

Partners in Sustainability

The Abalone Industry Association
of South Australia's
Successful
Self-Management Arrangement



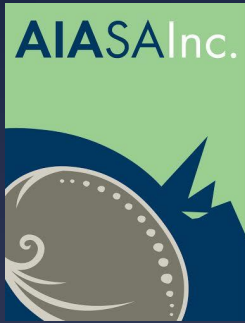
Dr Nicole Hancox
AIASA Executive Officer



INTERNATIONAL ABALONE SYMPOSIUM FEB-MARCH 2023

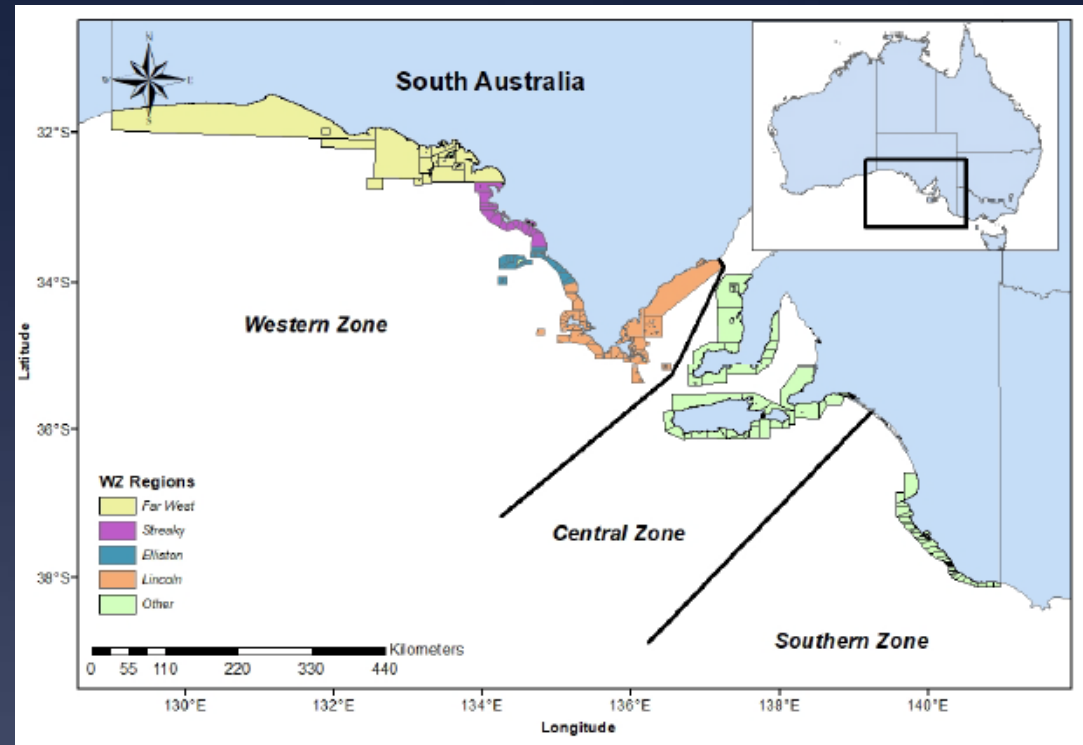
SA Abalone Industry & The Association (AIASA)

WZAF 22 Licence Holders



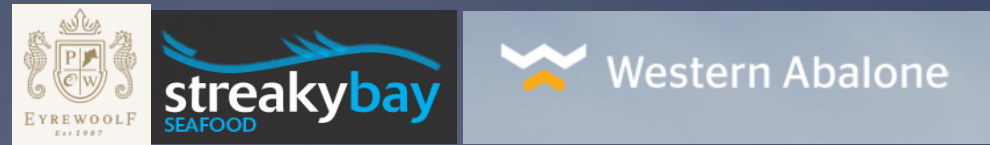
Strategic Plan Key Areas

- Access Security
- Maximise Profitability
- Biological Sustainability
- Industry Profiling
- Corporate Governance
- People Development



