



Guides and Tools for Climate Change Adaptation Planning

In recent years there has been an increased focus on planning for climate change impacts, and an ever-growing number of guidebooks and tools have been made available to assist governments and organizations in the planning process. Most of these are intended for broad audiences and are not written specifically for tribes. The Institute for Tribal Environmental Professionals (ITEP) developed the following list to point tribes towards some of the guides and tools that may be of use as they get started on climate change adaptation planning. The list is not meant to be an all-inclusive list, but rather is a selection of resources that might be helpful for tribes to review early in the process. Additional resources are listed on the Tribes & Climate Change website (www4.nau.edu/tribalclimatechange/index.asp), and a search on the Internet will yield many more.

Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments

This guidebook provides a detailed, easy-to-understand process for climate change preparedness based on familiar resources and tools. It includes information on getting started; conducting impact, vulnerability and risk assessments; developing preparedness goals and actions; and implementing and updating the plan. 172 pp. Climate Impacts Group, ICLEI, and King County, Washington, September 2007.
<http://cses.washington.edu/cig/fpt/guidebook.shtml>

Tribal Climate Change Adaptation Plan Template

The Institute for Tribal Environmental Professionals (www4.nau.edu/itep/index.asp), developed the Tribal Climate Change Adaptation Plan Template to be a resource for tribes as they write climate change adaptation plans. The template provides guidelines and suggestions for writing a plan and includes key terms and additional resources. The template is intended to be used for organizing and presenting information but is not meant to create a "one-size fits-all" plan, as each tribe will have unique needs and approaches to planning for climate change. The template is available as a Word document. Please contact Sue Wotkyns, ITEP's Climate Change Program Manager, at Susan.Wotkyns@nau.edu, to request the template; include your name, tribe or organization, and your contact information when requesting the template. 43 pp. Institute for Tribal Environmental Professionals, March 2011.

Climate Change Planning Tools for First Nations Guidebooks

This series of six guidebooks developed for Canadian First Nations takes a community-based approach to planning for climate change impacts. The guidebooks walk you through the planning process; each guidebook develops an important part of the planning process and is

a precursor to the next guidebook. Guidebook topics: 1) Starting the Planning Process, 2) Climate Change Impacts in the Community, 3) Vulnerability and Community Sustainability, 4) Identifying Solutions, 5) Taking Adaptive Action, and 6) Monitoring Progress and Change. Centre for Indigenous Environmental Resources, 2006.

www.cier.ca/information-and-resources/publications-and-products.aspx?id=412

Adapting to Climate Change in Coastal Alaska

This Alaska Sea Grant Marine Advisory Program (MAP) project brings a marine-dependent community perspective to climate change adaptation issues. The website has an adaptation planning tool and a manual that guide you through steps of the planning process. Although written for Alaska, it can be used and adapted by communities in other parts of the country. Provides fact sheets on ocean acidification, subsistence, sea level rise and storm surge, and permafrost. Alaska Sea Grant Marine Advisory Program, University of Alaska Fairbanks.

<http://seagrant.uaf.edu/map/climate/index.php>

Climate Witness Community Toolkit

The toolkit is the result of a process undertaken on Kabara, Fiji, (the first Climate Witness site in the Pacific) to document local impacts of climate change and to devise appropriate adaptation measures that local communities can implement themselves. The methodologies within the toolkit are an adaptation of participatory techniques WWF-South Pacific has used over the years in community resource conservation and development projects, and should give facilitators a clear sense of process when trying to illicit information specific to impacts of climate change and developing appropriate community response measures to them. It includes a series of activities to engage the community in identifying climate change impacts, concerns and opportunities, community values, adaptation options and a community action plan. The activities in the guidebook could be adapted to be used by tribal communities in the US. 18 pp. World Wildlife Fund—South Pacific Programme.

wwf.panda.org/about_our_earth/all_publications/?uNewsID=162722

Adaptation Database and Planning Tool (ADAPT)

ADAPT is an online tool that guides local government users through a planning process known as the Five Milestones for Climate Adaptation. ADAPT walks you through the process of assessing your vulnerabilities, setting resiliency goals, and developing plans that integrate into existing hazard and comprehensive planning efforts. You need to be an ICLEI member to have access to the tool; there is a membership fee. ICLEI—Local Governments for Sustainability USA.

www.iclei.org/programs/climate/Climate_Adaptation/adaptation-database-and-planning-tool-adapt

Promoting Generations of Self-Reliance - Stories and Examples of Tribal Adaptation to Change

This collection of adaptation practices and strategies presents practical examples for tribal environmental managers and leadership to consider applying to their own unique

circumstances. Although there is no strategy that can be universally applied, this guide may spark new ideas for creating effective tribal responses. Tribes can incorporate these models into their planning, programs, strategic plans and funding requests. Although much of the focus is on Alaska and the Northwest, the guide will also be useful to tribes in other regions. US Environmental Protection Agency Region 10, August 2011.

www.epa.gov/region10/pdf/tribal/stories_and_examples_of_tribal_adaptation_to_change.pdf

Tribal Climate Change Adaptation Options: A Review of the Scientific Literature

This report is based on a review of the scientific literature and summarizes the physical changes in the climate due of Climate Change, the vulnerabilities of natural resources to these effects, and adaptation options that may be relevant to tribes in EPA Region 10. US Environmental Protection Agency Region 10, January 2010.

