

Changing Arctic Fact Sheet Project



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Project goals



- To leverage and synthesize factual information from the Arctic Council's work to communicate to decision makers and the public;
- Contribute to cross-working groups cooperation on common topics; and
- Contribute to the outreach aspect of the Arctic Council and ensuring close collaboration with the Arctic Council

Two Fact sheets

1. MPAs in a changing Arctic
2. Indigenous peoples and local communities in a changing Arctic on (focus on impacts from interaction with the marine environment)



Marine climate change impacts

Report Card 2013

The 2013 MCCIP Report Card provides the very latest updates on our understanding of how climate change is affecting UK seas. Over 150 scientists from more than 50 leading science organisations contributed to this report card covering a wide range of topics ensuring that the information is timely, accurate and comprehensive.



The key messages provided by this Report Card are summarised below:

Temperature records continue to show an overall upward trend despite short-term variability. For example, in the last decade, the average UK coastal sea-surface temperature was actually lower in 2008-2012 than in 2003-2007.

The seven lowest Arctic sea-ice extents in the satellite era were recorded between 2007 and 2013. The continuing downward trend is providing opportunities for the use of polar transit routes between Europe and Asia by commercial ships.

Changes to primary production are expected throughout the UK, with southern regions (e.g. Celtic Sea, English Channel) becoming up to 10% more productive and northern regions (e.g. central and northern North Sea) up to 20% less productive, with clear implications for fisheries.

There continue to be some challenges in identifying impacts of climate change. These are due to difficulties distinguishing between short-term variability and long-term trends, and between climate drivers and other pressures.

For the first time, this Report Card is also available as an e-publication at www.mcccip.org.uk/arc

Approach

- Short, distilled information based on existing knowledge (focus on Arctic Council reports)
- Targeted at policy makers, non-specialists
- Use of graphics and maps
- Will not make policy recommendations
- Inspired by UK example

Fact Sheet 1: Marine Protected Areas

- Draft outline developed by co-leads, circulated to PAME (~6 pages)
- Cover page
- Marine protected areas as a conservation tool
- Climate impacts on ecosystems, habitats, and species
- Impacts from expanding ocean uses due to climate change
- MPAs as tools for resilience



Marine Protected Areas in a Changing Arctic



Marine Protected Areas as a conservation tool

A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values. (IUCN, 2008)

ADD:

Current coverage of MPAs in the Arctic

Diversity of MPA types

“Other effective conservation measures” as part of MPA networks



Climate impacts on ecosystems, habitats and species

What is happening?

Ecosystems

- Xx
- Xx
- Xx

Habitats

- Xx
- Xx
- Xx

Species

- Xx
- Xx



What could happen?

Ecosystems

- Xx
- Xx
- Xx

Habitats

- Xx
- Xx
- Xx

Species

- Xx
- Xx

Climate impacts on ecosystems, habitats and species (cont.)

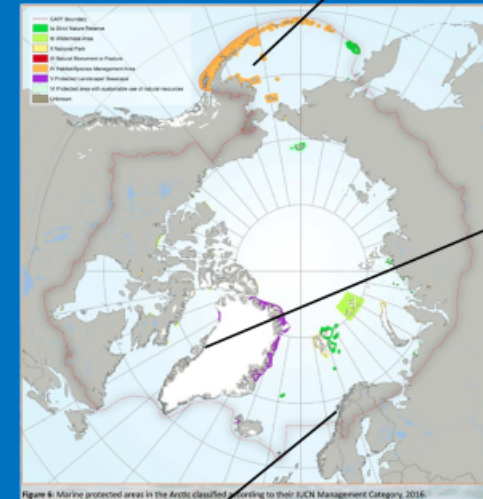


Figure 6: Marine protected areas in the Arctic, classified according to their IUCN Management Category, 2016.

Example of climate impact in MPA

Example of climate impact in MPA

Example of climate impact in MPA

Expanding ocean uses due to climate change

Will include examples of expanded ocean uses due to reduced ice cover – will work with other PAME Expert Groups and AC Working Groups.

What is happening?

Shipping

- Xx
- Xx

Oil and Gas

- Xx
- Xx

Tourism

- Xx
- Xx

Fishing

- Xx
- Xx

What could happen?

Shipping

- Xx
- Xx

Oil and Gas

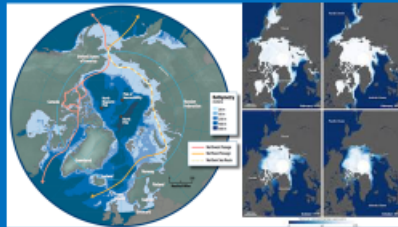
- Xx
- Xx

Tourism

- Xx
- Xx

Fishing

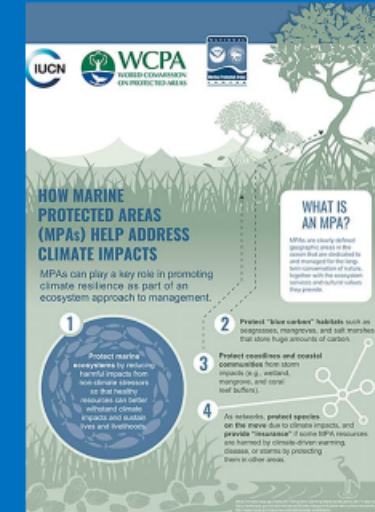
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Marine protected areas as tools for resilience

MPAs can help build resilience to climate impacts:

- Protect carbon-storing habitats
- Reduce secondary and exacerbating impacts
- Protect moving species and habitats
- Support food security and livelihoods for indigenous peoples



Fact Sheet 2: Indigenous Peoples



- Focus on engaging with permanent participants and other indigenous representatives to determine focus and key points
- Preliminary themes discussed include: food security, coastal change (loss of sea ice, erosion), personal safety, examples of solutions.

Timeline

- May 2020: first draft of fact sheets
- August 2020: circulate draft fact sheets to PAME
- Sept 2020 (PAME II): PAME discussion and feedback
- Nov 2020: circulate 2nd draft fact sheets to PAME
- Feb 2021 (PAME I): aim for PAME approval
- Spring 2021: Ministerial approval

Thank You

