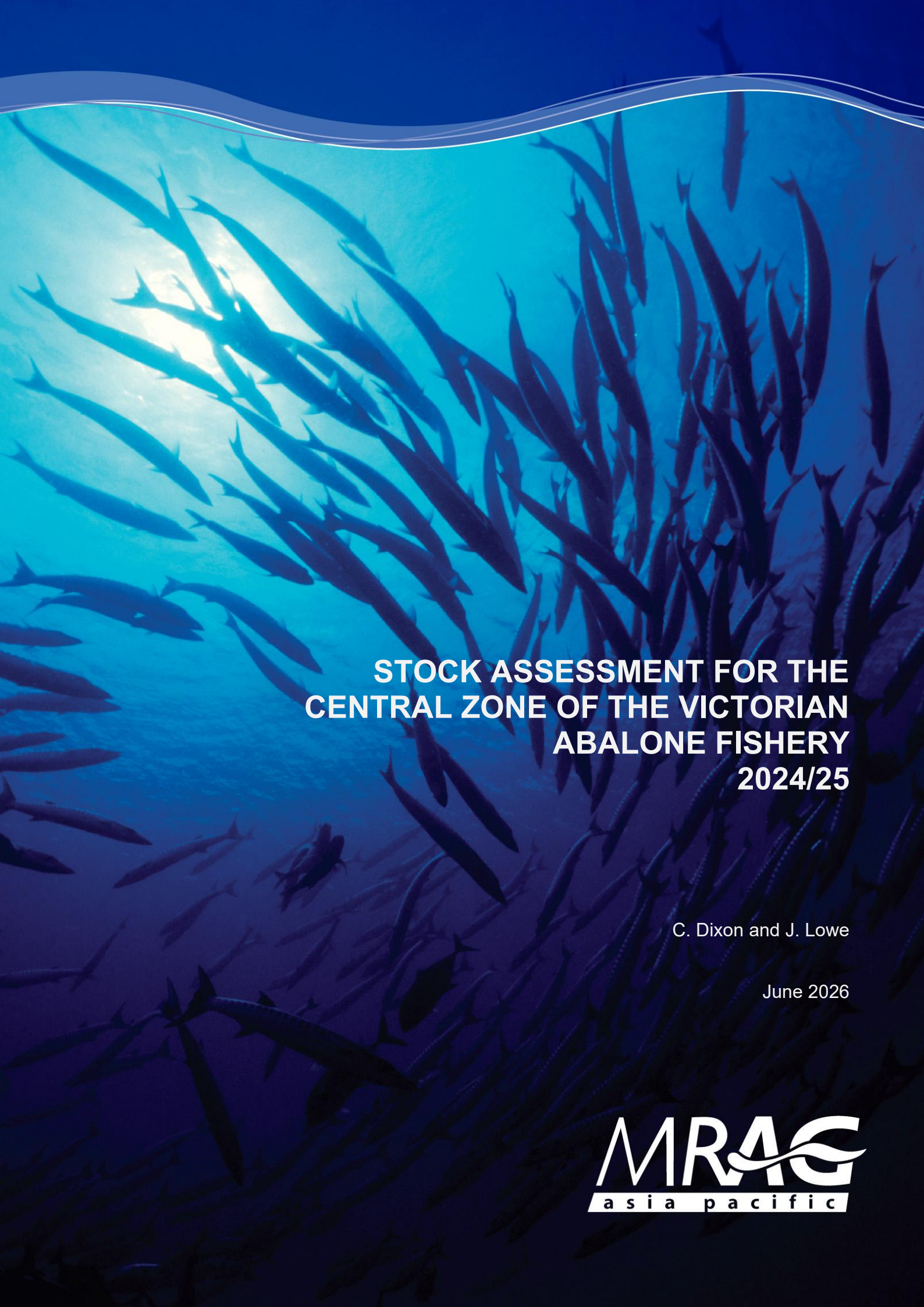

STOCK ASSESSMENT FOR THE CENTRAL ZONE OF THE VICTORIAN ABALONE FISHERY 2024/25

C. Dixon and J. Lowe

June 2026

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About MRAG Asia Pacific

MRAG Asia Pacific is an independent fisheries and aquatic resource consulting company dedicated to the sustainable use of natural resources through sound, integrated management practices and policies. We are part of the global MRAG group with sister companies in Europe, North America and the Asia Pacific.

2/29 Woodstock Rd
Toowong Qld 4066
Australia

PO Box 732
Toowong Qld 4066
Australia

P: +61 7 3371 1500
F: +61 7 3100 8035
E: info@mragasiapacific.com.au

Preferred citation: Dixon, C.D., and Lowe, J. (2026). Stock Assessment for the Central Zone of the Victorian Abalone Fishery 2024/25. MRAG Asia Pacific, Brisbane, Australia.

ISBN: 978-0-6456995-3-1

Published: 9 June 2026

ACKNOWLEDGEMENTS

This work was funded by the Victorian Fisheries Authority (VFA), with funds collected through licence fees. We are grateful to Michael Cleland for his assistance in the provision and interpretation of data. Melissa Schubert from VFA provided constructive reviews of the document. The analyses of the CAV-ACV database reported here were provided to MRAG by Dr Duncan Worthington, AMBRAD Consulting.

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Executive Summary

This report assesses the status of the Central Zone blacklip abalone stock by analysing fishery-dependent catch and effort data up to 31 December 2025. Catch, effort, and catch-per-unit-effort (CPUE) data are presented in various ways to assess stock status in a weight of evidence approach at the Zone level and for each Spatial Management Unit (SMU). Data from 2003 for the 12 highest catch reefocdes are also presented, together with results from the "Eastern and Central Zone Harvest Strategy". These analyses are augmented by size data from the commercial catch provided by industry. This report should be read in conjunction with the "Central Zone Historical Stock Assessment and Current Methods 2025" report (Dixon and Lowe 2026), which documents the methods used for stock assessment, along with historical data from FIS and historical analyses of catch and effort data.

Although the most recent Status of Australian Fish Stocks (SAFS) assessment (Mundy et al. 2024) classifies the Central Zone stock as 'depleting', this report builds on recent positive trends for the fishery that provide compelling evidence indicating the fishable biomass is now 'recovering'.

Commercial CPUE has increased in recent years at all SMUs and key reefcodes. While mean catch per day has decreased in recent years, this may be impacted by market conditions.

Length frequency data from the commercial catch indicate large increases in the average size of abalone harvested at all SMUs where abalone were measured. Incremental annual increases have occurred for at least four years at most SMUs and up to a decade at some. While increases in the average size of individuals within the commercial catch may also reflect market preferences, critically, the increases are occurring simultaneously with increases in commercial CPUE. This provides confidence that the trends reflect an improving status of the resource.

While the 2024/25 TACC of 225.1 tonne (t) was substantially undercaught at 197.7 t, the benefits of "leaving abalone in the water" were not observed across all SMUs. Catches from traditionally high catch SMUs closer to easily accessible ports, such as Phillip Island, Back Beaches and Flinders, were all caught at or above their respective Optimum Targets (OTs). Catches from the Cape Otway and Shipwreck Coast SMUs were below their OTs by 18 and 12 t respectively. Divers suggest the low catches have primarily resulted from poor weather at these SMUs, and these trends of low catch have continued in the first half of the 2025/26 quota year.

There is strong evidence that the fishable biomass of the Central Zone blacklip abalone stock is recovering. While divers suggest poor weather has led to lower than expected catches in some SMUs, all other SMUs have been harvested at or above their respective OTs. Maintaining stable OTs for 2026/27 at most, if not all, SMUs seems to be a sensible approach to ensure further stock recovery occurs. The current TAC for 2025/26 is 228.8 t, while the suggested total catch range from the Harvest Strategy for 2026/27 is 218.7 to 245.7 t.

1. General Introduction

This Stock Assessment Report analyses fishery-dependent catch and effort data up to 31 December 2025 to assess the status of the Central Zone blacklip abalone stock. Catch, effort, and CPUE data are presented in various formats for assessment of stock status in a weight of evidence approach at the Zone level and for each Spatial Management Unit (SMU). Data are also presented for the 12 highest catch reefcodes from 2003. Summary results from the Eastern and Central Zone Harvest Strategy for 2025 are provided and discussed for each SMU. New FIS data will be presented in future reports.

This is the seventh Stock Assessment Report prepared by MRAG Asia Pacific (MRAG AP) for the Central Zone. It should be read in conjunction with the "Central Zone Historical Stock Assessment and Current Methods 2026" report (Dixon and Lowe 2026), which documents the methods used for stock assessment, along with historical data from FIS and previous analyses examining CPUE and FIS trends.

2. Methods

Dixon and Lowe (2026) document detailed methods used for analyses in this report. These include:

- Catch and effort data;
- CPUE standardisation;
- Assessment against Performance Indicators;
- Weight of evidence assessment; and
- Harvest Strategy.

The following improvements have been made since the previous stock assessment (Dixon and Lowe 2025):

- Inclusion of six months of current season data i.e. 1 July to 31 December 2025;
- Updated CPUE standardisation model that includes a quarterly term;
- Inclusion of data presented for the 12 highest producing reefcodes in the Central Zone; and
- Comparison of standardised and original nominal reference points for the Harvest Strategy.

3. Results

3.1 Central Zone Blacklip Assessment

3.1.1. Catch and effort

The Central Zone fishery commenced in the early 1960s (Gorfine et al 2008), however data here are shown from 1978 onward when daily logbooks were introduced (Figure 1). Catch ranged from a peak of 750 t in 1984 to 535 t in 1988 before the introduction of quota. Catch steadily increased to 693 t in 1992 and remained relatively stable before declining to 663 t in 2002 when Marine Parks were first introduced. Catch slowly declined to 591 t in 2007 when the abalone viral ganglioneuritis (AVG) first hit the Central Zone, with catch reducing to 462 t in 2008 and 297 t in 2010. Since then, catch has declined slowly to 198 t in 2024.

The total catch for 2024/25 was 197.7 t, which was close to 87.8% the TACC of 225.1 t. The 2024/25 catch was 11% lower than that of 2023/24.

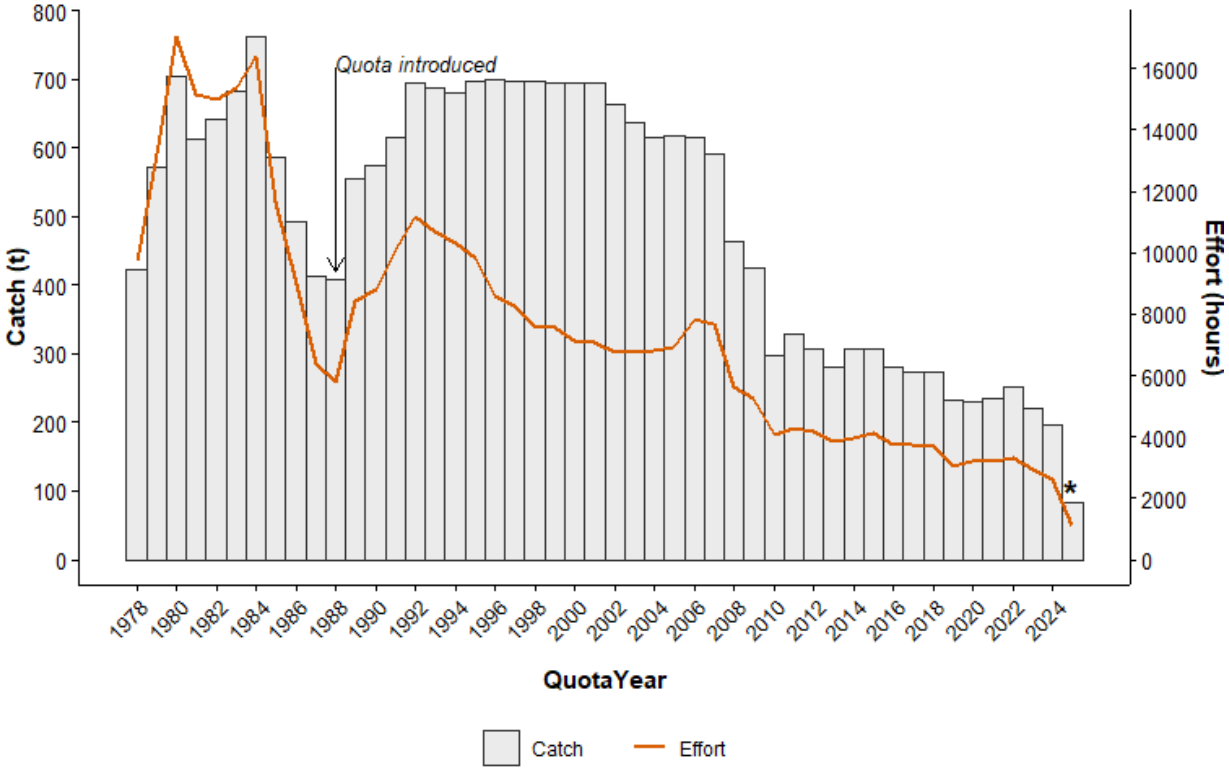

Figure 1: Historic catch (t) and effort (minutes) from 1978 to 2025. Quota was introduced in 1988 with the quota year running from April to March. All data prior to 2020 are from April to March. In 2020, the quota year was changed to the financial year, resulting in the 2020 quota year being 15 months in duration.

Standardised mean daily catches declined from 2003 to 2013, then have remained relatively stable thereafter (Figure 2). Nominal mean daily catch has been more stable, ranging without trend from around 370 to 440 kg/day.

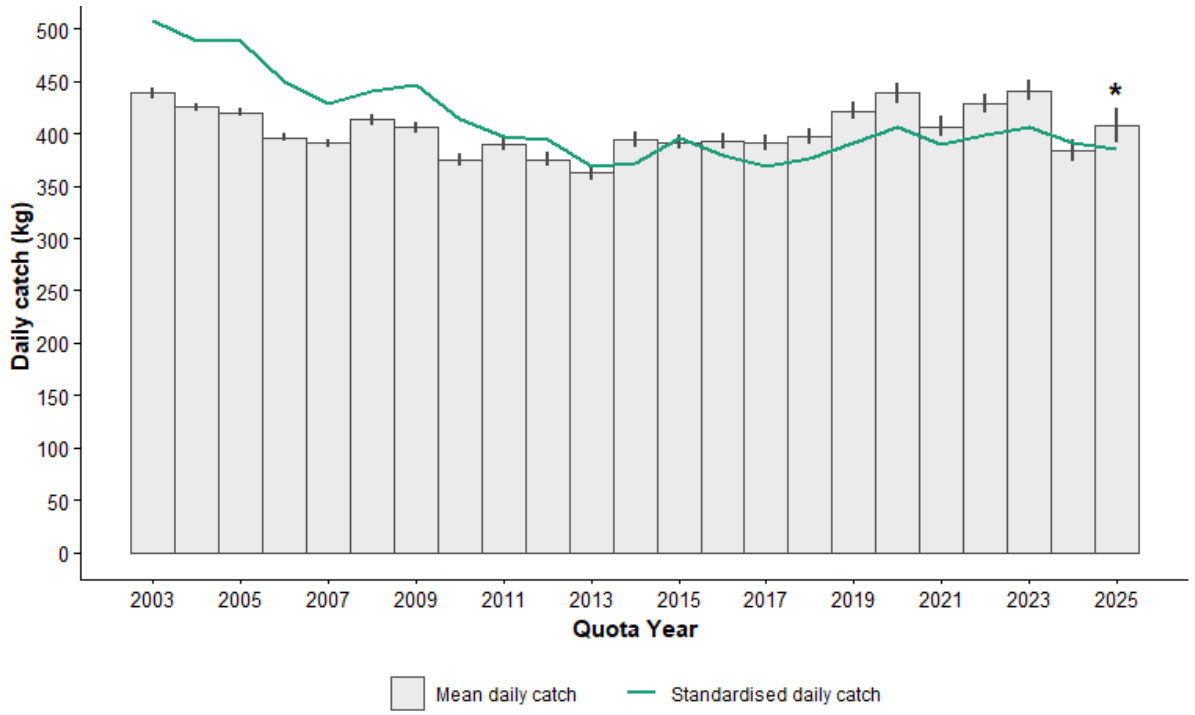

Figure 2: Nominal mean daily catch (vertical bars, kg per fishing day +/- SE) and standardised (line) from 2003 to 2025. Data are reported in quota years, with 2025 up to 31 December only.

The number of active divers in the fishery has declined from a peak of 50 in 1984 to 18 in 2024 (Figure 3). There have been 15 active divers in the first half of the 2025/26 quota year. The average catch per diver was around 10 t in 1978 before increasing to 20-25 t just prior to the introduction of quota. Mean catch per diver peaked from 1990 to the mid-2000s.

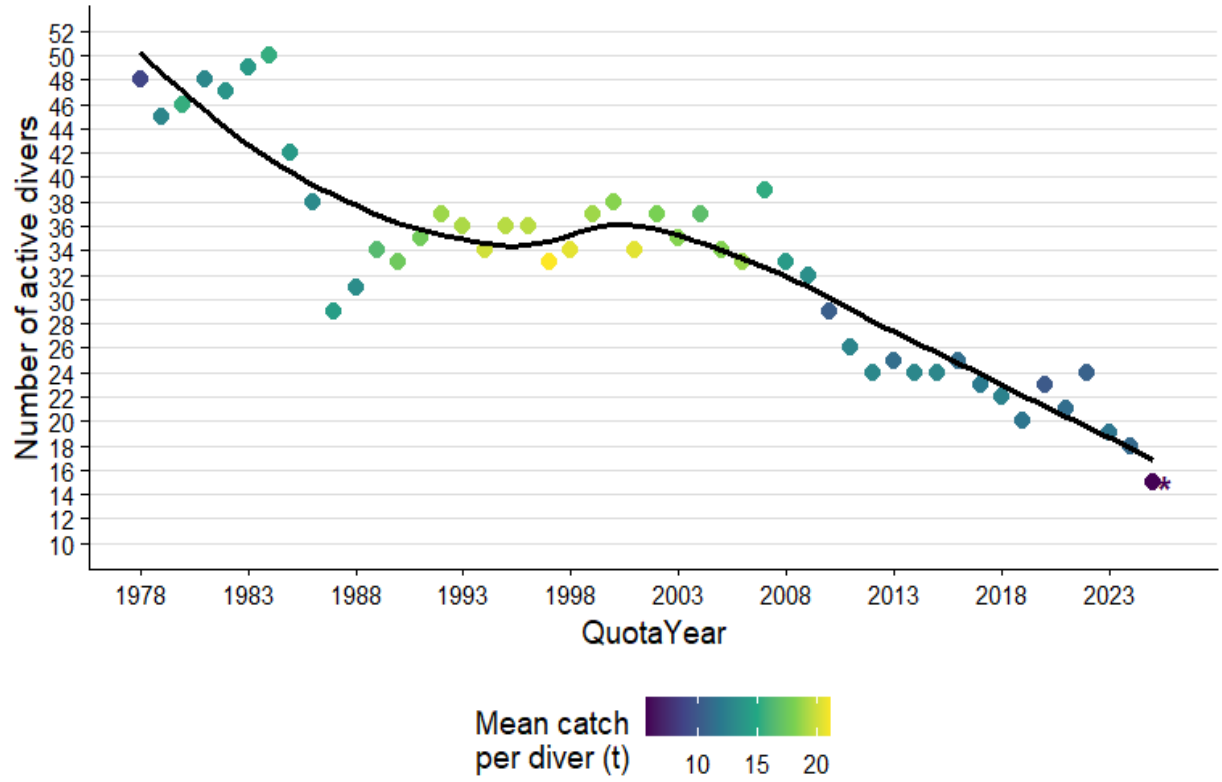

Figure 3: Number of active divers in the Central Zone Abalone Fishery, 1978 to 2025, and mean annual catch per diver. Black line is a LOESS curve. Data are reported in quota years, with 2025 up to 31 December only.

3.1.2. Catch per unit effort (CPUE)

Standardised CPUE generally declined from 2003 to 2019 and increased thereafter (Figure 4) and is currently the highest it has been since 2009. Nominal CPUE generally increased from 1992 to 2001, declined to 2010, was relatively stable until 2018 and then increased thereafter.

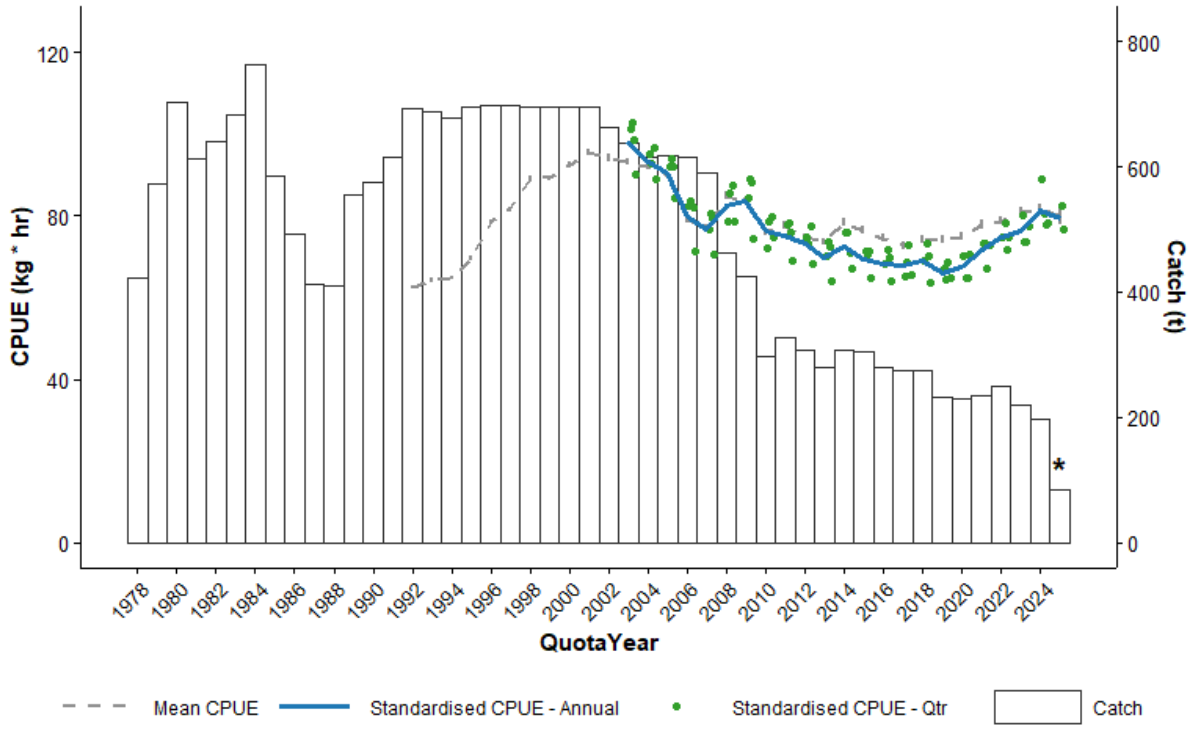

Figure 4: Central Zone catch from 1978, nominal CPUE from 1992 and standardised CPUE from 1992 to 2025. Catch = bars, nominal CPUE = grey dashed series (+/- SE), standardised annual series from 2003 = blue solid, standardised quarterly series = green dots. Data are reported in quota years, with 2025 up to 31 December only.

Trends in the proportion of catch taken throughout the year (Figure 5) are relatively stable for quarters 1, 2 and 3 despite a shift in the timing of the quota year in 2020. Only Q4 shows any real variation with around 13% of the annual catch harvested in Q4 in 2019 and >45% of the annual catch harvested in Q4 in 2020.

Trends in the variation of CPUE by quarter were generally stable except for lower relative CPUEs in recent years in Q3 and higher relative CPUEs in Q4 (Figure 6). These changes coincide with the changing of quota year in 2020. Maintaining higher CPUEs at the end of the season may be a positive sign for the stock but interpretation of these data is complicated by the changing of quota year months in 2020.

