique ability to document and disseminate lessons learned, program models, and success stories that are continually emerging from this national "learning lab" of community action.



[28] This collaborative approach currently resonates in the philanthropic community, which refers to it as Collective Impact. See, Collective Impact, John Kania and Mark Kramer, Winter 2011Stanford Social Innovation Review, www.ssireview.org/articles/entry/collective_impact

Groundwork Trusts are committed to the long-term health and sustainability of a community, and are often engaged in complementary multi-year projects and programs that help to advance long-term goals. For example, many of the brownfields and river restoration projects that Groundwork undertakes (such as the Spicket River Greenway in Lawrence and the Saw Mill River Daylighting in Yonkers) require a decade or more of committed and continual effort before coming to fruition. Groundwork excels at driving long-term projects while concurrently creating and integrating community events, volunteer programs, educational activities and funding sources in order to maintain the momentum that is needed to execute these complex and challenging projects.

- **Groundwork Generates Visible Results and Measurable Impacts:** Within the local community, Groundwork Trusts typically have a reputation for being the group that "gets the job done." Groundwork staff members are just as likely to be on a work site as they are at a desk, and this "boots on the ground" approach (as well as the visible results that it creates) is vital to garnering the respect and buy-in of the local community. Groundwork Trusts are also expected to carefully document the results of their work, and to report these results to NPS and EPA each year. This level of documentation allows each Trust, and the network as a whole, to assess the impact of its work and to establish the value of services provided and resources leveraged.

PART TWO. SUSTAINABLE COMMUNITY BUILDING—The Intersections of Environmental, Equitable Development and Sustainability Policy

Groundwork operates within the domain of neighborhood scale environmental policy, equitable development and sustainability.

Groundwork's unique model leverages its project work with communities to shape policy at different scales and dimensions. In light of their genesis and ongoing support from federal agencies (EPA and National Park Service), GW USA sits in a special position to offer insights and guidance on how to better implement federal environmental policy at the neighborhood scale. By working at this crossroads of building sustainable communities on the ground, the Trusts intersect different policy fields compared with other community development organizations. Instead of the domain of housing and urban development, Groundwork operates within the domain of neighborhood scale environmental policy, equitable development and sustainability.

In this section the report explores how the trusts inform environmental, land redevelopment, and overall community renewal policies, both in their formulation and implementations. The report focuses on the policy dimensions of three primary Trust program activities in the context of serving underserved communities:

- *Brownfields and Vacant Properties:* the assessment, cleanup and reuse of abandoned industrial sites and reclamation of vacant lots through federal and state environmental remediation procedures and local land redevelopment processes.
- *Urban Waters:* the restoration of degraded urban rivers, lakes and streams and adjacent banks and habitat through federal and state water quality regulations and watershed/habitat protection programs in concert with local litter ordinances and solid waste programs.
- *Equitable Development:* the navigation of local land redevelopment procedures and rules and empowerment of local residents in strategic neighborhood development projects so that underserved residents and neighborhoods more directly benefit from the projects.

A. Policy Context, Definitions and Frameworks

A primary goal of this report is to better understand the different ways the Groundwork Trusts shape and indirectly influence policy—what some call policy fingerprinting. Thus, it becomes important to define policy and understand a few of its concepts and frameworks. The vast literature on public policy offers numerous definitions. For some, public policy means a set of principles and goals that guide public officials within government in deciding what to do or not do about public problems. These principles guide public debates among public officials and with citizens about the role of government—what government should or should not do—in responding to common public problems (e.g., conditions the public widely perceive as unacceptable and therefore requiring some type of action). "Public policy is a course of government action or inaction in response to public problems."[29] Policies also take different shapes and forms, such as the goals/objectives (the stated outcomes) the policy hopes to achieve, the legal vehicle for policy action (legislation, executive orders, administrative regulations, judicial decisions, etc.), and plans, programs, and projects (the means for implementing the policies). Beyond the definitions and the elements, the field of policy analysis can examine the policy process of how stakeholders come together (or not) to design, adopt, implement and evaluate different types of policies at different levels of government (federal, state, regional, local) and the impact (or not) that policies may have on institutions, sectors (public, private and nonprofit), communities, and individuals.

Although community-based organizations, such as Groundwork Trusts, do not formally adopt or direct policy, nonprofits are playing increasingly critical roles implementing policies by working closely with neighborhood residents in the development of local programs and projects. Evaluating the implementation of public policy by actors outside of government becomes even more critical in light of dwindling public resources and heightened scrutiny about the need and role for government interventions. While the Groundwork Trusts and network do not overtly do policy, the nature of their programs and projects offer a unique perspective from the front lines of implementing important federal environmental policies (e.g., Brownfields and Urban Waters) and local land development policies and processes.

[29] Michael E. Kraft and Scott R. Furlong, Public Policy—Politics, Analysis, and Alternatives, 3rd edition (Congressional Quarterly Press, Washington, DC: 2010).

GROUNDWORK'S BROWNFIELDS POLICY ROOTS

Groundwork's far-reaching involvement in reclaiming brownfields and vacant property derives from a long-standing partnership between two federal agencies—the Rivers and Trails Conservation Assistance (RTCA) Program within the National Park Service (NPS) and the Brownfields Program within the U.S. EPA. With the bulk of capacity-building funding provided by EPA, addressing community priorities around brownfield sites strongly underpins the Groundwork initiative in the United States. Groundwork Trusts are in fact placed specifically in communities that have received federal brownfields funding in the past. The idea behind this policy is to help EPA achieve broader community revitalization goals in high-poverty, brownfields communities, in a way that can be sustained over time and can build upon the site-specific nature of brownfields assessment and clean-up projects. At the same time, EPA's investment also leverages staff support and capacity-building from NPS in those communities and achieves RTCA program goals of making conservation-related efforts more tangible to the American public, who are increasingly dwelling in densely populated urban areas and away from federally-held open spaces such as national park sites.

Thus, Groundwork's policy fingerprints might involve organizing a community to seek community benefits/amenities (e.g., park and open space, or permanent jobs) from a proposed local development project, or galvanizing residents around the cleanup and restoration of degraded natural resources, such as polluted urban rivers and contaminated former industrial sites. Many of the Trusts work closely with federal and state agencies, local public officials and staff along with leveraging private sector and philanthropic partnerships. All of these Trust programs, projects and partnerships shed light into the policy impacts and hopefully positive policy outcomes and how they play out in underserved communities of color with disparate socio-economic, health, and environmental problems.

B. Brownfields Redevelopment

Reclaiming brownfields and vacant properties for community benefit is central to the work of all Groundwork Trusts. Few community-based organizations (CBOs) that traditionally work on housing and neighborhood revitalization choose to tackle the environmental regulatory and redevelopment complexities associated with most brownfields projects. Several Trusts have developed a decade's worth of expertise around brownfields development, particularly in orchestrating the necessary partnerships between the community and local governments for reusing former industrial and commercial properties as green space.

By acting as a catalyst and an intermediary, the Trusts often lead community efforts to transform older industrial properties and vacant lots into green spaces. Unlike most private sector-driven brownfields redevelopment projects, Groundwork Trusts champion green reuse ideas that provide community benefits to underserved neighborhoods. The Trusts typically work on smaller brownfield sites in dense, more compact urban neighborhoods that have suffered from decades of economic decline and disinvestment— sites having low economic development potential. In most cases the Trusts do not own the land, so they partner either with private land owners, local government departments and/or authorities to assess the site's contamination, examine its green potential and then engage neighborhood residents and community/civic groups to devise a feasible reuse plan and long-term ownership and maintenance strategy. They work closely with federal and state environmental regulators, foundations, cleanup engineers, developers, and financial and philanthropic institutions, but their most important relationship is the trust they build with neighborhood residents. In many ways the Trusts act as a nonprofit "green" consultant to both local government and neighborhood.

DEFINITION OF BROWNFIELDS

In January 2002, Congress amended federal environmental laws by defining, for the first time, a brownfield site as "… real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."[31] With such a broad definition, 'brownfield' can refer to large scale former industrial sites with serious chemical and hazardous substances in their land or groundwater, or to the corner gas station or dry cleaners with oil pollution that typically poses fewer risks to public health and the environment.

Through this special intermediary role, the Trusts have gained tremendous insights into the ability of community-based organizations and nonprofits to navigate federal and state brownfield policies and programs. The Trusts constantly invent workarounds to address various policy barriers that make brownfield projects particularly challenging. This section will: 1) set the brownfield policy context with a brief overview of the regulatory framework, relevant programs, and the environmental cleanup process; 2) identify policy issues and program barriers to transforming brownfields into green spaces; and 3) offer program ideas and recommendations for policy changes that could facilitate the greening of brownfields. Many of these issues, which arose during conversations and interviews with Groundwork executive directors and staff, are also highlighted in a series of supplemental case studies that can be found in the Appendix.

[30] EPA Brownfield Office site: www.epa.gov/brownfields/

[31] Small Business Liability Relief and Brownfields Revitalization Act (Public Law 107-118).

1. The Brownfields Policy Context

In the mid-1990s, the U.S. EPA began providing pilot grants to support local government efforts to redevelop and reuse former industrial properties without substantial or serious environmental contamination. These "brownfield" sites were removed from EPA's National Priorities List of Superfund sites (e.g., the most toxic and dangerous sites that require federal government intervention for cleanup). Over the years the pilot grants grew into a nationwide brownfield redevelopment initiative that EPA still leads. Over the course of the program, EPA's Brownfields program[30] has leveraged 75,790 jobs nationwide and over $18.3 billion in additional private and public sector resources.

Many states also have their own brownfields laws and environmental rules and regulations[32] that adhere to EPA's standards, but often offer additional incentives and streamlined cleanup processes through Voluntary Cleanup Programs (VCPs). In 2002 Congress formalized EPA's brownfields program by passing the Small Business Liability Release Act,[33] which now appropriates roughly $100 million per year for brownfields assessment and cleanup, competitive grants, clarified liability protections for prospective purchasers, and increased support for state and tribal programs. With adoption of the new federal law, brownfields programs serve a dual policy imperative: 1) protection of public health and the environment through the cleanup of contaminated lands; 2) promotion of economic development, community revitalization and jobs through the reuse of these sites.

Although the core programs remain state and local government cleanup and assessment grants,[34] EPA continues to expand and improve its suite of brownfields initiatives. Many of these supplemental grants and programs align closely with Groundwork's place-based approach to redeveloping brownfields:

1) Job training grants[35] help local governments and nonprofits train low-income and minority residents in various facets of environmental cleanup;

2) Environmental justice forums, workshops, and policy and program changes[36] focus on the community impacts and disparities driven by concentrations of toxic land uses, and engage residents affected by past and present redevelopments;

3) Area-wide planning reflects a broader understanding about how communities function and the catalytic role that brownfields redevelopment can play, so pilot grants[37] have been established (the Brownfields Office awarded 23 in 2010) for developing plans that cover multiple brownfields within a distressed, geographic area (corridor, district, or neighborhood scale).

4) Greening of brownfields includes target grant programs for reclaiming brownfield sites for green spaces and parks.[38]

EPA's Brownfields Office continues to research the public health implications of reusing brownfields and vacant lots for urban agriculture and provides communities with guidance and technical assistance.[39] The agency is also establishing links with its Office of Water's Green Infrastructure[40] initiative and exploring the reuse of former factories and industrial sites for renewable energy generation.[41]

Groundwork understands the positive impacts generated by brownfield redevelopment as strategic bellwethers of larger community renewal efforts; brownfields should be part of any long-term community economic development strategy. From the program perspective, EPA's Brownfields Office remains a core partner and critical source of support for the Groundwork USA network, as much of Groundwork's federal funding comes from EPA through its Interagency Agreement with the National Park Service. Groundwork Trusts then leverage these federal resources by raising funds and in-kind contributions from regional and local sources, including philanthropic interests. Within the history of federal environmental law and the field of community development, however, the brownfield law and EPA's brownfield programs remain relatively new initiatives, and thus the next section will focus on how these policies and programs work on the ground through the eyes community-based organizations (CBOs), such as Groundwork Trusts, involved with the greening of brownfields.

