

Beaver Benefits

Beavers and Carbon

Wetlands are known worldwide for their ability to capture and store carbon. Beavers can transform creeks into wetlands that capture carbon. New beaver wetlands bank the most carbon; however, beavers also increase carbon storage in existing wetlands by trapping more sediment behind their dams and expanding the area under water.

Beaver wetlands help store carbon in many ways:

Why is this important?

Carbon is a building block of life, but too much in the atmosphere can destabilize the complex systems that maintain life on our planet. Carbon capture refers to any process that pulls carbon from the atmosphere and stores it on or in the earth. As the amount of carbon in our air increases with the burning of fossil fuels, beavers are an effective partner in capturing and storing carbon at scale, for free.



Wetlands increase vegetation growth, which captures more carbon from the air

Beavers build and expand ponds, increasing the dissolved carbon stored in the water

DISSOLVED ORGANIC CARBON

DISSOLVED INORGANIC CARBON

Without air, organic material in sediment, wood, or dead vegetation does not decompose, trapping carbon for longer

Beaver dams trap carbon-rich sediment at the bottom of ponds

What happens when beavers leave?

Beavers do it best! The changes beavers make can persist on the landscape for an extraordinarily long time. Although active beaver wetlands are best for storing carbon, carbon remains trapped even if the beavers leave. Abandoned dams can still retain lots of sediment, storing carbon storage in the land for many years.

For more information and references visit: projectbeaver.org

