



WCS Climate Adaptation Fund

Supporting on-the-ground projects promoting wildlife adaptation to climate change
2012 Grants List

National Wildlife Federation - WCS Grant: \$250,000

Climate Smart Coastal Impoundments



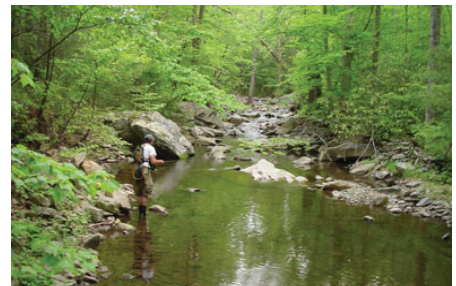
Creating coastal impoundment habitat along the Delaware coast will ensure the long-term survival of species dependent on these rich tidal systems.

The Mid-Atlantic region is facing sea-level rise at three to four times the rate of the global average. Coastal impoundments, which provide fresh and brackish water habitat for multiple species, are at significant risk of being destroyed, threatening species that depend on this habitat. In response, this project will create coastal impoundment habitat inland and upland of an existing threatened impoundment, sharing the lessons learned about the habitat values of their conservation actions across the East coast.

Trout Unlimited - WCS Grant: \$209,800

Securing and Expanding Coldwater Refugia

Selecting coldwater habitats in Virginia and West Virginia for their resilience to the impacts of climate change as well as their recognition as ecological hot spots for aquatic and terrestrial biodiversity, this project will enhance and restore their ecosystem function, providing benefits to a wide range of coldwater dependent species. This work serves as the first place-based application of a recent regional climate vulnerability model and lessons learned will be shared with the larger conservation community to strengthen future adaptation projects.



Removing 15 miles of road and restoring 120 acres of riparian habitat to create needed refuge for fish and wildlife.

The Nature Conservancy Minnesota - WCS Grant: \$236,500

Adaptation Forestry in Minnesota's Northwoods



Restoring harvested forestland using native species likely to withstand a changing climate.

Through the restoration of 2,000 acres of recently harvested forestland using a combination of native tree species likely to persist in warmer, drier conditions, this project will increase the ability of northern forests to withstand a changing climate, while continuing to provide a variety of critical ecosystem services for a species. This work is the first step in helping northern forests transition to an uncertain future and may ultimately influence their adaptive capacity across millions of acres in the Great Lakes region.

The Nature Conservancy Oregon – WCS Grant: \$210,241
Incorporating Climate Change into Tidal Wetland Restoration



Using current climate data to guide restoration of the Kilchis and Miami Rivers of Oregon.

Oregon estuaries contain highly productive habitats that have undergone dramatic and detrimental conversion to farmland, ports and coastal towns. Restoration actions have begun, but climate change impacts threaten to undermine these efforts. Using downscaled climate change data to inform site selection, this project will undertake restoration activities of the Kilchis River Preserve and the recently restored tidal marsh on the Miami River, applying new restoration designs to address the effects of climate change.

The Conservation Fund – WCS Grant: \$162,050
Blackwater National Wildlife Refuge Climate Adaptation Project

Blackwater National Wildlife Refuge is one of the largest protected marsh complexes in the Northeastern U.S. Containing 30,000 acres of tidal marsh, this refuge is a vital part of the Chesapeake Bay's wildlife network. Sea level rise and marsh erosion brought about through climate change are drowning these marshes, threatening this vast, critical habitat. Through the implementation of climate adaptation techniques, this project will improve the persistence and resilience of these vital tidal wetlands.



Improving tidal marshes so these habitats withstand sea level rise and erosion due to a changing climate.

Greater Yellowstone Coalition – WCS Grant: \$51,700
Linking Aquatic and Terrestrial Climate Change Adaptation

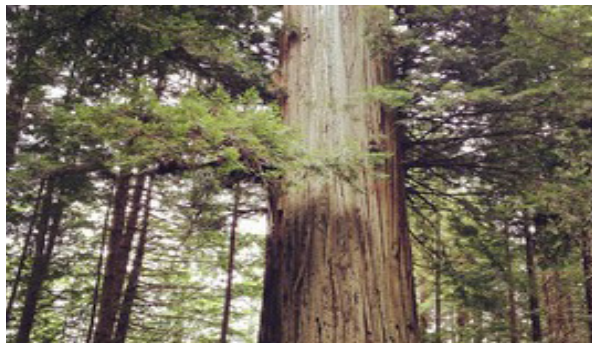


Restoring streams and riparian vegetation will provide needed refuge for species in Southwest Montana.