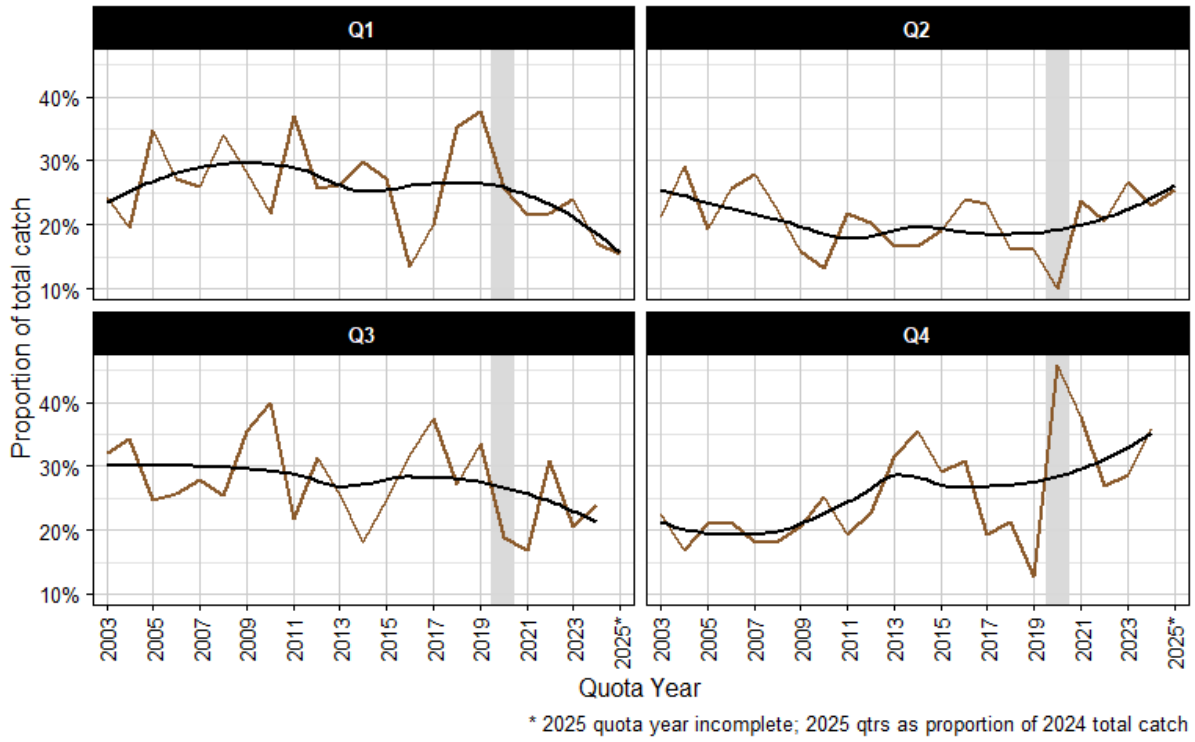

Figure 5: Distribution of total catch by quarter (Q1–Q4) from 2003–2025. Each panel shows the proportion of total annual catch taken in each quarter, black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

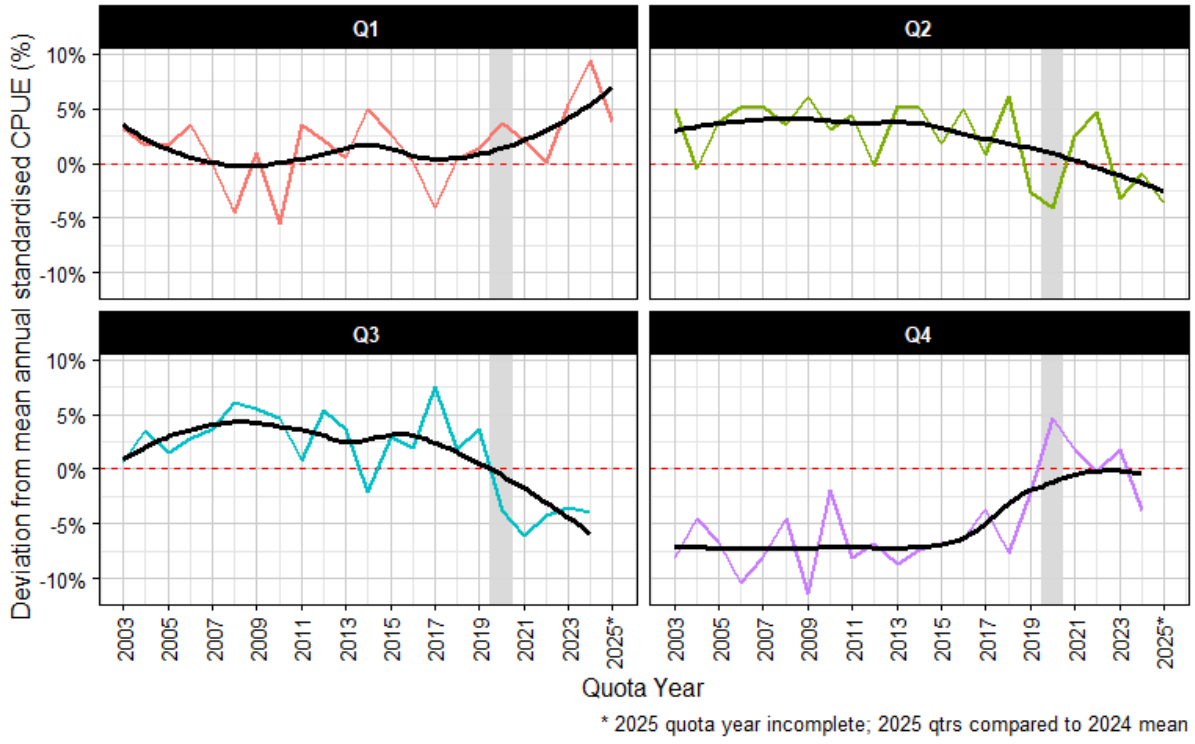

Figure 6: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

3.1.3. Central Zone Performance Measures

Catch in 2024/25 was 197.7 t, which was 87.8% of the TACC (225.1 t, Table 1). Catches have declined by a total of 70% from 2003/04. Nominal CPUE declined by 21% from 2003/04 to 2020/21 but has increased 9% in the last four years. Standardised CPUE declined by 39% from 2003/04 to 2020/21 but has increased 20% in the last four years. Mean daily catch has also decreased over time, including in the short term. However, mean daily catch may have been impacted by market forces in recent years.

Table 1: Performance measures used in the assessment of the Central Zone abalone fishery.

Measure	2024/25	Long term (since 2003/04)	Medium term (since 2009/10)	Short term (since 2020/21)
Nominal CPUE (kg/hr)	81.7	93.1 (↓12%)	83.6 (↓2%)	74.8 (↑9%)
Standardised CPUE (kg/h)	80.2	98.7 (↓19%)	83.8 (↓4%)	67.0 (↑20%)
Standardised mean daily catch (kg/day)	391.6	508.1 (↓23%)	447.0 (↓12%)	405.9 (↓4%)
Catch (t)	197.7	654.4 (↓70%)	426.4 (↓54%)	230.5 (↓14%)
2024/25 TACC t, (% TACC)	225.1 t, (87.8%)			

3.2 Spatial management unit (SMU) blacklip assessment

3.2.1. SMU Performance Measures

Assessing SMUs on an individual basis provides a more detailed picture of spatial trends against the performance measures and distributions of catch and effort within the Zone. While the total catch was around 28 t below the TACC, seven of the 11 SMUs exceeded their OT, while the remaining four were well below their OT (range 38-46% below, Table 2). The most important of these low catch SMUs (Cape Otway and Shipwreck Coast) are at the western end of the Zone and are among the most difficult areas to access.

While standardised CPUE remains well below 2003/04 levels, there has been substantial increases in the short-term, with 20% increase since 2020/21 (range by SMU 9-33%). In 2024/25, the CPUE was only 4% below the medium-term 2009/10 level. Table 2 also defines SMUs by the size of the catch relative to the TACC (VFA 2018). Large SMUs are defined as those where total catches accounted for > 15% of the TACC, medium SMUs are defined as those where total catches accounted for 10-15% of the TACC, and small SMUs are defined as those where total catches accounted for <10% of the TACC.

In 2024/25, 19.3% of the TACC was harvested from the Back Beaches SMU (43.4 t), and 15.1% from the Phillip Island SMU (34.1 t). While Cape Otway has the highest OT (49.0 t), only 62% of it was harvested (30.6 t) equating to 13.6% of the TACC. Shipwreck Coast has the fourth highest OT (29.2 t), however only 60% of this was caught (17.7 t). Prom Westside (22.9 t, 10.2% of OT) and Flinders (21.8 t, 9.7% of OT) were the other substantial contributors. The Surf Coast (3.7 t) caught more than twice its OT (1.7 t), however this area is rarely fished and catches higher than the allocated OT are encouraged to spread effort and catch throughout the zone.

Table 2: 2024/25 Performance measures used in the assessment of the Central Zone abalone fishery at the SMU scale (Zone totals repeated for reference).

Spatial Management Unit (SMU)	Catch					Standardised CPUE % difference		
	Catch 2024/25		OT (t)	% OT	SMU category	Long-term (2003/04)	Medium-term (2009/10)	Short-term 4 years (2020/21)
	(t)	% TACC						
Back Beaches	43.4	19.3	41.5	104.5	L	-20	-6	9
Phillip Island	34.1	15.1	34.0	100.4	L	-12	-2	24
Cape Otway	30.6	13.6	49.0	62.4	M	-20	-11	10
Prom Westside	22.9	10.2	21.0	109.2	M	-13	11	23
Flinders	21.8	9.7	20.5	106.3	M	-17	0	19
Shipwreck Coast	17.7	7.9	29.2	60.5	S	-24		21
Kilcunda	10.2	4.5	9.3	109.9	S	-20	-5	20
Cape Liptrap	5.1	2.3	9.4	53.7	S	-22	-13	21
Prom Eastside	5.1	2.3	4.8	105.8	S	-6	6	33
Surf Coast	3.7	1.6	1.7	217.6	S	-17	0	17
Cliffy Group	2.7	1.2	4.7	57.9	S	-17	-6	22
Port Phillip Bay	0.5	0.2	0		S			
Central Zone	197.7	87.8	225.1			-19	-4	20

Notes: Coloured shading indicates whether catch has been caught within the OT, Threshold or exceeded the Limit. Green (within OT range) indicates catch was <±15% of the OT, Yellow (within threshold range) indicates catch was ±15-30% OT, Red (exceeding limit range) indicates catch was >±30% of the OT for the 2024/25 quota year. SMU catch categories (% of zone catch): Large ≥ 15%, Medium 10-15%, Small < 10%.

3.2.2. Distribution of the catch

Since 2002, there have been substantial changes in catch distribution among the 12 SMUs in the Central Zone (Figure 7). Most notably, catches from the Flinders SMU, which were historically the highest within the Zone, are now lower than several other SMUs. In recent years, the Cape Otway, Back Beaches, Phillip Island and Shipwreck Coast SMUs have been the highest contributors to the catch. Catches from the Back Beaches and Phillip Island SMUs have been relatively consistent since 2002, while Cape Otway SMU catch has declined substantially in the last decade. The Shipwreck Coast SMU catch decrease was largely attributed to closures and reduced TACCs after the AVG virus, although recent increases in catch suggest post-virus stock recovery. Catches from most other SMUs are lower and relatively stable, except for decreases in the Port Phillip Bay SMU associated with environmental influences (Mayfield et al. 2012).

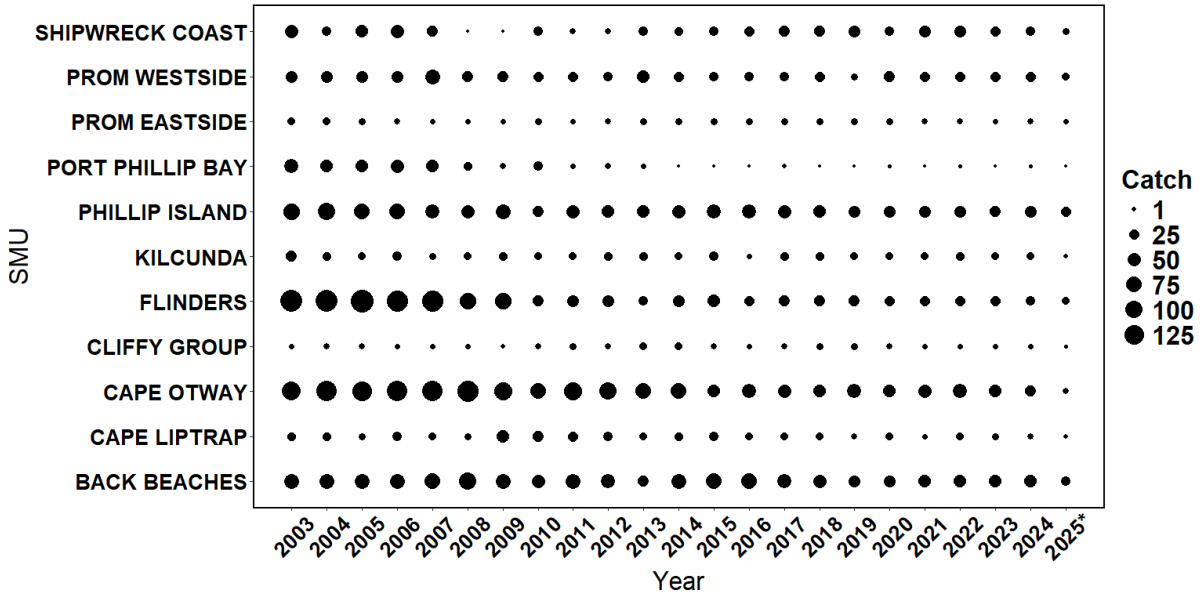

Figure 7: Relative distribution of catch at each SMU in the Central Zone by quota year, with 2025 up to 31 December only.

3.2.3. Harvest Strategy outputs

Tables 3 and 4 provide results of the Harvest Strategy for the Central Zone to inform the TACC setting process. The methods for the calculations underpinning the Harvest Strategy are documented in Dixon and Lowe (2026). The key elements to understand for the interpretation of results are:

- The reference points used are the original reference points in the 2016 Harvest Strategy;
- The CPUE measure uses the current CPUE standardisation model with data from 2003/04 to 2024/25. The CPUE values are shown in the following sections for each SMU along with nominal values, displayed against the reference points; and
- There is no tertiary indicator.

The 2024/25 standardised CPUE values were above the Threshold at all 11 assessed SMUs and therefore Catch Control Rule (CCR) 1 applied at all SMUs (Table 3).

The gradient of the recent 4-year CPUE trend provides the basis for the Primary Category (Table 4). All gradients were positive, with the Prom Eastside, Prom Westside and Surf Coast SMUs at >5% increase, resulting in an Increasing Primary Indicator for each. All other SMUs were considered Stable.

The Secondary Indicator is based on the ratio of CPUE in the last two years. It was Stable at Back Beaches, Phillip Island, Flinders and Surf Coast SMUs, and Increasing at all other SMUs.

On this basis, the Final Categories were Increasing at Prom Eastside, Prom Westside and Surf Coast, with Stable Final Categories for all other SMUs. Because the Current Status was above the Threshold for more than three years, Prom Eastside and Surf Coast have potential increases in OT of up to 25%.

The current quota from the combined OTs for 2025/26 was 228.8 t. The suggested total catch range for the Central Zone for 2026/27 is 218.7 to 245.7 t.

Table 3: Reference points for Central Zone SMUs, standardised mean annual CPUE from 2020- 2025 and catch control rules (CCR).

SMU	Limit RP	Threshold RP	Target RP	2019	2020	2021	2022	2023	2024	Current Status	Years at Status	CCR
BACK BEACHES	50	70	100	64.5	68.8	73.1	78.2	78.1	75.0	Above Threshold	4	1
CAPE LIPTRAP	40	60	120	64.2	64.4	68.9	74.8	74.0	77.9	Above Threshold	22	1
CAPE OTWAY	50	70	100	68.5	68.6	70.3	68.5	71.3	75.2	Above Threshold	2	1
CLIFFY GROUP	40	60	110	61.0	61.8	65.3	68.6	69.8	75.2	Above Threshold	22	1
FLINDERS	50	70	100	58.6	59.4	67.1	67.6	71.8	70.8	Above Threshold	2	1
KILCUNDA	50	70	110	59.3	59.9	64.8	66.4	65.7	71.7	Above Threshold	1	1
PHILLIP ISLAND	50	70	110	61.8	62.1	67.5	73.0	78.2	77.2	Above Threshold	3	1
PROM EASTSIDE	40	50	80	47.9	48.7	51.6	53.5	53.2	64.7	Above Threshold	4	1 - 125%
PROM WESTSIDE	50	70	100	54.3	65.6	62.5	67.9	66.7	80.5	Above Threshold	1	1
SHIPWRECK COAST	40	60	130	90.0	84.8	96.0	96.5	97.4	102.8	Above Threshold	19	1
SURFCOAST	40	60	70	56.4	58.5	57.0	62.4	64.5	66.6	Above Threshold	3	1 - 125%

Table 4: Harvest Strategy results for Central Zone SMUs with suggested target catch ranges.

SMU	4yr gradient	Primary Indicator	2yr ratio (% change)	Secondary Indicator	Primary Category	Final Category	2025/26 Target Catch (OT, t)	Total catch, Lower (t)	Total catch, Upper (t)
BACK BEACHES	0.73	Stable	-3.95	Stable	Stable	Stable	42.5	40.4	44.6
CAPE LIPTRAP	3.74	Stable	5.16	Increasing	Stable	Stable	12.1	11.5	12.7
CAPE OTWAY	2.57	Stable	5.55	Increasing	Stable	Stable	49.0	46.5	51.5
CLIFFY GROUP	4.74	Stable	7.74	Increasing	Stable	Stable	4.7	4.5	4.9
FLINDERS	2.29	Stable	-1.44	Stable	Stable	Stable	20.5	19.5	21.5
KILCUNDA	3.11	Stable	9.11	Increasing	Stable	Stable	9.3	8.8	9.8
PHILLIP ISLAND	4.95	Stable	-1.26	Stable	Stable	Stable	34.0	32.3	35.7
PROM EASTSIDE	7.82	Increasing	21.64	Increasing	Increasing	Increasing	4.8	4.8, 5	5.5, 6
PROM WESTSIDE	8.60	Increasing	20.71	Increasing	Increasing	Increasing	21.0	21, 22	24.1
SHIPWRECK COAST	2.24	Stable	5.54	Increasing	Stable	Stable	29.2	27.7	30.7
SURFCOAST	5.38	Increasing	3.21	Stable	Increasing	Increasing	1.7	1.7, 1.8	2, 2.1
Total							228.8	218.7, 220.0	240.0, 243.6

3.2.4. Back Beaches SMU (Large SMU)

The Back Beaches SMU was the most important Central Zone SMU in terms of total catch with 43.4 t harvested in 2024/25, representing 22.0% of the zone catch (Table 5) and 19.3% of the TACC (Table 2). The total catch for 2024/25 was above the OT (41.5 t). Standardised CPUE in 2024/25 remains below the long and medium-term levels but has increased by 9% in the last 4 years. Standardised mean daily catch has declined across all time scales.

Table 5: Summary of Catch, Optimum Targets and Performance Indicators for the Back Beaches SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
43.4	22.0	40.0	41.5	42.5	-20%	-6%	9%	-22%	-8%	-3%

The Back Beaches have been an important contributor to the Central Zone TACC since 2003 (and prior), with an average catch of 57 t and a peak catch of 95 t taken during 2008 (Figure 8). Catches generally declined in subsequent years reaching a low catch of 32 t in 2013. Catches ranged from 52 to 78 t from 2014 to 2018 and from 35 to 43 t thereafter, with catches stable across the last four years. It is noted that the OT has increased by 2.5 t in the last two years, and in 2024/25 was overcaught by 2 t (Table 5).

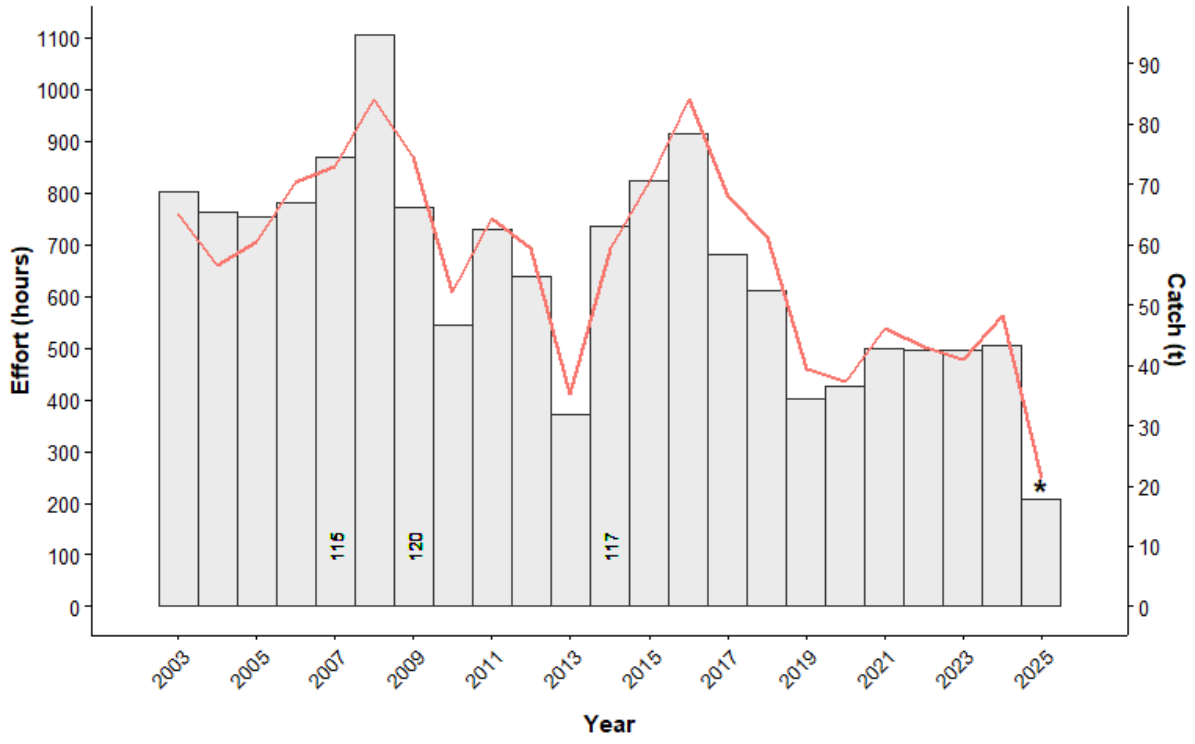

Figure 8: Total catch (bars) and total effort (line) for the Back Beaches SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE generally declined from 2003 to 2019 and increased thereafter (Figure 9). However, there has been a marginal decline from 78.2 to 75.0 kg/h in the last two years coincident with a 2.5 t increase in OT over this time. Standardised CPUE has been above the Threshold Reference Point of the Harvest Strategy since 2021.

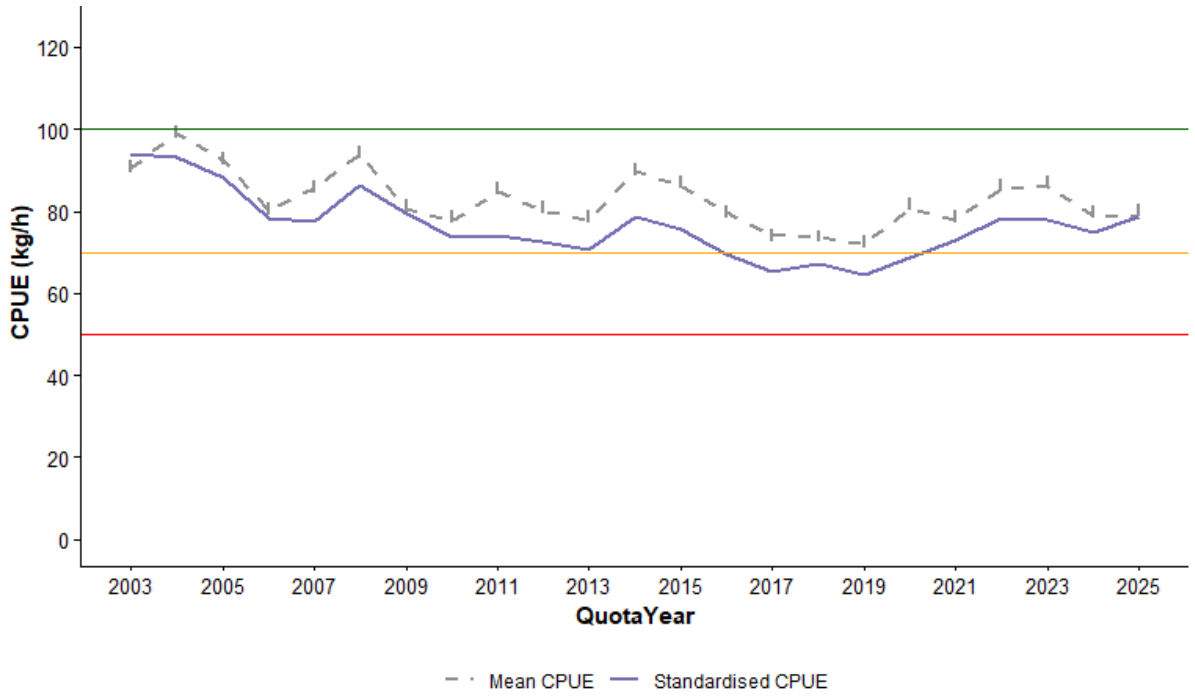

Figure 9: Back Beaches SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

The proportion of catch harvested by quarter has been relatively stable since 2003 (Figure 10). The difference between standardised CPUE measures at the annual and quarterly scale were also relatively stable, generally differing by <10% (Figure 11).