AIASA's affiliations

- Abalone Council of Australia Ltd (ACA)
- Seafood Industry Australia Inc (SIA)
- Emerging State peak body - *Seafood Industry South Australia Inc*
- Eyrewoolf Abalone
- Streaky Bay Seafood
- Western Abalone Processors

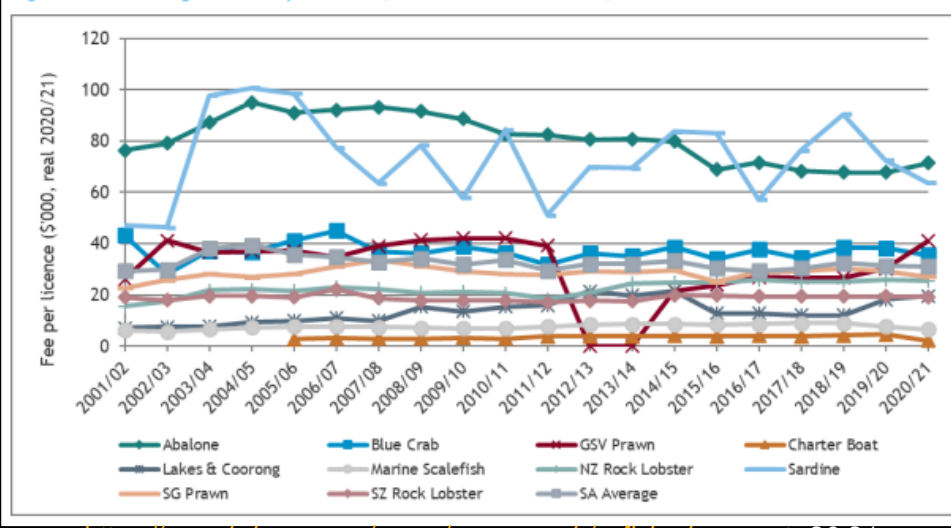


Western Zone Abalone Fishery

- Greenlip (*H.laevigata*) @145mm & Blacklip (*H.rubra*) @130mm
- 2023 quota is ~43T (meat weight) each
- Divers use surface air supply to send abalone to the surface using air-filled bags to the “Sheller” on board
- Abalone are partially processed ‘shucked’, chilled on-board & delivered to a local processor for grading & export (cans, pouches, frozen & live)
- Operate under Commonwealth and State (PIRSA) regulation with quotas set annually (with science advice SARDI).



Figure 15-6 Management fee per licence, SA commercial fisheries, 2001/02 to 2020/21*



Time to 'Take Charge'...

In 2015, the Harvest Strategy review commenced

Industry recognized & assessed:

- The HS was failing/flawed
- The potential risk to the biomass
- sustainability priorities
- Scientific publication by Stobart et al 2013 was supported
- Working with processors to shift away from servicing markets
- A reduction in profitability, with large management costs

