

Minnesota Environmental Congress

Adapting to climate change: innovative strategies from around Minnesota

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health impacts and climate change

Climate change significantly impacts tribal air, water and food. It has resulted in rising coastal water levels; more frequent forest and grass fires; increased pests and vector-borne disease; extreme weather conditions; decreased food availability; lower inland water and underground aquifer levels and non-native plant encroachment.

Tribal Public and Environmental Health Think Tank, a work group convened by the American Public Health Association (APHA) with the support of the Centers for Disease Control to increase awareness of the unique public and environmental health challenges faced by American Indian/Alaska Native communities.

The screenshot shows the 'public health newswire' website. The header includes the APHA logo and navigation links for 'ABOUT CONTACT' and a search bar. The main navigation menu lists 'HOME', 'HEALTH TOPICS', 'FINDINGS', 'ALL THINGS APHA', 'VOICES', and 'ANNUAL MEETING'. The article is titled 'Climate changes tribal and indigenous health' by Louise Dettman, dated Nov 1, 2017. The article text discusses the 'Year of Climate Change and Health' initiative and the impact of climate change on tribal communities. A circular graphic with a mountain, river, and feather is featured. The right sidebar contains social media links for Twitter, Facebook, LinkedIn, YouTube, and RSS, as well as a 'LATEST TWEETS' section with several tweets related to public health and climate change. At the bottom, there are 'POPULAR TAGS' including 'Affordable Care Act' and 'Annual'.

public health newswire

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GUEST POSTS

Climate changes tribal and indigenous health

by Louise Dettman on Nov 1, 2017 • 9:53 am

2017 is the [Year of Climate Change and Health](#), a 12-month APHA-led initiative with monthly themes related to the health impacts of climate change. In recognition of [National Native American Heritage Month](#), November's focus is on [Tribal and Indigenous Health](#). Today's guest blog comes from the [Tribal Public and Environmental Health Think Tank](#), a work group convened by APHA with the support of the Centers for Disease Control to increase awareness of the unique public and environmental health challenges faced by American Indian/Alaska Native communities.



Climate and Health is one of the Tribal Public and Environmental Health Think Tank's six tribal health priority issues, along with Food Sovereignty and Access, Infrastructure and Systems Development, Resource Extraction, Clean Air and Clean Water.

The Think Tank's forthcoming report, "Tribal Health Priorities," covers all six and provides some of the historical, political, social and cultural contexts key to understanding the issues tribal communities face, including the effects of climate change.

Climate change significantly impacts tribal air, water and food. It has resulted in rising coastal water levels; more frequent forest and grass fires; increased pests and vector-borne disease; extreme weather conditions; decreased food availability; lower inland water and underground aquifer levels and non-native plant encroachment.

As a result of geographic vulnerabilities and extreme environmental changes, some American Indian/Alaska Native communities have been displaced and traditional food practices, medicines and ceremonies are threatened.

Disruption of traditional practices

Weather pattern changes and warming waters can impact the health of local animals and plants if they are unable to migrate or adapt well to changing ecosystems. By threatening the health of local plants and animals, climate change disrupts the ability of Native populations to access traditional food sources and medicines and perform traditional ceremonies.

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RT @MikeStobbe: With death rate up, US life expectancy is likely down again. New 2017 data. Me/AP: <https://t.co/p77ZYWQ1Z4>, 18 hours ago

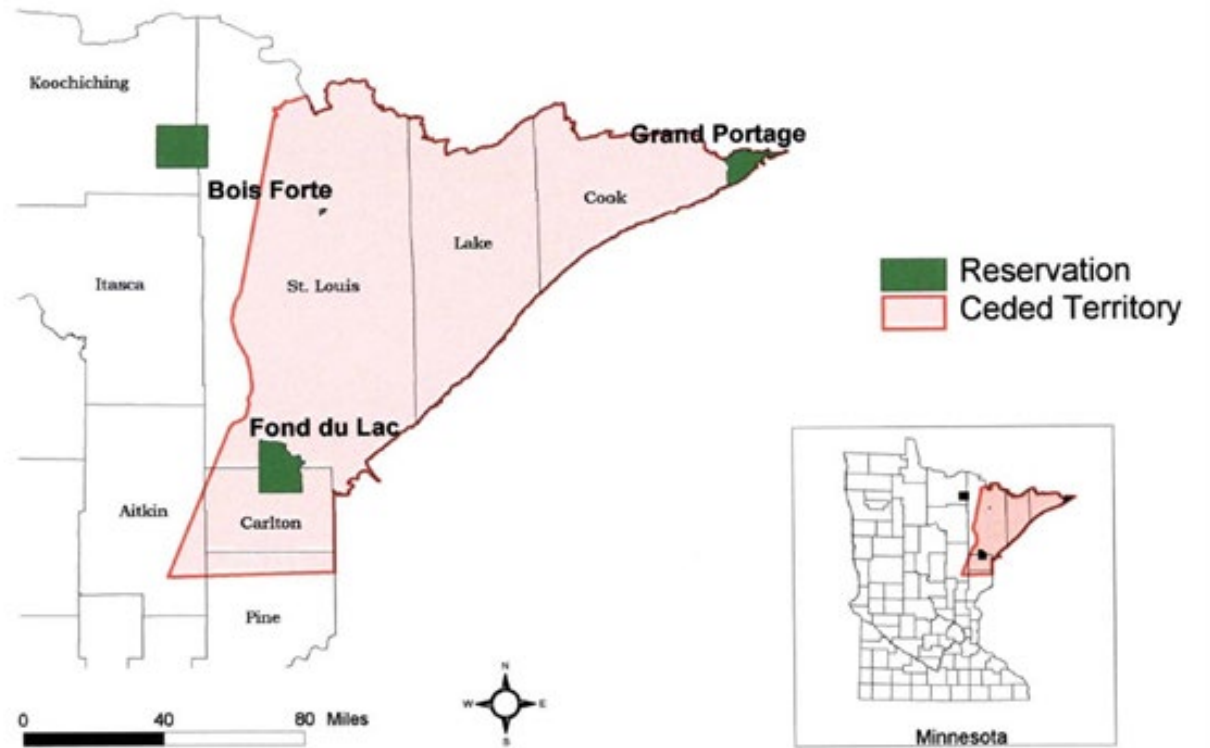
Join APHA leaders @lyndonhaviland and @MohandesDean in bringing more public health students to @APHANAnnualMtg... <https://t.co/07Yaxne3Uu>, 23 hours ago

