

An aerial photograph of Philadelphia, Pennsylvania, showing the city's dense urban landscape and the Schuylkill River. A specific area along the riverbank is highlighted in a vibrant green color, indicating the focus of the project. The text 'BARTRAM'S' is overlaid in a large, green, serif font, with the '@' symbol enclosed in a green circle. A thin green horizontal line is positioned below the title.

BARTRAM'S

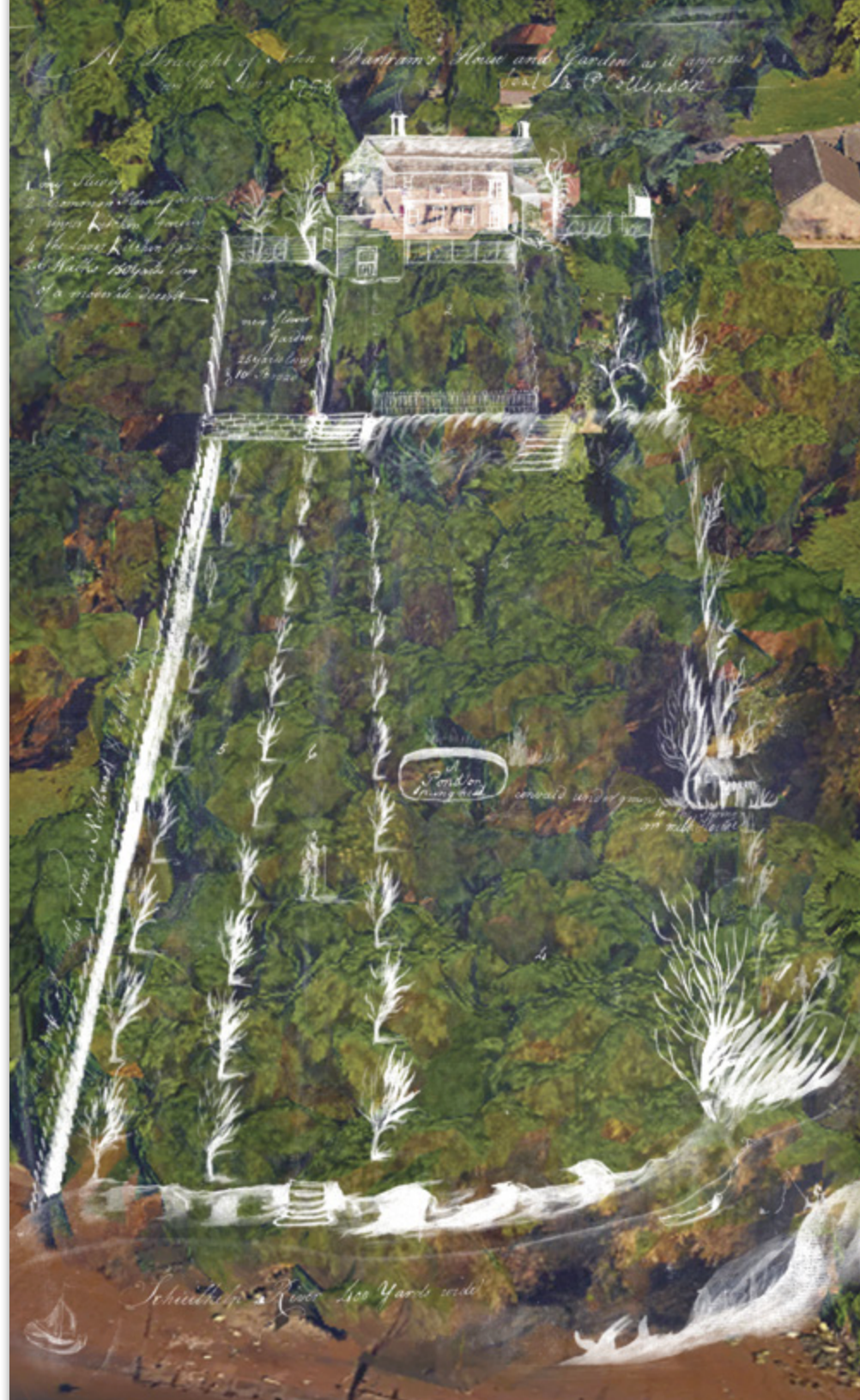
Art@Bartram's: Exploration, Discovery and Exchange

by the **Lindy Institute for Urban Innovation at Drexel University**
in partnership with the **City of Philadelphia Mural Arts Program**
and the **John Bartram Association**

BARTRAM'S GARDEN

a National Historic Landmark, is a verdant 45-acre oasis in Southwest Philadelphia situated within a shifting post-industrial landscape. Located in the Kingsessing neighborhood, on the western bank of the Lower Schuylkill River between 51st and 56th Streets off Lindberg Boulevard, it is the oldest surviving botanic garden in the United States—a vestige of 18th-century America. Once the home of America's first botanist, the celebrated John Bartram (1699–1777), Bartram's Garden remains a significant historical, botanical, ecological and cultural landmark.

Bartram used his farm as a base from which to explore extensive reaches of the North American continent and create a transatlantic exchange of the plants and seeds he discovered on his travels. Historians have referred to him as the "King's Botanist," because he introduced many new plants to Europe, although his only formal recognition from the English Crown was a yearly pension. His son William (1739–1823) was a noted naturalist in his own right; William's drawings and documentation of explorations along the Eastern Seaboard of North America are seminal natural historical documents. John's granddaughter Ann (1779–1858) continued the international plant and seed trade throughout the first half of the 19th century.



Bartram's Garden is a living artifact of the great age of exploration of the New World—one characterized by the free-flowing exchange of ideas and discoveries when Philadelphia was a burgeoning center of science and the arts. Carved out of the vast wilderness surrounding colonial Philadelphia in 1728, the Garden became subsumed over time by the expansion of the city and the rapid industrialization of America that had begun in the early 1800s. As the Lower Schuylkill developed into an early energy hub, a significant network of railroads, oil refineries and heavy industry surrounded and cut off the Garden from the rest of the city for nearly 150 years. The City of Philadelphia acquired the Garden in the late 1890s, saving it from extinction at the hands of industrial interests.

After World War II, as Philadelphia's industrial fortunes gave way to nearly 50 years of deindustrialization, depopulation and decline, Bartram's Garden remained an isolated outpost of tranquility and was largely forgotten by nearby communities. The decline in manufacturing jobs and industry in Philadelphia, which lost more than 500,000 people in the second half of the 20th century, had a powerful impact on the historically working-class neighborhoods around the Garden.

Only in the last decade have the fortunes of Philadelphia begun to turn around. Today, its population is increasing as young people, immigrants and empty-nesters are choosing to live in the city. Civic leaders are focusing on innovation as a vehicle for economic revitalization, and the global planning trend of creative placemaking—which merges art making and neighborhood regeneration—has helped to highlight previously neglected sections of the city. Public and philanthropic investments in parks and open space, including trails and waterfronts, have only served to increase connectivity and awareness of Philadelphia's great cultural assets.

Among these assets is the Lower Schuylkill River. With the recent extension of the Schuylkill River Trail Boardwalk to South Street, as well as the eventual connections to Grays Ferry Crescent Park and over the Schuylkill to the west, Bartram's Garden is poised for transformation from a long-isolated curiosity in a post-industrial no-man's-land into a regional destination. Indeed, the Philadelphia Industrial Development Corporation (PIDC) plans to develop an innovation hub adjacent to Bartram's Garden. In 2016 Philadelphia Parks and Recreation plans to open Bartram's Mile, a one-mile extension of the Schuylkill Trail, which will reveal the Garden to the larger Philadelphia community.

THREE ERAS

Bartram's Garden and its surrounding neighborhoods have seen significant change in the three centuries since John Bartram purchased land to establish his botanical garden and international plant trade. Having served as an exurban garden district and center for commercial nurseries as well as a large-scale energy and industrial complex, this area of Southwest Philadelphia now has potential at the crux of Philadelphia's next economy—one that focuses on innovation, technology transfer and entrepreneurship. We can view the Garden's history in context of three eras: Botanical and Horticultural, Industrial and Post-industrial.

The William Penn Foundation, as part of their Creative Communities and Watershed Protection programs, funded Art@Bartram's to capitalize on the extraordinary potential of this site both for public life and public education. The Lindy Institute for Urban Innovation at Drexel University, working with the City of Philadelphia Mural Arts Program and the John Bartram Association, developed this framework for art making and community engagement, which draws from the rich historical, ecological, social, cultural and community context of the Garden. Art@Bartram's is both an action plan and a roadmap for building community awareness of the ongoing importance of the Garden and ensuring community stewardship for this forgotten treasure within the evolving landscape of Philadelphia's neighborhoods, parks and waterways.





1. Map of Philadelphia showing Bartram's "Botanic Garden," 1808

2. Sketch of John Bartram's house and garden, 1758

3. Sketch of John Bartram, "the father of American Botany," by J. B. Pyle, 1877

4. George Washington visiting Bartram's Garden, 1787

5. Lower Bridge at Gray's Ferry, West Bank, 1816



1785 • Samuel Vaughan redesigns grounds surrounding Gray's Ferry Inn; creates "America's first public pleasure park"

1787 • George Washington visits the Garden in June. Members of the Constitutional Convention later visit the Garden during summer recess

1812 • Following John Jr.'s death, William Bartram, with niece Ann Bartram Carr and her husband Robert Carr, continues the nursery business in 1813.

