

RESCUING TIBBETTS BROOK ONE STITCH AT A TIME

Rescuing Tibbetts Brook Mary Miss

October 01, 2019



Rescuing Tibbetts Brook

___ City as Living Laboratory



This is a project about the 'daylighting' of a stream called Tibbetts Brook. Daylighting is the term used to describe the process of restoring a stream of water that has previously been channelled underground to a more natural state.

In the case of Tibbetts Brook, the stream will be diverted out of the Broadway sewer to the rail corridor adjacent to the Major Deegan Expressway.



WATCH: Daylighting Tibbetts Brook with Christina Taylor



History & Background ___tibbetts brook

For millennia, the brook burbled and gasped, tumbling down out of the valley carved by the Inwood glacier. Softer marble had yielded to the ice and left a U-shaped valley, New York's version of the Great Yosemite on a smaller scale.

For a time, the valley was a small, unremarked elbow of a great lake that extended a hundred miles to the north, lined with black spruce and alder. Caribou and mastodons paced nearby.

As the climate warmed, and the ice dams at Hellgate and the Narrows broke with cracks and floods, the brook tumbled down, ever recipient of the rain and the snow, conduit to the sea.

The sea rose to meet it and filled the lower valley on the high tide, enabling the even, pale green sward of a salt marsh to form. The lower brook became a two-way conduit, in on the flood tide, out on the ebb, fixing into a broad set of winding, blue and gray curves.

Somewhere along the way the real people came to live on its banks, where the freshwater stream met the brackish marsh edge, and on a small sandy island near the mouth, where trails left to climb the mountains on either side.

Turkeys flew across the valley in the evening light brook trout and shad traced the bends upriver, and wolves not far away could be heard to howl.

A long time later, other people came, building dams, planting crops, cutting salt hay, and chasing the real people off over the great river to the west. They spoke in strange tongues and had strange ideas.

Industry and agriculture in turn yielded to streets and homes and the train, and with them, the marshy brook became a soggy afterthought for sewage and landfill. When dark storms clouded the skies. sometimes streamwaters would flow up and over the yards and into basements.

The people relegated the brook to a culvert, diverting the flowing waters underground into darkness, lost inname and form. The brook diminished, hidden, lost, waits to be rescued.

- Eric Sanderson



Outflow of Tibbetts Brook from the Van Cortlandt Lake into the Broadway Sewer.



Underneath a bridge crossing the CSX corridor.



Former location of CSX railway tracks adjacent to the the Major Deegan Expressway.



Inside the Broadway sewer.

Project Vision

___ establish a framework

RESCUING TIBBETTS BROOK: One Stitch at a Time will catalyze a series of artist and designer-led initiatives in the Bronx to engage nearby communities in bringing Tibbetts Brook back to life.

Through unearthing this buried stream and channeling it along an abandoned railroad line into the Harlem River, it can once again see the light of day. This will allow the clean, fresh water of Tibbetts Brook to bypass the sewer system, collect excess rainwater, and create a beautiful new linear park. Possibilities include a walking trail and bike path that could join the new greenway planned to connect Van Cortlandt Park to the High Bridge.

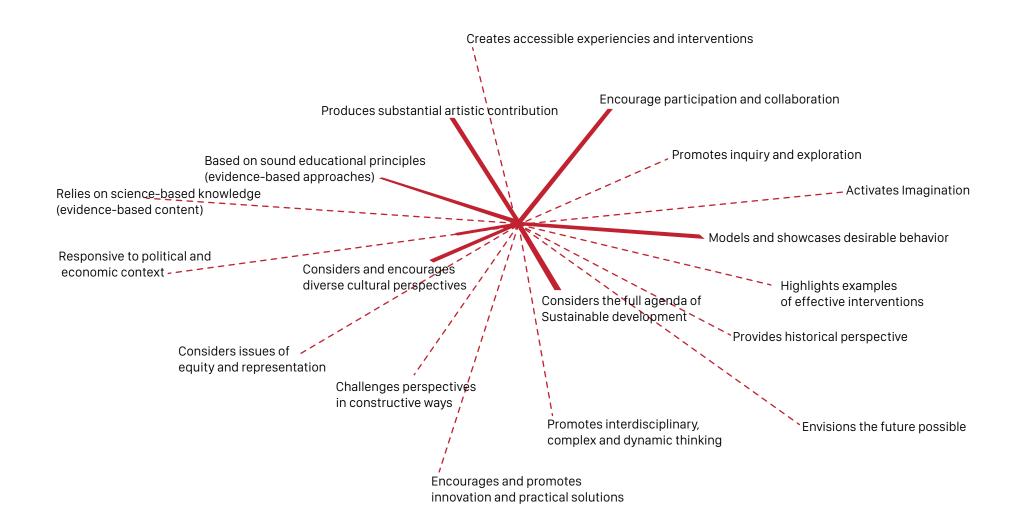
The goal is to create a visual, physical and conceptual framework for Tibbetts Brook that can be implemented over the multiple stages of bringing the stream out of the sewer to once again see the light of day.

The development of this framework will call attention to the initiative, to support engagment of the adjacent communities and introducing local resdents to the possibilities daylighting Tibbetts Brook presents. It is also an important means to keep the project on the radar of the city and state agencies who will be responsible for the implementation of this project.

