



Canaan Valley Institute



Canaan Valley Institute was created as a nonprofit, non-advocacy organization in 1995 to provide local residents with the information and technology they need to make decisions impacting their environment and economy.



Canaan Valley Institute

Who We Are

Outreach

Education



Science &
Technology

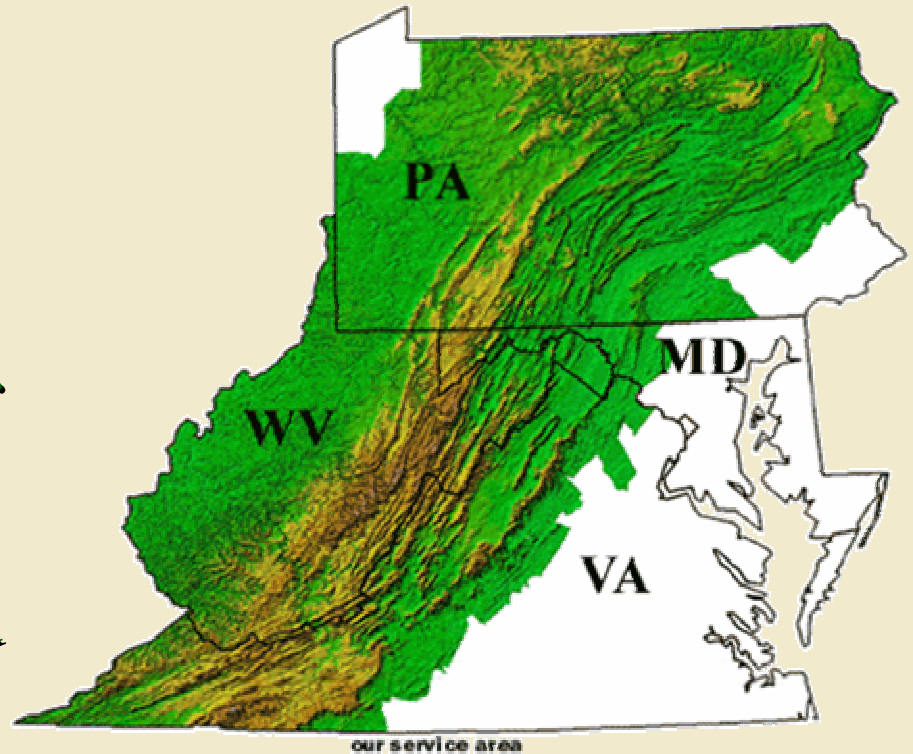
Operations



Canaan Valley Institute

Where We Work

When invited, CVI provides assistance throughout the Mid-Atlantic Highlands, which includes parts of Pennsylvania, Maryland, Virginia and all of West Virginia.





