











Adaptation to Climate Change and Variability: Bringing Together Science and Indigenous Ways of Knowing to Create Positive Solutions

FORCED RELOCATION

Over seventy participants of *Rising Voices* convened for a second time at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado on June 30-July 2, 2014 to discuss what the science, information, support and research needs are of tribal communities to facilitate respectful and appropriate adaptation solutions to climate change and variability. *Rising Voices* is a community of engaged Indigenous leaders, Indigenous and non-Indigenous environmental experts, students, and scientific professionals across the United States, including representatives from tribal, local, state, and federal resource management agencies, academia, tribal colleges, and research organizations.

We came together from across the nation – including Hawai'i and Pacific Islands, Alaska, Northwest, Southwest, the Plains, Midwest, Gulf states, and Northeast – for a rich and honest discussion regarding the complex climate change challenges facing Indigenous peoples, current adaptation and mitigation strategies, protection of Indigenous knowledge, sustainable Indigenous practices, and political and institutional barriers. Many of the Indigenous communities represented at *Rising Voices* are already contending with a changing climate, including displacement of Native Alaskan villages and Native Gulf Coast communities due to rising sea levels, loss of sea ice, and/or extreme hurricane activity.

Extreme weather events, coupled with ongoing environmental change such as erosion and sea level rise are transforming ecosystems in the United States. Land development and resource exploitation are exacerbating these changes. Government agency adaptation strategies for coastal communities, including the construction of seawalls, create an illusion of protection and are no longer working because of increasing climate change impacts such as sea level rise. For some Indigenous communities, community relocation is the only adaptation strategy that can protect residents from these hazards. Relocation is an extreme adaptation strategy, which can cause Indigenous communities to lose connection with the land of their ancestors, subsistence and cultural practices, social networks and kinship systems, and sovereignty.

The Rising Voices workshop brought together community leaders from Isle de Jean Charles, Louisiana and Kivalina, Alaska to share the challenges and barriers with the relocation of their respective communities. Both communities have been working to relocate for decades and have had similar challenges working with federal government agencies, such as the U.S. Army Corps of Engineers.

The lack of a government relocation framework is a key problem for several reasons. Current relocation institutional mechanisms work on an individual level, do not support communities that want to relocate as a community, inhibit relocation by not providing sufficient relocation funds because of the

devaluation of houses in flood plains, and prevent community empowerment. The lack of access to scientific information to understand the environmental changes affecting the habitability of a community's location prevents communities from adapting. In addition, no institutional criteria exists to ensure government agencies incorporate local scientific knowledge of environmental change when assessing relocation sites as well as the habitability of a community's original location. Finally, a community's decision to relocate can affect its ability to receive funding to maintain existing infrastructure at a community's original location. For example, after the village of Shishmaref, Alaska voted to relocate in 2001, the community was cut off from state and federal funding, yet is still in its original place.

An adaptive governance relocation framework could respond to these challenges and:

- Prioritize communities staying in-place;
- Support a community-led and initiated relocation process;
- Create a relocation funding mechanism;
- Create a dynamic, iterative process as climate change transforms places where people live and establish indicators that mark when it is no longer safe to stay in-place and necessary to start a relocation process; and
- Ensure that the human rights of individuals as well as communities are protected, including cultural, sovereignty, and subsistence rights.

We recommend the creation of a **Task Force on Climate Migration**. Members of the Task Force would include Indigenous leaders, legal and scientific experts, and federal, state, and tribal government representatives. The Task Force could aim to:

- Formulate the design of an institutional framework;
- Identify available land for relocation, including land exchanges with state and national parks;
- Research existing laws and policies which could be utilized to facilitate relocation and those
 which might need amendment, such as the Stafford Act's definition of 'disaster' which might
 need to be changed to include erosion and sea level rise;
- Conduct a state-by-state survey of community locations which are vulnerable to hazards and atrisk of displacement;
- Create a clearinghouse of community stories about relocation. Rising Voices provides a model for how this could be done.
- Consider funding options and explore public/private partnerships;
- Consider models that already exist, such as the 1930s Resettlement Act created in the U.S. and the relocation plan for Isle de Jean Charles, Louisiana and Newtok, Alaska.

People around the world are experiencing climate displacement. The creation of the Climate Migration Task Force is a huge opportunity for the United States government to demonstrate international leadership. Indigenous peoples in the United States can also provide a model for a community-led relocation process that protects the human rights of community residents and improves their standard of living, health, and well-being.

To learn more or become part of the Rising Voices movement, please contact Heather Lazrus (hlazrus@ucar.edu), Julie Maldonado (jkmaldo@gmail.com), Bob Gough (gough.bob@gmail.com), or Jeffrey Morisette (morisettej@usgs.gov).

Rising Voices website: http://www.mmm.ucar.edu/projects/RisingVoices