

# Northwest Biocarbon Initiative

The need to develop viable climate solutions that cut atmospheric carbon levels grows increasingly urgent with the acceleration of human-caused climate change.

**BIOCARBON:** Plant life and healthy soils contain carbon and absorb carbon from the atmosphere, helping to reduce CO<sub>2</sub> pollution that is destabilizing our climate.

Rapid transition from fossil to clean energy is vital to halt rising atmospheric carbon dioxide levels, now over 390 parts per million. But emerging science indicates we have already crossed the danger line. We must reduce CO<sub>2</sub> concentrations to 350 ppm or below by also mobilizing the biosphere to help bring CO<sub>2</sub> levels back down to an acceptable level.

**The Northwest Biocarbon Initiative (NBI)** is designed to position the Northwest as the nation's leading laboratory and incubator for biocarbon solutions. NBI's purpose is to advance cutting-edge model policies and practices to store carbon in forests, farms and communities.

NBI is a Climate Solutions program, in partnership with the region's leading conservation groups, focused on demonstrating the essential role that natural systems can play in reducing CO<sub>2</sub> levels in the atmosphere to ensure long-term climate stability.

The Northwest offers rich forest and agricultural resources, a strong pool of innovators, a pioneering role in landscape conservation, advanced land use and green infrastructure planning. Strategic biocarbon projects have *multiple benefits*. For example: improving wildlife habitat and public access to green spaces, protecting water quality and ecological values, reducing pollution, controlling storm water and buffering against temperature and precipitation extremes driven by climate change.

## WHAT ARE BIOCARBON SOLUTIONS?



Biocarbon solutions are about harnessing living systems to absorb CO<sub>2</sub> from the atmosphere into the world's trees, plants and soils and reducing the pollution load that is destabilizing our climate.

To be effective, biocarbon strategies must complement the other essential goal: rapidly phasing out fossil fuel burning — the prime driver of climate destabilization — while delivering multiple environmental, economic and climate adaptation benefits that make solutions salient, profitable and enduring. This is a new lens for sustainability innovation.

## NBI STEERING COMMITTEE

[American Farmland Trust](#)

[Bullitt Foundation](#)

[Climate Solutions](#)

[Conservation Northwest](#)

[Ecotrust](#)

[Pacific Forest Trust](#)

[The Climate Trust](#)

[Washington Environmental Council](#)

[Wilburforce Foundation](#)

The science and art of biocarbon solutions need strong investment and great attention in the next few years.



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## Biocarbon solutions include:



**Forest management strategies** that shift acres from industrial monoculture and short-rotation models to longer-rotation, whole-system approaches that deliver a spectrum of ecosystem services;



**Agriculture and rangelands strategies** that shift acres from maximizing short-term profit while mining soils, to approaches that build carbon-rich soils and long-term fertility;



**Community development and public engagement strategies** that inspire people and their institutions to convert acres of parking, pavement, barren rooftop and input-demanding grass lawns into more carbon-rich alternatives such as park-and-nature intertwines, eco-landscaping, lawn conversions, green roofs, green redevelopments and green infrastructure.



**Bioeconomy strategies** that transform organic wastes from cities, industries, farms and forests into valuable bioproducts. Composts and biochar return carbon to the soil, while bioenergy and biochemicals replace fossil carbon products.

NBI sees the Northwest as an ideal place for biocarbon leadership. The region offers tremendous biocarbon potential and is home to some of the most innovative foresters, farmers, researchers and community leaders working to optimize our landscape's potential to soak up carbon.

### WHAT WILL THE NORTHWEST BIOCARBON INITIATIVE DO?

NBI will demonstrate the essential role that natural systems can play in reducing carbon dioxide levels in the atmosphere and help the Pacific Northwest develop catalytic, world-class initiatives to build the biocarbon economy. **NBI will:**



**Champion** the stories of real Northwest people and communities whose projects are capturing carbon from the atmosphere and fixing it in living plants and soils in ways that save money and do better by the environment;

**Cultivate** revenue streams and public policies that ensure good biocarbon projects make good business sense – the key to widespread adoption;

**Foster** collaborations to advance the state-of-the-art mapping of biocarbon potentials and best practices, which can differ greatly place-to-place, and to increase public understanding of biocarbon;

**Position** the Northwest as the nation's leading laboratory and incubator for biocarbon solutions, and help draw resources to the region to sustain our cutting-edge leadership.

The Northwest Biocarbon Initiative is a project of

