

Arctic Biodiversity Congress,

October 9, 2018 – Rovaniemi, Finland

**SESSION: The CBMP as an international player and
a regional BON of GEO BON: exploring synergies**



Circumpolar Biodiversity Monitoring Programme

Status on work and next steps; Strategic Plan



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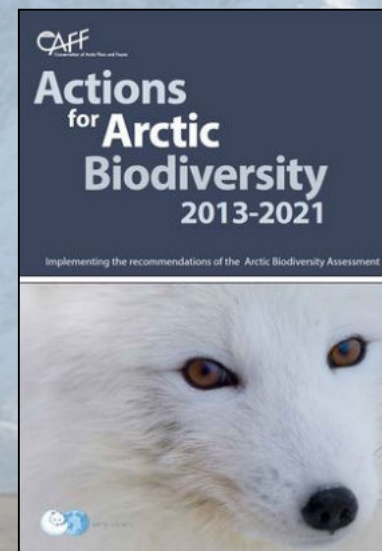
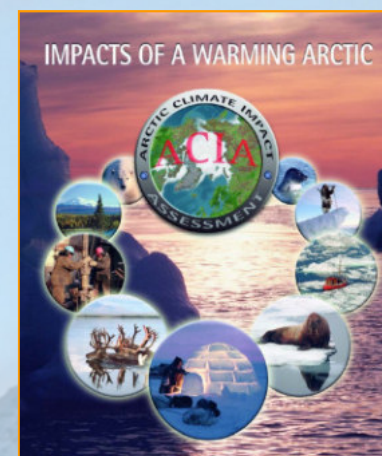


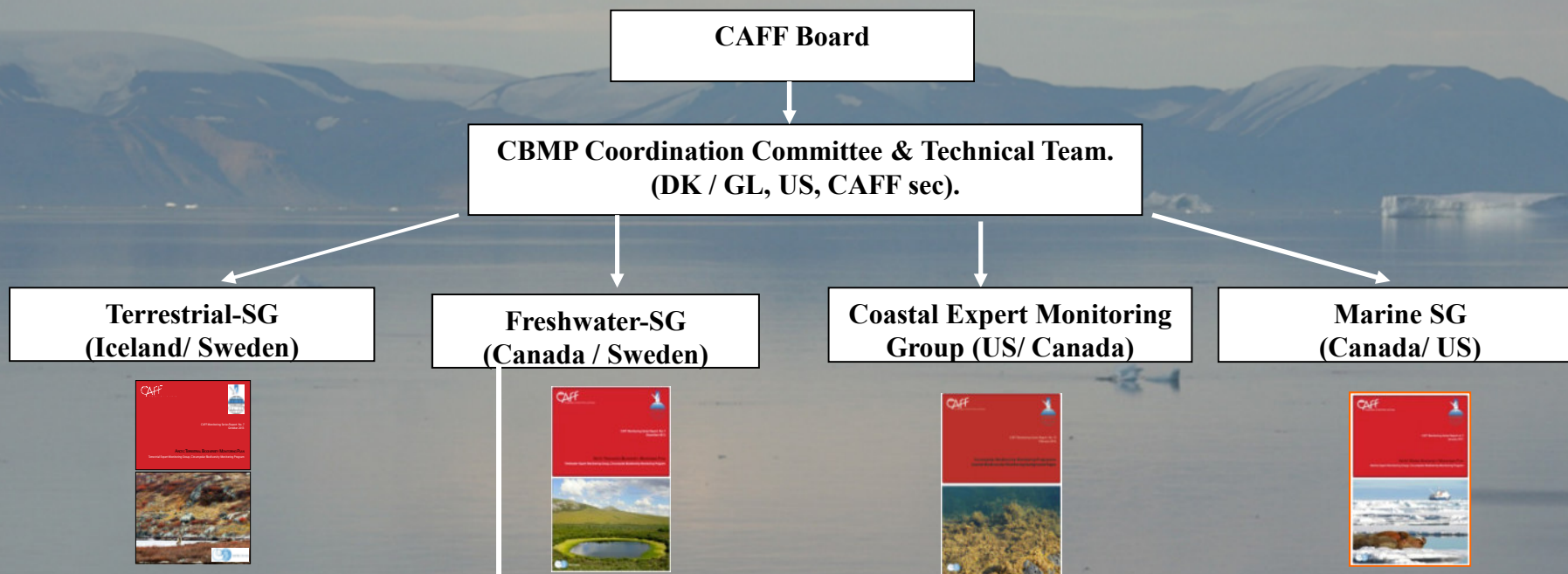
Tom Christensen, Sara Longan.