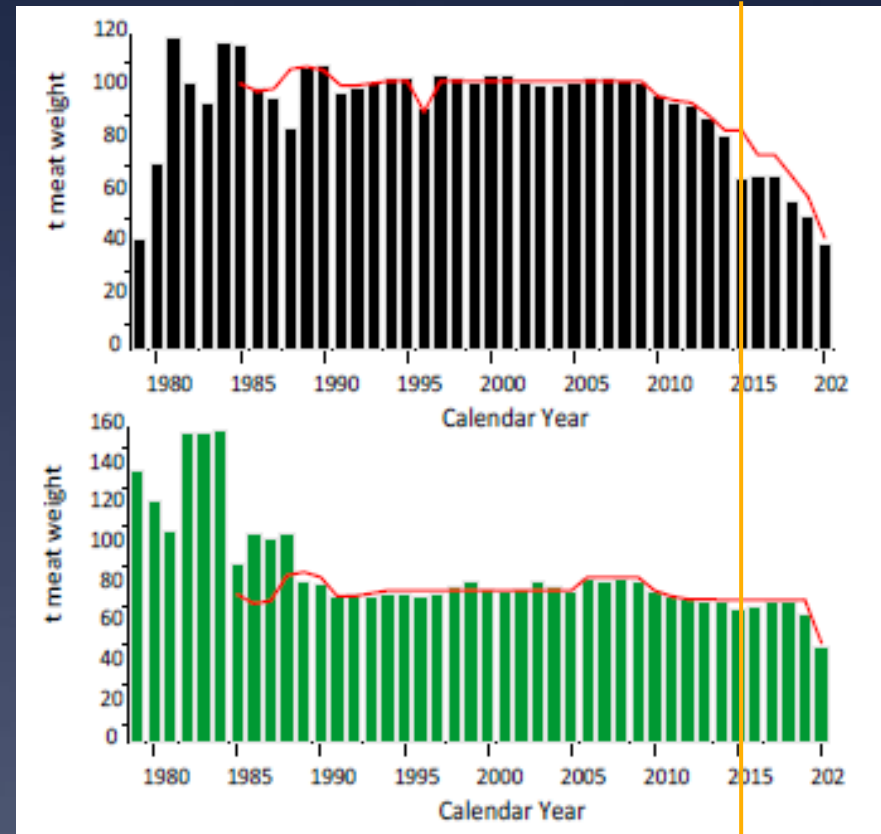


Figure 1.2. Western Zone catch (t, meat weight; bars) and total allowable commercial catch (red line) for blacklip (top plot) and greenlip (bottom plot) from the 1979 to 2020 calendar years.

Memorandum of Agreement
Between Parties

2015 Industry Memorandum of Agreement

Recitals:

1. The parties are concerned to manage the Western Zone ('WZ') abalone resource in an ecologically sustainable manner minimizing economic risks.
2. The governance of the industry by PIRSA and the current compulsory harvest strategy rules based on experience and science do not require any reduction by PIRSA in 2015 TACC quota for available licenced species.
3. Each of the parties is a licence holder in the WZ Abalone fishery.
4. The parties hereto have agreed to the following terms to best manage the resource during 2015.

Now this agreement witnessed:

1. Each of the parties agrees to not catch 800kg of available blacklip quota and 150kg of available Greenlip quota (pro rata to actual holdings compared to full licence allocation) for the purposes of the recitals, during 2015.
2. An allowance of 10% for Greenlip (i.e. 15kg) and 2.5% for Blacklip (i.e. 20kg) based on a full allocation is agreed to be reasonable to allow for the difficulty in ascertaining accurately the level of caught quota, and the level of catch on any particular diving day.
3. Should any party catch more than their available quota minus 800kg of blacklip plus the relevant allowance, it is agreed that a penalty will apply.
4. The penalty is agreed to be \$100kg for blacklip, and \$150kg for Greenlip for the value of the over catch which shall be a damage payable by any licence which overcatches pro rata to those parties that do comply with this agreement.
5. The penalty damage shall be payable within 28 days of receipt of the proceeds of the over catch pro rata to those parties that have not over caught with interest at 10% thereafter until paid as full.
6. Each party agrees to be entirely responsible for the actions of all divers, employees, contractors or anyone else involved on their licence.
7. SARDI's figures of catch per licence shall be conclusive and binding.
8. The term of this agreement is for 2015 only.
9. The parties agree that the Executive Officer of the Abalone Industry Association of South Australia Inc. (the Association) is entitled with their permission and authority to receive from PIRSA, the PIRSA Quota Balance Statement, Summary Page only.
10. The parties agree that the calculation shall be made by the Executive Officer of the Association, which will be based on the PIRSA Quota Balance Statement, Summary page only catch data, and will be final and binding on the parties.
11. This agreement can be signed and be effective in counterpart, and can be forwarded by email, fax or post to: eo@abalonesa.com.au, Fax 86826654 or PO Box 763, Port Lincoln, SA, 5606.
12. This agreement is subject to the Minister for Agriculture Food and Fisheries committing to recognize the full extent of the voluntary reduction in 2015 catch in the 2015 Harvest Strategy process for setting 2016 quota for both species.

