

# BENEFITS OF TREES

Beyond their obvious aesthetic contribution, trees add significantly to the quality of life in Harpers Ferry by providing substantial environmental, energy conservation, economic and health-related benefits.

***Air quality:*** trees intercept airborne particulates and take up gaseous pollutants.

***Water quality:*** trees reduce pollution in waterways and groundwater by using up excessive nutrients in runoff.

***Stormwater management:*** trees reduce peak stormwater runoff, stream channel erosion, and the costs of stormwater runoff control. Urban areas having a 30 percent tree canopy can reduce stormwater runoff by 17 percent. (Should see what coverage we have and put that in instead since we may have better canopy coverage.)

***Climate:*** trees moderate temperatures and offset heat island effects by reducing air temperature, air movement and solar radiation. and by increasing humidity,

***Energy:*** trees reduce energy needs and costs of cooling and heating.

***Soil resources:*** trees stabilize soils and reduce soil erosion.

***Wildlife:*** trees provide essential habitat for birds, squirrels and other critters, bringing stability through diversity to the urban environment.

***Visual relief:*** trees help frame views and vistas, add diversity to manmade landscapes, and soften or screen otherwise stark urban settings.

***Recreation:*** trees provide greenways which afford much needed opportunities for active and passive recreation in urban settings. They are a vital feature in parks and provide welcome shade to summer sidewalks.

***Cost benefits:*** Some of the cost benefits of trees can be quantified. For example, a U.S. Forest Service study showed that large trees can increase real estate values by up to 20 percent. At maturity, as few as three trees planted near each home in a community can reduce residential air conditioning demand on a hot summer day by 10-15 percent.

For more information on the benefits of trees, visit this website:

<http://www.pubs.ext.vt.edu/420/420-181/420-181.html>