- CAFF's biodiversity monitoring programme
- Started as response to Arctic Council recommendations on biodiversity and ecosystem monitoring (ACIA)
- Now also a tool for CAFF to implement ABA Action Plan.
- Focal point for current and credible Arctic biodiversity information

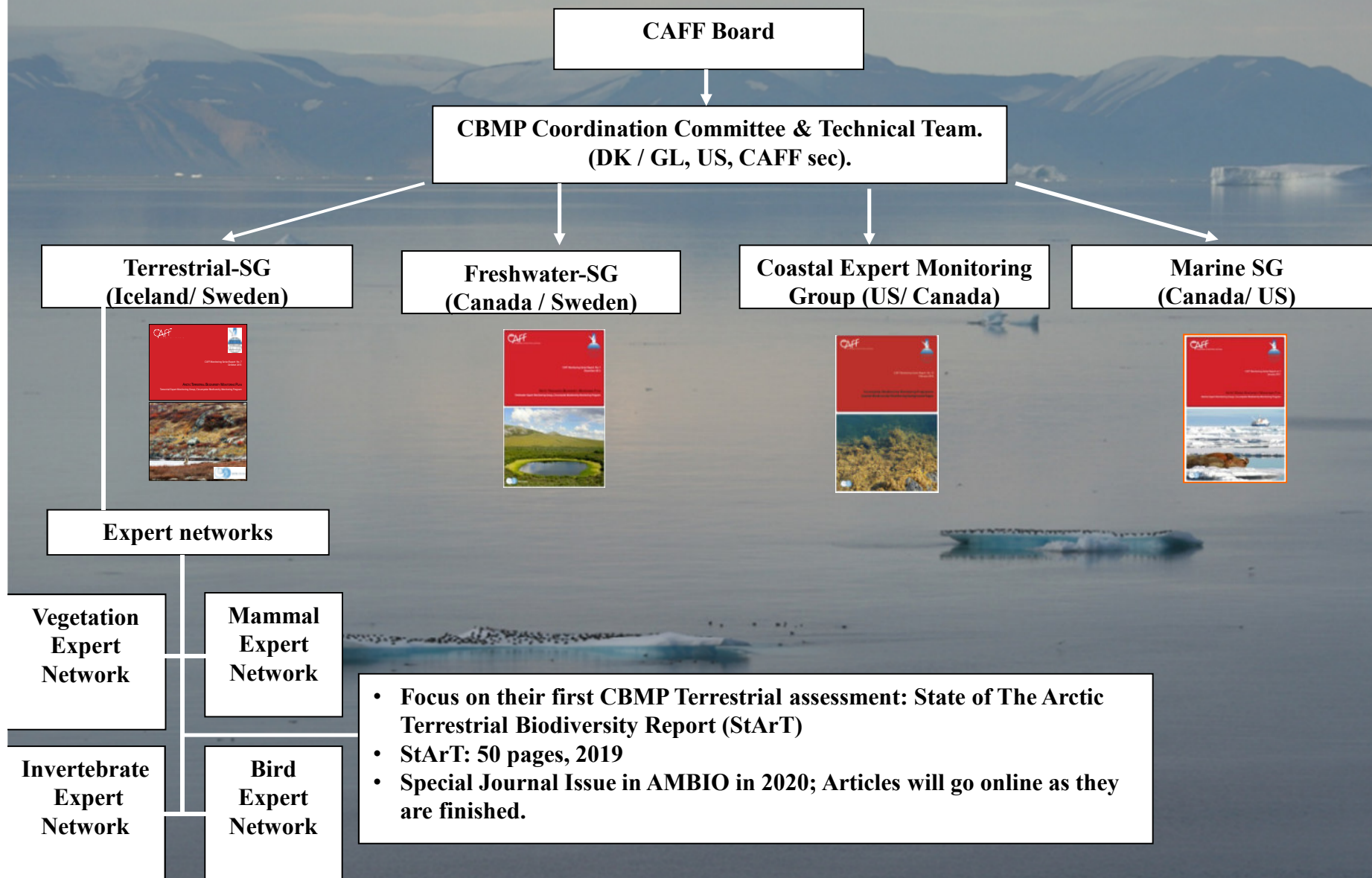
www.cbmp.is

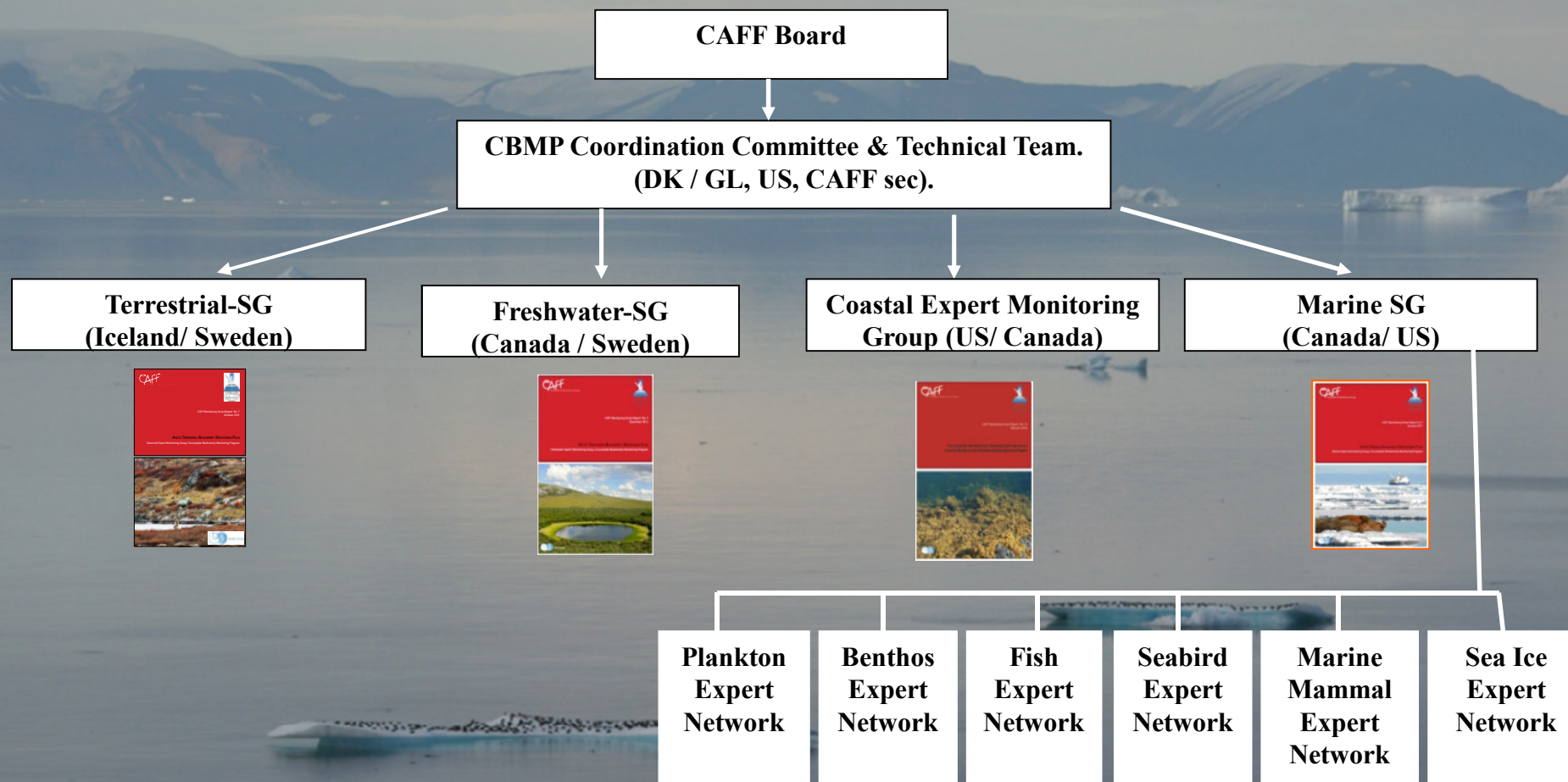
www.ABDS.is





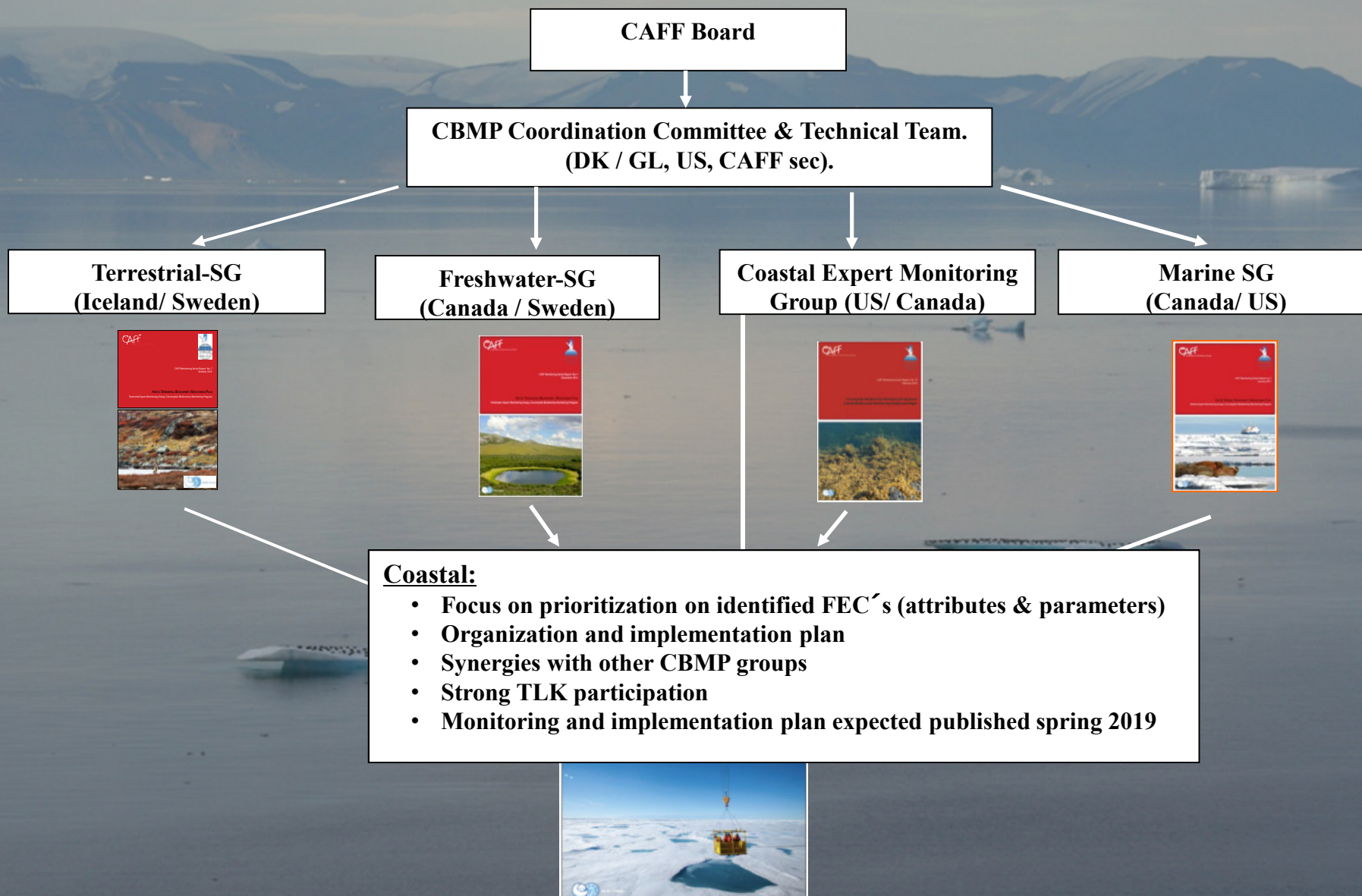
- Focus on their first CBMP Freshwater Assessment (SAFBR)
- State of The Arctic Freshwater Report (SAFBR); 70 pages, May 2019
- Special Journal Issue 2019; 13 articles in Freshwater Biology.
- Extensive (harmonized) database on ABDS; 2018