1728–1739 • John Bartram purchases 102 acres from Swedish settlers to begin his nursery, botanical collections and plant trade; he expands holdings to add 192 acres between 1735 and 1739

1740 • Gray brothers expand their ferry business, building Gray's Tavern and Ferry House; later they build Gray's Ferry Inn

1753 • James Bartram deeds 64 acres of his father's nursery as a wedding gift

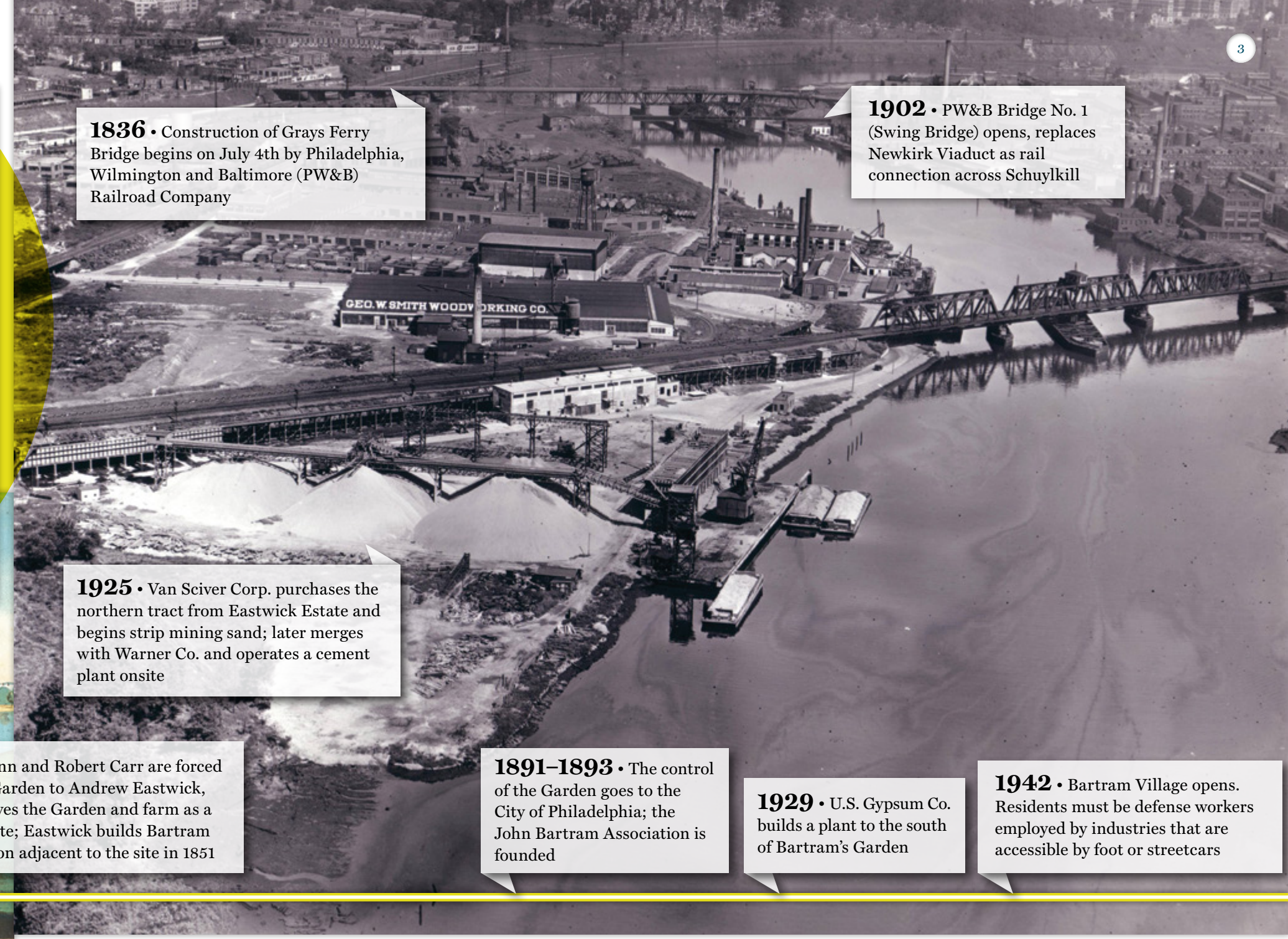
1766–1774 • William Hamilton builds Georgian mansion in the Palladian Style. In 1785, he remodels mansion in the English neo-classical style; the grounds are made a horticultural showcase in the English Garden style

1777 • John Bartram's death; sons John Jr. and William take over and expand business



INDUSTRIAL ERA 1830s–1950s

As America embraced industrialization in the early 1800s, a network of rail lines along the Schuylkill began to compete with the botanical and horticultural heritage of the area. Consolidation of the surrounding counties into Philadelphia County in 1854 brought the district within the city limits, just as heavy industry began to populate the banks of the river. An early energy hub, the zone later became characterized by massive oil tank farms and petroleum distribution networks, and other heavy industrial uses took root, such as cement and gypsum factories. Predominant uses of the Schuylkill River during this era were manufacturing, discharge of waste and transporting coal from upstate Pennsylvania to Philadelphia's burgeoning factories.



3

1902 • PW&B Bridge No. 1 (Swing Bridge) opens, replaces Newkirk Viaduct as rail connection across Schuylkill

1836 • Construction of Grays Ferry Bridge begins on July 4th by Philadelphia, Wilmington and Baltimore (PW&B) Railroad Company

1925 • Van Sciver Corp. purchases the northern tract from Eastwick Estate and begins strip mining sand; later merges with Warner Co. and operates a cement plant onsite

1891–1893 • The control of the Garden goes to the City of Philadelphia; the John Bartram Association is founded

1929 • U.S. Gypsum Co. builds a plant to the south of Bartram's Garden

1942 • Bartram Village opens. Residents must be defense workers employed by industries that are accessible by foot or streetcars

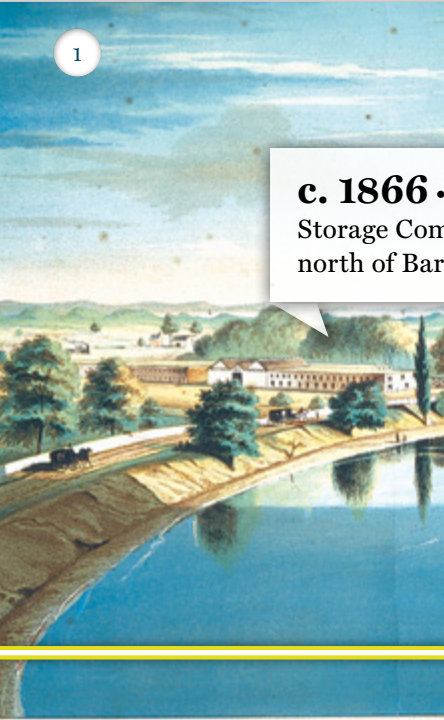
1850 • Ann and Robert Carr are forced to sell the Garden to Andrew Eastwick, who preserves the Garden and farm as a private estate; Eastwick builds Bartram Hall mansion adjacent to the site in 1851

1838 • PW&B opens the Schuylkill Bridge (Newkirk Viaduct) at Gray's Ferry, after Matthew Newkirk, first president of PW&B RR



2

c. 1866 • Atlantic Petroleum Storage Company builds a plant north of Bartram's Garden



1

- 1. Atlantic Petroleum Storage Company Plant along the Schuylkill, c. 1866
- 2. Innkeeper's house at Gray's Ferry Inn, c. 1870
- 3. Van Sciver Sand Plant, 1927

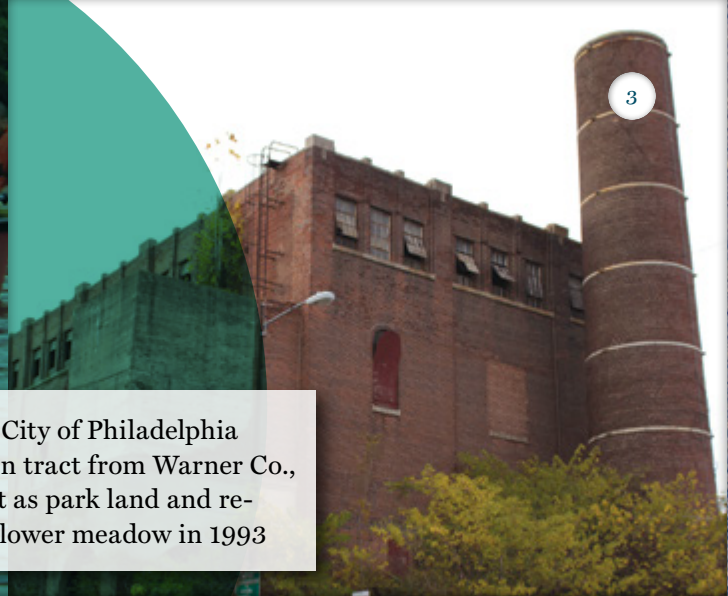


Adjacent Land Owners in 1942: Warner Company/Van Sciver Sand Plant; Mason Heflin Coal Co.; The Petrol Corp.; Water Terminal Fuel Oil Co.;

United States Gypsum Co.; Joseph T. Ryerson & Son, Inc.; Seaboard Container Corp.; Eveready Oil Co.; Consumers Fuel Oil Co.; Tidewater Oil Sales Corp.; Grays Ferry Brick Co.; G. W. Smith, Inc. Warehouse; Bartram Incinerator; City of Philadelphia Garbage Disposal Plant; Philadelphia Gas Works Co.; Socony Vacuum Oil Co.

POST-INDUSTRIAL ERA 1950S TO PRESENT

The period from the end World War II until the early 21st century was one of decline in Philadelphia. The retreat of industry to green fields outside of urban centers had a profound impact on the city and industrial neighborhoods like Southwest Philadelphia. In the early 2000s, Philadelphia's fortunes started to change. Driven in part by changing attitudes towards urban living, and reinforced by tax policies that promote growth, Philadelphia reversed a 50-year decline in population. Southwest Philadelphia is now an important adjunct to the thriving educational and medical economic hub of University City. Today the river is an amenity, and the planned extension of the Schuylkill River Trail will bring new visitors and users to the district.



