

# Maryland's Healthy Forests

Keeping the Central Appalachians Connected and Resilient



Small farms dot the forested hills of the Central Appalachians in Western Maryland. © Kent Mason

The Central Appalachians are the water tower for the mid-Atlantic. The mountain forests naturally filter and protect the headwaters of the Potomac River, source of drinking water for millions of people in the D.C. metro area. These same forests are also one of the most biodiverse ecosystems in the world, providing habitat for more than 200 globally rare plants and animals. However, our forests are vulnerable. A legacy of hundreds of years of under-regulated timber and mineral extraction have changed the Central Appalachian landscape forever. Today, the rapid increase in energy development in the region is accelerating forest fragmentation as large corridors of land are cleared. And an uncertain future in the face of climate change will introduce both known and unknown challenges to this fragile ecosystem.

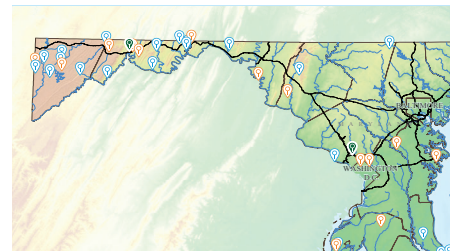
Science tells us that the forests of the Central Appalachians will play a critical role in preserving biodiversity as climate change alters natural areas and weather patterns. These forests are resilient and adaptable, as long as they stay connected, protected and responsibly managed. Although Western Maryland occupies only a small slice of the Central Appalachians, it is a critical slice. Our models show that the forests of Allegany and Garrett counties in Western Maryland are a critical migratory corridor for hundreds of plants and animals. To conserve this priority area the Maryland/DC chapter uses science to better understand these forest ecosystems and the threats they face; we use best-in-class management to keep the forests healthy and resilient; and we rely on people to understand the value that these forests provide as a natural resource and source of clean drinking water.

**2** **MATURE TREES**  
Needed to provide oxygen  
per person, per year

**50%** **OF FRESH WATER**  
In the U.S. comes  
from forests

**200** **GLOBALLY RARE SPECIES**  
Live in the Central Apps

## Where We Operate



The Nature  
Conservancy 

## Our Solutions

Our goal is to protect and restore healthy, connected forests that can enable habitats, wildlife and communities to thrive. We use science to better understand overall forest health and resilience. We rely on decades of land management experience to improve forest health. We engage and educate the youth so that our forests stay connected and healthy for future generations.

### Science

We use the land we own as living laboratories; making discoveries that we translate into best management practices. This enables us to achieve conservation at scale through influence and sharing with other forest landowner partners.

### Management

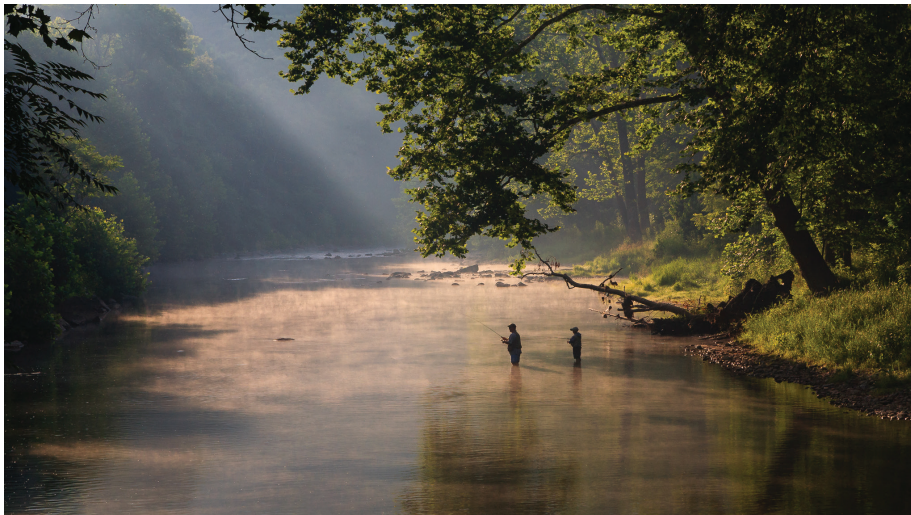
State forests and TNC forests make up roughly 1/3 of the total forested acreage in Western Maryland. The remaining acres are owned by private landowners. We have created focused strategies to include both public and private forest landowners in our mission to keep the Central Appalachians healthy and connected.

### People

The demand for environmental specialists is expected to grow 15 percent by 2022, outpacing the national employment average. The MD/DC chapter is inspiring and empowering the next generation of conservation leaders through internship programs in Western Maryland communities.




## Your Support Makes a Difference

With your support, we will keep the forests of the Central Appalachians connected and healthy so that our local communities and natural habitats can continue to thrive in the face of a changing climate.



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**The Nature Conservancy in Maryland/DC**  
425 Barlow Place, Suite 100 Bethesda, MD 20814  
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TNC burn boss Gabe Cahalan supervises a controlled burn at Sideling Hill Creek preserve. © Matt Kane/TNC

## Good Fire

One important way that we maintain forest health is through prescribed fire. Many species of plants and trees have evolved to be fire-adapted, and may not grow or disperse their seeds until after a forest has burned. Fire also removes woody debris from the forest floor and helps control invasive species.

Fire suppression in Western Maryland began around the turn of the 20th century, when the population was growing, and fire was perceived as a destructive force. We now know that the Western Maryland forests have adapted to the persistent presence of fire and the lack of fire has made them less healthy and more vulnerable.

Our team has completed rigorous training, making us a leader within the Fire Learning Network (FLN), a TNC initiative that engages partners to accelerate the restoration of landscapes that depend on fire. We have been burning on the Eastern Shore for decades. Now, science has guided us West and we are conducting burns on TNC lands in the Appalachians.

The Nature Conservancy 