Marine:

- **First Marine CBMP Assessment published in 2017 (SAMBR): 190 pages.**
- **Focus: Next steps after SAMBR. How to communicate and use key findings and advice for future monitoring? How to use lessons learned? Synergies with other groups?**



Long term ecosystem based adaptive monitoring plans

(Lindenmayer & Likens)



Conceptual Model
- Identify FEC and key monitoring targets

Management questions

Monitoring design

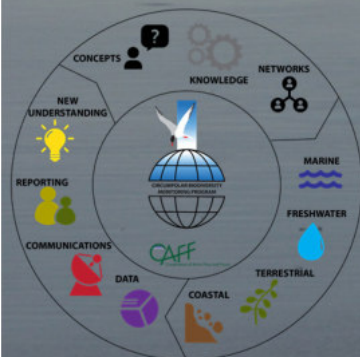
- Sampling methods
- Scale to use

Collect data

Data: analyse

Communication of data
(dependent of target group)

Science
Experiments
Existing Networks



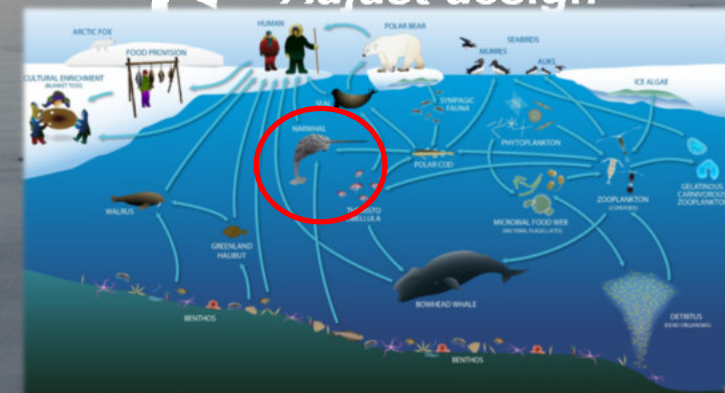
Knowledge



conceptual

hypothesis

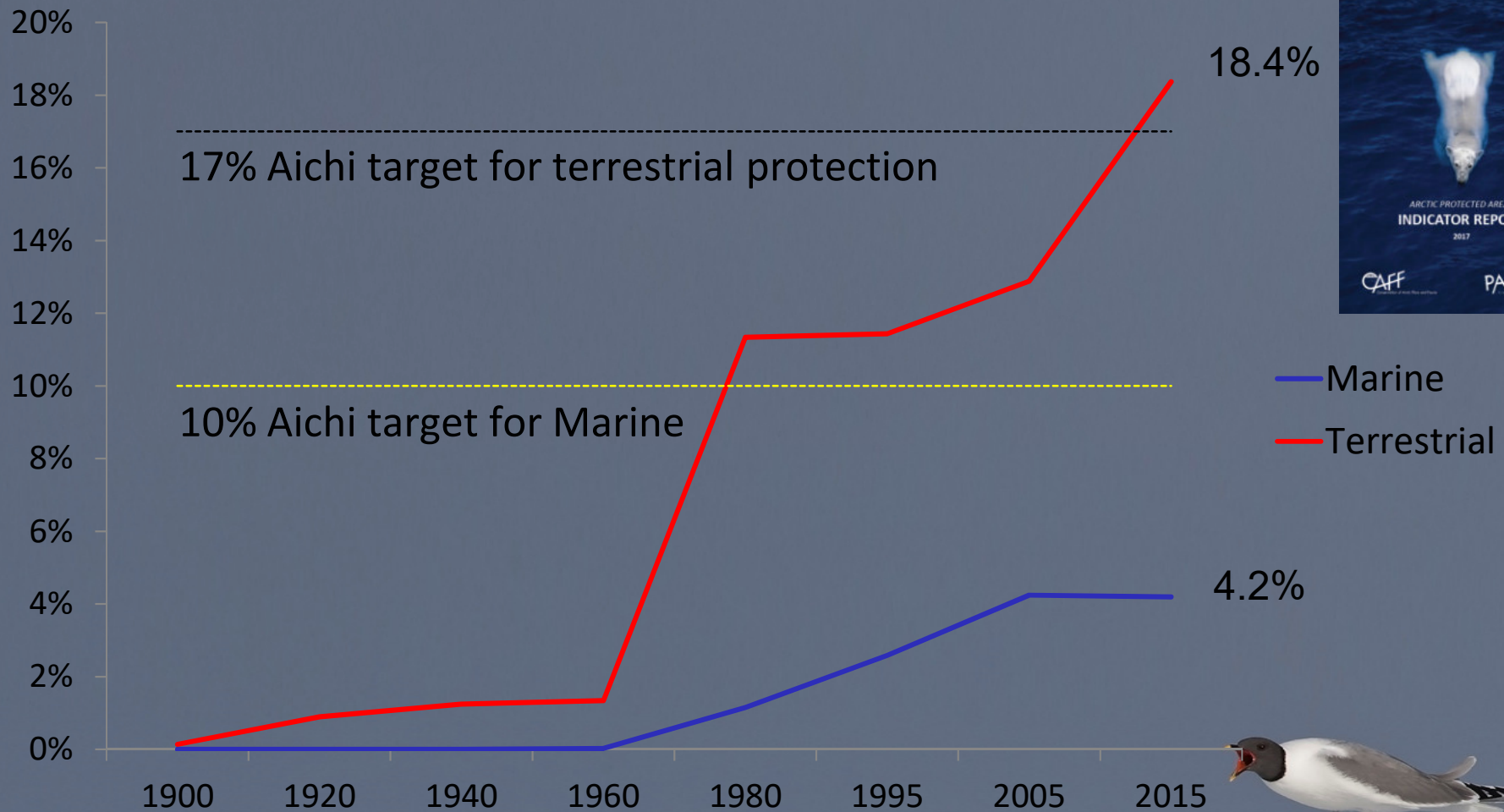
Adjust design



- Regular assessments: *State of Arctic Biodiversity* report, including status reports (Scientific and TK information)