The area 'Waterloo Bay' is open for harvesting under the 1-day access arrangement (odds & evens).

Dated: The _____ day of _____ 2014

Signed: _____

Executed by: _____

By it's Directors: _____

AIASA Diver Assessment Surveys

Abalone Licence No:..... Diver:..... **GREENLIP** January to March 2022 DATE:.....

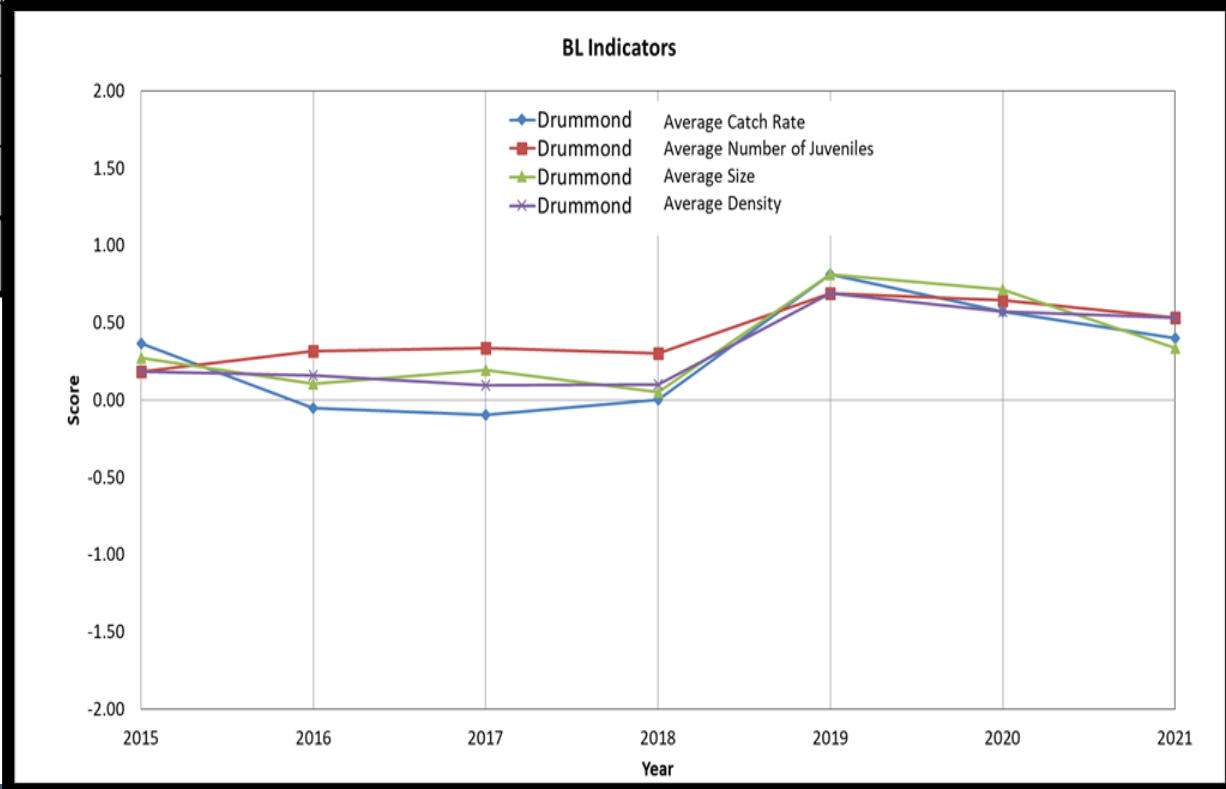
AIASA CONFIDENTIAL DIVER ASSESSMENT	SAU															
	Nth Nuyts 2 A B F G H	Pt Westall 4B 4C 4D 4E4F	Balrd Bay 5B 5C 5D 5E	Venus 5F 6A B C D E	Andous 7A B 8A B C D E	Flinders 9E F G H	Hotspot 9C D	Ward Isle 9A B	Drummond 11C 12A B C 12C	Reef Head 13D E F 14A, 14B	Avold Bay 14C, 14D	Point Avold 14E 15A	Fishery Bay 16A, 16B 15B	Memory 18C 18E	Taylor's Island 18D 19A BCDE	Gap 18 F
Total number of days fished																
% of time spent - Live (L), Shucked (S) or Other (O)																
Is your average daily catch rate / catch....																
Is the average density of abalone....																
Is the average size of abalone...																
Are the number of juvenile abalone....																
Overall SAU performance																

