

Other Reports 2017/18



Ramsar TAG 8 March 2018
Steve Fisher, PHCC Science Advisor

*We acknowledge the Noongar people as Traditional Custodians
of this land and pay our respects to all Elders past and present*



PHCC | Working
Together
Peel-Harvey Catchment Council

ARC-Linkage Project

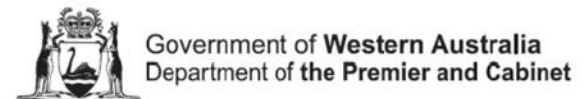
Balancing estuarine and societal health in a changing environment

This research is supported under Australian Research Council's *Linkage Projects* funding scheme (project number LP150100451)



Australian Government
Australian Research Council

Project collaborators & partners



ARC-Linkage Project Team

Workshop (6 Sep 2016)



ARC Linkage Project Components

1. Catchment-estuary
function & linkages

Catchment-
Estuary
response model

Nutrient isotope
tracing

2. Estuarine
ecosystem health

Estuary
ecological
health

Societal value
provision

3. Socio-economic
health & aspirations

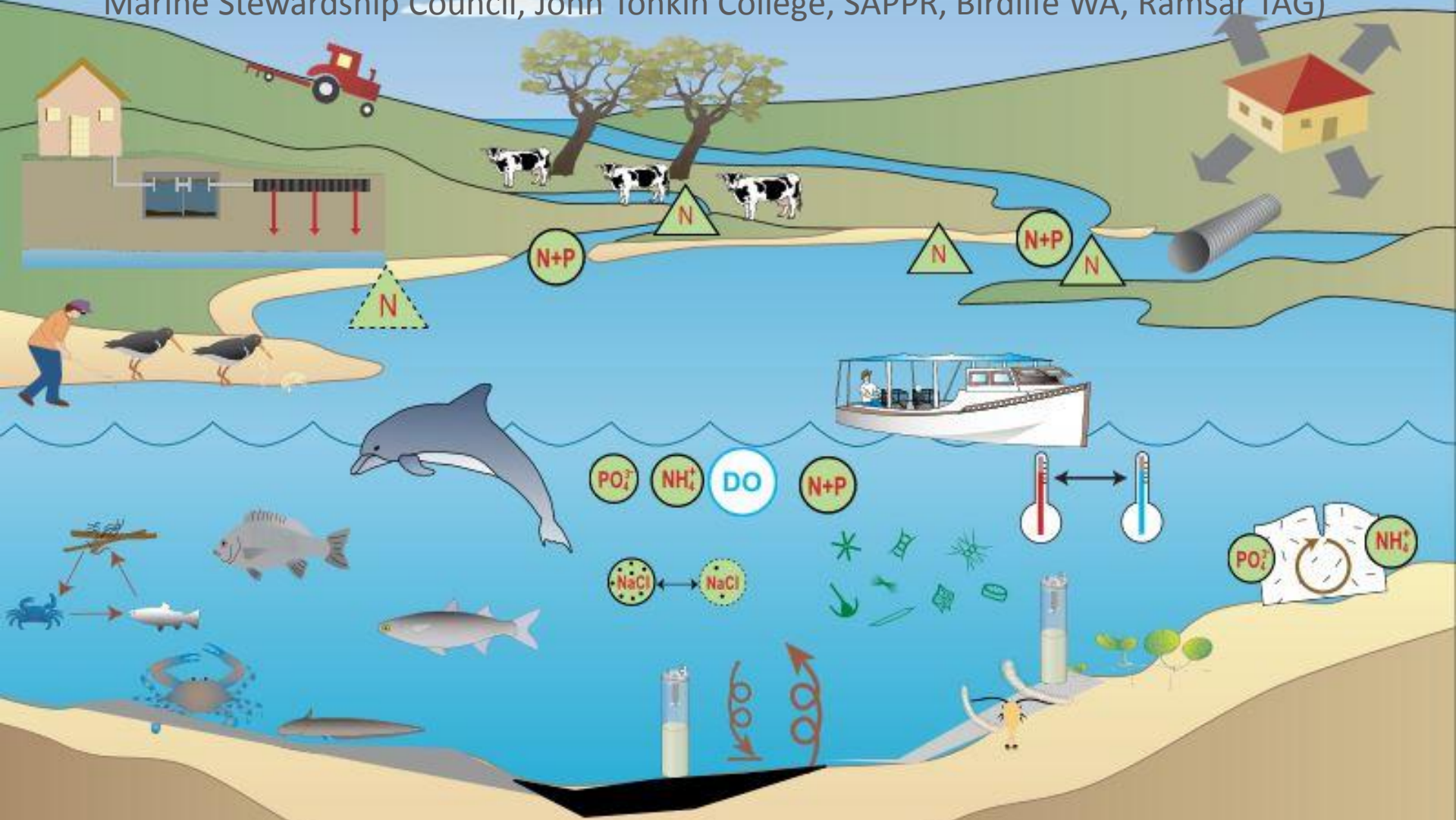
Socio-economic
health

Catchment
development
scenarios

DSS for sustainable development

Peel-Harvey Estuary Report Card

(ARC-Linkage project, Regional Estuaries Initiative, Murdoch University Cetacean Research, Marine Stewardship Council, John Tonkin College, SAPPR, Birdlife WA, Ramsar TAG)



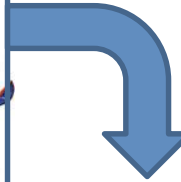
Courtesy of the Integration and Application Network, University of Maryland Center for Environmental Science (ian.umces.edu/symbols/).

