



LEO Network – Helping to Understand Environmental Vulnerability and Change in Northern Communities

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THE TAKE HOME

LEO is Local Environmental Observer Network

LEO is a community of environmental observers and topic experts who share information about specific events, that are potential symptoms of environmental change.

LEO Network can help increase understanding about environmental change and related vulnerabilities.

LEO Network content be explored through a variety of dimensions: time frame, location, and category, among others.





Services

- **Clinical - Alaska Native Medical Center**
- **Sanitation Infrastructure - Environmental Health and Engineering**
- **Community Health – Epidemiology, Disease / Injury Prevention, Health Research**

What does environmental health look like in rural Alaska?



Appropriate infrastructure



Capable Operators, Safety and Environmental Professionals



Safe and Sufficient Food Resources



Clean Air and Health Homes



ALASKA NATIVE
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Effective Plans and Capacity for Responding to Disasters



Safe and Sufficient Water Resources



Courtesy: LEO Network



M. Brubaker



Photo courtesy LEO Network

Lessons From Medical Community

Can we adopt strategies from clinical services, that could strengthen our community health services and wellness?

1. Patient Histories
2. Telemedicine
3. Syndromic Surveillance
4. Health Impact Assessments
5. Traditional Healing Methods







Photo: NASA



dessiné et gravé par G. Yver

Lith. de Langlois

Costumes des habitants des Îles Aleoutiques







Center for Climate and Health



Disease



Food Security



Injury



Behavioral Health



Water Security

In 2009 ANTHC established the Center with a focus on understanding the connections between climate change, environmental impacts and health effects.



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Health Effects of Climate Change Impacts

