



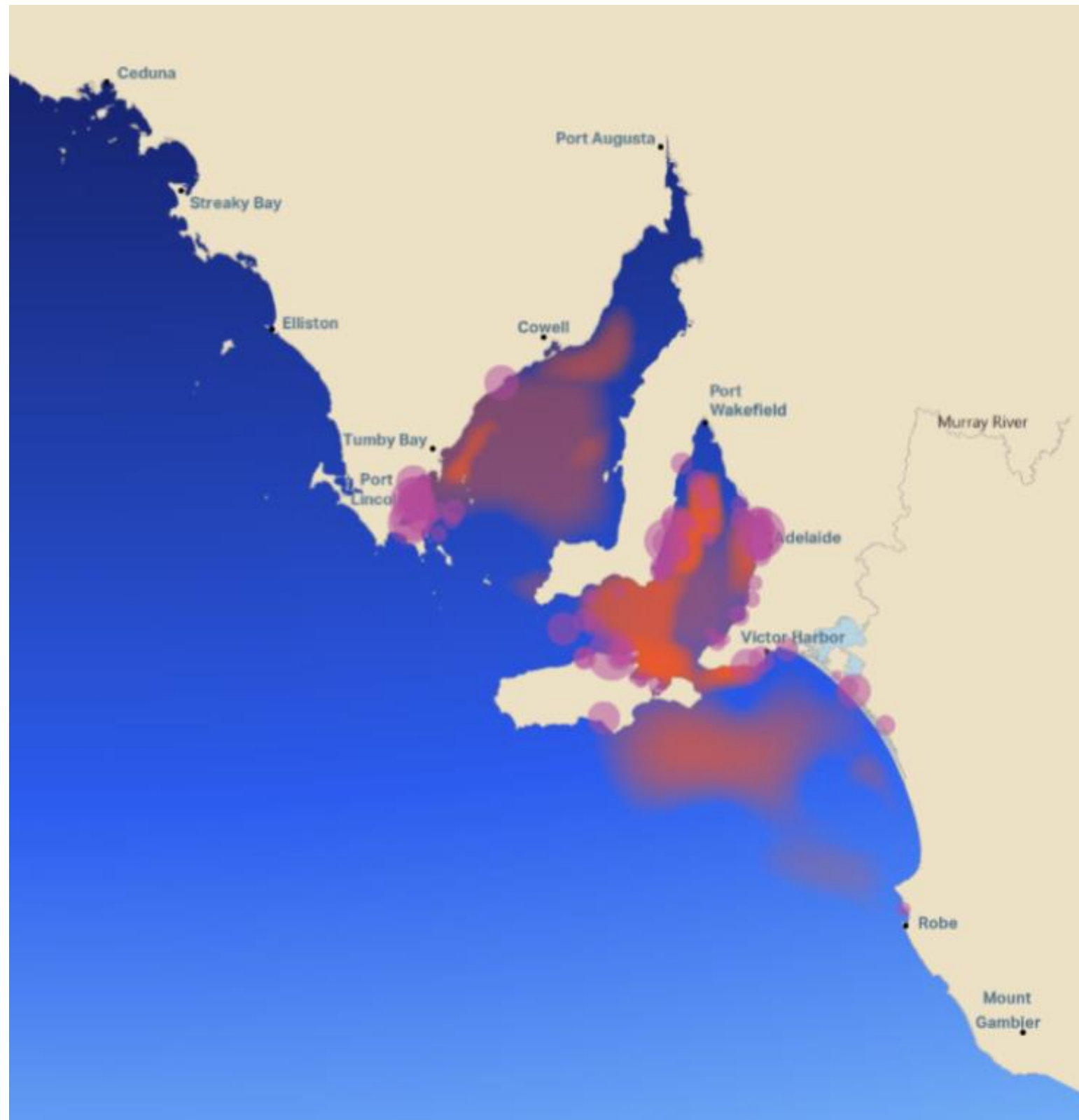
An adaptive and systems- based mindset Lessons from South Australia's Harmful Algal Bloom