Canaan Valley Institute

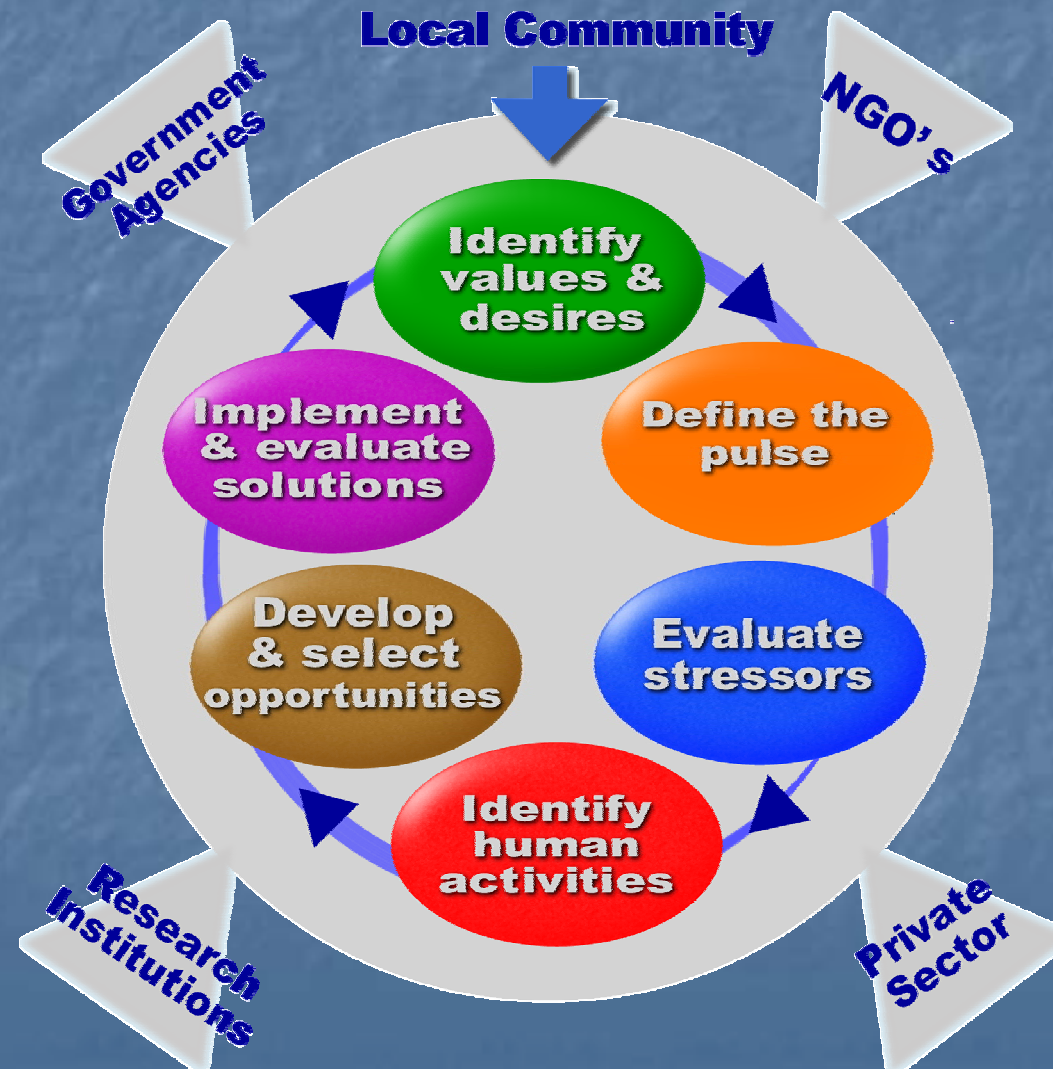
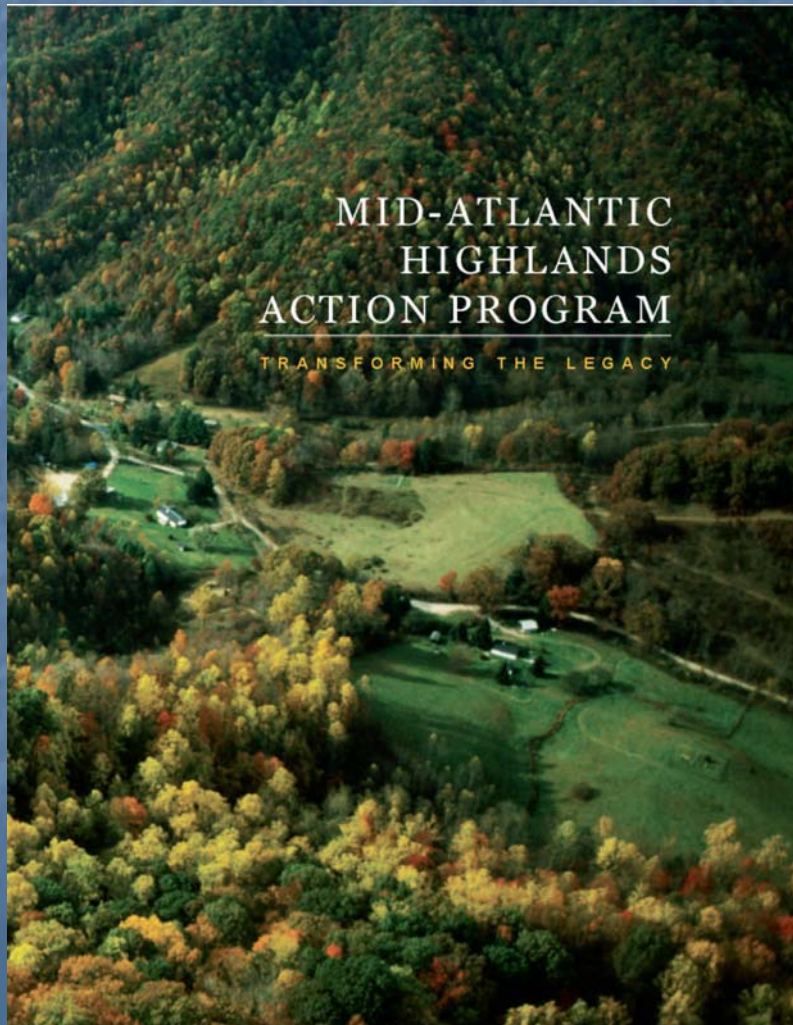
Employing a Multi-Disciplinary Approach