- Outputs as scientific publications
- Revised / adjusted strategies and adaptive monitoring plans and protocols
- Headline Indicator reports
- Various summaries and other communications material
- Input to the ABDS (www.abds.is) that will be an important tool for faster and timely reporting



CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM





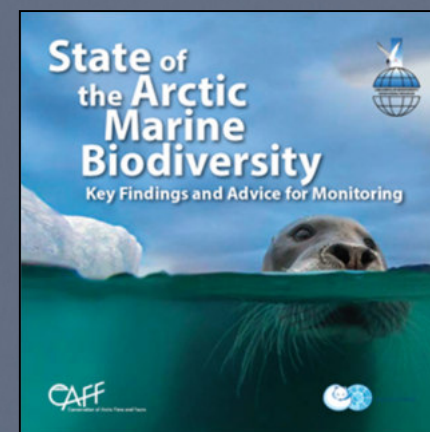
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- Scientific peer reviewed report (2017)
- 30 page summary document
- Describe the baseline conditions for FEC's identified within:
 - Seabirds (8)
 - Marine mammals (11)
 - Fish (3)
 - Benthos (3)
 - Plankton (4)
 - Sea Ice Biota (4)
- Describe the status of the monitoring on these FEC's
- Include advice for future monitoring priorities directed towards policy and decision makers