2. Program and Policy Observations on the Greening of Brownfields—Practical Lessons from the Groundwork Experience

The redevelopment of brownfields and vacant properties creates a number of challenges for community-based organizations. Studies of nonprofits and community development organizations in Detroit, Cleveland, Portland, and Denver revealed: 1) CDCs

[32] Small Business Liability Relief and Brownfields Revitalization Act (Public Law 107-118).
[33] Guide to State level brownfield laws and resources: http://epa.gov/brownfields/state_tribal/state_map.htm
[34] EPA Brownfield Office Grants site: www.epa.gov/brownfields/grant_info/index.htm
[35] www.epa.gov/brownfields/job.htm
[36] www.epa.gov/brownfields/grant_info/tba.htm
[37] Area-Wide Pilot site: www.epa.gov/brownfields/areawide_grants.htm
[38] www.epa.gov/brownfields/sustain.htm
[39] Urban agriculture, vacant land reuse: www.epa.gov/brownfields/urbanag/index.html
[40] Green Infrastructure: http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm
[41] They have also conducted recent studies that document the environmental benefits (air, energy, land, and public health and water quality impacts) of brownfields infill development projects. US EPA, Office of Solid Waste and Emergency Response, Special Report, "Air and Water Quality Impacts of Brownfields Redevelopment," April 2011, EPA 560-F-10-233. The complete study can be found at www.epa.gov/brownfields/sustain.htm

BROWNFIELDS SNAPSHOTS

Virtually every Groundwork organization addresses small-scale brownfields and vacant properties to some extent, and some Groundwork Trusts have led or are working toward the clean-up of 2+ acre brownfields, most notably in Lawrence, MA, and Denver, CO. Taking on contaminated properties is no easy feat, and most community-based nonprofits shy away from these complex and longer-term redevelopment projects. Other Groundwork Trusts such as Groundwork Milwaukee have worked on smaller neighborhood petroleum sites and Groundwork Providence leads a highly successful brownfield job training program. Groundwork Hudson Valley's daylighting of the Saw Mill River in Yonkers, NY is on a former brownfield site as well. The senior staff members at these Trusts understand the intricacies of brownfield grants, cleanup standards, legal liability relief, and the flexibility often found in state voluntary clean-up programs (VCPs). They also help neighborhoods and local governments leverage the variety of financial resources (public, private, and philanthropic) that greening brownfield sites often demands. In some places, like Buffalo, NY, where the vacant property issue is extreme, the Trust's entire focus and mission centers on re-using abandoned properties. The following case studies provide a more complete picture of the Trusts' brownfield work. The complete case studies can be found in the Appendix.

- ***Brownfield Case Study #1:*** *Groundwork Lawrence*, in Massachusetts, successfully helped to catalyze development of the Spicket River Greenway through a multi-faceted river reclamation campaign featuring hands-on volunteer engagement in cleanups, advocacy, habitat restoration, trail development, and most notably, development of two brownfield-to-park projects.
- ***Brownfield Case Study #2:*** *Groundwork Buffalo*, in New York, through its Green Lots Program, is exploring the application of their urban greening work on multiple vacant, city-owned lots with residents, local government, and other local stakeholders to demonstrate the potential for transforming the community's abundance of vacant land for more productive uses.
- ***Brownfield Case Study #3:*** *Groundwork Denver*, in Colorado, is currently working on the Globeville Valley Redevelopment Project, which is aimed at reclaiming a set of adjoining vacant parcels as a passive open space that fosters physical activity, provides opportunities for and access to urban gardening, and enhances the neighborhood's overall character.

have limited staff with real estate experience, so their project management capacity is limited to only one or two projects per year; 2) brownfields and vacant properties pose especially difficult real estate problems, such as clouded titles, uncertain demolition expenses, etc., that demand considerably more staff time and expertise; 3) anticipated cleanup costs of 2-3% of total development costs may cause a nonprofit to back out of the project; 4) if unanticipated environmental cleanup problems arise, environmental insurance to limit these overruns is not available for most nonprofit projects where the cleanup costs are less than one to two million dollars.[42] Despite these and other challenges, Groundwork Trusts have successfully navigated the program complexities of brownfields cleanup and reuse. As part of our study we focus on the brownfields experience of three Trusts to identify the challenges that CBOs confront as well as the creative ways they work-around the policy and programmatic barriers.

Based on these snapshot case studies and conversations with other Trust directors and managers, this section offers a few ideas for enhancing the brownfields capacity of nonprofits and refining current brownfields programs and policies to facilitate the greening of brownfields:

1) Brownfield programs and policies were primarily designed for redevelopment by local government- and private sector-led projects, and not those led by community-based organizations (CBOs);
2) Rules and regulations make greening brownfield projects more difficult and complex;[43]
3) Markets and real estate finance drive most brownfield redevelopment to projects with immediate and higher economic returns on investment (especially those downtown or along waterfronts) compared with the greening of brownfields; thus, developers often ignore the smaller brownfields scattered across underserved neighborhoods;
4) Nonprofits need access to more efficient land acquisition and financing strategies for greening brownfields;
5) Nonprofits could benefit from better data on making the socio-economic case for converting vacant properties and brownfields to green spaces.

Many of these common observations exemplify the special challenges that confront community-based organizations in their pursuit of reclaiming brownfields for green spaces. Certainly EPA and various brownfield stakeholders understand these challenges and continue their efforts to incrementally refine and revise relevant programs and policies.

[42] Margaret Dewar and Kris Wernstedt, Challenges in Reusing Vacant, Abandoned, and Contaminated Urban Properties, Land Lines, pg. 2-7, (April 2009), Lincoln Institute of Land Policy.

[43] "Greening projects present greater challenges than other forms of redevelopment in justifying end-use and project funding, but are more easily accepted by affected communities." C.A. De Sousa, Turning brownfields into green space in the City of Toronto / Landscape and Urban Planning 62 (2003) 181–198

a. Brownfields Redevelopment Policies Focus on Local Government/Private Sector Partnerships

By design, the process for redeveloping brownfields targets the pivotal relationship of local governments and the private sector. Thus, the current brownfields policy system does not necessarily allow for community and nonprofit partners to champion urban greening projects and other reuse ideas that provide direct community benefits.[44] Typically the past or prospective property owners are former industrial or commercial entities that have concerns about the potential legal liabilities under federal/state environmental laws (e.g., Superfund's strict liability) for remediating the environmental contamination that remains on the abandoned or underused property.

Most brownfield policies and programs offer local government grants, technical assistance and other incentives to work in collaboration with the property owners to assess and cleanup the contamination and then market the property to prospective developers for reuse. Thus, developers respond to the demands of the market by searching for and taking on those parcels with the greatest potential economic return. Many of these brownfield resources provide gap funding to cover the additional costs of environmental remediation and thus, in order to make the financial numbers work, local government leaders are more likely to target brownfield projects that have greatest potential for generating local revenues.[45] Therefore, the brownfield system encourages municipalities to partner with private sector developers on economic development projects, especially where local governments have insufficient resources to acquire the brownfields or provide much direct financial support. This economic development model makes it difficult for CBOs in several ways:

- Many CBOs do not have experience or expertise with economic development projects, let alone those that also involve the complexities of environmental remediation. They may be familiar with the financing models and federal requirements related to affordable housing projects, but unless they have some experience with the terminology and process, it is unlikely the local government or environmental regulators will take their interest in community driven brownfields projects seriously.
- Even when CBOs with brownfield experience, such as Groundwork Trusts, identify small neighborhood parcels with significant potential for providing community benefits and improving the quality of life for underserved neighborhoods, it is difficult for them to overcome the local government focus on higher-profile revenue-generating projects.
- CBOs and neighborhood residents often have fewer resources and limited capacity to actively engage local government and the developers in determining which brownfield sites in their own neighborhoods should be redeveloped first. The community is often shut out of preliminary development conversations that solely involve the developer, local government officials and environmental regulators.

b. Brownfield Rules and Regulations Make Community-Led Brownfield Projects More Complex

Many of the environmental laws and policies pertaining to brownfields hinge on property ownership. For example, local government eligibility for brownfields assessment and cleanup resources requires the property owners' permission or some level of engagement. Groundwork, like most CBOs, does not own (or come to own) the brownfields they are reclaiming for green space, nor are they a local governmental entity; thus, Groundwork and CBOs cannot directly or fully avail themselves of the various brownfields grants, protections, and technical assistance. Over the years EPA and state environmental regulators have refined some of the grant eligibility requirements so that CBOs can obtain the benefits of some grants; however, in most cases the community-based organization must partner with the local governments, which engage them as consultants.

BROWNFIELD LESSONS LEARNED

Local governments need stronger liability protections and other legal strategies to facilitate the transfer of brownfields and vacant properties to CBOs and/or local governments for urban greening projects. Groundwork Lawrence suggests working with the state Attorney General's Office, especially those divisions responsible for enforcing and administering brownfield liability protections and other brownfield programs. In Massachusetts, the Attorney General's Office Brownfields Unit created the Covenant Not to Sue program, which offers the incentive of liability protection for brownfield site owners willing to follow the law. In the case of Groundwork Lawrence's Dr. Nina Scarito Park project, this legal mechanism encouraged both the former site owner (a bank) and the City of Lawrence to come to the table and negotiate the cleanup and title transfer of a contaminated riverfront parcel to the City for a nominal fee, which then allowed Groundwork to catalyze its transformation into a public park.

Land Ownership Records. Navigating the world of land ownership records and data presents problems for CBOs as many local governments have poor land records or make it difficult to access real property information systems, especially the medium and small, older industrial cities where Groundwork operates. Groundwork Trusts and other CBOs expend significant time and resources learning to navigate these information system barriers so they can devise realistic environmental assessments of these contaminated properties, thus making the process of remediating brownfields much more time-consuming on the front end.

Legal Liability. Another challenge for greening brownfields is the specter of legal liability for paying the costs for a complete environmental cleanup. First, local governments are reluctant to work on brownfield projects where the reuse will not generate revenue or have direct economic benefits. Second, if the property poses liability concerns to the local government (much depends on the site's history and how the local government acquired the property), in Groundwork's experience, local governments have little interest in allowing those properties to be redeveloped by nonprofits as green space. Despite how pivotal such projects can be for underserved neighborhoods, the risks appear to greatly outweigh the rewards for most local government officials.

URBAN GREENING INSTITUTE

EPA and state brownfields offices should explore how they could launch an urban greening initiative that includes a cohesive suite of revised cleanup rules, grant requirements, and additional resources tailored for urban greening projects. EPA's Brownfields Office could learn from the agency's special water quality initiatives (e.g., urban waters and green infrastructure strategy), which have gained substantial policy traction inside and outside of the agency in devising a greening of brownfields initiative. A preliminary step might be to merely organize existing programs and policies under a greening framework and then go through a strategic planning process with urban greening partners and foundations to identify not only policy gaps, but also program and technical assistance opportunities to build greater capacity of CBOs.

Over the years EPA and the states have revamped several brownfields programs to encourage and promote urban greening. For example, the selection criteria for EPA's national assessment, cleanup, and RLF grants include sub-criteria that award points for green space projects. Additional criteria include environmental benefits from infrastructure reuse/sustainable reuse. While these are important steps, these incremental changes to grant criteria seem insufficient given the burgeoning interest and need for urban greening. Perhaps EPA could add criteria that would encourage local governments to partner with qualified CBOs, especially those who act as intermediaries, on urban greening projects. Groundwork could be helpful in developing the scope of such a program and a list of qualified urban greening entities.

Statutory Rules. Many Groundwork Trusts have run into the statutory rules that make nonprofits ineligible for receiving EPA's Brownfields Pilot Assessment Grants. These grants are often the first step in any type of brownfield redevelopment project. Certainly any entity, including nonprofits, can request a Targeted Brownfield Assessment (TBA) from an EPA regional office or state brownfield program (if they provide that type of technical assistance). However, Phase I and Phase II environmental assessment costs, even for small lots, are beyond the means of many CBOs, especially those proposing greening projects. Inability to get the assessment done stops many neighborhood brownfield projects from going forward due to the unknown cost of cleanup and the amount of work necessary to drive such projects to completion.

Pre-Development Costs. Another policy barrier is government funding for brownfields often comes on a reimbursement basis, necessitating a greening CBO to have sufficient resources on hand to "front" the costs for pre-development expenses. If a small nonprofit with a slim financial margin decides to move forward with brownfield redevelopment project, it typically must take on a significant financial risk by either "fronting" the cost of a site assessment with sorely limited cash (i.e., donations, a bank loan or line of credit, etc.) that would otherwise go to programming or essential day-to-day organizational operating costs, or expending its hard-earned fundraising capital to secure assessment funds from local foundations or businesses.

c. Adopting Area-wide Approaches to Redeveloping Brownfields

As developers target individual properties with the greatest economic potential, comprehensive neighborhood revitalization becomes more difficult as site-specific redevelopment remains subject to the real estate market. While individual brownfield projects typically spawn some adjacent development, the challenges in many distressed neighborhoods are so great that developers and investors are often reluctant to do more, especially on smaller sites where the economic rewards are lower and the risks higher. Moreover, developers often lack the credibility, patience, and expertise to engage residents in an effective neighborhood revitalization planning process.

By contrast, nonprofits engaged in redevelopment and revitalization typically take a more place-based or neighborhood-scale approach when thinking about brownfield sites. They engage in capacity-building activities with the residents to identify opportunities where place-based investments can stabilize neighborhoods, make them safer, and provide quality of life improvements to underserved residents over the long term. These CBOs recognize that it will take more strategic and patient approaches to eventually revitalize the more distressed neighborhoods.

Few federal and state brownfield policies and programs operate at the district or neighborhood scale, thus creating a major policy gap for CBOs engaged in neighborhood revitalization. "The redevelopment of less desirable contaminated properties and community-wide revitalization that benefits local residents and is consistent with a community-based vision has proved more elusive."[46]

CBOs, especially those that have brownfield and urban greening experience, offer important assets in implementing the trend toward area-wide approaches. Federal and state brownfields policies and programs should promote the CBO's role in leading area-wide approaches given their skills and experience working at the neighborhood or district scale. As EPA and the states adopt and refine more area-wide brownfield policies and programs, federal and state policymakers should consider:

1) revising regulations to ensure that CBOs are eligible to directly receive grants and technical assistance;

2) expanding the eligible types of activities that would facilitate successful area-wide initiatives, such as the formation of community land trusts and land banks;[47] and

3) infusing area-wide grants (and others) with special urban greening requirements or standards (allocate a certain threshold percentage of the inventoried sites within a neighborhood or district to urban greening projects).