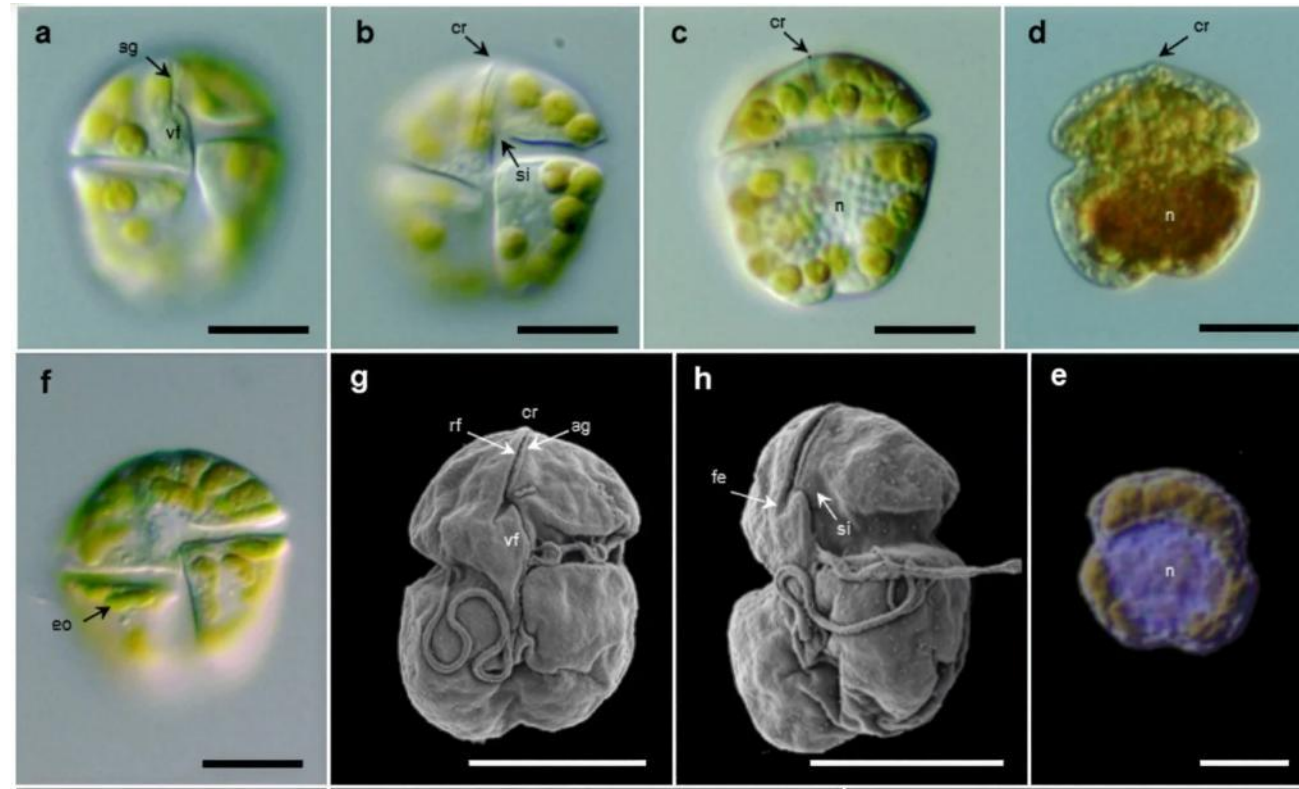
Miriam Lumb



Government
of South Australia

Department of the
Premier and Cabinet





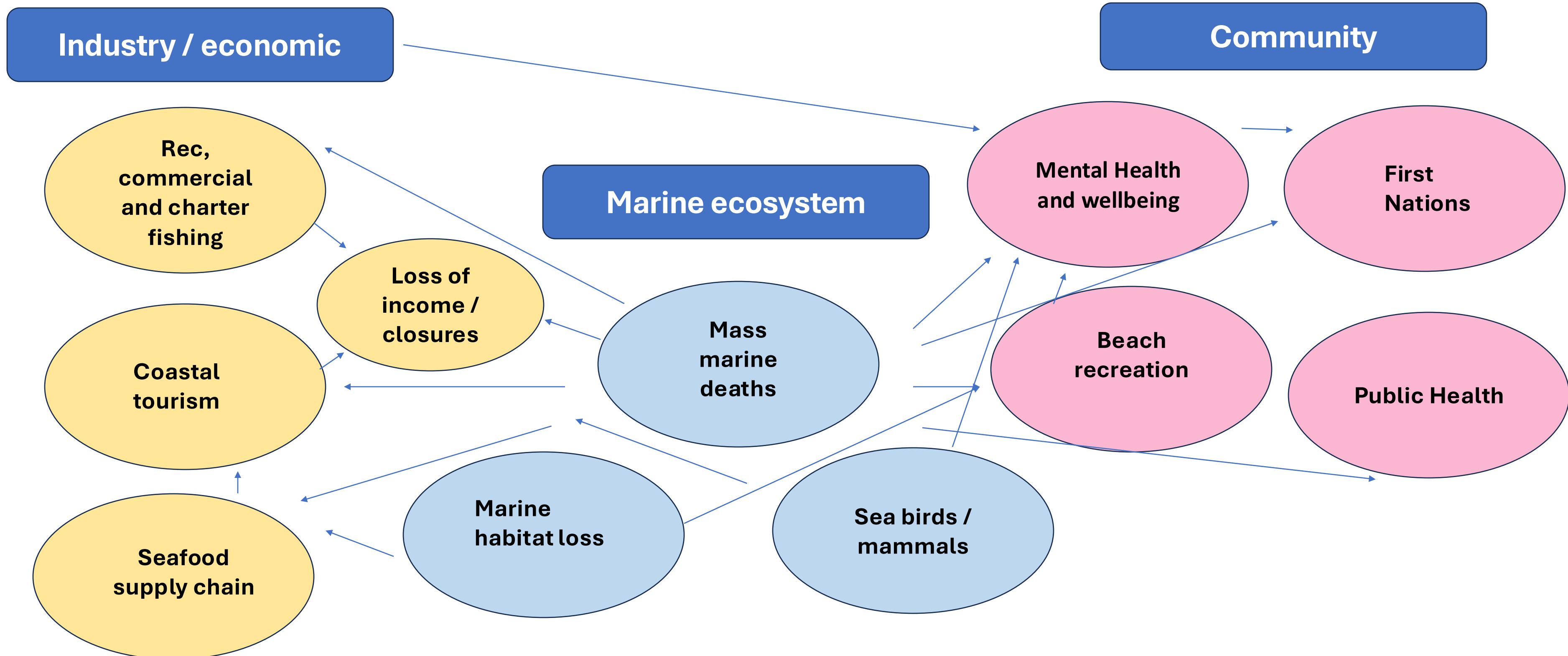
Karenia cristata: <https://www.uts.edu.au/news/2025/11/species-identification-key-to-understanding-south-australias-harmful-algal-bloom>

