

# Climate, Ecosystems, & Human Health Work Group

## December 15, 2011

### Meeting Summary

**Attendees:** Mike Brubaker (ANTHC), Amy Holman (NOAA), Louisa Castrodale (DHSS), Raphaela Stimmelmayer (NSB), Dianne Soderlund (EPA), Gay Sheffield (AK Sea Grant), Tenaya Sunbury (ICHS), Teri Rowles (NOAA), Jim Berner (ANTHC), Carl Hild (APU), Jackie Kramer (EPA), Michelle Davis (EPA), James Lima (BOEMRE), John Pearce (USGS), Anthony Fishbach (USGS), Gary Ferguson (ANTHC), Chris Krusen (?), Karen Murphy (FWS & WLCC), Joel Reynolds (FWS & WLCC), Kristin Ryan (ADEC), Bob Gerlach (ADEC), Sue Flensburg (BBNA), Tyler Katzmar and Bradley Harris (Alaska Pacific University), Carrie Goetz (ASLC), Carl Hild (APU), Lori Verbrugge (USFWS), George Edwardson (ICAS & NS Villages), Victoria Hykes-Steere (APU), Andrea LaTier (EPA Seattle), Cyd Hanns (NSB), Craig George (NSB), Vera Metcalf (AEWC), Taquilik Hepa (NSB), Joe Sarcone (ATSDR)

### SEAL ILLNESSES & DEATHS IN ALASKA

The purpose of this meeting was to bring together experts & interested parties to share information related to reported disease & mortality events related to seals in the Arctic.

**Mike Brubaker**, Alaska Native Tribal Health Consortium (ANTHC), shared a series of maps that demonstrated preliminary locations of communities in Alaska, Canada, & Russia where reports of diseased or dead ringed seals, bearded seals, spotted seals, & walrus have come in from July through Oct 2011 (incomplete due to limitations related to surveillance). He stressed the importance of marine mammals, such as these, in subsistence diets as demonstrated by ADF&G Kotzebue harvests. Mike said ANTHC hopes to get info to Tribes to assist local leaders in making decisions.

Food confidence is an issue now; not necessarily food safety.

**Aleria Jensen**, NOAA, works with the National Marine Mammal Stranding Network & US Fish & Wildlife Service (USFWS). Despite exhaustive testing, there is no smoking gun. Issue was brought to their attention in late August '11. Some animals are lethargic, elevated # of carcasses. In response, an international effort was launched.

There wasn't a lot of time to sample beaches due to impending freeze up.

**Raphaela Stimmelmayer**, North Slope Borough (NSB) Wildlife Dept., reported that they are working with many partners on the investigation, which is ongoing. Unusual Mortality Event (UME) is under consideration. Numbers of diseased & dead animals is outdated as additional reports have come in from the Bering Strait region. Hunters are seeing healthy seals now. Animals have had eroded & ulcerated lesions on flippers & body, hair loss, & lethargy. Barrow was first place observations came in from. Provided numbers and percentages of spotted & bearded seals from Bering Strait region; more pups & young, not as many adults. Think hunters may be catching them at sea before they get sick & stranded. They will be doing a presentation at the Alaska Marine Science Symposium.

**George Edwardson**, President of Inuit Communities of Arctic Slope (ICAS), asked about starvation, lead, & radiation. No correlation yet to starvation as conditions of animals range from fat to no food in stomachs. They will be testing further for radiation.

**Teri Rowles**, NOAA National Marine Fisheries Service (NMFS), provided an overview of the pending UME declaration. She said that there is a UME int'l working group who dispense advice. Reps from Mexico & Canada. They held a meeting 10 days earlier and provided a recommendation to the agencies regarding the declaration. There have been 54 previous UMEs in the US; there are now 3 in effect. This would be the 55<sup>th</sup> in 20 yrs. A coordinator and liaisons will be identified if UME is declared. There has been only one other UME in Alaska, which was related to sea otters.

**Carl Hild**, Alaska Pacific University (APU), raised the potential implications related to UVB exposure from a large ozone hole, which has developed.

**Gay Sheffield**, AK Sea Grant Marine Advisory Program - Nome, talked about the range of reports from the area she covers. Over 60 reports went in to the stranding network.

These marine mammals represent the top subsistence foods in 9 communities. A series of low pressure systems & high winds led to a decline in hunting which corresponded to a decrease in the incidence of reports. Alaska Natives use walrus for meat, organs, hide, & ivory. Over 90% of US harvest is in Bering Strait. Seals also heavily used for skins, meat, blubber, & handicrafts. They are eaten in various ways, which include raw frozen, raw fresh, cooked, aged, & fermented.

