Nature-based Stormwater Strategies work for WORKING LANDS

Nature-based Stormwater Strategies for working lands include restoring and replicating wetlands to retain and filter runoff and utilizing buffers and water control techniques to capture, store and infiltrate rain. Nature-based strategies restore the natural hydrology and the capacity of the land to reduce flooding and naturally treat runoff from adjacent farm and forest lands.



This converted wetland was restored to its natural stream bed hydrology to collect runoff from adjacent working lands.

Nature-based Stormwater Strategies

Water Control Structures

These structures control the volume and discharge of runoff which reduces flooding, erosion and pollutants.

Wetland Restoration

Wetlands store floodwaters, improve water quality and maintain surface water flow.

Vegetated Buffers

Grassed and tree-lined buffers slow and filter stormwater runoff, reducing flooding by enhancing infiltration.



Nature-based Stormwater Strategy Project Examples

Mattamuskeet Drainage Association

Local land owners and farmers are managing agricultural runoff by directing it to restored wetlands.



Lux Farms, a part of the Drainage Association, implemented practices like ditch plugs to stop unintentional drainage into local waterways.

Purlear Creek, Wilkes County

The NC Forest Service restored and enhanced a perennial stream and wetlands on land that was previously a hay pasture.



This channel was restored to reduce sediment erosion and provide habitat for riverine species.

North River Wetlands Preserve

Replicating natural hydrology on farm and forest lands addresses flooding and water quality challenges.



Restoring farmland in Carteret County allows for other land uses, such as hunting, while improving water quality.

Lake Mattamuskeet

A Watershed Restoration Plan has been implemented in order to protect farmland, reduce residential flooding, and improve water quality.



The Plan was developed by stakeholders as a framework to manage the watershed using nature-based strategies.

Why use Nature-based Stormwater Strategies?

"Conservation practices improve onfarm nutrient cycling and infiltration, and active drainage management helps improve watershed-scale flood resilience."

Joey Hester, Nonpoint Source
Planning Coordinator
N.C. Department of Agriculture and
Consumer Services

"You take the water coming off the farmland and put it onto the wetlands, let the wetlands filter it, and then none of the water has to leave the property. By all of us working together we have commercial farm property, but we've got incredible wildlife property too."

Gene Fox, former representative for Mattamuskeet Ventures

"These projects maintain working land drainage while providing habitat and clean water. This balance is critical because a man's drainage is just about the most important thing that there is."

Mac Gibbs, former director Hyde County Cooperative Extension

