

The Many Benefits of a Healthy Urban Forest

Urban Forest Benefits	How the Forest Works for the City
Reduces Stormwater Runoff	Tree canopies reduce the fast rate at which rain falls to the earth. Water enters the ground more slowly under trees and is better absorbed and filtered into ground water than when it runs off surfaces. Conifers and other evergreen plants and trees grow year-round. This process moves water up from the ground, through plant tissues, and into the atmosphere as water vapor. The amount of water in the top two feet of the soil is reduced, leaving more room for additional rain water to flow into the soil.
Improves Water Quality	Tree roots absorb soil water that contains both nutrients and pollutants. Some pollutants are transformed by plants through metabolism, and others are trapped in woody tissues released only when a tree decomposes.
Reduces Erosion	As the canopy of trees slows the speed of rain falling on the earth, that rain water has less energy to displace soil particles. Soils under a canopy and the thick layer of leaf litter are protected from the erosive energy of rain water.
Increases Property Values	Homes that back up to greenbelts may be valued at up to 15% more than comparable homes not near a park. Forested parklands provide residential properties an adjacent natural area for walking and passive recreation activities such as bird watching.
Improves Air Quality	Tree leaves absorb carbon dioxide and produce oxygen through photosynthesis. The surface of leaves trap airborne dust and soot.
Makes Communities More Attractive	Trees and other plantings provide visual relief from the built environment. Trees and stretches of parkland can soften the angular edges of buildings, while the natural tones of bark and foliage are easy on the eyes.
Reduces Global Warming	Trees absorb “greenhouse gases” like carbon dioxide and store the carbon in woody tissues. Trees also modify “albedo,” the reflectivity of sunlight on the earth’s surface. The combination of the two effects can make the urban forest a remarkably cool spot in the urban heat island.
Provides Wildlife Habitat	Wild animals have unique requirements for food and shelter. Raccoons and crows adapt well to urban environments. Many native species don’t. They require a variety of plants and multiple layers of canopy to forage and nest.
Buffers Noise	Tree canopies dampen sound by intercepting sound waves.