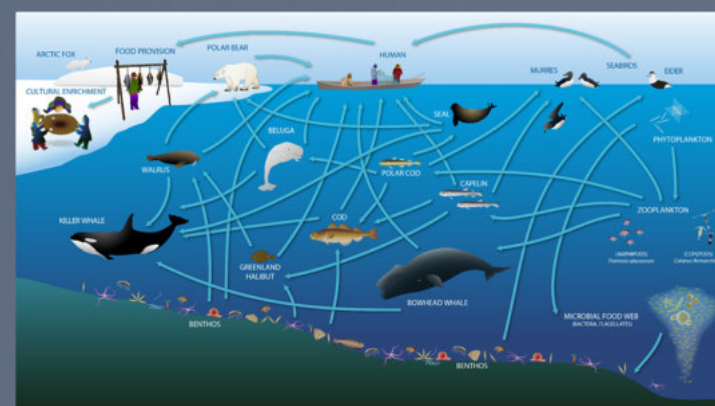
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- Food resources are being lost for many (high) Arctic species
- Current trends indicate that species reliant on sea ice will experience range reductions as sea ice retreat.
- Some Arctic species are shifting their range northward and increasing numbers of southern species are moving into Arctic waters
- Arctic marine species and ecosystems are undergoing pressure from a variety of (new) stressors that may effect cumulative
- Underway or expected change in energy flow in the High Arctic marine environment



Some FEC's and Energy in food web (high arctic)

Figure adapted from Darnis et al 2012 and Inuit Circumpolar Council – Alaska (2015).



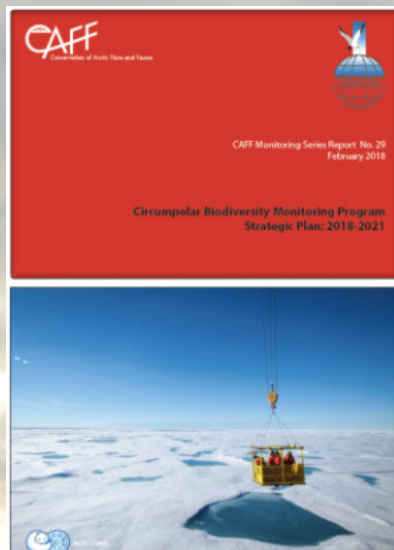
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SAMBR include one subchapter for each FEC group with:

- Baselines/ trends on FEC's (if possible)
- Drivers of observed trends
- Comparisons between the AMA's (if possible)
- Current monitoring, monitoring gaps and advise for future monitoring
- Figures and tables on FEC's that are relatively easy to update based on future monitoring

SAMBR: Arctic Marine Areas



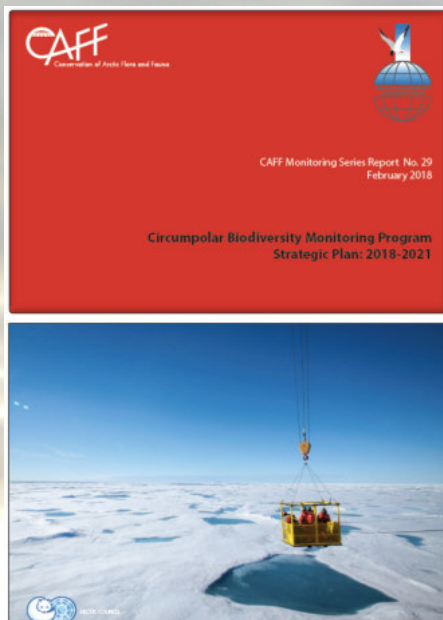


Plan approved and published in autumn 2017

Goals:

- *Goal 1:* The CBMP is relevant to the Arctic States, Permanent Participants, the scientific community and other partners
- *Goal 2:* CBMP results support decision making and facilitates coordinated monitoring.
- *Goal 3:* The CBMP is an adaptive monitoring program
- *Goal 4:* The CBMP is sustainable (defined by organization, capacity and finances)

Each goal is defined through a number of objectives.



Examples on activities:

- Align CBMP to support CAFF inputinto national, regional, and global reporting needs
- Map CBMP activities against national/ international reporting requirements
- Map how CBMP activities help support the UN Sustainable Development Goals
- Explore how CBMP data might fit in to other reporting requirements
- Take national, Circumpolar and also global needs into account when planning follow up on the SABR's
- Establish new partnerships, so the CBMP support CAFF input to national, circumpolar and global needs;
- Continue to work with existing partners, including GEOBON, to further ensure information on Arctic biodiversity is available and feeds into relevant fora.

Thank you