Open Space Institute

Resilient Landscapes Initiative

Potomac Headwaters of Virginia and West Virginia

Facts

Total Acres: 1,028,104

Total Conserved Acres: 205,643

Resilient Acres: 619,063

Important Geology Types: Limestone, moderately limestone and shale

Noteworthy species: brook trout, Harperella mussel, Indiana bat and Virginia big-eared bat

Key Rivers: South Branch of the Potomac, Lost and Cacapon Rivers

Potomac River, West Virginia; Photo: Ed Neville, Potomoc Conservancy

Contact

Potomac Headwaters of Virginia and West Virginia

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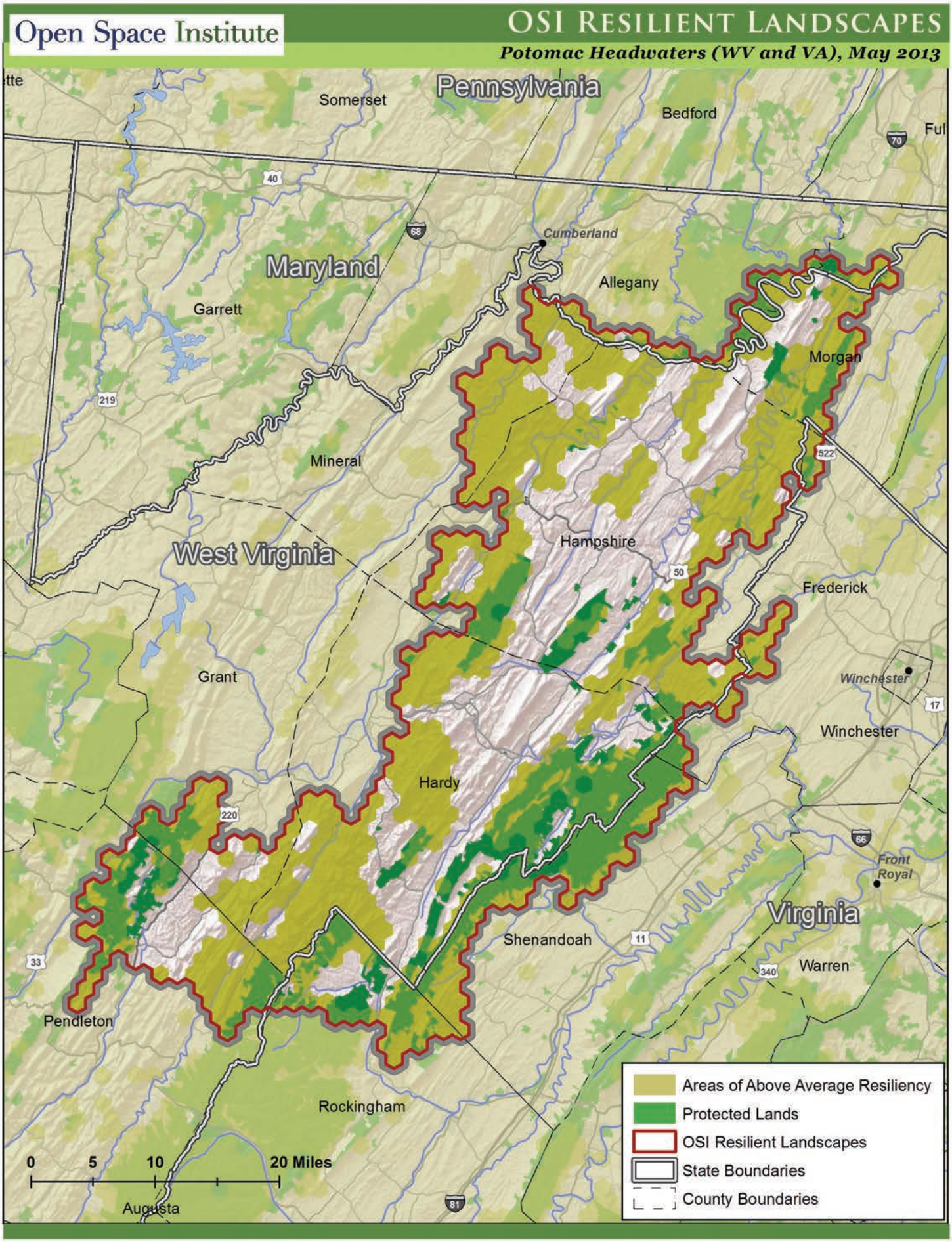
Howards Lick Run, Lost River State Park; Photo: Ed Neville