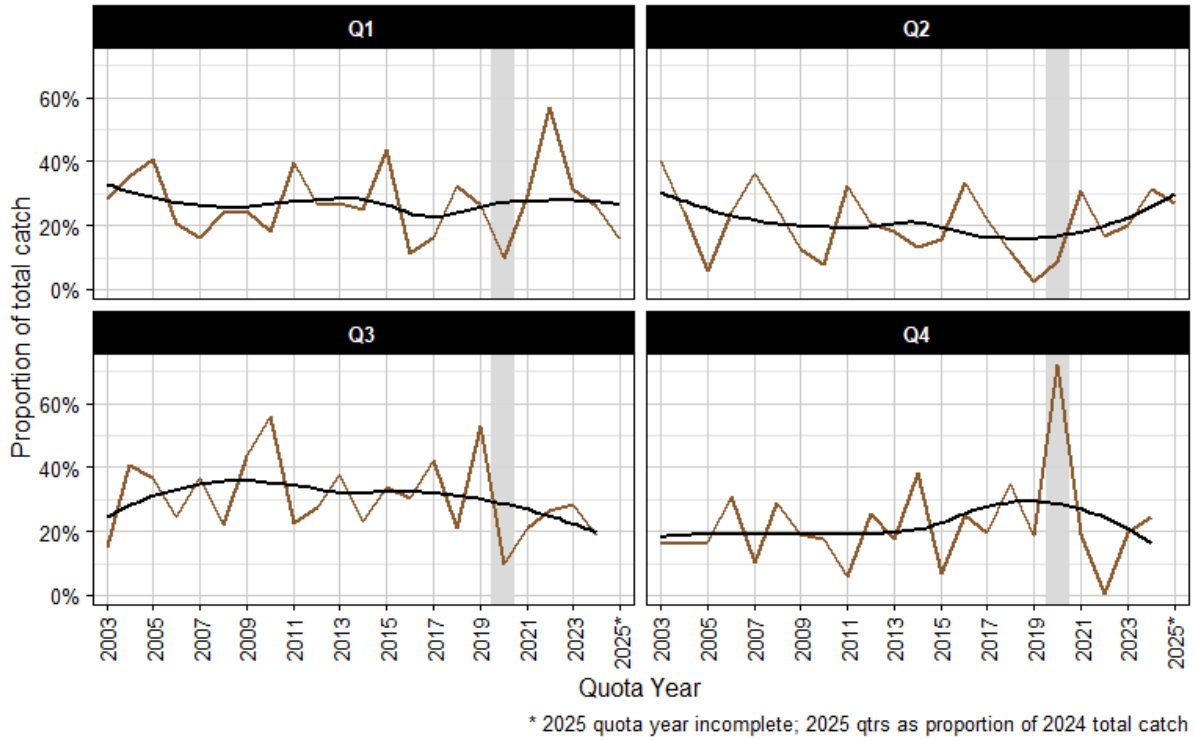

Figure 10: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Back Beaches SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

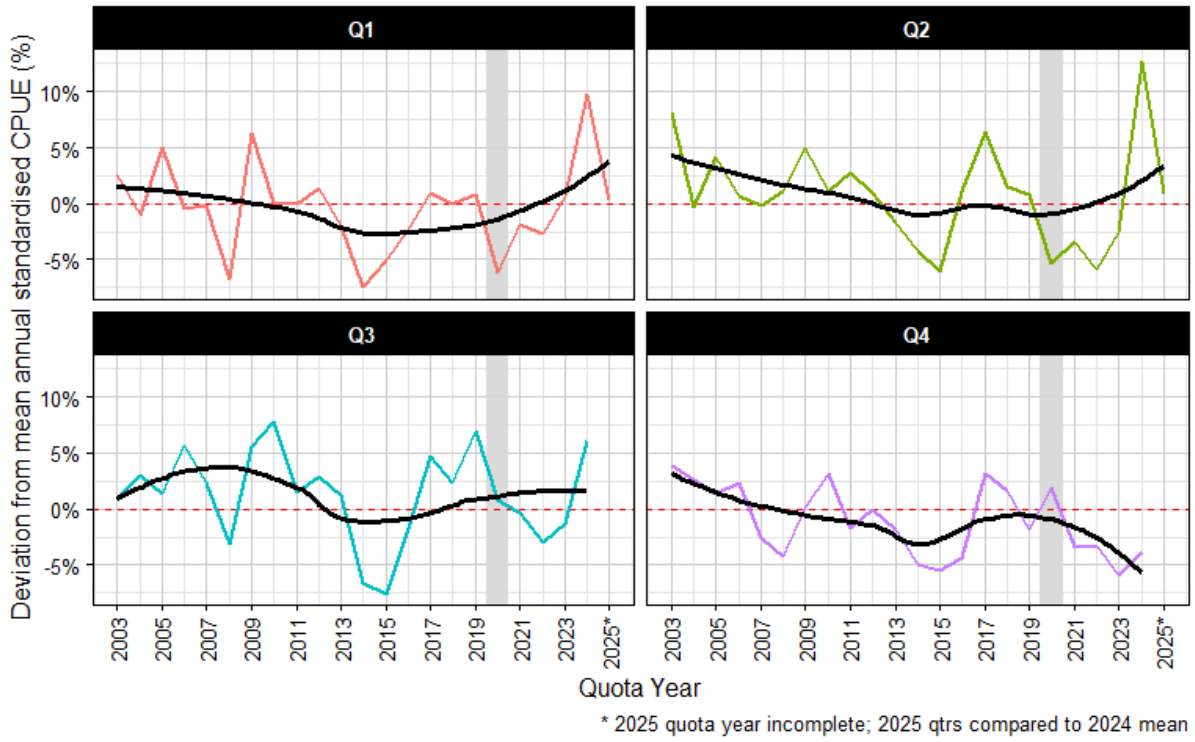

Figure 11: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the back Beaches SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch has declined since 2003 (Figure 13) and declined by 17% from 330 to 274 kg per day between 2022/23 and 2024/25.

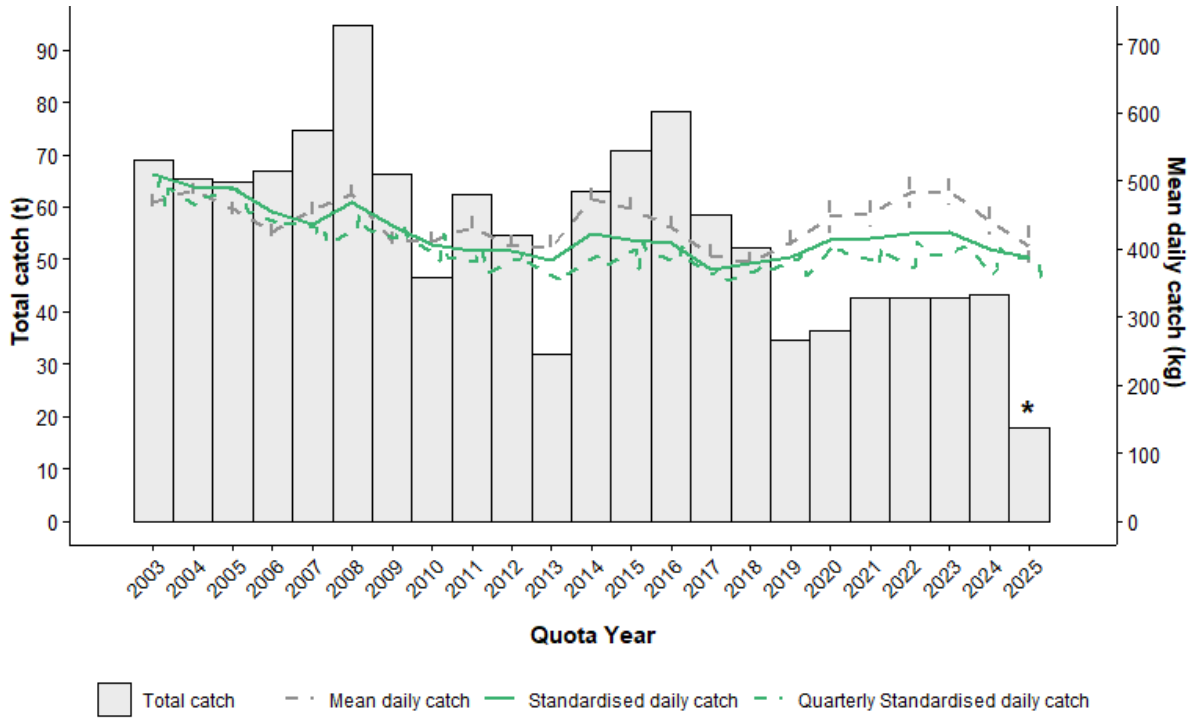

Figure 12: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Back Beaches SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Back Beaches SMU comprises five reefcodes, four of which have contributed substantially to the SMU catch in the recent years (Figure 13). In 2024/25, catches were highest at 12.03, followed by 21.02 and 12.04. In the first half of 2025/26, 9.2 t has already been harvested from 21.03.

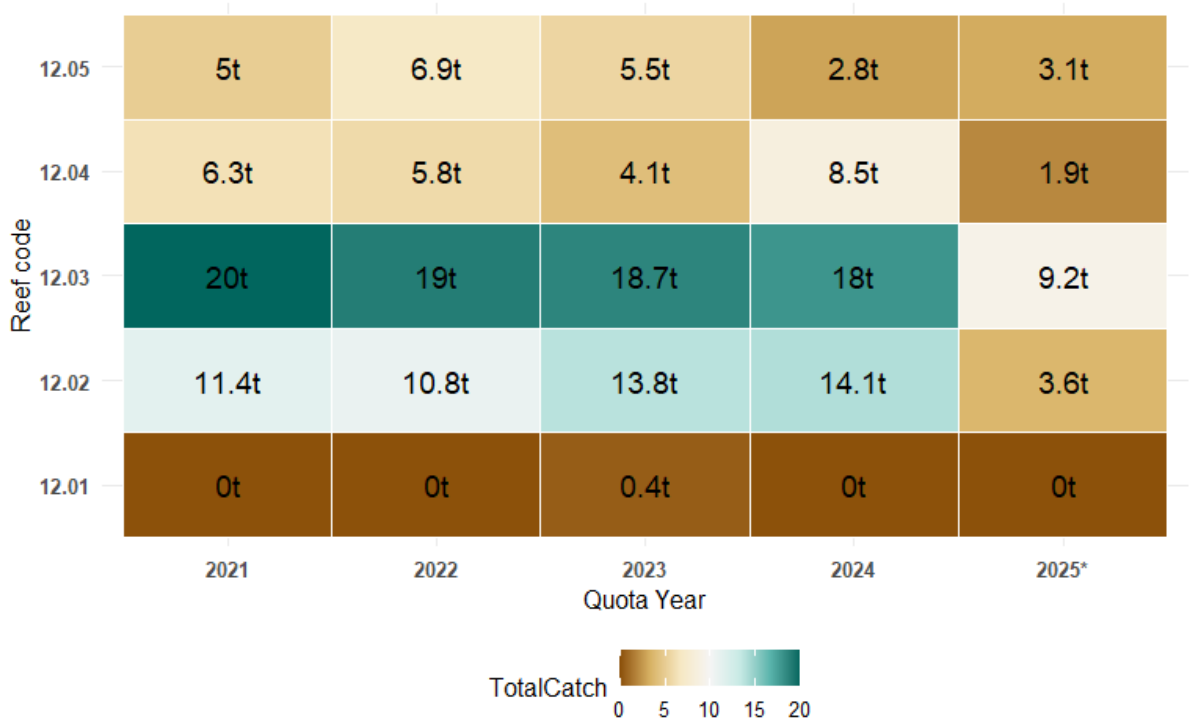

Figure 13: Total catch by reefcode for the Back Beaches SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of commercial abalone harvested show a clear increase in nominal and standardised length over time (Figure 14a,b). The increase in standardised mean size is approaching 10 mm in less than a decade. Under an assumed constant weight to length relationship, this has also resulted in an average increase of close to 25% in average weight of abalone caught (Figure 14c).

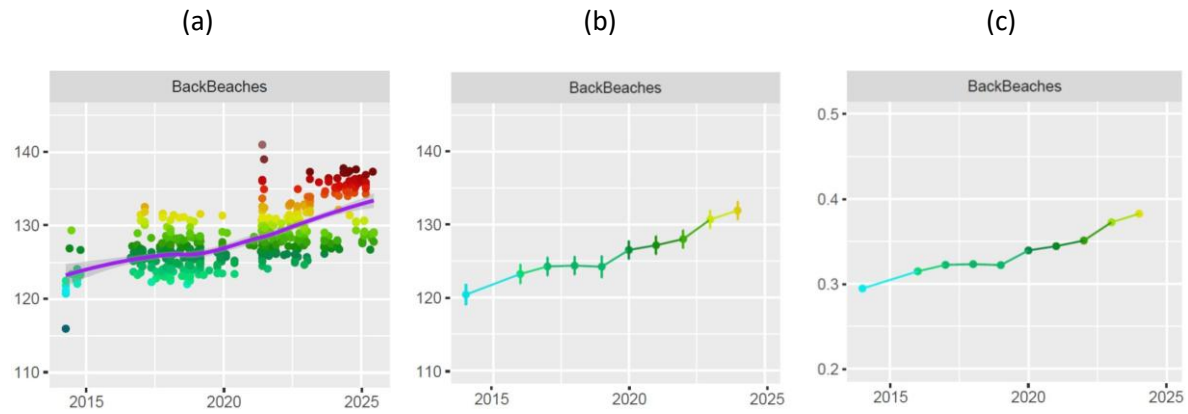

*Figure 14: Commercial length frequency data for the Back Beaches SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

The overview of trends in data for the Back Beaches is overwhelmingly positive. The CPUE has increased substantially following lower catches in 2019 and 2020. The distribution of catches among reefcodes has been stable, as has mean daily catch. Since 2019, there has been a consistent annual increase in the mean length of abalone harvested at a rate of around 1 mm per year. However, it is noted that this SMU has been fished over its OT each of the last few years, and the OT has increased by 2.5 t in the last two years.

The CPUE Performance Indicator (PI) has been above the Harvest Strategy's Threshold level since 2021 and both the Primary and Secondary Indicators were Stable resulting in a Stable Final Category. The current OT is 42.5 t and the suggested OT ranges from 40.4 to 44.6 t.

The Back Beaches SMU appears to have improved after two years of lower catches were harvested during 2019 and 2020. While the available data suggests the stock is well positioned, CPUE has marginally declined in the last two years corresponding to increases in OT each year. Maintaining a Stable OT as suggested by the Harvest Strategy would be an appropriate outcome, however ongoing trends in CPUE should be monitored closely.

3.2.5. Phillip Island (Large SMU)

The Phillip Island SMU was the second highest SMU in terms of total catch, with 34.1 t harvested in 2024/25, representing 17.2% of the zone catch (Table 6) and 15.1% of the TACC (Table 2). The 2024/25 catch was close to the OT of 34.0 t. Standardised CPUE in 2024/25 remains below the long and medium-term levels but has increased by 24% in the last 4 years. Standardised mean daily catch has declined across all time scales.

Table 6: Summary of Catch, Optimum Targets and Performance Indicators for the Phillip Island SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
34.1	17.2	32.3	34.0	34.0	-12%	-2%	24%	-32%	-21%	-17%

The Phillip Island SMU is an important contributor to the Central Zone TACC, with an average catch of 51 t since 2003 and a maximum catch of 91 t in 2004 (Figure 15). Catches generally declined reaching a low catch of 32 t in 2010, and ranged from 33 to 51 t between 2011 and 2018 before stabilising in the last six years under a catch cap. Notably, around 25 t has been harvested from Phillip Island in the first six months of 2025/26.

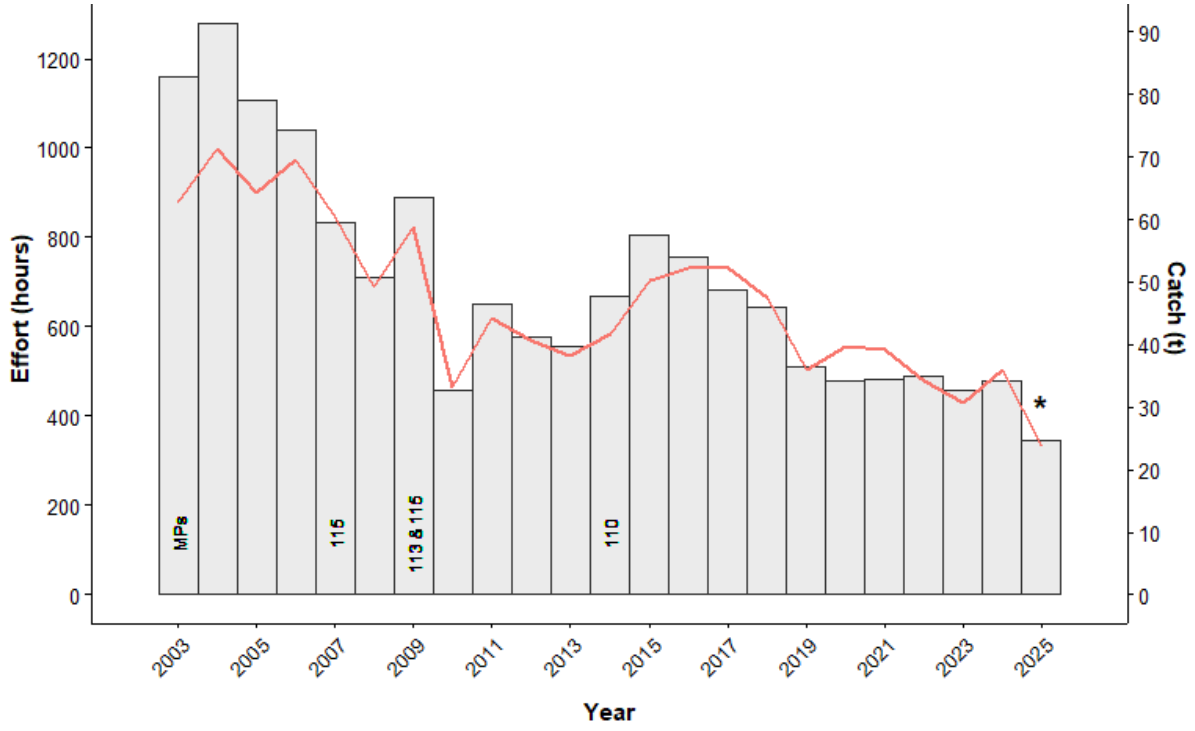

Figure 15: Total catch (bars) and total effort (line) for the Phillip Island SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE generally declined from 2003 to 2017 before increasing from 2020 to 2024 (Figure 16). It has been below the Threshold level for most of this time but has been above the level for the last three years.

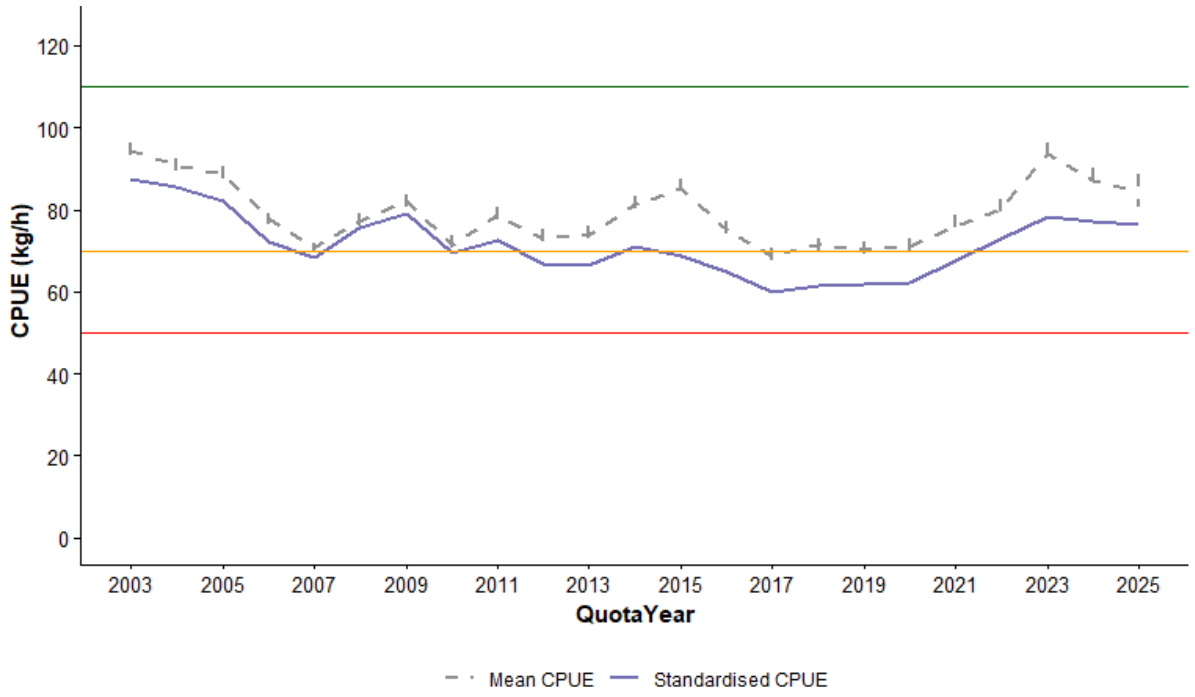

Figure 16: Phillip Island SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

While quarterly catch trends have been variable over time there are no apparent trends (Figure 17). Similarly, trends in standardised CPUE relative to annual mean also vary without clear trends (Figure 18).

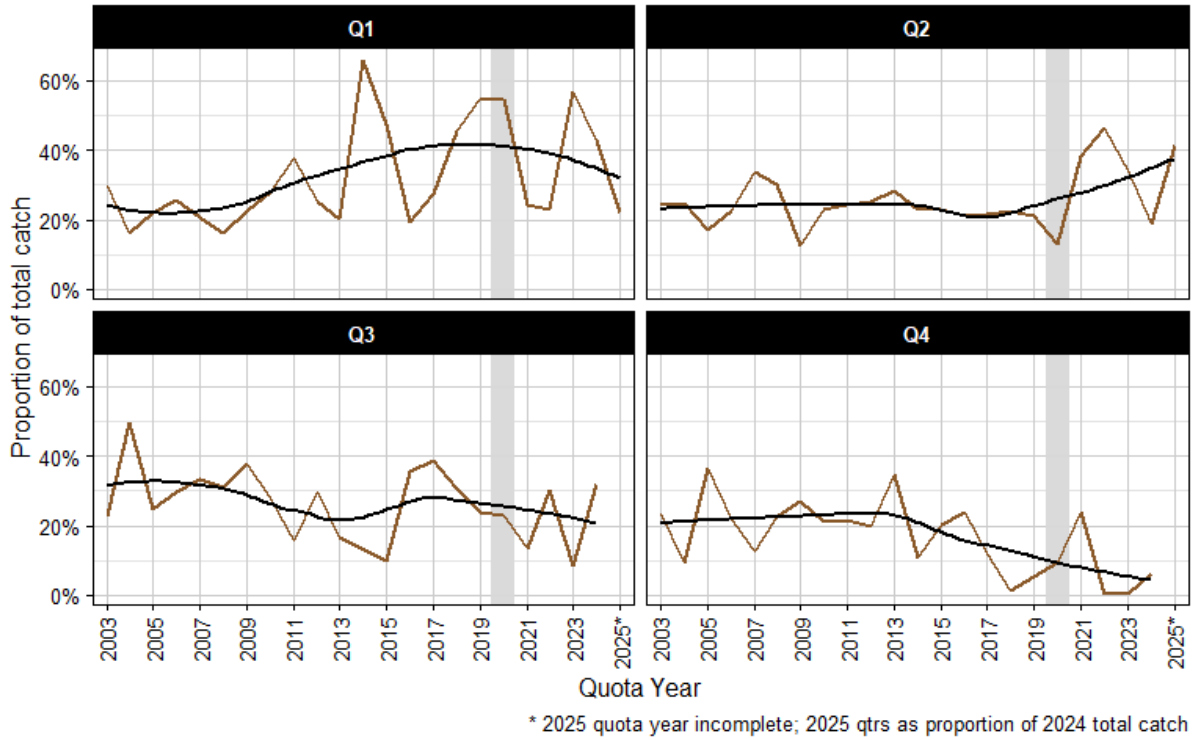

Figure 17: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Phillip Island SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

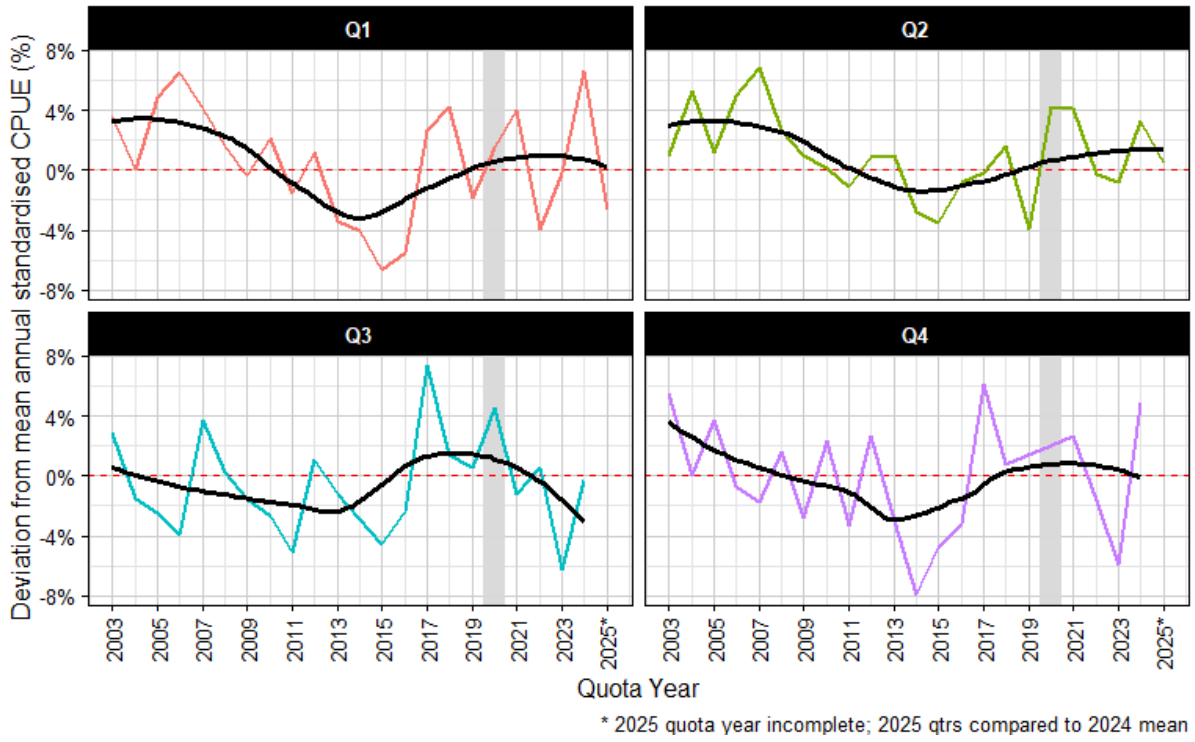

Figure 18: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Phillip Island SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch has generally ranged between 300 and 350 kg/day from 2010 to 2025 (Figure 19). While mean daily catch declined in 2024 to its lowest level, this may have been impacted by market forces.

