

## ***Climate and Health E-News***

### ***Connecting People and Raising Awareness in the Interests of Public Health***

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**USGS to Study Climate Impacts on Community Water** - USGS is funding a project to look at the effects of climate change on community water sources in the North Slope region. The project is a collaboration between the USGS-Alaska Science Center, the North Slope Borough, the University of Alaska Fairbanks Permafrost Laboratory, and the Alaska Native Tribal Health Consortium's Center for Climate and Health. Initially the project will focus on the community of Point Hope, an Inupiat community of about 700 residents, located on a gravel spit extending out into the Chukchi Sea. The village is essentially surrounded by saltwater and relies on a tundra lake located 6 miles inland as its freshwater source. Tundra lakes are vulnerable to changes in water quality and availability due to increasing temperature, changes in precipitation, and thawing permafrost. The project will document any historical changes to community water supplies by using remote sensing, field studies, and analysis of water utility records. UAF interns will utilize historical aerial photography and contemporary high-resolution satellite imagery to determine trends in lake area from the 1950s to present. Students will also establish a water quality and quantity monitoring station using loggers that will record continuously throughout the entire year. Site visits will be conducted primarily during the pumping and treatment season to collect in situ water quality measurements. For more information, contact Ben Jones at USGS in Anchorage [bjones@usgs.gov](mailto:bjones@usgs.gov).

**EPA Works with Tribes to Characterize Leachate from Open Dumps** - Rural Alaska has more than 200 open dumps. In many cases these dumps have not been properly sited, and are in areas of standing water or subject to storm surge, erosion, or seasonal flooding. Most are not lined and there are few controls to prevent hazardous waste from being put into them. Little has been done to characterize the nature of dump site contaminants and their movement in the environment. Given the influence of climate change on hydrology, permafrost and erosion, more information is needed on the nature and movement of dump site contaminants in order to better define best management practices. EPA is working with RuralCAP and with tribal environmental programs in several rural communities to characterize the movement of dumpsite leachate. *Additionally EPA is looking to enroll two additional communities that have dump sites constructed on permafrost, to be part of the program.* Participants meet every two months by teleconference and have training during the Alaska Forum on the Environment. The Tribal representatives will be responsible for regularly gathering and shipping samples, and will be provided with training, equipment, lab services, shipping costs and the costs of installing hand set monitoring wells. The application form is [attached](#). For more information contact Ted Jacobson at RurALCAP [tjacobson@ruralcap.com](mailto:tjacobson@ruralcap.com) 907-279-2511, or Michelle Davis [Davis.MichelleV@epamail.epa.gov](mailto:Davis.MichelleV@epamail.epa.gov) at EPA's Anchorage Field Office, 907-907-271-5083.

**High Arctic Species on Thin Ice.** A new assessment of the Arctic's biodiversity reports a 26% decline in species populations in the high Arctic. Populations of lemmings, caribou and red knot are some of the species that have experienced declines over the past 34 years, according to the first report from The Arctic Species Trend Index (ASTI), which provides crucial information on

how the Arctic's ecosystems and wildlife are responding to environmental change. However some species like the Alaska Bowhead whale population are increasing. While some of these changes may be part of natural cycles, there is concern that climate change may be exacerbating natural cyclic declines. You can download the report at:

<http://www.asti.is/download> Source: <http://www.scienceblog.com/cms/high-arctic-species-thin-ice.html>

Regards - Mike

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