Image credit: Stefan Andrews





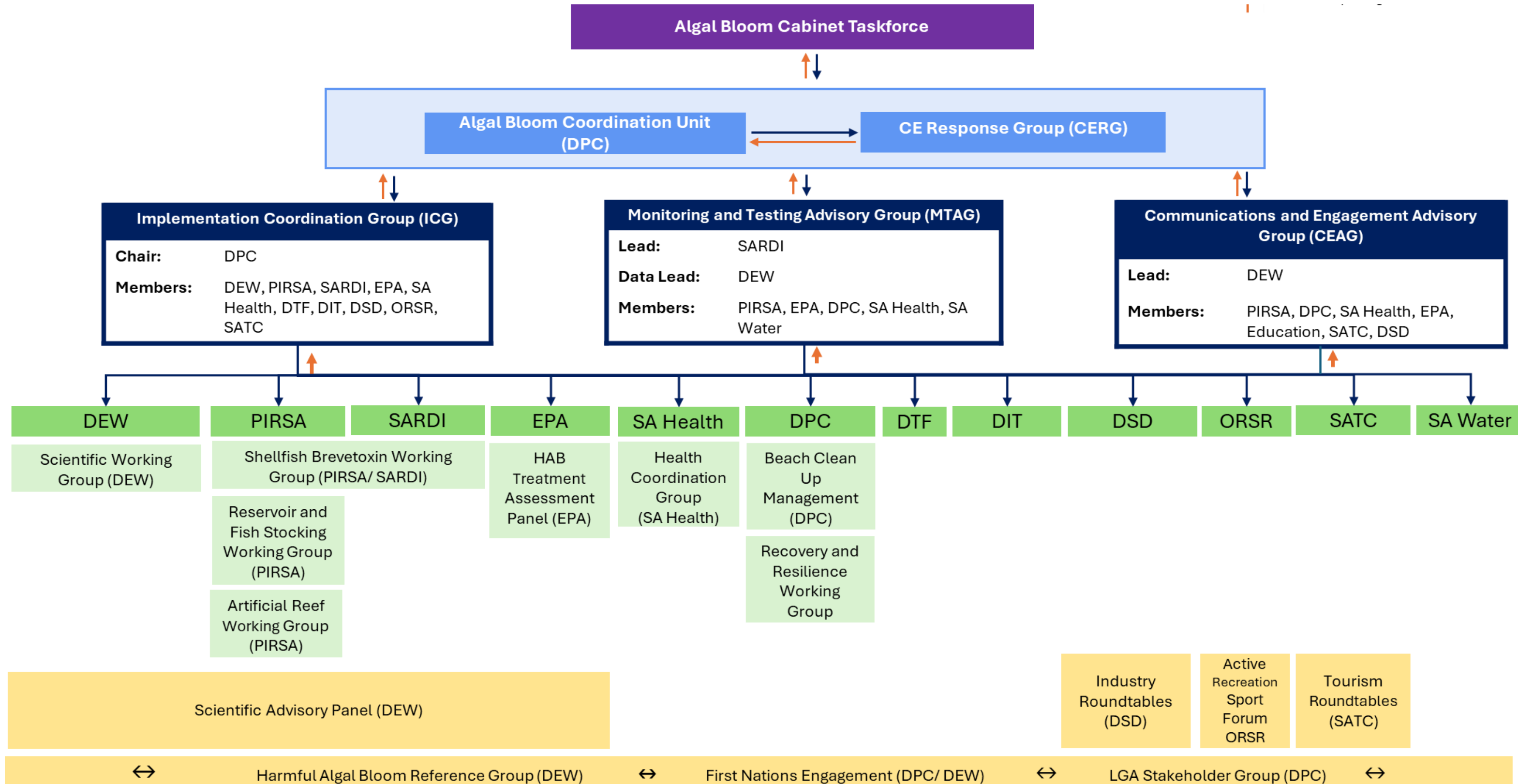
Systemic and cascading impacts





A different (emerging) emergency

'Traditional' emergency / planning	Harmful Algal Bloom
Rapid onset	Slow-onset
Contained area	Spatially dynamic / scale
End point	Prolonged and uncertain
Well practiced / familiar	Incomplete knowledge / experience
A plan to follow	No existing plan
Defined funding arrangements	Not defined
Combat the hazard	Manage the consequences
Prepare, respond, recover	Non-linear / concurrent activity
Human/infrastructure focused recovery	Ecological focused recovery





St Kilda Boat Ramp
HAB sample
Date: 08/10/2025

2

St Kilda Boat Ramp
HAB sample
Date: 08/10/2025

2

Grange Jetty
HAB sample
Date: 08/10/2025

Karenia
Surv.
D₄
T₁

Karenia
Surv.
D₄
T₂







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Development
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PIRSA