The Potomac Headwaters of Virginia and West Virginia region is one of four landscapes across the Northeast and Mid-Atlantic that are strongly positioned to facilitate wildlife adaptation to climate change, according to the Open Space Institute's analysis based on data from The Nature Conservancy's *Resilient Sites for Terrestrial Conservation*. Resilient landscapes are natural strongholds that are potentially resistant to drought, flooding, rising temperatures and other threats associated with climate change, providing habitat for a variety of plants and animals and benefits, such as clean water, for humans.

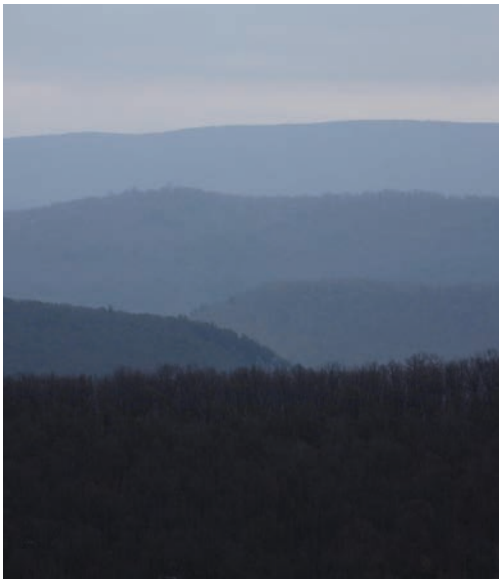
Decision-makers can use this resiliency science to identify places to conserve today that will likely support a diversity of plants and animals tomorrow as the climate changes. The four landscapes, chosen from among a dozen that OSI evaluated using this new data, contain unprotected climate resilient habitat, strong nonprofit capacity and potential matching funds for conservation. All four areas are eligible for land protection grants and technical assistance through OSI's $6 million Resilient Landscape Initiative.

What is a Resilient Landscape?

Based on more than a decade of research, TNC has found that sustaining species diversity across the landscape depends on the geology types below ground and the complexity of associated landforms above ground. The more complex the site, the more species will be able to take advantage of the micro-climates available among the slopes, cliffs, valleys, ravines, caves and lowlands of a complex landscape. Local connectivity — or absence of roads, buildings and other infrastructure — is also important since species need to be able to access the complex features. Together landform complexity and local connectivity indicate the most resilient examples of each geology type. At its heart, this science is based on the idea that while we cannot predict exactly how species and habitats will respond to climate change, we can identify places that provide the greatest climatic options for the greatest number of species.


Open Space Institute
OSI Resilient Landscapes
Potomac Headwaters (WV and VA), May 2013
Pennsylvania
Somerset
Bedford
Maryland
Garrett
Allegany
Cumberland
Morgan
Mineral
West Virginia
Hampshire
Frederick
Grant
Winchester
Winchester
Hardy
Front Royal
Virginia
Shenandoah
Warren
Pendleton
Rockingham
Augusta
0 5 10 20 Miles
Areas of Above Average Resiliency
Protected Lands
OSI Resilient Landscapes
State Boundaries
County Boundaries

South Branch of the Potomac, West Virginia; Photo: Kent Mason



Cacapon, Potomac Headwaters; Photo: Tom Cogill

Why the Potomac Headwaters of Virginia and West Virginia?

The Cacapon/Lost Rivers and the South Branch of the Potomac are the two least-developed major tributary watersheds of the main stem of the Potomac, giving them a vital role in feeding freshwater to the Chesapeake Bay. They are renowned among other things for their biodiversity. This one million acre landscape is a haven for four federally endangered species, including more than 40% of the world's Virginia big-eared bats and the largest single colony of Indiana bats. It harbors more than 120 state rare plant and animal species, and more than 40 species of greatest conservation need in West Virginia. Trout Unlimited has identified at least 22 large patches of quality native eastern brook trout habitat that are dependent on the protection of more than 93,000 acres across the landscape. And 1,000-foot deep Smoke Hole Canyon contains what may be the largest area of unique, under-protected limestone forest left in the Central Appalachians, supporting many rare plant communities.