Marine Stewardship Council

Assessment of Peel-Harvey Estuarine Fishery

Assessment Report

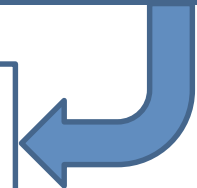
- 2 species
- 5 units of certification
- 3 principles of sustainability:
 - P1: Stock status & Harvest strategy
 - P2: Ecosystem impact
 - P3: Governance, Policy & Management system




- ### Audit of Assessment inc. compliance with conditions
- Harvest strategy and control
 - Bycatch
 - Habitat function
 - Consultation



Stakeholder Engagement on Aquatic Resource Management
**inc. non-fishing based e.g. PHCC, CCWA, Birdlife AUS,
State Government Departments**



MSC Certification Conditions: Principle 1

Condition number	Condition	Performance Indicator	Related to previously raised condition?
1	By the 3 rd surveillance audit, provide evidence that the harvest strategy for blue swimmer crab is achieving its objectives.	1.2.1 (all gear)	N/A
2	By the 3 rd surveillance audit, provide evidence that well defined harvest control rules are in place for blue swimmer crab that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.	1.2.2 (all gear)	N/A
3	By the 3 rd surveillance audit, provide evidence that the harvest strategy for sea mullet is achieving its objectives.	1.2.1 (all gear)	N/A
4	By the 3 rd surveillance audit, provide evidence that well defined harvest control rules are in place for sea mullet that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.	1.2.2 (all gear)	