[46] Kris Wernstedt and Jennifer Hanson, "Areawide Brownfields Regeneration through Business-Based Land Trusts and Progressive Finance," Lincoln Institute of Land Policy Working Paper (#WP06KW1) (2006) accessed at www.lincolninst.edu.

[47] Of the 23 EPA area wide grantees, only 2 were nonprofits while the rest were local governments or quasi-governmental agencies. For the next round of area wide grants (perhaps in 2013), EPA intends to make nonprofits eligible to be grant recipients.

d. CBOs Could Benefit from More Efficient Land Acquisition and Financing Strategies for Greening Brownfields.

Another major policy barrier to the greening of brownfields is having more efficient mechanisms for local governments and quasi-public entities to acquire vacant and abandoned properties, especially those that are tax delinquent, as they provide prime opportunities for a constant supply of land for urban greening. Since the current brownfields process encourages private developers and local governments to first redevelop sites with great economic potential, public and quasi-public entities (e.g., land banks, land trusts, redevelopment authorities, etc.) present the only viable pathway to acquiring vacant land for urban greening.

Unfortunately, many cities and counties do not have the statutory authority to create land banks or the fiscal capacity to demolish abandoned buildings; this complicates transforming vacant lots into community green spaces. Moreover, the process of tracking and foreclosing on tax delinquent properties can be cumbersome and expensive for local governments. Effective land banking often requires reforms of state tax foreclosure systems as well as adoption of authorizing legislation for counties or cities to form land bank entities. However, sometimes existing local government entities, such as redevelopment authorities, can exercise their powers in a land banking capacity.

From a policy perspective, it would make good sense for CBOs such as Groundwork to collaborate closely with current land banking initiatives and support local efforts to create them. Oftentimes CBOs shy away from land banking policies given the murky, lengthy, and arcane process of acquiring abandoned, tax-delinquent property. Within the past 5-7 years, however, a few states—most notably Michigan and Ohio—have reformed their state tax foreclosures laws and empowered counties to create land bank authorities. By supporting these state and local policy reforms, and perhaps even advocating special resources and powers that target urban greening projects led by land bank partnerships with urban greening groups, nonprofits can increase their opportunities for transforming vacant lots into green spaces.

e. Creating a Broad Socio-Economic Research Agenda for Converting Brownfields and Vacant Properties to Green Spaces.

When it comes to assessing the impact of current brownfields policies and programs, most of the studies and data tout the economic development benefits. EPA's data includes a mix of outputs (number of grants, total grant dollars, etc.) with economic

EMERGING POLICY TRENDS SUPPORTING AREA-WIDE PLANNING

A few states began to experiment with "area-wide" brownfield programs and plans (e.g., Wisconsin, New Jersey, New York and Pennsylvania) 5-7 years ago. In 2011 the Ohio Department of Development's Urban Development Division launched its Brownfields Action Plan Pilot Program that provides selected Ohio communities with technical assistance in doing area-wide planning, as well as seed funding for implementation once the plans are complete. Several cities (e.g., Indianapolis and Milwaukee) pioneered their own district or corridor brownfield redevelopment initiatives that serve as successful models.

Building on these state and local experiments, in 2010 EPA announced its first round of Brownfields Area-wide Planning grants. 23 pilot communities each received a one-time grant from EPA to research an area-wide planning approach that would cover multiple brownfield sites within a defined geographic area (e.g., commercial corridor, neighborhood, district, etc.). Grantee activities include defining the project area, engaging the community, establishing partnerships, prioritizing brownfield sites, and assessing existing physical, social, environmental and economic conditions, etc. These more recent area-wide policies, together with previous programs, indicate a growing trend toward redeveloping brownfields from a place-based, neighborhood or district approach.

CBOs AS BROWNFIELDS COMMUNITY CONSULTANTS

Policymakers and foundations should strategize on how to enable urban greening intermediaries (such as Groundwork Trusts) to take on different tasks and responsibilities for local governments as community consultants for their greening of brownfield projects. Given their knowledge of the brownfield cleanup process and especially their strong community connections, experienced nonprofits such as those that function as effective development intermediaries could easily become project consultants to local governments on different facets of urban greening. Groundwork offers good examples of this strategy, as several Trusts have managed or used assessment grant resources on behalf of local government grantees.

The Trusts add tremendous value and credibility to these brownfield projects, as they tend to have long-term commitments in their target areas, which are critical when trying to transform underserved neighborhoods through urban greening. Is there a way to cultivate this insight and take it to scale by building the capacity of other Trusts and other urban greening intermediaries? For example, could the criteria for different brownfield programs more explicitly acknowledge the role of urban greening intermediaries and perhaps even provide extra points for those local governments that propose such partnerships?

MAKING DEMOLITION DOLLARS COVER COSTS FOR URBAN GREENING DEVELOPMENT AND MAINTENANCE

A few cities, such as Cleveland, leveraged funds from HUD's Neighborhood Stabilization Program (NSP) to support neighborhood demonstration projects for reclaiming vacant lots; however, in doing so, they had to navigate a number of bureaucratic policy and program rules. As part of the lawsuit settlement with the lending industry over improper mortgage foreclosure rules (e.g., Robo signing), the Attorneys General of Michigan and Ohio recently approved demolition dollars for several cities in their states that have large inventories of vacant and abandoned housing. Policymakers, in these cases NSP and the AGs, should consider the property maintenance challenges once local governments demolish these abandoned homes, and allow local governments to partner with CBOs to manage and pay for the ongoing maintenance of these vacant lots.

indicators, such as leveraging additional private and foundation resources, number of jobs, increases in property values of the site and adjacent properties, etc.

Trying to quantify the benefits of greening brownfields and vacant properties, however, remains a difficult proposition. The economic benefits somehow seem more relevant and easier to quantify than do environmental or societal benefits. Thus, most current research focuses on the economic results, such as increases in adjacent property values. Plus, policymakers tend to undervalue the socio-environmental benefits that derive from greening vacant lots and brownfields. Practitioners and scholars, however, note how important it is for urban greening groups to articulate the wide range of benefits in order to counter the long list of problems in converting brownfields to open space, parks, etc.[48]

Brownfield policymakers and scholars should turn to the ever-expanding research on the socio-economic benefits from urban greening. Studies include increases in property values from community gardens,[49] the provision of ecological services (water infiltration, habitat, etc.) to the community, the potential public health improvements from access to trails and recreational amenities, and recent research that establishes a relationship between greening vacant lots in distressed urban neighborhoods on the one hand, and residents' increased perceptions of safety and lower crime rates on the other.[50] Of particular significance for Groundwork Trusts are a series of ongoing studies of Philadelphia's near-40-year urban greening experience led by the Pennsylvania Horticultural Society's (PHS) vacant land management initiative. University of Pennsylvania Professor Susan Wachter and a team of researchers have issued several studies connecting increases in property values with the PHS urban greening efforts. Based on a time series of home sales in Philadelphia, the findings from their most recent report (June 2012) suggest: "traditional models of urban form underestimate the economic value of open space by ignoring its value as a local amenity:"

- Local presence of a vacant property is associated with nearby homes being worth an average of 16% less than comparable dwellings in the same neighborhoods.
- Following conversion of a vacant lot to maintained green space, nearby homes command a premium of 2% to 5%, or a total gain from 18% to 21% from before.

COMPREHENSIVE FUNDING FOR URBAN GREENING

EPA and the states should support policy changes that would provide CBOs with a portfolio of models and mechanisms for financing the design, development and maintenance of green spaces. These programs could also link with policy objectives of creating green jobs in landscaping for local residents. Other funding ideas that state and local governments should consider:

1) Devise a "development fee" for greening nonprofits and cities working toward these ends, similar to CDCs who earn a "developers fee" for affordable housing (re)development on vacant properties. There is currently no equivalent for nonprofits leading the greening of brownfield redevelopment projects, even though greening contributes to a community's infrastructure, and often proves profoundly pivotal for distressed neighborhoods. Such a program would help satisfy increasing demand for green space. Making it easier for greening CBOs to turn hundreds of small neighborhood brownfields into green spaces would dramatically extend the impact of the Brownfields program.

2) Establish a capital reserve with contributions made by local businesses in the area, modeled after the Business Improvement District (BID) concept that would provide a maintenance endowment for CBOs and communities to utilize in cultivating ongoing stewardship of newly-developed parks over time.

[48] "Identifying the numerous benefits associated with greening urban areas is essential for countering the numerous barriers, real or perceived, that are often associated with such spaces, including high maintenance costs, safety concerns, poor accessibility, insufficient recreational programming, and poor design." Turning brownfields into green space in the City of Toronto, Christopher A. De Sousa, *Landscape and Urban Planning* 62 (2003) 181–198

[49] Ioan Voicu and Vicki Bean, 2008. "The Effect of Community Gardens on Neighboring Property Values," Real Estate Economics, American Real Estate and Urban Economics Association, vol. 36(2), 241-283.

STUDIES ON BENEFITS FROM BROWNFIELDS REDEVELOPMENT

- The International Economic Development Council's (2001) examination of the off-site impacts of a half-dozen brownfield-to-green space projects estimates that property values in neighborhoods surrounding these projects increased at rates more than two times those in control neighborhoods lacking conversion to green projects.
- The Northeast Midwest Institute (2008) Working Draft on The Environmental/Economic Benefits of Brownfields Redevelopment highlights these socio-economic benefits:
  - Neighborhood Revitalization as Measured by Property Value Increase. Cleanup and redevelopment lead to property value increases on the order of 5-15% for properties that are up to 3/4 mile from the site. However, there are documented cases where "impact" projects, usually involving change in use from industrial to parks or mixed use, have had much higher impacts, even exceeding 100 percent.
  - Leveraging Investment. Interpreting the results of eight studies with widely varying results, NEMW concludes that public investments in brownfields leverage total investments at a ratio of approximately $1/public investment to $8/total investment.
  - Responsible Growth and Saving Land from Destructive Sprawl Development. One acre of redeveloped brownfields has been estimated to conserve 4.5 acres of greenfields sprawl development.

- After five years affected households experience a median gain of $34,468 in housing wealth.
- Every dollar spent to clean and green a vacant lot is estimated to yield additional property tax revenues of $7.43.

In light of the fiscal challenges confronting all levels of government, strengthening the evidence base could assist nonprofits in their conversations with policymakers and foundations to support their projects and programs. Any such research initiative should not only commission and support additional studies, but also provide nonprofits and academics with training and support in the translation and communication of their research findings for policymakers and practitioners at all levels of government. Perhaps a good model to follow would be the recent research on the benefits of green infrastructure from water policy and advocacy nonprofits including Clean Water America. They have done a good job identifying and communicating about model initiatives, convening practitioners and policymakers around the topic, and supporting their claims with facts from different studies.

C. URBAN WATERS

The restoration of urban waters has become a core activity of the Groundwork Trusts in response to the needs of the underserved communities where they work. For many of the small, older industrial cities where the Trusts operate, decades-long degradation of urban waterways presents numerous challenges, but also amaz-

BUILDING THE EVIDENCE BASE FOR AN URBAN GREENING POLICY AGENDA

Federal agencies, especially HUD and EPA, along with foundations interested in urban greening should support the formation of research collaboratives to develop a holistic research agenda that supports the greening of brownfields. Groundwork and other nonprofits could benefit from additional, applied research that documents the benefits of their respective urban greening projects and programs that reclaim vacant properties and redevelop brownfields. These research studies should expand the type of economic benefits to include local government cost savings as well as document the green jobs and other economic spillover effects from urban greening. Perhaps research could also create new models that offer nonprofits and policymakers tools for calculating the social, economic, and environmental benefits of urban greening.[52]

Wachter's most recent study also illustrates the value of tracking progress of particular initiatives over time; thus it would be ideal to organize similar studies across several cities in different geography and different markets. Such a "living laboratory" model could significantly strengthen the evidence base of community driven urban greening projects and programs. EPA may want to look at the recent efforts to seed sustainability research by HUD's Department of Planning Development and Research as a model it might follow in supporting studies of urban greening projects and programs.

[50] Greening vacant lots to reduce violent crime: a randomized controlled trial, Eugenia C Garvin, Carolyn C Cannuscio, Charles C Branas, Injury Prevention Journal (Doi: 10.1136/injuryprev-2012-040439).

[51] Susan Wachter, Kevin Gillen and Carolyn Brown, "Green investment strategies: a positive force in cities," Communities and Banking, Federal Reserve Bank of Boston, 2008 (2), 24-27.

[52] Julia Kennedy, Peter Haas, and Bill Eyring, "Measuring the Economic Impacts of Greening: the Center for Neighborhood Technologies Green Values Calculator," in Growing Greener Cities, Eds. Eugenie Birch and Susan Wachter, pgs. 326-345, (Penn Press, 2008).

ing opportunities for leveraging restoration activities as a catalyst for renewing adjacent neighborhoods and improving quality of life among residents. Today over half the Trusts have major urban water initiatives covering three primary activities: 1) designing and developing parks and trails along rivers and streams; 2) restoring adjacent habitat; and 3) preventing and reducing sources of pollution.[53]

Building on the long-standing tradition of nonprofit river keepers and watershed stewards, the Trusts' urban greening mission helps strengthen connections between waterways, adjacent habitat, and surrounding neighborhoods. Groundwork's approach complements the U.S. EPA's recent Urban Waters initiative, which also takes a holistic approach to nurturing the relationship of distressed neighborhoods and the urban waterways that flow through them thus putting water policy in the context of the place and the people around it—a hallmark of the Groundwork Trust model!