Legend:

- 2** Better than your "Expected Performance"?
- 1** Marginally better than your "Expected Performance"?
- 0** Same as your "Expected Performance"?
- 1** Marginally worse than your "Expected Performance"?
- 2** Worse than your "Expected Performance"?

"Expected Performance": In your diving experience, over time, what is the average you anticipate from this SAU

*Complete survey for each diving day for the majority of species caught e.g. if 60% GL were caught use GREENLIP Diver Assessment.



Supported Research

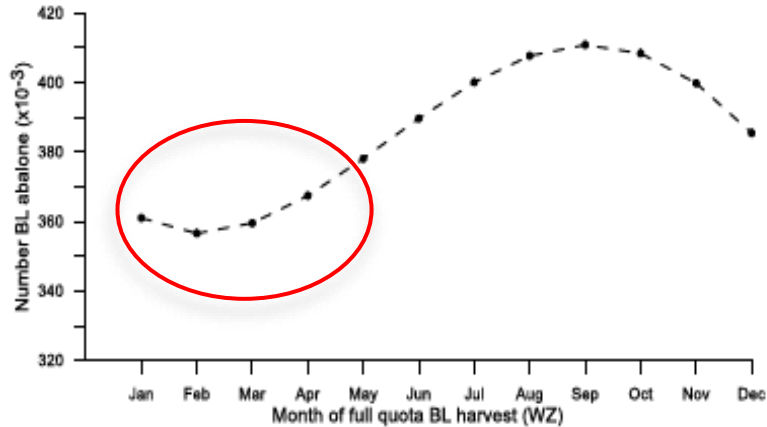


Figure 4.14. Number of blacklip abalone harvested $\times 10^{-3}$ if all the WZ TACC was harvested in the shown month (dashed line and dots).

- Optimum condition is when the abalone weigh more (i.e. bleed less)
- Identified the optimum time to harvest
 - GL (April-July)
 - BL (Jan-April)
- Less abalone are harvested for the same (quota) taken

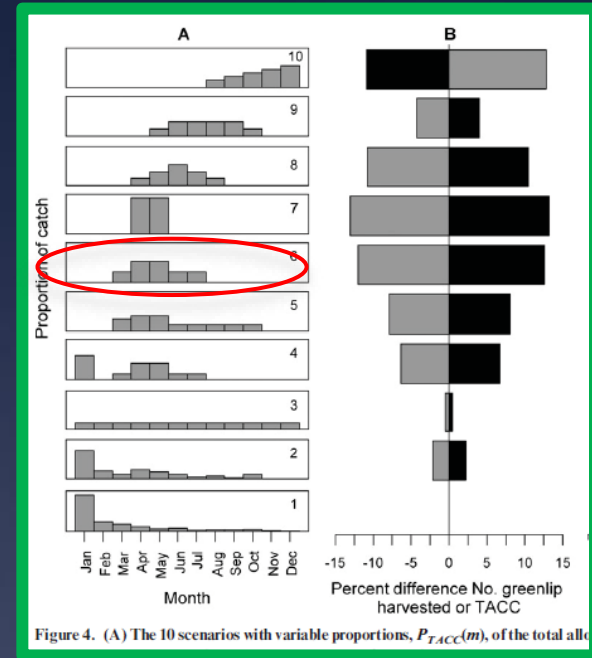


Figure 4. (A) The 10 scenarios with variable proportions, $P_{TACC}(m)$, of the total allowable catch (TACC) harvested in each month (m). (B) Percent difference in greenlip harvested or TACC for each scenario.