Marine Stewardship Council 2017 Audit Report – Blue Swimmer Crab

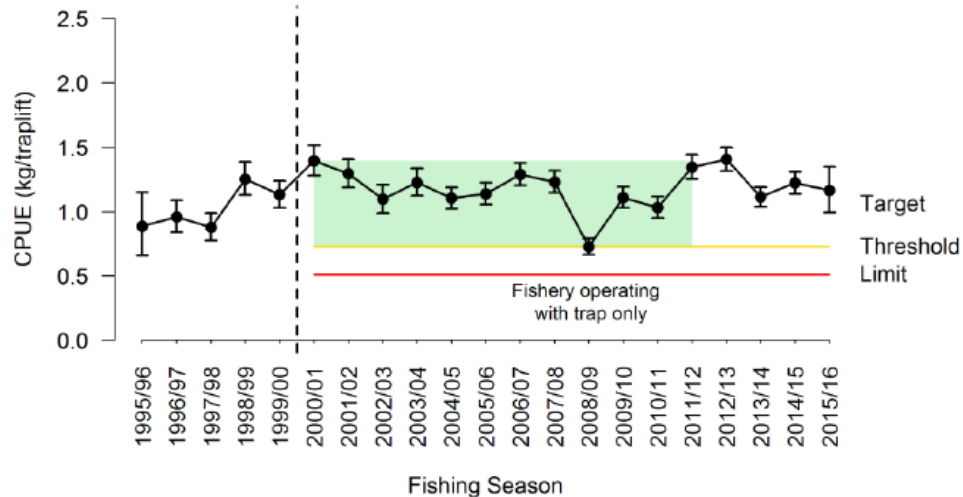


Figure 1. Annual standardised commercial catch rate (kg/traplift) of blue swimmer crabs in the Peel-Harvey crab fishery relative to the associated reference points (target, threshold and limit) for the harvest strategy. The reference period is from 2000/01 to 2011/12; defined as the period where the fishery was operating with traps only and during which time the threshold (lowest historical catch rate), limit (20% below the lowest catch rate) and target (range between the threshold and highest historical catch rate) were set. Fishing season is defined as 1 November to 31 August. (Johnston et al. 2017a, West coast blue swimmer crab resource status report 2017. In Fletcher and Santaro 2017 Status reports of the fisheries and aquatic resources of Western Australia 2016/17).

Blue Swimmer Crab (commercial)

- total catch 2015/16 = 58 t (Target 45 – 104 t)
- CPUE remained between target and threshold levels (0.7 – 1.4 kg / traplift)
- Current fishing effort *not likely to affect recruitment to the stock*
- Harvest Control rules are effective and *do not require adjustment*



Marine Stewardship Council 2017 Audit Report



- Blue Swimmer Crab (recreational)
 - total catch from boat 2015/16 = 38 - 56 t (Target 62 – 144 t)

Marine Stewardship Council 2017 Audit Report – Sea Mullet

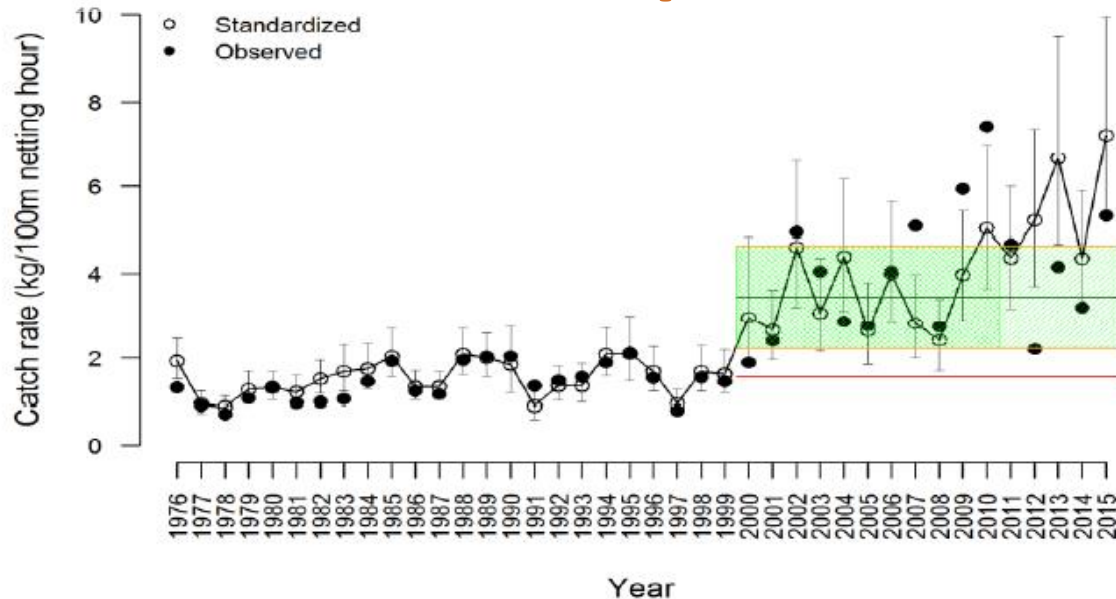


Figure 4. (from Johnston et al. 2017b)

http://www.fish.wa.gov.au/Documents/wamsc_reports/Western%20Australian%20Marine%20Stewardship%20Council%20Report%20Series%20No%203%20Addendum.pdf

- Threshold levels for both catch 144.8 t* (46 – 70 t) & CPUE were breached triggering further investigation (stock assessment by 2019)
- Trends in catch and catch rates are either stable or increasing
- Annual catches historically > 100 t without signs of stock depletion
- *Recent catches unlikely to be cause for concern*

Marine Stewardship Council


2017 Audit Report – Retained species



- Yellowfin whiting
 - Large commercial catches in 2014 and 2015 (29.6 t) breached the 13.8 t threshold (target < 12 t) triggering a review
 - *Results suggest that the recent level of fishing was acceptable and due to strong recruitment pulses in 2010/11 and 2015/16*
- Tailor
 - 2013 threshold exceeded but were below target levels for 2014 and 2015
 - Investigations showed catch rates follow trends in recruitment and 2013 breach due to strong recruitment
 - *There are no concerns about the current status of the stock and no further management actions are required*