From a policy perspective, each Trust devises creative strategies for navigating the complex web of environmental laws and policies that govern water quality. At the same time, the Trusts understand the role local land use policies can play as drivers of the degradation of urban waterways and at the same time as catalysts in shaping sustainable solutions. The following insights and ideas from the Groundwork urban waters experience can inform regulators, local officials and nonprofits about how current policies facilitate or impede the restoration of urban waters.

1. Policy Context Of Restoring Urban Waterways

Now celebrating its 40th year, the Clean Water Act (CWA) serves as the overarching federal policy framework for improving the health of our nation's bays, lakes, rivers, creeks, and streams.

WATERWAYS AND WATERSHEDS BEING IMPROVED BY GROUNDWORK TRUSTS

- The Spicket River, Merrimack River, Lawrence, MA
- Mystic River, Boston Harbor, Somerville, MA
- Pequonnock River, Yellow Mill Channel, Long Island Sound, Bridgeport, CT
- Saw Mill River, Hudson River, Yonkers, NY
- Elizabeth River, Arthur Kill, Elizabeth, NJ
- Watts and Pope Branches, Anacostia River, Washington, DC
- Scajaquada Creek, Niagara River, Buffalo, NY
- Mill Creek, Ohio River, Cincinnati, OH
- Kinnickinnic River, Milwaukee River, Lake Michigan, Milwaukee, WI
- Mississippi River, Lake Ponchartrain, LA
- White Rock Creek, Trinity River, Dallas, TX
- Bear Creek, South Platte River, Denver, CO
- Chollas Creek, San Diego Harbor, San Diego, CA
- Johnson Creek, Willamette River, Portland, OR

While its ambitious goals may remain elusive, the CWA establishes the policies and programs designed to improve water quality by managing discharges of pollutants into the waters of the United States. The U.S. EPA and state environmental agencies serve as the primary regulatory bodies that manage the different CWA programs and policies. At its heart, the CWA establishes a national permitting system for regulating discharges of pollution by industrial uses, municipal sewage treatment plants, and city stormwater systems. The law also covers development that encroaches upon wetlands and an elaborate federal system of setting water quality standards for certain pollutants and creating watershed restoration plans based on those standards (TMDLs). The CWA, like Brownfields, contains a virtual alphabet soup of acronyms of federal environmental policies. While the heart of the CWA focuses regulatory attention on these end-of-pipe dischargers (point sources), it struggles with controlling runoff from overdevelopment and agricultural uses (nonpoint sources). Water quality problems posed by land development and land use around these water bodies are often beyond the reach of the CWA's end-of-pipe permitting system.

2. The Problems of Urban Water

Urban places are frequently at the bottom of watersheds, where water quality problems (especially trash) accumulate. Many cities were built around waterways during an era of industrialization and manufacturing; thus, the sediments and shorelines often contain a legacy of pollution including heavy metals and other contaminants. Toxic sediments and discharges of chemicals and sewage pose health risks to residents, especially those low-income residents who regularly rely on the water body for recreation and subsistence fishing.

Historic land-use patterns and recent development decisions along urban waters have encouraged the presence of factories (many now abandoned or repurposed), rail lines, and highways, which cut off neighborhoods and residents from these resources. After decades of neglect, the abandoned appearance of many of these rivers and streams serves to increase dumping and illicit activity. The density of urban areas, in terms of population and land use, generates additional impacts on water bodies from polluted stormwater runoff, illegal outfalls, and hook-ups to combined sewer overflows (CSOs). The urban communities adjacent to degraded waterways are often the poorest, and lack the staffing or fiscal capacity to adequately address these challenges to their urban waterways.

In response to this national crisis of urban rivers, a number of urban river groups and watershed organizations emerged in

[53] Groundwork USA. 2012. Lessons Learned: Reclaiming Urban Waters Across the US. Groundwork Trust Special Report

LINKING THE PAST WITH THE PRESENT—THE GROUNDWORK'S URBAN WATERS MODEL

Most urban waters we work on have a long-term identity crisis: they are streams that often flow, unnoticed, through low-income neighborhoods, in underground culverts, or along industrial corridors. Urban waterways often represent a legacy of racial and socio-economic disparities, as they symbolize spatial divides within communities. Engaging residents in efforts to restore the waterways can open avenues to acknowledging underlying racial or other divisive issues and provide the opportunity for the community to experience healing and moving forward together.

Below is a graphic illustrating the way Groundwork visualizes cities and towns within the context of urban waters. The historical status of the urban waterway is often at the core of what the community thinks of itself in terms of a place, as most of our target urban waters were once the primary geography around which the community was settled. We have found that it is possible to tap into local stakeholders' feelings about a given waterway and leverage those emotions to reclaim the waterway's significance. Rebuilding the importance of the waterway in the community's mind is a critical step that takes imagination, action, and time.

communities across the country, from the Bronx River Alliance to the Friends of the L.A. River. Today these and other nonprofits comprise the urban backbone of national network of river keeping, watershed protection, and stream monitoring organizations. Many of these groups rally around cleanups, habitat restoration, boating, and greenway projects, while other groups or divisions within these groups engage in policy work, advocacy, and education campaigns at the national and regional level.

3. Program and Policy Challenges in Restoring Urban Waters

Reclaiming urban waterways goes beyond the CWA and its focus on water quality. CWA provisions that govern nonpoint source runoff and stormwater overflows do not directly govern land development decisions and local land use policies that are driving many water pollution problems in urban communities. In a recent report to EPA's Office of Water, Groundwork Trusts noted the direct connections between their urban greening work in revitalizing distressed communities and the towns' urban waterways—"Any land-based environmental improvement quickly intersected with the urban waters issue."[55] While forgotten by many residents and local leaders, Groundwork understands these streams and waterways have "tremendous potential for revitalizing the fabric of urban neighborhoods around them if there is a catalyst to re-imagine them."[56]

The following observations summarize the common policy chal-

EPA'S URBAN WATERS INITIATIVE IN COLLABORATION WITH GROUNDWORK

In 2011, EPA Administrator Lisa Jackson launched the Urban Waters Initiative with the intent to bring attention, resources, and technical assistance to restore, improve access and reconnect underserved communities to their urban waterways.[54] The initiative includes competitive grants to small communities along with technical assistance provided by a federal interagency partnership to support restoration studies and projects. In 2011, the first EPA grant program was established under the Urban Waters Initiative, and River Network and Groundwork USA were selected through a competitive process to co-manage it. Under this program, 2-year grants ($50,000-$60,000) were awarded to five nonprofits across the nation for urban waters capacity-building efforts, and five additional nonprofits were selected as Urban Water Fellows. Groundwork USA and River Network are helping EPA to incorporate all of the grantees into a larger Urban Waters Learning Network.

[54] www.epa.gov/urbanwaters/movement.html

[55] As part of its cooperative agreement with EPA's Office of Water, Groundwork USA leaders compiled a special report about the Trusts urban waters restoration experiences. The appendix includes a summary of that report. See Lessons Learned Report at page 21.

[56] Id.

lenges the Trusts confront in their work restoring urban waters and describe general policy concepts, such as understanding the regional context of watersheds, which play a greater role in urban water policy than in brownfields redevelopment.

- **Upstream—Downstream Tensions:** The impact of compromised water quality from litter and both point and nonpoint sources of pollution inevitably place the greatest burden on those communities, habitats, and stakeholders furthest downstream. Therefore, restoring the urban section of a stream often requires partnerships with the upstream communities that may be rural, or have smaller governments, differing commitments to the waterway, and different cultures and demographics. Urban-rural differences often make it difficult to communicate, engage, and reach consensus on how to protect and restore rivers.
- **Private Property Ownership:** The complexity of land use and ownership in urban areas along waterways demands that urban water improvement groups work with dozens of private property owners (individuals and businesses) to encourage them to participate, address illegal dumping and maintenance concerns, or provide access to the waterway. The difficulty of collaborating with owners of vacant and abandoned industrial properties along waterways that may be contaminated can create severe obstacles to restoring water quality.
- **Water Quality Data Collection and Sharing:** The reporting of water quality data varies from water body to water body and agency to agency. Although many nonprofit groups and local universities actively oversee regular volunteer stream monitoring initiatives that gather data about water quality and the overall health of water bodies within their respective regions, it is often difficult for nonprofits to ensure their data is compatible and consistent with EPA and state water quality sampling and testing data. Moreover, the capacities of river keeping organizations and watershed protection societies are not equal when it comes to data gathering, collection and synthesis.
- **Talking About the River:** Groundwork Trusts, like many nonprofits working on river restoration, have to balance their positive enthusiasm in recruiting residents back to the river for cleanups and river festivals with the realities of the rivers' actual health. They do not want to expose volunteers and other local residents to toxic pollution from sediments or overflowing sewage caused by the last storm. These circumstances pose potential risk communication challenges, such as: How to encourage people to experience the river when the river is unsafe in some places or at certain times? How to effectively communicate these risks to neighborhood groups without scaring them away or discouraging them from getting involved in future restoration activities?
- **Land Development Disconnect:** Decisions about new developments pose perhaps the greatest threat to urban watersheds. Part of this challenge involves tension between communities experiencing rapid growth (e.g., new developments and construction upstream in rural areas) versus older, established (former) industrial cities downstream containing densely populated neighborhoods in distress. Many state and local land use rules and procedures focus on the impacts of individual sites; thus, planning commissions and boards are not required to assess or consider watershed and cumulative impacts on adjacent or nearby waterways. State rules and local codes may not incorporate the latest practices in low impact development or green infrastructure. Local capacity for modernizing local plans and codes is often limited as well. Many smaller towns and cities with part time city and town councils and planning commissions lack the capacity or expertise to protect the quality of local water bodies in the face of encroaching development. Even once a development is approved, local governments may not have sufficient resources and staff to monitor compliance with the development conditions that were mandated to protect the waterway, and thus the onus rests with the community and nonprofit river keepers to ensure compliance with local codes.
- **Trash, Tires and More Tires:** River cleanups serve as one of the prime activities for most urban water restoration groups. Although regular cleanup activities have great immediate impact, the endless stream of litter and tires pulled out of waterways each year can make this effort feel Sisyphean. One reason for this is the numerous sources of pollution from stormwater drains, overflowing dumpsters, and actual illegal dumping along with weak anti-dumping laws and lack of sufficient commitment and resources by local authorities to enforce the laws that do exist.

CHARTER A BROWNFIELDS NONPROFIT ASSISTANCE CENTER

EPA and other federal partners, such as HUD, EDA, and DOL, should consider creating a national assistance center that would provide training and technical support for community-based organizations engaged in redeveloping brownfields and reclaiming vacant properties. Groundwork extends the EPA Brownfields mission by embedding itself in brownfields communities for decades and addressing a broader range of issues around cleanup sites. Given EPA's original sponsorship of Groundwork USA and its current technical assistance and guidance, the Trusts have strong linkages to brownfield redevelopment and many agency staff. Many of the Groundwork Trusts have become leaders in multi-million dollar, community-driven brownfields-to-green space redevelopment efforts. Thus, the Groundwork USA network and its experience with brownfields offers federal and state agencies an ideal vehicle for such a center. The center could be modeled after EPA and HUD's university assistance centers, but such an approach would be significantly strengthened by a community-based organization providing guidance to other nonprofits in a peer-to-peer model.

- **What River?** Illegal dumping and poor land use decisions over the years have compromised or hidden many urban rivers to such an extent that local residents ignore and see little value in trying to restore and protect them. Development patterns that include industrial properties, fences, highways, and railway tracks along the water's edge prevent residents from having direct access to water that is otherwise a stone's throw from home. Whether land use approvals or infrastructure projects, water policy decisions that hide these water resources from the public conscience contribute to the demise of urban waterways and make it difficult for policymakers and residents to take restoration efforts seriously.

4. Groundwork Case Studies—Practical Policy and Program Lessons from the Trusts

As part of this report, Groundwork commissioned case studies to extract and amplify the policy dimensions of the Trusts' urban water work; the case studies also illustrate how the Trusts devise innovative strategies and tactics to work around different environmental policy gaps. The full case studies can be found in the Appendix. These case studies illustrate a number of insights and good practices that other communities can learn from and adapt.

- ***Urban Waters Case Study #1:*** *Groundwork Anacostia*, in Washington DC, has been instrumental in building capacity around reclamation of the Anacostia River, physically maintaining the River, effecting policy change, and cultivating community awareness around the multiple benefits of river restoration.
- ***Urban Waters Case Study #2:*** *Groundwork San Diego*, in California, has been working with the local community to restore the Chollas Creek and has partnered with the local schools to create the Earth Lab Project, an outdoor learning lab where students engage hands-on to learn the benefits of improving their watershed.
- ***Urban Waters Case Study #3:*** *Groundwork Milwaukee's* GILS Project, in Wisconsin, is working to increase the fish population and improve spawning patterns along the shipping channel of the Milwaukee River Estuary.