- Organizational development and capacity building
- Watershed education and technology transfer
- GIS and remote sensing
- Conservation and restoration project implementation

Highlands Action Program-- Background

- ✓ 2001 Congressional language called for EPA to establish HAP
 - Language for HAP continues in EPA legislation
 - CVI cited as a logical partner because of its community watershed focus and experience
- ✓ CVI produced report to:
 - Show need for HAP
 - Recommend stakeholder driven approach for HAP

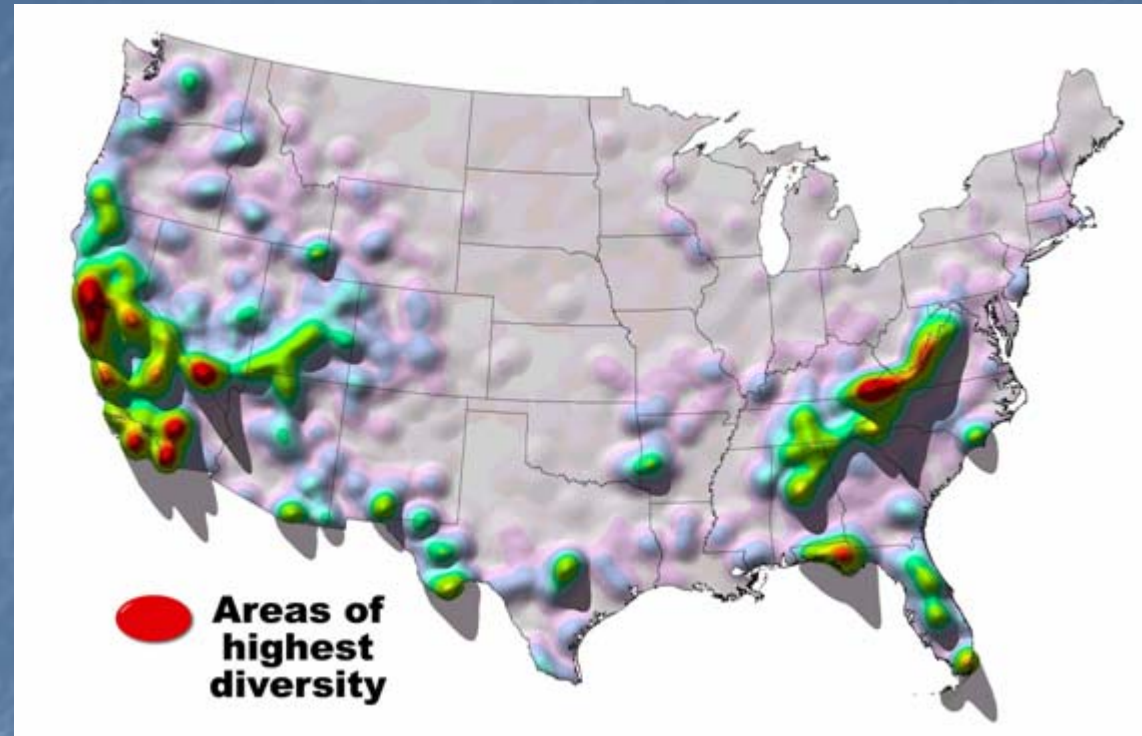
Highlands Action Program: *Transforming the Legacy*



