



Communicating marine and coastal climate change impacts: Key findings and lessons learnt from the Pacific and Caribbean regions

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A brief history of report cards

- Marine Climate Change Impacts Partnership (MCCIP) and UK report cards (first published in 2006)
- Rapid transfer of quality assured science
- Adopted elsewhere since (e.g. Australia and Arctic cards to pick two extremes!)
- Recently applied in two different regions by CME programme (Caribbean and Pacific)



What do we mean by a report card?

- 2 step process
 - Detailed peer-reviewed papers on certain topics
 - Summary report card with the main information
- Concise information summarising the state of the science at that moment in time
- Small number of pages
- Non-technical language

Why are report cards useful?

- Will provide an **at-a-glance snapshot** of coastal and marine climate change impacts supported by comprehensive, peer-reviewed papers with case studies for specific areas, countries or regions.
- Will help identify key **socio-economic impacts, knowledge gaps** and **research priorities**.
- Can be used to support national and regional **plans / strategies / frameworks**.
- Will help **raise the profile** of marine and coastal climate change issues globally e.g. at COP meetings.
- Will showcase the **breadth and depth of research** already taking place in a country/region.
- Creates an opportunity to **work collaboratively** and share experience of communicating marine climate change issues to key decision makers.

CME programme

2016 UK Government commitment

- Commonwealth Marine Economies Programme
- to support Commonwealth Small Island Developing States (SIDS)
- to alleviate poverty
- by preserving their marine environments
- and harnessing maritime resources that will support the sustainable growth.
- 3 regions / 3 Partners



CME programme and climate change cards

“Britain is firmly committed to helping small island states deal with the effects of climate change and that’s why we’re announcing new support to help protect them from the risks of climate change and to make the most of their natural maritime advantages which are so vital to their economies” David Cameron, CHOGM 2016

- Climate change as core theme
- Regional approach for climate change report card
- Caribbean year 1
- Pacific year 2

CME report cards: Collaborative process

Collaboration:

- Driven by and owned in region
- Experts in region
- Cefas facilitated
- Working group in region



Photo: Adrian Cashman

CME report cards: Topics

Overall topics on:

- What is happening already
- What could happen in the future
- Our confidence in understanding
- Case studies from across the region
- Knowledge gaps
- Potential socio-economic impacts



Photo: Daniel Lund, Invoke Consulting

Caribbean report card

Regional working group partners including:

- Caribbean Community Climate Change Centre (CCCCC)
- Caribbean Regional Fisheries Mechanism (CRFM)
- University of the West Indies (UWI)



Commonwealth Marine Economies Programme



Caribbean Marine Climate Change Report Card 2017

What you need to know about the impact of climate change on the critical state of coasts and seas in Caribbean Small Island Developing States (SIDS), and what needs to be done.

Key messages:

Caribbean states are particularly vulnerable to climate change which presents a significant risk to the region's people.

Much more needs to be done to reduce other human pressures on island systems to make states more resilient to climate change.

Climate change can have significant negative impacts on the quality of life of Caribbean peoples, if an integrated approach to dealing with its social impacts is not taken.

The seas, reefs and coasts on which all Caribbean people depend are under threat from coral bleaching, ocean acidification, rising sea temperature, and storms. There needs to be a greater effort to protect these resources.



Caribbean report card

Hot topic reports, authored by invited experts:

- Extreme events, ocean acidification and sea temperature (physical drivers theme)
- Mangroves, corals, fish and shellfish (biological diversity theme)
- Fisheries, tourism and settlements/infrastructure (people and livelihoods theme)

Key messages:

- Economic and social assessments
- Adaptation actions
- Further research
- Strategic planning
- Negative effects on quality of life
- Greater effort to protect marine resources
- Reduce other human pressures

Caribbean report card - fisheries

What is already happening?

- Many reef habitats are now degraded
- Decline in live coral cover
- Declines in herbivorous fish

What could happen?

- Oceans become warmer, less oxygenated, more stratified and lower pH
- Shifts in distributions of species
- Impacts could be direct or indirect
- May be lower effects on crustaceans than corals and molluscs
- Oceanic species may be more resilient overall



Photo: Hazel Oxenford

Pacific report card

Regional working group partners including:

- Secretariat for the Pacific Regional Environment Programme (SPREP)
- Secretariat for the Pacific Community (SPC)
- University of the South Pacific (USP)
- UN Environment
- Climate Analytics



Commonwealth Marine Economies Programme



Pacific Marine Climate Change Report Card 2018

This report card provides a summary of climate change impacts on coasts and seas in the Pacific island region, and how Pacific islands can respond.

Reliance on marine biodiversity is high across Pacific nations, thus reducing human pressures on habitats is vital to promote diverse and productive ecosystems which are more resilient to climate change.

Climate change is putting the fundamental needs of ocean dependent Pacific communities at risk, including living space and housing, food and water security, culture, health and wellbeing.

Pollution and marine waste, population growth, resource over-exploitation and overfishing, invasive species, damage to key ecosystems, and coastal development are all magnifying the effects of climate change.

Flexible management systems and adaptation projects which build climate resilience are urgently needed, that are adaptive over time, connect terrestrial and marine systems and link different sectors.

Engaging communities is a fundamental part of successful climate action and the intentional inclusion of social and cultural groups will benefit efforts to build climate resilience.



Pacific report card

Hot topic reports, authored by invited experts:

- Extreme events, sea level and inundation, ocean acidification and sea temperature (physical drivers theme)
- Mangroves, corals, seagrass, fish and shellfish (biodiversity theme)
- Oceanic fisheries, coastal fisheries, tourism and settlements/infrastructure (people theme)

Key messages:

- Fundamental needs at risk
- Need to reduce other human pressures
- Engage communities in research and adaptation projects
- Flexible management and incremental changes



Photo: John Connell



Pacific report card - settlements

What is already happening?

- Graves washed into sea
- Coastal erosion
- Coastal landfill sites being flooded

What could happen?

- Atoll communities most at risk
- Whole islands and communities moving inland or to new islands
- Freshwater lenses/aquifers become saline
- Loss of cultural heritage and historical sites



Photo: John Connell



Photo: Cefas

Comparisons between regions

- Issues of interest
- Meaning of marine in both regions
- State of the science
- Who these were aimed at / utility of the cards
- Action being taken
- Knowing your audience
- How people work together in region
- Community level management and cultural heritage in Pacific



Photo: Daniel Lund, Invoke Consulting

- Geography and differences between islands
- Role of international bodies and policies

Learning and next steps

- Value of buy-in
- Communication amongst partners
- Communication of outputs
- Launch events – differences
- Local / regional ‘Voice’
- Comparison with UK - state of science and key impacts vs what needs to be done
- Country or key topic specific cards
- Middle East/Overseas Territories
- Use to inform international negotiation
- Used as evidence to support access to climate funding

Questions?



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Photo: Daniel Lund, Invoke Consulting