- 1. Bartram's River Festival, 2015
- 2. PW&B Bridge No. 1 (Swing Bridge), 2015
- 3. Bartram Incinerator, 2014
- 4. Schuylkill River Boardwalk, 2014

1960 • Bartram's house and garden receives National Historic Landmark Designation

1967 • Woodlands mansion receives National Historic Landmark Designation; expanded to include grounds as a National Landmark District in 2006

1981-1989 • City of Philadelphia purchases northern tract from Warner Co., fills and restores it as park land and re-opens it as a wildflower meadow in 1993

1997 • Tidal wetland is recreated in south meadow with EPA funds from Sun Oil fines; it is enhanced and enlarged in 2013 with mitigation funds from Philadelphia Airport expansion

2010s to present • Bartram's Mile Planning Process, Future Trail Connections, PIDC, and Bartram's Village reconstruction

MOVING FORWARD

Bartram's Garden is an important anchor along Philadelphia's Lower Schuylkill River. Adjacent to University City and within a short commute from City Hall, the Garden and its surroundings are largely unknown. This will change with the opening of Bartram's Mile in 2016, along with a new river crossing in 2017. Economic development by PIDC will bring new research and development and advanced light-industrial uses, as well as people, to the area.

This moment in the history of Bartram's Garden provides a precious opportunity to consider a number of important planning issues:

- How do we make sense of the rich historical narrative around the Garden and its neighborhood?
- How do we think about art making and community engagement as powerful tools for honoring Bartram's and the neighborhoods' pasts and creating a new future?
- How do we shape our thinking around issues of place, community and the environment?

Answers may lie at the confluence of the area's rich histories: at the intersection of horticulture, industry and the new Philadelphia. Within these sometimes-competing interests is an opportunity to reveal the unique qualities of the community and create a bridge between those residents and businesses who have remained in Southwest Philadelphia and those yet to come. A framework for action that grows out of this new narrative must also incorporate the physical, social and environmental context of the area.

2016 • Projected opening of Bartram's Mile

2017 • Projected opening of trail-connecting Swing Bridge

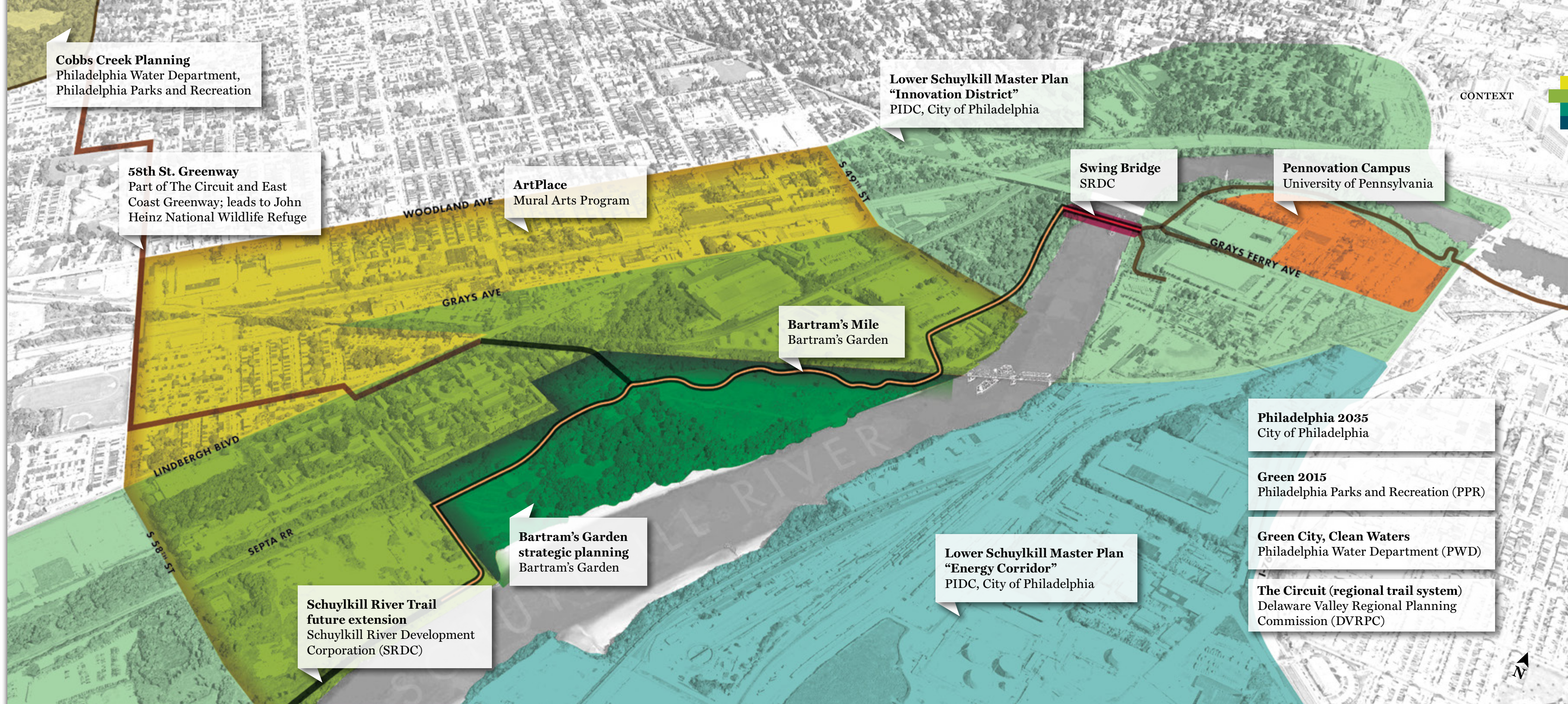
INDUSTRIAL ERA

BOTANICAL AND
HORTICULTURAL ERA

POST-INDUSTRIAL ERA

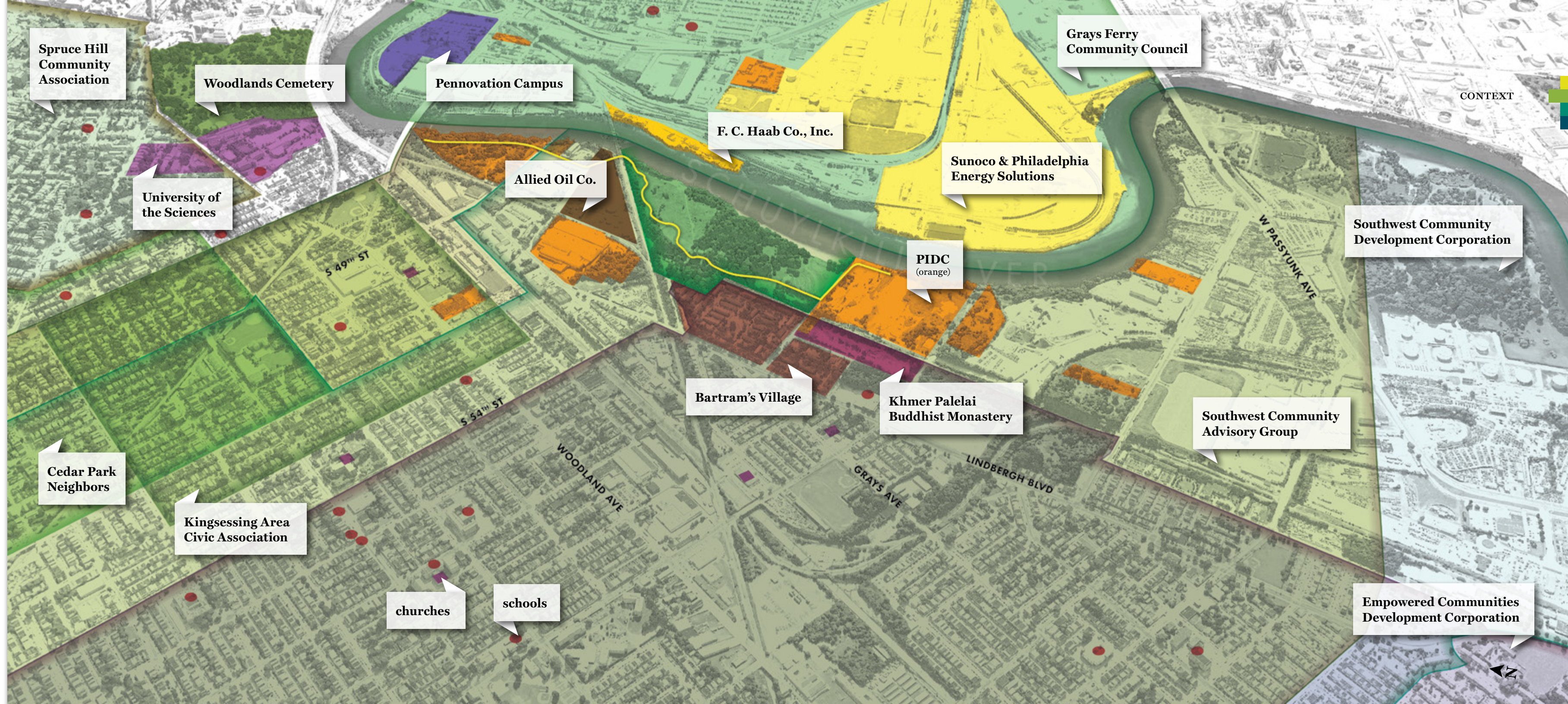
PLANNING

Philadelphia is experiencing a planning renaissance as well as significant investments in its parks, trails and public spaces. The area around Bartram's Garden has benefited from both citywide policies and from philanthropic investments. The University of Pennsylvania has created an "innovation campus" directly across the river, and the East Coast Greenway, a 2,500-mile trail extending from Maine to Florida, runs directly through the Garden.



