



ENVIRONMENTAL BENEFITS

PARK AND OPEN SPACE BENEFITS

Acquiring land for parks and open spaces helps assure the long-term preservation of environmentally significant land, which in turn:



Reduces Flooding

- Natural areas reduce the rate and volume of stormwater runoff, which reduces the incidence and the severity of flooding and erosion
- Stream flows decrease by 3.7% for every 1% increase in protected wetland along a stream corridor

Source: Illinois State Water Survey, 1993

A community near Boston purchased or protected 8,000 acres of wetlands along the Charles River. These wetlands were capable of containing 50,000 acre-feet of water and were an alternative to a \$100 million system of dams and levees. The loss of these wetlands would have caused an estimated \$17 million in flood damage annually.

"Economic Benefit Report," 1999
Trust for Public Land

Protects the Biological Diversity

- Protects wildlife and plant communities
- Accounts for the variety of species, genetic variability, and variety in ecosystems
- Human life is solely dependent on the amount of biodiversity in an area
- Nature's way of ensuring the survival of species and ecosystems

Enhances Water Quality

- Natural vegetated areas safeguard the quality of surface and groundwater by reducing the sediment load that enters an area's waterways and by filtering out toxins and excess nutrients
- Parks and open spaces provide natural water filtration that can permit communities to avoid other expensive alternatives for drinking water protection.

In New York City, \$1.5 Billion was spent to protect 80,000 acres of an upstate watershed as an alternative to an \$8 billion water filtration plant that would have been needed if the lands had been developed.
"Economic Benefits Report," 1999
Trust for Public Land

Enhances Air Quality

- Natural vegetated areas promote air cleanliness by reducing the amount of carbon dioxide in the air and by producing oxygen
 - A typical tree provides \$196,250 worth of ecological benefits including air purification and oxygen formation
- Source: G. Tyler Miller, Jr. *Living in the Environment*, 1998