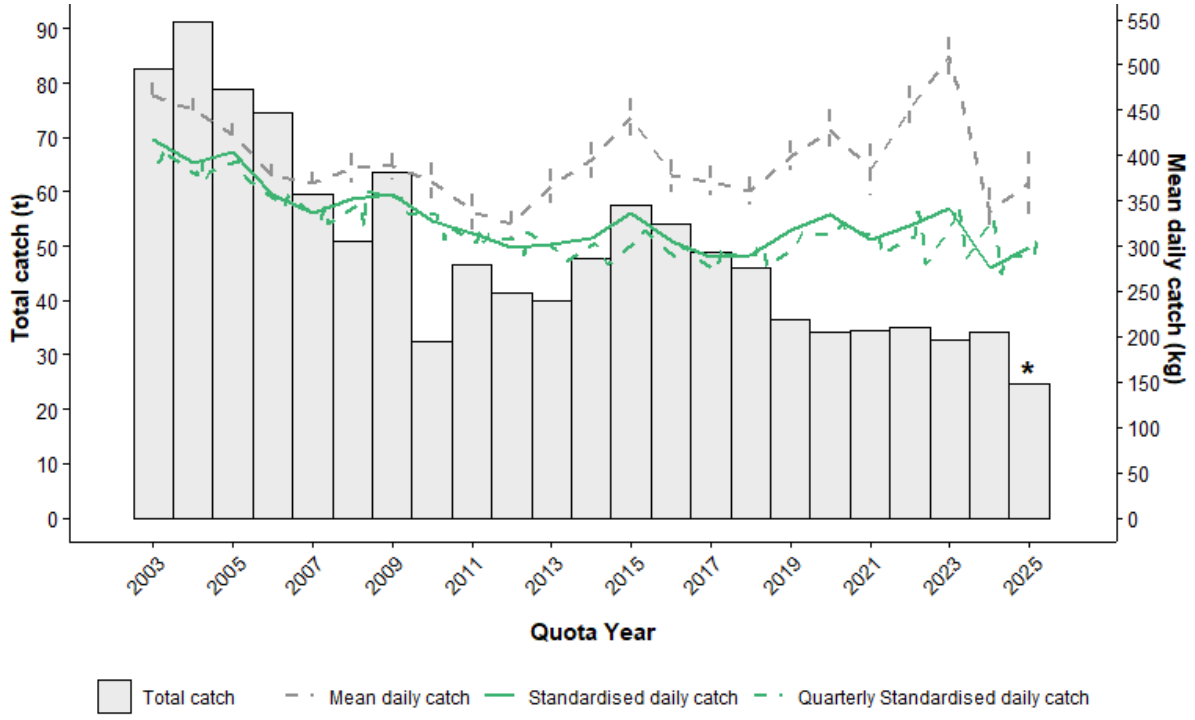

Figure 19: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Phillip Island SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Phillip Island SMU comprises 11 reefcodes, four of which produce most of the catch (14.02, 14.03, 14.04, 14.09) (Figure 20). In 2023, catches were unusually low at 14.03 and unusually high in 14.02 due primarily to prevailing winds. During 2024, catches returned to previous averages and it is notable that the catch in 14.03 up to 31 December 2025 is already close to last year's catch.

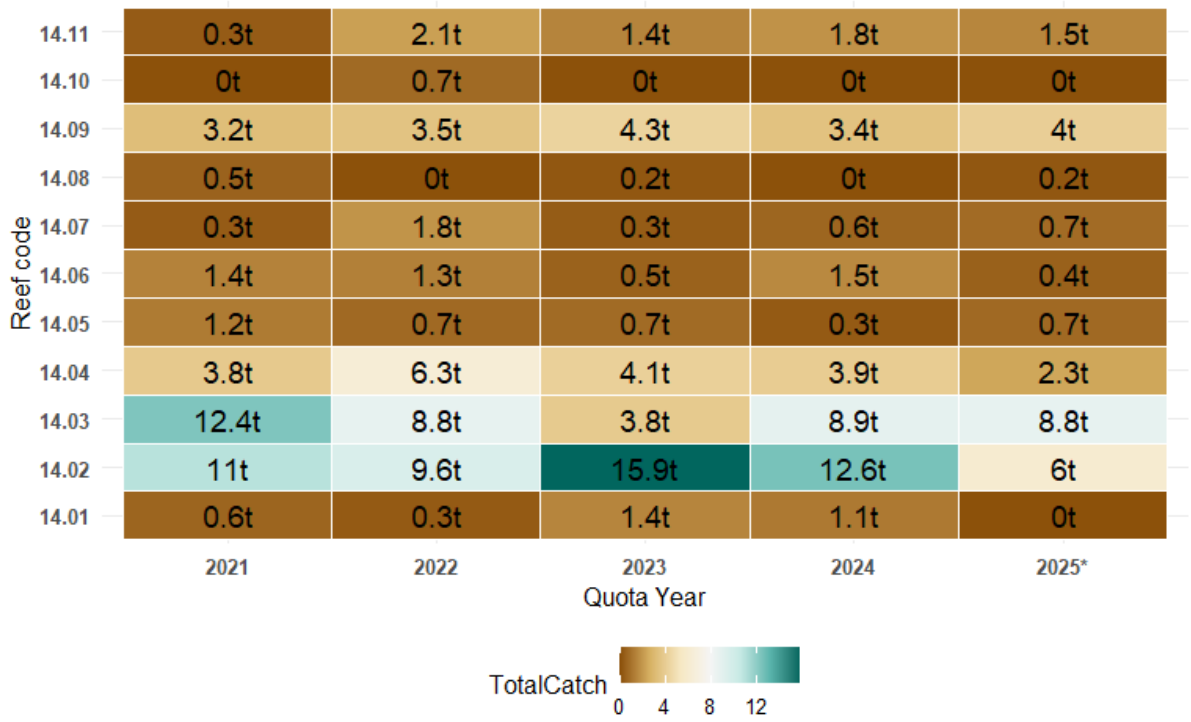

Figure 20: Total catch by reefcode for the Phillip Island SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested show a clear increase in raw and standardised length over time, particularly since 2019 (Figure 21a,b). The increase in standardised mean size is approaching 10 mm in the last six years. Under an assumed constant weight to length relationship, this has also resulted in an average increase of around 25% in average weight of abalone caught (Figure 21c).

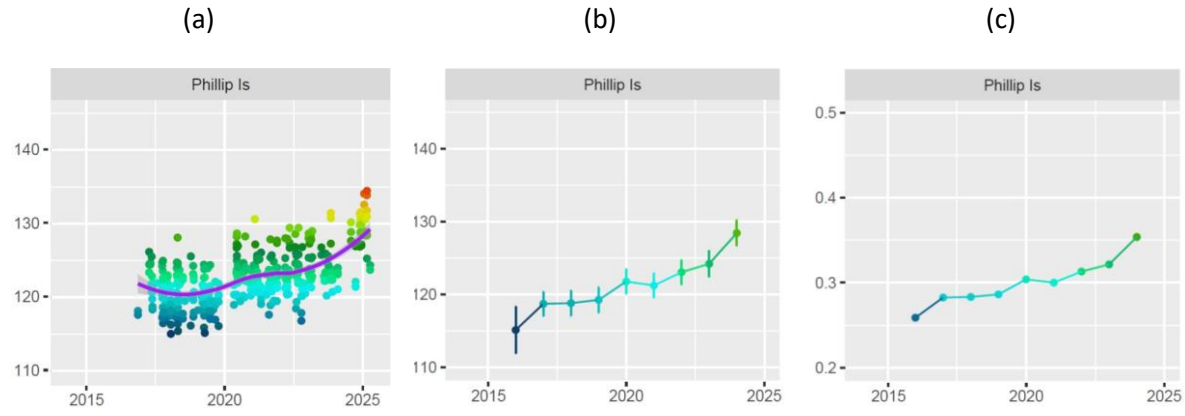

*Figure 21: Commercial length frequency data for the Phillip Island SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

The overview of trends in data for the Phillip Island SMU is also overwhelmingly positive. Since catches were stabilised at lower levels in 2019, CPUE has increased from around 60 to 78 kg/h. While the distribution of catch has been highly variable in recent years among the two most important reefcodes (14.02 and 14.03), reefcode level analyses suggest that CPUEs have remained increasing or stable at these reefcodes (see Figure 86, page 74). Since 2019, there has been a consistent annual increase in the mean length of abalone harvested at a rate of around 1 mm per year.

The CPUE PI has been above the Harvest Strategy Threshold level for the last three years. The Primary and Secondary Indicators were Stable resulting in a Stable Final Category. The current OT is 34.0 t and the suggested OT ranges from 32.3 to 35.7 t.

The Phillip Island SMU appears to have improved substantially since catches were stabilised at lower levels in 2019. Maintaining a Stable OT as suggested by the Harvest Strategy appears to be an appropriate outcome.

3.2.6. Cape Otway (Medium SMU)

The Cape Otway SMU contributed 30.6 t in 2024/25 representing 15.5% of the zone catch (Table 7) and 13.6% of the TACC (Table 2). The 2024/25 catch was 37% lower than the OT of 49.0 t. Standardised CPUE in 2024/25 remains below the long and medium-term levels but has increased by 10% in the last 4 years. Standardised mean daily catch has declined across all time scales.

Table 7: Summary of Catch, Optimum Targets and Performance Indicators for the Cape Otway SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
30.6	15.5	49.0	49.0	49.0	-20	-11	10	-19%	-12%	-4%

The Cape Otway SMU has contributed an average catch of 83 t since 2003 (Figure 22) and a peak catch of 159 t in 2008. The catch of 30.6 t in 2024/25 was the lowest catch recorded since 2003, with divers suggesting that this has primarily resulted from poor weather conditions. Catches from this region continue to be low, with only 6 t harvested in the first six months of 2025/26.

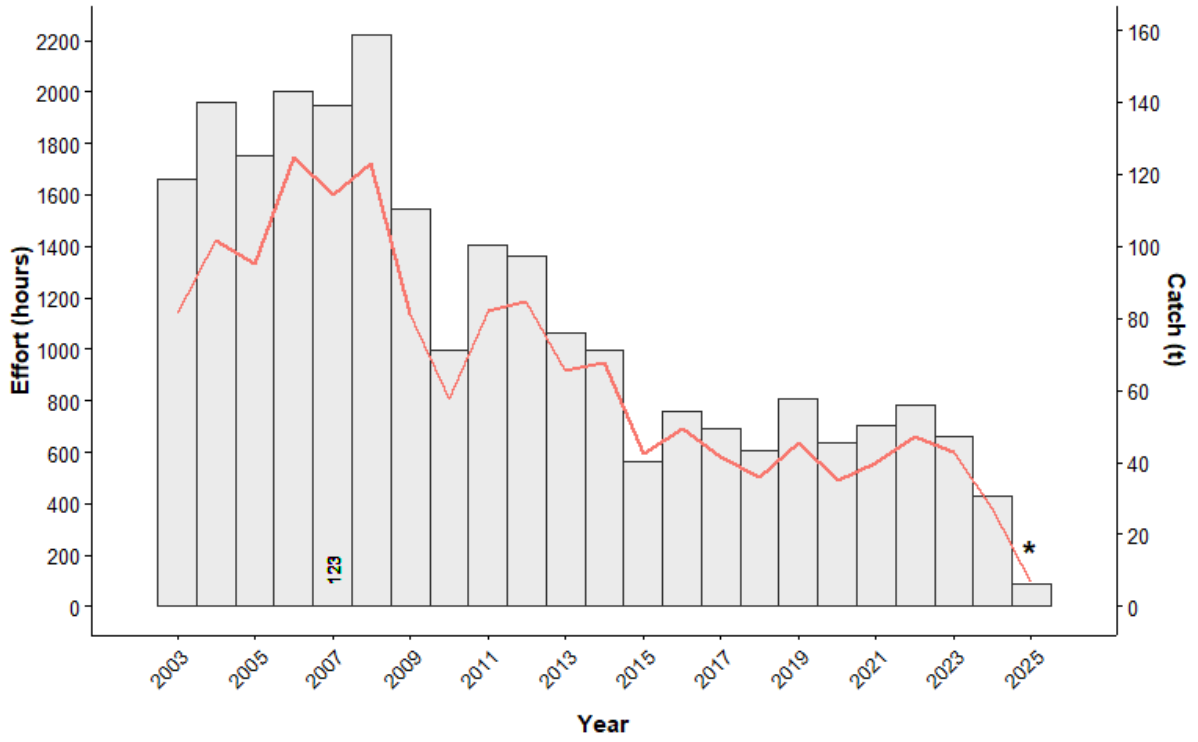

Figure 22: Total catch (bars) and total effort (line) for the Cape Otway SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE declined from 2003 to 2015, but has slowly increased thereafter (Figure 23) and has been consistently around the Threshold level since 2017.

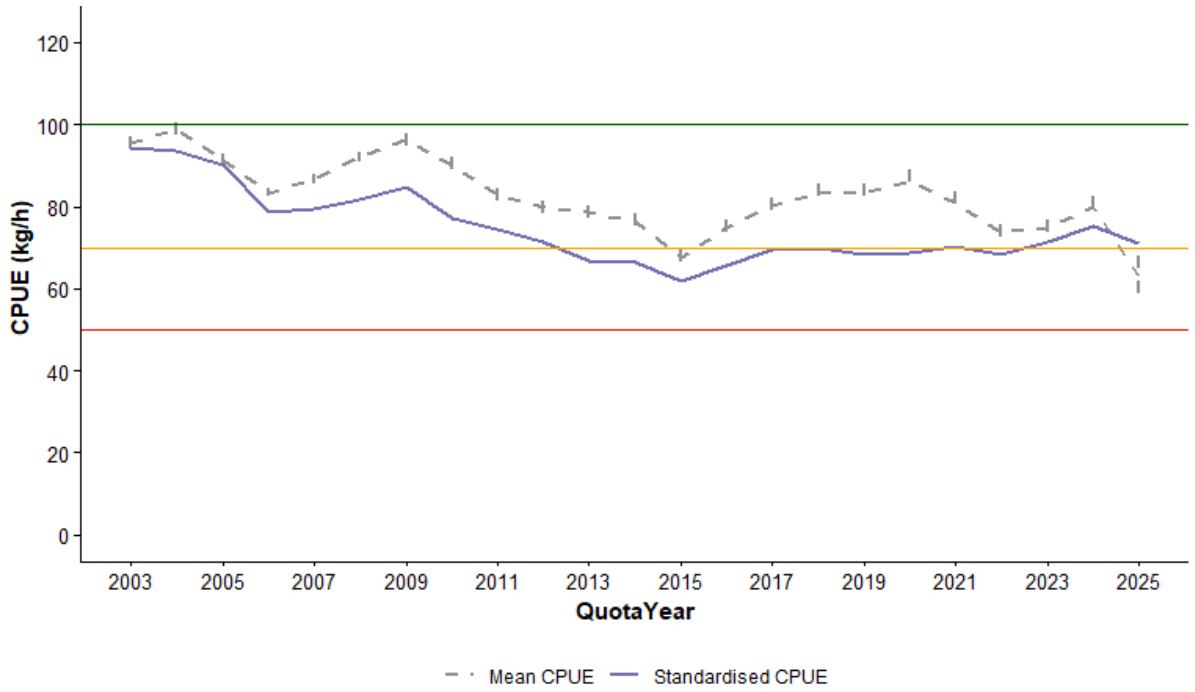

Figure 23: Cape Otway SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

The proportion of catch harvested in the first two quarters at Cape Otway is generally less than that harvested in the last two quarters, with highest amounts harvested at the end of most recent quota years (Figure 24). There has been a high degree of variation in quarterly CPUE but no clear trends over time (Figure 25).

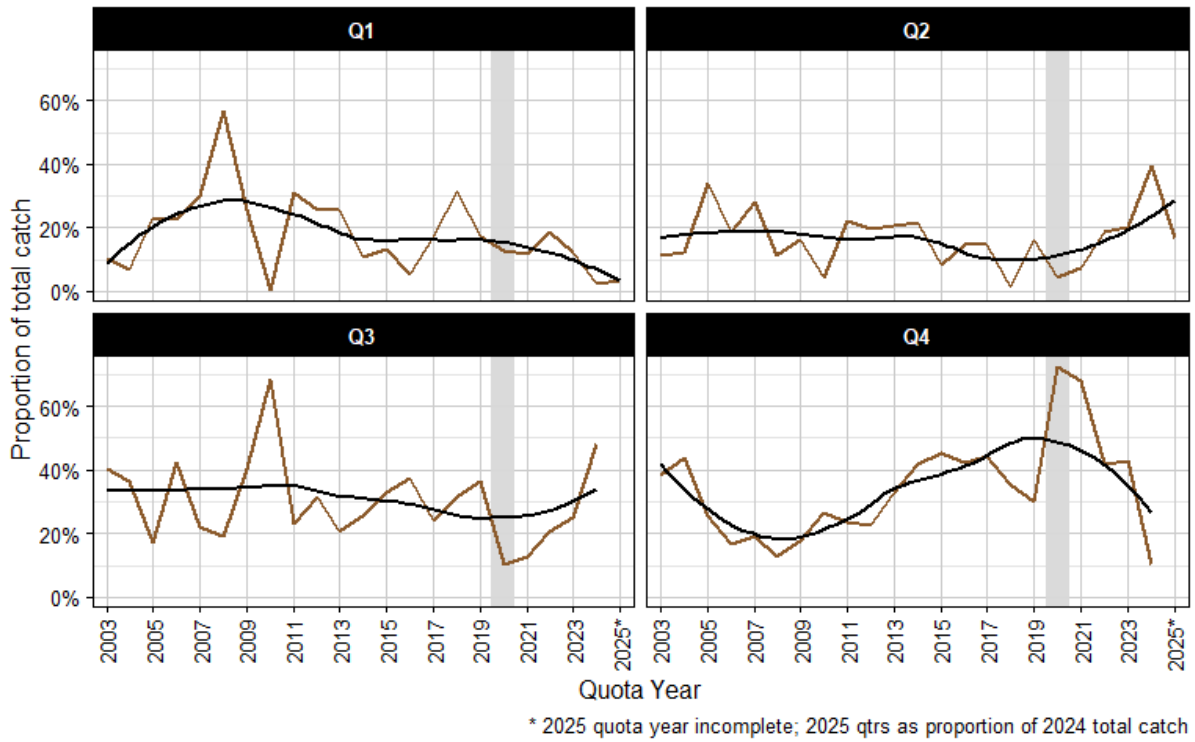

Figure 24: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Cape Otway SMU. Each panel shows the proportion of total annual catch taken in each quarter., black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

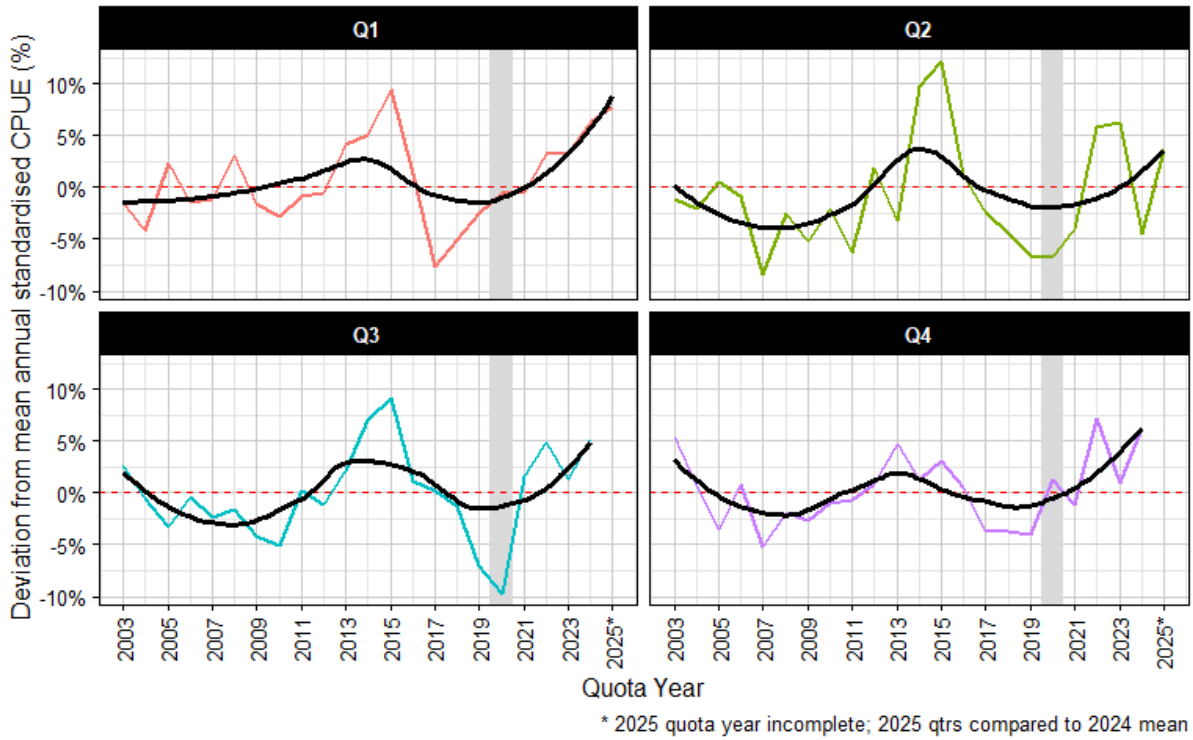

Figure 25: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Cape Otway SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch generally declined from 2003 to 2014 and has been relatively stable thereafter (Figure 26).

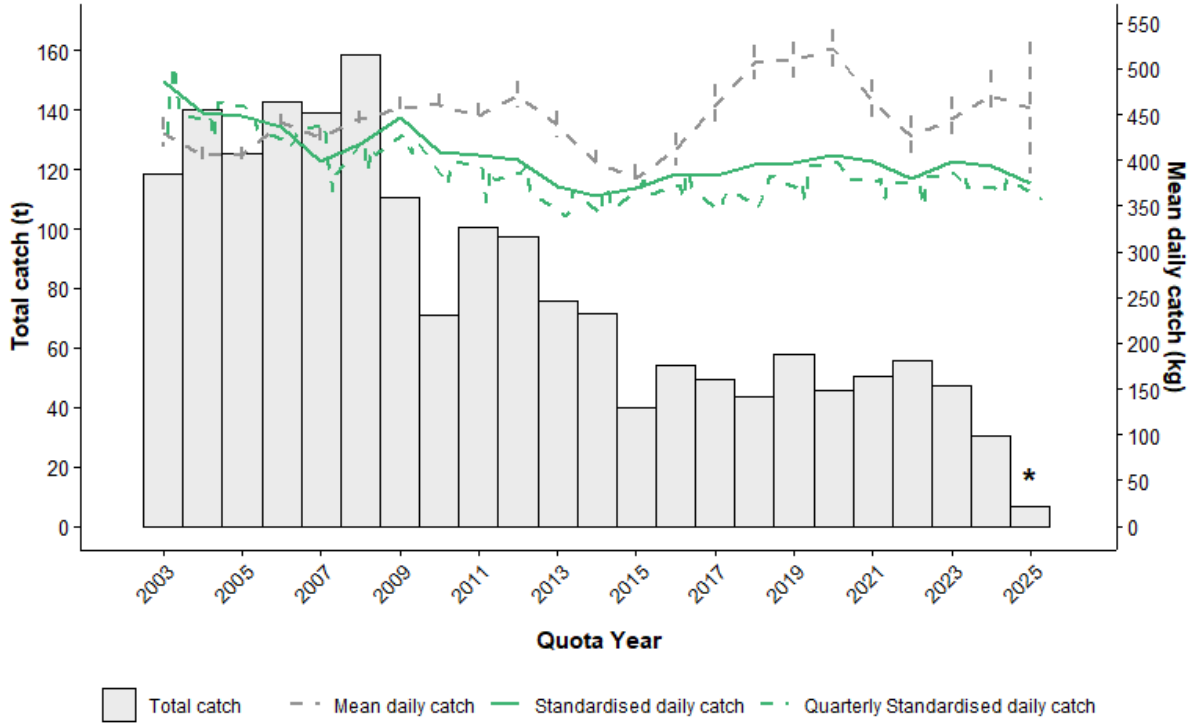

Figure 26: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Cape Otway SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Cape Otway SMU comprises 10 reefcodes, with 6.01, 6.02 and 7.08 the key contributors in recent years (Figure 27). Very little catch has been harvested from Cape Otway reefcodes in the first six months of 2025/26.

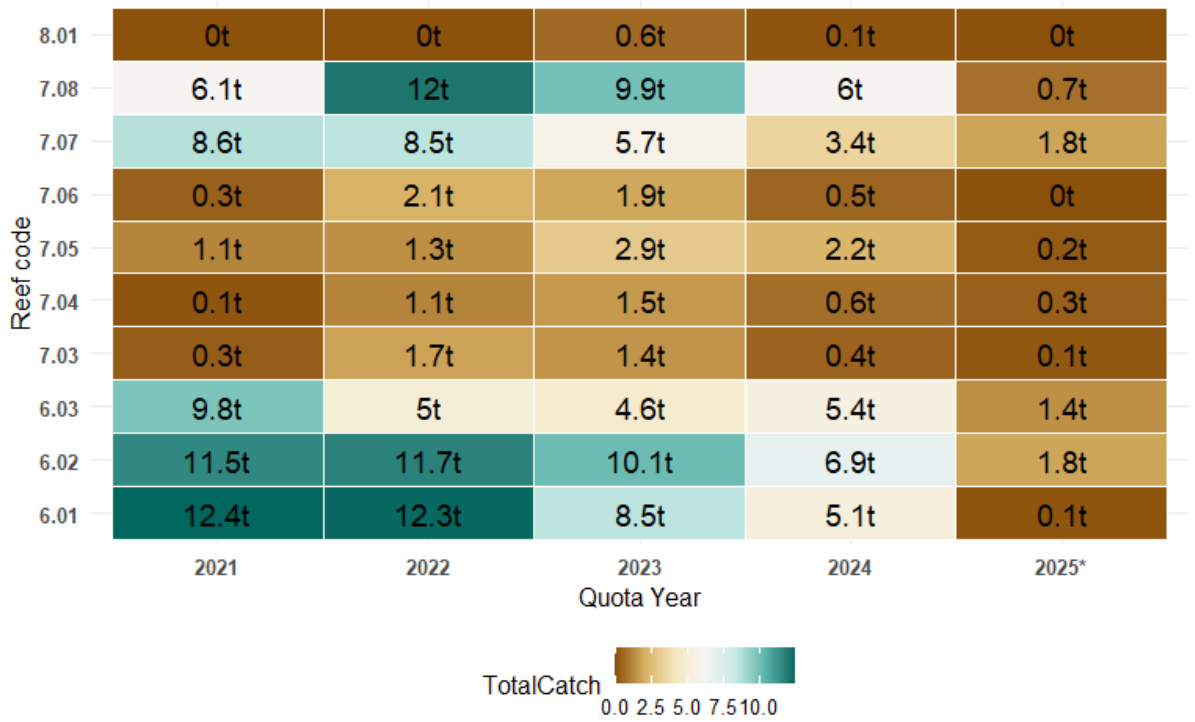

Figure 27: Total catch by reefcode for the Cape Otway SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested show a small but consistent increase in nominal and standardised length over time (Figure 28a,b). The increase in standardised mean size approximates 4 mm over six years. Under an assumed constant weight to length relationship, this has also resulted in an average increase of close to 10% in average weight of abalone caught (Figure 28c).