MSC Certification Conditions: Principles 2 & 3

Condition number	Condition	Performance Indicator	Related to previously raised condition?
7	By the 4th surveillance audit, provide evidence that the scoop net sector is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm. This should include consideration of overlap with habitat for bird species with emphasis on listed threatened species.	2.4.1 (scoop net)	
8	By the 1 st surveillance audit DoF to demonstrate that consultation processes have been amended to provide opportunity for all interested and affected parties to be involved.	3.1.2 (commercial)	N/A
9	By the 1 st surveillance audit DoF to demonstrate that consultation processes have been amended to provide opportunity for all interested and affected parties to be involved.	β.1.2 (recreational)	N/A

MSC Certification Conditions: Principle 2

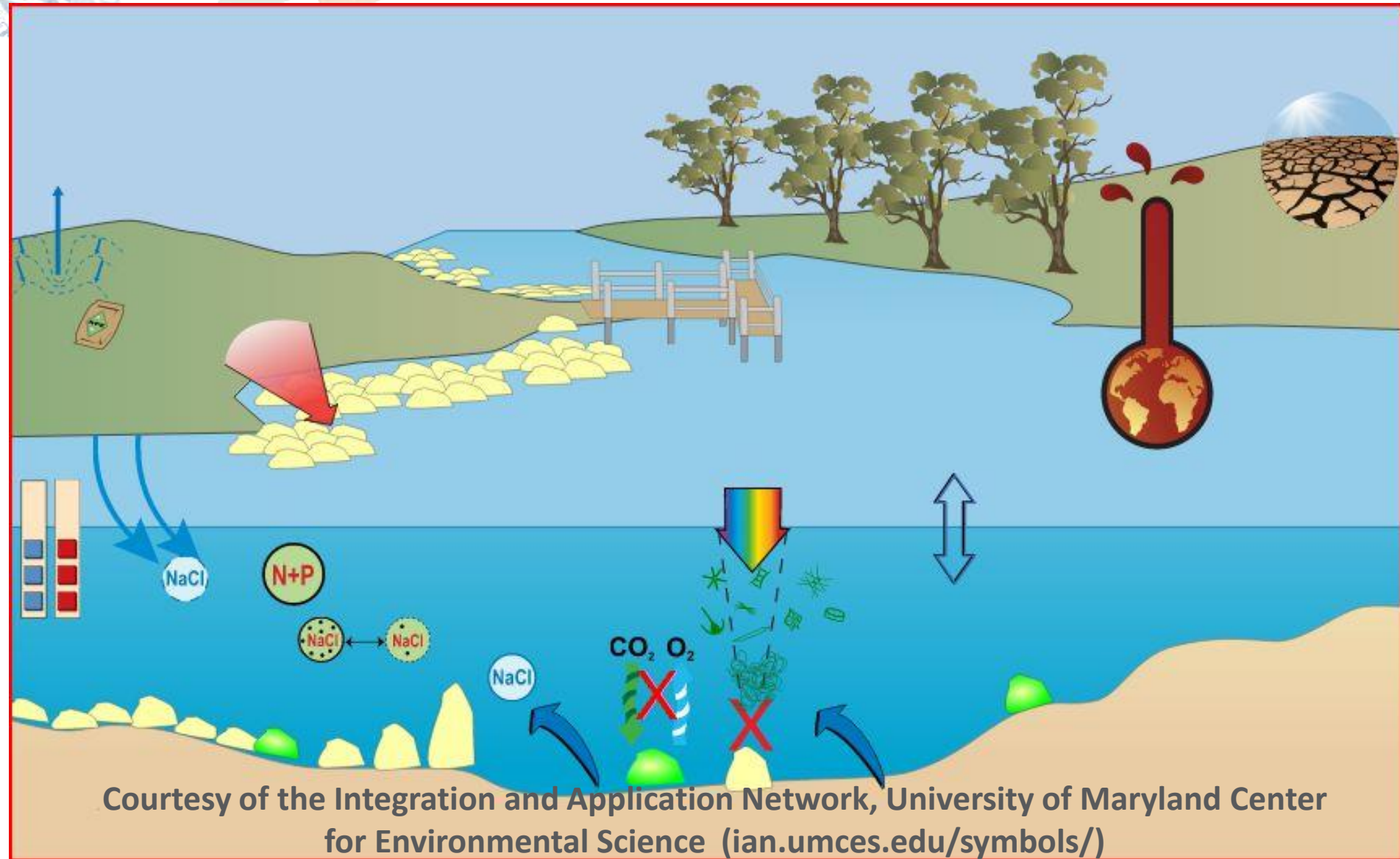
Condition number	Condition	Performance Indicator	Related to previously raised condition?
5	<p>By the 1st surveillance audit, provide evidence that an ongoing fishery independent bycatch observation/reporting program, to detect any increase in risk to bycatch species, has been implemented, of a design suitable for the scale of the fishery.</p> <p>This may include an independent local volunteer from the region, with an agreed design, process and reporting framework (agreed with CAB). This may include compliance reports for ETP species.</p>	2.2.3 (gill net)	N/A
6	<p>By the 1st surveillance audit, provide evidence that an ongoing fishery independent bycatch observation/reporting program, to detect any increase in risk to bycatch species, has been implemented, of a design suitable for the scale of the fishery.</p> <p>This may include an independent local volunteer from the region, with an agreed design, process and reporting framework (agreed with CAB). This could include compliance reports for ETP species.</p>	2.2.3 (haul net)	N/A