One important lesson from the Groundwork experience is the emphasis on community—working directly with residents, public officials, other nonprofits, and civic groups to create new visions for their urban waterways. Groundwork Trusts promote the river through persistent and extensive outreach and other creative activities—essentially running an ongoing social marketing campaign. Unlike their work in brownfield redevelopment, the Trusts must typically wage more vigorous and long-term campaigns to explain why river restoration matters.

5. Improvements for Urban Waters Policies and Programs

The case studies, interviews, and research across the Groundwork Network demonstrate successful program tactics within the Trusts' urban waters work. Based on this synthesis, the report identifies several ideas for improving federal, state, and local environmental, land use, and public nuisance policies:

a. Encourage and Support Green Infrastructure Work by Nonprofits

Green infrastructure aligns closely with the mission and urban waters and community stewardship program activities for many, it not all, of the Trusts. In light of recent policy drivers, it seems green infrastructure is fast becoming a major priority for EPA, state environmental regulators, regional and local sewer and water authorities as well as environmental and watershed groups; thus, community-based organizations with capacity and experience, such as Groundwork, could play a strategic role in helping local government officials implement, manage and monitor green infrastructure policies and initiatives, as well as liaison and engage with local residents who live adjacent or near the river.

At the federal and state policy levels green infrastructure is fast becoming an acceptable strategy for controlling overflows from aging stormwater systems. One of the major policy drivers is EPA's Phase II Stormwater regulations that will require local governments to expend billions of dollars over the next 10-20 years to retrofit their existing stormwater and sewer systems to avoid combined-sewer-overflows (CSOs). Thus, many older industrial cities, some under federal court orders, will need to raise the nec-

GROUNDWORK URBAN WATERS PERFORMANCE MEASURES

Each year Groundwork USA compiles a report of its Performance Measures that represents all of its Trusts' activities in and around urban waters, as well as the amount of riparian habitat it improves. For example, since tracking of urban waters efforts began in 2008, Groundwork Trusts have "cleaned up, conserved, or restored" over 72 miles of riparian habitat in urban neighborhoods. Trusts have also removed—or catalyzed the volunteer removal of—over 1,800 tons of trash and debris from their target areas, much of it from in and along the banks of urban rivers and streams.

EXPLORE OPPORTUNITIES FOR COLLABORATING WITH NATIONAL URBAN GREENING NONPROFITS

Beyond work in the field, Groundwork should develop collaborations with national and regional nonprofit associations and advocacy organizations that champion different facets of green infrastructure, such as Clean Water America, City Parks Alliance, River Network and The Conservation Fund. Working at the national scale will raise the visibility of the great work of the Trusts and highlight the pivotal role that community-based urban greening groups can play in advancing the green infrastructure agenda.

essary fees, taxes and loans to make these infrastructure improvements. These rules have compelled local governments to seek less costly but effective alternatives, and are increasing municipalities' willingness to experiment with green infrastructure and other low impact development strategies and tools to comply with the EPA's regulatory mandate.[57]

Beyond the federal government, a number of professions have become engaged in developing frameworks and standards that provide guidance for builders, architects, developers, planners, and real estate professionals. These include the American Society of Landscape Architects' Sustainable Sites Initiative and the US Green Building Council's LEED-ND. Each framework offers goals, principles and standards for integrating green infrastructure into site development. Collectively, these policy statements and private sector frameworks offer a solid policy and programmatic basis for linking private development with neighborhood scale, urban greening initiatives led by CBOs such as Groundwork.

b. Strengthen Local Anti-Dumping and Littering Laws

One of the major activities of Groundwork Trusts' urban waters work involves the removal of tons of litter and debris from the river and its adjacent banks. Many urban rivers throughout the United States continue to serve as community dumping grounds.

From a policy perspective, several of the Trusts have begun to expand their efforts "upstream" to prevent illegal dumping by encouraging local governments to adopt more strict ordinances, and provide incentives for those that use landfills, recycling and other legitimate methods of solid waste management. The Trusts are also partnering with local governments by advocating for sufficient resources in support of enforcement and social marketing campaigns that link illegal dumping to watershed health. During a focus group with Groundwork executive directors, the following ideas arose:

- Create a tax incentive to prevent dumping by auto repair shops.
- Support bulk dumping planning at the neighborhood level.
- Require all property owners, including auto body shops, to retain municipal government waste management services or municipally-vetted waste and trash contractors, for pick up and dispose of bulk items.
- Increase fines; utilize cameras at known dumping spots (similar to those at red lights).
- Develop national anti-littering partnerships with fast food chains.
- Expand the local taxes on plastic bags as a way to deter littering and raise revenue for river cleanup technology (e.g., the bag fee in Washington, DC).

Process and People Lessons	Projects Lessons	Programs and Policy Lessons
Establish community consensus around a big vision for the waterway.	Catalog the project's value and benefits.	Carry out biodiversity studies with high school and college students.
Have your legislators serve as project champions.	Provide reliable technical information.	Monitor climate change impacts on biodiversity in your watershed.
Leverage the strengths of partners.	Bring resources to the table.	Utilize AmeriCorps NCCC as a resource for completing restoration activities.
Ensure the community always has a voice.	Document species in watershed via "Bioblitz."	Connect community to watershed with trash/anti-litter campaigns.
Engage stakeholders as stewards through clean-up events.	Use rain gardens as demonstration projects for home owners.	Start with small, tangible successes to garner trust and build momentum for a longer revitalization campaign.

Technical Assistance and Funding Resources	Outreach and Education	Policy Changes and Research
Establish support for technical experts to assist with menu of habitat restoration and water quality activities — maybe a roster of approved experts maintained by EPA regional offices.	Process input and feedback from practitioners (end users) before and after developing federal "tools."	Connect solid waste laws and policies with urban water laws and policies to prevent litter and debris from entering waterways; explore certain types of trash (e.g., old tires) that demand federal intervention.
Develop funding and/or targeted federal assistance that would support engineering designs and environmental plans for habitat restoration.	Produce on-line catalogue of best practices in consultation with practitioners—perhaps a clearinghouse managed by a non-federal entity as are many EPA clearinghouses.	Develop uniform federal guidance (especially for metropolitan sewer and water authorities) on using green infrastructure for CSOs—especially helpful for those communities new to the notions of how green infrastructure can complement grey.
Establish regular federal funding for river keepers by linking them to watersheds and consider them part of the "base flow" program efforts.	Develop 100 Best Practices Compendium every 4-5 years that covers critical urban water topics: stormwater, water quality, how to build a rain garden, etc.	Commission study (meta-analysis) of the quality of existing water quality studies, where such studies are not being done, and survey of water quality programs and initiatives.

[57] See, for example: US Environmental Protection Agency. 2011. A Strategic Agenda to Protect Waters and Build More Livable Communities Through Green Infrastructure. http://water.epa.gov/infrastructure/greeninfrastructure/upload/gi_agenda_protectwaters.pdf; and: Environmental Protection Agency. 2007. Using Green Infrastructure to Protect Water Quality in Stormwater, CSO, Nonpoint Source and other Water Programs. EPA Memo from Benjamin Grumbles, EPA Assistant Administrator. www.epa.gov/reg3wapd/npdes/pdf/dcms4_guidance.pdf

c. Infuse Local Land Development Decision-Making with Watershed Protection Principles and Goals

In order to address the challenges of multiple stakeholder interests in the fate of urban waterways, policymakers and regulators should encourage the design and implementation of more holistic approaches to the protection and restoration of urban waterways. For example, the new EPA Urban Waters Initiative illustrates a place-based policy model. The table below reflects a synthesis of the more than 20 model practices listed in Groundwork's recent report to the EPA Office of Water entitled "Lessons Learned: Reclaiming Urban Waters Across the U.S.". Our goal here is to provide a snapshot of the myriad good practices within three classic lines of analysis—1) Process and People Lessons; 2) Project Lessons; and 3) Program and Policy Lessons. Again, the table is not comprehensive, so for the complete list please refer to the report.

Additionally, in that report, Groundwork practitioners identified 9 recommendations for possible action by the federal government that would support the urban waters work of nonprofits. The recommendations in EPA report drill down to the operational level. The table below offers a brief summary and synthesis of those recommendations (for the full discussion please consult the report).

d. Identify Creative Strategies for Funding Work by Nonprofits in Restoring Urban Waters

The Clean Water Act's State Revolving Fund (SRF) program allocates more than $5 billion annually to states for water pollution control.[58] Traditionally these funds have been used to address point source pollution sources, such as wastewater treatment plants. However, Groundwork Trusts should consider the vast and under-utilized opportunities to use SRF dollars for less traditional projects such as nonpoint source pollution control and green infrastructure installation.[59]

[58] http://water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm

[59] U.S. EPA has developed a fact sheet focused on using the SRF to support green infrastructure projects specifically: www.epa.gov/owm/cwfinance/cwsrf/green_if.pdf. Other helpful information on a variety of topics related to creative use of the SRF can be found at http://water.epa.gov/grants_funding/cwsrf/factsheets.cfm.

[60] See http://cbey.research.yale.edu/uploads/Conservation%20Finance%20Camp%202011/agenda/Tuesday/CWSRF_REPORT_FINAL.pdf for more on the Ohio program and for information on other state approaches.

Typically SRF funds are provided via low-interest loans, but states are increasingly establishing flexible approaches that allow for creative financing of projects without the burden of loan repayment. For example, Ohio's Water Resource Restoration Sponsorship Program offers reduced SRF loan rates to traditional wastewater treatment loan recipients who sponsor a watershed restoration project. Participating loan recipients receive a reduced loan rate and the savings from that reduction is tagged for a watershed project (the loan recipient is granted a small (e.g., 0.1%) additional reduction in their loan rate as an incentive to participate). The watershed project funds are then provided as a grant to project implementers. Several other states have created similar approaches based on the successful Ohio model.[60]

A recent example of an urban river revitalization project benefiting from SRF funding is found in the Ogden River in Ogden, Utah. The river flows through the heart of this mid-sized city, but

THE GROUNDWORK GREEN TEAM: INVESTING IN YOUTH AND THE FUTURE OF THEIR COMMUNITIES

Groundwork Trusts across the United States are engaging local high school students in the national Green Team program, which features hands-on field work to transform the built environment; raise awareness about the critical environmental, economic, and social issues our communities face; nurture civic engagement; and improve quality of life in some of the country's most underserved neighborhoods. By offering exceptional hands-on leadership opportunities for Groundwork communities' young people, Trusts are investing in both places and people—thereby creating a lasting legacy of unique "next generation" Groundwork practitioners. Those who will carry the Groundwork mantle next need to be well-rounded, diverse, and holistic generalists. Indeed, the Groundwork Green Team program has become a vehicle across the nation to develop the very thinkers and doers who will continue to advance a multi-faceted, ground-up, cooperative approach to community revitalization.

To cultivate this cohort further, Groundwork USA hosts an annual Youth Summit that is attended by at least two of each Trust's delegate Green Team members and their program leader. At the Youth Summit, Green Team delegates and their leaders bring perspective and best practices to share and compare with their fellow attendees. The youth participate in roundtable discussions, site tours of Groundwork projects, and a service-learning project that is relevant to the Groundwork efforts happening on the ground in the host community. The Youth Summit, held in a National Park or Federal Wildlife Refuge, inspires participants not only by introducing them to others who are working on similar issues, but also by exposing them all to vastly different contexts than the places they call home.

for decades the city's back had been turned to the river. Lined with junkyards and strip clubs, the river was a liability rather than a resource. The river had water quality impairments, and flooding was a regular problem. With leadership from the city, that all changed. The city implemented a visionary restoration effort designed to improve recreational access and minimize flooding, while at the same time improving water quality and habitat.[61] A substantial part of the funding for this ambitious project came through the Clean Water Act's SRF funds – first with $1.1 million dollars of stimulus monies, and later with a second injection of $1 million in traditional SRF funds.[62] These funds were made available as 100% principal forgiveness, making both allotments essentially a grant.

D. Equitable Neighborhood Development

Equitable development has become an integral part of Groundwork's programming. For the Trusts, the term "equitable development" describes working in neighborhoods that have seen decades of disinvestment to ensure that all residents have the opportunity to effectively participate in and benefit from land development initiatives and projects—goals consistent with Groundwork's ethos of "changing places, changing lives." By helping residents navigate the local development process and its politics, the Trusts foster a greater understanding of how urban development projects and plans can improve both the residents' quality of life and the natural environment—a fundamental tenet of building sustainable communities.

The Trusts work closely with traditionally marginalized populations (e.g. the elderly, low-income, youth and communities of color) that often distrust local governments given long histories of marginalization, imbalances of power, and environmental injustices. By engaging underserved residents in the rebuilding of civic infrastructure, the Trusts ensure that community capacity can facilitate neighborhood transformation. Another hallmark of the Trusts' approach to equitable development is the establishment of tangible life and work skills for youth hailing from diverse and disadvantaged backgrounds. Through its national Green Team program, the Trusts work with middle and high school youth through a wide array of creative in-school and after-school green service programs.

By engaging the community, and specifically by working with youth, the Trusts gain a deep understanding of the challenges that families face in their communities, as well as the profound effects that Groundwork programming and place-based initiatives can have on overall quality of life. Many of the Trusts' brownfields projects directly engage residents, and especially the youth, in planning and advocacy work, which provides them positive opportunities for developing their voice and individual skills; more importantly, these experiences can cultivate a stronger connection to their neighborhood and its natural environment—the land and the water. Thus, the Trusts work persistently to empower neighborhood residents in becoming stewards of their community.