Approximately 60% of the landscape scores above-average for resilience and the elevation range spans from approximately 500 feet to over 3,775 feet. Twenty percent of the landscape forms a strong foundation of protected lands, including the George Washington and Monongahela National Forests as well as over 30,000 acres of state lands. A small but strong land trust community maintains a presence in the region. Significant human uses of the landscape include agriculture in valleys, hunting on mountain slopes and ridges, and a variety of outdoor pursuits in places like Spruce Knob Seneca Rocks National Recreation Area. These attractions, along with new major highway and potential wind energy development, will require focused sustained effort to protect the landscape's remaining large blocks of intact and forest.

Resilient Landscapes Initiative

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Appalachian Mountain Club

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North Atlantic Landscape Conservation Coordinator
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American Bird Conservancy

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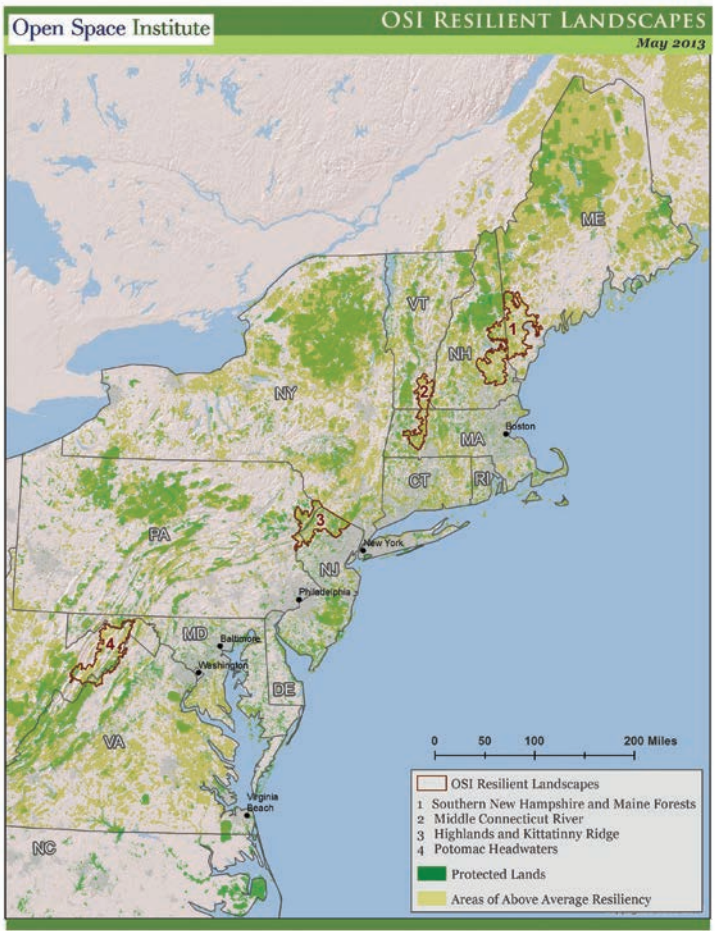

OSI Resilient Landscapes Initiative Capital Grants

Through the Resilient Landscapes Initiative, OSI will provide $5.5 million in capital grants within four targeted areas. OSI will award matching grants to projects that permanently protect resilient habitat through the acquisition of land or easements. OSI will solicit grant proposals through a competitive Request for Proposals (RFP) and, with help of an Advisory Committee, review applications against ecological and transactional criteria.OSI announced the initial RFP in June 2013 and additional rounds will be announced approximately every six to nine months through September 2015. Please go to OSI's website for more information: www.osiny.org/ResilientLandscape.

Outreach and Education

OSI will further enhance the capacity of land trusts and public agencies to respond to climate change through focused outreach and education efforts. We will provide data on resilience and make grants to land trusts and provide technical assistance to public agencies in focus areas to integrate resiliency science into conservation plans. Grants will be made by invitation.

The Open Space Institute protects scenic, natural and historic landscapes to provide public enjoyment, conserve habitat and sustain communities. Founded in 1974 to protect significant landscapes in New York State, OSI has been a partner in the protection of nearly 2.2 million acres in North America.

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