Climate Change, First Nations, and Adaptation

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A webinar series with a focus on First Nations and climate change is scheduled for Fall of 2012. The series idea was ignited through the close relationship FORREX has with the En'owkin Centre (a post-secondary Indigenous institution) and with Dennis Martinez. Martinez is an accomplished professional and has over 40 years experience in ecological and eco-cultural restoration in temperate, tropical terrestrial, and aquatic/marine ecosystems. He specializes in Indigenous community-based bio cultural restoration and ecosystem-based climate change adaptation internationally.

Martinez visited the En'owkin Centre in the Fall of 2010, to speak on the work he has been involved with through the Indigenous Peoples Biocultural Climate Change Assessment Initiative (IPCCA). The visit to Penticton was part of the assessment work with the IPCCA (Penticton was one of the four regions in British Columbia that was assessed). These assessments were completed in order to examine Indigenous Resilience in Pacific North America, which included a brief study of the relationship between selected leading indicators of adaptation and resilience as well as indirect and direct drivers of climate disruption and their negative environmental impacts.

Following the assessments, Martinez found that all communities shared commonalities in their vulnerability to climate disruption. He states that while Indigenous Peoples have survived primarily because of their resilience, including the ability to adapt to changing environmental, socio-economic, and political conditions, this resilience is challenged more so in today's rapidly changing climate. The rate of change, coupled with the size and intensity of climatic events, is making adaptation difficult. This difficulty is exacerbated by the loss of historic ancestral lands and resources that have caused a variety of socio-economic problems, including poverty due to loss of most or all natural resources. Indirect and direct drivers of climate disruption that exacerbate adaptation difficulties as well as frequent lack of solid Band support will also be discussed by Martinez at the webinar.

It is not surprising to know that, of the communities Martinez visited, he observed that it was common to see Western-educated native natural resource managers and scientists depending on and trusting Western ways of knowing more than Traditional Ecological Knowledge (TEK). More time is spent in front of computers and less time doing what their ancestors routinely did—observing nature. Sadly, if this paradigm continues to dominate, we will lose the actual practice of TEK, and it will slowly be replaced by Western approaches. This will ultimately lessen Indigenous Peoples' capacity to adapt to the living and constantly changing natural systems in places for which they are respon-

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sible for management and adaptation. Martinez does believe that in order to adapt successfully in the face of rapid climate disruption, it is going to be necessary to maintain and/or restore a traditional education while simultaneously becoming secularly educated. Having a complete education (i.e., traditional and Western) will in the end prove to be a leading indicator of resilience and the adaptive capacity of Indigenous alternative modernities to bridge—not to "integrate" or "merge"—Western science and TEK.

Park of the En'owkin Centre's mandate is to maintain Syilx TEK practices. There is an active TEK Program at the Centre that is diligently at work. From the local community scope, TEK is applied in various ways. These are

- knowing where and when to harvest foods and medicines in a local context;
- knowing the harvesting limits in each area without damaging species and (or) habitats;
- knowledge of specific plants, animal amphibians, insects, and fish significant to traditional uses related to that local area;
- knowledge of the different protocols that are required for each food and medicine type;
- understanding cultural sensitivities, requirements, and protocols for different habitat and species; and
- understanding how information may be provided, presented, utilized, and shared.

Part of the recovery of Syilx lands through TEK practices as a part of conservation efforts has been used in projects such as the Locatee lands ECOmmunity Place Project. ECOmmunity Place provides a "natural" venue where individuals can learn about the natural and cultural qualities of the South Okanagan, as well as the ongoing restoration and enhancement projects for species at risk.

Richard Armstrong and Sarain Squakin hugging a tree. Photo credit: Ellen Simmons

We need the next generation learners to continue to be knowledgeable and to continue to be "keepers of the land" (Richard Armstrong, TEK keeper, personnel communication, September 17, 2010). Jeannette Armstrong, Executive Director of the En'owkin

Centre, is cognizant of the need to get people together and develop a process that Indigenous People can be exclusively engaged in. However, it does take time to create this framework that speaks to knowledge about what climate change is doing to your people. This is asked on a continual basis (seasonally and daily) to the hunters and gatherers. We need to find a way to engage all of the work that is going on. Conceivably, this could be developed further through the assessment work that has been initiated by Dennis Martinez with the IPCCA.

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