FEDERAL EJ POLICY

As the lead federal agency involved with administering federal policy on environmental justice (EJ), EPA defines "environmental justice" as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." The cornerstone of federal EJ policy rests on President Clinton's 1994 Executive Order 12898, which prohibits discrimination in programs receiving federal funds and requires federal agencies to conduct more extensive environmental reviews on potential disparate health and economic impacts in communities of color. The order also called for improved research for assessing and mitigating environmental health impacts. Other EJ initiatives led by the federal government include the National Environmental Justice Advisory Council (NEJAC), the Federal Interagency Working Group, and numerous EPA grants and tools designed to help communities overcome these challenges. After a year of extensive public comment, in September 2011 EPA Administrator Lisa Jackson adopted Plan EJ 2014—a strategic planning roadmap established to improve integration of environmental justice into EPA's day-to-day activities.[65]

This section of the report explains the policy context of equitable development by tracing its evolution from the environmental justice and civil rights movement and identifying common challenges in the local land development process. Through case studies and a policy synthesis, the report identifies common barriers (policy, program and process) as well as strategies for enhancing existing land use policy tools and for making land development processes more accessible and fair.

1. The Policy Context of Equitable Neighborhood Development

Communities in the United States have a thorny history with respect to the effects of development patterns and land use policies on low-income neighborhoods. During the 1950s and 1960s, practices such as real estate redlining perpetuated neighborhood segregation based on race, ethnicity, and class. Local officials often used zoning, urban renewal and other land use tools to locate industrial uses, hazardous materials, and toxic dumps disproportionately in powerless neighborhoods home to low-income and minority residents. In an outgrowth of the civil rights movement of the 1960s, researchers and advocates in the 1990s documented these conditions and disproportionate impacts, which led to the creation of the environmental justice movement.[63]

[61] See http://www.riverrestoration.org/projects/files/ogden.html for more specifics on the restoration effort.

[63] William A. Johnson, Jr., "Sprawl and Civil Rights: A Mayor's Reflections." Growing Smarter—Achieving Livable Communities, Environmental Justice and Regional Equity, Robert Bullard, editor (MIT Press, Cambridge, Mass: 2007).

[64] Robert D. Bullard, "Smart Growth Meets Environmental Justice." Growing Smarter—Achieving Livable Communities, Environmental Justice and Regional Equity, Robert Bullard, editor (MIT Press, Cambridge, Mass: 2007).

[65] Created in September of 2011: http://www.epa.gov/environmentaljustice/resources/policy/plan-ej-2014/plan-ej-2011-09.pdf

WHAT IS EQUITABLE DEVELOPMENT?

While the equitable development movement arose from the environmental justice movement, many of its principles and strategies are intertwined with smart growth issues of sprawl, access to regional transportation systems, and recently, health disparities related to food deserts. According to the national nonprofit Policy Link, equitable development is defined as "*an approach to creating healthy, vibrant, communities of opportunity. Equitable outcomes emerge when smart, intentional strategies are put in place to ensure that low-income communities and communities of color participate in and benefit from decisions that shape their neighborhoods and regions.*"[66] According to EPA's Office of Sustainable Communities, equitable development integrates environmental justice and smart growth principles and policies in the revitalization of underserved neighborhoods, such as by providing affordable housing choices, ensuring access to transportation options and improved neighborhood amenities (e.g., schools, healthy foods, parks and green space), reusing vacant properties, repairing infrastructure in existing neighborhoods, and preserving cultural assets. One principle that receives heightened attention in equitable development campaigns is the need for facilitating meaningful community engagement in land use decisions in order to address longstanding policy and political imbalances in local land use decision-making. Other national and regional nonprofits and foundations, such as the Ford Foundation, the Local Government Commission and Smart Growth America, have also made equitable development a high policy and program priority.

Community groups and regional chapters of civil rights organizations, many from the South, began to understand and raise awareness about the patterns that researchers uncovered—that harmful practices in land use, industrial planning, waste disposal and sanitation services placed concentrations of locally unwanted land uses (often known as LULUs) in communities of color.[64] Local residents were unaware and powerless to stop the location of these harmful and often polluting land uses. Numerous public health studies documented the disparate impact that such uses had on the health of people of color.

Although such overt institutional practices are less frequent today, the remnants of such a history — such as disparities in wealth, disproportionate access to resources and public health consequences — continue to plague many communities where the Trusts work. The unequal distribution of power continues to manifest itself through racial and social tensions; lack of access and community power in local development conversations; and other, less visible forms of inequity. These dynamics then resurface when developers from outside the neighborhood, with support from city leaders, seek approval for their development projects. First, the people living in these neighborhoods often do not get to decide or contribute to the vision for what happens with current and future land-use decisions. Second, even if long-term residents are able to stay in their neighborhoods, the new development often does not benefit them or cater to their needs. Third, regardless of place, until recently, little progress has been made to institutionally alter such histories of inequitable development. Cumulatively, these barriers—such as place-based racial tensions, lack of transparency and access in local land development decision-making, and the overall complexity of land use and community redevelopment—make equitable development difficult to achieve through traditional policy and program interventions, as successful outcomes require a holistic approach of revitalizing place and regenerating people. This is a core element of the Groundwork model.

Revising and Reframing Local Land Development Processes and Plans. Unlike the other two policy areas (brownfield redevelopment and urban waters), there is no analogous broad federal or state environmental regulatory framework with extensive oversight, permitting requirements and review for revising local land development processes. Equitable development is more of a set of core principles that provide policymakers with guidance in rectifying inequitable local land development decision-making systems. Thus, community-based organizations, such as Groundwork Trusts, play critical roles in educating local officials about equitable development, as well as organizing and empowering disadvantaged neighborhoods to promote equitable development projects and programs.

Barriers to Equitable Neighborhood Development. Whether developing urban greening projects alongside residents, or advocating that private development should benefit all segments of the neighborhood, the Trusts recognize that proposed development projects disproportionately impact low-income residents, and work to transform the energy and impetus behind these projects to produce opportunities for equitable development in affected neighborhoods. Within the context of their work, the Groundwork USA leadership identified three major policy barriers to achieving equitable development:

- **Economics (and Politics) Prevails Over Community Goals and Benefits.** Even before the Great Recession, local governments were struggling to raise sufficient revenues to meet the demand for services. For older industrial cities these budgetary challenges have become even more acute, leaving some local governments on the verge of bankruptcy. Thus, many local political leaders are desperate for new investments of any kind as they seek civic revitalization in order to increase their tax base. All too often, local officials pull together a variety financial incentives or promise short development approval processes at the expense of community interests and sound land use planning principles.
- **Complexities of Local Land Development Processes**. Local development approval processes are difficult to negotiate, especially for working class residents with limited skills, those raising families and working two jobs, and non-English-speakers. Even part-time city council members may have difficulty understanding the complete range of possible policy and community impacts of particular development projects. They may not fully appreciate the full value of the land involved, and may thus underestimate what they should seek in return. Together

[66] http://www.policylink.org/site/c.lkIXLbMNJrE/b.5136575/k.39A1/Equitable_Development_Toolkit.htm

the environmental assessments, land-use disposition review procedures, and zoning and planning board reviews create a daunting maze of legal processes that require experience in the form of professional consultants or advocate institutions to effectively negotiate.

- **Lack of Access and Meaningful Community Engagement.** When developers and their consultants, often with the tacit approval of local officials and planners, present their projects to the community for the first time, it often seems like a "done deal" as the majority of the designs and plans are complete, leaving little room for incorporating the community's input. Superficial community participation is often enough for developers to "check the box" that they have done their part. Although creative and interactive community engagement processes are increasingly gaining traction now, cities still have difficulty involving residents and grassroots stakeholders early on and helping create the vision for the whole of the community into which the final design and project development will fit.

2. Policy and Program Lessons from the Trusts—Strategies for Navigating the Tensions and Complexities of Equitable Development

Given today's market realities of slower growth and long histories of racial and environmental injustices, achieving equitable development will continue to challenge local officials and the Trusts. Part of the challenge rests on the inherent tension between taking a project-by-project approach versus viewing individual development proposals in the context of a longer-term, community-led neighborhood revitalization vision. The Groundwork observations above and the case studies below illuminate how the Trusts work to facilitate more transparent and fair land development decision-making.

- ***Equitable Development Case Study #1:*** *Groundwork Lawrence*, in Massachusetts, worked in partnership with a local CDC and a diverse array of local stakeholders to push for the city of Lawrence's first zoning amendment in decades, the Reviviendo Gateway Zoning Overlay District, which enabled redevelopment of vacant parcels (of which there were nearly 1,000 in Lawrence's poorest neighborhoods) by right, encouraged mixed use redevelopment of historic and underutilized mill buildings, and established the vision of a vibrant urban village for local stakeholders and their families to live, work, play and thrive.
- ***Equitable Development Case Study #2:*** *Groundwork Somerville*, in Massachusetts, partnered with several local organizations to form Community Corridor Planning, a coalition designed to ensure that even the most marginalized residents of Somerville could participate in the visioning and planning processes surrounding access to the light rail mass transit extension through their community.
- ***Equitable Development Case Study #3:*** *Groundwork Hudson Valley*, in New York, parallel with and complementary to their efforts to catalyze the daylighting of the Saw Mill River in downtown Yonkers, brought together various community groups to begin discussions on a Community Benefits Agreement (CBA) that sought to ensure that long-time residents would be able to benefit from a $3.1 billion development that was to occur on the waterfront there.

Groundwork's experience operating on the front lines of equitable development offers important insights for how to navigate one of the more complex public problems confronting regions and communities of all sizes and locations. Certainly the possible policy interventions look different in each community given the political, legal, historical and social dynamics of each place. What emerges from the case studies, however, is a simple typology of interventions: 1) process strategies for making the land development decision-making process more inclusive and transparent, including targeted outreach and education; and 2) a suite of local

COLLABORATIVE COMMUNITY ENGAGEMENT IN LEGACY CITIES—PARTNERSHIPS OF PLANNERS AND COMMUNITY-BASED ORGANIZATIONS[67]

Appropriate approaches to engagement are not only vital, but are fundamentally different in older industrial cities, often known as legacy cities. "Understanding the present and past struggles of these communities is essential to building trust and ensuring the credibility of any engagement effort. Legacy cities share an arc of growth, strength, and decline, with deindustrialization representing not only the loss of their economic foundations, but also the loss of community identity. Understanding this local narrative is central to the engagement process."

In the American Planning Association Planner's Advisory Service (PAS) Report on Cities in Transition, co-authors Alan Mallach and Joseph Schilling suggest that planners, working in tandem with community-based organizations, should collaborate in developing strategies for community engagement, using a blend of capacity-building and classic outreach. "Depending on community dynamics, these two approaches may happen simultaneously or in different phases and may be led by the same or different organizations. Community organizers working for nonprofit groups may focus on capacity-building, while the local government planner takes the lead with outreach. Either way, the two approaches will intersect and should be knit together into a cohesive and collaborative community-engagement strategy."

Through a series of interviews with planners and community-based organizations working the front lines in distressed communities, Mallach and Schilling go on to suggest that rebuilding the civic infrastructure takes time and that organizations outside city hall, such as CDCs and other community-based organizations, might be better suited for leading the outreach and local governments acting in supporting roles for such efforts.

[67] See Chapter 8 on Community Engagement of the PAS Report and the complete set of interviews are posted on line at http://vacantpropertyresearch.com/research/pas_report/

land use and land development policy tools that have the potential to make the eventual development project more fair and beneficial to underserved residents of the neighborhood.

Land Development Process Principles and Techniques. The Trusts wear several different hats when it comes to local land development. For some development projects, a Trust acts as the objective intermediary trying to broker a development decision between the private developer, city leaders, and the community. In other circumstances, a Trust may act more as a watchdog that monitors city hall activities and calls attention (perhaps even organizes a call for action) when those potential development and policy decisions will either favor or disfavor underserved communities. In still other instances, some Trusts do both. When it comes to strategies for ensuring more equitable development processes, Groundwork offers the following principles for other nonprofits and community-based organizations working with underserved neighborhoods:

- **Vision:** Get ahead of the developers and create a community or neighborhood vision.
- **Facilitator/Mediator:** Be the honest broker (e.g., a voice of reason in a high stakes game); development is not bad, but it needs to be balanced and fair.
- **Watchdog:** Oversee the community planning process and facilitate finding common ground between the community's vision and the city's and/or developer's vision.
- **Strategic Priorities:** Focus on major land-use change in lower land value neighborhoods—be strategic by working on projects that offer the greatest return on social investment.
- **Engage Residents:** Educate residents from the get-go and offer meaningful opportunities for them to participate.
- **Partnerships:** Spend time cultivating relationships with local officials, city staff, businesses and civic institutions, and share important equitable development principles with them.
- **Interest-Based Negotiations:** Demonstrate that a community vision realistically can coincide with a developer's vision.

With these principles and techniques in mind, the Trusts offer the following policy and program recommendations for making the land development process more fair and equitable:

- Amend local land development policies and procedures to strengthen community engagement requirements to ensure that project vision and concept evolution directly involve the residents and the neighborhoods most affected.
- Consider using a blend of engagement techniques for fostering greater community engagement:

> What stands out within the Groundwork experience is their effort to connect revitalization of the physical and social environments: empowering people through ecological stewardship—a proven recipe for community renewal.