Allergic Reactions



Food Spoilage



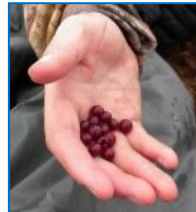
Food Confidence



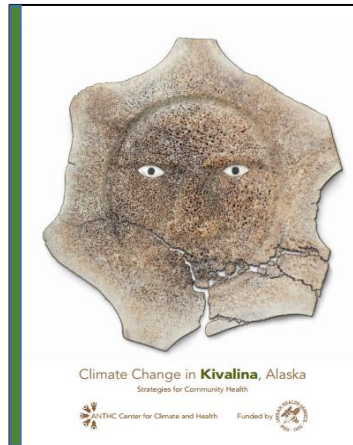
Injury



Nutrition



Mental Health



Water Quality



Infrastructure Damage



Travel Safety



Waterborne Disease



Respiratory Health



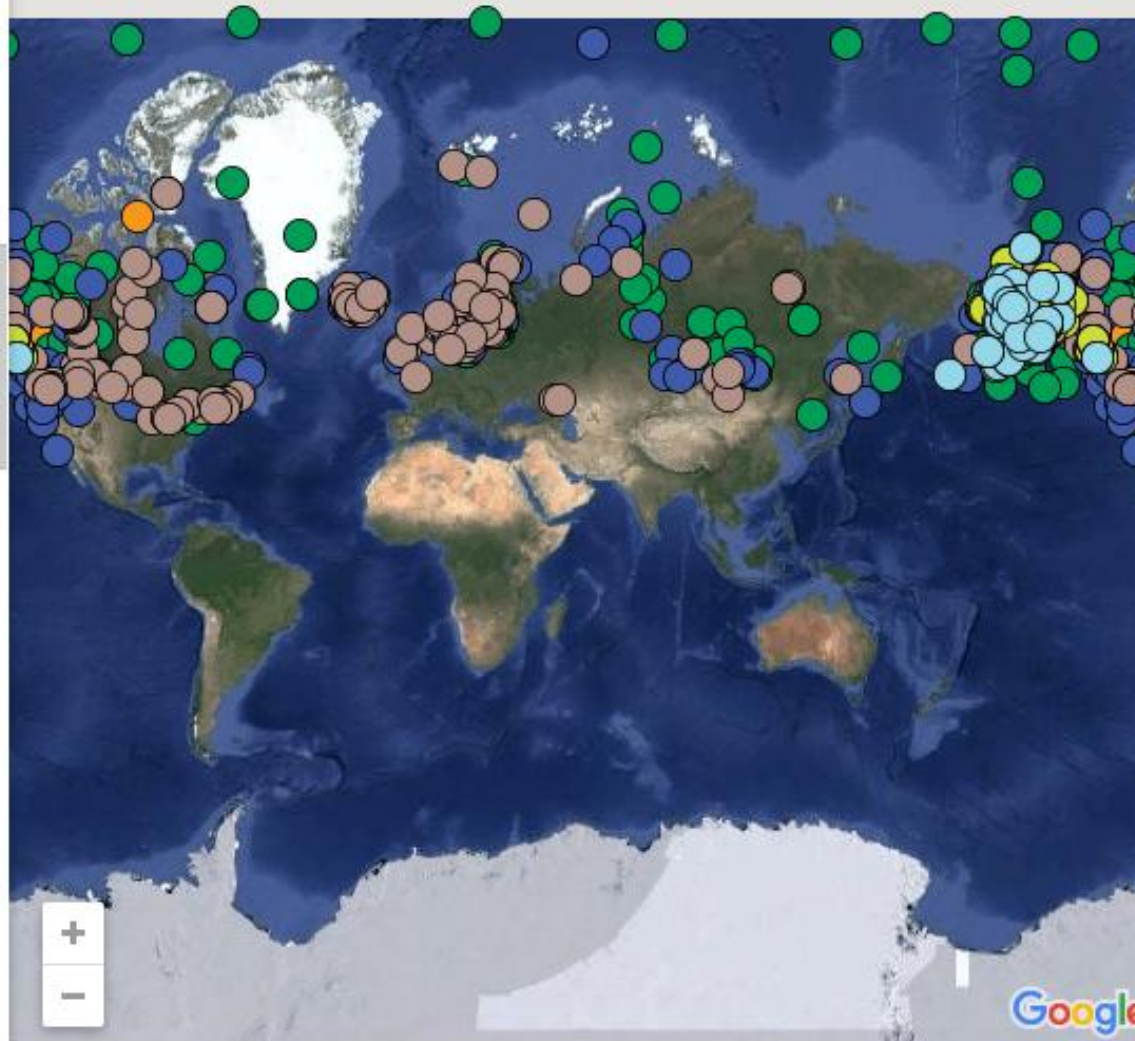
Ice Hazards



Infection

2012

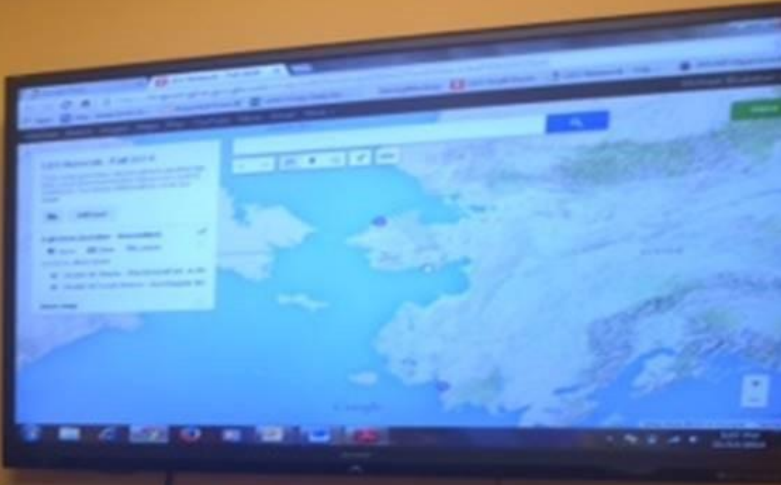
- 1-2012 Late freeze-up delays subsistence - ...
- 2-22-12 Huge pressure ice ridges "Vuneqs" n...
- 2-22-12 Mystery insect in Southeast - Klawo...
- 3-9-12 Change in barnacle numbers raises h...
- 3-17-12 Unusually large ice formation next t...
- 3-20-12 Aleutian community digs out of an a...
- 4-25-12 Warm and thawing in the Interior - E...
- 4-28-12 Sick seal sighting (USA)
- 5-1-12 Deer with fur loss in Southeast (USA)
- 5-6-12 Unusual bug found in home (USA)
- 5-8-12 Flood concerns on Kuskokwim River ...
- 5-9-12 Winter windfall causing road obstacl...
- 5-10-12 River bank erosion disrupting comm...
- 5-15-12 Predators conflicts, wolves & bear i...
- 5-19-12 Discolored seal with sores on side fl...
- 5-23-12 Community impacted by flooding (U...
- 5-29-12 Unusual bearded seal harvested (US...
- 6-12-12 Weird orange bug (USA)





BECOME A "LEO"
Change is happening fast... it's time to get your hands on what!

