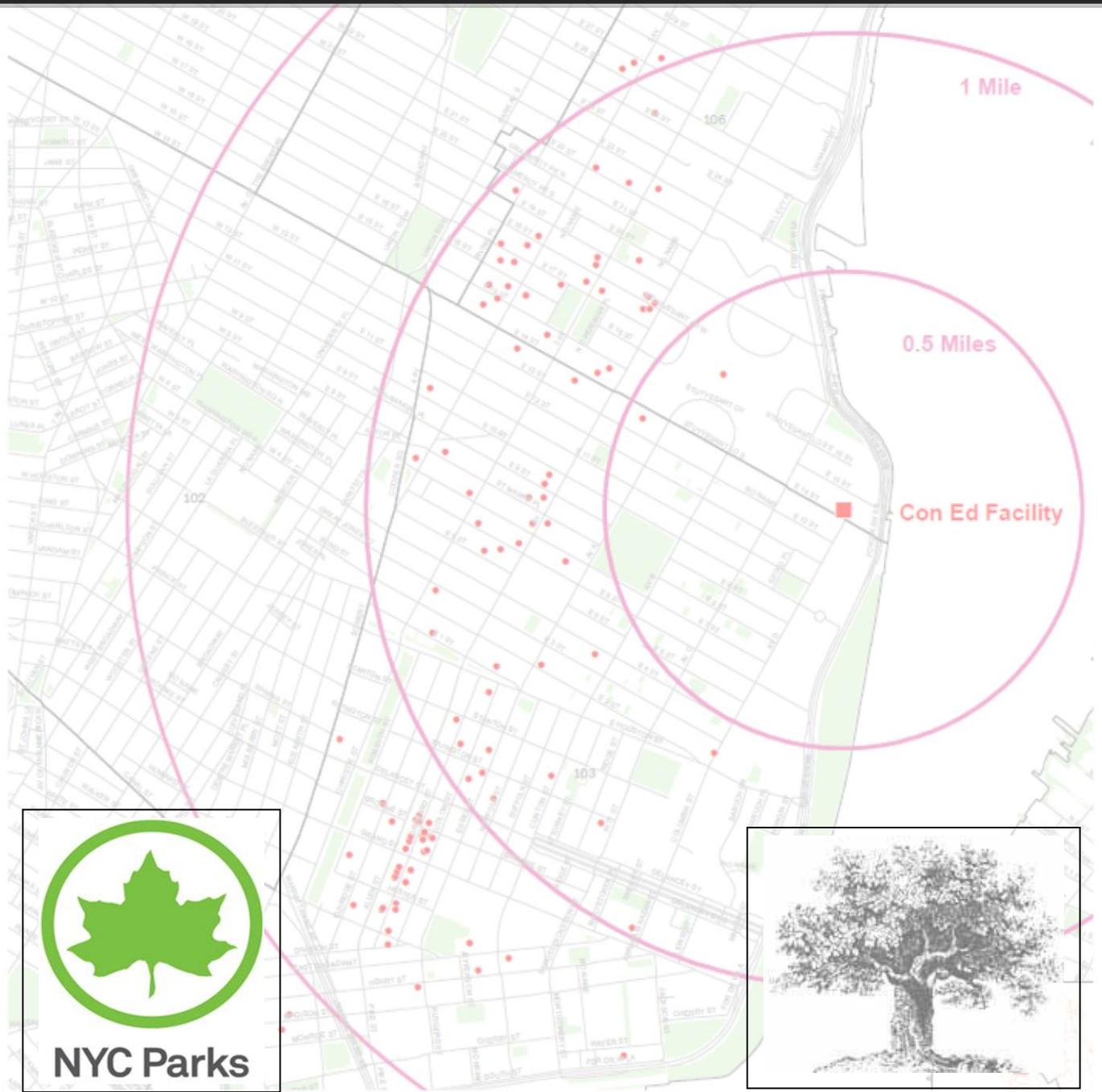


**Lower East Side Accelerated Greening Program:
72 New Trees, Pit Expansion and/or Groundcover Plantings for 260 Existing
Trees, and coordination of citizen stewardship for the Lower East Side**



Lower East Side Accelerated Greening Program

72 New Trees, Pit Expansion and/or Groundcover Plantings for 260 Existing Trees, and coordination of citizen stewardship for the Lower East Side