This conceptual framework will be implemented in a series of project phases, progressing from temporary to permanent installations providing a visual 'framework' for engagement. The aim is to involve artists from early on in an intimate view of the corridor, exploring the multiple aspects of the stream through walks, workshops, temporary installations, performances: what insects and birds live there, what are the shrubs and trees growing there.

The vision for this initiative has been provided by the Bronx Council for Environmental Quality, the Harlem River working Group, Van Cortlandt Park Alliance, and Bronx Community Board 8.

CALL | City as Living Laboratory



Principles for Activation: Connecting knowledge, perspectives, and artistic interventions with actions to promote sustainable development

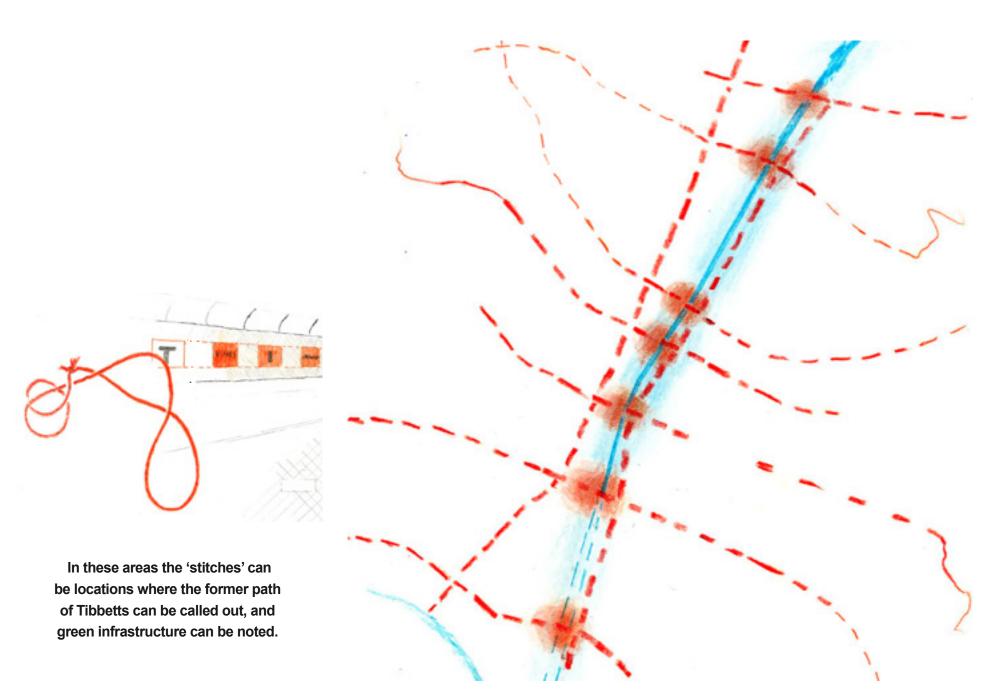
Project Goals

___ community / arts / ecology

To help imagine the future daylighting of Tibbetts Brook, the intention of this project is to activate the nearby **communities** with new ways of seeing, learning, and creating stewardship; to invite **artists** to create a multi faceted corridor with places of engagement and to reveal the rich **ecology** of the stream and its functions and connections to this urban context. The primary goal of RESCUING TIBBETTS BROOK is **to reveal that nature is present everywhere in action at all times and that we are not separate from it.**

Several critical strategies in helping to acheive these goals for Tibbetts Brook include:

- Support Innovative Art
- Improve Water Quaility & the Environment
- Improve Public Health
- Invite Community Input & Foster Ownership
- Advance Environmental Justice
- Provide Intergenerational Programs
- Create Diverse Partnerships
- Spark Creative Ideas

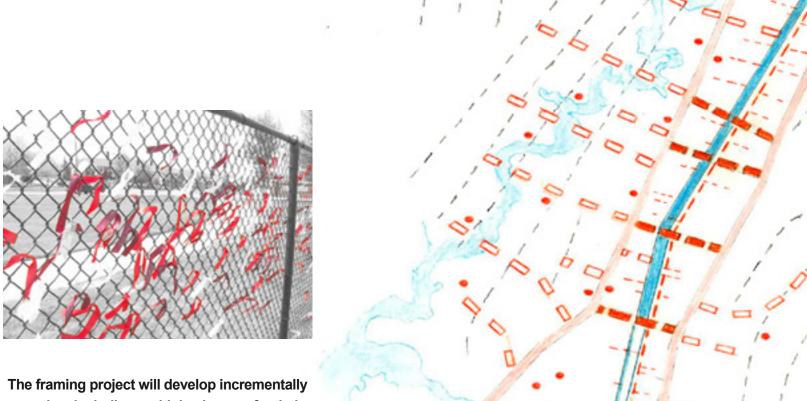


Project Concept
___the stitches

To take on this urban scale project that will be implemented over time we need to literally visualize 'stitching' the stream into place.

The image here is of a red thread that runs through the surroundings and that thread appears at many different scales: giant stitches on the fence barriers of bridges; smaller ones appearing out on the nearby streets, sidewalks, fences and poles.