The Highlands--A Special Place

✓ Biodiversity

- Terrestrial and aquatic diversity
- National hotspot



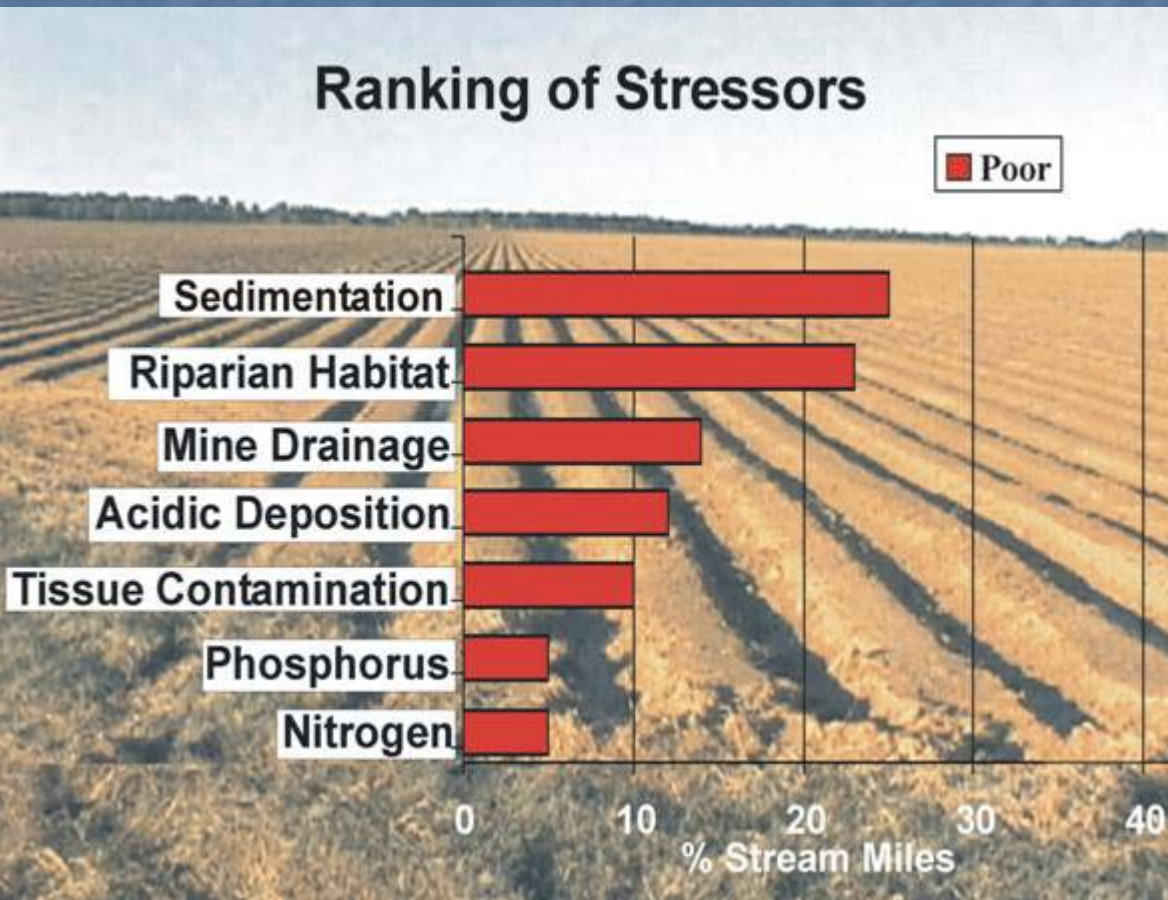
- ## ✓ Economic importance of natural resources
- Tourism—\$26 billion/year
 - Forestry—\$11 billion/year and 186,000 jobs
 - Energy—coal, oil, natural gas, and wind

