One Health in the Arctic – Avenues for Future Cooperation?

U.S. Department of State

GEO Plenary Side Event
Oct 23, 2017
Water and Hydrology

• Detection of changes to rivers, lakes, coastlines that may affect water quality and quantity

1. Break-up season
2. Flooding and silting
3. Changes to permafrost
4. Coastal erosion

• Particularly important for communities that rely on surface water, as well as coastal communities

• A popular topic for observation in LEO, but remote sensing can provide valuable perspective
Natural Disasters

• Assessing post-event impacts from events such as:
  1. Floods
  2. Fires
  3. Severe storms

• Consider impacts on subsistence animals and human communities as well as more broadly on ecosystems

• Particularly important for subsistence-based communities

• Another popular topic for observation in LEO, but remote sensing can provide valuable perspective
Vector ecology

• Change in vegetation that can affect the range of key disease vectors such as beavers, ticks, mosquitoes

• Particularly important for communities where an ecological shift is occurring and new risks may be introduced

• Local observation offers key insights, remote sensing helps give sense of broader scale of the change
Fire management

- Assessing the extent of both fires and their smoke plumes, particularly for impact on air quality and respiratory health

- Particularly important for communities in the interior

- Less common to see such observations in LEO, and may put people at risk to go out and observe – remote sensing is essential
Thank You