Application for Con Ed Settlement Funds

As the awareness of the benefits of an urban tree canopy has grown over recent decades there has been a growing push to plant and protect the trees in our urban neighborhoods. The Lower East Side Accelerated Greening Program's goals are to work as a focused project within this greater greening movement by completely stocking all available street tree locations and increasing the tree health of existing street trees near the Con Edison East River Complex. To achieve these goals the Lower East Side Accelerated Greening Program seeks \$150,000 from the Con Ed settlement funds which will be matched with \$150,000 from the City of New York Department of Parks & Recreation to plant 72 trees, expand the pits of existing trees and plant groundcover and flowering spring time bulbs for 260 existing trees in the Lower East Side directly around the Con Ed power plant. This effort will be coupled with a focus on long term stewardship of the trees in this area by engaging in community outreach, coordination of active citizens/groups in the area, and leading a stewardship workshop to educate citizens in proper tree care.

This multifaceted project begins by focusing efforts within three radius zones; $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ of a mile from the Con Edison East River Complex (see Appendix 1). The first goal is to ensure that all available street tree planting locations radiating from the Con Edison facility are planted. NYC Parks has estimated there are approximately 72 remaining tree planting opportunities in the initial $\frac{1}{4}$ mile area, approximately 24 of these sites are empty pits on streets boarding the East River Complex and approximately 48 sites are outstanding requests within the $\frac{3}{4}$ mile radius. Next, existing trees will be surveyed for pit expansion and groundcover and flowering bulb plantings until remaining funds are depleted. We estimate the funds requested, will enable the expansion of tree beds as well as the planting of groundcover and bulbs for approximately 260 trees which will cover all of the street trees in the $\frac{1}{4}$ mile zone and some sites within the $\frac{1}{2}$ mile zone. This also includes many newly planted trees that were planted by New York City Parks & Recreation in conjunction with the Lower East Side Ecology Center. The rehabilitation of existing tree beds and any new trees planted will create a visual consistency to all street tree beds within the focus areas, as well as ensuring each trees growing conditions are optimized for tree longevity. It is also possible that some tree planting could be focused on nearby Park areas or any private land if desired by the Committee or Con Edison. These efforts will be further refined by a variety of public outreach efforts on tree care and community empowerment to provide additional boost to future tree health and longevity, as tree longevity will maximize the benefits these trees bring to this neighborhood. In addition, the project will be working closely with the Lower East Side Ecology Center as they are a critical stakeholder within the neighborhood and have already invested countless hours of work into the trees within the neighborhood. Our hopes are that both the groundcover and bulbs will be planted with the help of volunteers, increasing the level of community involvement, as well as the anticipated level of ownership.

Lower East Side Accelerated Greening Program will be led by New York City Department of Parks and the New York Tree Trust. They will coordinate with MillionTrees NYC, property owners, the areas community gardens, adopt a tree pledgees, citizen pruners, and of course the Lower East Side Ecology Center who is already a leader in stewardship activities in the proposed area. The New York Tree Trust, a 501-3c non-profit, will accept the settlement funds for the trees and tree work. NYC Parks will match those dollars and coordinate the use of these funds according to the Program's stated budget and goals, and coordinate the installation of trees and tree work.

The Lower East Side Accelerated Greening Program will satisfy the settlement funds scope as a healthy canopy of trees is one of the best ways to provide local air quality improvement and subsequently neighborhood health improvement. The Program will also provide stewardship and outreach efforts that will

serve the local community in a variety of ways thru the numerous other benefits that trees and neighborhood beautification provides. These efforts equally satisfy NYC’s Million Tree goals by enabling the planting of more trees in an area of need. In addition, Parks has already planted many trees in the area and it has become clear that the infrastructure of the neighborhood restricts some tree planting locations. Therefore, it is critical to the long term development of canopy within this neighborhood that existing trees receive extra care to ensure for their longevity. By increasing the health of existing trees this plan also works to offset future tree maintenance and tree replacement costs, which again helps NYC Park’s goals of increasing the longevity of large trees and the benefits those large trees provide. The partnership of these goals will provide environmental, economic, and health benefits to the local community for generations to come.

