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*Parks, people, planet:
inspiring solutions*

Climate Change and Indigenous Groups

Freshwater Resources and the Need for Adaptation

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IUCN Resolutions on Indigenous and Traditional Peoples

- Recognize the social, economic and cultural rights of indigenous peoples such as their right to lands, territories and natural resources, respecting their social and cultural identity, their customs, traditions and institutions.
- Support indigenous peoples' right to make their own decisions affecting their lands, territories and resources, by assuring their rights to manage natural resources on which their livelihoods and ways of life depend.

BUT...

Climate change threatens indigenous people by changing freshwater resource availability and altering wildlife distribution



Photo: U.S. Fish and Wildlife Service.

Some Effects of Climate Change on Indigenous Groups

- In U.S. Pacific Northwest many tribes rely on salmon for subsistence and a source of identity
 - Later runs & smaller fish due to shifts in water temperatures and cycles
 - Late arrivals are disruptive to traditional timing of important cultural events
- Plants negatively affected, too
 - “A fish can move around. Plants can’t. If we can do a good job at forecasting what climate change might be, we might have to step in and help the plants move. And make sure we have these roots and berries in perpetuity.” (Paul Lumley of Columbia River Inter-Tribal Fish Commission)
- Loss of economic, cultural, and religious use of native species



Photo: Edward S. Curtis Collection,
Library of Congress.

Need for Adaptation

- Cannot afford to be static in our behavior - even culturally important behavior on how we use our freshwater resources must adapt
 - Cannot avoid climate change

- Range Shifts vs. Defined Territories:

*For the Tribes, range shifts in native species will threaten their cultural existence. The **treaty-protected rights** of tribes to hunt, fish and gather traditional resources are **based on reservation locations**... These locations were chosen **to ensure access to culturally significant resources, whose locations were thought to be fixed**... Traditionally, Tribes relied on moving residence based upon seasonal availability of food and water sources. **Modern Tribes are unable to relocate** to cope with shifts in the availability of cultural and religious sources. Few Tribes have can afford the purchase of large territories of new land, and federal laws prohibit the transfer or expansion of tribal jurisdiction. (Climate Change Impacts on Tribal Resources, 2006)*

Next Steps - How to Adapt

- Many adaptation options
 - **Behavioral**, such as altered food choices (more difficult when food is tied to culture)
 - **Managerial**, such as altering farm practices
 - **Policy**, such as planning regulations and treaties
 - In July 2014 U.S. Task Force on Climate Preparedness and Resilience Announces Tribal Climate Resilience Program would receive \$10 million in funding
- All plans moving forward should be participatory, inclusive



[Photo: Paulo Filgueiras, UN Photo.](#)

Tribes Taking the Initiative

- Many tribes already working with other organizations, universities to come up with Climate Adaptation Plans
 - Tulalip Tribes of Washington State, U.S.
- Since indigenous cultures rely heavily on the land, they notice the effects of climate change firsthand
 - Often at forefront of many climate issues
- Cross-sectoral support will help make the biggest changes

Tulalip Adaptation and Mitigation Policy Frameworks for Climate Change

In order to cope with current environmental changes, we must stop treating the natural world as static and instead incorporate policies and law in planning and management that allow us to sustainably maintain healthy, resilient human communities in the face of change. These policies and law need, among other things, to be:

- 1. Integrated** - involve multiple independent sectors in the creation of holistic solutions that address a full range of natural and social factors.
- 2. Cross-scale** - address problems at multiple scales, and devise scale-appropriate actions, working to ensure policies and actions do not defeat measures taken at any one scale;
- 3. Adaptive** - monitor and respond to the effectiveness of efforts and advances in scientific and local knowledge, adapt objectives when necessary;
- 4. Restorative** - use historical baselines for mitigation goals for processes that maintain healthy watersheds and communities;
- 5. Participatory** - recognize stakeholder equity by including federal, state, tribal and local governments, businesses and citizens in the transparent development of baselines, objectives, and mitigation and adaptation measures;
- 6. Sustainable** - design objectives and actions on a basis of ecological and cultural sustainability, and include mechanisms to ensure the sustained financial and administrative support for their implementation.