Louisa Castrodale, Alaska Div of Public Health, went over guidance that has been disseminated regarding health implications. They include:

- Do not eat any animals that appear sick or diseased, or have washed up on shore
- If you find a wild animal acting abnormally or showing signs of illness, notify your local wildlife authority
- Avoid feeding meat from a sick or diseased animal to pets or other animals
- Wear rubber gloves when butchering or handling animals
- Thoroughly wash your hands & all of your equipment after working with animals
- Cooking your game before eating it can reduce the risk of infection from different parasites, viruses, & bacteria that may be present in raw food; and
- If you feel sick, contact your local community health care provider.

People desire STRUCTURED, CONSISTENT outreach.

Hunters are showing signs of change as they adapt to concerns by taking more time to determine health of seals.

**Vera Metcalf**, Kawerak, Inc. & Pres of Eskimo Walrus Commission, represents 19 communities w/the Eskimo Walrus Commission. Been in existence since 1978. Shared AK Native perspectives.

**Doug Dasher**, Alaska Dept. of Environmental Conservation (ADEC), said that ADEC is doing water quality monitoring. They are now working in the Chuckchi Sea. Working w/Dr. Kelly at UAA. Doing radionuclide testing to fingerprint Fukushima. Looking into whether feds will conduct atmospheric mapping.

Other questions & comments:

- Look at fallout deposition on Adak.
- Should be a concerted effort to monitor oceans.
- Taqulik Hepa, NSB, said hunters reported in June that animals were fine.
- Offshore Continental Shelf lease sale is in an area that we know very little about.

- More people stressed importance of consistent, weekly/regular communication.
- Use Facebook & other social media.
- Lori Verbrugge, USFWS, talked about use of molecular technology & value of “ruling-out” potential causes of the seal illness in the interest of increasing food confidence for subsistence users
- George Edwardson wants to be a part of the group established if UME is declared.
- Wondered about noise pollution, lead from Red Dog, Global warming & cultural shock, heat/ice, algae from ice loss, and radioactivity from Siberia.
- Concern with high concentration of marine mammals hauling out on land due to diminishing ice. Could this be a result of too many in small area? Could agencies allow AK Natives to break the groups up to mitigate this?
- Jim Berner, ANTHC, talked about clusters & identification of animals/species.
- Teri Rowles praised the multi-agency collaborative effort that has been working on this issue.

### **Post-meeting follow-up:**

#### **Arctic Seal Deaths - Unusual Mortality Event (UME) Declared:**

<http://alaskafisheries.noaa.gov/newsreleases/2011/umedeclaration2011.htm>

On 12/20/11, NOAA declared a UME in response to the recent deaths involving ice seals in Alaska. Approximately 60 dead and 75 diseased seals (mostly ringed) have been reported in Alaska since July. Reports related to walruses have also been received. Declaration of a UME will help mobilize resources to expand the investigation into causes. More detailed information on the disease outbreak can be found at: <http://alaskafisheries.noaa.gov/>

#### **From Julie Speegle, Public Affairs Officer for NOAA's National Marine Fisheries Service AK Region in Juneau**

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Dr. Teri Rowles, Joel Garlich-Miller, Raphaela Stimmelmayer and Stephen Raverty provided expertise during this morning's media teleconference on the Alaska UME declaration (and pending declaration for walruses). The audio recording of that media teleconference is available on NOAA's Alaska Regional website: <http://alaskafisheries.noaa.gov/>

Julie circulated a Public Service Announcement to media outlets and communities in the Arctic and Bering Sea Strait regions. The purpose of this PSA is ask for continued help from subsistence communities in reporting marine mammals in distress.

We discussed the possibility of holding information sessions or discussions at one or more of the following events:

**Alaska Marine Science Symposium** - January 16 - 20 at the Captain Cook Hotel in Anchorage, AK. <http://www.alaskamarinescience.org/>

**Alaska Health Summit** - January 23-25 at the Captain Cook [www.alaskapublichealth.org](http://www.alaskapublichealth.org)

**Alaska Forum on the Environment** - February 6 - 10 at the Denali Center in Anchorage. <http://akforum.com>

**International Congress on Circumpolar Health** - August 5 - 10 in Fairbanks, AK. <http://icch15.com/>