The act of making connections between the surrounding neighborhoods and the stream will be noted, celebrated and can materialize in many ways. In these adjacent areas the 'stitches' can be locations where the former path of Tibbetts can be called out, the sites of future green infrastructure can be noted. A network can develop over time that knits the varied webs and systems into place connecting the stream to the surrounding cityscape.



over time including multiple phases of artistic interventions, and various artists and residents within the community.

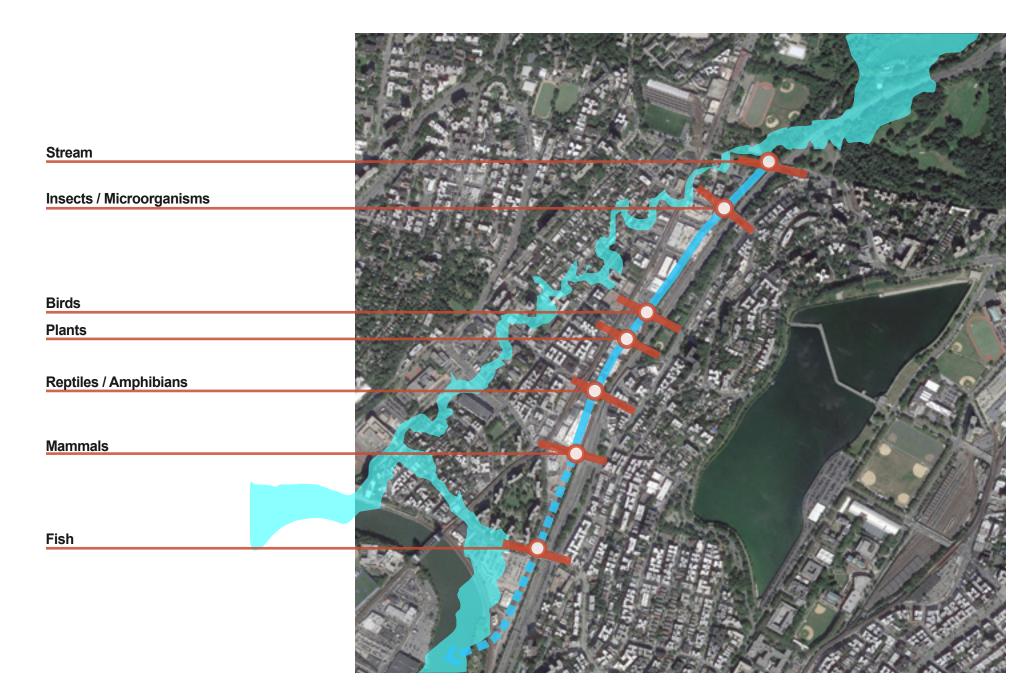
Project Evolution ___the sutures

As Tibbetts Brook materializes in its new location. these red markers can appear along the new walkway next to the stream or the adjacent walls, street ends or undersides of bridges.

Stitches / knots / bows / twists / loops marking stopping places can call out things of note; people in the adjacent communities can offer their own means of stitching the new stream in place and describe their personal connection to it.

In describing the process of engineering this stream to run from the semi-natural setting of Van Cortlandt Park into the narrow test tube like corridor adjacent to a highway, the term 'suture' seems appropriate. The conditions are anything but natural, but there is the potential to make introductions to many aspects of the nature of this stream—the plants, mammals, reptiles, fish, amphibians, birds and insects--and create attachments to them. The image of stitching Tibbetts Brook in place seems to come naturally.

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Project Framework ___the bridges

Seven bridges cross the abandoned rail corridor that will become the future location of the stream bed of the newly visible Tibbetts Brook. We envision these bridges acting as giant stitches at the scale of infrastructure to reconnect the stream and the neighborhoods with each other.

At the start of the process, with views that can be had over the old rail corridor, they can act as gathering and event locations, viewing places, sites where it's possible for people to begin to imagine what can be there in the future. Once the stream is in place they can be the starting point for a more intimate connection with the habitat of the stream.

These are locations where new ways of seeing and sharing knowledge can emerge in collaboration with community members. The bridges can initiate the introduction of Tibbetts Brook to the community and serve as a public gathering spots for temporary installations and events.

> Each bridge can introduce a different aspect of the stream...

...all of the plants, fish, and birds that will be found there.



Rescuing Tibbets ___preliminary plan



The project will be announced to the public by re-purposing existing infrastructure. The sides of each bridge are painted red with large scale texts visible to motorists; driving north the title appears one word at a time. Driving south, the name of the habitat or each bridge appears.

NORTH
Rescuing / Tibbetts / Brook / One / Stitch / At A / Time

SOUTH
Fish / Mammals / Reptiles / Plants / Birds / Insects / Stream



Rescuing Tibbets

___ temporary interventions & events



RESCUING TIBBETTS will proceed in phases.

Early temporary installations will be installed on bridges at 233rd and 234th street. These installations will be focused on areas overlooking the corridor, to help people imagine the future stream while looking through the fencing.

