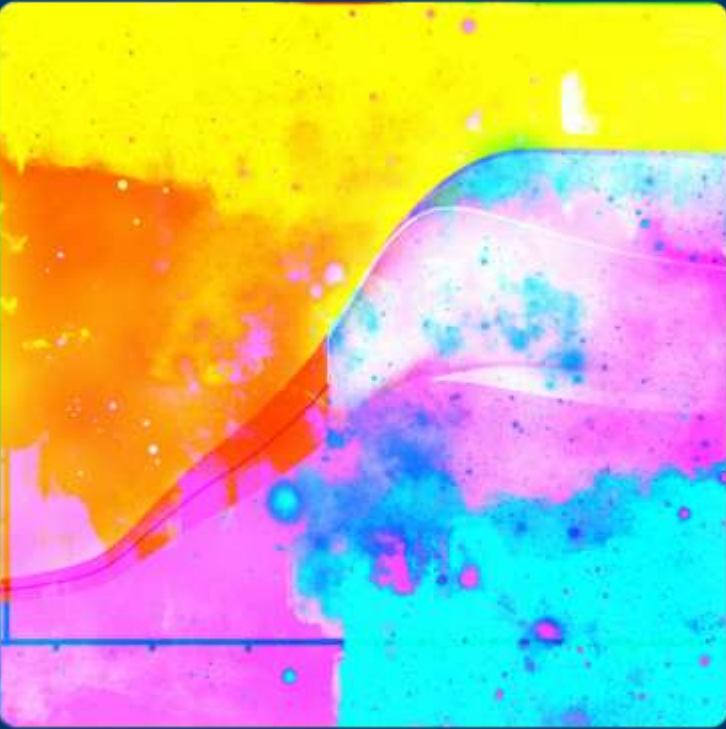


Climate Risks at 1.5°C and 2°C

Rachel Warren, Tyndall Centre,
University of East Anglia

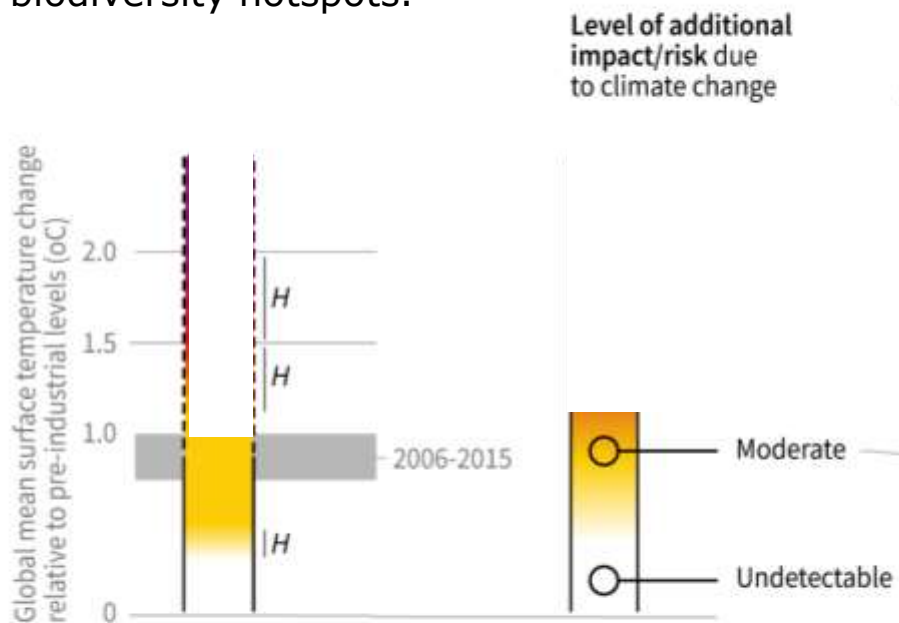


**IPCC Special Report
on
Global Warming of 1.5°C**

4th Dec 2018

Reasons for Concern : Example Unique and Threatened Systems

- **RFC1** Unique and threatened systems encompass ecological and human systems that (i) have restricted geographic ranges constrained by climate related conditions and (ii) have high endemism or other distinctive properties. They include coral reefs, the Arctic and its indigenous people, mountain glaciers, and biodiversity hotspots.



