



CREATING SUSTAINABLE COMMUNITIES

A GUIDE FOR DEVELOPERS AND COMMUNITIES

ACCESS TO GREEN SPACE

CREATING BUFFERS, LANDSCAPING AND TREE PLANTINGS

Green buffers and the planting of native trees and shrubs serve a number of beneficial purposes, especially in urban settings. The presence of native vegetation serves to enrich the local landscape and provides habitat for birds, butterflies, and other species that might otherwise find the urban environment inhospitable. This vegetation, and the soil that supports it, allows stormwater to recharge and provides natural filtration and purification without overwhelming storm sewer systems. At the same time, the presence of greenery helps to reduce the urban heat island effect, which decreases the need for artificial cooling during hot summer months. Trees also serve to filter both air and noise pollution, thus adding an important health benefit for local residents. These health benefits are especially important in urban areas where residents suffer disproportionately from health problems associated with poor air quality and the effects that long-term exposure to elevated noise levels has on stress-related illness.

Tree-rich neighborhoods have been shown to have lower crime rates and are generally seen as more desirable places to live.¹

APPLICABLE NEW JERSEY GOALS AND TARGETS

- Reduce emissions of ozone precursors and fine particulates to attain the Clean Air Act health standards and visibility goals (DEP Action Plan)
- Reduce exposure to diesel exhaust (DEP Action Plan)
- Reduce projected energy use by 20% by 2020 and meet 20% of the State's electricity needs with Class 1 renewable energy sources by 2020. (NJ Energy Master Plan)
- Manage flooding to reduce property damage and increase surface water buffers to enhance function and value. (DEP Action Plan)
- Undertake urban environmental quality-of-life initiatives in conjunction with local governments, local activist and community groups that establish measurable goals for two and three year achievements. (DEP Action Plan)
- By 2008 preserve at least 1,354,000 acres (NJSSI)
- Plant 100,000 trees in Trenton, Paterson, Newark, Elizabeth, Orange, Union, and Passaic (DEP web page - <http://www.nj.gov/dep/dsr/trends2005/pdfs/urban.pdf>)

SUGGESTED ACTIONS AND STRATEGIES

- Preserve existing trees while developing sites. Site development plans should include detailed plans for the maximum preservation of non-invasive, indigenous species on site. All parties involved in the construction process should be aware of these plans
- Re-vegetate cleared areas with native, non-invasive species. As soon as possible after construction, cleared areas should be re-vegetated
- Maintain green buffer areas between major highways and industrial areas, and residential developments.
- Plant deciduous trees where they can provide cooling in the summer while allowing sunlight to hit buildings during the winter months.
- Engage local community in tree-planting efforts. Provide education targeted to residents of all ages, income levels, and educational backgrounds.

1. Frances E. Kuo and William C. Sullivan, "Environment and Crime in the Inner City: Does vegetation reduce crime?" in *Environment and Behavior*, Vol 33, No. 3, May 2001.



- Developers should cover the cost of tree donation/planting, and maintenance in the same way that developers covers utility extensions and other road development costs.
- Municipalities should link green infrastructure reimbursement to projects in the same way that utilities infrastructure is linked to projects.

STATE TECHNICAL/FINANCIAL ASSISTANCE

NJ DEP Division of Parks and Forestry, Green Communities Challenge Grant
www.nj.gov/dep/parksandforests/forest/community/grants.html

NJDEP Community Forestry Program
www.nj.gov/dep/parksandforests/forest/community/
www.nj.gov/dep/dsr/trends2005/pdfs/urban.pdf

FURTHER INFORMATION

New Jersey Tree Foundation - www.charityadvantage.com/njtf/home.asp

Chewonki Foundation - www.chewonki.org/cleanwater/green_buffers.asp

The Conservation Fund's Green Infrastructure page - www.greeninfrastructure.net/

Particulate Pollution Removal by Urban Trees - www.lifesci.sussex.ac.uk/home/Kevin_Beckett/

American Forests: Setting Urban Tree Canopy Goals - www.amfor.org/resources/urbanforests/treedeficit.php

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