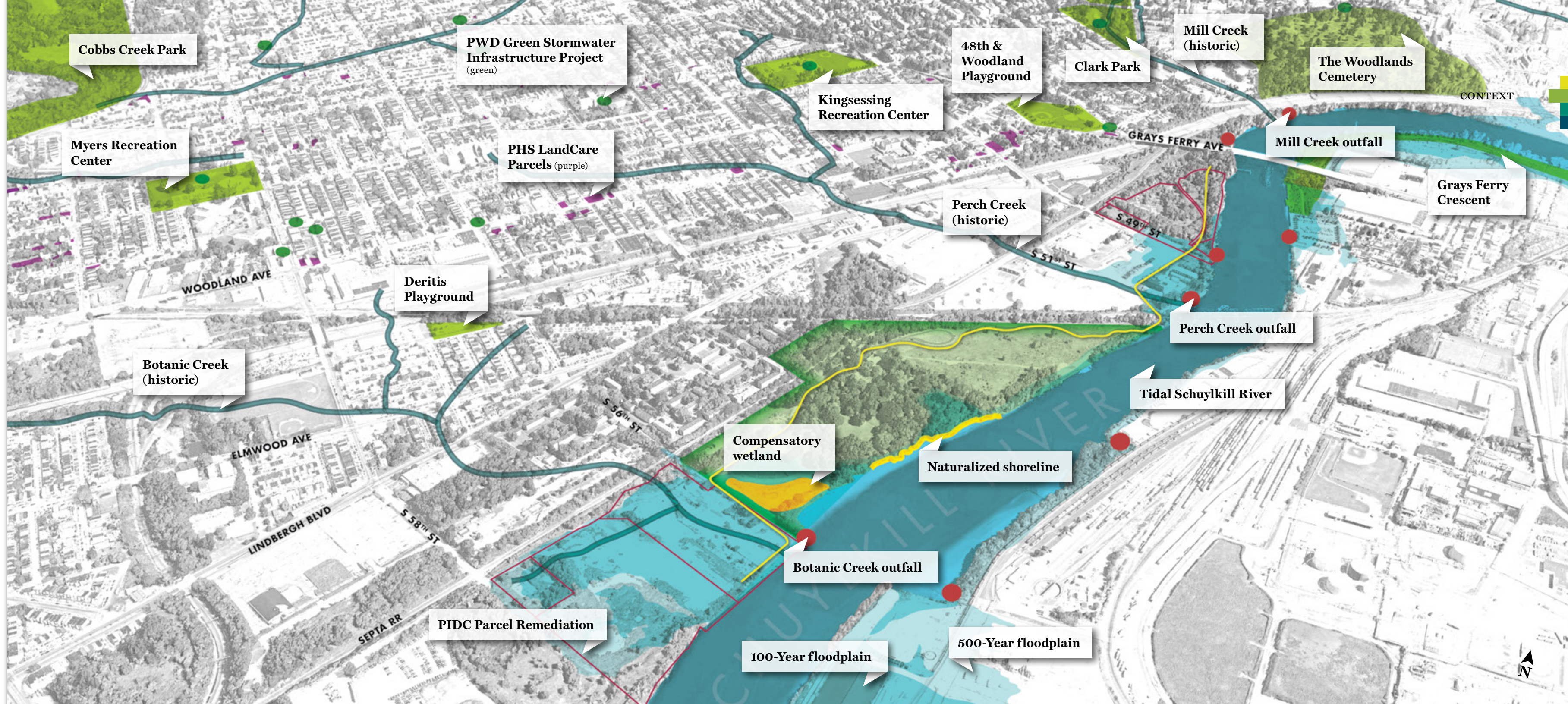
STAKEHOLDERS

As with any city neighborhood, there are multiple community groups, service organizations, institutions and governmental actors with a stake in its future. The residents of the Bartram Village housing complex are the Garden's closest neighbors. Other key stakeholders include the Philadelphia Industrial Development Corporation (PIDC) and the nearby communities of Kingsessing and Spruce Hill, along with the historic Woodlands Cemetery.



ENVIRONMENT

The Lower Schuylkill River has begun to rebound from the significant environmental degradation of the 19th and 20th centuries. Today, trails, community gardens and recreational use are reclaiming the landscape and augmenting historic botanic and horticultural collections. Environmental remediation remains an important concern, and the potential to highlight water quality and access to the river must be a key element of future action.



PRINCIPLES FOR ART@BARTRAM'S

Four principles have emerged as the foundation for decision-making about location, engagement and creating meaning in art along Bartram's Mile.

1 BRIDGE THE DIVIDE

Alleviate the physical barriers that separate the Garden from the surrounding neighborhoods, by establishing connections and creating elements that allow users to orient themselves in the landscape.

2 MAKE HISTORY YOUR GUIDE

Leverage the historic land uses and artifacts in the district as a starting point to consider potential artistic interventions.

3 FOLLOW THE WATER

Increase awareness of environmental issues along the Schuylkill River, and build a culture of stewardship.

4 CONNECT COMMUNITIES THROUGH ART AND HORTICULTURE

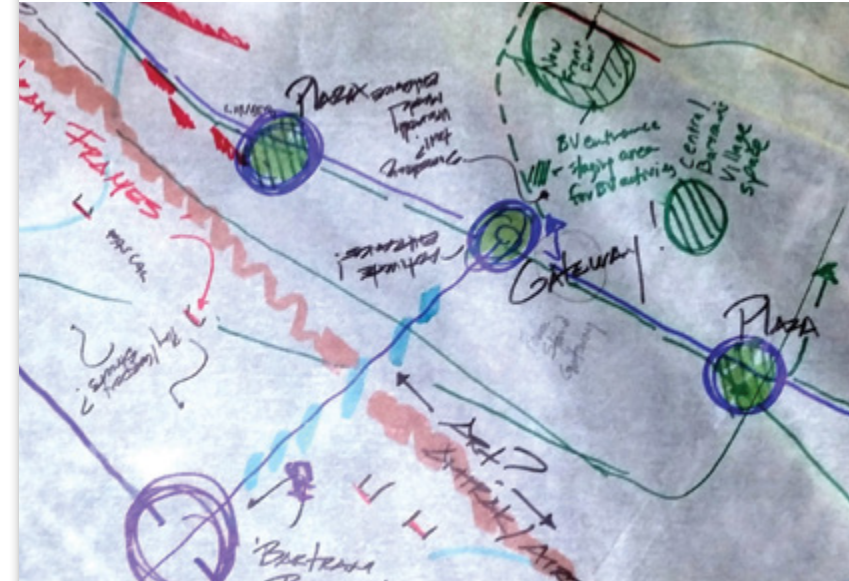
Strengthen relationships between Bartram's Garden and the surrounding community, and leverage community development initiatives through art making and stewardship of the land.

EXPLORATION, DISCOVERY AND EXCHANGE

The Lindy Institute for Urban Innovation convened a workshop in May 2015 that brought together local and national experts in the fields of art, planning and placemaking. The project team invited this group to focus on opportunities for art making and civic engagement along Bartram's Mile, to help define a public art and outreach program that would herald the extension of the Schuylkill River trail to Bartram's Garden in 2016.

Against the backdrop of national and international trends in creative placemaking—the fertile intersection of arts, economic development and neighborhood revitalization—the participants sketched a vision for the Mile that would help people access the trail and the river, create art grounded in the rich histories of the site and use the potent environmental narrative of the Garden and river to shape an identity for the district.

Workshop discussions yielded a number of principles for art making and civic engagement, which are consonant with the story of John Bartram himself: one of exploration, discovery and exchange. This conversation—rooted in co-creation, co-production and cooperation—was a highly effective means to unite the interests of new friends and also draw upon the strength of old relationships.



BRIDGE THE DIVIDE

Bartram’s Garden and its surroundings are isolated physically and psychologically from its neighbors and the city as a whole. Largely invisible within a tangle of highway and railroad infrastructure and lodged within a faceless and unwelcoming post-industrial landscape, the Garden has worked hard to engage with its local communities and has successfully built awareness and increased attendance.

And yet, with the extension of the Schuylkill Trail in 2016, work remains to connect the river and the Garden to the surrounding communities and to make the transition from neighborhood to river’s edge as easy and elegant as possible. Extending the Bartram’s brand into the communities around the Garden will pique local interest. Enlivening the public realm through art making—both interactive and traditional—will elevate the sense of place and help knit communities together with the Garden. Lessening the impact of the physical barriers that separate the Garden from its neighbors will attract visitors.





BRIDGE THE DIVIDE:
OPPORTUNITIES

Woodland Avenue is an important community corridor, with numerous small businesses and the 11 Trolley Route. The intersections at 49th, 54th and 58th Streets could connect people directly to the river. Art interventions at these locations offer significant potential to orient residents and visitors towards the Garden, the Mile and other destinations along the Avenue and in Southwest Philadelphia.

The 36 Trolley runs along this important transit corridor, which is also frequently used by trucks servicing nearby industries and other automobiles traveling deeper into Southwest Philadelphia. Key spots along Lindbergh and Grays serve as the gateways leading to the Garden and the Mile, and have potential for artistic interventions.

These sites offer direct access to Bartram's Mile or the 58th Street Greenway, both part of the larger East Coast Greenway. Interventions at these locations offer opportunities to inform trail users of connections to broader regional destinations.

The Bartram's Mile master plan calls for three major spaces along its run. The 56th Street plaza will offer sweeping vistas of the Schuylkill River and the Philadelphia skyline. The northern terminus will be the landing for the swing bridge crossing. At the center, the Mile intersects with the East Coast Greenway and is adjacent to the historic core of Bartram's Garden.