Priority components of Phase One include:

- Fence and concrete base to be painted
- Graphical texts to announce bridge topics
- Red webbing stitched into chain-link fence
- Habitat details shown on installed panels
- Walks, events and stories collection

Rescuing Tibbetts Brook | Bronx NY



Rescuing Tibbets

___ stream content access



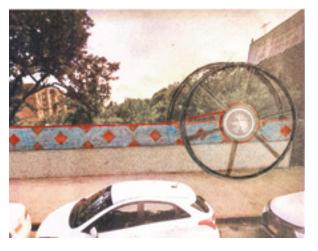
RESCUING TIBBETTS BROOK will provide various content options for public access. Content will include:

- Signage: Creative signage on the bridges
- Dial Up: Audio information via phone
- Website: Digital information via web
- Podcast: Creative audio information



Rescuing Tibbets

___ permanent installations



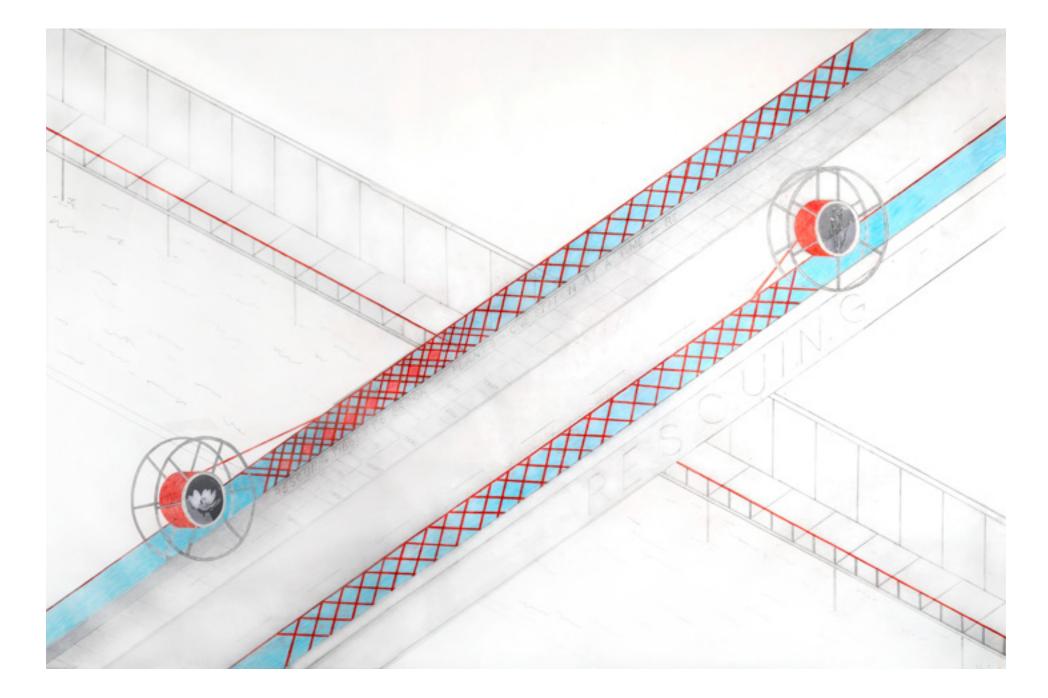
The transformation of the bridges will enable the following physical and virtual possibilities:

PHYSICAL

- Structural members painted with info-texts
- Fencing replaced with double layer blue fence
- LED uplight between layers of fencing
- Metal cut out letters mounted on concrete base
- Habitat names etched into concrete sidewalks
- Large 'spools' at one end of either side of bridge
- Red webbing woven into fence on each bridge
- Content panels on fencing
- Seating, shade, and other elements on bridge

VIRTUAL

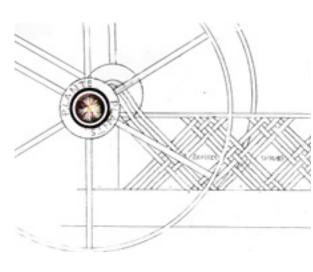
- Digital repository of stream stories collected from surrounding community residents
- Detailed content related to specific habitat to be digitally accessible at each site
- Audio tours or podcasts related to the stream
- All content will be digitally available in English and translated into Spanish





To initiate the process of daylighting Tibbetts Brook and to visualize the concepts of stitching Tibbetts Brook into its new location, bridges will be visually transformed with the following:

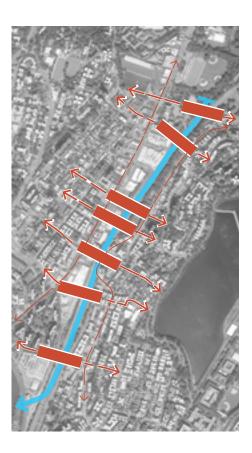
- Oversized 'spools (24' in height) straddle the fence and call attention to the new role of the bridges as 'sutures'
- · A visual pattern is created by weaving red webbing into the existing fencing along the bridges, to pique the curiosity of passers-by to stop and take note of the future stream site
- Informational panels with names and content about stream habitat give community members the opportunity to know the stream more intimately
- All content appears in English and Spanish.











Phase One

Feasibility studies for the streambed continue. Temporary installations will activate the two central bridges. Content development and story collection will begin with this phase, starting to make connections to the uplands.

Phase Two

Land acquisition completed. The first two bridges are transformed with permanent installations. Content development and outreach to the surrounding communities (Walks, Workshops, Events).