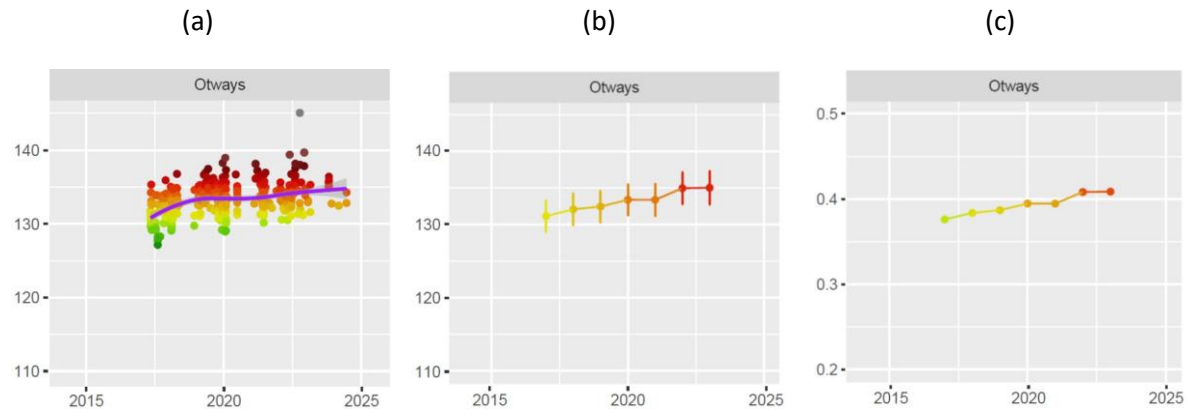

*Figure 28: Commercial length frequency data for the Cape Otway SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

Divers suggested that catches at the Cape Otway SMU have been by poor weather conditions in 2024/25, with 30.6 t harvested - falling short of the OT by almost 20 t. These trends appear to be continuing in 2025/26, with only 6 t harvested in the first six months. The CPUE has been stable since 2017 and increased in 2024/25. The distribution of catches among reefcodes has been stable over the last few years and the CPUE stable at the three most important reefcodes (see Figures 85 & 86, pages 73 & 74). Since 2017, there has been a slow but consistent annual increase in the mean length of abalone harvested from the Cape Otway SMU.

The CPUE PI has been just above the Harvest Strategy Threshold level for three of the last four years. The Primary and Secondary Indicators were Stable, resulting in a Stable Final Category. The current OT is 49.0 t and the suggested OT ranges from 46.5 to 51.5 t.

Divers suggest catches at the Cape Otway SMU have been affected by poor weather conditions in 2024/25, and these trends have continued in the first 6 months of 2025/26. Maintaining a Stable OT as suggested by the Harvest Strategy should enable stock recovery given the low catch in 2024/25.

3.2.7. Prom Westside (Medium SMU)

The Prom Westside SMU was the fourth highest contributor, with 22.9 t harvested in 2024/25 representing 11.6% of the Zone catch and 10.2% of the TACC (Table 8). The catch was 34% just above the OT of 21.0 t. Standardised CPUE in 2024/25 remains below the long-term level but was 11% than 2009/10 and 23% higher than 2020/21. Standardised mean daily catch has declined across all time scales.

Table 8: Summary of Catch, Optimum Targets and Performance Indicators for the Prom Westside SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	Long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
22.9	11.6	21.0	21.0	21.0	-13%	11%	23%	-18%	-4%	-6%

The Prom Westside SMU has produced an average catch of 28 t since 2003, with a peak of 62 t in 2007 (Figure 29). Except for 2019, catch has been very stable for more than a decade, ranging between 20 and 30 t.

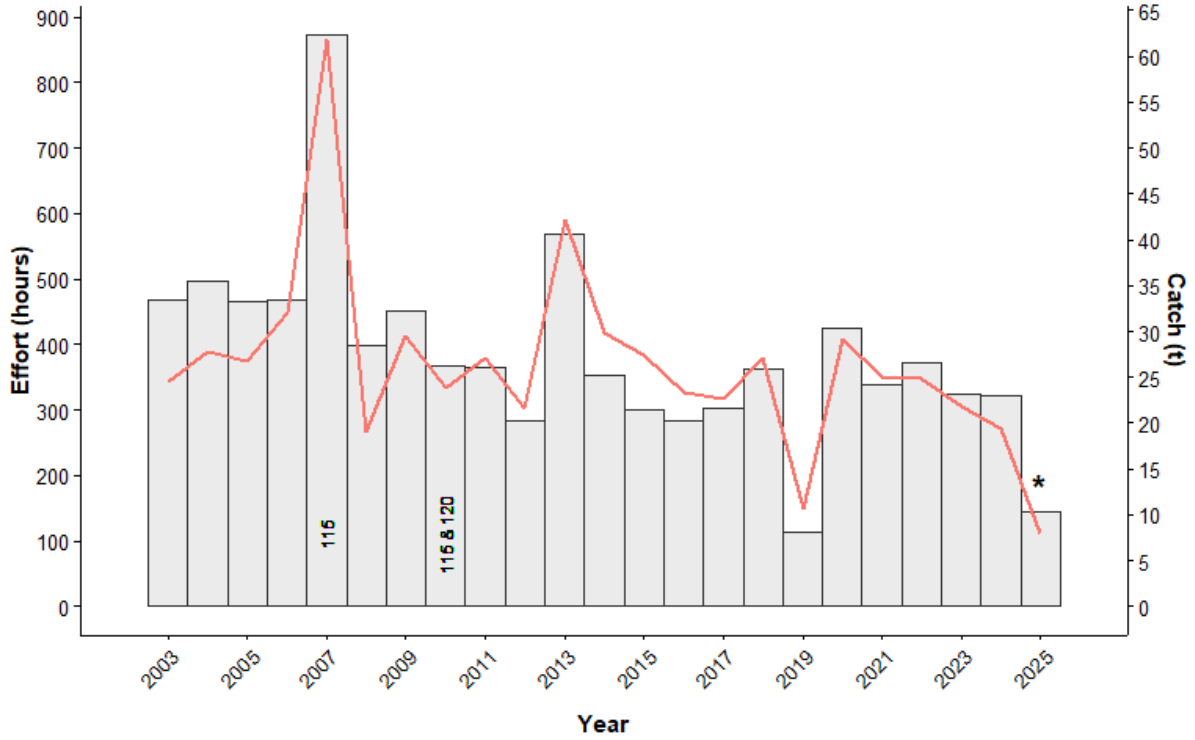

Figure 29: Total catch (bars) and total effort (line) for the Prom Westside SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE generally declined from 2003 to 2014 (Figure 30). With catches kept relatively stable thereafter, CPUE stabilised and then increased, and in 2024 it reached above the Threshold level of the Harvest Strategy for the first time since 2024.

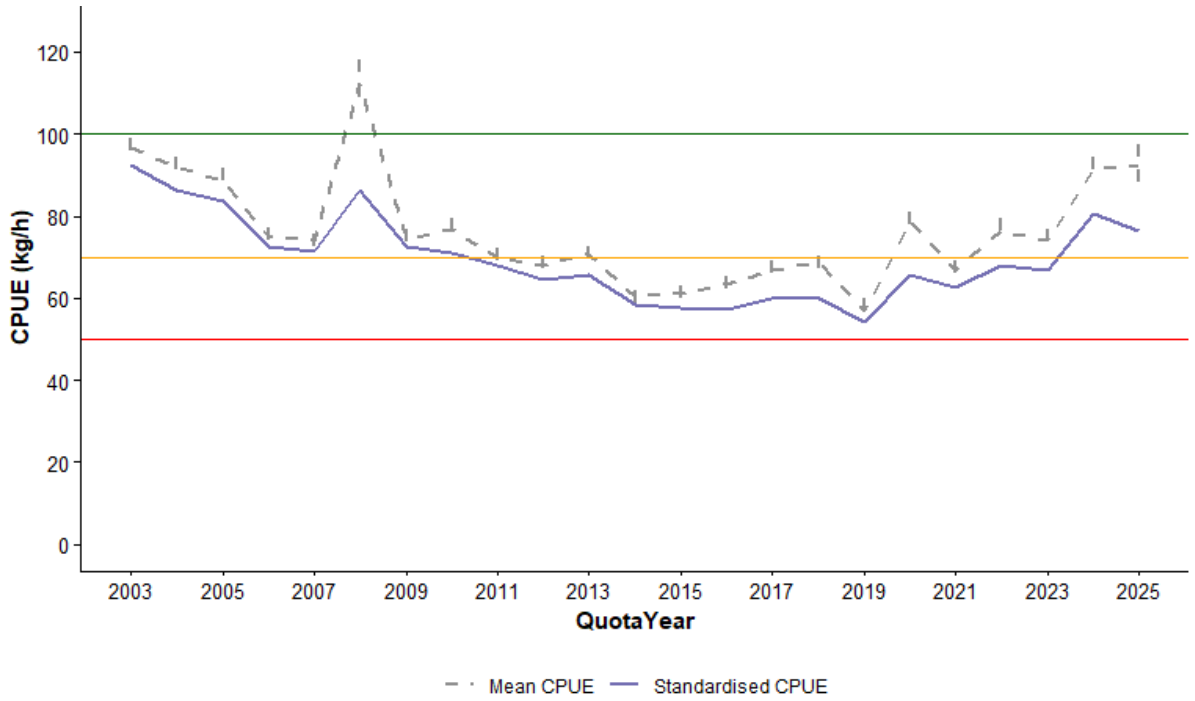

Figure 30: Prom Westside SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

While the proportion of catch harvested each year by quarter can be highly variable, there are no clear trends and the SMU is generally fished year-round (Figure 31). There are no clear trends in the variation among quarterly CPUEs over time (Figure 32).

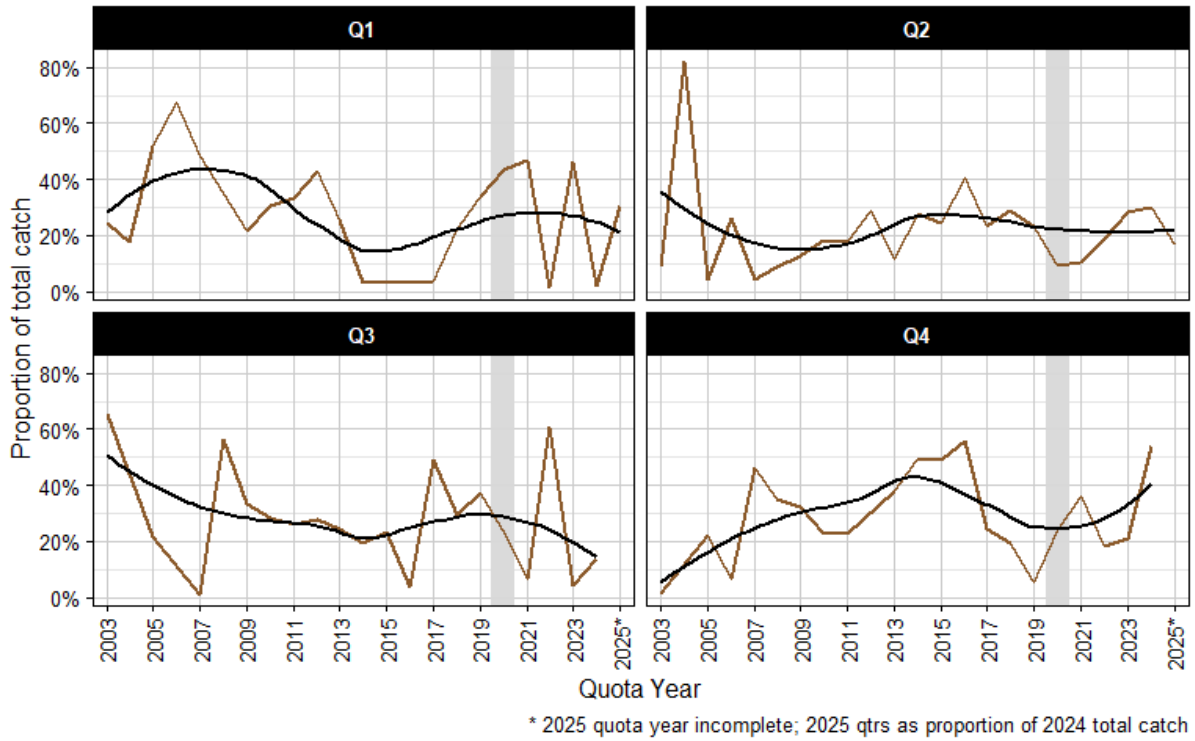

Figure 31: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Prom Westside SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

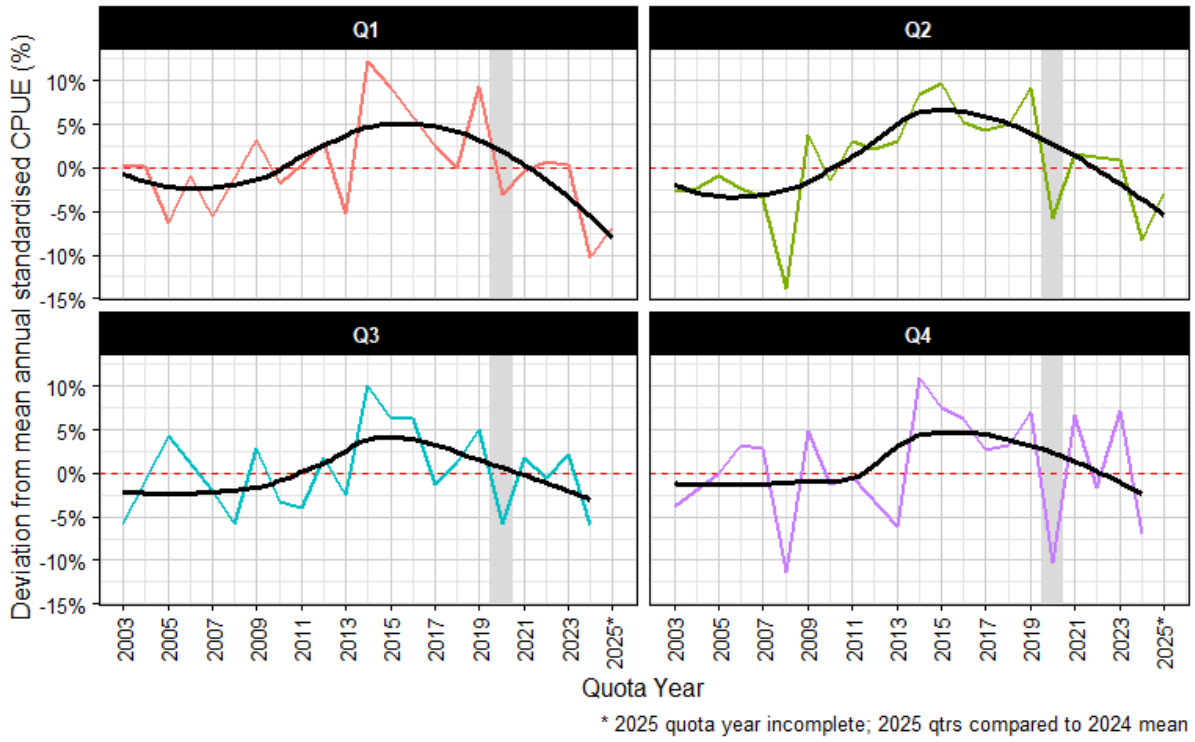

Figure 32: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Prom Westside SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch generally declined from 2003 to around 2014 before slowly increasing thereafter (Figure 33).

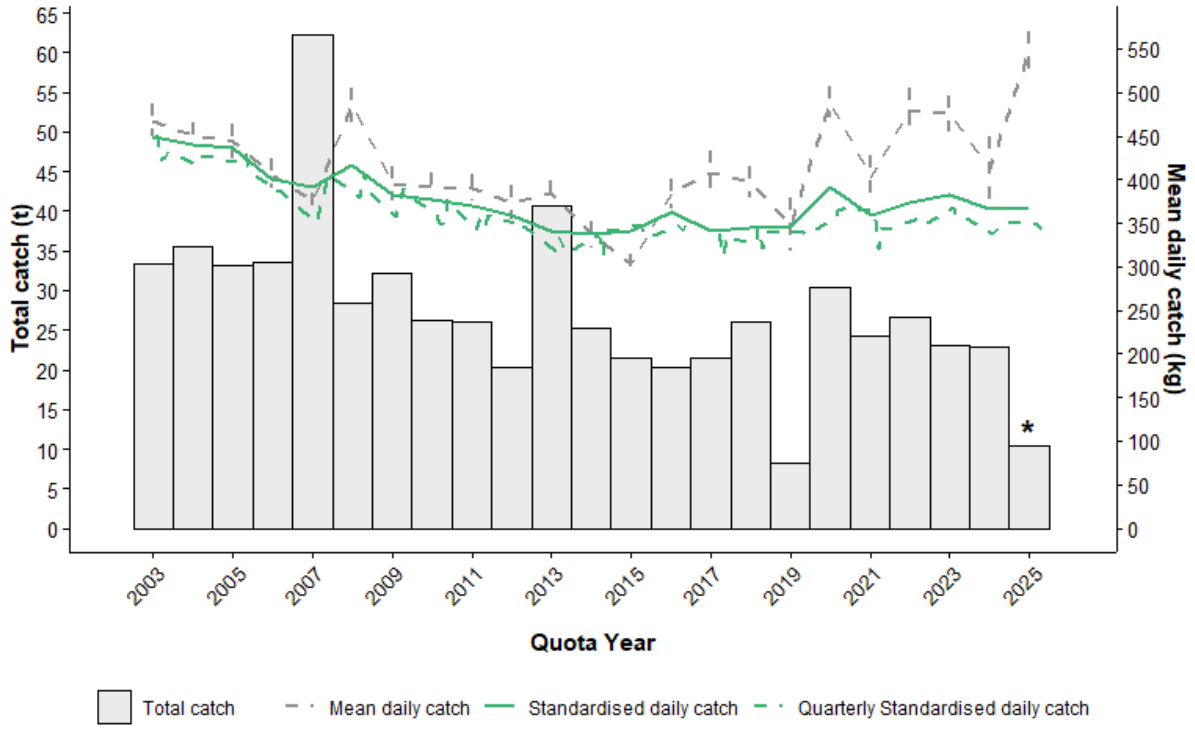

Figure 33: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Prom Westside SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Prom Westside SMU comprises 10 reefcodes, however only two reefcodes (17.10 and 17.02) produced more than3 t each in the last two quota years (Figure 34).

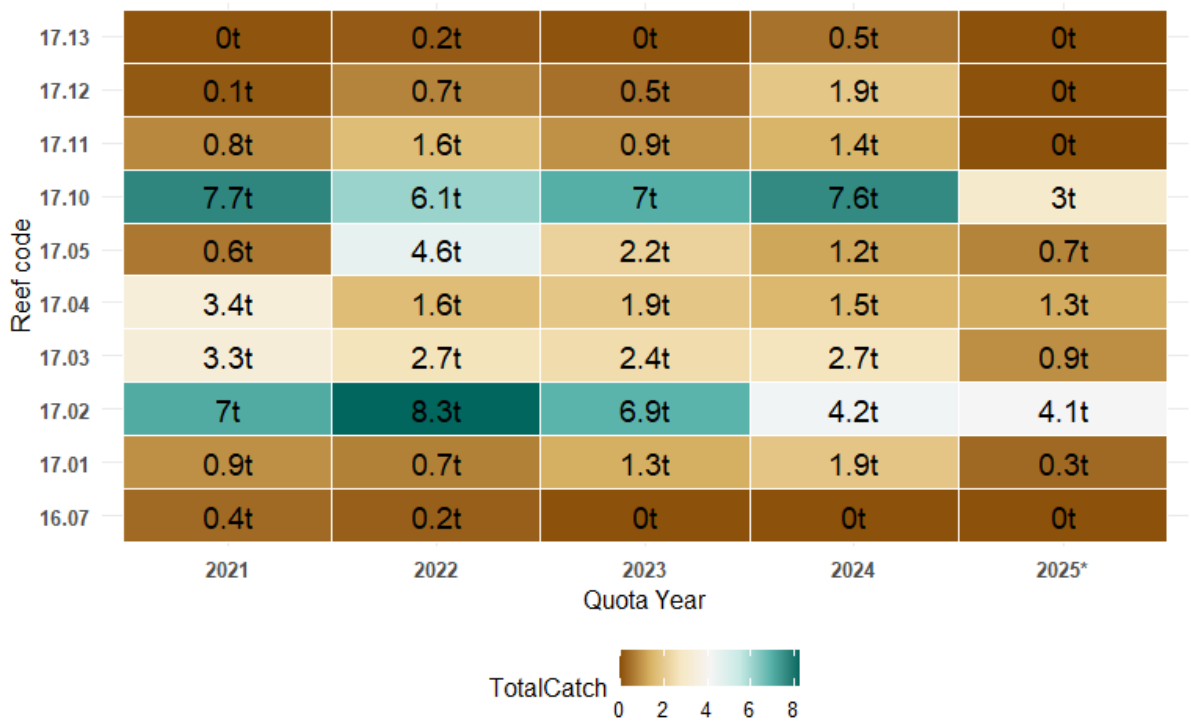

Figure 34: Total catch by reefcode for the Prom Westside SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested were relatively stable from 2016 to 2021 before increasing in the last three years (Figure 35a,b). Under an assumed constant weight to length relationship, this has also resulted in a small increase in average weight of abalone caught (Figure 35c).

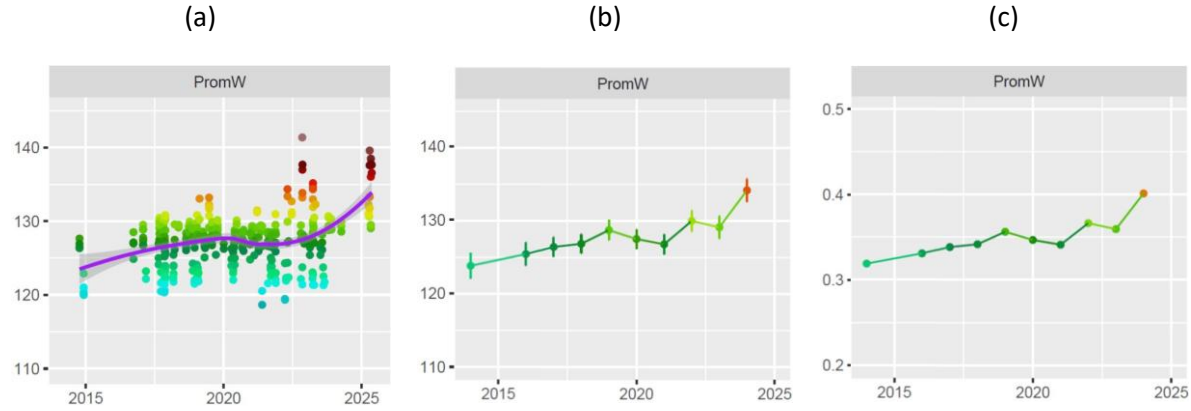

*Figure 35: Commercial length frequency data for the Prom Westside SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

Catches at the Prom Westside SMU have stabilised over the last four years, with concurrent increases in mean CPUE and average length of abalone harvested during that time. Reefcodes 17.02 and 17.10 continue to produce around half of the annual catch.

In 2024, the CPUE PI reached above the Harvest Strategy Threshold level for the first time since 2010. The Primary and Secondary Indicators were both Increasing resulting in an Increasing Final Category. The current OT is 21.0 t and the suggested OT ranges from 21.0 to 24.1 t.

Much like the Phillip Island SMU, the Prom Westside SMU appears to have benefitted from several years of stable catches, with recent increases in both CPUE and mean length of abalone harvested. While the Harvest Strategy indicates that a potential increase in OT is supported, maintaining the OT at current levels should ensure ongoing improvement in stock status to continue the recent increasing trends.

3.2.8. Flinders (Medium SMU)

The Flinders SMU contributed 21.8 t in 2024/25 representing 11.0% of the Zone catch (Table 9) and 9.7% of the TACC (Table 2). This was just above the OT (20.5 t). Standardised CPUE in 2024/25 remains below the long-term level, was the same as 2009/10 and was 19% higher than 2020/21. Standardised mean daily catch has declined across all time scales.

Table 9: Summary of Catch, Optimum Targets and Performance Indicators for the Flinders SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	Med	Short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
21.8	11.0	20.5	20.5	20.5	-17%	0%	19%	-25%	-13%	-2%

The Flinders SMU was historically the most important Central Zone SMU, with a peak catch of 188 t in 2005, and an average catch of 142 t from 2003 to 2009 (Figure 36). However, catches declined abruptly and have been maintained around 20-40 t since 2010.

