

## Southwest Climate Change Initiative Overview

Patrick McCarthy – Gunnison, Colorado – December 2, 2009

Several years ago it became apparent to the conservation community that we are no longer working in a world where we can assume climate stability and persistent ecosystems. Climate change is already causing subtle change (like changes in timing of migrations or leaf-out) and dramatic and sometimes surprising change (like widespread forest dieback due to temperature and moisture thresholds being crossed).

The community's first response has been to act to cut the emissions that may lead to what some of the world's most prominent ecologists and climatologists call "dangerous climate change."

TNC has taken this on in earnest through efforts in Washington, state capitals – and next week in Copenhagen – to promote new policies that would establish emission reduction targets and controlling the global deforestation that causes 17% of GHG emissions.

It is equally apparent that the Earth's climate will continue to warm for decades, even if we dramatically or even completely eliminate emissions. We will need to act to conserve species and systems that are being buffeted by a rapidly changing climate.

In The Nature Conservancy's analysis in the Southwest, which we began in 2007, we concluded:

**Climate change is already happening and it is already affecting native plants, animals and habitats – perhaps especially in the southwestern US.** If we want to see the natural features that sustain us survive this inevitable and rapid shift, must take action now.

**Though there remains some uncertainty about climate change effects, now is the time to figure out how to manage risk and minimize loss.** Governments, businesses and individuals have made an enormous investment – billions of dollars – in building an understanding the climate system, and this investment has paid off in greatly increased knowledge about global and regional patterns. Even though uncertainties remain, any action we take now to understand the local effects and to build resilience will help us, over time, become more effective in the face of ecological change that may be more rapid and extensive than any of us can now imagine.

**We're all in this together.** Climate change does not respect ecological or jurisdictional boundaries. It changes the former and ignores the latter. Unlike some other threats to diversity, it is global and affects us all. **To build resilience and reduce loss, we must act together, across political boundaries.**

Our response was to join UA, WCS and USFS to design and carry out the SWCCI, which includes Arizona, Colorado, New Mexico and Utah and whose goal is to provide information and tools to conservation practitioners in the four states for climate adaptation. The initiative has three functions:

1. Prepare a **regional assessment of climate change exposure** that will identify the places where T, ppt and moisture stress have changed, and will change, the most and the least, helping us set priorities for climate adaptation. The first phase of this work has been completed and we are now working on a second phase, to be completed in 2010.
2. Organize a series of **landscape workshops**, one in each of the Four Corners states, where conservationists can work together to identify science-based and practical adaptation strategies and can commit to implementing and testing these strategies for the benefit of nature and people at these sites.
3. **Draw upon the four workshops** for data, tools and lessons that can be applied to some of the hundreds of other landscapes in the southwestern US that may be adversely affected by climate change.

There is more detail about the SWCCI in the one-pager in your workshop binder. More information is available at the web site listed in the fact sheet and at [www.nmconservation.org](http://www.nmconservation.org).

This is the second of four workshops. All of us in the SWCCI recognize that ultimate measure of success will be extent to which informed, collaborative action is taken by you and your organizations to prepare this landscape for ongoing climate change. We'll do everything we can to help make that happen.