The remaining five bridges will be activated with temporary installations. Site analysis, design and planning for daylighting Tibbetts Brook continue. Opportunities for artists and community projects are identified.

Phase Three

Phase Four

Each bridge is fully re-purposed. Construction of stream, sound walls, and walkway are complete. Access to the walkway along the stream is provided at each bridge.

Rescuing Tibbets

___ phasing plan

Phase One

Temporary installations will activate the two central bridges -- overlooking the stream. The first bridge is on 233rd Street and the second is on 234th Street to introduce the surrounding communities to the future of Tibbetts Brook. Additionally, the process of developing content and collecting stories about the history and current state of the stream will create connections to adjacent communities and upland habitat. Feasibility studies examining stream construction continue.

Phase Two

The first two bridges are transformed with permanent installations and the corridor for the stream is acquired -- marking a formal commitment to moving forward. The process of developing content and the outreach to the surrounding communities will remain ongoing. Connections between the upland areas and a new stream continue to be explored.

Phase Three

The remaining five bridges will be activated with temporary installations announcing the habitat focus for each bridge. The site analysis, design and planning for daylighting Tibbetts Brook continue, influenced by these activations. Opportunities for artists and community projects are identified; along walkways, under bridges, on adjacent walls, and various location conducive to gathering. Additionally an ongoing series of Artist Walks extend into surrounding neighborhoods to further engage community members.

Phase Four

Each bridge is fully re-purposed -- and the stream, adjacent sound wall, and walkway are in place. Access to the walkway along the stream is provided at each bridge. The communities along the corridor enjoy the benefits of a daylit Tibbetts Brook -- a new linear park, decreased flooding, and new habitat corridor.

Red Eared Slider (Reptiles)

Trachemys scripta

Eastern cottontail (Mammals)

Sylvilagus floridanus

Great Blue Heron (Birds)

Ardea herodias

Bluegil (Fish)

Lepomis macrochirus

Broadleaf Arrowhead (Plants)

Sagittaria latifolia

Green Frog (Amphibians)

Lithobates clamitans









Rescuing Tibbets

___ possible habitat

The habitat will be revealed through signage, digital content, and public engagement tours.

Reptiles of Tibbetts Brook and riparian forest

- Common Gartner Snake- Thamnophis sirtalis
- Dekay's Brownsnake- Storeria dekayi
- Common Snapping Turtle Chelydra serpentina
- Painted Turtle- Chrysemys picta
- Red Eared Slider Trachemys scripta

Amphibians of Tibbetts Brook and riparian forest

- American Bullfrog- Lithobates catesbeianus
- Green Frog- Lithobates clamitans
- Eastern Red-backed Salamander- Plethodon cinereus

Birds of Tibbetts Brook and riparian forest

- Great Blue Heron
- Yellow Warbler
- Green Heron
- Red Winged Blacvkbird
- · Belted Kingfisher
- Mallard
- Canada Goose
- Wood Duck

Plants of the Riparian forest and stream edge

- Broadleaf Arrowhead- Sagittaria latifolia
- Marsh Marigold- Caltha palustris
- Ostrich Fern- Matteuccia struthiopteris
- Red Maple- Acer rubrum
- Boxelder- Acer negundo
- Cardinalflower- Lobelia cardinalis
- Sweetgum- Liquidambar styraciflua
- River Birch- Betula nigra

Fish of Tibbetts Brook - documented so far

- Yellow Perch- Perca flavescens
- Large Mouth Bass- Micropterus salmoides
- Black Crappie- Pomoxis nigromaculatus
- Bluegill- Lepomis macrochirus
- Pumpkinseed- Lepomis gibbosus
- Golden Shiner- Notemigonus crysoleucas
- Brown Bullhead- Ameiurus nebulosus
- White Sucker- Catostomus commersonii

Potential Fish if daylighting occurred

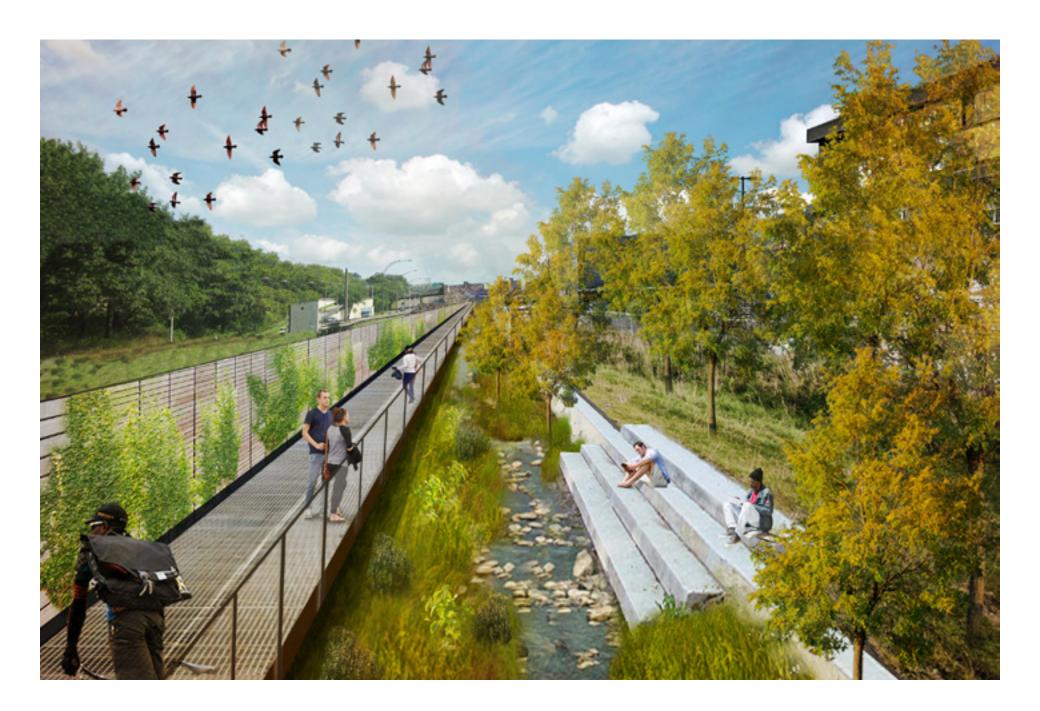
- American Eel- Anguilla rostrata
- 2. Blueback Herring- Alosa aestivalis
- 3. Alewife- Alosa pseudoharengus