- WOODLAND AVENUE INTERSECTIONS
- LINDBERGH & GRAYS AVENUE GATEWAYS
- BARTRAM'S MILE TRAILHEADS
- BARTRAM'S MILE SPACES

BRIDGE THE DIVIDE:
CASE STUDIES

Environmental artistic interventions can reorient people so they can see a place in a new light. Improvements in a space can disrupt assumptions that can act as barriers to use of places like Bartram's Garden. The following case studies reflect how small changes—sometimes as simple as changing the lighting—can have a huge impact on how a visitor experiences a space. Engaging and evocative, these artistic interventions envision and accentuate cognitive markers in the larger landscape, encouraging members of the public to consider their relationship with the world around them in new and different ways.



Many installations utilize the resonance of color in ways beyond artificial light. Works such as *Color Falls* (2012) and *Passage* (2011) by Randy Walker, and street paintings by Lang/Baumann, demonstrate the power of color in drawing attention. Even more significant are the cases that involve community members in the creation of the work. The city of Portland, OR, initiated the *Creative Crosswalk* project, executed by local design shop Ampersand Content, to encourage crosswalk use as a means to increase safety for pedestrians and also highlight the character of the place. Community members contributed to the design, resulting in an ode to the rainy climate.

In Philadelphia, a collaboration between the City and Philly Pride Presents (an LGBT pride organization) painted crosswalks in the colloquially known "Gayborhood" with bright rainbow colors. This visual marker represented the rich history of the neighborhood as a hub for the LGBT community and loudly pronounced its acceptance in modern-day Philadelphia.



Light can have a powerful emotional impact; it can minimize feelings of unease in dark, unfamiliar or large places. With this effect in mind, the firm Stijlgroep Landscape and Urban Design created a project called *Orientation by Light* (2010) at Maastad Hospital in Rotterdam. Using light to achieve a more approachable, warm environment within the patios of the expansive hospital, the project adds various lighting elements to give each area a unique and memorable identity. These act as a marker for visitors and patients as they navigate the hospital, increasing comfort and easing stress. The structures themselves add beauty, and layering in colorful lighting brings a sense of levity to what might otherwise be perceived only as a serious, perhaps intimidating place.

While light can highlight physical spaces, it can also dramatize that space with a more performative means. The city of Vancouver commissioned artist Rafael Lozano-Hemmer to envision *Vectorial Elevation* (2010), an installation of twenty robotic searchlights situated along the waterfront to illuminate the skyline in a captivating light show. The interactive work also encouraged city dwellers to design custom "light sculptures" and submit them through a website; the user-generated designs then became part of the light performance from dusk until dawn.

Here in Philadelphia, Lozano-Hemmer presented his light show with a focus on free speech, in honor of Philadelphia's political history. The project, titled *Open Air* (2012), used sound clips the public provided to "conduct" the lights, and invited people to record up to 30 seconds of sound and watch as their voices impacted the light show. As with the Maastad Hospital installation, the interaction between viewer and art became the core value of the work and helped visitors to create a deeper relationship to place.

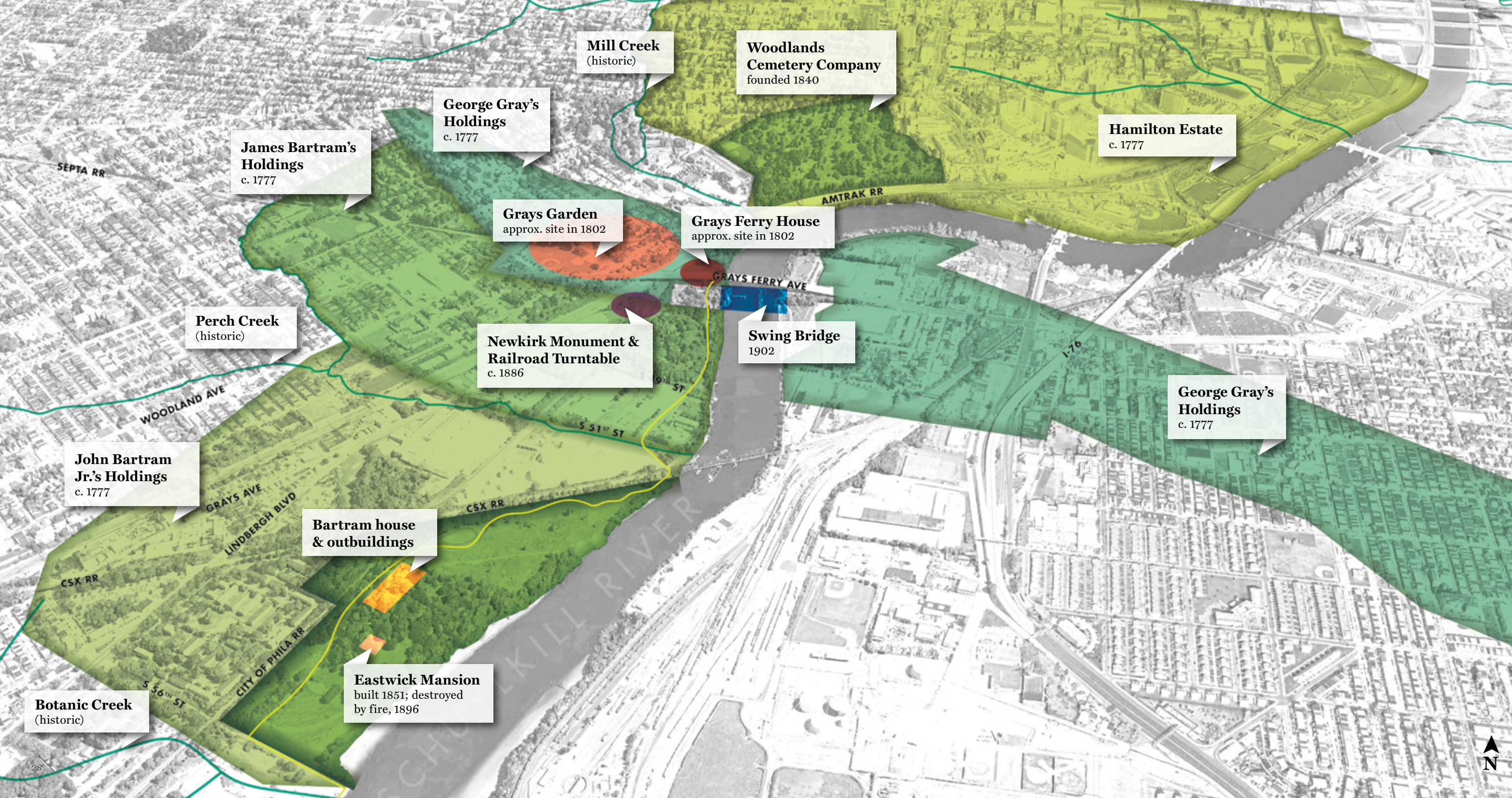


1. Painted Crosswalks in the "Gayborhood," Philadelphia
2. *Vectorial Elevation*, Vancouver
3. *Orientation by Light*, Rotterdam

MAKE HISTORY YOUR GUIDE

The Bartram's Garden neighborhood along the Lower Schuylkill River is an intoxicating palimpsest of historical stories. Each era has etched its mark on the landscape, and this living narrative is much richer than the sum of its parts. An approach that neither whitewashes nor erases the past will allow the many histories and voices to shape art that engages both the landscape and the communities it reflects. There is exciting potential to elevate, illuminate and celebrate the paradoxes and ironies of life along the river, as well as the joys of discovery that emerge from engaging with this site.

Incorporating education programs and artistic interventions that interlace botany, horticulture, industry, ecology and hydrology will enrich all who come to the Garden—and provide unique opportunities for delight. Celebrating the age of industry by preserving and repurposing the buildings and relics scattered across the landscape will ensure that the industrial character remains. There are endless opportunities to forge connections between environmental groups, artists and curators as well as engage new audiences through programs and creative interventions that highlight the often-conflicting interests of horticulture, waterways and manufacturing.





MAKE HISTORY YOUR GUIDE:
OPPORTUNITIES

- 1 Bartram's House and Historic Garden Core (John Bartram's heart of the Garden)
- 2 Cider press (an "industrial" artifact from a pre-Industrial era)
- 3 Eastwick Mansion site
- 4 Woodlands Cemetery

- 5 Botanic Avenue site (former garbage disposal plant)
- 6 Ryerson Smokestack (currently George F. Kempf Supply Co.)
- 7 Crescent Iron Works
- 8 CSX Bridge
- 9 Tank clusters

- 10 Bartram Incinerator
- 11 Newkirk Monument
- 12 Remnant dock pilings
- 13 Swing Bridge
- 14 35th and Grays Ferry industrial remnant

- 15 U.S. Gypsum site (under remediation, future light industrial)
- 16 Bartram Village (Philadelphia Housing Authority housing, formerly shipbuilder housing)
- 17 Bartram's Garden Meadow (formerly Van Sciver/Warner Co.)
- 18 National Heat & Power site (under remediation, future light industrial)
- 19 Pennovation Campus (formerly DuPont Paint and Varnish complex)

			
BOTANIC AND COLONIAL SPECIMENS	ACTIVE INDUSTRIAL ARTIFACTS	INACTIVE OR NEGLECTED INDUSTRIAL RELICS	POST-INDUSTRIAL LAND USES AND ADAPTATIONS

MAKE HISTORY YOUR GUIDE:
CASE STUDIES



1



2



3

Artists who create installations in interesting landscapes often spend copious amounts of time delving into the genius loci (spirit of place): the tangible and intangible characteristics that comprise a location’s distinctiveness. Bartram’s Garden and its surrounding areas have endured centuries of change, accumulating significant histories and relics. Some remain hidden, waiting to be rediscovered, while others are in plain sight, begging to have their stories told through artistic interpretation.

