Sea Ice, Coastal Erosion, and the Iñupiat; How indigenous relationships with the land and water influence responses to climate change

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Dependence on Sea Ice

Sea ice has an important role in the lives of the Iñupiat. It helps to prevent coastal erosion, maintains current pattern, and allows for communities to access bowhead whales. Sea ice is declining in the Artic which is causing increased vulnerability in these communities (George 2003).

Coastal Erosion and the Iñupiat

Coastal communities are at greater risk of impacts from sea level rise. This, coupled with the loss of sea ice and permafrost, are causing Iñupiat communities to lose the land they are living on and have a relationship with. Many towns have been faced with relocation to address this issue (Sakakibara 2008).

Whales and Iñupiat Traditions

One of the major sustenance activities of the Iñupiat people is hunting bowhead whales. The relationship between the humans and whales is a way in which the Iñupiat walk into the whaling cycle. Climate change is impacting migration patterns, sea ice, and also patterns in the food the whales eat (Sakakibara 2010).

Vulnerability, Adaptive Capacity, and Resilience

These communities experience increased vulnerability as a response to their relationships with the land. Melting sea ice is impacting the activities that engage the environment around them (Parks and Roberts 2007). The adaptive capacity depends on individual communities. While some want to relocate, others are adapting to climate hazards to stay in their homes (Shearer 2011).