

## **Roots for Resilience: A new Initiative to Enhance Carbon Storage and Climate Adaptation on Maryland's Lower Eastern Shore**

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The State of Maryland, through funding from U.S. Environmental Protection Agency's Climate Pollution Reduction Grant (CPRG), is advancing nature-based climate solutions to enhance carbon sequestration, conserve stored carbon, and strengthen community resilience to climate-related hazards. The Maryland Department of Natural Resources (DNR) is leading this effort through a new initiative, **Roots for Resilience: Strong Roots for a Changing Landscape**, which focuses on Maryland's Lower Eastern Shore—a region highly vulnerable to climate impacts. This initiative promotes afforestation, improved forest management, and coastal wetland restoration to bolster the landscape's natural capacity to store carbon and buffer against climate stressors.

**Roots for Resilience** builds on existing partnerships and local efforts to restore ecological integrity and engage communities. Key collaborators include our local nonprofit partners: Audubon Mid-Atlantic, Lower Shore Land Trust, and Eastern Shore Land Conservancy. Our Initiative will move forward tidal marsh restoration projects identified through Audubon's recently published *Marshes for Tomorrow* plan, which targets the restoration of critical habitats for species such as the Saltmarsh Sparrow (and the Black Rail). Our Initiative will also support fisheries restoration for Maryland's rare black-banded sunfish. Additionally, **Roots for Resilience** will restore areas impacted by emerald ash borer ("ash flats") and develop best practices for reestablishing local ecotypes of Atlantic white-cedar, bald-cypress, and shortleaf pine through expansion of the State Tree Nursery.

Land Trust partners will provide tailored community outreach and implement Coastal Resilience Management Plans on agricultural lands, prioritizing properties projected to transition to wetlands. These plans will evaluate ecological benefits and proximity to flood-vulnerable populations. By integrating ecological restoration with community resilience, Roots for Resilience seeks to preserve Maryland's rapidly changing coastal landscape for future generations.