MSC Certification Conditions: Principles 2 & 3

Condition number	Condition	Performance Indicator	Related to previously raised condition?
7	By the 4th surveillance audit, provide evidence that the scoop net sector is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm. This should include consideration of overlap with habitat for bird species with emphasis on listed threatened species.	2.4.1 (scoop net)	

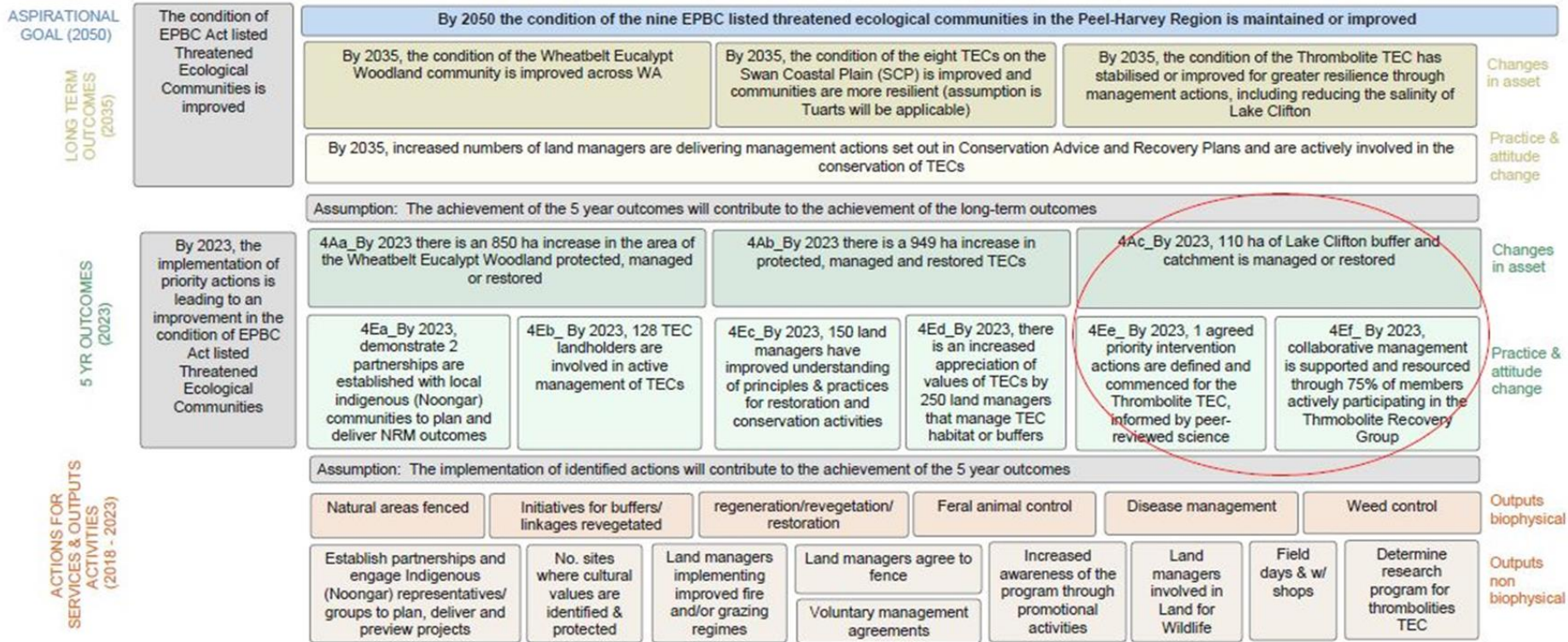
- DPIRD (Fisheries) conducting surveys using e.g. drones to monitor bird disturbance by fishers
- Birdlife Australia (with PHCC) has funding from a 2017 State NRM Community Action Grant to monitor bird disturbance (2017/18)

