

Climate, Ecosystems, & Human Health Work Group

Tuesday, Oct 11th
Meeting Summary

Attendees: Mike Brubaker (ANTHC), Amy Holman (NOAA), Kris Holderied (NOAA), Steve Gray (DOI AK CSC), Carl Markon (USGS), David Driscoll (ICHS), Tenaya Sunbury (ICHS), Jackie Kramer (EPA), Michelle Davis (EPA), Philip Loring (ACCAP), Karen Murphy (FWS & WLCC), Joel Reynolds (FWS & WLCC), Alan Parkinson & visiting Researcher from Sweden (AIP/CDC), Bob Gerlach (ADEC), Louisa Castrodale (DHSS), Sue Flensburg (BBNA), Tyler Katzmar and Bradley Harris (Alaska Pacific University)

PRESENTATIONS ON: CLIMATE & HUMAN HEALTH ASSESSMENTS & SURVEILLANCE TOOLS

The big thaw - consequences of climate change in Northwestern Alaska communities

Mike Brubaker, ANTHC - powerpoint posted online at:

<http://www.climatechange.alaska.gov/chh.htm>

Since 2009, ANTHC has been performing health impact assessments of communities in the Northwest Arctic. This is one of the most climate vulnerable regions in Alaska because of the rate of temperature change in the permafrost rich landscape. This presentation summarizes the findings from five villages focusing on permafrost thaw and the implications for food and water security, transportation, and infrastructure. Mike noted that the consequences of warming are not uniform from village to village. Also, events that in the past would not have resulted in anything remarkable are now triggering significant impacts as the fragile systems are becoming increasingly vulnerable. One example is the overflow of a sewage lagoon in Kiana which cause a major thaw in the permafrost as temps now hover around the freezing point. Mike also underscored the need to build for changes already underway and projected. Homes and infrastructure are inadequate to address thawing & shifting grounds.

Climate Change Health Assessments for Three Coastal, Riverine and Lake System Communities in Bristol Bay

Sue Flensburg, BBNA, & Mike Brubaker, ANTHC - powerpoint online

Funded by the Western Alaska Landscape Conservation Cooperative, the project to conduct climate change health assessments for three communities is the first of its kind in the Bristol Bay region. The project officially starts October 2011 under the direction of a project team including a wide range of partners. This presentation covers the four-step process that will be used to complete the community climate health assessments and public outreach component.

Phil Loring, of ACCAP, reported on a NOAA funded project that he is involved in which will focus on 3 communities (yet to be selected, but in the Bristol Bay region to complement the BBNA/ANTHC project reported on earlier). Plans are to look at whether communities have climate change adaptation plans in place, funding to address their needs, and regional capacity. Others involved in this include Craig Gerlach and Bill Schnabel.

Developing a Surveillance and Response Toolkit for Alaskan Communities

David Driscoll & Tenaya Sunbury, ICHS - no powerpoint

UAA's Institute for Circumpolar Health Studies (ICHS) was awarded a grant from CDC (CDC/NCEH) to develop, implement, and evaluate a community-based monitoring system to

capture baseline human health and ecosystem data from three ecologically distinct regions of Alaska.

The University of Alaska Anchorage's Institute for Circumpolar Health Studies (ICHS) was awarded a grant from the National Center for Environmental Health at the Centers for Disease Control and Prevention (CDC/NCEH) to develop, implement, and evaluate a community-based monitoring system to capture baseline human health and ecosystem data from three ecologically distinct regions of Alaska. The goals of this study are to (a) coordinate a community-based network of local observers, (b) develop a toolkit to guide sentinel surveillance of climate change related events, (c) analyze structured observations of sentinel natural and health events and (d) work with experts and community stakeholders to identify adaptation/mitigation strategies to human health threats identified.

A brief oral update on this project, now underway, was provided. They are in month seven out of 12 in their field reporting regimen.

PRESENTATION ON RECENT FINDINGS OF INTEREST:

Preliminary Investigations into Ichthyophonosis – Is there a connection between climate change & groundfish health? That is but one question being asked...

[Tyler Katzmar, grad student, APU] - powerpoint online

Alaska Pacific University Prof. Brad Harris and his students have completed the first port-based investigation of the prevalence of Ichthyophonosis and mushy flesh syndrome in south-central Alaskan groundfish species. The team found evidence of Ichthyophonosis in all five ports investigated and in 5 of 11 groundfish species sampled. They found 14 halibut with mushy flesh conditions but no link between Ichthyophonosis and mushy flesh. Tyler presented their preliminary findings which document Ichthyophonosis in 5 new Alaskan marine fish species and suggest it is broadly distributed in SouthCentral AK waters. They are awaiting confirmation from the lab and thinking of steps to eliminate bias in future studies by conducting vessel-based sampling (since fish w/mushy flesh are discarded if identified on board). They did not include shellfish in their investigation. Neither ichthyophonosis nor mushy flesh are known to cause any harm to humans. Ichthyophonosis cannot survive in a warm-blooded host.

UPCOMING CONFERENCES/WORKSHOPS:

- **Joel Reynolds, Science Coordinator for the Western LCC, announced this science conference which will focus on Southwest Parks:**

NPS Southwest Alaska Science Symposium, 2-4 Nov in Anchorage

<http://www.arcus.org/meetings/2011/swak-science-symposium>

- Carl Markon reported that he is working with the USGCRP & an Alaskan team to coordinate the writing of the AK Chapter for the upcoming National Climate Assessment. Mark Shasby is now the USGS AK Science Center Director. Carl is now the USGS Alaska Deputy Executive Director
- Karen Murphy gave a status report on the 5 LCCs in AK. The Western LCC, Arctic LCC, & North Pacific LCC are up and running, the Aleutian Bering Sea Islands LCC has just held its initial meeting w/interim steering committee members, & the Northwest Interior Forest LCC will be doing the same Oct. 14th.
- Kris Holderied, NOAA, reported that they were just funded by EVOS for a 5 year study focusing on oceanography to marine mammals. Working on data with AOOS. Mike B asked about utilizing EcoPath or EcoSim Models.
- Mike Brubaker said that ANTHC received an EPA grant to hire local climate change observers. They plan to post information on Google Maps. Tenaya suggested looking into ESRI & community-based mapping.
- Steve Gray, recently hired Director of the AK Climate Science Center, reported that 5 research projects were funded last year. They have a USGS staff scientist, someone else funded by NPS, 3 post-docs already on board, and 3 new grad students coming from UAF.
- Sue Flensburg requested that we share information on funding opportunities and sent the following in for distribution:

FUNDING OPPORTUNITIES:

State & local officials interested in additional information about developing & implementing cost-effective climate & energy strategies that help further environmental goals & achieve public health & economic benefits may visit:

<http://www.epa.gov/statelocalclimate>

To subscribe to or unsubscribe from this listserv, go to:

<http://www.epa.gov/statelocalclimate/listservs/index.html>

Also, from internet:

NOTE: These opportunities represent a snapshot of what is currently available (as of August 9, 2011). Future grant opportunities are contingent upon funding appropriations

<http://pcjv.org/docs/Climate%20Funding%20Opportunities.pdf>