Timeline

- February 2013–NYC Parks will survey all street tree sites within ¼ of a mile of the East River Complex for tree planting viability. NYC Parks will survey for the expansion of existing pits and/or ground cover plantings working out first from ¼ miles and then ½ mile from the East River Complex. Community Outreach efforts in to be determined work areas.
- March 2013–NYC Parks will mark locations with a contractor and start any necessary pre-construction work. NYC Parks will provide a report to Community Board detailing proposed work.
- March-June 2013–Tree Planting, Pit Expansion, Ground Cover Plantings. NYC Parks will provide an updated report to the Community Board in June detailing the final work completed.
- July 2013–Stewardship Workshop to be held.
- November 2013- Bulb planting in tree beds throughout the focus area with volunteers
- May 2013-May 2015– All trees will get weeded and watered once every two weeks through the growing season (May 15-October 15). Any trees that die will be replaced in the subsequent season.

Budget

The New York Tree Trust has obtained estimates from approved NYC Department of Parks & Recreation contractors of approximately \$1,800 to install each new tree and approximately \$500 for the expansion of an existing tree pit with the planting of groundcover. These funds will pay for a contractor to oversee all sidewalk site preparation, the actual tree, tree and ground cover planting, a two-year guarantee period, maintenance and watering for two years, and all necessary permits to perform the work from both NYC Department of Parks and Recreation (DPR) and the Department of Transportation (DOT). This price also covers supervision of all trees while they are planted to ensure they are planted to DPR’s specifications. DPR will coordinate the full survey of underground electric and gas utilities and obstacles in the area and tree planting locations. The project management costs listed include staff time needed to carry out the coordination, implementation and management of this proposal.

Funding

Settlement Funds	\$150,000
<u>Matching Funds from Park’s & Rec.</u>	<u>\$150,000</u>
Total	\$300,000

Costs

Project Management	\$40,000
72 Newly Planted Trees	\$130,000
260 Existing Tree Pit Expansions and/or	
<u>Inclusion of Groundcover/ Bulb Plantings</u>	<u>\$130,000</u>
Total	\$300,000

Deliverables

In March 2013, at the completion of an initial detailed survey of the areas detailed in (Appendix1), Lower East Side Accelerated Greening Program (NYC Parks) will provide a report to the Community Board detailing the proposed address of each new tree to be planted, existing pit to be expanded and/or planted with ground cover. Lower East Side Accelerated Greening Program (NYC Parks) will provide a final report to the Community Board at the conclusion of the project December 2013. This report will include the address of each new tree planted, existing pit expanded and/or planted with groundcover or flowering bulbs

Additional Information on Tree Benefits and the Improved Community Health Trees Provide

The benefits of planting trees in cities have been studied extensively. Trees have been found to consistently provide environmental benefits, economic benefits and health benefits to the local community (Appendix I). In addition to these benefits Lower East Side Accelerated Greening Program focuses specifically on improving and protecting the tree health of large high value existing trees by targeting them for pit expansion and/or groundcover planting. The benefits of expanded trees pits are that they simply provide trees the space and resources they need to remain healthy and thus enabling the trees to provide these listed air quality and public health benefits well into the future. The use of groundcover and bulb plantings is a two pronged approach to tree health and neighborhood quality of life problems in that they both aid in tree health and add aesthetic value to the neighborhood. The aesthetic value of groundcover planting generally raises neighborhood awareness to trees, beautify the neighborhood, and add incentive to public and business engagement in tree care activities. Lower East Side Accelerated Greening Program will have many positive effects on community health, some more specific information on these benefits of trees include:

- **Improved Air Quality**-Net annual air pollutants removed, released, and avoided average 1.73lb. per tree and are valued at \$5.27million or \$9.02 per tree (New York City, 2007). In fact, one tree can remove 26 pounds of carbon dioxide from the atmosphere annually, the equivalent of 11,000 miles of car emissions. In addition, trees remove dust and other pollutants from the air.

Improved Health -There is strong evidence that trees help reduce air pollutants that can trigger asthma and other respiratory illnesses. A 2008 study in the Journal of Epidemiology and Community Health found that children in NY living in areas with more street trees have a lower prevalence of asthma. Studies find that by planting trees, there is a high likelihood of lowering childhood asthma rates in the area served by Community Board 3. (Appendix III). Green spaces also encourage physical activity-a healthy habit for any New Yorker.

- **Community and Business District Appeal** -The greening of business districts increases community pride and positive perception of an area, drawing customers to the businesses. Studies have found that tree-lined retail districts encourage more frequent visits, more time spent shopping and more spending by consumers (Journal of Forestry, 2005).
- **Reduced Crime**-A study by University of California horticulturalist Ted Stamen in 1993 found that urban spaces which had been planted had a 90% chance of remaining graffiti free.
- **Storm Water Capture**-New York City's street trees capture rain both in their canopies and tree beds, reducing storm water runoff by 890.6 million gallons annually. This has an estimated value of \$35.6 million and the average tree captures 1432 gallons of storm water each year (New York City, 2007).