LOCAL ENVIRONMENTAL OBSERVER



A photograph of a person wearing a dark, fur-lined hat and a light-colored, heavy winter jacket. They are looking off to the side, towards a body of water under an overcast sky. The person is positioned in the upper right portion of the frame. A semi-transparent white box containing text is overlaid on the lower left and center of the image.

To respect and acknowledge the contributions of all members.

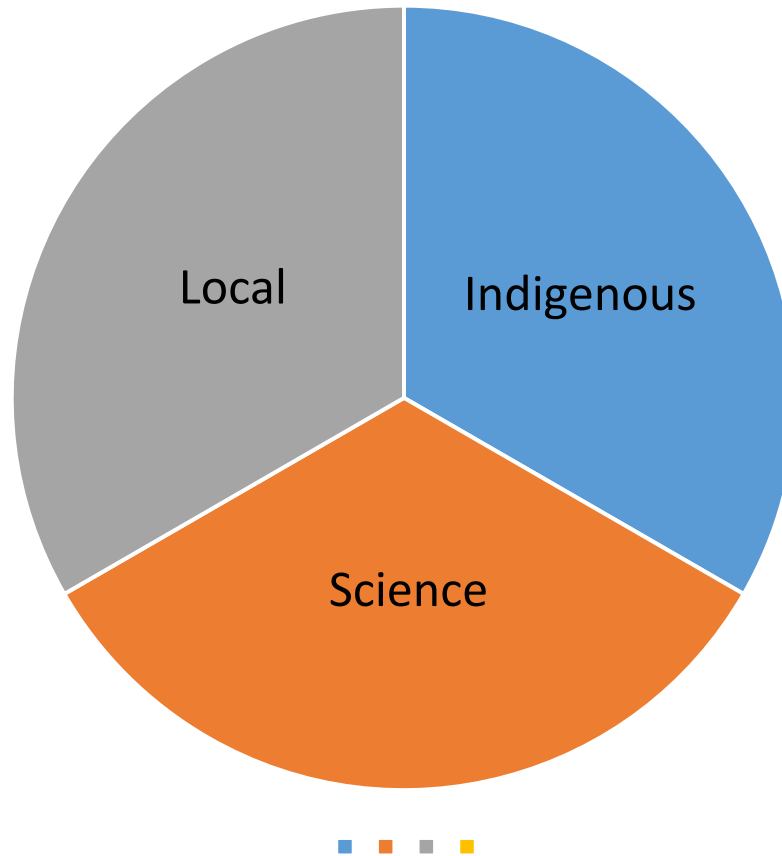
To help guide members to the resources they need.

To make the information accessible.

To respect privacy and create a safe space for information sharing.

And to make the system inclusive of different knowledge systems.

Three Knowledge Systems





9 JANUARY 2026 / AK Alaska Public Media / **Alix Soliman** EVENT

Multiple small avalanches release in Juneau after city issues evacuation advisory



Juneau, Alaska, United States

📍 N 58° 18' 7.061" W 134° 25' 10.83"

[🔍 Nearby](#)

Multiple small avalanches released on Mount Juneau above the Behrends neighborhood after the City and Borough of Juneau issued an evacuation advisory for known slide paths amid heavy rain, wind, and warming temperatures. Some residents evacuated and an emergency shelter opened as officials warned conditions could worsen and Thane Road closures could last days.



SAFETY



BUILDINGS



TRANSPORTATION



EXTREME PRECIPITATION



LANDSLIDE / AVALANCHE



DISPLACEMENT

Read On [AK Alaska Public Media](#) (English) [🔗](#)

Or translated into

See Also

[📍 View on Map](#)



Juneau officials recommend residential evacuations, warning of dangerous 'historic avalanches'


Juneau, Alaska, United States

FEB 27, 2021

[ADN Anchorage Daily News](#) EVENT

AUGUST 6, 2024 **EVENT**

River erosion threatening community water supply

 SURFACE WATERS / WETLANDS

 SAFETY

 SANITATION

 WATER SECURITY

 EROSION

50 km PERMAFROST CHANGE
50 mi

© Mapbox © OpenStreetMap



Noatak, Alaska, United States

 N 67° 34' 15.996" W 162° 57' 55.008"

 Nearby

Erosion of the shoreline on Well Island is threatening the water line that connects the village of Noatak to their water supply. The Tribal Health System is coordinating with the federal agencies and state and borough to support water supply needs and repairs.

