Thank you Senator Begich for hosting this hearing on a timely and important topic for rural Alaskans.

I will speak from my role as a rural subsistence user, former researcher and director of the Division of Subsistence, Alaska Department of Fish and Game, and as current member of the U.S. Arctic Research Commission.

In the Commission’s most recent goals report, food security has four facets according to the World Health Organization and the Food and Agriculture Organization:

- **Availability:** whether there are sufficient amounts of food on a consistent basis
- **Access:** whether there are sufficient economic and physical resources to obtain appropriate foods
- **Use:** whether use is appropriate based on knowledge of basic nutrition and care, as well as adequate water and sanitation
- **Stability:** whether the availability, access and use over time is stable

For most areas of the state, I think we can say that rural, subsistence-dependent communities have enjoyed all facets of food security. Jobs are few, cost of living is high so the most foundational part of the mixed subsistence-cash economy is hunting, fishing, gathering and trapping. The traditional pattern of sharing with those not as active, such as the elderly and less able, help maintain strong communities.

Until recently, I tended to view discussions regarding food security in Alaska as concerns focused grocery store shortages because jets and trucks were not able to get into road connected parts of the state. I thought that those of us outside of the railbelt would turn to time honored practices of hunting, fishing, and gathering to secure food. However, in recent years, decreasing returns of salmon and variable weather affecting subsistence success as well as drying of processed fish and game brings food security concerns close to home.

Subsistence is a key feature of food security in rural Alaska. It is defined by, provided for and protected in state and federal law. The question is whether those definitions, provisions, and protections are meaningful.
Change is part and parcel of subsistence annual cycles. Resources come back in varying abundance, change migratory routes and timing. I recall the example of Kivalina where Subsistence Division had three data points of harvest data that were nearly 20 year intervals. One annual cycle featured caribou as the species of highest per capita production; another data point featured marine mammals and caribou in part because caribou migrated further inland and were not as accessible. The most recent data point in 2007 showed bearded seal as the highest produced species. I’m sure people in Kivalina were at times unsettled and uncertain about how they would provide for food on the table as resources fluctuate, but they were able to feed their families by taking was nature provided at those different times. We have to be resourceful and adaptable.

Those of us dependent on wild renewable resources face many challenges. Recent tests are very unsettling: Unknown mortality events of sea mammals; declines in king salmon returns; uncertainties that climate change brings. Rapid changes in the health of some species do become a challenge for feeding our families. Recent fluctuations in abundance and timing of returns of Chinook salmon in the Arctic, Yukon, Kuskokwim regions of Alaska are troublesome. In 2012, fishermen in the lower Kuskokwim may have fished in civil disobedience, but they also fished because of the cultural imperative to feed their families. It is clear to us why fishermen had to fish. The court recognized the religious right of fishing families. It is not just a cultural imperative. It is a matter of food security. The other factor the court considered in its decision was the state’s right to intervene to protect future returns of Chinook. This is a concern everyone shares.

I believe management authorities have the tools to provide meaningful subsistence opportunity and protect resources for future generations. It takes cooperation between state and federal government and tribes and local communities. Some of the options are difficult but have been used. Determining who among all subsistence users is the most dependent and has the least alternatives in order to provide for the subsistence priority in times of shortage is a currently available tool. This process involves tough decisions and sacrifice.

Many of us point to other users and sectors that should share in the conservation load of highly allocated species like salmon. However, in the face of climate change, the only mortality realistically under our control is human induced. We all need to consider the resource and future generations in our decisions.

I look forward hearing from other panelists and to discussions with those in attendance regarding these issues.