[http://yosemite.epa.gov/R10/TRIBAL.NSF/programs/tribalairprojects/\\$FILE/tribal_climate_change_adaptation_report_010610.pdf](http://yosemite.epa.gov/R10/TRIBAL.NSF/programs/tribalairprojects/$FILE/tribal_climate_change_adaptation_report_010610.pdf)

Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment

This guide is designed to help conservation professionals and natural resource managers craft effective strategies to prepare for and cope with the effects of rapid climate change on the nation's fish, wildlife, and natural habitats. The guide provides an overview of the general principles of climate change vulnerability as it relates to species, habitats, and ecosystems; a description of the scientific methods currently available for assessing vulnerability and its components, and for tailoring these approaches to particular situations and needs; and examples of vulnerability assessments carried out by government agencies, non-governmental organizations, academic institutions, and other stakeholders. 176 pp. National Wildlife Federation, January 2011.

www.nwf.org/~media/PDFs/Global%20Warming/Climate-Smart-Conservation/ScanningtheConservationHorizon.ashx

Drought Ready Communities

This guide outlines a broad-based process, recognizing that drought creates problems that go beyond the scope of what water suppliers alone can address. Worksheets and other exercises can help communities see how drought has affected water supplies and overall community well-being in the past. The guide can help communities identify their drought monitoring resources, so they can spot emerging drought. The planning section helps communities determine steps they can take to reduce their drought risk ahead of time. It includes case studies and a resource collection on how other municipalities have planned for drought, including both processes and solutions. 53 pp. National Drought Mitigation Center, Oklahoma Climatological Survey, Illinois State Water Survey and State Climatologist's Office, and Lower Platte River Corridor Alliance, 2010.

www.drought.unl.edu/Planning/PlanningProcesses/DroughtReadyCommunities.aspx

Technologies for Climate Change Adaptation - Water Sector

This guidebook describes adaptation strategies in the categories of water conservation; storm water control and capture; resilience to water quality degradation; preparation for extreme weather events; diversification of water supply; and mitigation. It has been made widely available and will help both developed and developing countries understand various means of increasing resilience to the uncertain effects of future climate change. The Water Institute at the University of North Carolina at Chapel Hill provided technical and methodological expertise. 128 pp. United Nations Environment Programme (UNEP) Risoe Center, April 2011.

www.waterinstitute.unc.edu/unep-project

Adapting to Climate Change: A Planning Guide for State Coastal Managers

This guidebook was developed to help US state coastal managers develop and implement adaptation plans to reduce the risks associated with climate change impacts affecting their coasts. Tribes located along coasts may find the guide useful. NOAA Office of Ocean and Coastal Resource Management, 2010.

<http://coastalmanagement.noaa.gov/climate/adaptation.html>

Climate Wizard

Climate Wizard is an online tool that allows you to choose a state or country and assess how climate has changed over time and project what future changes are predicted to occur in a given area. You can view historic temperature and rainfall maps for anywhere in the world, view future predictions of temperature and rainfall, and view and download climate change maps. Nature Conservancy, Univ. of Washington, and Univ. of Southern Mississippi.

www.climatewizard.org/index.html

A Guide for Tribal Leaders on US Climate Change Programs

This guide summarizes key US government programs addressing climate change, opportunities for tribal engagement and contacts for each agency. In addition to its immediate value to tribes and their partners, this information will provide important groundwork for research on understanding and improving the tribal consultation processes in the context of climate change. This guide also begins to include tribal, academic and non-governmental agencies and programs to assist tribes in addressing climate change. 17 pp. University of Oregon Environmental Studies program and the USDA Forest Service Pacific Northwest Research Station, June 2011.

http://tribalclimate.uoregon.edu/files/2010/11/tribal_leaders_CC_guide_6-23-111.pdf

Tribes & Climate Change website

This website developed by the Institute for Tribal Environmental Professionals (ITEP) includes profiles of tribes being impacted by climate change and how they are addressing those impacts, audio recordings of tribal elders offering their views on climate change, general information about climate change and its impacts, and links to numerous online resources, announcements about upcoming events, and funding opportunities. Go to

Resources>Adaptation for links to additional adaptation planning guides and tools. The website was developed with support from US EPA as a resource for tribes.

www4.nau.edu/tribalclimatechange/index.asp

Tribal Climate Change Newsletter

This newsletter provided by the Institute for Tribal Environmental Professionals (ITEP) includes updates on ITEP's Climate Change Program; news items about tribes and climate change; useful resources; announcements about funding opportunities and upcoming events; and other information relevant to tribes and climate change issues. The newsletter is delivered monthly by email. Contact Sue Wotkyns to be added to the distribution list:

susan.wotkyns@nau.edu.