Observation by Jeffrey Luther:

The attached photos provide a timeline of the river erosion at the Well Island, exposing the well transmission lines we get the drinking water from. Friday, July 19, no transmission line exposure, the following Monday, a buddy of mine came in

 Follow

 My Maps

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Noatak Alaska, United States
Nautaaq or Nuataam Kuunja

42 Nearby Posts

3 LEO Members

Contributing Members



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ANTHC

 Send Message

See Also

 View on Map



Noatak Erosion and River Channel redirection

Noatak, Alaska, United States

APR 13, 2023

EVENT



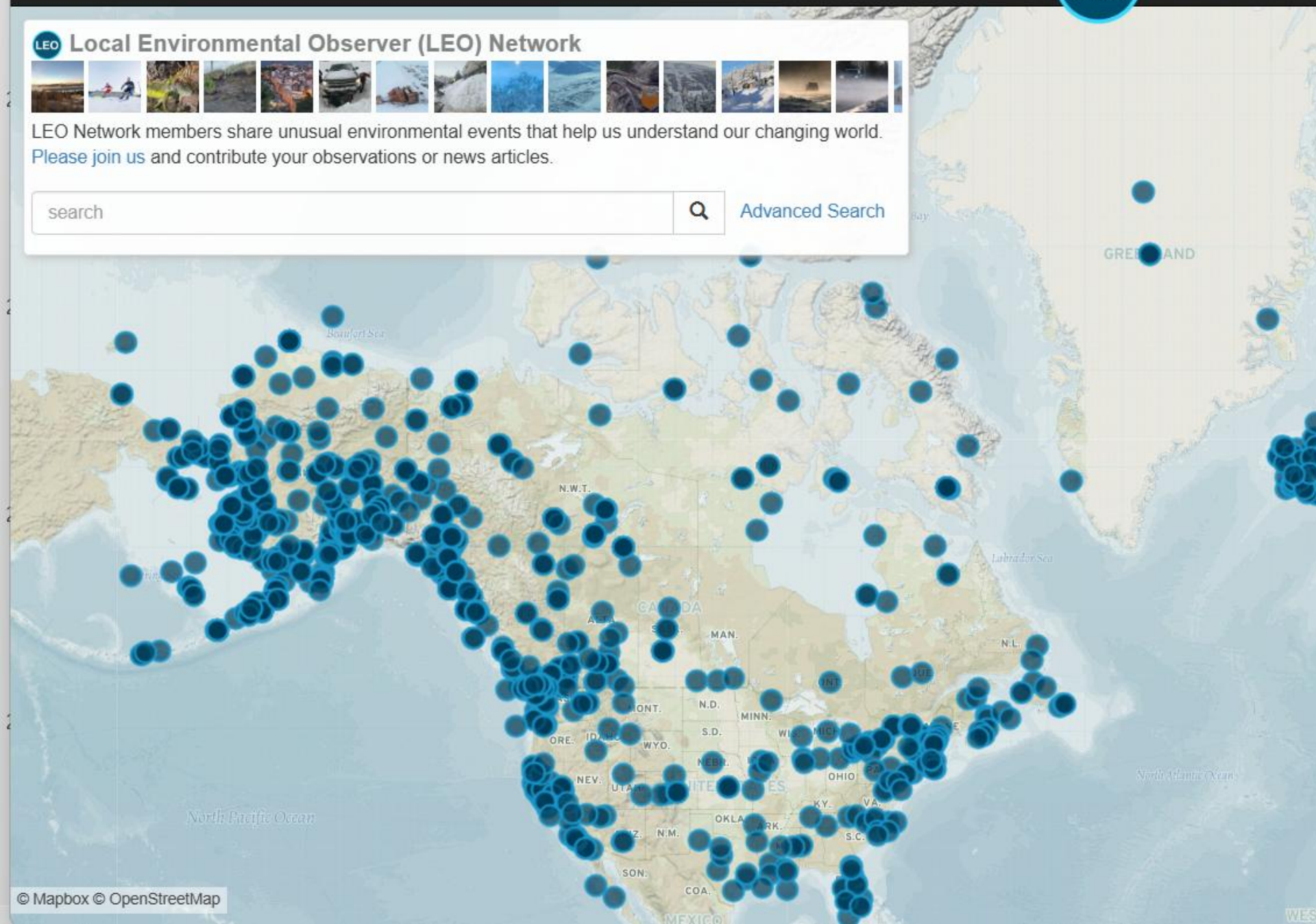


LEO Local Environmental Observer (LEO) Network



LEO Network members share unusual environmental events that help us understand our changing world. Please join us and contribute your observations or news articles.

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