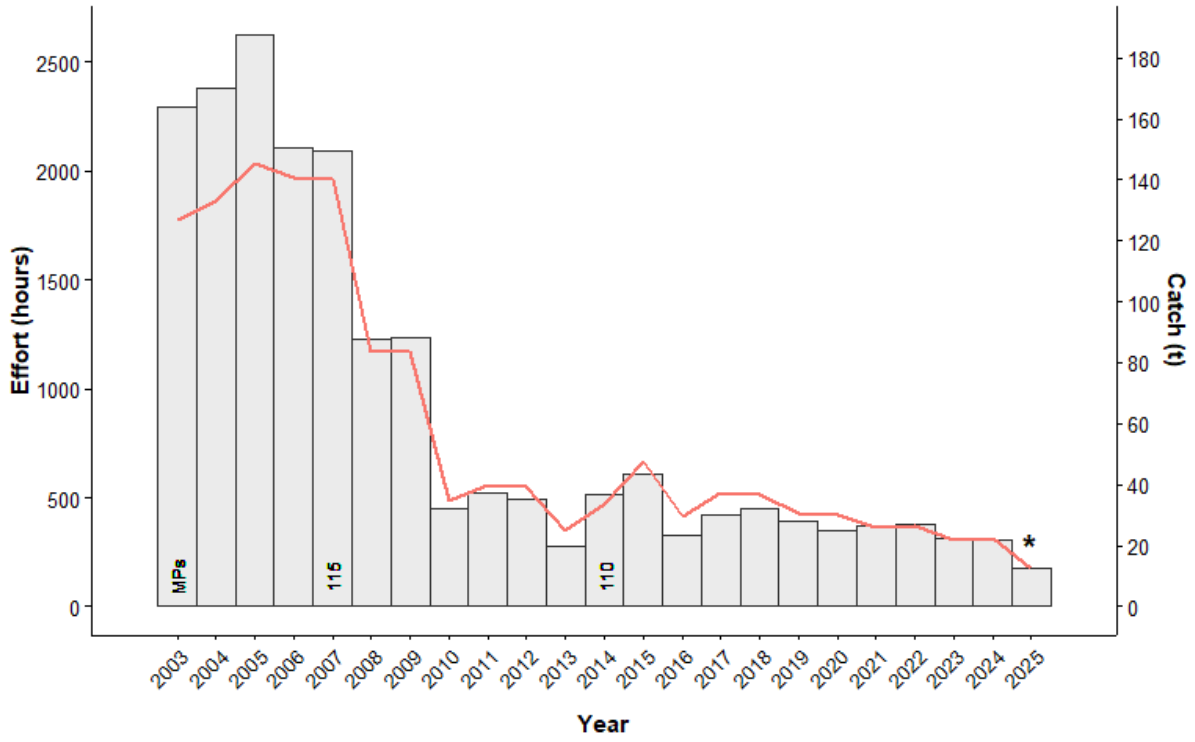

Figure 36: Total catch (bars) and total effort (line) for the Flinders SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE declined from 2003 to 2013 before stabilising until 2020 and increasing thereafter (Figure 37). CPUE has increased substantially in recent years, reaching above the Threshold level in 2023 and 2024.

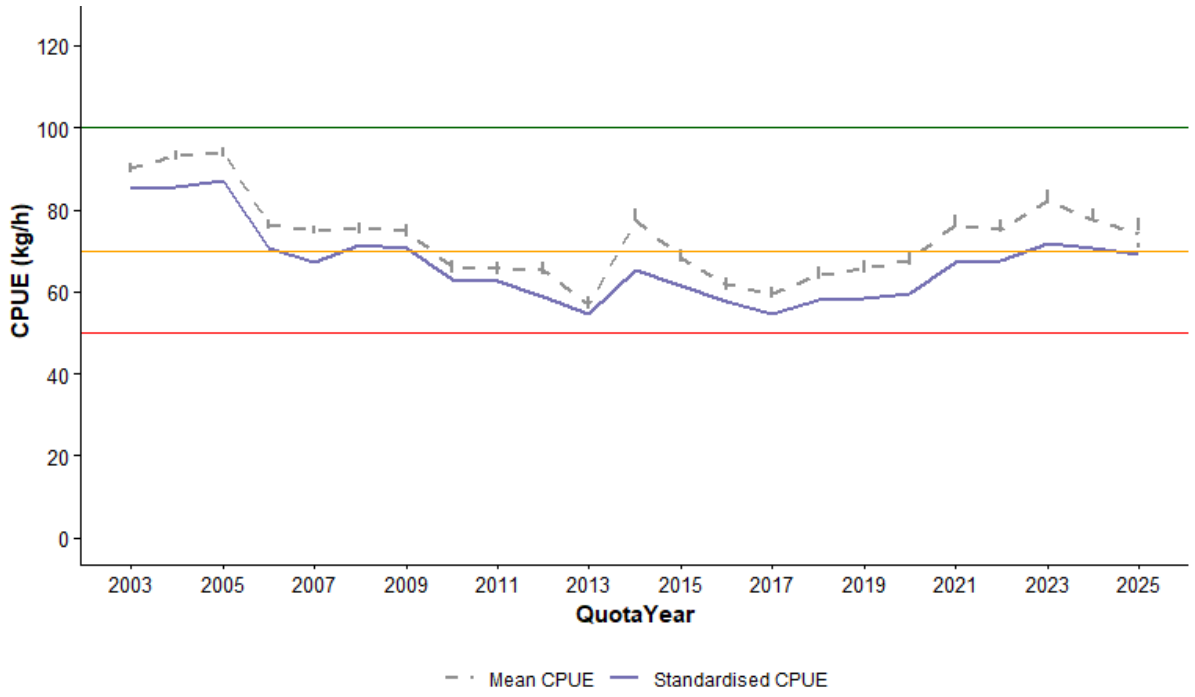

Figure 37: Flinders SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

While the proportion of catch harvested among quarters has generally varied without trend, in recent years there has been a slight increase in the proportion of catch harvested in Q4 (Figure 38). There are no clear trends in the variation among quarterly CPUEs over time (Figure 39).

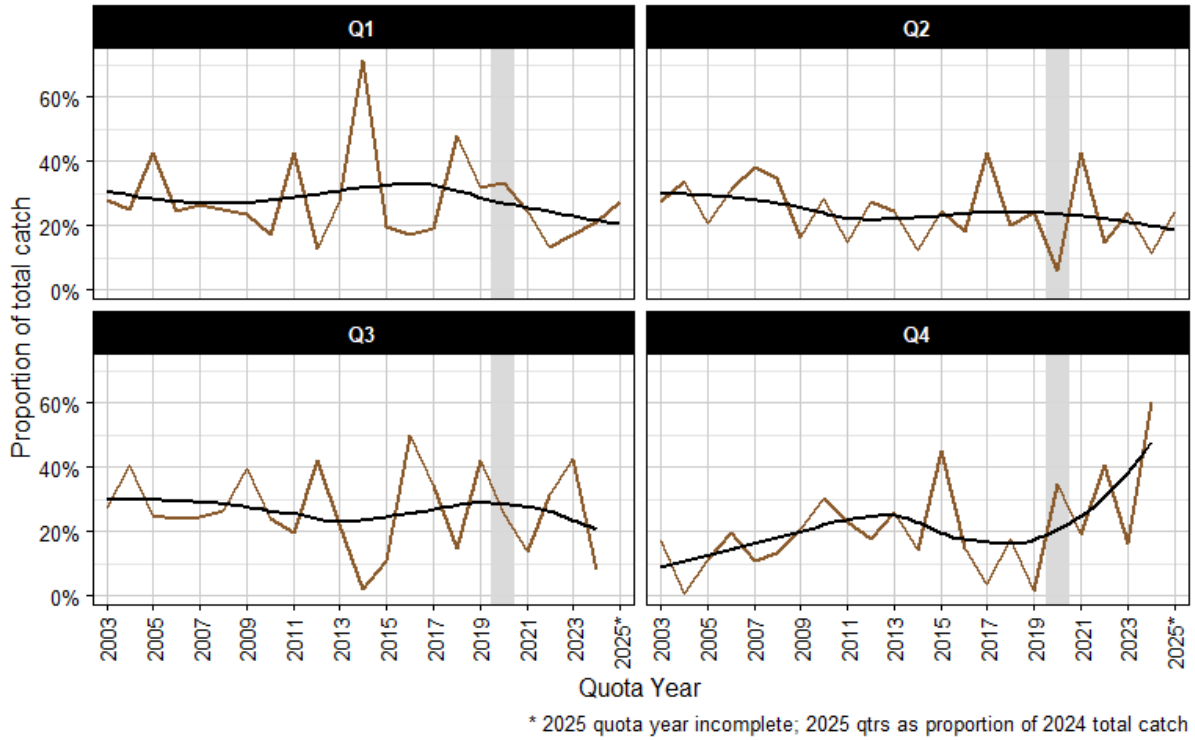

Figure 38: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Flinders SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

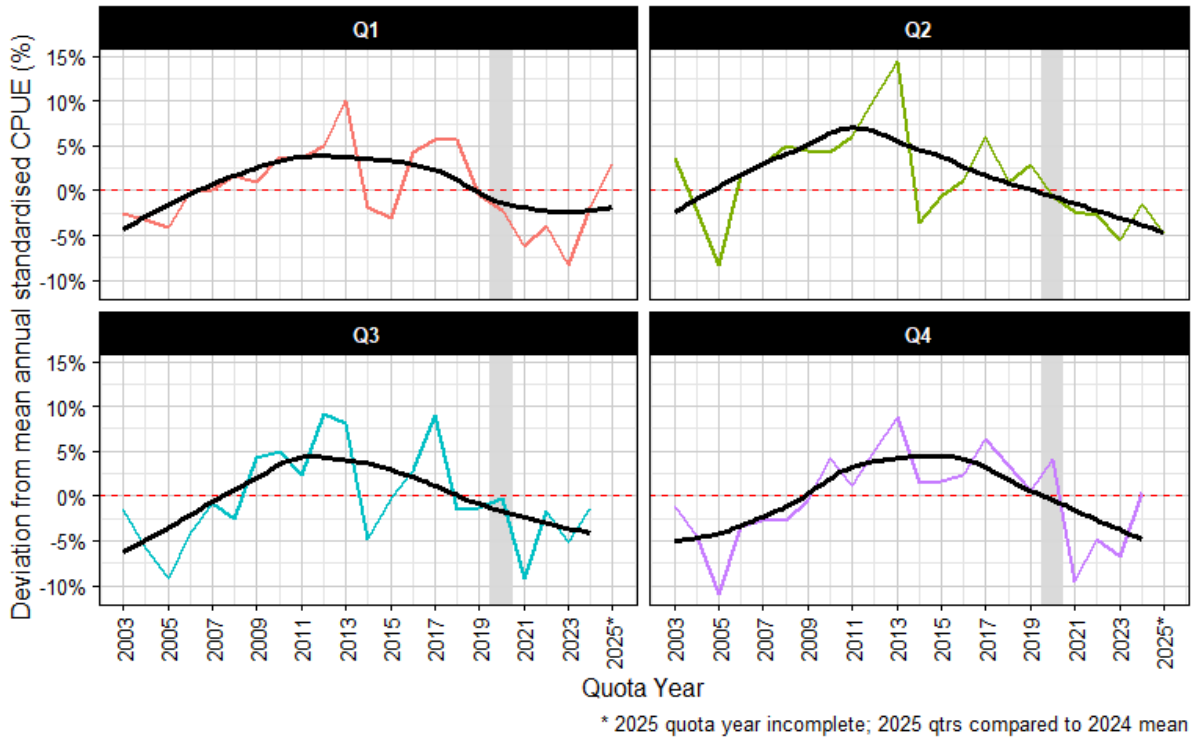

Figure 39: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Flinders SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch declined from 2003 to 2013 and has remained relatively stable thereafter (Figure 40).

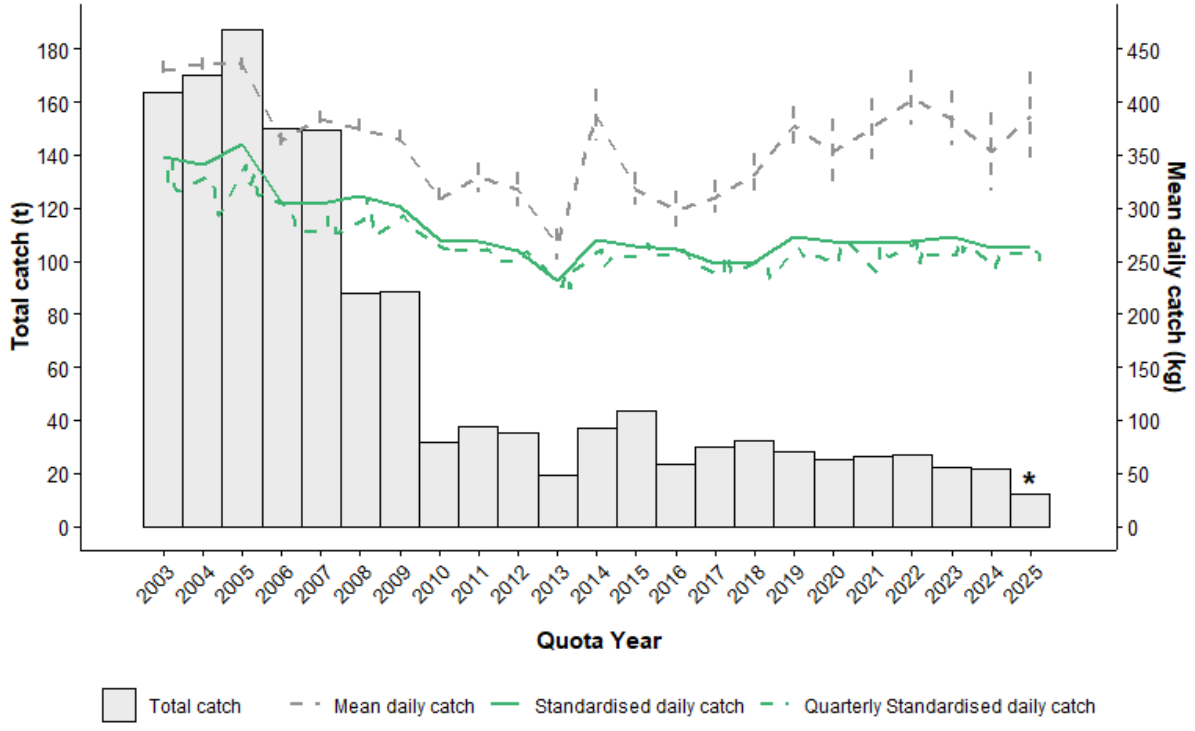

Figure 40: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Flinders SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Flinders SMU comprises eight reefcodes, with 12.06 being the clear highest producer in recent years, followed by 13.01 and 13.02 (Figure 41). The catches from 13.01 and 13.02 in the first half of 2025/26 are almost equal to the total catch harvested in each reefcode during 2024/25.

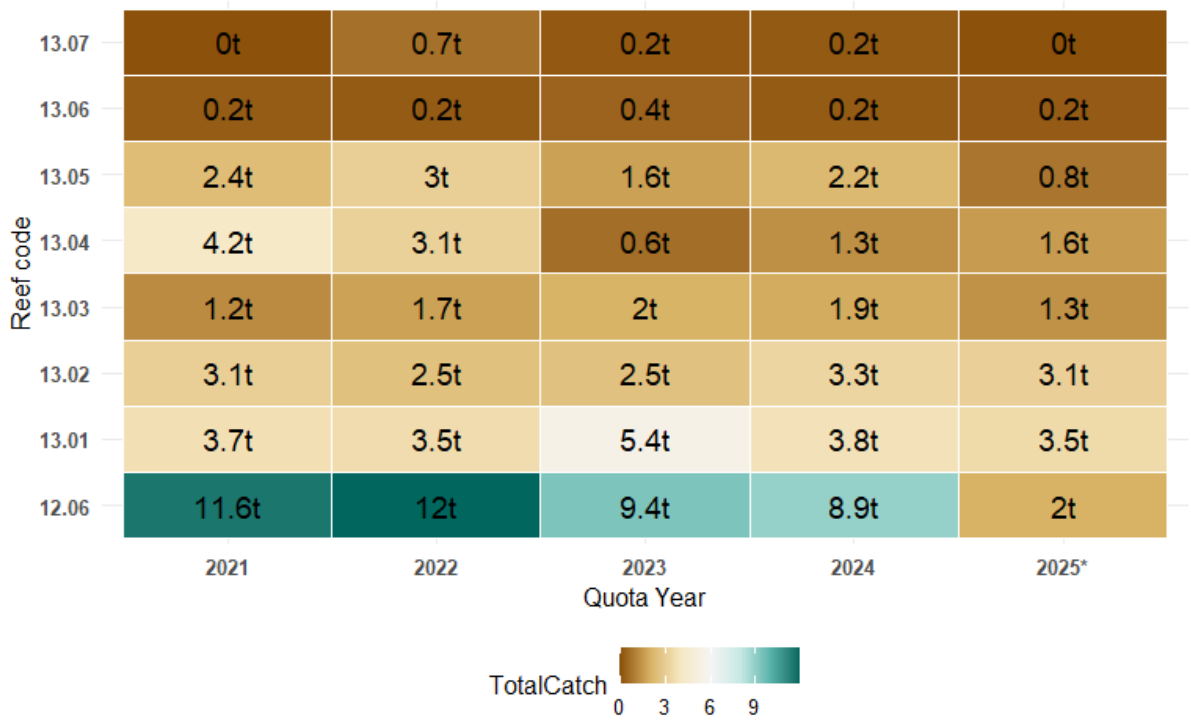

Figure 41: Total catch by reefcode for the Flinders SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested show a clear increase in nominal and standardised length over time (Figure 42a,b). The increase in standardised mean size has exceeded 10 mm in less than a decade. Under an assumed constant weight to length relationship, this has also resulted in an average increase of close to 25% in average weight of abalone caught (Figure 42c).

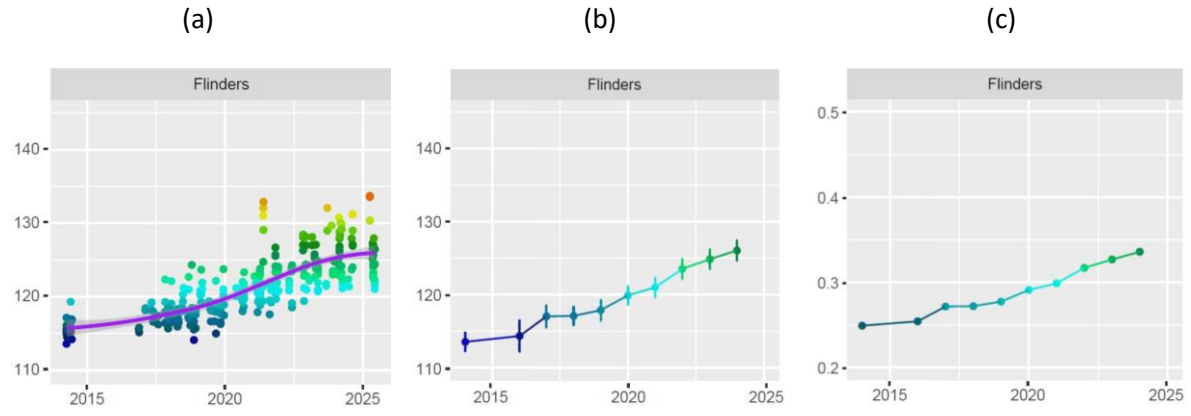

*Figure 42: Commercial length frequency data for the Flinders SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

Catches at the Flinders SMU have ranged between 20 and 30 t for over a decade, with recent catches closer to 20 t. While stocks seem unlikely to ever recover to levels they were at their historic peak, the remaining stocks that are primarily in shallow reefs appear likely improving in their status. As for other SMUs, the key information to underpin this assessment is an increase in CPUE over the last five years with concurrent increases in mean size of abalone in the commercial harvest.

The CPUE PI has been above the Threshold reference level of the Harvest Strategy for the last two years. The Primary and Secondary Indicators were both Stable resulting in a Stable Final Category. The current OT is 20.5 t and the suggested OT ranges from 19.5 to 21.5 t.

The Flinders SMU also appears to have benefitted from several years of stable low catches. Both CPUE and mean length of abalone harvested have increased for at least five consecutive years suggesting that the existing shallow reef stocks are improving. The Harvest Strategy suggests a Stable OT and this should ensure ongoing improvement in stock status to continue the recent increasing trends.

3.2.9. Shipwreck Coast (Small SMU)

The Shipwreck Coast SMU contributed 17.7 t in 2024/25 representing 9.0% of the Zone catch (Table 10) and 7.9% of the TACC (Table 2). This catch was 39% below the OT of 29.2 t. Standardised CPUE in 2024/25 remains below the long-term level but was 21% higher than 2020/21. Standardised mean daily catch in 2024/25 remains below the long-term level but was 1% higher than 2020/21.

Table 10: Summary of Catch, Optimum Targets and Performance Indicators for the Shipwreck Coast SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
17.7	9.0	29.2	29.2	29.2	-24%	NA	21%	-19%	NA	1%

The Shipwreck Coast SMU has had an average annual catch of 26.5 t since 2003, with a peak catch of 48.1 t harvested during 2006 (Figure 43). The fishery was closed during 2008 and 2009 due to the AVG virus. Catches gradually increased post-virus and following a low of 17.4 t in 2020, catches were the highest post-virus in 2021/22 (38.4 t). Divers suggest that the low catch in 2024/25 was primarily caused by poor weather conditions.

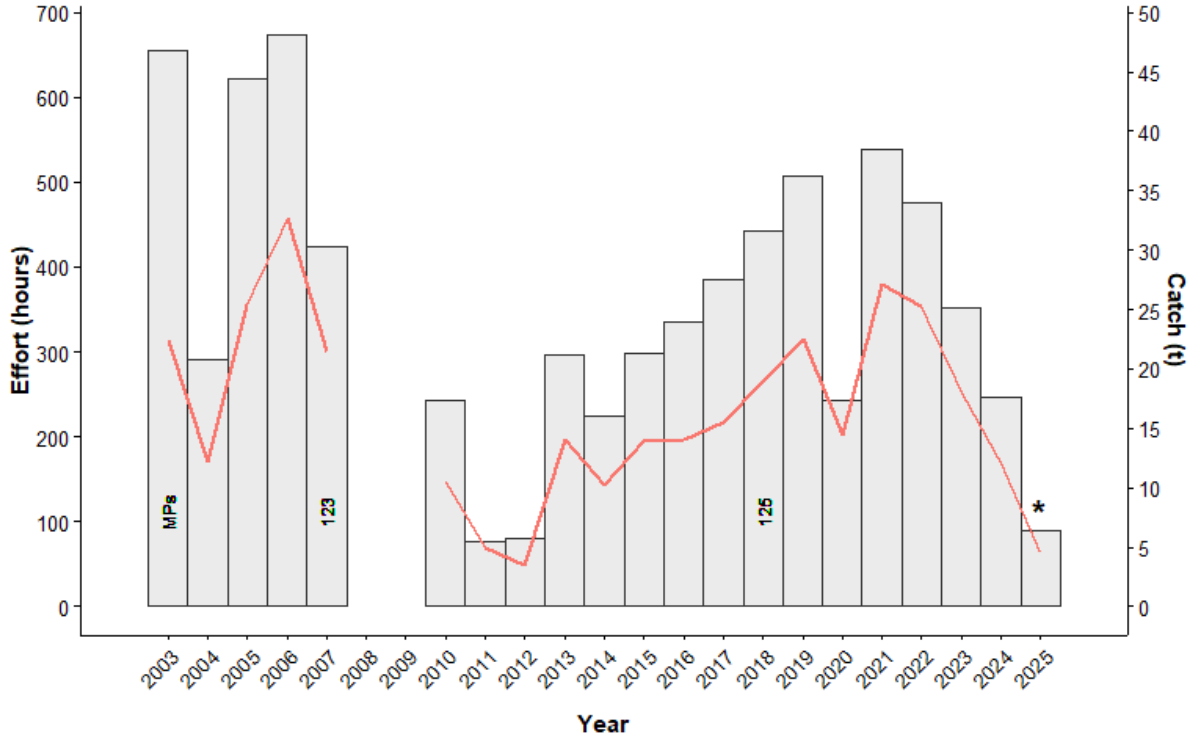

Figure 43: Total catch (bars) and total effort (line) for the Shipwreck Coast SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE was highest in 2003, declined pre and post virus until 2020 (Figure 44) and has increased consecutively thereafter.

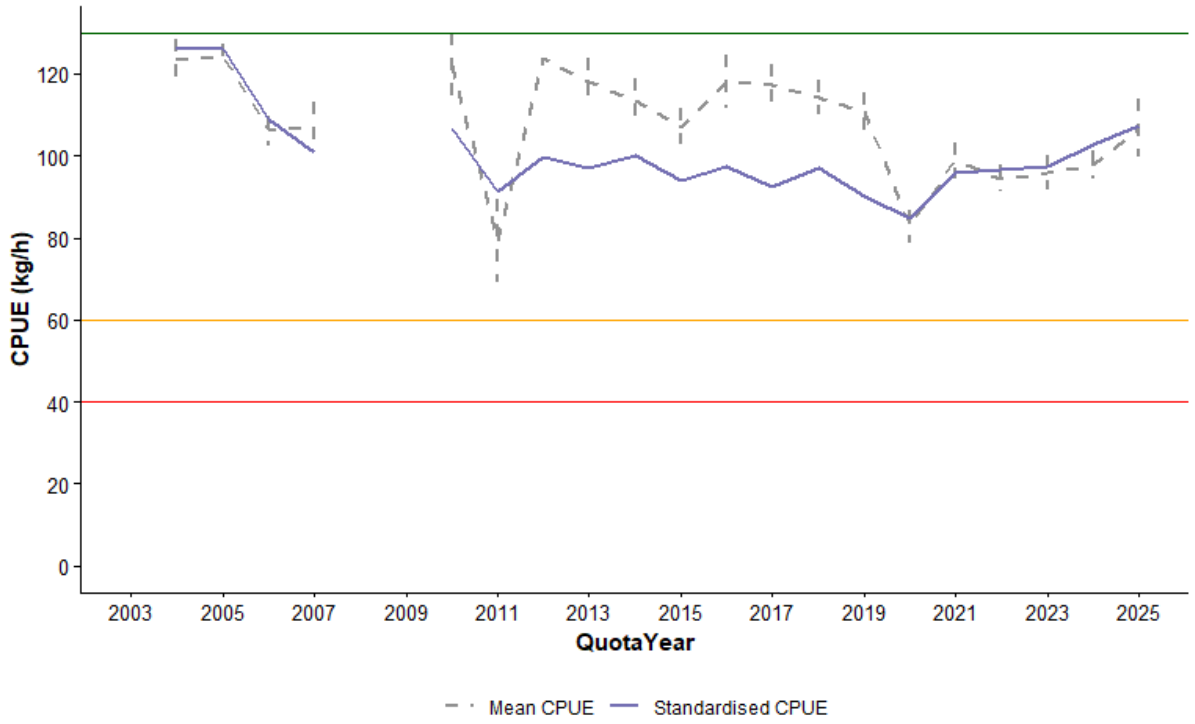

Figure 44: Shipwreck Coast SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

Since 2003, the majority of catch from the Shipwreck Coast SMU has been harvested during Q3 (Figure 45). Since 2017, the proportion of Q4 catch has reduced substantially, which may be associated with the shift in timing of the quota year. The variation in CPUE by quarter shows no clear trends (Figure 46).