Regional climate modeling suggests the Madison River watershed in Southwest Montana is likely to experience a significant temperature increase, impacting both aquatic and terrestrial species. To prepare for these changes, this project will restore the headwater reaches of tributaries identified as future cold-water refuges. These same tributaries are sited as future critical connectivity corridors for terrestrial species. Riparian vegetation and cover will be enhanced to facilitate successful movement of species between fragmented patches of wildlife habitat.

The Pacific Forest Trust – WCS Grant: \$200,750

Creating a Connected Conservation Network for Climate Adaptation



Securing protected areas on over 1,000 acres of private commercial forestlands and implementing climate adaptation enhancement test plots on 500 acres to improve the future functionality of this ecosystem.

The Klamath-Cascade Region of California provides an array of habitats for diverse ecological communities with forest diversity alone providing 30 conifer species, a global maximum. In addition, the watersheds in this region are the source of drinking water for 25 million Californians. Using conservation easements to create new, strategically located protected areas on private commercial forestlands, this project will improve ecosystem functionality and adaptive capacity of these forests as climate changes.

The Trust for Public Land – WCS Grant: \$250,000

Protecting and Strengthening Resiliency in the White Mountains

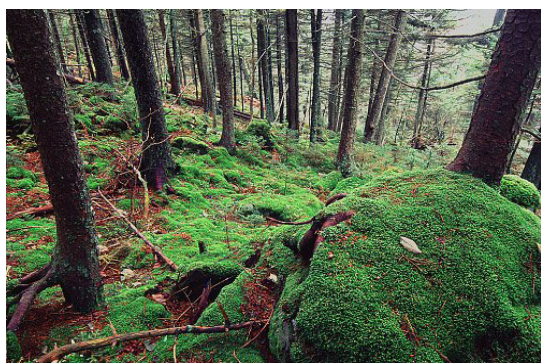
The White Mountain to Moosehead Lake region of New England is the pivotal east-west connector between 12 million acres in the Adirondacks and Vermont and 14 million acres in Maine. Widely recognized as an enduring landscape providing critical refugia for species, this project will use the latest climate science data to inform conservation easement terms and ecological reserve design on more than 18,000 new acres of protected land.



Establishing 18,000 acres of new protected areas using current climate science data.

The Nature Conservancy, Central Appalachians – WCS Grant: \$249,800

Enhancing Adaptation and Resiliency in Red Spruce Ecosystems



Ensuring species thrive through protection and restoration of 1,050 acres of northern hardwood forest.

The red spruce-northern hardwood ecosystem is an important habitat supporting a wide array of rare, threatened and endangered species. As temperatures are predicted to increase, current climate science identifies these high elevation forests as high risk. To ensure their ability to thrive in the future, this project will increase the size, functionality, connectivity, and resiliency of red spruce forest stands through protection and restoration of 1,050 acres and an additional 1.25 miles of headwater streams.

The Sky Island Alliance - WCS Grant: \$92,038
Enhancing Adaptive Capacity of Wildlife in the Sky Island Region

Springs in arid ecosystems occupy a small fraction of the landscape and yet support high levels of productive biodiversity, providing much needed refugia for migratory birds, reptiles and amphibians. Through the restoration of ecological function of nine high-priority springs in the Arizona portion of the Sky Island region of the arid southwest, this project will improve the resilience of this extremely important landscape to climate change.



Improving springs in arid southwest Arizona will increase this habitat's ability to endure changing conditions.

National Wildlife Refuge Association – WCS Grant: \$172,000
Habitat Connectivity and Resilience in Florida's Northern Everglades



Preserving 50,000 acres of the Florida Everglades to provide wildlife habitat and clean water for 8.3 million people.

The Florida Everglades has been named a globally significant biodiversity hotspot and provides the water supply to 8.3 million people, making conservation and restoration of this area essential. This project aims to secure at least 50,000 acres of the highest priority properties in the Everglades Headwaters Conservation Partnership Area and use climate change resilience modeling to inform design of this new 800,000-acre reserve.

Conserve Wildlife Foundation of New Jersey – WCS Grant: \$51,000
Constructing Upland Vernal-pool Habitat to Manage for Sea Level Rise

Vernal pools are isolated, ephemeral wetlands that provide critical habitat for a wide range of species. Climate change induced sea-level rise is projected to inundate significant portions of these ecosystems. To mitigate these risks, this project will create a complex of vernal pools on the Cape May Peninsula to increase connectivity of these habitats, while fostering migration of species toward upland areas.



New vernal pool habitat for a wide range of species will help populations survive changing conditions.