The Mid-Atlantic Highlands--Pulse

Biological Indicators	% Good	% Fair	% Poor
Landscape	53	39	8
Birds (BCI)	43	36	21
Fish (IBI)	17	36	31
Aquatic Insects (EPT)	25	48	27

- ✓ Roughly 50% of Highlands landscapes are not in good condition
- ✓ Roughly 70% of stream miles are not in good condition

The Mid-Atlantic Highlands--Stressors

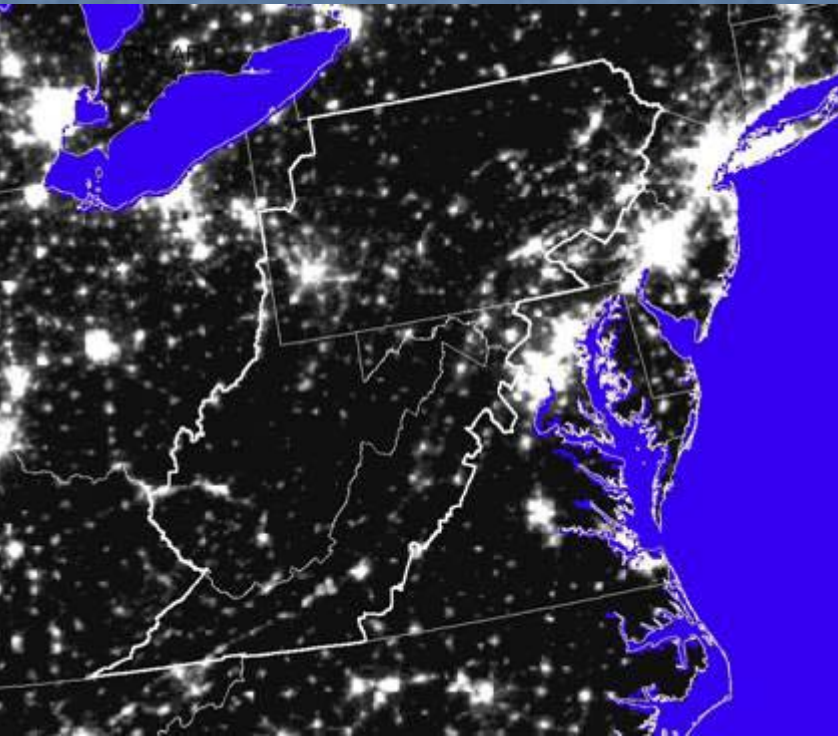


✓ Water Quality Stressors

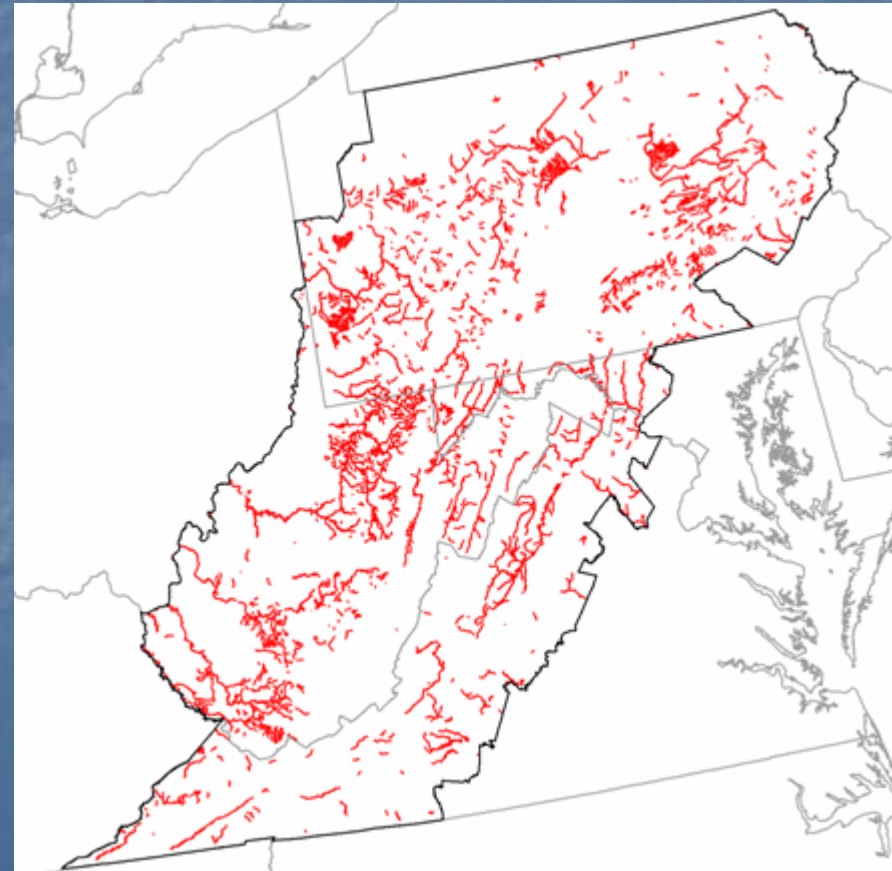
25% stream miles impaired by sediment
22% by loss of riparian habitat

From: US Environmental Protection Agency. (2000). *Mid-Atlantic Highlands Streams Assessment*. US Environmental Protection Agency, Washington, DC. EPA/903/R-00/015

The Mid-Atlantic Highlands-- Human Activities



✓ Urban Infringement & rural sprawl fragment natural areas



✓ Assessed streams not meeting standards are shown in 303(d) Stream Listings

The Mid-Atlantic Highlands-- Economic Conditions

- ✓ High rates of children in poverty
- ✓ Low educational attainment
- ✓ High unemployment rates
- ✓ Low labor force participation rates
- ✓ Low per capita income

Consequences

- Environmental justice issues
- Emigration of working-age population

Opportunities for Stewardship--Create a Restoration Industry

Direct and indirect number of jobs per \$ million spending in different industrial sectors

Industrial Sector	Direct Jobs/\$ million	Indirect Jobs/\$ million	Total Jobs/\$ million
Aquatic Ecosystem Restoration	13.0	17.0	30.0
Road Construction	9.5	14.8	24.3
Utility Construction	6.1	19.7	25.8
Defense Contractors	10.2	10.5	20.7

✓ Restoration spending creates more jobs than road construction, utility construction, or defense contracts

✓ Restoration industry needs the region's skilled workers



Highlands Action Program— Tangible Outcomes

- ✓ 18,000 stream miles will be revitalized
- ✓ 5000 square miles of forest will be revitalized
- ✓ 105,954,000 ton/yr reduction in sediment load
- ✓ 3000 jobs will be created



Highlands Action Program—Moving Forward

Because of CVI's experience, HAP is the next generation of geographic programs—a large scale cooperative initiative in which states and locals have a *serious role* and in which *environmental outcomes* are the leading measures of success.

