



WCS Climate Adaptation Fund

Working to support on-the-ground projects promoting wildlife adaptation to climate change

2011 Grants List

Hawaiian Silversword Foundation, Inc. - WCS Grant: \$250,000; Project Budget: \$521,200 ***Kanakaleonui Bird Corridor Upslope Restoration***



Creating climate refugia to help native bird species avoid avian malaria.

Hawaii's mid-elevation forests, where most of its native bird species are found, have been warming at a faster rate than regional projections. The birds will need to move upslope to cooler areas to escape from mosquitoes that transmit avian malaria. This project aims to restore 525 acres of forested habitat in the Kanakaleonui Bird Corridor and surrounding lands to provide forest birds a continuous area of native forest that will allow them to move to higher elevations.

Scenic Hudson - WCS Grant: \$50,679; Project Budget: \$101,928

Estuarine adaptation: Protecting and prioritizing freshwater tidal wetland migration zones along the Hudson River

Sea level rise presents the most immediate climate change impact to the Hudson River Estuary ecosystem. This project will execute private land acquisition strategies, creating new protected areas around key tidal habitats and facilitating upslope migration and adaptation to expected sea level rise. Approximately 419 acres of privately owned tidal wetlands and intact upland floodplains will be transferred to state protection. The project will also conduct landowner outreach and land acquisition activities to protect up to an additional 1,000 acres of tidal wetlands and adjacent upland migration zones.



Vulnerable tidal wetlands and their upland migration zones will be protected in the Hudson River Estuary.

The Nature Conservancy, Colorado - WCS grant: \$164,900; Project Budget: \$356,821

Enhancing resilience of wetland habitats to increase the adaptive capacity of Gunnison sage-grouse



Working to increase viable habitat for species like sage grouse in Eastern Colorado.

This project will restore and enhance 500-800 acres of priority brood-rearing habitat for Gunnison sage grouse using techniques that can be readily replicated in other locations. Wetland and riparian areas in three sagebrush shrubland locations will be enhanced to increase adaptive capacity of this imperiled species and other wildlife in the Gunnison Basin. The results of this work will be shared through the Gunnison Climate Working Group and the Southwest Climate Change Initiative to other groups working in similar ecosystems across the West.

Trout Unlimited - WCS Grant: \$140,000; Project Budget: \$498,525

Upper Bear River Reconnect and Flow Restoration Project



Bonneville Cutthroat trout and other cold water species need intact river systems to adapt to a changing climate.

Many native fish and other aquatic and riparian species of the interior West are well-equipped to survive extremes of temperature and precipitation, but they need intact, connected habitats to do so. This project will restore over seven miles of braided river and riparian habitat, reconnecting the East Fork of the Bear River in Utah to its main stem.

The Nature Conservancy, Virginia - WCS Grant: \$149,744; Project Budget: \$728,649

Implementing Climate Change Adaptation Strategies on Virginia's Eastern Shore

Climate change adaptation strategies will be demonstrated on Virginia's Eastern Shore to inform the expansion and restoration of the Chincoteague National Wildlife Refuge. Projects will restore a functional oyster reef, improve 300 linear feet of living shoreline, create 7,000 square feet of tidal salt marsh and enhance more than an acre of existing, emergent wetlands. Once demonstrated, these types of interventions can be readily replicated along the Eastern seaboard.



Demonstrating how living shorelines help ecosystems adapt to rising sea levels.

Grand Canyon Trust – WCS Grant: \$150,000; Project Budget: \$303,100

Restoring Beaver in Southern Utah: Keystone Engineer for Climate Change Adaptation



"Ecosystem engineers" such as beavers increase water storage important for areas in the West where increased drought conditions are expected due to climate change.

Beavers can radically alter streams and valley bottom ecosystems through their dam building activities. The water storage ponds created by beavers generate a diversity of habitats and replenish aquifers, making this species a critical ally in helping natural communities adapt to predicted increases in temperature, drought severity and extreme precipitation events in an era of climate change. This project will reintroduce beavers in up to 87 stream segments in Southern Utah as well as track the benefits to ecosystems from the beavers' activities.