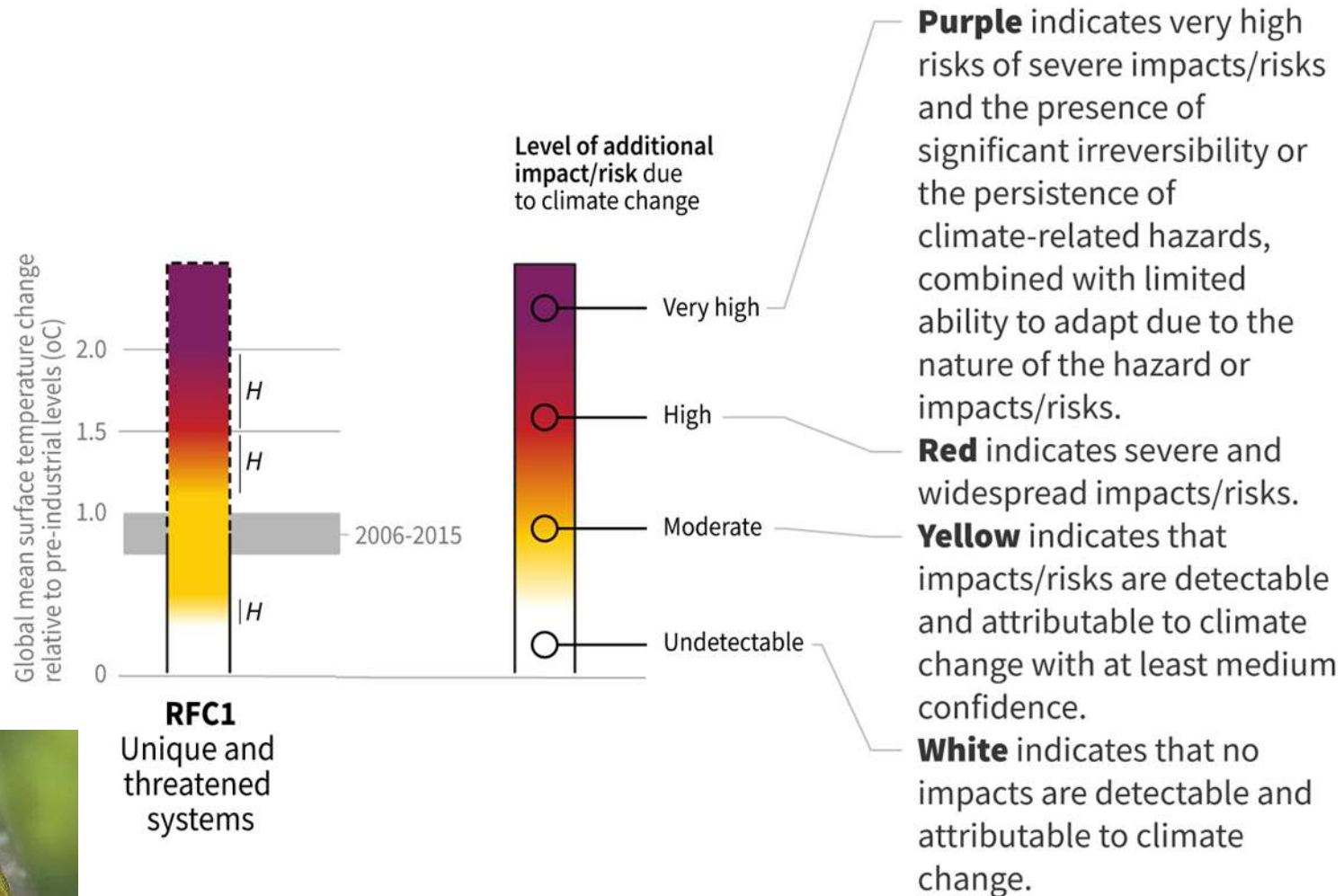
RFC1
Unique and
threatened
systems

Yellow indicates that impacts/risks are detectable and attributable to climate change with at least medium confidence.

White indicates that no impacts are detectable and attributable to climate change.