POPULAR TAGS

Affordable Care Act Annual



1854 Ceded Territory



Climate Change Vulnerability Assessment and Adaptation Plan

1854 Ceded Territory Including the Bois Forte, Fond du Lac, and Grand Portage Reservations



		Sensitivity: Low → High				
		S0	S1	S2	S3	S4
Adaptive Capacity: High ↓ Low	AC4	<ul style="list-style-type: none"> Black Crapple 	<ul style="list-style-type: none"> Berries (w/o Bog Species) White-Tailed Deer 			
	AC3		<ul style="list-style-type: none"> Bald Eagles Wolves Birds and Waterfowl (turkey, duck, pheasants, geese) 	<ul style="list-style-type: none"> Air Quality Walleye Northern Pike 	<ul style="list-style-type: none"> Sturgeon Eastern White Pine Furbearers (beaver, black bear, bobcat, coyote, fisher, fox, mink, muskrat, river otter.) Northern Red Oak, Bass Wood, and Chokecherry 	
	AC2			<ul style="list-style-type: none"> Culturally Significant Plants Sugar Maple Black Ash Resource Access Shrub Wetlands 	<ul style="list-style-type: none"> Wild Rice Labrador Tea Berries (bog species) 	<ul style="list-style-type: none"> Quaking Aspen
	AC1			<ul style="list-style-type: none"> Culturally Significant Places 	<ul style="list-style-type: none"> Water Quality and Quantity Birds and Waterfowl (ruffed grouse, spruce grouse, loons, swans) Cisco Furbearers (lynx, American marten, snowshoe hare) Lake Trout Whitefish 	<ul style="list-style-type: none"> Moose Brook Trout Vernal Pools
	AC0					<ul style="list-style-type: none"> Paper Birch Boreal Wetlands Northern White Cedar

Moose (MOOZ)

- Important subsistence/cultural resource
 - Central to the identity of the boreal forest
 - Consuming shrubs/trees
 - Serving as food for predators such as wolves
- Mooz Decline
 - Land use changes
 - Habitat shifts
 - Emergence of new disease vectors
 - Pressure from predators
 - Increasing number of parasites
 - Climate change
- High Vulnerability



Wild rice (manoomin)

- Cultural/spiritual tie to wild rice
 - Harvested for food
 - Significant role in cultural practices
 - Economic resource
- Serves as a source of food and shelter for fish and wildlife
- Climate Impacts
 - Susceptible to changes in temperatures and precipitation
 - Cool waters less than 35° are required during the dormancy stage that is needed for wild rice germination
 - Heavy precipitation events have increased in the 1854 Ceded Territory
- Medium Vulnerability



Water quality & quantity

- Water is a vital element for the Bands in the Ceded Territory
 - Tied to all aspects of life, food, economy, recreation and traditional/cultural history
- Important for plant/animals
 - Wild rice (manoomin)
 - Wildlife
 - Natural ecology of the forests and wetlands in the region
- Medium-High Vulnerability



Current Implementation Projects

- Wild Rice (Manoomin) Phenology
- Sugar Maple Phenology
- Moose Breeding Activity
- Acoustic Monitoring for Amphibians
- Temp Loggers
- Temp and DO Logger Chain
- Rain Barrels
- Ice Monitoring
- Walleye and Sturgeon Assessments
- Climate Summary





Next Steps

Share strategies with identified partners

Identify other potential partners

Collaborate on strategy implementation



Miigwech! (Thank you)

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More information:

<http://www.1854treatyauthority.org/environment/climate-change.html>