  - Holding informal, self-organized gatherings, such as study circles, neighborhood coffees, and potluck dinners in living rooms, can bring people together to discuss issues and build stronger links among neighbors.
  - Offering meetings after business hours means more residents may be able to participate. However, the provision of childcare and food at meetings through the dinner hour are also extremely important for ensuring turnout at meetings, especially among young working families.
  - Empowering young people by providing creative resources to make photo essays and YouTube videos, for example, focused on the strengths and weaknesses of their neighborhoods and how proposed developments will add to or detract from their communities.
  - Offering interactive opportunities for engagement, such as charrettes, town hall meetings, and world cafes—all are intensive participatory design and planning exercises, and offer highly effective ways of both engaging residents and generating valuable ideas and vision for a site or neighborhood. All such processes, however, must ensure that the product is useful to the community and reflects the goals and concerns of the area's residents.
  - Ensure that land use planning commissions and land development entities that oversee special redevelopment districts and zones have transparent processes and community representatives involved in program decision-making and administration.

Land Use Policies and Land Development Procedures. In order to achieve more equitable development, local policymakers and planners will need to recalibrate the procedures and processes for developing land use policies and making land development decisions. Although the Trusts have gained extensive experience on the process side of equitable development by acting as the neighborhood broker, facilitator, and advocate, it seems that many of the Trusts are navigating new territory as they engage with local land use policies. A few of the senior Trusts have been involved in the development of new zoning overlays and community benefit agreements, but the land use planning and development system remains a new field for the majority of Trusts. Groundwork Trust practitioners offer the following policy and program recommendations for making local land use policies, plans, and codes more fair and equitable:

- Create design guidelines for the neighborhood based on the community's vision; such specific guidance could benefit the potential developer who likely wants to avoid as much (expensive, time-intensive) neighborhood opposition as possible, and

at the same time, gives the community what it wants (this is the take-home of the Reviviendo work in Lawrence—first a vision and design guidelines, and later zoning reform).

- Promote the use of inclusionary zoning policies (e.g., ordinances, programs, conditional use permits, etc.) in states that allow local governments to adopt such zoning strategies, and/or the imposition of certain conditions as part of the development review process.
- *Fix it First* by targeting infrastructure (water, utilities, transportation, etc.) for rebuilding distressed neighborhoods before constructing new infrastructure in new communities; this is a classic smart growth strategy of creating priority funding areas and other "fix it first" policies.[68]
- Provide incentives for local governments and developers to enter into Community Benefit Agreements (CBAs)—a legally binding development agreement signed by the city and the developer with community-based organizations and neighborhood groups as a third party beneficiary. In exchange for project approvals and taxpayer subsidies, CBAs extract benefits from developers that go to the local community, such as hiring neighborhood youth, creation of affordable housing, and provision of developer fees for parks and maintenance and schools, etc.
- Explore adapting the evaluation process from Health Impact Assessments (HIAs) as a policy tool for educating local policymakers and residents about the health implications (both adverse and positive) of approving certain development projects.[69] HIA is a "combination of procedures, methods and tools by which a policy, program or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population." HIA can be used by non-traditional health sectors, such as urban planners, to identify the potential community health effects of new policies. Several Trusts are looking at HIAs as tools for engaging residents and holding developers and new land users accountable to the community. Although the "rules of engagement" involving HIAs are still a work in progress, it would seem that a nonprofit intermediary, such as the Groundwork Trusts or the Groundwork USA Network, could conduct and manage the HIA process for pending equitable development proposals. Groundwork could also partner with university public health departments or other institutions or nonprofits for data gathering and analysis as part of the HIA process.

PART THREE. THE PROGRAM AND POLICY AND OPPORTUNITIES OF GROUNDWORK USA

Within this emergent movement of sustainable community building, the Groundwork Trusts offer policymakers and community leaders a comprehensive model worthy of further exploration and support. As the examples and case studies illustrate, Groundwork's activities in restoring urban waters, pursuing equitable development and reclaiming brownfields reflect a community-driven, ecological approach that rectifies long-standing socio-economic inequities in underserved urban neighborhoods. As nonprofits, the local Trusts work to ensure that proposed and current development and restoration projects seek a balance between the three core tenets of sustainability—economy, environment and equity.

What stands out within the Groundwork experience is their effort to connect revitalization of the physical and social environments: empowering people through ecological stewardship — a proven recipe for community renewal. By striking a balance between people and place, the Trusts help ensure long-term neighborhood sustainability and equity. Groundwork's model straddles the sustainability and community development movements by acting as a nonprofit intermediary which empowers residents, rebuilds civic infrastructure, and engages local government partners while focusing their lens of sustainability as catalyst for neighborhood revitalization and urban regeneration.

This section of the report looks forward at the promise for expanding the Trusts' successful model of sustainable community building, and taking the Groundwork USA Network to a national scale. From a program perspective, what opportunities exist for experimenting with alternative mechanisms of financing the green work of the individual trusts? Are there tools for quantifying the net-positive benefits of the Trusts' urban greening activities along with the social benefits of training the next generation of neighborhood environmental stewards? What are the prospects for enhancing the model through expansion of the support roles of other federal agencies? What issues could researchers uncover in further documenting and supporting the Trusts' impressive body of work? Finally, the report offers several ideas for growing a national network of urban greening organizations engaged in sustainable community building that could be orchestrated and supported by a Groundwork Trust Institute.

A. Opportunities for Enhancing the Capacity and Scope of the Groundwork Trusts—Program and Policy Themes

The Groundwork model operates through two basic organizational structures: 1) the process and the actions of the individual Trusts; and 2) the network of 20 Trusts supported by the national program office of Groundwork USA. When discussing opportunities for enhancing the Groundwork model, it becomes important to identify policy and program strategies for the Trusts and for Groundwork USA, and their relationships to one another. In each of the three major policy areas (Brownfields, Urban Waters, and Equitable Development), the report offers a number of specific program and policy ideas for expanding the Trusts and the network. This next section synthesizes those specific insights into a broader set of program and policy lessons.

Three cross-cutting themes arise when thinking about ways of enhancing the program and project capacity of the individual trusts: 1) Expanding the portfolio of resources (old and new) for supporting the urban greening of neighborhood revitalization; 2) Developing new business models that provide urban greening consulting services through formalized partnerships with local

[68] Daniel J. Hutch, "Smart Growth Tools for Revitalizing Environmentally Challenged Urban Communities." Growing Smarter—Achieving Livable Communities, Environmental Justice and Regional Equity, Robert Bullard, editor (MIT Press, Cambridge, Mass: 2007).
[69] *WHO 1999*

governments; 3) Enhancing capacity for Groundwork executive directors and their senior staff through a Groundwork Trust Management Academy.

1. Expanding the Portfolio of Urban Greening Resources

After the initial support by EPA and NPS to study and launch a Trust, the subsequent flow of federal resources depends on the Trust's project or programmatic work. For example, a Trust that focuses on brownfield redevelopment may obtain EPA Brownfields resources either directly or indirectly through a partnership with local government. As a general rule, raising sufficient local resources becomes a critical task for each Trust's executive director and local board in order to ensure the Trust's long-term viability and stability.

Overall the Trusts are successful in leveraging these and other federal resources by raising funds and in-kind services from multiple sources, such as foundations, civic organizations, and businesses. Since 2000, the network of Groundwork Trusts has collectively leveraged over $19 million in private and in-kind resources. In light of dwindling federal (and state) resources, the Trusts will need to diversify their resource portfolios by focusing on their strengths in urban greening, and expanding capacity to tackle new ways of providing those services to local governments and private developers.

Given their long standing role in leading the green transformation of underserved neighborhoods, the Trusts can make a persuasive case to local policymakers for setting aside a small percentage of existing or proposed local environmental revenues to support community-based sustainability activities, such as restoring rivers and greening vacant lots. These revenues could come from a variety of different local environmental and economic development sources, such as:

- **Stormwater utility fees**. Many local governments and sewer and water authorities charge property owners, especially businesses, stormwater utility fees to cover the costs for installing and maintaining the grey and green stormwater infrastructure. The Trusts' watershed cleanup and restoration work, especially removing trash and invasive species and restoring habitat, enhance the natural carrying capacity of neglected urban rivers. Local governments and sewer/water authorities should consider integrating the work of the Trusts as part of their stormwater action plan to comply with federal stormwater and state watershed protection regulations. Perhaps a city could set aside a small percentage (e.g. 1%) of their stormwater utility revenues for community-based green infrastructure initiatives that could support the Groundwork Trusts' watershed cleanup and restoration work.
- **Developer fees for urban greening.** A common practice within the community development field is the imposition of a "developer fee" as part of each development transaction; the fee, modest in relation to the public subsidies involved, allows the CDC to cover some of its organizational costs involved in the project and helps support their long term commitment to the neighborhood and its affordable housing goals. Could this practice somehow be adapted for the greening work of the Groundwork Trusts? As more local governments promulgate policies that encourage, and perhaps require, new developments to address stormwater runoff and other nonpoint sources of pollution through low impact development practices, more private and nonprofit developers are installing green infrastructure treatments and strategies. Could local governments charge developers a green infrastructure impact fee and then set aside a small percentage of those revenues for the routine monitoring and maintenance of the adjacent water body that the green infrastructure is designed to protect? Such a comprehensive approach would more closely connect the responsibilities of the private developer for the green infrastructure on site with the community responsibility for the adjacent water body. Assuming local governments have sufficient legal authority and political support to impose impact fees for green infrastructure, nonprofit sustainability intermediaries such as the Trusts would be ideal green infrastructure service providers to the local government.

the Groundwork experience offers policymakers at all levels important insights into the implementation of environmental and land development policies.

- **Green infrastructure and open space districts**. Another infrastructure financing strategy available to many local governments is the formation of special districts, such as business improvement districts, special assessment districts for parks or open space maintenance, or utility districts. The process typically requires agreement by a majority of the property owners within the boundaries of the proposed district on the formation of the district, its governing process, the amount of the assessment, and the types of activities the assessment revenues can cover. Such districts are commonly used for revitalizing or stabilizing decaying downtowns, enhancing private development investments, and protecting a variety of natural assets, such as open space and recreational areas. Within the urban context, many of these districts are created by local governments, though nonprofit conservation trusts offer another model.

With respect to green infrastructure, perhaps property owners adjacent to a network of green alleyways or a riverfront trail could form a green infrastructure district where the revenues raised help cover the costs for repair and maintenance of the

green infrastructure. Perhaps a nonprofit intermediary could manage or operate the district. While a regional authority or local government would likely charter a district, it could develop a memorandum of understanding (MOU) whereby a local Groundwork Trust would derive a management fee to manage and operate the district or to provide property maintenance services.

2. Developing New Models for Nonprofit Urban Greening Consultants

During our interviews and policy roundtable, Trust executive directors brainstormed and shared ideas for developing a type of "green" consulting service for local governments. Given the Trusts' solid track record on urban greening, it seems to make fiscal and political sense for a local government to enter into a MOU with a local trust to provide different types of urban greening services. Groundwork Lawrence and the City of Lawrence, Massachusetts have a MOU that establishes the general parameters of their working partnership and lays the foundation for future work arrangements.[70]

Local government could also design a standard request for proposals (RFP) that solicits applications specifically from nonprofit or community-based organizations, or at least specifies the eligibility of nonprofit greening groups for funding. The Trusts could also identify similar arrangements with quasi-public entities, such as water and sewer authorities, conservation trusts, and also private developers. One of the core strengths of the Groundwork model is the connection with local residents; thus, the Trusts could be critical "consultants" in promoting community engagement as well as providing education, outreach, training, and technical assistance on urban greening strategies and other sustainability activities. The Trusts offer local governments and the private sector a supplemental network of community-based green consultants that could provide cost-effective services in an era of dwindling public resources.

3. Expanding Capacity through a Groundwork Academy

One of Groundwork's most valuable features is Groundwork USA's supporting relationship with each of the 20 Trusts. Starting in 2001, the Trust executive directors have come together each year to discuss common challenges, share best practices, and develop working relationships at the annual Groundwork Assembly. Groundwork USA periodically offers sessions on aspects of program and project management, along with sessions on environmental and natural resource grants, policies, and programs managed by NPS and EPA program officers. A classic strategy for expanding business or nonprofit organizational capacity is to build the capabilities of executive leaders and front line managers. While Groundwork USA excels at its core on-the-ground practices, formalized education and promulgation of these practices lies outside its organizational expertise. A curriculum developed by Groundwork USA in partnership with educational institutions and comprised of a combination of formal classes and informal learning sessions could help meet the executive development needs of its Trusts.