Mammals of Tibbetts Brook

- Muskrat- Ondatra zibethicus
- Eastern cottontail- Sylvilagus floridanus
- · White-tailed deer- Odocoileus virginianus
- Coyote- Canis latrans
- Water Shrew- Sorex palustris
- Meadow Vole- Microtus pennsylvanicus
- Raccoon- Procyon lotor
- Virginia opossum-Didelphis virginiana

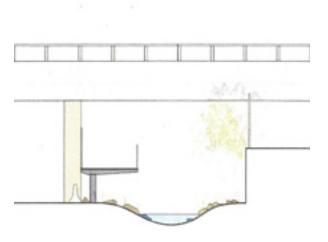
Microinvertebrate and Insects of Tibbetts Brook

- Freshwater Sponge- Ephydatia fluviatilis
- Leeches / Scutate snail leech-Helobdella modesta
- Leeches- Erpobdella microstoma
- Molluscs (Numerous)
- Crustaceans (Numerous)
- Odonotes (Numerous)
- Mayflies: Small squaregill mayflies-Caenis sp.
- Dobsonflies: spring fishfly- Chauliodes rastricornis
- Diptera: Non-biting midgefly- Dicrotendipes sp.
- Beetles: Crawling water beetles- Peltodytes sp.
- Bettles: Predaceous diving beetles- Cybister sp.
- True Bugs: Water boatman- Trichocorixa sp.
- True Bugs: Giant water bugs- Belostoma sp.



Rescuing Tibbets

___ vision for the future



The new streambed for Tibbetts Brook will be carefully planned and constructed. Ecologists and engineers consider such factors as natural riparian vegetation, the grade and shape of the channel and the right conditions for habitat in their design.

To follow CALL's progress on Rescuing Tibbetts Brook and the daylighting process in general, please visit the City as Living Laboratory website for updates:

https://www.cityaslivinglab.org/rescuing-tibbetts

The possible scenario for a design creating community access to Tibbetts Brook consists of:

- An 18' vine-planted sound wall on the east side of the corridor adjacent to the Major Deegan Expressway
- A 10' wide elevated steel grate walkway and bike path with a rail
- Access ramps to the walkway from the bridges
- Stopping places along the corridor walkway
- Access to the stream on the on the west side of the corridor where possible

Rescuing Tibbetts Brook

___ artist statement

In the early 2000, I began to try to imagine how artists could have a more essential role in addressing the complex social and environmental issues of our time. In 2008 the idea for the City as Living Laboratory (CALL) emerged out of that earlier work. To demonstrate how this framework could play out, I began the initiative BROADWAY: 1000 Steps. The vision was for an incremental process of transforming this 18-mile long central avenue of New York City into a green corridor. The goal was to help people understand the infrastructure that supports their lives and how connected we are to nature in spite of living in a dense metropolis. A multitude of artists, designers, and performers would be called upon to use the processes of engagement inherent to the arts to make new ideas about how to live sustainably in the city tangible. The central focus was how to connect people on the streets in their own neighborhoods with these complex issues.

Our artist-facilitated collaborations with scientists and key community actors are grounded in place-based experience that fosters a deeper understanding of a site's history, as well as the natural systems, social relations, and infrastructure that sustain life. CALL works with communities to translate this awareness into meaningful action in which people discover agency, purpose, and a voice in setting priorities for solutions that bring concrete improvements in their lives.

As a first step, the diverse communities along the corridor were explored by over fifty CALL/WALKS, each led by an artist and scientist, social scientist, historian or other expert in their field.

After having several walks in the Bronx along Broadway, a WORKSHOP was held with a group of community members in 2016. Out of this meeting it emerged that one of the most pressing issues was the ongoing flooding of the neighborhood after

rainstorms, and the resulting sewerage overflows into the Harlem River

In the late 90s the Bronx Council on Environmental Quality presented a plan to take the fresh water of Tibbetts Brook flowing from Van Cortlandt Lake, out of the Broadway sewer where it had been buried in the early 20th century. Diverting this stream into the defunct CSX rail corridor as a linear park would decrease the load on the sewer thereby reducing flooding and sewerage overflows. It will help with air quality, cooling, and promote health benefits.