TO EXIT
AFTER HOURS
PLEASE PUSH
GREEN
BUTTON

Preparing to play 8_Scope_Sardine.mpg

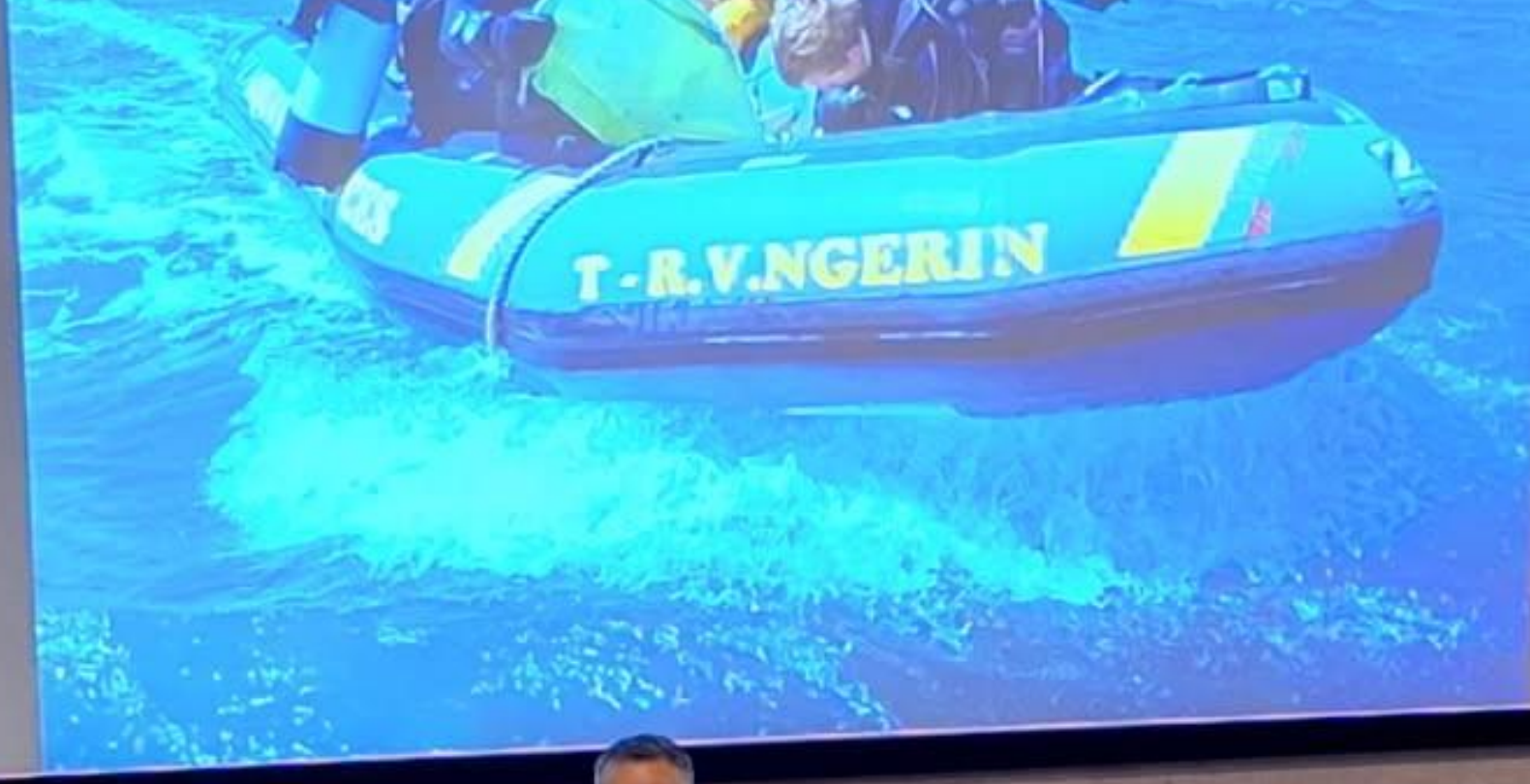
Algal Bloom
Summer Plan





←EXIT

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Temporary commercial and recreational fishing restrictions announced amid ongoing algal bloom

By Olivia Mason Environmental Management

Thu 23 Oct 2025



The fishing restrictions were announced at a press conference on Thursday. (ABC News: Lincoln Rothall)

Oyster growing areas closed again on the Yorke Peninsula due to toxic phytoplankton

By Tom Mann and Isabella Kelly

ABC Rural Marine Biology

Fri 24 Apr



Communities impacted by SA's algae bloom take stock of destruction

By Caroline Horn ABC South East SA Oceans

Tue 27 May 2025

















The governance model allowed for :

- sharing information quickly
- cross-agency coordination
- coordinated messaging & joint decision-making
- dynamic evidence-based decision making
- balancing of economic and environmental objectives
- alignment between operational and strategic objectives



Future governance

- Review of the *Emergency Management Act 2025*
 - *the incorporation of strategies related to emergencies that cause, or threaten to cause, damage to **marine environments**, including marine flora and fauna.*
- *Aquatic ecological hazard* added as a hazard to the State Emergency Management Plan (SEMP).
- SEMP review – acknowledging novel, concurrent and protracted crises.
- Hazard Risk Reduction Leader and Control Agency assigned with responsibilities across PPRR.