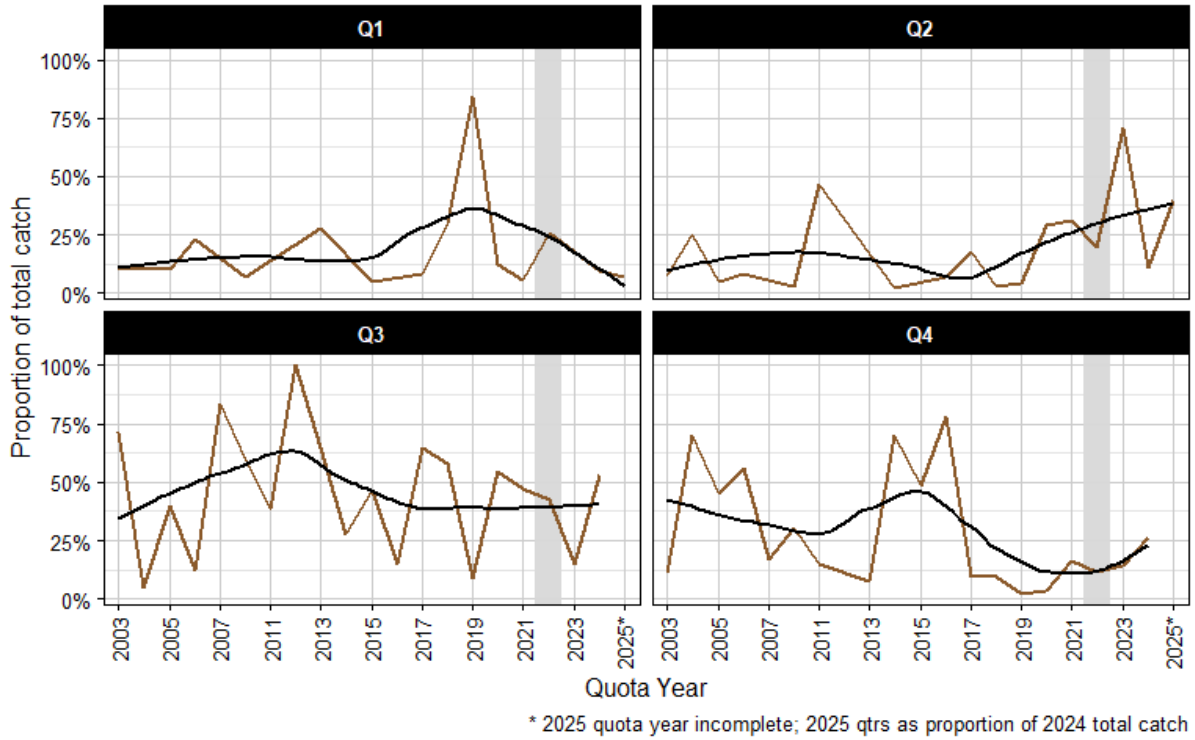

Figure 45: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Shipwreck Coast SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

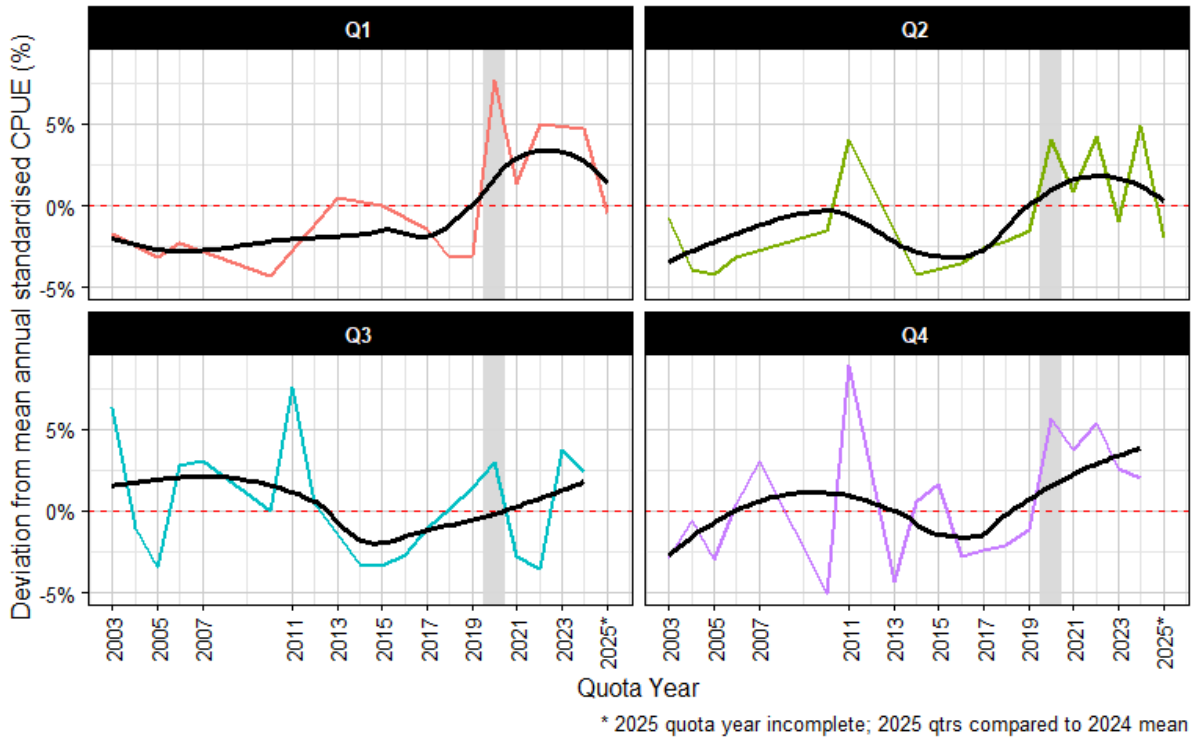

Figure 46: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Shipwreck Coast SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch declined from 2003 to 2007 and has remained stable thereafter (Figure 47).

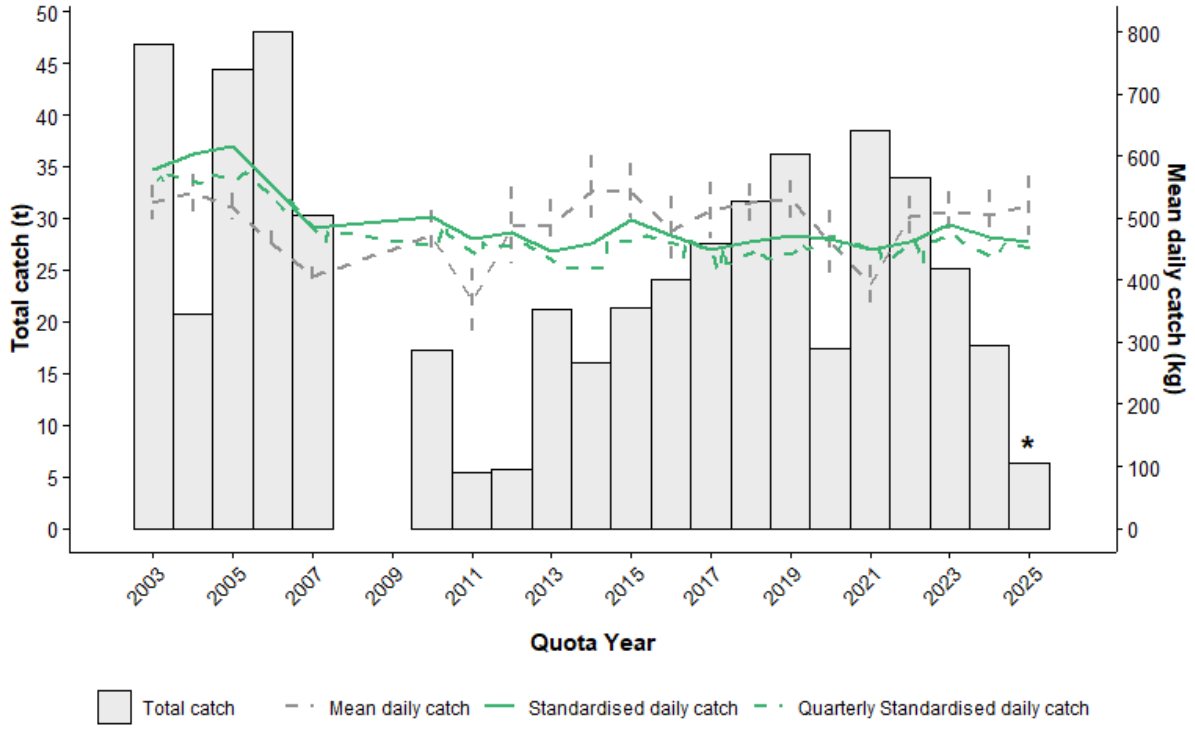

Figure 47: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Shipwreck Coast SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Shipwreck Coast SMU comprises five reefcodes, each of which has contributed meaningfully to the catch in recent years (Figure 48). Whilst catches were much lower in 2024/25, 4.02 remained the highest catch contributor.

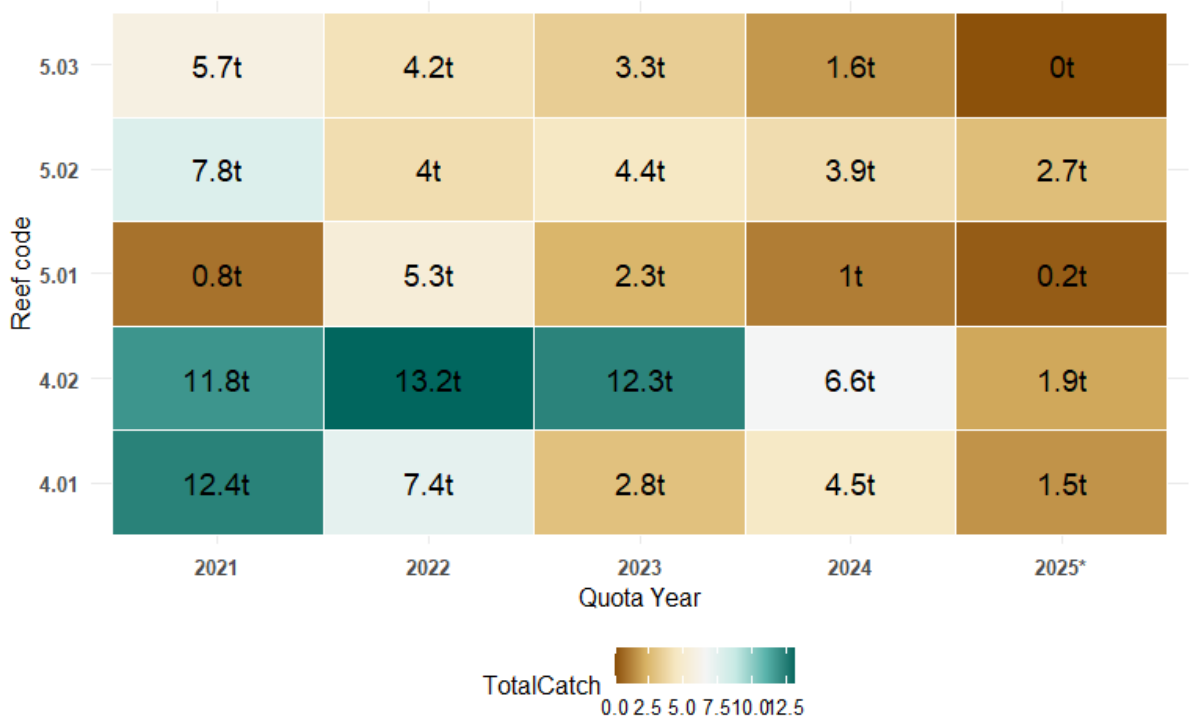

Figure 48: Total catch by reefcode for the Shipwreck Coast SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested shows a clear increase in nominal and standardised length over time (Figure 49a,b). While the increase in size is not as large and consistent as other SMUs, it is noted that the legal minimum length (LML) of 130 mm is the largest in the Central Zone, and the average size of abalone is currently around 6 mm above the LML.

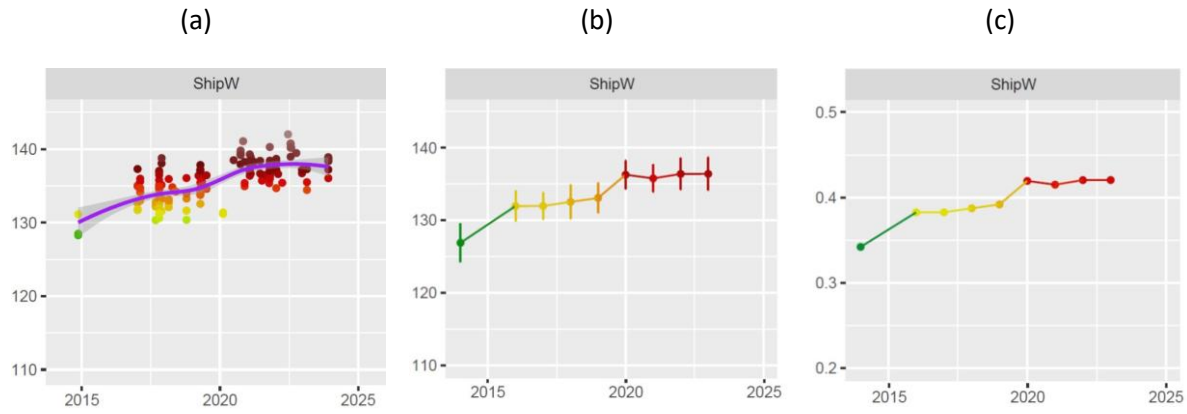

*Figure 49: Commercial length frequency data for the Shipwreck Coast SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

Catches at the Shipwreck Coast SMU have been well below the OT in recent years. Divers have suggested that unfavourable weather conditions were the primary reason catches were low in 2024/25. The CPUE has increased over the last four years, and this may reflect an increase in biomass related to the lower catches. While the mean size of abalone harvested has only marginally increased, it is noted that mean size is well above the LML and they are the largest abalone in the Central Zone.

The CPUE remains well above the Threshold reference level of the Harvest Strategy. The Primary and Secondary Indicators were both Stable resulting in a Stable Final Category. The current OT is 29.2 t and the suggested OT ranges from 27.7 to 30.7 t.

Recent catches at the Shipwreck Coast SMU have been below the OT with divers suggesting that the low 2024/25 catch was due to unfavourable weather conditions. The total 2024/25 catch of 17.7 t was 11.5 t below the OT (29.2 t), which will be positive for the stock. The pattern of low catches has continued in the first half of the 2025/26 quota year. Maintaining the Stable outcome from the Harvest Strategy would be a positive outcome for maintaining or improving stock status.

3.2.10. Kilcunda (Small SMU)

The Kilcunda SMU catch of 10.2 t in 2024/25 represented 5.2% of the total catch for the Central Zone (Table 11) and 4.5% of the TACC (Table 2). The catch was 10% above the OT (9.3 t). Standardised CPUE in 2024/25 remains below the long and medium-term levels but has increased by 20% in the last 4 years. Standardised mean daily catch has declined across all time scales.

Table 11: Summary of Catch, Optimum Targets and Performance Indicators for the Kilcunda SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
10.2	5.2	10.3	9.3	9.3	-20%	-5%	20%	-27%	-16%	-7%

Catches from the Kilcunda SMU have been stable since 2004, with an average of 12.6 t and a range of 4 to 19 t (Figure 50). In the last six years, catches have been even more consistent, ranging from 10 to 13 t (average 11.4 t).

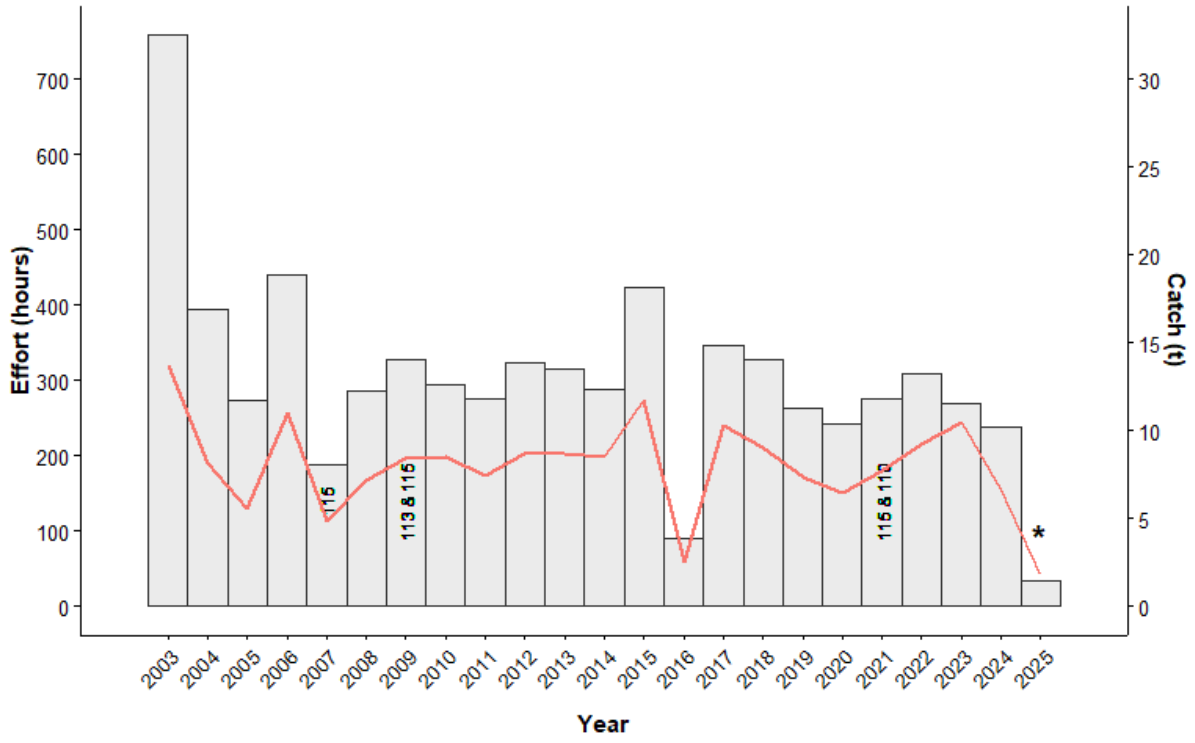

Figure 50: Total catch (bars) and total effort (line) for the Kilcunda SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE slowly declined from 2003 to around 2019 and has slowly increased thereafter (Figure 51). CPUE reached above the Threshold level of the Harvest Strategy in 2024 for the first time since 2010.

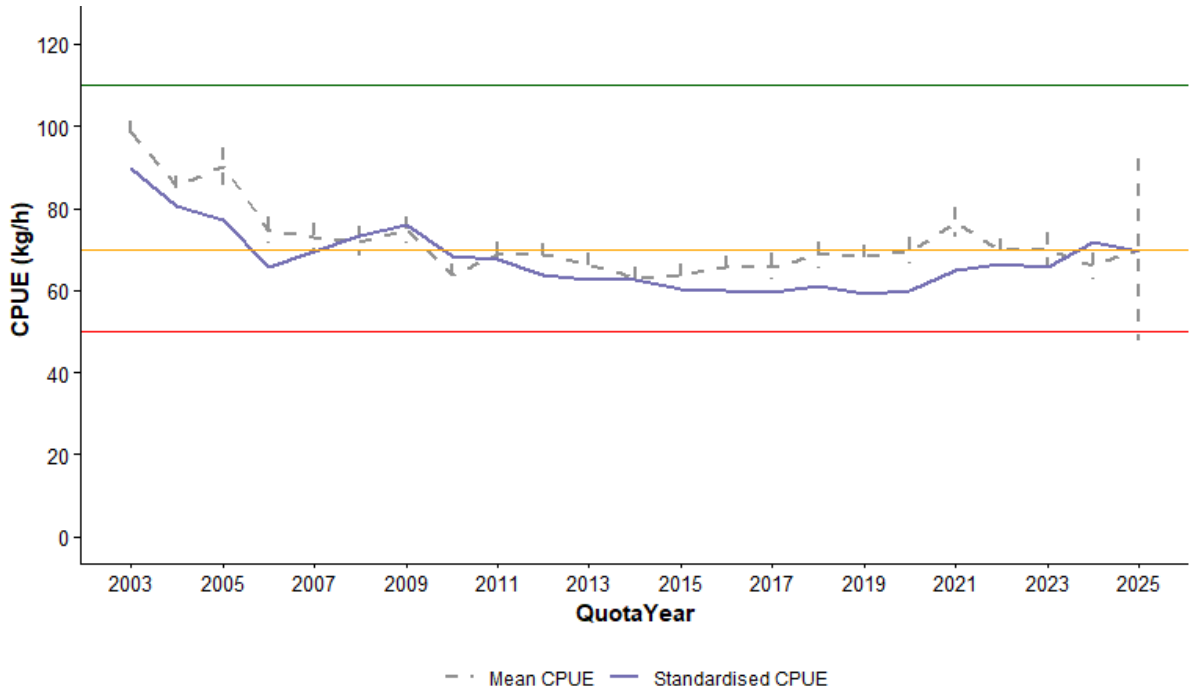

Figure 51: Kilcunda SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

In recent years, the majority of catch has been harvested in the last quarter (Figure 52). The difference between seasonal and annual CPUEs have generally been small (<5% difference, Figure 53).

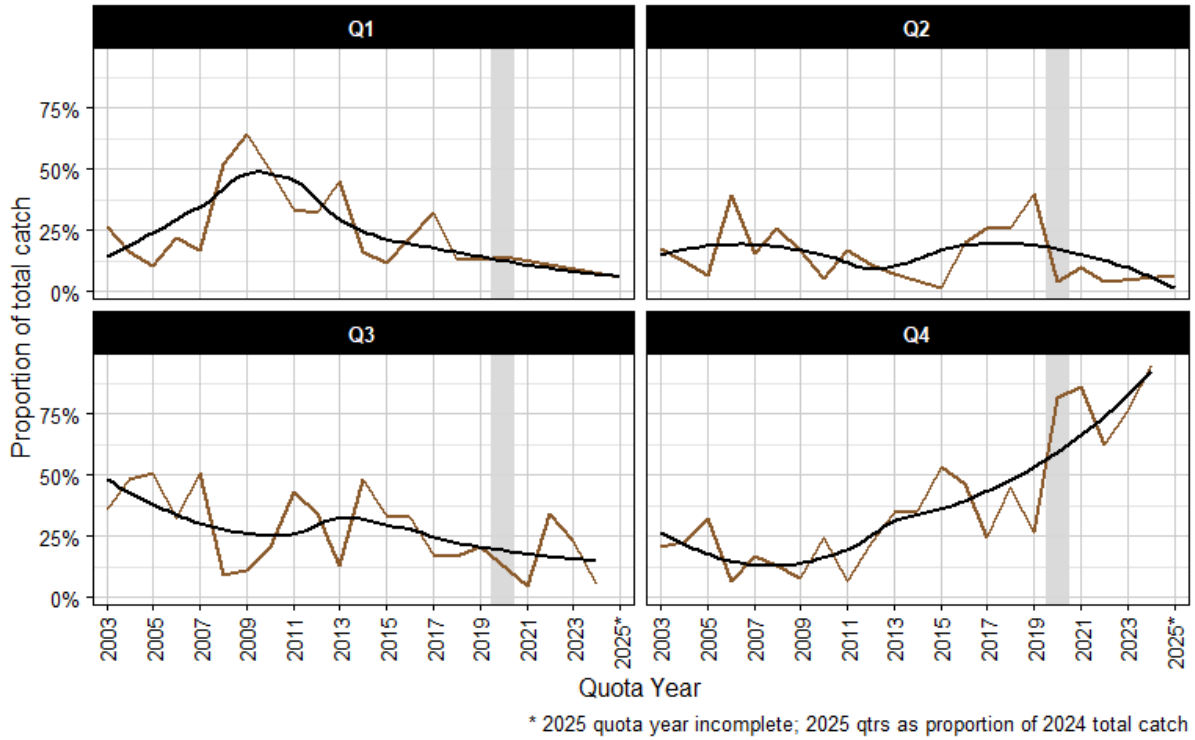

Figure 52: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Kilcunda SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

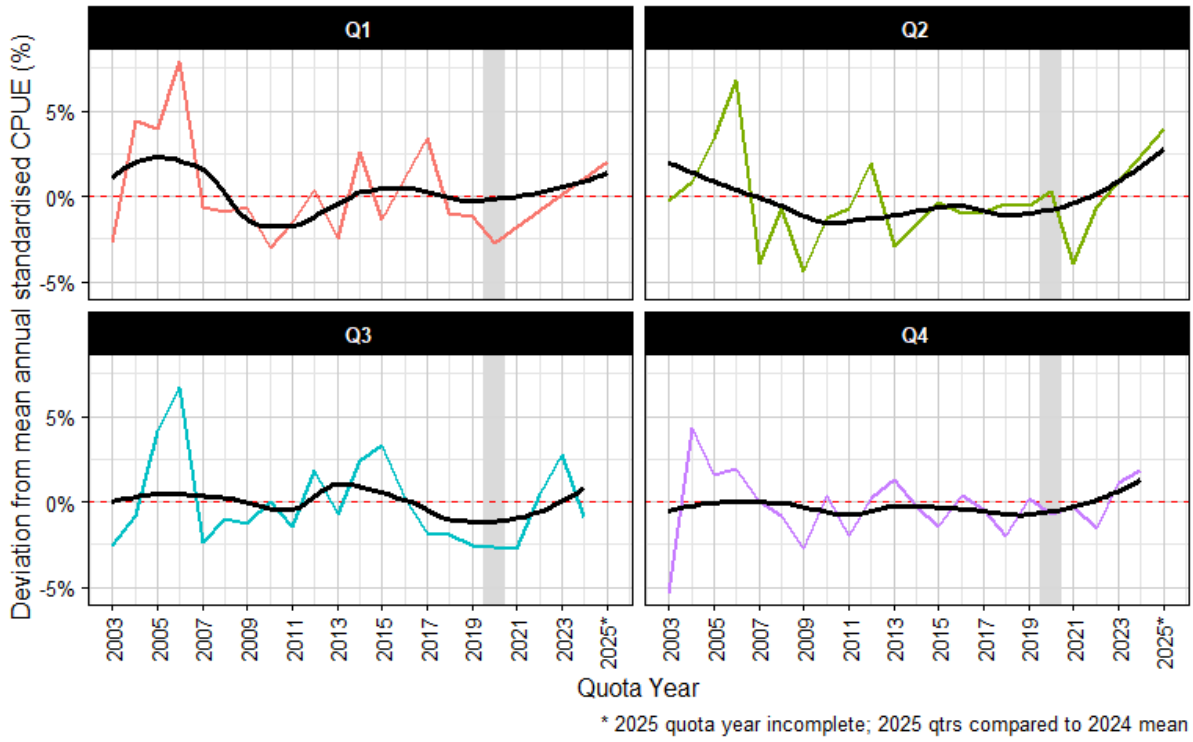

Figure 53: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Kilcunda SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch generally declined from 2003 to 2013 and has been relatively stable thereafter (Figure 54) but declined by 21% from 308 to 242 kg per day between 2022/23 and 2024/25.