Threats to Lake Clifton Thrombolites: hydrology and water quality



Threatened Ecological Communities Program Logic

4. THREATENED ECOLOGICAL COMMUNITIES



Lake Clifton Thrombolite Recovery Plan

Priority Actions addressed by NLP 2 RLP Ramsar Project Design

Action 3: Clarify the extent and condition of the community

Action 5: Conduct biological research to clarify threats to the thrombolites and help design recovery actions

Action 7: Ensure areas containing the microbial community are protected from physical damage

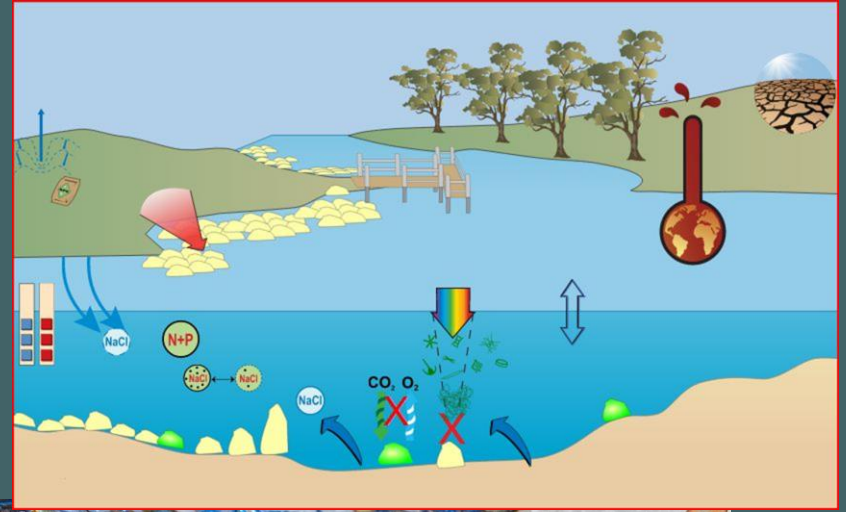
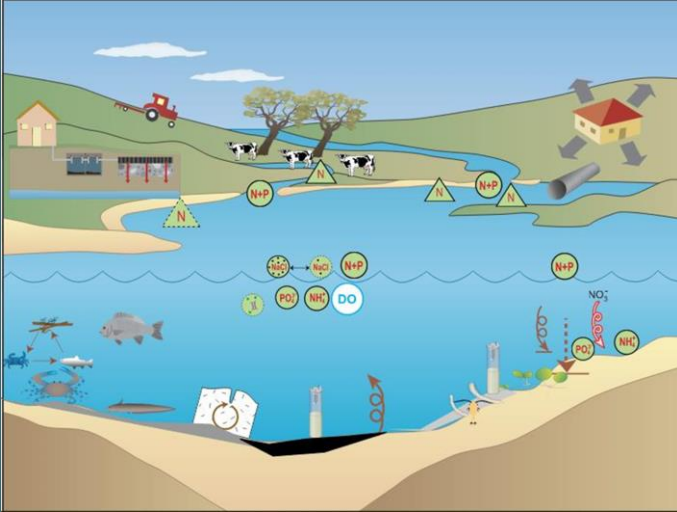
Action 9: Undertake ongoing monitoring of physical condition and microbial assemblage of thrombolites

Action 10: Monitor water quality and hydrology

Action 11: Determine the range of normal fluctuations for hydrological regimes and attempt to maintain them within that range

Action 12: Manage water quality

Action 20: Report on success of management strategies for the thrombolite community.



Thank you for your time today!

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