- **Slowing Global Climate Change** -Urban trees help offset climate change by capturing atmospheric carbon dioxide in their tissue, reducing energy used by buildings, and reducing carbon dioxide emissions from fossil-fuel based powerplants.NYC trees remove over 42,000tons of carbon each year.
- **Lower Summer Air Temperature**-According to the U.S. Environmental Protection Agency, urban forests reduce urban temperatures significantly by shading buildings and concrete and returning humidity to the air through evaporative cooling.
- **Natural Resource Conservation**-By using trees to modify temperatures, the amount of fossil fuels used for cooling and heating by homeowners and businesses is reduced.
- **High Return of Investment**–Over the years the City has invested millions in its urban forest.NYC Park Department estimates that trees provide\$5.60in benefits for every dollar spent on tree planting and care.

Additional Information on Local Support, Community Outreach & Continuing Efforts

Lower East Side Accelerated Greening Program will use its contact list of already vested tree care entities and business owners in the Lower East Side for community outreach. This outreach coupled with field visits in the neighborhood will ask for support from the local community to assist in monitoring, watering, and maintaining the trees once the two year guarantee has lapsed. These efforts will operate in tandem with DPRs existing Adopt-a-Tree effort. Information about DPRs volunteer stewardship effort to get the community to care for trees can be found here; <http://stewardship.nycparks.org/>

MillionTrees NYC will also plan to hold a stewardship workshop during the summer of 2013 in the Lower East Side to help equip local residents with the knowledge and tools needed to care for new street trees. The workshop will cover basic tree biology as well as teach the basics of new tree care.

The continuing efforts for all specific work items will also be contractually binding for two years. The installers hired by New York City Parks and the Tree Trust will be required to water the tree every two weeks during the growing seasons and to guarantee each tree a two year period.

Additional information on NYC Department of Parks & Recreation Trees Planting efforts in this Area.

DPR receives and records each request to plant a tree in the city through a database. As of December 2012 DPR has over 140 outstanding requests for trees community boards 3 and 6, 48 of which are requests within the ¼ mile Lower East Side Accelerated Greening Program proposed area. While DPR attempts to plant trees as quickly as possible NYC Parks is only scheduled to plant a few of these 48 requests in the 2013 planting seasons as requests can take up to 1 year to be surveyed. The DPR request based system does not have any requests for 24 recently identified empty tree pits on streets boarding the East River Complex. In addition, there is no current funding for the expansion of tree pits in the LES. Unrequested tree sites and trees in need of pit expansion are often delayed in being addressed as public demand for trees are given top priority. These sites and this neighborhood are perfect candidates for specific grant based funds such the Lower East Side Accelerated Greening Program. By focusing in on the neighborhoods in the immediate proximity to the East River Complex the Lower East Side Accelerated Greening Program will both quicken the pace of planting, provided opportunities for tree planting in often neglected sites, and increase existing tree health by provided the opportunity to expand pits increase their health with the use of ground cover plantings.

Lower East Side Accelerated Greening Program Participants

New York Tree Trust



The New York Tree Trust is a non-profit established in 1994 to protect, preserve, and enhance New York City's street, park and forest trees. The goals of the Tree Trust are to foster public-private partnerships in urban forestry, raise public awareness of the importance of urban forestry conservation and stewardship, promote new technologies to enhance tree survival and advance innovative management tools, and revitalize historically and arboreal significant municipal trees. Donations can be specified to accelerating the planting of a tree in a certain location. The New York Tree Trust's fiscal sponsor is the City Parks Foundation whose tax ID number is 133561657.

NYC Department of Parks and Recreation



The Parks Department Central Forestry division and forestry divisions of each borough provide a variety of tree and sidewalk-related services to New York City. NYC Parks evaluates each tree planting location to determine the sites suitability and potential infrastructure conflicts.

MillionTreesNYC, one of the PlaNYC initiatives, is a citywide, public-private program with an ambitious goal: to finish planting and care for one million new trees across the City's five boroughs over the next five year. By planting one million trees, New York City can increase its urban forest a valuable environmental asset made up of street trees, park trees, and trees on public, private and commercial and by an astounding 20%, while achieving the many quality-of-life benefits that come with planting trees. More information about MillionTreesNYC can be found at:

<http://www.milliontreesnyc.org>

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