# Nature in Cities

## Natural Solutions to Environmental Challenges in Urban Communities

Tree canopy at the U.S. Capitol Building © Matt Kane/The Nature Conservancy

Urban populations around the globe are growing rapidly. In the U.S. more than 80 percent of Americans now live in cities, and this percentage is projected to rise over the coming decade. Unfortunately, as urban populations increase, so do pressures on natural resources, including the one resource upon which all life depends: water. In Washington, D.C. these stresses are already apparent in the mounting challenges we face to absorb intense rainfalls, cool temperatures, and protect clean water. For example, 15% of the pollution affecting the Chesapeake Bay can be attributed to urban stormwater runoff.

**But nature can help.** The Maryland/DC Chapter of The Nature Conservancy works to address D.C.'s most pressing environmental issues through cost-effective means that also encourage people to form a more sustainable relationship with nature. We are designing and building green infrastructure to clean stormwater runoff and planting and maintaining trees and vegetation that will filter the air we breathe and provide shade to people. These strategies leverage the power of nature to make D.C. communities more vibrant and livable.

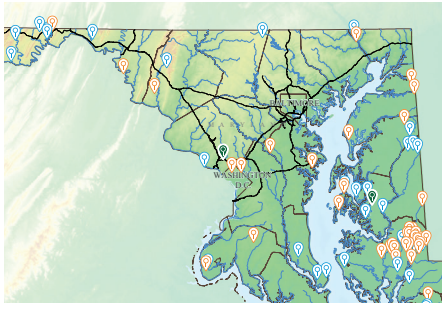
Our urban program also works to cultivate the next generation of environmental leaders through youth engagement. Urban conservation projects provide excellent opportunities for students from diverse backgrounds to take part in hands-on environmental stewardship, and to learn about environmental policy. Through our programming, young leaders learn the important role that nature can play in urban environments. They also gain advocacy skills to help them become ambassadors for conservation by using their civic voices to bring nature and its benefits back to their communities.

**80%** **OF AMERICANS** live in cities

**2/3** **OF WORLD POPULATION** will live in cities by 2050

**#1** **STORMWATER RUNOFF** is the fastest growing source of pollution to the Chesapeake Bay

## Where We Operate



The Nature Conservancy
Maryland/DC

## Our Solutions

We believe that nature can help our urban communities in a lot of ways. From filtering stormwater runoff, to mitigating urban heat-island effect, to the psychological and emotional healing power of nature, natural solutions in cities need to be built into urban planning across the globe.

**Install green infrastructure to retain and filter stormwater**

By replacing paved surfaces with green infrastructure, rain gardens and bioretention, the Conservancy is implementing cost-effective, environmentally sound stormwater management practices. These installations reduce stormwater runoff, lower stormwater management costs for developers, and add urban green space.

**Expand tree canopy to mitigate urban heat-island effect and improve air quality**

We are working with local partners to plant and maintain trees, which can reduce ambient temperatures in urban areas by as much as 20 degrees, while simultaneously filtering pollutants from the air and retaining stormwater. These functions translate into substantial savings for residents and businesses on power bills. They also mean healthier air to breathe, more cooling shade in the summer, and a reduced risk of floods.

**Build support for green infrastructure**

Green infrastructure and tree canopy expansion improve local air and water quality, enhance quality of life and economic output for city residents, and create local green jobs. The Conservancy is working with lawmakers in Maryland and D.C. to support innovative policies that reinforce the ecological and economic benefits realized through investing in nature in cities.

## Your Support Makes a Difference

With your support, we will make D.C. a proving ground, demonstrating how nature in cities preserves our waterways, and generates benefits for communities, for people's health, and for the economy.

Volunteers plant a rain garden in D.C. © Anacostia Watershed Society

Impervious surface removal at Mount Olivet Cemeterey, a project site where The Nature Conservancy is capturing stormwater runoff. © The Nature Conservancy

## Project Profile

In 1858, Mount Olivet Cemetery was founded in what was then a rural part of Washington, D.C., as a sanctuary for the departed. Now that the cemetery is almost full, the church is exploring new ways to use the cemetery grounds to answer Pope Francis' Encyclical on the Environment to respect and care for the earth.

This shared interest in the natural world has led to an innovative collaboration between the Conservancy and the Catholic Archdiocese of Washington, to address the growing environmental problem of urban stormwater runoff.

At Mount Olivet, we are replacing approximately 18,000 square feet of impervious surface with rain gardens. The work is being performed by a local contractor that specializes in ecological construction projects. The project is expected to prevent the runoff of millions of gallons of stormwater annually into the nearby Anacostia River, and ultimately the Chesapeake Bay.

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