After several years of Walks, research and partnership-building in the Marble Hill, Kingsbridge, and adjacent neighborhoods surrounding Van Cortlandt Park, working with those partners, CALL has launched a multi-faceted initiative **RESCUING TIBBETTS BROOK: One Stitch at a Time.** This project will address what has arisen as the community's most pressing issue.

- Mary Miss









Means of Engagement

___ community participation

Events, public prgorams, and both temporary and permanent art projects have already begun the process of engagement with the many nearby communities. Through shared experience, community input and the creation of an ongoing discourse, we aim to radically change the way people view themselves in relation to their environment over time. Walks with artists and scientists, performances, exhibitions, scientists performing their research work in a public setting, and cross-disciplinary school programs are examples of the possible activities that will take place of the course of a three-year period.

These programs will be integrated and build upon each other to maximize the potential for community enagement in the overal visioning process for Tibbetts Brook. True to CALL's iterative process, CALL/WALKS, WORKSHOPS, and PROJECTS will continue to investigate the territory and community concerns while generating innovative ideas and experiential learning opportunities. These programs will greate feedback loop that will continually inform the ongoing direction of the overall intiative. From pop-up exibitions to school-based educational programs, access points will be created at many levels to invite maximum input.

Several critical strategies to engage the community around Tibbetts Brook include:

- Artist / Scientists Walks
- Community Workshops
- Resident Story Collection
- Neighborhood Events
- Community Presentations / Lectures
- School-based Edcuational Programs
- Pop-up Exhibitions
- Public Art Projects



Juanli Carrion, CALL/WALK Spring 2015



Nicolás Dumit Estévez Raful Espejo, Growing a Green Heart (proposal, project aimed for Spring 2020)



Bob Braine, Estuary Tattoos Fall 2018



SLO Architecture, Finding Tibbetts 2.0 Fall 2018

Artist Engagement

___ artists, designers, poets, musicians

Artists can help introduce the stream before, during, and after construction. Temporary installations and permanent projects can be implemented over time, to explore opportunities for configuring the stream so that it works ecologically, while also revealoing its functions and makeup. Once the stream is in place their work can be the starting point for more intimate connection with the habitat along the entire Tibbetts Brook Corridor.

Additional examples of opportunity sites include:

- The Stream itself
- The walks, ramps, walls, and fences
- Stoping places on eastside stream walkway
- Stepdown / overviews on westside of stream
- Blank walls on east and west sides of stream
- Underside of all corridor bridges

CALL | City as Living Laboratory

Program Development

___ record of engagement

Rescuing Tibbetts Brook is an outgrowth of CALL's iterative framework. CALL's engagement in this area of the Bronx began with a series of CALL/WALKS, which built momentum for a cross-sector WORKSHOP in 2015 to explore neighborhood concerns more in depth. Bringing together community activists, educators, students, elected officials, environmental scientists, designers and artists, the workshop's goal was to identify the neighborhood's most pressing environmental challenges and brainstorm ideas on effectively addressing them. Two compelling suggestions emerged: Increase the number of and participation in community gardens and work towards the daylighting of Tibbetts Brook.

A neighborhood group from one of the local housing projects took on the gardening initiative. Working with artist Juanli Carrion and the Outer Seed Shadow project, they have built three new community gardens in the area. CALL's efforts focused on exploring the daylighting project, supporting its advancement in collaboration with the Coalition for Daylighting Tibbetts Brook. This coalition was formed under the leadership of Van Cortlandt Park Alliance and the Bronx Council on Environmental Quality, and includes 21 other organizations and elected officials.

Since 2015, seven CALL/WALKS led by artist/ scientist teams have explored the territory and intricacies around daylighting, along with additional workshops and public forums. Responding to the outcomes of these programs, CALL commissioned 2018 projects Finding Tibbetts 2.0, by SLO Architecture, and Estuary Tattoos by artist Bob Braine. Reaching hundreds of residents, these portable projects were powerful drivers to build community-level awareness for the daylighting effort, attracting new advocates and adding hundreds of signatures to the petition for daylighting Tibbetts Brook. These initiatives generated press coverage pivotal to maintaining pressure on elected officials and city agencies responsible for green infrastructure, and have informed the proposal for **Rescuing Tibbetts Brook**.

Rescuing Tibbetts Brook | Bronx NY

Social Sustainability **Artists**

Scientists

Poets

Engineers

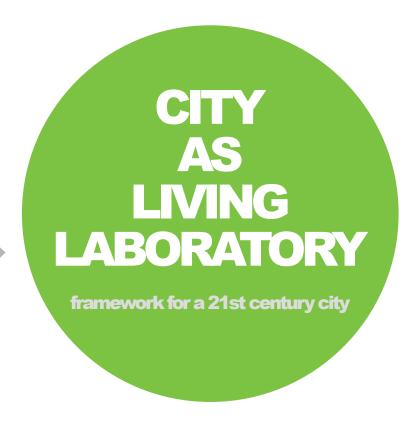
COMMUNITIES/ARTS/COLLABORATIONS

Sociologists

Performers

Historians

Designers





City as Living Laboratory

___ sustainability made tangible through the arts

The City as Living Laboratory (CALL) mission is to increase awareness and action around environmental challenges through the arts, and to foster public understanding of the natural systems and infrastructure that support life in the city.