One example of public art that leverages historic assets to tell a story is the 33-mile Irwell Sculpture Trail, which runs through three towns outside of Manchester in Northern England. The trail weaves through several art clusters along the River Irwell, which—like the Schuylkill—was an important transit route during the Industrial Revolution. Several works allude to this industrial heritage:

- *Remnant Kings* (1997) by Ian Randall utilizes massive cogs inspired by the once-prolific textile and mining operations in the area.

- *Waterwheel* (1996) by David Kemp uses its namesake to reference the powerful engines of industry along the river and symbolize the changing nature of the river, returning from its industrial past to a bucolic country landscape.
- *In the Bulrushes* (2001) by William Pym draws inspiration from nearby industrial transportation canals and the once-great vessels that navigated these waterways—now lost to the reeds. The sculpture, which is lit at night, acts as a beacon along the trail.

Interpretation and storytelling are by no means limited to the visual medium. *[murmur]*, initially developed in 2002 with the assistance of the Canadian Film Centre’s Media Lab in Toronto, is a community-based, locative oral storytelling project that has been implemented in nine city neighborhoods across the world. The stories told through *[murmur]* range from “historic” accounts you might find in printed texts to recollections of recent events—often with content that community members create themselves.

For each location, a small sign with a telephone number allows people to call in to hear the story of that place while physically experiencing the space; the storyteller may also prompt the listener to journey through a more dynamic experience. Similarly, *Clockwork Forest* (2011), by the arts group greyworld, offers storytelling in a setting in Grizedale, England, that is more akin to Bartram’s Garden. Visitors can “wind” large keys that are attached to trees in the landscape to hear stories of the forest.

Another means to convey the spirit of place is to highlight its relics. Cities across the world have adapted industrial infrastructure to create a new place; examples in the United States include Gasworks Park in Seattle (opened 1975), Concrete Plant Park in the Bronx (completed 2009), and Pennsylvania’s Bethlehem Steel Stacks (completed 2001), all excellent examples of this type of adaptive reuse. These destinations are proof that, with artistic investments and the right kind of programming, a previously “blighted” structure can be revived as a special feature of the landscape.

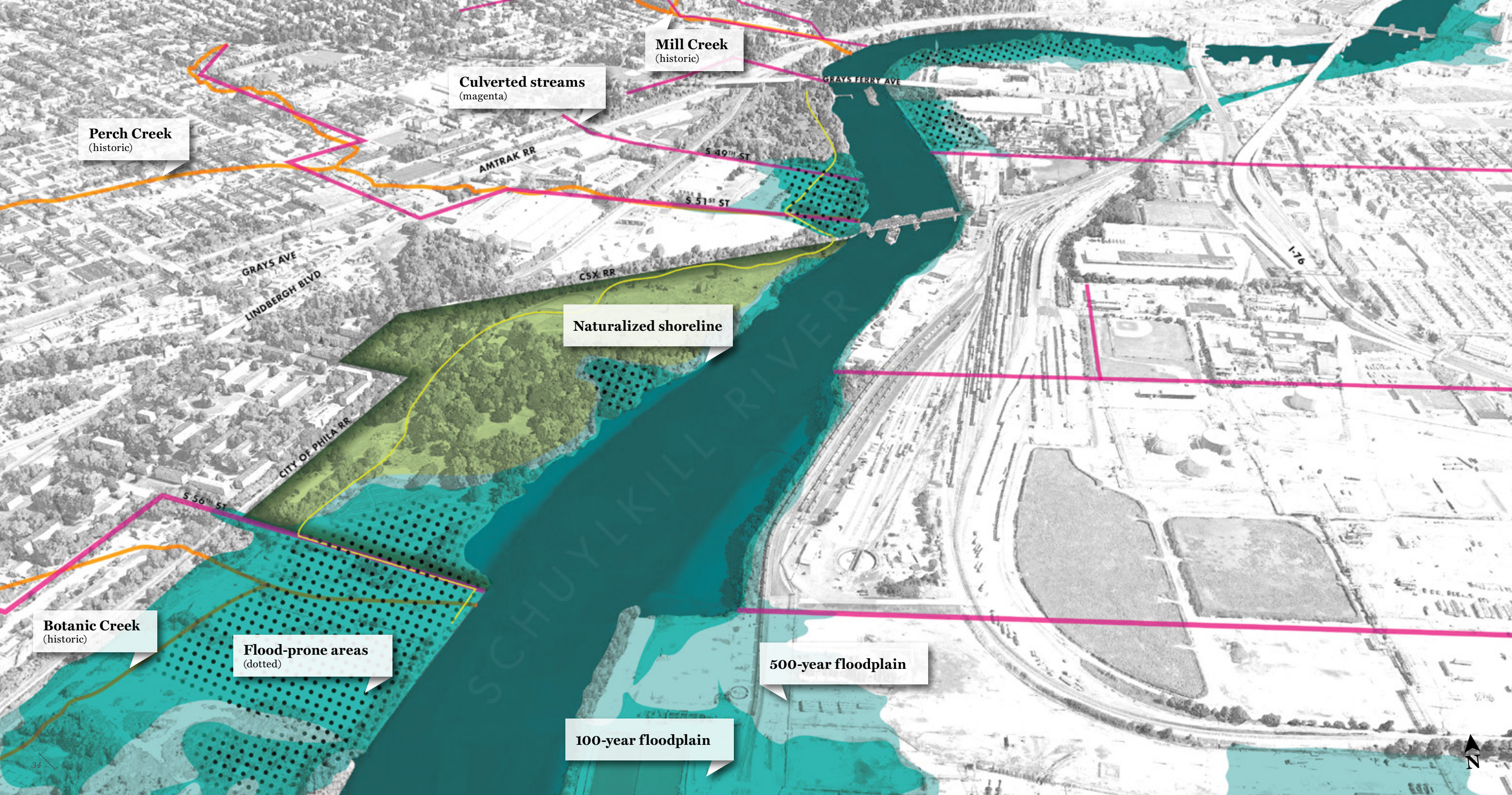


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1. Bethlehem Steel Stacks, Pennsylvania
2 & 3. *Clockwork Forest*, England
3 & 4. Sculptures from the Irwell Sculpture Trail, England



FOLLOW THE WATER

Bartram's Garden and the intensive industrial uses that sprang up around it grew directly out of the powers and prowess of the natural world. John Bartram sought to understand, catalogue and disseminate his findings about nature to an increasingly connected and enlightened world. His descendants would continue to commodify the natural resources he so treasured, turning them into a business. Industry in the 19th and early 20th centuries sought to harness the power of nature and in turn wreaked havoc on the land and water.

What remains from this tumultuous relationship between industry and nature, however, is a landscape that is begging to be discovered, understood and enhanced. The riverbanks at Bartram's Garden are one of the Schuylkill's last remaining naturalized vegetated shorelines in the city. As such, the Garden is a critical artifact and laboratory for interpretation and celebration. The hidden creeks and streams—Botanic, Mill, Perch—that once ran across the landscape hold meaning in natural beauty and ecological function. Honoring the banks of the Schuylkill River will fix the site into the public's consciousness and create educational, recreational and artistic opportunities for inspiration from and enjoyment of the tidal river.



**FOLLOW THE WATER:
OPPORTUNITIES**

These spots could use art to highlight access to the river and its recreational amenities:

- 1 Proposed 56th St. Plaza
- 2 Bartram's Garden Strategic Plan: Recreation Core
- 3 Fishing locations
- 4 Boat dock
- 5 Strategic Plan: Proposed fishing pier
- 6 Riverboating activities
- 7 Bartram's Mile North gathering spaces
- 8 Grays Ferry Crescent fishing and riverbanks

These locations are suited for art that engages and educates. Opportunities exist here to deploy "citizen science" and engage visitors to collect data or observe natural phenomena, as well as collaborate with nearby academic institutions:

- 9 Strategic Plan: Historic Core
- 10 Strategic Plan: Natural Science Core
- 11 Living shoreline
- 12 Wetland
- 13 Vernal pool

These are potential sites for art installations that illustrate water quality through monitoring and displaying dynamic data as the water conditions change over time. This collaboration could be leveraged with PWD and others.

- 14 Stream culverts and combined sewer overflow outfall locations

SYNCHRONIZING ART WITH RECREATION

ART AS ENVIRONMENTAL EDUCATION

HIGHLIGHT WATER MANAGEMENT AND QUALITY

FOLLOW THE WATER:
CASE STUDIES

at times alarming, Polli's work provoked thought about how we impact our environment in real ways, often without any awareness on our part.

Environmental artist Stacy Levy often incorporates themes of stewardship and natural processes into her artistic interventions. Her installation *Rain Yard* (2013) at Philadelphia's Schuylkill Center for Environmental Education demonstrates how stormwater infiltrates different surfaces in natural and urban environments. Spiraling blue gutters guide the flow of water from adjacent roofs down into metal troughs containing the surface samples, and an elevated mesh platform reveals the speed with which it infiltrates the native plantings that grow beneath them. The work serves as an outdoor classroom where students can directly observe the relationships between hydrology and the urban surfaces humans create.