Drought

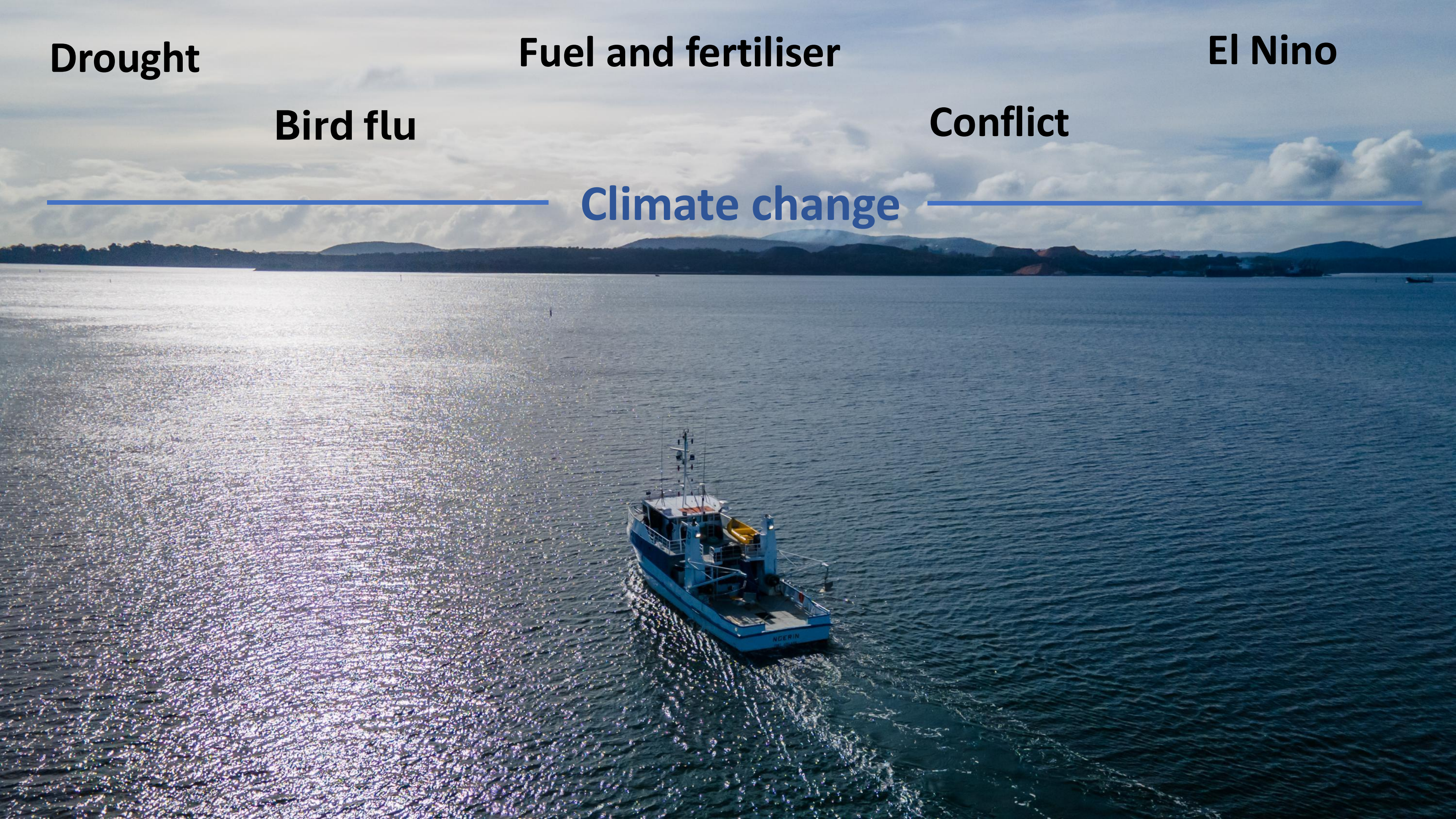
Fuel and fertiliser

El Nino

Bird flu

Conflict

Climate change





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Please see a staff member at the registration desk if you need assistance finding it.