Rescuing Tibbetts Brook is an initiative to invite the residents of New York City to better understand the water systems that support their lives. Its strategies are grounded in place-based experience that makes sustainability personal, visceral, tangible, and encourages public engagement and governmental action over time.

CALL programs are conceived to help citizens connect environmental challenges to personal experience and take action to find solutions for concrete improvements.

CALL supports interdisciplinary collaborations with scientists, urban planning experts, key community actors, and government officials to:

- •CALL to support and advance the role of artists in efforts to make cities more livable and sustainable.
- •CALL to connect people to the ecosystems and the infrastructure that surrounds them, supporting their lives, making things that are hidden, unseen, or abstract real and tangible.

The **CALL/FRAMEWORK** is a methodology that nurtures collaborative teams to promote heightened environmental awareness and more livable cities of sustenance

- **CALL** attention to natural and man-made systems that sustain our lives often, focusing on the unseen, under-recognized, or threatened.
- •CALL to create collaborations between artists, scientists, and citizens to address specific needs through citizen engagement, community action, and policy change.
- CALL to affirm the value of artists to revision the public realm to enable positive environmental change and successful programs in neighborhoods and cities across the country.



Environmental Sustainability

UN Sustainability Goals

___ global objectives



UN Suatainability Goals (SDG)

A survey conducted in 2017 by the Organisation for Economic Cooperation and Development indicated that approximately 70% of Americans had never heard of the UN Sustainable Development Goals (SDGs). CALL's projects are designed to both accelerate our cities' efforts towards meeting key targets set by the SDGs and to help the public understand what the goals mean on both a local and global context. Rescuing Tibbetts Brook and the overall daylighting initative will address a number of SDG's directly through the reduction in Combined Sewer Overflows (CSOs), which are detrimental to both the environment and public health and the restoration of natural habitat, and indirectly through an increase in local resiliance and awareness.



SDG S3 - Good Health

Ensure healthy lives and promote well-being for all at all ages. CSO events cause flooding—damaging residences, businesses, and streets, and polluting the surrounding waterways. One of the targets of SDG 3 is to reduce the number of illnesses from water and soil contamination and pollution. Diverting Tibbetts Brook back to the Harlem River, and reducing the number of CSO events, would assist in reaching this goal. Daylighting Tibbetts Brook would also create a linear park, connecting Van Cortlandt Lake with the Harlem River Greenway, and creating a public amenity for the community. Community parks advance health equity.





SDG 4 - Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Education is extremely important to sustainable development. Work with artists such as Bob Braine and SLO Architecture has allowed City as a Living Laboratory to provide educational opportunities for all ages in the Tibbetts Brook area.

SDG 9 - Innovation and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation Daylighting Tibbetts Brook corrects the sewer infrastructure of NYC by lessening the inflow of water into the system and decreasing the likelihood CSO events and local flooding.



SDG 6 - Clean Water and Sanitation

Residents ensure availability and sustainable management of water and sanitation for all Eighty percent of wastewater in the world goes into waterways without adequate treatment. In NYC, the majority of the sewer system is combined, meaning sanitary and storm flows empty into the same system. According to the DEP, water from Tibbetts Brook enters the Broadway sewer at a rate of 4 to 5 million gallons of water per day. During heavy rains, the sewage treatment plants have to process storm flows as well as regular sanitary flows. Since the facilities are unable to cope with the volume, untreated sewage is discharged into the waterways of the city. In the area of Tibbetts Brook, the previous re-routing of the brook into the sewer system contributes to this situation.



SDG 13 - Climate Action

Take urgent action to combat climate change and its impacts Helping New York City reduce flooding during storms is an act of improving resiliency. Restoring Tibbetts Brook not only protects the local community during a heavy rainstorm, it protects the community in the case of larger disasters such as superstorms and hurricanes. As the effects of climate change are felt, these larger disasters will increase in frequency and magnitude.





SDG 14 - Life Below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development. The Harlem River is a tidal strait connected to the ocean via the Hudson River and East River, so all CSO events affect marine life.

SDG 15 - Life On Land

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Burying Tibbetts Brook decades ago degraded the natural habitat. A new linear park will restore habitat, encouraging biodiversity.

Rescuing Tibbetts Brook | Bronx NY **CALL** | City as Living Laboratory

Project Partners

--- organizations and agencies

CALL is building a diverse coalition of partners.

Steering Committee:

- Dr. Robert Fanuzzi, President, Bronx Council for Environmental Quality
- Jacki Fischer, Co-Founder & Director, Outer Seed Shadow
- Eileen Jeng Lynch, Curator of Visual Arts, Wave Hill
- · Christina Taylor, Director of Programs and Operations, Van Cortlandt Park Alliance

Key partner organizations include:

- Bronx Community Board 8
- Bronx Council for Environmental Quality
- CRIAS
- Infrastructure Matters
- KRVC Development Corporation
- NYC H2O
- OSS Project -- Outer Seed Shadow MH
- SWIM Coalition NYC -- Storm Water
- Van Cortlandt Park Alliance
- Wave Hill