Warming trend was observed in the 1980s across the arctic regions. This warming has influenced not only the natural environment but also human activities in North Alaska, and has produced unexpected problems although not all of the consequences of climate change tend to be negative for both marine mammals and human activities.

There are several natural and social factors assumed to seriously and negatively affect bowhead whales and the indigenous whale hunt on the basis of my field research in Barrow, Alaska from 2006 to 2013. These factors are (1) changes in sea-ice patterns due to global warming, (2) increasing exploration activities for oil and gas development as a result of the changes in sea-ice patterns, (3) increasing cargo, oil/gas exploration, and tourist ships due to the decrease in sea-ice cover, (4) the IWC, (5) US energy policy, (6) economic activities of multi-national corporations, (7) the anti-whaling movement of several environmental and animal rights NGOs, and (8) internal changes in Inupiat society. The Inupiat whalers are presently carrying out the bowhead whale hunt under environmentally, socially, politically and economically critical conditions created by a combination of these factors. The effects of them on Inupiat whaling have been amplified by climate warming in many ways. This presentation will describe and discuss the impact of climate change on aboriginal subsistence whaling in Northwest Alaska, focusing the effects of the factors of (1) and (2).

Changes in the extent of sea-ice cover may affect the bowhead whale hunt of the Inupiat negatively because the changes may cause alteration in migratory routes of bowhead whales and produce unstable and dangerous sea-ice conditions for the hunt. Currently, several oil companies under the influence of the new US energy policy have engaged in oil and gas exploration activities in offshore waters along the northwest coast of Alaska. These activities, which involve seismic means to estimate the extent of the reserves as well as drilling, stress bowhead whales and cause them to change their migratory routes, which would negatively affect the whale hunt.

The whaling activities and the corresponding activities associated with whaling such as festivals, as well as the sharing and consumption of the whale meat among the Inupiat people in coastal communities are closely related to what they live for in coastal northwest Alaska. As the continuation of whaling is a basis for the continuation of their way of life (culture), the sustainable use of bowhead whales is vital to Inupiat life. Thus, the problem of whaling is, for the coastal Inupiat, not only a problem of “food security” but also a problem of “cultural security.” The climate change is one of the most serious factors disturbing their food and cultural securities. The presentation will provide an anthropological picture of interactions among various human activities, climate changes and other the environmental changes in Northwest Alaska.