North American OA synthesis report





Kick-off discussions

29 October 2026

GOA-ON

Global Ocean Acidification Observing Network

Overview

1. Welcome and Introductions
2. The vision and the need
3. The potential content
4. Regional representation and coordination
5. Opportunities and timelines

The vision and the need

- Both groups represent a relatively long-running collaboration (DFO-NOAA began 2016, GOA-ON North American Hub began in 2017)
- Although similar / shared goals, limited interactions between groups (which includes synthesis knowledge and products)
- **NA synthesis an opportunity to**:
  - Provide a **synthesis that could be used by management and general public for increased understanding of the role of OA and for decision-makers to use as a guide for OA**
  - **Could highlight regional differences** in OA processes / levels, vulnerabilities, societal impacts and adaptation responses
  - **Highlight international scientific collaboration** in a tangible way (could use case studies from DFO-NOAA work, including OARS as well) at a time of geopolitical differences
  - **Provide inspiration to other GOA-ON Hubs** and OA collaborations to develop more outward-facing products, which could highlight regional differences and vulnerabilities
  - Done right, this could be something that is a **regular report and help inform other national contributions** (e.g. Canada's Changing Climate)
  - **May facilitate and encourage more international multidisciplinary collaborations,** including closer connections between DFO-NOAA and the GOA-ON NA Hub and extended network

The potential content

- Could be modelled on a moderate scope the **Arctic Report Card**
- **Series of essays, retrospective of accomplishments in NA since 2016/2017, each with their own doi** (like Arctic Report Card)
- **Executive Summary and Regional Status Dashboard**
- **Observations (ocean acidification,** temperature, oxygen, salinity**) over multiple regions**
  - likely combine by region than country, as observational overlaps e.g. Canada and US in Arctic, Mexico and US in Gulf of Mexico
  - Surface and sub-surface trends, saturation states, pCO_2 and DIC
  - Compound drivers and physical factors, e.g. OAH, extremes, coastal run-offs
  - Opportunity to highlight joint observing activities?
  - DFO-NOAA strong contribution
- **Observation Network Status and Data Infrastructure**
  - Asset coverage
  - Data integration and accessibility
  - Monitoring gaps
- **Modelling over multiple regions**
  - By region and by model and how used
  - DFO-NOAA strong contribution

How to Cite Arctic Report Card 2025

Citing the complete report or Executive Summary:

Druckenmiller, M. L., R. L. Thoman, and T. A. Moon, Eds., 2025: *Arctic Report Card 2025*. M. B. Armstrong and C. Garcia, Coordinating Eds., https://doi.org/10.25923/nrzf-j897.

Citing an essay (example):

Mudryk, L. R., A. Elias Chereque, C. Derksen, K. Luojus, and B. Decharme, 2025: Terrestrial snow cover. *Arctic Report Card 2025*, M. L. Druckenmiller, R. L. Thoman, and T. A. Moon, Eds., M. B. Armstrong and C. Garcia, Coordinating Eds., https://doi.org/10.25923/cfhv-c239.

(Note: Each essay has a unique DOI assigned)

The potential content

- **Biological and Ecological Indicators**
  - Species vulnerabilities: pelagics, benthic, tropical, refugia; commercial and non-commercial
  - by species or by region, or both?
  - DFO-NOAA strong contribution
- **Socioeconomic and Human Dimensions**
  - Connecting chemical changes to coastal communities, economies and adaptation
  - Economic and social impacts to commercial or traditionally important species
  - Indigenous and Community perspectives
  - Mitigation and adaptation progress
  - NOAA has relevant social sciences, Action Plans, OA Alliance for policy?
- **Highlight gaps and uncertainties?**
- **Highlight the scientific collaborations (DFO-NOAA, NA Hub, GOA-ON)**
- **Missing elements, or sections to remove?**

Regional representation and coordination

- While DFO-NOAA group exists, there aren't the same formal relationships with Mexico
- NA Hub leadership and Mexican NA Hub membership is more focused on observations
- **Is there a way of facilitating or promoting coordination with countries? Use of CANs and early-career networks (e.g. ICONEC)?**
- What are the **key expertise that we may be missing** per country (especially thinking socioeconomics, social sciences)? Can we derive from published literature?
- In Canada the OA Community of Practice could play a role in coordination (Kristina)





Opportunities and timelines

- **Great example of a productive international collaboration!**
- **Separate chapters / doi's** with specific author teams (and expectations)
- Opportunities for authorship and leadership and highlighting own work
- Connection between disciplines may increase perception of 'relevancy' to decision-making
- Early career support / network opportunities

Timelines:

- **Final target for delivery in fall of 2028.**
- **Now – end of 2026:** identify/recruit author teams and co-develop chapter outlines. Editors in support.
- **Jan - July 2027:** authors to develop initial content per chapter, identify missing information / expertise
- **August – December 2027:** drafts of chapters produced by end of December 2027
- **February 2028:** Use the 2028 Feb / March Ocean Sciences Meeting in Vancouver as a meeting place to help finalize the document (revise, seek missing information) and develop Executive Summary content
- **Fall 2028:** Editing, graphics etc finalized and formal process for publication release