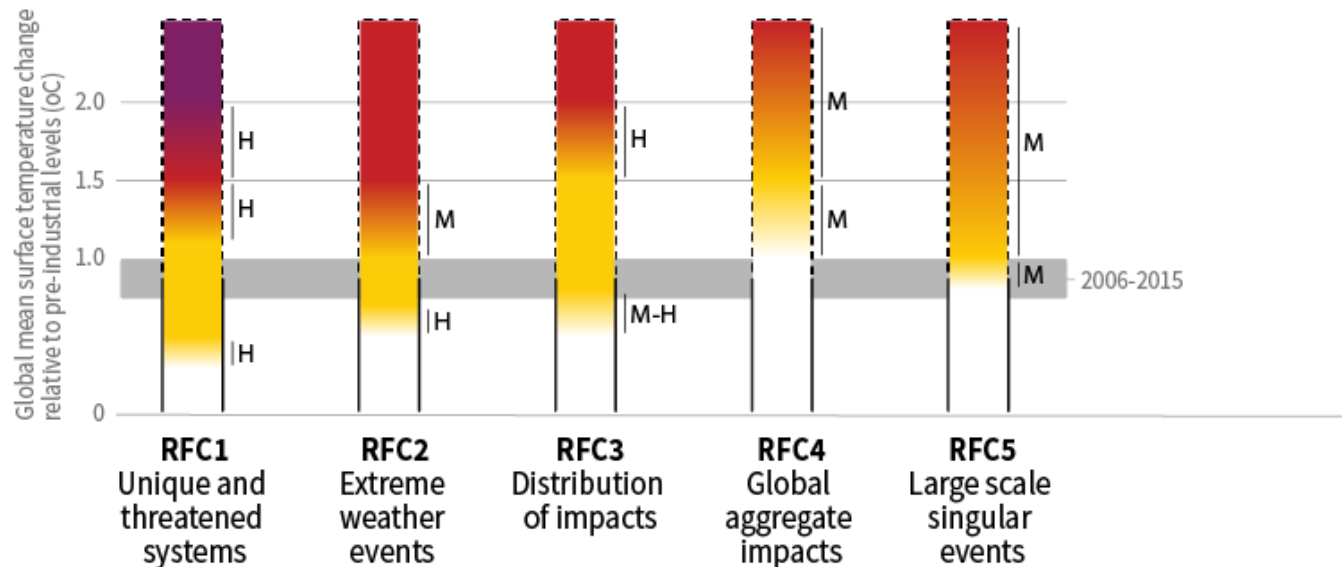
Reasons for Concern : Example Unique and Threatened Systems



SPM2

How the level of global warming affects impacts and/or risks associated with the Reasons for Concern (RFCs) and selected natural, managed and human systems

Impacts and risks associated with the Reasons for Concern (RFCs)

