



The Local Environmental Observer (LEO) Network in British Columbia

'The eyes, ears and voice of our changing environment'

The Local Environmental Observer (LEO) Network was designed by the Alaska Native Tribal Health Consortium (ANTHC) to communicate environmental changes observed by local and traditional people. The purpose of the Network is to increase understanding about environmental change and to help identify healthy and effective ways to adapt to those changes. Observers connect with experts, such as indigenous and scientific experts through the network and this creates a space to integrate indigenous, local, and scientific knowledge. The scope of participation is rapidly broadening. The LEO Network is being implemented in British Columbia (BC) through a partnership between the First Nations Health Authority (FNHA), the Commission for Environmental Cooperation (CEC), ANTHC, and Ocean Integrity Research as a way to better understand environmental changes that are being observed in BC.

WEBSITE AND MOBILE APP

Observations of unusual environmental changes are posted on an online map-based database with descriptions, photos, video, and audio information. Scientific and indigenous experts then review observations and respond with additional information and links. Over time, observations can provide important information to identify emergent trends in ecosystems and human well-being. In Alaska, the LEO Network has grown to include hundreds of participants, communities, and institutions, and is already highlighting climate change effects and potential adaptation approaches. Communities may decide what information to post and share with the network, and the level of detail.

The LEO Network features a global map and data interface accessible through the website (www.leonetwork.org), or through the mobile app 'LEO Reporter' on both iPhone and Android. It allows viewers to read refined stories that include initial observations, input of experts, photos and even video. The interface includes interactive maps, a search engine to explore the LEO observation database, and updates from the network. Anyone can be a LEO observer and engage other observers and experts, and help grow the network in BC. The LEO Network is designed to complement other existing surveillance and monitoring efforts in BC.



Observations can be posted from anywhere in the world, but expert consults and technical support is available only in regions supported by LEO Network Hubs, such as in Alaska, British Columbia, and Baja California. To participate, the first step is to register and create a member profile. The level of participation in the network is up to each individual member and posting observations is not a requirement for membership. Many members are simply interested in reading the observations of others in order to stay informed about new events or to analyze trends, local impacts, and responses.

LOCAL, INDIGENOUS, AND SCIENTIFIC EXPERTS

When observations of unusual environmental changes are submitted, other local, indigenous, or scientific knowledge holders can be consulted to verify, interpret, or enhance them. Indigenous experts can monitor LEO observations locally and regionally, provide consults, and act as local points-of-contact. First Nation environmental managers, natural resource staff, and other observers can participate in all capacities of the network, as appropriate. A network of scientific and technical experts provides the Western science component of a consult. They are usually located in government agencies, academic institutions, or organizations with topic expertise. The LEO Network connects the various forms of knowledge.

IMPLEMENTING THE LEO NETWORK IN BRITISH COLUMBIA

A one-day workshop was held on November 15, 2016 in Victoria, BC to familiarize First Nations regional champions with the LEO Network. These champions were identified through a representative selection process through the First Nations Health Authority regional structure. The participants felt that communities and other groups in their region would benefit from joining the LEO Network and they were eager to share the information they had learned. Please see the workshop summary for more details.

The LEO Network will grow in BC through ongoing monthly webinars, continued support of regional champions, training of FNHA's Environmental Health Officers, Technicians, Community Engagement Coordinators, and other staff, presentations at regional caucus meetings, social media, and written materials such as brochures and newsletter articles. The LEO BC Hub will provide leadership in identifying indigenous and scientific experts based on topic expertise and the interest and capacity of these organizations to participate. Consultations provided by local, indigenous and scientific experts complete the map postings.

SPONSORS AND PARTNERS

Financial support for the implementation of LEO Network in BC is provided by the CEC and FNHA. The ANTHC is providing technical support in the establishment of the BC LEO Network Hub.

There is growing interest in implementing the LEO Network in Canada and the US. The LEO Network has been accepted as an Arctic Council project under the Arctic Contaminants Action Program Working Group to help implement the Circumpolar LEO Network. The White House Council on Native American Affairs is championing LEO Network in a partnership to expand the initiative to Native youth, with a goal of using the platform to integrate Native youth voices into the U.S. national dialogue on climate change.

Learn more about the LEO Network at: www.leonetnetwork.org

Refer to the user guide for particular questions: <https://leonetwork.org/en/learn>

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