

WELCOME!

During the Aleutians East Borough *Strategic Planning Session* in December 2018, Assembly and community members in attendance agreed that Climate Change is an issue that broadly and significantly impacts our communities.

Collectively, we agreed it needed a place in our Strategic Plan and the AEB is committed to understanding how Climate Change affects our communities and what role we must take to address these issues.

As part of this effort the Natural Resources Department would like to provide the communities with information that is relevant and timely. It is our hope that by continuing to inform ourselves on Climate Change, we will better prepared to respond as well as anticipate needs to ensure the well-being of our communities.

An important part of this effort is hearing from YOU. If there is a topic or issue you want to hear about or is impacting your community, please contact us.

Thank you!

**International Collaborative Research Expedition to Study Pacific Salmon**

As part of the International Year of the Salmon, an international team of scientists are going on a month-long expedition to study Pacific Salmon in the Gulf of Alaska. The primary objectives of the research is to use genetic sampling to identify stock-specific rearing areas, abundance and condition of all 5 species of salmon.

Salmon stocks in the Gulf of Alaska tend to be highly variable, and although it is generally accepted across the scientific community that juvenile salmon are most vulnerable to mortality during their first year of marine life, the specific mechanisms that contribute to the variability is not well-understood.

During the 2019 Board of Fisheries meetings for the Alaska Peninsula/Chignik/AI, there

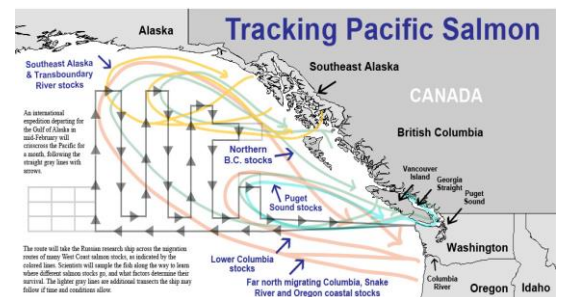
Natural Resources Department Updates

In addition to the Climate Change Corner, we are in the process of developing a survey that will address stakeholder needs, concerns and perspectives with respect to Climate Change.

The survey will be sent to community members in 2019, and will help the AEB in understanding the most pressing concerns for our constituents, and develop appropriate objectives.

was a great deal of concern surrounding the 2018 Chignik run failure. Although there isn't a single explanation to explain the 2018 missed escapement in Chignik, there is general concern that anomolous climate conditions may have contributed.

Scientists on this expedition seek to understand factors that contribute to marine survival, and regulate salmon production. This information could allow managers to more accurately forecast returns, and respond to climate conditions. To learn more, [read here](#).

**The Status of Marine Heatwaves (MHW)**

As of October 2018, Alaska officially entered into another marine heatwave. [Oliver et al. \(2018\)](#) found that MHW have increased in frequency and duration by 34% and 17%, respectively between 1925 to 2016. MHW have farreaching implications in the ecosystem, and in turn AEB communities. Negative impacts include decreases in abundance or changes in the distribution of commercial fisheries stocks, notably the Pacific cod crash in 2017 and the Gulf of Alaska salmon in 2018 may have been impacted by the 2014 MHW. A recent study ([Smale et al. 2019](#)) shows MHW can result in decreased kelp and eelgrass biomass, both of which serve as habitat and shoreline erosion protection in the Aleutians. Scientists at ADFG are currently working to use sea surface temperature data to improve salmon run timing predictions.