1. *Rain Yard* by Stacy Levy,
Schuylkill Environmental
Center, Philadelphia

2. *Dis(solve)* Green Bench,
Japhet Creek, Houston

3. *Particle Falls* by Andrea
Polli, Philadelphia



3

In Polli's work *Particle Falls*, commissioned for Philadelphia's Wilma Theater by the Chemical Heritage Foundation in 2013, Polli paired technology and art to capture and display issues of air quality. The artist mounted a small air monitor to detect particulate matter, and the visitor could visualize a simple correlation on the adjacent wall. Over a lightfall, dots appeared for the amount of particulates in the air, representing visually what the monitor captured in real-time. The more particulates there were, the more dots appeared. Captivating and even

At times, "the environment" feels like a vast, even remote concept. In the case of air quality, and its impacts on human activity, the challenge lies largely in air's invisibility. People cannot always connect with what they cannot see, but they can see, in real-time, just how much difference a passing bus makes in the air they breathe. They can tell one watershed from another by looking at water samples. Environmental artists such as Andrea Polli and Stacy Levy are experts at revealing the elegance and beauty of nature as a living entity, with its own nuances and unpredictable moments.



1

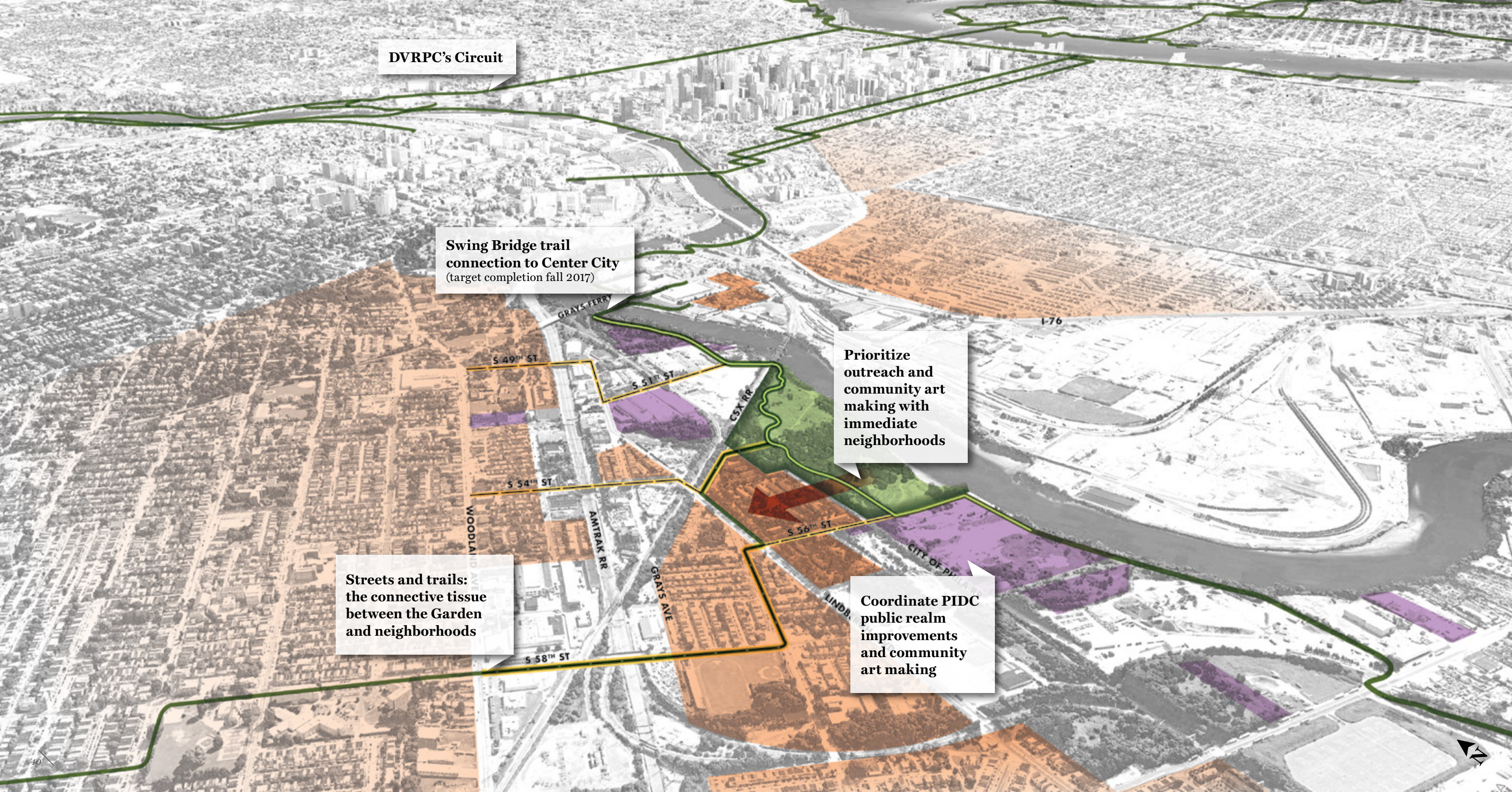
City and nature may often seem mutually exclusive, but more and more, urbanists understand the importance of the environment in the long term, as well as in daily life. Art helps us to interpret the role of nature in the city; open and green spaces improve quality of life and provide the chance for mental recuperation from the fast pace of urban centers. Creative placemaking allows us to interact with space in a way that creates meaning. At sites like Bartram's, art can reveal overlooked beauty and help users make emotional connections to the privilege of our collective stewardship.

At Japhet Creek in Houston many passionate activists have spent years restoring and preserving their creek. The first Houston Green Fingers project, Japhet Creek was the site chosen to meet the program's goal of "[creating] corridors of connectivity to not only improve water quality, but to strengthen the relationship between the community and the environment."¹ To promote awareness of and education about this vital resource, the University of Houston schools of art and architecture launched

a project called *(Dis)solve*. Student teams created several environmental installations to serve as "a metaphor about ideas and issues that shape our thoughts about nature, water, industry, protection and people."¹ The artfully designed installations incorporated raw industrial materials in entry gates, signposts and informational signage. These juxtaposed nature and industry, challenging the viewer to reconcile the apparent conflict with the underlying harmony.



2



CONNECT COMMUNITIES THROUGH ART AND HORTICULTURE

Once Bartram's Mile opens in 2016, Bartram's Garden will no longer be Philadelphia's best-kept secret. After the world discovers Bartram's it will be more difficult to create a genuine partnership between the surrounding communities and the Garden itself. Today parks and public spaces depend on local audiences for use and stewardship, and future investments along the Mile will depend on the strength of these community partnerships. The city and the region will ensure ongoing support by engaging a broad public in art making that underscores the importance of the Garden and the Mile to the local communities.

A phased approach to civic engagement—one that distinguishes urgent, immediate needs from short- and long-term efforts—will safeguard a connection between the Garden and its surrounding neighborhood. Engaging the immediate communities in art making as well as horticultural projects builds trust. A long-term placemaking strategy should center on the relationship between art and gardening and capitalize on development trends to spark increased community participation.

Bartram's Garden has the capacity to host large neighborhood events within a number of its spaces. The site should:

- leverage the extensive outreach and event programming already underway at Bartram's to use the site as a venue for artistically oriented events.
- explore opportunities with other civic groups to co-sponsor events to expand the attendance base, and use some of these events as an opportunity to explore community issues.
- bring attention to initiatives that are organized by other community organizations, in addition to Bartram's ongoing exhibits or programming already taking place onsite or elsewhere in the neighborhood.

- 1 Boat Dock: Boating and water-oriented events
- 2 Historic Core: Smaller-scale events
- 3 Eastwick Pavilion and Lawn: Larger-scale events
- 4 Meadow: larger-scale events

LEVERAGE THE GARDEN



CONNECT COMMUNITIES THROUGH ART AND HORTICULTURE: OPPORTUNITIES

The Garden should build upon existing partnerships with agencies and organizations while forging new relationships. Some opportunities could include:

- Horticulture: Pennsylvania Horticultural Society (PHS), Woodlands Cemetery, Morris Arboretum
- Water and Environment: Philadelphia Water Department (PWD), Pennsylvania Department of Conservation and Natural Resources (PDCNR), John Heinz National Wildlife Refuge
- Academic: Area schools, University of the Sciences, the Academy of Natural Sciences
- 5 Area schools

BUILD PARTNERSHIPS

The Garden should explore collaborations with PHS's LandCare to:

- co-create community green space near residents that they can personalize through public art making.
- afford Bartram's the chance to extend its presence into the Southwest community by helping to create small slices of the Garden in outlying neighborhoods.
- spark a dialogue about redevelopment and how those sites can better serve the community.

BRING VACANT LAND TO LIFE

The Garden should build on its existing community gardening spaces as a vehicle for creating or displaying art. These sites already engage communities with horticulture, so they are ripe with opportunities to integrate community art making.

- 6 Community Garden, Farm and Food Resource Center, Orchard, and Berry Hill
- 7 Farm Stand

ENGAGE IN COMMUNITY GARDENING

Successful projects connect to a strong community that continually builds up and utilizes its civic infrastructure, including public spaces. Having safe, beautified common areas allows neighbors to share experiences and make memories together. These spaces can be the lifeblood of a community. Though community building often happens organically, arts programming and art making can influence how neighbors engage in a place and can encourage them to develop a sense of ownership.

1. *Camden Night Gardens*, Camden

2. *Project Row Houses* (PRH), Houston

Camden Night Gardens is part of an initiative called “Connect the Lots,” jointly operated by the City of Camden and Cooper’s Ferry Partnership. The project is a series of nighttime programming that is iterative, temporary, collaborative, experimental and fundamentally artistic. The program runs in two neighborhoods divided by physical barriers, both of which have suffered from reputations as impoverished, unsafe areas. This initiative seeks to break the community free from the past and these misconceptions, building a sense of pride in the place. Program elements range from the traditional to the practical: light displays to drumlines, community table dinners to light graffiti portraits. This innovative, pop-up programming provides positive exposure that stirs excitement within the community and momentum for lasting change.



Long-term changes in a community require time, relationship building and the (re)establishment of trust. It is often a member of the community that has a vision for what the community could be and first champions the change. In low-capacity contexts—like the area surrounding Bartram’s—it is a constant challenge to find and encourage these community builders and initiators. Recent studies on creative placemaking have found that artists living in the community often kickstart this process. Offering a unique worldview and the infectious inspiration of art making, these individuals may be the best source of capacity building and activation within a neighborhood.