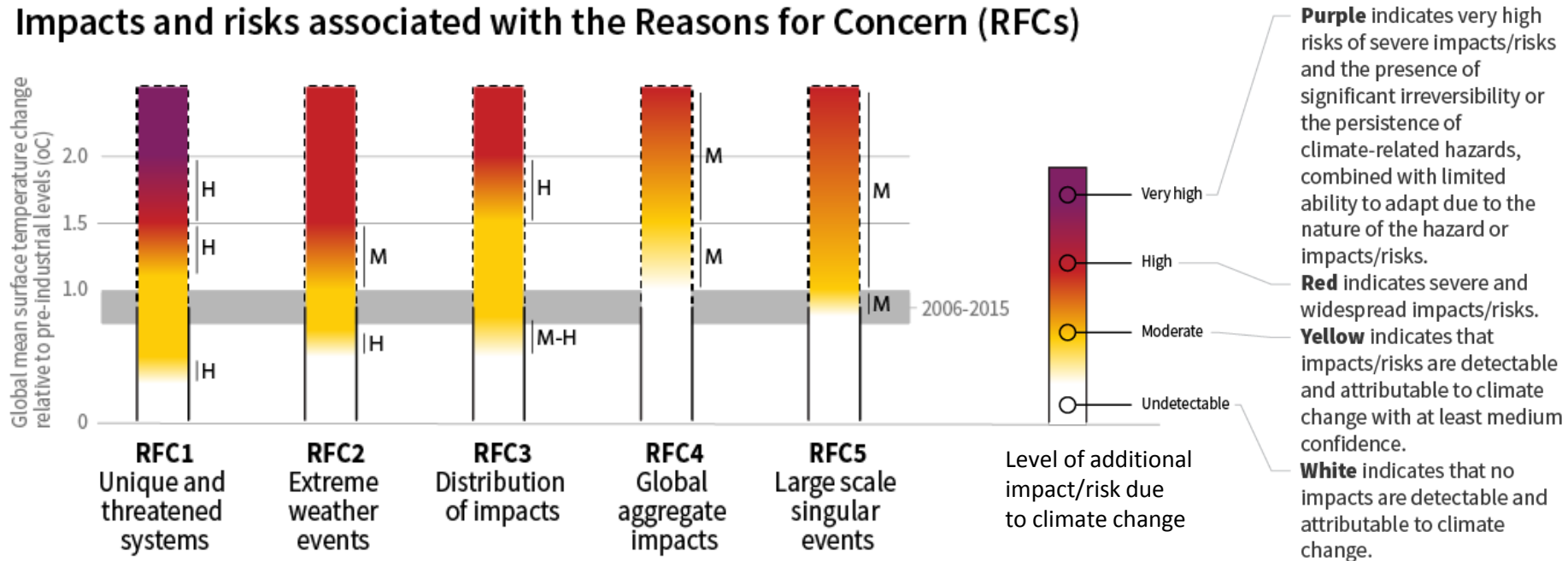


Confidence level for transition: L=Low, M=Medium, H=High and VH=Very high

SPM2

How the level of global warming affects impacts and/or risks associated with the Reasons for Concern (RFCs) and selected natural, managed and human systems

Impacts and risks associated with the Reasons for Concern (RFCs)



Confidence level for transition: L=Low, M=Medium, H=High and VH=Very high



Increased Concern

Assessed levels of risk have increased since AR5 for global warming of 2°C.

- Transition from high to very high risk between 1.5 and 2°C for RFC1 (Unique and threatened systems)
- Transition from moderate to high risk between 1°C and 2°C for RFC3 (Distribution of impacts)

Jason Florio / Aurora Photos



Increased Concern

Assessed levels of risk have increased since AR5 for global warming of 2°C.

- Transition from moderate to high risk between 1°C and 2.5°C for RFC5 (Large scale singular events)
- Instabilities in Greenland & W. Antarctic ice sheets may trigger under 1.5 to 2C warming (medium confidence)

Jason Florio / Aurora Photos

Lower impacts on the economy

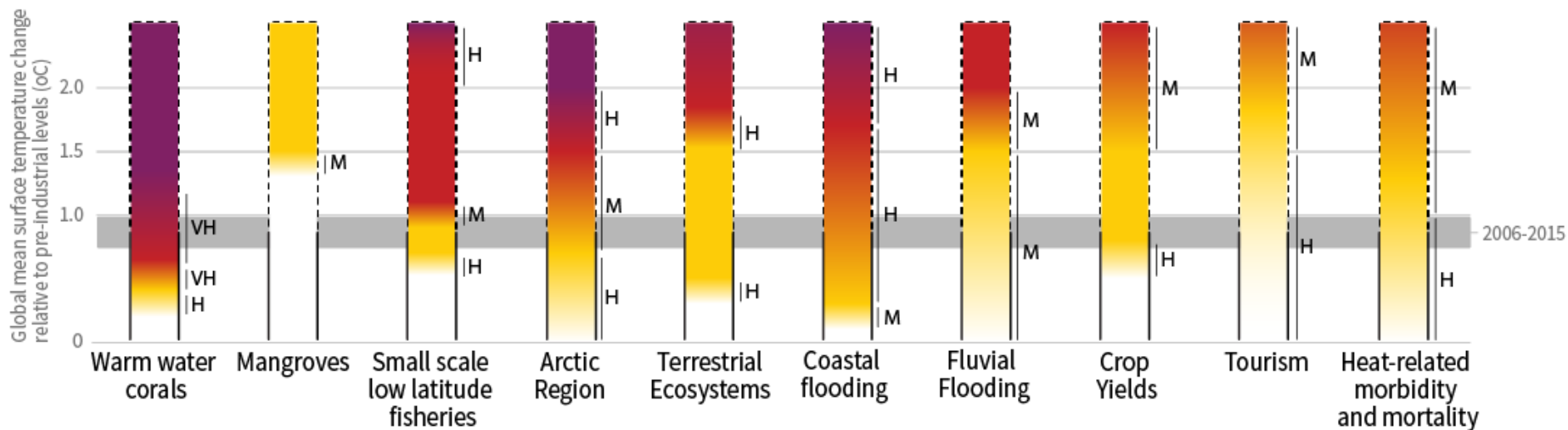
At 1.5°C compared to 2°C:

- Risks to global economic growth are lower
- Countries in the tropics and S Hemisphere sub-tropics expected to experience largest impacts on economic growth

SPM2

How the level of global warming affects impacts and/or risks associated with the Reasons for Concern (RFCs) and selected natural, managed and human systems

Impacts and risks for selected natural, managed and human systems



Confidence level for transition: L=Low, M=Medium, H=High and VH=Very high