Scenario 6 ~33,326 GL left in the water/year

- Decrease risk of resource being overexploited
- GL left on the reef increases in size, leading higher value individuals available for harvest.
- Catch rates increase
- Produce an average of 61 billion eggs per year which provides an additional buffer against recruitment failure

2023 Industry Memorandum of Agreement

Western Zone: Season 2023

	Greenlip	Blacklip	East of Cape Carnot	Anxious Bay	St Francis
Jan	10% cap	GREENLIP TO BE CAUGHT WITH BLACKLIP, FROM BLACKLIP AREAS	CLOSED	CLOSED	CLOSED
Feb	10% cap	GREENLIP TO BE CAUGHT WITH BLACKLIP, FROM BLACKLIP AREAS	CLOSED	CLOSED	CLOSED
Mar	10% cap	GREENLIP TO BE CAUGHT WITH BLACKLIP, FROM BLACKLIP AREAS	CLOSED	CLOSED	CLOSED
Apr					
May					
Jun					
Jul			CLOSED		
Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Oct	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Nov	10% cap	25% cap	CLOSED	CLOSED	CLOSED
Dec	10% cap	25% cap	CLOSED	CLOSED	CLOSED

Abalone Condition - **Good**, **Tolerable**, **Poor**

Compliance Quota Integrity

All vessels to land and retain a sample of 2-abalone of both species partially shucked per bag (representative of the smallest fish)