Based in Houston’s Third Ward, *Project Row Houses* originated in 1993 with artist and community activist Rick Lowe. His motivation was a simple prompt from a local high school student: “If you’re an artist and you’re creative, why can’t you create a solution [to existing neighborhood issues]?”² Lowe set to work creating a lasting solution. Initially, the work focused

on renovating houses for artists-in-residence and single mothers. Two decades later, PRH is a well-funded nonprofit that has rehabbed approximately 40 properties. The organization hosts public art initiatives and education programs, maintains a variety of “social safety nets” to keep vulnerable populations from backsliding and boasts a sustainable model that other neighborhoods can recreate.

For meaningful change to happen, the individuals in a place must be able to engage and discover their own purpose in the work being done there. Art facilitates a community’s ability to find its identity through creative placemaking. Rooted in community engagement, unique approaches draw residents in to participate and then empower them to take action and develop a strong sense of ownership. Especially in neighborhoods where this sense of identity and confidence has decayed over time, a process like this can reinvigorate residents and put a community solidly back on the path to economic and spiritual recovery.



CONNECT COMMUNITIES
THROUGH ART AND HORTICULTURE:
CASE STUDIES

NEXT STEPS

Art@Bartram's is a framework for art making along Bartram's Mile in Southwest Philadelphia based on the concepts of **exploration, discovery and exchange**.

The William Penn Foundation commissioned this work in advance of the opening of Bartram's Mile in 2016 and in response to investments by the public, private and philanthropic sectors in this area.

The Lindy Institute for Urban Innovation at Drexel University led the creation of this plan in partnership with the City of Philadelphia Mural Arts Program and the John Bartram Association. Philadelphia Parks and Recreation (PPR) and the Schuylkill River Development Corporation were critical partners in the effort, which was guided by a 38-member advisory group. This work built on PPR's years of civic engagement for the design and construction of the Schuylkill River Trail to Bartram's Garden.

Mural Arts is now charged with implementing a public art program that increases awareness of Bartram's Garden and Bartram's Mile across the city and the region. To be successful the work must:

- be grounded in a firm understanding of the historic, social, environmental, physical and economic context of the site and surrounding area.
- address multiple histories and narratives.
- be a vehicle for connecting communities with Bartram's Garden and across communities against a backdrop of rapid social and economic change.

These preferred early action zones are important gateways to the Garden and are proximate to existing programming or planning initiatives:

- 5 Bartram's Mile northern connection to the Circuit
- 6 51st St. Trailhead
- 7 49th St.–Grays Ave.–51st St. path to the Schuylkill River
- 8 Garden Entrance Gateway
- 9 56th St. Trailhead
- 10 Woodland Ave.–49th St. intersection
- 11 Bartram's Boat Dock

These locations offer opportunities to leverage the existing planning energy and civic ownership for successful collaborations:

- 1 PIDC Improvements
- 2 Bartram Incinerator site (City-owned)
- 3 Botanic Avenue site (City-owned)
- 4 Swing Bridge (estimated opening fall 2017)

SITES & INITIATIVES SUPPORTIVE OF EARLY ACTIONS

EARLY ACTION ZONES



WHO SHOULD PROGRAM AND ENGAGE THE COMMUNITY ALONG BARTRAM'S MILE?

The Mural Arts Program will jumpstart a community conversation about neighborhood change, history, environment and place through art making. In the short term, it will commission art with funding from the William Penn Foundation and a complementary national grant from ArtPlace America. Over time, the role of Mural Arts in the neighborhood will subside, as will that of many of the current funders presently working in the area. The role that other organizations can and should play is still to be determined.



NEXT STEPS

NEXT STEPS FOR THE MURAL ARTS PROGRAM

1. In partnership with Bartram's Garden, create a tiered and phased civic-engagement strategy that addresses multiple constituencies.
2. Jointly create a community advisory group to support the civic-engagement work.
3. Through ongoing civic engagement with multiple stakeholder groups, develop and implement a short-term art program that draws upon several narratives—social, environmental, cultural, economic and historical—to increase local and regional awareness of and access to Bartram's Mile and Bartram's Garden.

NEXT STEPS FOR THE JOHN BARTRAM ASSOCIATION

1. Continue to partner with Mural Arts in the development and implementation of the civic-engagement program around art, horticulture and placemaking.
2. Sustain the civic-engagement program once Mural Arts has completed its work.
3. Develop the institutional capacity to integrate public art and placemaking into the strategic objective of the John Bartram Association.
4. Create a strategic plan for long-term funding, programming and management of art installations along Bartram's Mile and within Bartram's Garden. This could take the shape of strategic partnerships with existing arts organizations and funders.

NEXT STEPS FOR PHILADELPHIA PARKS AND RECREATION AND SCHUYLKILL RIVER DEVELOPMENT CORPORATION

1. Continue to support the work of Mural Arts and Bartram's Garden around civic engagement, art and placemaking.
2. Work to ensure that the ownership of the Streets Department's Botanic Avenue site and buildings are transferred to Philadelphia Parks and Recreation. Work with Bartram's Garden, Philadelphia Industrial Development Corporation and other partners to plan, preserve and program the site as an important revenue-generating destination on the Schuylkill River Trail for recreation, refreshment and public events.

IMAGE CITATIONS

Unless otherwise noted, all photographs by Ryan J. Debold of the Lindy Institute for Urban Innovation.

pages 6–7:

1. *A Plan of the City of Philadelphia and Environs Surveyed by John Hills*, 1808. Zebooker Collection, Athenaeum of Philadelphia

2. *A Draught of John Bartram’s House and Garden as it appears from the River*, 1758, by William Bartram. © The Right Hon. The Earl of Derby, Bridgman Art Library

3. *Illustration of John Bartram*, c. 1879, by Howard Pyle. From *Harper’s New Monthly* (February 1880), p. 322. Philadelphia Collection, The Free Library of Philadelphia, Print and Picture Department

4. *George Washington Visiting Bartram’s Garden in 1787*, 1900, by Jean Leon Jerome Ferris. National Museum of American Art, Smithsonian Institution. © Bridgeman Art Library

5. *The Lower Bridge on Schuylkill at Gray’s Ferry 5* [October 1816], 1816, by Joshua Rowley Watson. New York Historical Society. Plate 9 in *Captain Watson’s Travels in America* by Kathleen A. Foster (Philadelphia: University of Pennsylvania Press, 1997)

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1. Survey of the Atlantic Petroleum Storage Company for refined oil, by E. Hexamer. Lithograph, 1866, by E. Herline. Library Company of Philadelphia

2. *Ruins of Mr. George Grays Old Residence at Grays Ferry, 1868*, 1868, by Robert Newell. Newell Album, Library Company of Philadelphia. From *Architecture in the U.S., 1800–1850* by William Barksdale Maynard (New Haven: Yale University Press, 2002)

3. *Van Sciver Sand, 51st Street and Schuylkill River, 1927*, by Dallin Aerial Survey Company. Hagley Museum & Library

pages 10–11:

1. Bartram’s river festival, 2014. Photo by Nicola Tenaglia

4. Schuylkill Banks Boardwalk. Photo by M. Edlow for Visit Philadelphia™

page 21:

Top right: Banks of the Schuylkill, 2010. Photo by Cocoabiscuit

Middle right: Southwest View, 2010. Photo by Cocoabiscuit

pages 26–27:

1. 13th and Locust Streets in the city’s Washington Square West neighborhood. Photo by Marisa Fischetti via Visit Philadelphia™

2. *Vectorial Elevation Van2010*, 2010, by Jonathan Evans

3. *Maasstad Hospital, Rotterdam (NL)*, 2011, by Stijlgroep

pages 32–33:

1. Lehigh Valley FIFA World Cup SoccerFest and Viewing Party at SteelStacks in Bethlehem, PA, 2014. Photo by Lehigh Valley, PA

2. *The Clockwork Forest*, 2011, by greyworld

Grizedale Forest Sculpture, Lake District, 2014, by John Malone

3. *Nailing Home*, 2005, by Nicholas Smale

Remnant Kings, Irwell Sculpture Trail, 2005, by Mark Trickett

pages 38–39:

1. *Rain Yard*, 2013, by Stacy Levy. Schuylkill Center for Environmental Education

2. *Dis(solve) Green Bench*, 2010, by Patrick Peters

3. *Particle Falls*, 2013, by Conrad Erb. Chemical Heritage Foundation

page 44:

Top: *The Harvest Table*, 2014, at Camden Night Gardens. Coopers Ferry Partnership

Middle: *Black Light Basketball*, 2014, at Camden Night Gardens. Coopers Ferry Partnership

Bottom: *Camden (after)*, 2014. Photo by MikesOnBikes

page 45:

1. Sam Durant’s *We Are the People*, 2003, at PRH. Photo by Rick Lowe. Creative Time Reports

2. *Project Row Houses*, 2014. Photo by Teresa Porter

page 48:

Left: *Tank Farm*, 2010. Photo by Cocoabiscuit

Top right: *Untitled*, 2011. Photo by John Donges

AERIAL IMAGERY

Bartram’s Garden, Philadelphia, 2015. Landsat. Google Earth Pro 7.1.5.1557.

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1. Society for Experiential Graphic Design, “Dis(solve): The Japhet Creek Project,” 2011. <https://segd.org/content/dissolve-japhet-creek-project> (accessed 4 November 2015)

2. Nicole Audrey Spector, “Rick Lowe: Heart of the City,” *Guernica*, 25 September 2014. <https://www.guernicamag.com/daily/rick-lowe-heart-of-the-city> (accessed 4 November 2015)

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