CROSSING THE ENVIRONMENTAL POLICY DIVIDE—INTEGRATING ENVIRONMENTAL POLICY ON THE GROUND

Groundwork's experience highlights the challenge of translating the goals and vision of multiple environmental laws and policies through on-the-ground sustainable community building efforts. The US environmental policy framework regulates pollution through separate mediums of air, water, and land—the Clean Air Act, the Clean Water Act, etc.—and administers environmental programs through a fragmented federal system with multiple levels of government agencies. One of the major limitations of this framework is the inability to address environmental problems holistically, let alone link environmental policy with social and economic policy. Given the Trusts' work on sustainability, many of its programs cut across this environmental policy divide, thereby offering federal (and state) environmental officials the rare opportunity to see those connections (and barriers) at the community level. As examples, in the field, Groundwork takes a comprehensive approach to redeveloping brownfields; however, the federal and state Brownfields policy goals and drivers do not easily translate across statutes or mediums at the neighborhood level. While the goals under each federal and state environmental policy are broad—protect public health—the substantive focus is often narrow; for example, Brownfields is confined to contaminated lands, while Urban Water focuses first on the water body itself and then secondarily on the connection between land and water. In trying to build sustainable communities, the Groundwork Trusts are consistently crossing these environmental policy dividing lines, and thus encounter tensions between the primary public health goals of environmental cleanup policies and the intent of utilizing such policies in a holistic manner to address core community issues in underserved neighborhoods.

Perhaps Groundwork USA could partner with a university located within a Trust community to develop a curriculum in nonprofit management informed by the Groundwork model. Another element of this practitioner training initiative could be a series of policy sessions. As the Trusts' executive directors become more aware of their policy fingerprints, their insights might provide the foundation for a special policy curriculum designed to help Groundwork practitioners become more influential policy advocates. Topics could include the major federal environmental policies that intersect Groundwork's current programs along with trainings on relevant state policies and the core elements of

[70] The Groundwork Lawrence Cooperative Agreement does not specify work by specific geographic location or "district", nor does it state a specific fee that GW Lawrence would derive; rather, it enables City to engage under contract with GW Lawrence to provide project management / construction oversight services to City for a fee (which is determined on a project-by-project basis and is dependent on availability of City's discretionary funds).

THE FEDERAL INTERAGENCY PARTNERSHIP FOR SUSTAINABLE COMMUNITIES

Explore a more formal relationship with the interagency Partnership for Sustainable Communities to support the Groundwork USA network. The sustainability offices within HUD, DOT, and EPA serve as the Partnership's core members and guide its direction. The Partnership manages a suite of policy and grant initiatives that foster collaboration across numerous federal agencies to further support the development of sustainable communities. One of the Partnership's primary goals is fostering collaboration among federal agencies so that federal programs and policies are more responsive to the needs of regional and local government partners. Supporting the Groundwork USA Network would certainly be consistent with the Partnership's livability mission and its various sustainability programs. Engaging Groundwork USA could also expand the Partnership's reach by formally involving the NPS as well as more closely engaging other EPA offices, such as Urban Water and Brownfields.

zoning, planning and local land development processes. Perhaps these Groundwork Assembly training sessions could be expanded into standalone two- to three-day policy boot camp trainings for Groundwork Trust executive directors that could facilitate exploration of strategies for how to communicate, evaluate, and share policy innovations. Such "boot camps" might benefit by including federal agency leaders and local government officials to facilitate a dialogue on Groundwork's policy influence. The deeper appreciation of policy engendered by such interactions would enhance the Trusts' potential policy influence and leverage that growing expertise to support their fieldwork and capacity to attract a broader mix of funders.

The annual Groundwork Assembly affords the opportunity for convening some of these training sessions, but a robust management academy would likely require a substantial online component in order to make it workable for busy nonprofit managers and feasible for nonprofit budgets. An academy would certainly require Groundwork USA to raise additional funds, but the concept would be consistent with the missions of many national foundations, and perhaps federal agencies, such as NPS and EPA, could endorse and support the academy concept in some manner.

B. Opportunities for Expanding Groundwork's Policy Influence

Beyond its organizational infrastructure and diverse program activities, Groundwork USA offers a number of important policy insights about the art and science of sustainable community building. A basic question for Groundwork is whether and how its policy efforts should expand at the federal, state or local levels. Certainly Groundwork may not want to drift too far from its core strength—implementing environmental and land development policies in underserved communities through a variety of on-the-ground projects. As this report illustrates, however, the Groundwork experience offers policymakers at all levels important insights into the implementation of environmental and land development policies. This section of the report offers a few suggestions on how Groundwork and its partners can consolidate the Groundwork USA Network's policy fingerprints and further expand their policy influence.

In light of its long-standing relationship with EPA and NPS, Groundwork USA should explore possible partnerships with other federal and state agencies that connect with their urban greening mission. Several of the Trusts are working to increase access to fresh food for underserved neighborhoods, so additional support from the US Department of Agriculture and state agricultural extension services might yield natural synergy. Perhaps Groundwork could expand its expertise in managing youth stewardship programs to cover the dynamic field of green jobs that other federal and state agencies, such as the Department of Energy, Department of Labor, and the Economic Development Administration, support. Federal policymakers should also consider ways in which agency leaders and staff might leverage Groundwork USA's strong foundations with EPA and NPS. Below are a few suggestions outlining reasons and methods for Groundwork to expand and reach out to develop new relationships with federal and state agency partners.

Connecting Groundwork USA with relevant federal and state agencies could offer these government agencies unique opportunities for expanding their scope by leveraging community-based organizations as creative vehicles for implementing federal and state sustainability initiatives, which involve housing, economic, social, and environmental policies. For example, most of the Partnership for Sustainable Communities' current portfolio of programs provides resources for public agencies (regional and local governments) and large institutions, such as universities. Certainly the Partnership's focus on public agency partnerships has led to many improvements in streamlining federal processes and also encouraging more communities to devise more robust sustainability programs, policies and plans.

[71] www.sustainablecommunities.gov/

[72] State agencies could adapt many of the policy ideas we propose throughout this section of the report. For example, state environmental regulatory agencies, such as Departments of Environmental Quality and/or Departments of Natural Resources could support a smaller network of Groundwork Trusts within their state to work on sustainable community building among small and medium sized distressed cities — aligning precisely with the experience core strengths of the Groundwork Trust network.

[73] In 2010 HUD established the Office of International and Philanthropic Innovation to facilitate the research and promotion of innovative urban and housing policies and programs and engage the philanthropic sector to explore new partnerships with the Obama Administration (http://www.huduser.org/portal/ipi/about_v2.html). For example, in 2011 the Rockefeller Foundation awarded HUD a $2 million grant to support the Strong Cities, Strong Communities (SC2) Fellowship Program that supports the placement of 18 mid-career professionals in the seven pilot SC2 cities. (http://www.gmfus.org/programs/urban-and-regional-policy-program/strong-cities-strong-communities-fellowship/).

DESIGNING AN APPLIED POLICY RESEARCH AGENDA AROUND SUSTAINABLE COMMUNITY DEVELOPMENT

Groundwork USA and the Groundwork Trust network represent a new breed of sustainable community developers. These nonprofits can trace their roots back to convergence of the community development, environmental justice, and urban greening movements. While they share many core values and goals from these movements, these community-based organizations have a broader program portfolio involving sustainability's three core tenets, as they serve as mediators and facilitators of neighborhood-driven equitable development. Applied policy research centered on this emerging type of green community intermediary would help practitioners and policymakers better understand the number of entities, the scope and impact of their activities, the strategies they employ, and their potential for accelerating community transformation one neighborhood at a time. We recommend developing an applied policy research agenda that would engage academics, policymakers, and community-based organizations such as the Trusts in collaborative participatory-action research projects to build a strong evidence base for many of the policy and program ideas set forth in this report. Future research topics worthy of further exploration could include:

- Inventory of nonprofit sustainable community developers and intermediaries. What is the state of the practice of sustainable community development in the United States?
- Compare the Groundwork Trust model of sustainable community building with other national, regional, and local nonprofits and develop a typology of different models; extract and compare their respective core principles and practices.
- Explore different models for funding these foot-soldiers of sustainability through government, foundation, and private sector resources.
- Document and share the stories of the Groundwork Trust using ethnographic methods as a way to place them in the context of urban greening and other social justice movements.
- Devise a series of sustainable community development principles and performance measures around urban greening programs and projects that could help assess outcomes and support further policy and program innovations.

By investing in and supporting a national network of community-based green intermediaries (such as the Groundwork USA network) to accelerate local action, the federal agencies, such as the Partnership, could leverage the comparative advantages of CBOs and nonprofits for achieving sustainability at the neighborhood scale. Such a neighborhood lens on sustainability would be consistent with emerging models, such as LEED-ND and the EcoDistrict framework, and would allow the Partnership to expand its influence into this new dimension of sustainability policy.[72]

In this era of less federal and state resources, tapping CBOs makes good fiscal policy, as nonprofits have more freedom and flexibility to receive funds from foundations and businesses than do their public sector counterparts.[73] Its long history of raising charitable and private funds makes the Groundwork USA network an ideal place for the Partnership and other federal and state agencies to focus on sustainable community building.

C. CONCLUSIONS, NEXT STEPS, AND IDEAS FOR FURTHER EXPLORATION

From the outset, this policy project and report explored three overarching questions: 1) whether urban greening is a core strategy for sustainable community-building at the neighborhood scale; 2) whether the Groundwork Trust Model and the Groundwork USA Network are worthy of enhancing and expanding; and 3) whether Groundwork's program and project work provides policymakers with important insights into the design and implementation of environmental and land development policy. Through the dissection of the Groundwork model and the synthesis of its network's many programs, projects and policy lessons, this report provides overwhelming evidence in affirming these three questions.
In order to bring some of the policy, program and research recommendations to fruition, Groundwork USA and its partners have a range of possible next steps that could flow from this report's analysis and conclusions. We offer three strategic recommendations as the cornerstones for documenting and building the capacity of this emerging model of sustainable community-building. Its extensive record of proven sustainability projects and its ongoing support from federal agencies place Groundwork USA and its members in a pivotal position to act as conveners and coordinators on the national stage in much the same way that Smart Growth America and its partners launched the National Vacant Properties Campaign. With sufficient resources, Groundwork USA has the credibility in the field to bring together other national and local nonprofits engaged in urban greening and sustainable community-building.

1. **National Dialogue on Sustainable Community Building.** The time is ripe to bring together 20-25 of the leading national, regional and local nonprofits involved in sustainable community building activities. Based on our scan of the different national networks and conferences, a need exists for a national convention on sustainable community building. Many of these organizations participate in the events of other organizations (e.g. Groundwork USA representatives attend the New Partners for Smart Growth and the Reclaiming Vacant Properties Conferences), but there is

growing interest among nonprofit greening groups in bringing this particular niche of the field together for one to two days. The dialogue could cover program and project issues as well as policy challenges and opportunities. A facilitated session could begin building consensus and momentum for an urban greening policy agenda that could enhance the work of Groundwork and other nonprofits engaged in building sustainable communities. Another possible outcome could be an informal alliance of national, regional and local nonprofits where they could regularly communicate and share information from policy opportunities to overcome program challenges. Again, we believe Groundwork USA to be well suited to act as a co-convener of such an event. We also recommend that academics document the dynamics, as the dialogue could offer important insights into the emerging sustainable communities movement.

2. **Groundwork USA Network Affiliation.** Another possible outcome from the dialogue and the creation of a sustainable communities alliance could be more formal affiliation with the Groundwork USA Network. Over the years the Groundwork USA leadership has explored the concept of nonprofit organizations becoming part of the Groundwork "family" through an affiliate status. In this way, like-minded greening nonprofits working in a similar aspect of the sustainable community development field could learn from and contribute to the peer network of Groundwork Trusts and its practitioners, thereby mutually advancing the work, mission and goals of their organizations, and also informing policymakers and the field more broadly. Thus, any of the activities now open for Groundwork Trusts and their staff would, in theory, be open to affiliates as well. From a fiscal perspective, it would make sense for Groundwork to charge a modest membership fee and also seek supplemental resources from national and regional foundations.
3. **The Groundwork (GW) Institute.** Perhaps the most significant recommendation is for Groundwork USA to explore the creation of a Groundwork Institute that would facilitate peer-to-peer learning internally among the Trusts, but more importantly with other greening nonprofits as a way to advance the field of sustainable community development. The Groundwork Institute would highlight best practices discovered through the fieldwork of the Trusts and other nonprofits. It could also assist federal agencies to build more capacity for implementing federal environmental policies and help local governments enhance their understanding about how to successfully achieve sustainability at the neighborhood scale. From a programmatic perspective, the Institute would inventory and document model practices and programs, and thus serve as a national repository to help policymakers and nonprofit leaders to avoid reinventing the wheel. In the short term, perhaps Groundwork practitioners would convene regionally and/or nationally to share best practices on a project and/or programmatic topic. Over the long term, we see this opening up more broadly to practitioners desiring greater knowledge and best practices from outside the Groundwork Network, but from within a like-minded field of on-the-ground work.

By immersing ourselves in the Groundwork Trust experience over the past 12 months, we had a unique vantage point to witness firsthand the Groundwork network and see how their model works in different communities and through diverse program and policy fields. Almost every time we met or talked with Trust directors or the Groundwork USA leadership, we identified a new strategy, technique or twist on the Groundwork model. While each Trust operates in slightly different ways given local politics, funder/supporter priorities, leadership and capacity, and community dynamics, they tend to occupy (or are seeking to occupy) similar spaces: as trusted intermediaries working to infuse sustainability into community revitalization. We believe policymakers, foundations, and community-based organizations in the field could benefit from a deeper exploration of the Groundwork model and the emerging field of sustainable community-building. We hope this report offers policymakers strategic insight. At a time when many question the notion of sustainability, the Groundwork Trust offers a model worthy of replicating and expanding.

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