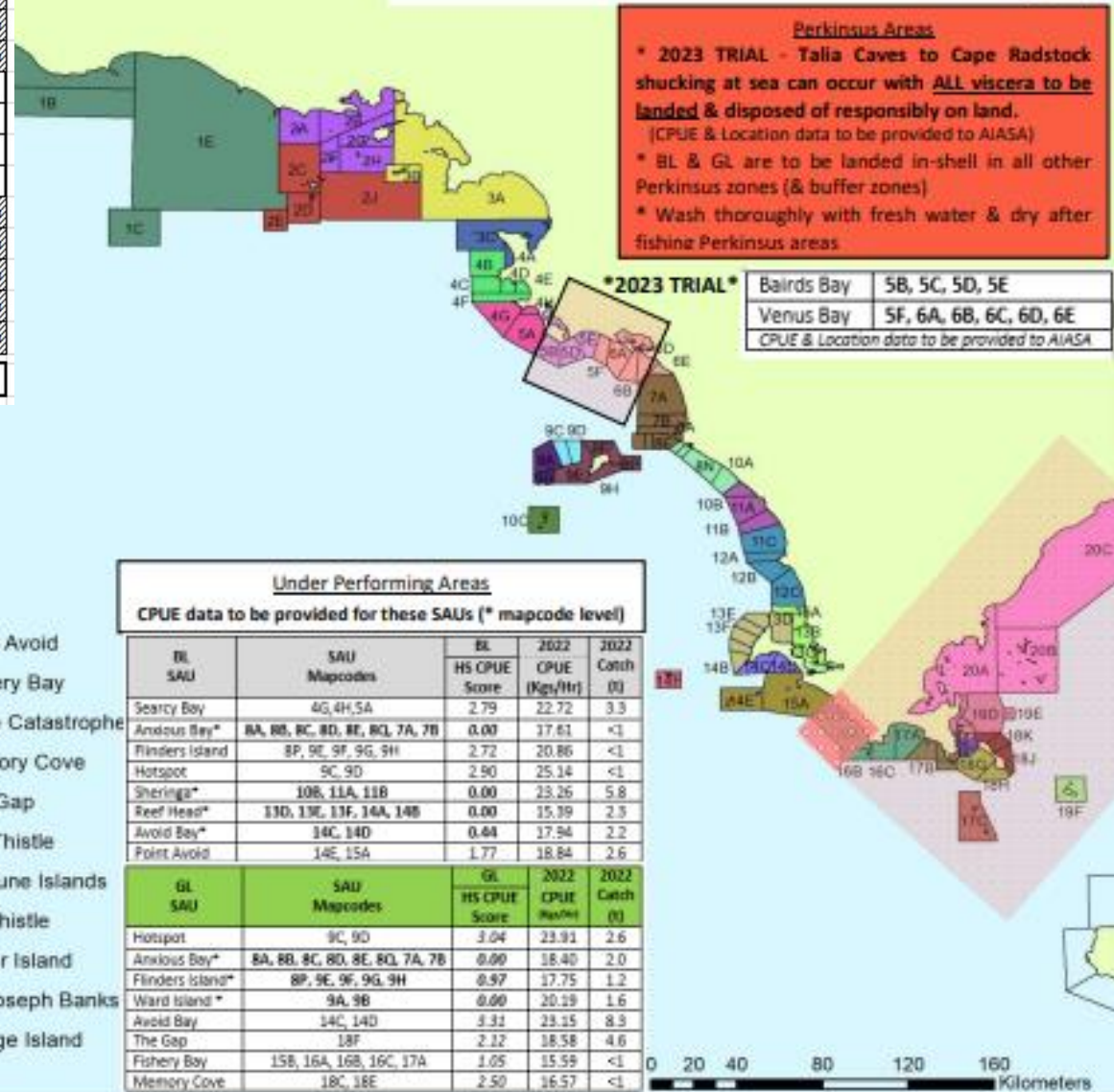
Spatial Assessment Units

D'Entrecasteaux Reef	Hotspot	Point Avoid
Nth Nuyts Archipelago	Ward Island	Fishery Bay
Sth Nuyts Archipelago	Pearson Island	Cape Catastrophe
Franklin Islands	Waterloo Bay	Memory Cove
Cape Bauer	Elliston Cliffs	The Gap
Pt Westall	Sheringa	SW Thistle
Searcy Bay	Drummond	Neptune Islands
Baird Bay	Coffin Bay	NE Thistle
Venus Bay	Reef Head	Taylor Island
Anxious Bay	Greenly Island	Sir Joseph Banks
Flinders Island	Avoid Bay	Wedge Island

'BA' - Mapcodes

ABALONE INDUSTRY ASSOCIATION OF SOUTH AUSTRALIA Inc.

Working for a Sustainable Future



Advantages of Self-Management

- **Increased sustainability** : Encouraged responsible fishing practices
- **Improved efficiency**: Tailor arrangements to the specific needs/conditions of the Fishery leading to a more productive/profitable fishery (reducing costs)
- **Flexibility**: Self-management allows Industry to be more responsive to changing conditions and emerging issues
- **Cost effective**: Efficient use of resources, streamlines processes, improved decision making, effective leadership



Positive Impact of Collaboration

- **Collaboration & communication:** Fosters shared responsibility/ ownership leading to more effective decision-making and greater cooperation
- **Increased member participation:** Has lead to a more inclusive and transparent decision-making process, as well as greater accountability and buy-in from all Members



Key Points

- MOA is used as a formal tool to acknowledge Industry collaboration together
- Industry used the MOA as an opportunity to voluntarily withhold quota, change the seasonal timing of harvest, implement biosecurity protocols & support management.
- Industry's self management arrangements have been successful due to:
 - Reliable leadership and trust within the industry
 - Good science
 - Proactive relationship with the Government
- Industry's self management arrangements has impacted and affected:
 - **Fishers:** Empowerment, flexibility, collaboration, reduce costs
 - **Stock:** Reduced the risk (protect spawning & harvested less abalone)
 - **Regulators:** A history of self management has built recognition
- **Opportunities:** Fine-tuning the MOA as new information emerge
Digitalization & new technologies to improve the efficiency/
effectiveness of the MOA

Collaboration, Innovation and a commitment to sustainability:

**Industry can help to ensure that the fishery remains
productive and viable over the long term**



AB YARNS: 50 YEARS OF BLOWING BUBBLES

1969-2019

History and Folklore of the
South Australian
Western Zone
Abalone
Fishery

Abalone Industry Association of South Australia



RRP \$69, order forms available
abyarnsa@gmail.com

