## The New River Valley Green Infrastructure Initiative: What Does Green Infrastructure Look Like?

Green Infrastructure is our Community's Natural Life Support System. An interconnected network of land and water that contributes to the health, economic well being & quality of life for communities & people.

> Corridor Natural Cover Developed Gap Agriculture or Lawn Gan

Barren Gap 8-digit Watersh Boundary

Chesapeake and Coastal Bays

# Green infrastructure networks are found at every scale:

#### Parcel or Site

- Designing homes and businesses around green spaces
- Creating community open spaces
- Clustering units in new residential developments
- Linking parcels to the greater community using trails or greenways

#### **Community Scale**

- Creating greenways that link existing parks and green spaces, providing alternative transportation routes and access to recreation
- Setting aside buffers along rivers and streams that protect against flooding
- Creating greenways networks
- Buffering land uses with compatible growth

#### **Regional or Statewide**

- Encourage compatible uses adjacent to agricultural areas, national forests, and state parks
- Seek out connections to conservation lands and other natural areas



#### A Green Infrastructure Network may include:

- **\***Water Resources
- Working Lands
- Outdoor Recreation and Trail Networks
- **\***Cultural Resources
- Natural Areas
- Conservation Lands

# What are the initial steps to develop a Green Infrastructure Network?

- Educate interest groups about the green infrastructure process and organize around a shared vision and goals
- Conduct an inventory of the area's natural and cultural resources
- Identify which resources provide services to the public (clean air and water, flood protection, recreation, food and energy production, etc.)
- Link key landscape features and designate optimal areas for new growth and development to occur

What does YOUR Green Infrastructure look like?



Appalachian Trai





Farms



Jefferson National Forest

#### For more information please contact:

Regina Elsner, New River Valley Planning District Commission (540) 639-9313 or relsner@nrvdc.org

Town of Pearisburg

### Benefits of Conserving and Sustaining our Green Infrastructure in the New River Valley

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#### **Ecosystem Services**

In the Delaware Valley, urban forests remove <u>1.7 million</u> <u>pounds</u> of air pollutants each year, at an estimated <u>value of</u> <u>\$3.9 million</u>.

The Charles River Basin located in Massachusetts, contains 8,534 acres of freshwater marsh & wooded swamp resulting in <u>\$95</u> million in annual economic benefits that includes:

- \$40 million in flood damage prevention
- \$25 million in pollution reduction

In New York City, the installation of a water treatment plant costs <u>\$6-8 billion vs. \$1-1.5 billion</u> over 10 years to protect the Catskill, Delaware & Croton watersheds, which together deliver 1.3 billion gallons of water per day.

### Economic Benefits

**Providing ecological services** that save local governments and state agencies millions of dollars by not having to construct manmade structures.

#### Examples include:

- Supply clean drinking water
- Mitigate droughts and floods
- \* Removing air pollutants
- Detoxify and decompose wastes
- Habitat for fisheries

#### Sustaining working lands for forestry and

**agriculture** that provides opportunities for resourcebased livelihoods, local food production, and maintains the rural character of the New River Valley.

Providing trails and sites for nature-based recreation and tourism, which translates to millions of tourist dollars every year.

Offering natural and restored green settings for growth and development that provide economic benefits to landowners while attracting new residents and businesses.



green spaces that provide gathering places and accessible areas for relaxation and recreation.

Trails and sites for nature-based recreation that support activities to improve physical and mental health while helping residents and visitors re-connect with nature.

Opportunities for land stewardship projects such as planting trees and restoring river banks.





#### Natural Functions and Values

Sustaining air and water resources; water is purified as it flows through wetland floodplains or filters through forest soils into the

ground

survival

Supporting native wildlife and plants as well as the habitats they depend on for What does YOUR Green Infrastructure look like?



New River



Above Angel's Rest



Buffalo Mountain



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Town of Blacksburg