

## United States: The GreenTrees Program

Reforestation of the Mississippi Alluvial Valley



Certification:



### Key Facts



## Background

The Mississippi Alluvial Valley (MAV) is the historic floodplain of the lower Mississippi River. It borders seven U.S. states, from Missouri in the north to Louisiana at the river delta in the south. Once a heavily forested area, the river plain has changed dramatically during the last decades. About 80 percent of the original forest cover has been cleared for agricultural and other land use purposes.

Deforestation of the Mississippi Alluvial Valley has resulted in a decline in the quality of water and wildlife in the watershed due to the loss of its natural flood control buffer. Restoring the forests would lead to massive ecological benefits.



## The Project

The project aims to plant 1.000.000 acres of forest in the region, divided up into multiple planting years. It includes the planting of cottonwoods and native hardwoods on lands that have been used continuously for agricultural purposes over the last decades. Landowners commit to protecting the trees and harvest is only allowed when the trees have grown up to the point that crowding may cause some trees to die.

The project generates approximately 200 tons of CO<sub>2</sub>e reductions for every acre of successfully established forest. Carbon finance mechanisms have been considered to be critical in order to present conservation as a profitable land use and steer landowners away from traditional agricultural practices which degrade the local ecosystem.

The GreenTrees Program is the first forestry project approved by the American Carbon Registry.

### Location:

Mississippi Alluvial Valley, USA

### Project type:

Afforestation/Reforestation

### Total emission reductions:

»» 276,000t CO<sub>2</sub>e p.a. ««

### Project standard:

American Carbon Registry

### Project start date:

January 2008

## Sustainable Development

By supporting this project you'll contribute to the following Sustainable Development Goals:

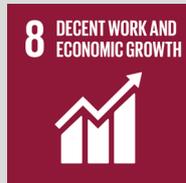


**SUSTAINABLE DEVELOPMENT GOALS**

While focusing on reducing greenhouse gas emissions, all our projects also generate multiple co-benefits. These are supportive of the United Nations Sustainable Development Goals.



**Clean water and sanitation**  
The project contributes to a great improvement of water quality. It minimizes soil erosion, absorbs farm chemicals from surface runoff and groundwater, and reduces sediment and pesticide contamination of streams.



**Decent work and economic growth**  
The project provides income to struggling farmers and landowners through the combination of carbon offset revenues and private capital investment. It also generates jobs for harvesters and wood processors for those landowners that are allowed and opt for these activities.



**Sustainable consumption and production**  
Biomass from the forests harvested in accordance with the project's specifications, for example deriving from timber thinning, can be used for energy generation or other purposes.



**Climate action**  
Woodland and forests are, aside from oceans, the most important CO<sub>2</sub> reservoirs on earth. By restoring forests, the project will significantly aid carbon sequestering and thus help to slow down climate change.



**Life on land**  
Reforestation restores the natural habitat for a series of species. The MAV is a flyway for 60% of all birds in North America; almost 40% of America's waterfowl migrate along it. It has been estimated that the type of planting performed in this project holds twice the amount of birds than other forms of reforestation.



## Technology brief – how it works

This project aims at reforesting 1 million acres. It achieves greenhouse gas emission reductions through utilizing one of the main functions of trees vital for the balance of the ecosystem of the earth: their ability to absorb carbon dioxide. Carbon circulates within a cycle consisting of the atmosphere, the plant, plant litter and the soil. Carbon dioxide draught from the surrounding atmosphere is a main input of any plant's photosynthesis processes.

The outputs are water, oxygen and carbohydrates. The latter are built into the plant's fibre and thereby fix carbon in the plant's biomass. Ultimately, the carbon re-enters the atmosphere from decaying biomass litter or soil respiration.



## Project Standard



The American Carbon Registry (ACR) was founded in 1996 as the first private voluntary greenhouse gas registry in the world. The ACR creates confidence in the environmental and scientific integrity of carbon offsets in order to accelerate transformational emission reduction actions. The ACR Forest Carbon Project Standard v 2.1 details requirements and specifications for the quantification, monitoring, and reporting of forest project-based greenhouse gas emission reductions and removals, methodological acceptance, verification, registration, and issuance of offsets for trade in the global voluntary and U.S. pre-compliance carbon markets.

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