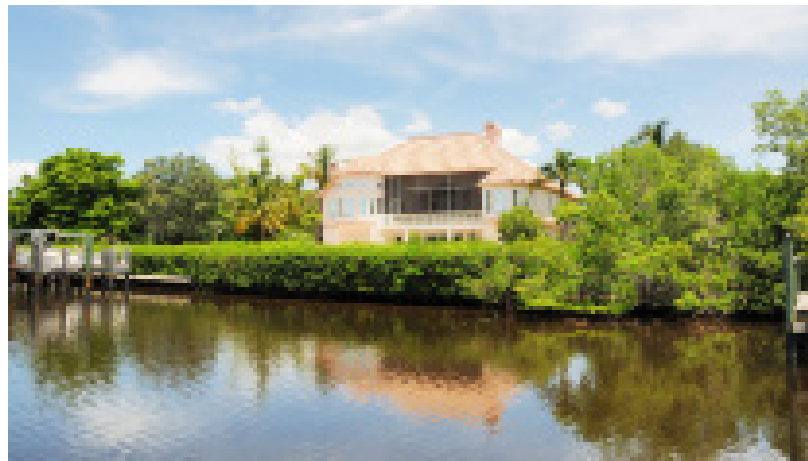




# THE POWER OF GREENSPACE



The environmental and social benefits of gardens and green spaces have long been known, though perhaps underappreciated. Thankfully, academic research continues to advance our understanding of the important effects that greenery has upon our environment, our society, and personal wellness.

In particular, green space can work to improve local water resources. Many cities are now working to incorporate “green infrastructure” in order to help solve long-term issues such as flooding and water quality improvement. These efforts can take many different forms, but are often less expensive than traditional engineering solutions, and offer more benefits such as increased community engagement, outdoor recreation access, and wildlife habitat.

## URBAN GREEN SPACE BENEFITS

**Prevents soil erosion and stabilizes dust.** Grass protects the soil from wind and water erosion. A good stand of grass stabilizes the soil with its roots. The roots knit the soil together, preventing the movement of soil. A dense cover of grass also reduces dust because the soil particles are not able to move with the wind. This ground cover provides a place for airborne dust to settle. Grasses in the U.S. trap as much as 12 million tons of dust and dirt a year.

**Absorbs rainwater.** Grass helps reduce runoff and prevents soil erosion, capturing and filtering rainwater to recharge our groundwater supplies. Grass leaves and stems cover the soil and intercept raindrops as they fall. Grass interferes with runoff flow, slowing it to the point where soil particles have a chance to soak it in. In fact, the average 10,000 square-foot residential lawn in the U.S. can absorb more than 6,000 gallons of water from a rainfall event.

**Improves and restores the soil.** Grass is a perennial plant, which means part of the root structure dies off during the winter and grows back the following spring. The dead roots of the plant break down and provide organic matter to the soil. Over time, organic matter improves the quality of the soil, making it more fertile and better able to filter air and water.

## ROLE OF RESIDENTIAL LANDSCAPES

When considering how to manage water, local and state agencies often look to public infrastructure projects that will clean and conserve water resources to meet local demand and healthy environmental standards. Increasingly, however, water management agencies and organizations working to protect local water resources are including residential landscapes in their designs to help capture rainwater, reuse that rainwater when needed to grow beneficial plantings, which then filters the water before it reaches area surface waters or groundwater reservoirs.

NASA has estimated that there is approximately 40 million acres of residential landscapes in the United States that are managed as turf grass. In public outdoor recreation surveys, gardening is the top activity that Americans directly participate in. Given the amount of land dedicated to residential spaces in urban environments, and the interest residents demonstrate in caring for their properties, engaging residents to help them manage their landscapes in a way that protects water resources will become increasingly important.

ScottsMiracle-Gro believes that residential land managers can play an extraordinary role in helping to achieve water quality improvement and water conservation goals. This process begins with our effort to design products that are safe and simple to use, increasing a resident's ability to successfully grow beneficial landscapes. This also includes providing education on how to properly use those products, and inspiring residents to manage their property in a way that does benefit local water resources. This is the impetus behind the Company's **Water Positive Landscapes Initiative**.



Product design and public education come together in this in-store advertisement designed to address misapplication of lawn fertilizer to hard surfaces, which is the top water quality concern for lawn fertilizer.



# CASE STUDIES

## CINCINNATI PROJECT GROUNDWORK

A multi-faceted approach to cleaning the waters of the Mill Creek and Ohio River, which flow through and by the City of Cincinnati. The City's "[Communities of the Future](#)" effort will reduce the costs of protecting local water resources while increasing the amount of greenspace surrounding those waterways to better filter rainwater before it becomes a problem. This approach has added benefits such as increased

public access to greenspaces and outdoor activities.

Through our GRO1000 program, ScottsMiracle-Gro helped convert land in a residential neighborhood adjacent to Mill Creek from an abandoned parking lot into a forested garden site that will slow down and filter stormwater, better protecting Mill Creek.

## PORTLAND CLEAN RIVER REWARDS

Recognizing the power of residents to manage their property in a way that protects area water quality, the City of Portland's "[Clean River Rewards](#)" program incentivizes residents to manage their property in a way that captures

and filters stormwater throughout the City. This includes recognition and encouragement of directing the water flow from a home's downspout to the home's lawn or garden.

## CHICAGO GREEN ROOF PROGRAM

In order to take advantage of the multiple layers of benefits that establishing [green roofs](#) across the city could have, the City of Chicago has helped property owners and building managers to install gardens and greenery on their roofs.

The results can be impressive: the green roof on the City Hall building reduces stormwater runoff by 50%. It also reduces energy consumption, saving the City almost \$6,000 a year to heat and cool the building.