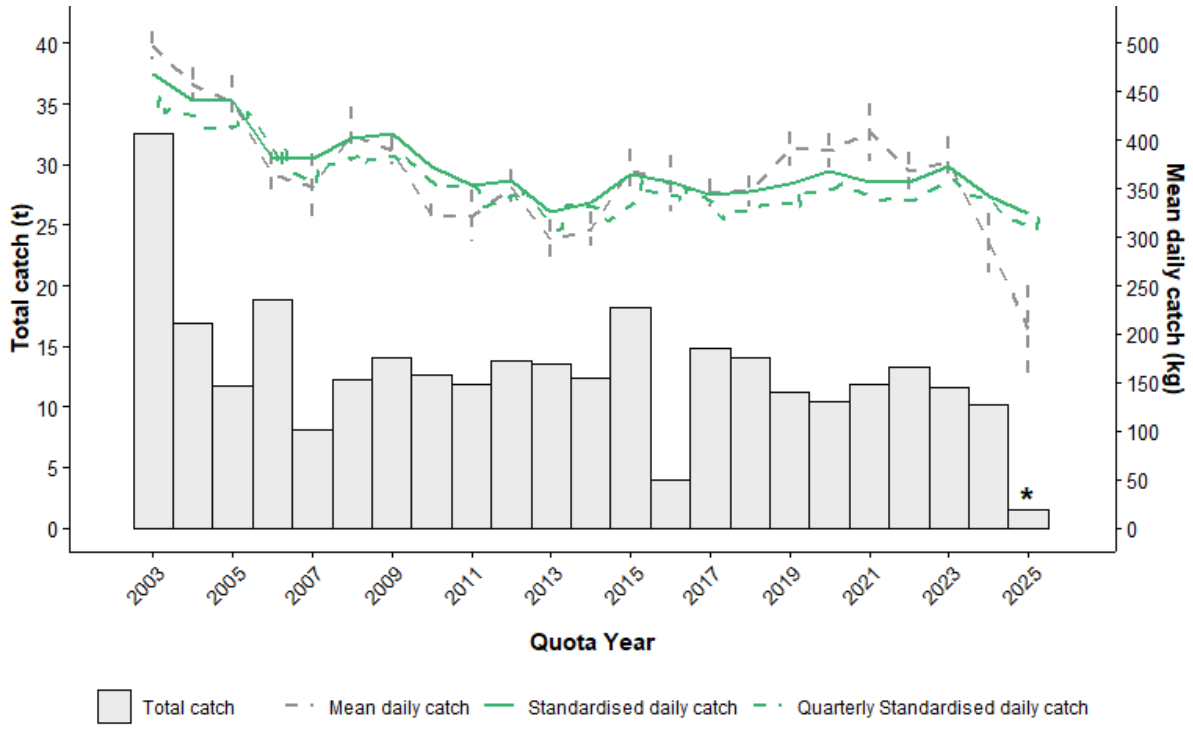

Figure 54: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Kilcunda SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Kilcunda SMU comprises five reefcodes, however almost all of the catch is harvested from reefcodes 15.01 and 15.05 (Figure 55). Only 1.4 t has been harvested in the first six months of 2025/26, but this is consistent with previous quarterly trends in temporal distribution of the catch.

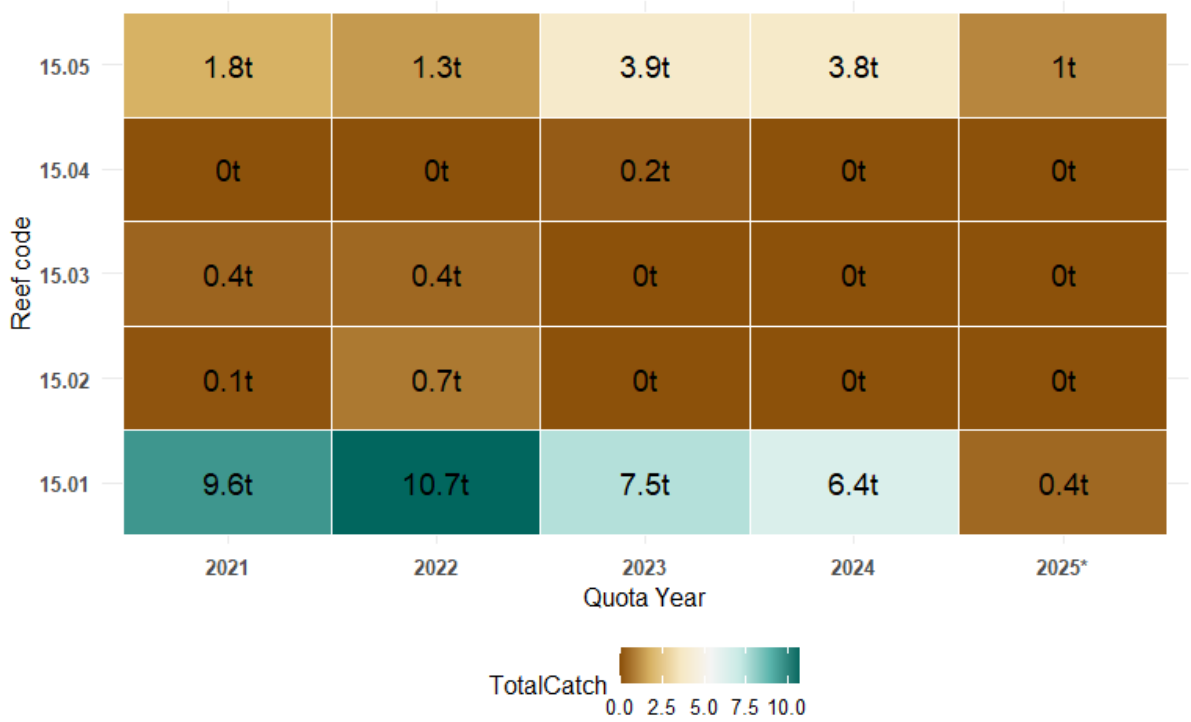

Figure 55: Total catch by reefcode for the Kilcunda SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested show a small increase in nominal and standardised length from 2016 to 2024 (Figure 56a,b). Mean size increased substantially in 2025 with several average catches exceeding 130 mm (Figure 56a). More data are required to provide greater certainty over this result, however the increasing trends are consistent with other SMUs.

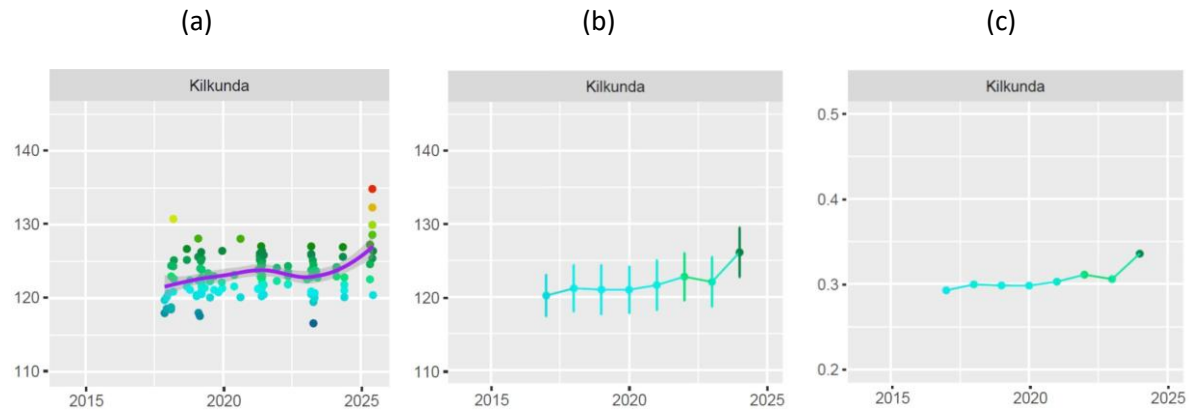

*Figure 56: Commercial length frequency data for the Kilcunda SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

Catches at the Kilcunda SMU have been generally stable for a prolonged period, with particularly stable catches ranging from 10 to 13 t in the last six years. During this period, CPUE has slowly increased from 58 to 69 kg/h. While the mean size of abalone only increased marginally from 2016 to 2024, recent data suggest abalone are currently being caught at a larger size, however further data are required to confirm these trends.

The CPUE PI reached above the Threshold reference level of the Harvest Strategy in 2024 for the first time since 2010. The Primary Indicator was Stable and the Secondary Indicator was Increasing resulting in a Stable Final Category. The current OT is 9.3 t and the suggested OT ranges from 8.8 to 9.8 t.

The Kilcunda SMU is showing positive signs with increasing CPUE over the last six years and some recent increases in mean size of abalone harvested. The Harvest Strategy suggests keeping the OT Stable which should support continued improvement in stock status and help sustain the recent positive trend.

3.2.11. Cape Liptrap (Small SMU)

The Cape Liptrap SMU catch of 5.1 t in 2024/25 represented 2.6% of the total catch for the Zone (Table 12) and 2.3% of the TACC (Table 2). The catch was around half the OT (9.4 t). Standardised CPUE in 2024/25 remains below the long and medium-term levels but has increased by 21% in the last 4 years. Standardised mean daily catch has declined across all time scales.

Table 12: Summary of Catch, Optimum Targets and Performance Indicators for the Cape Liptrap SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
5.1	2.6	9.4	9.4	12.1	-22%	-13%	21%	-22%	-15%	-9%

Catches from the Cape Liptrap SMU have been highly variable over time (Figure 57). In 2024/25, the catch (5.4 t) was only just over half of the OT (9.4 t). There has been no fishing in the Cape Liptrap SMU in the first half of 2025/26.

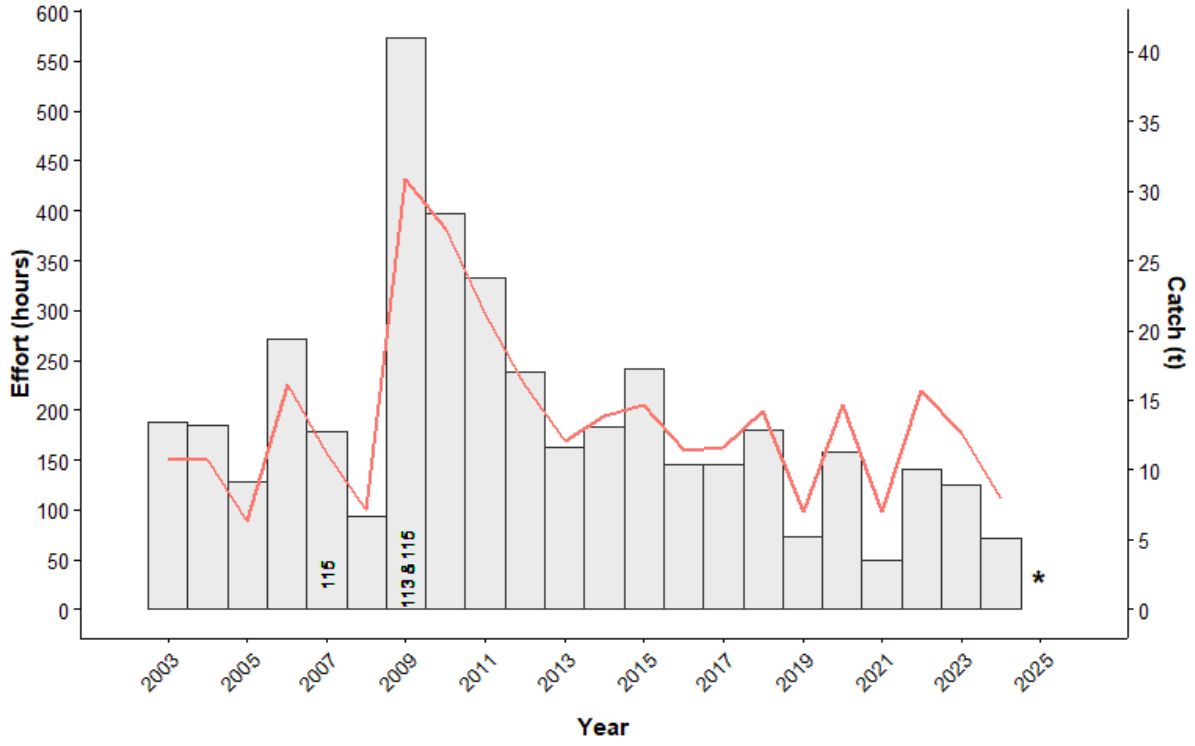

Figure 57: Total catch (bars) and total effort (line) for the Cape Liptrap SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE generally declined from 2003 to 2016, was stable until 2021 and has increased thereafter (Figure 58). The CPUE has always remained above the Threshold level of the Harvest Strategy.

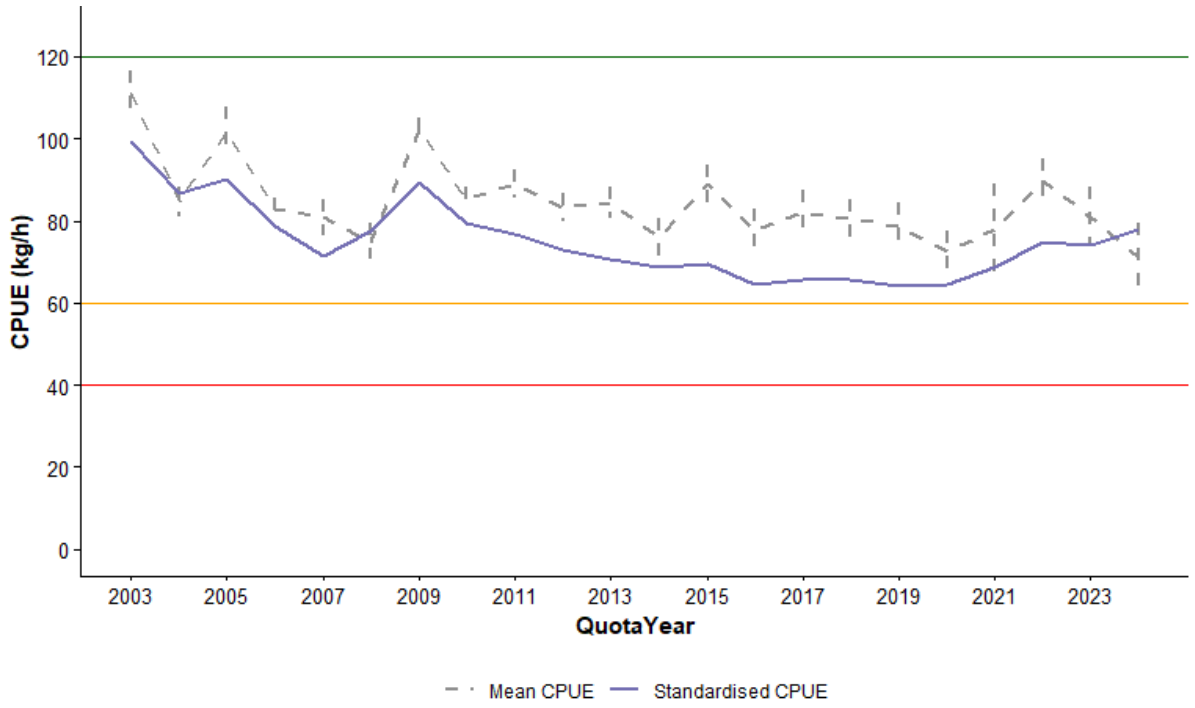

Figure 58: Cape Liptrap SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

Most of the annual catch is harvested in the second half of the year, with an increasing proportion in Q4 in recent years (Figure 59). Despite these changes, the difference between seasonal and annual CPUEs have generally been small and without trend (Figure 60).

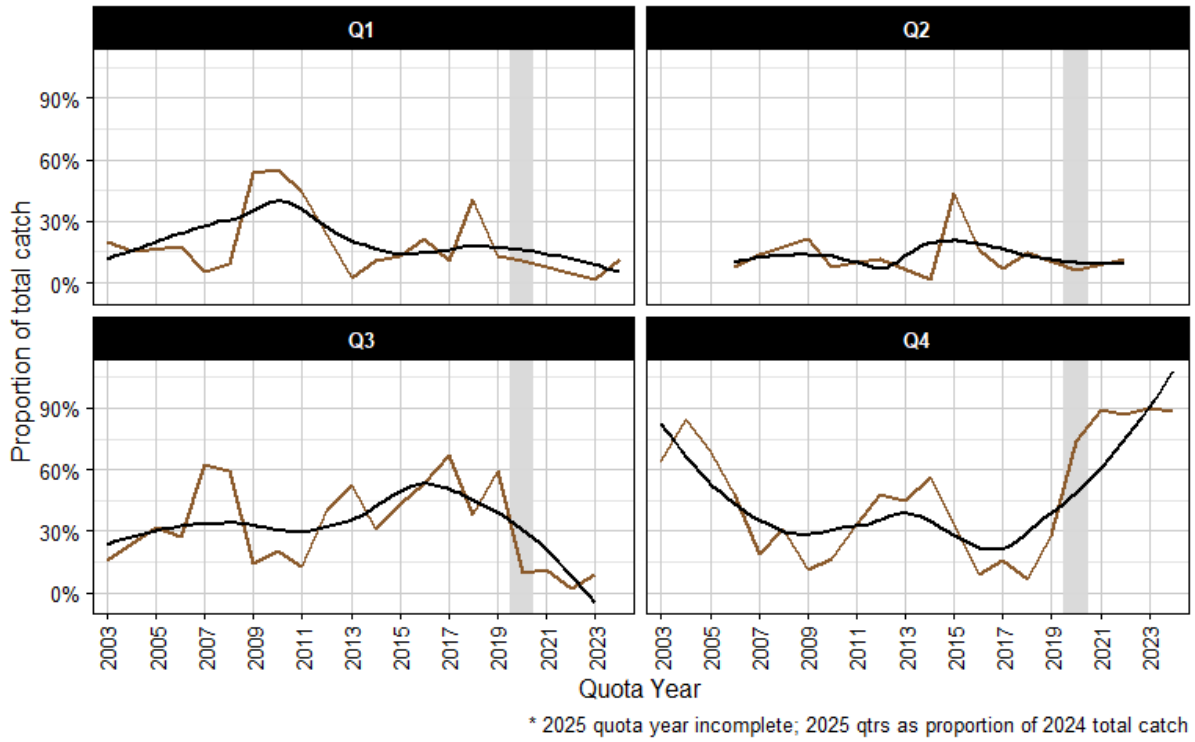

Figure 59: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Cape Liptrap SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

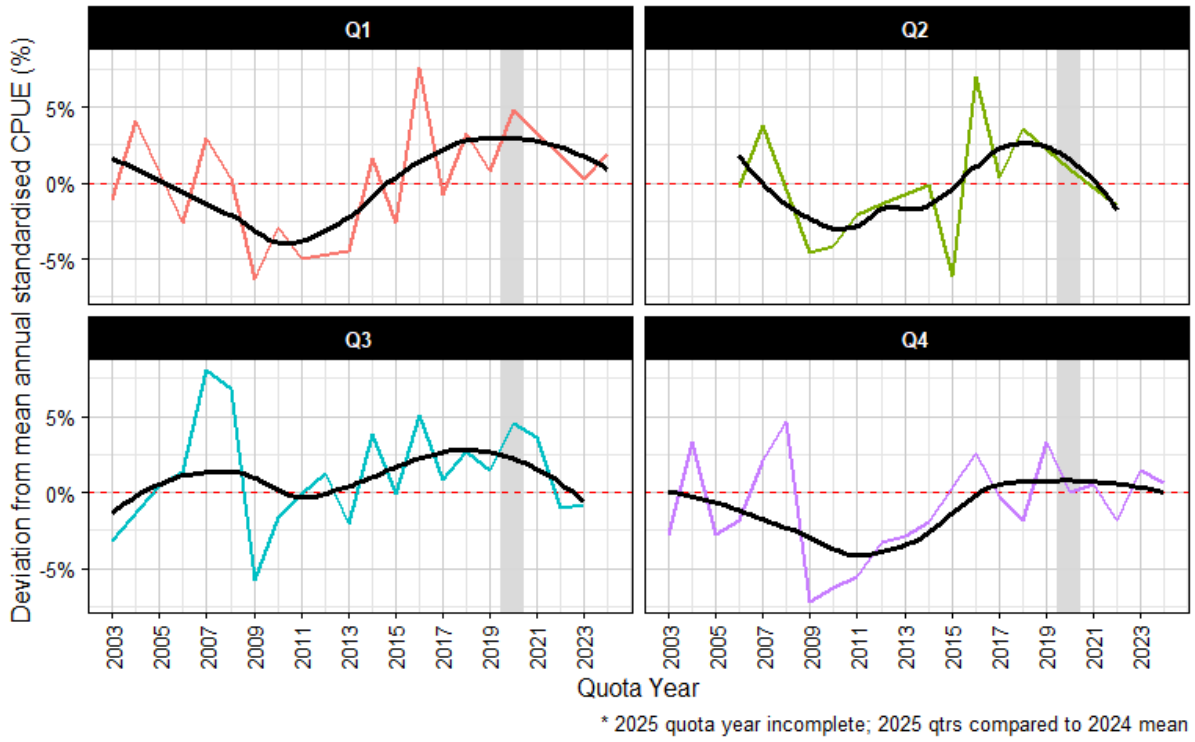

Figure 60: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Cape Liptrap SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

While standardised mean daily catch has slowly declined since 2003 (Figure 61), the current level of 300 kg/day is equal to the zone-wide average.

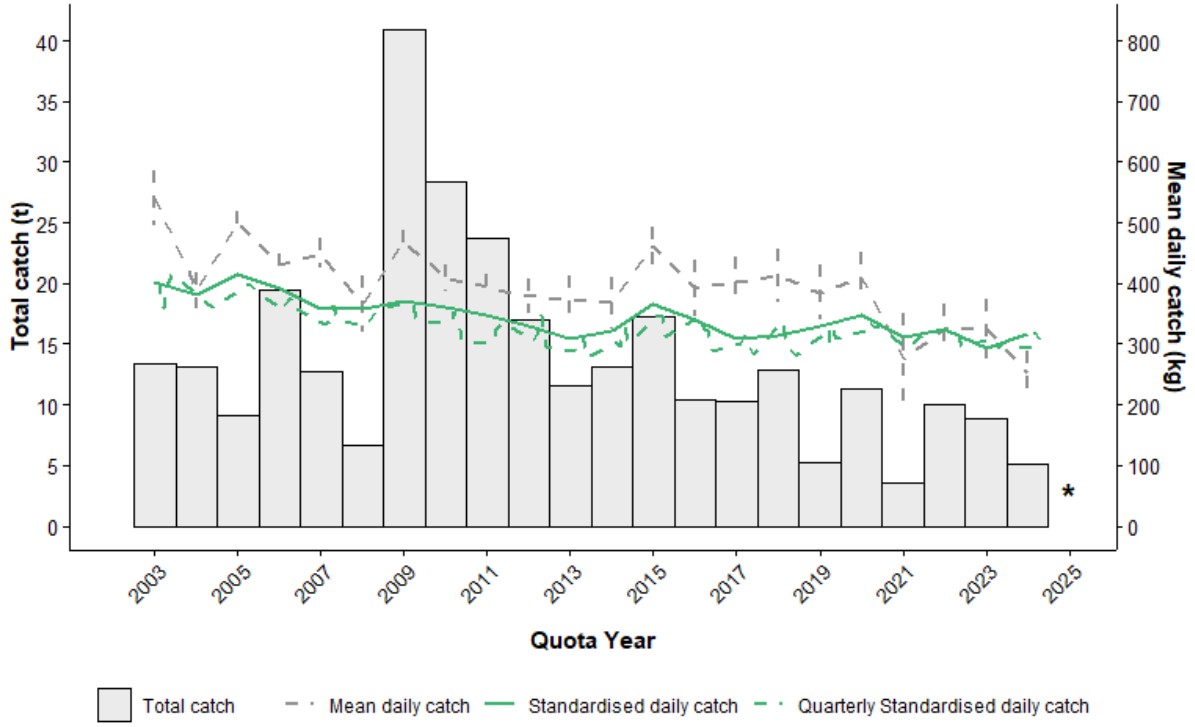

Figure 61: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Cape Liptrap SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Cape Liptrap SMU comprises six reefcodes (Figure 62). Catches among reefcodes tend to be variable, with 16.03 the most consistent producer.

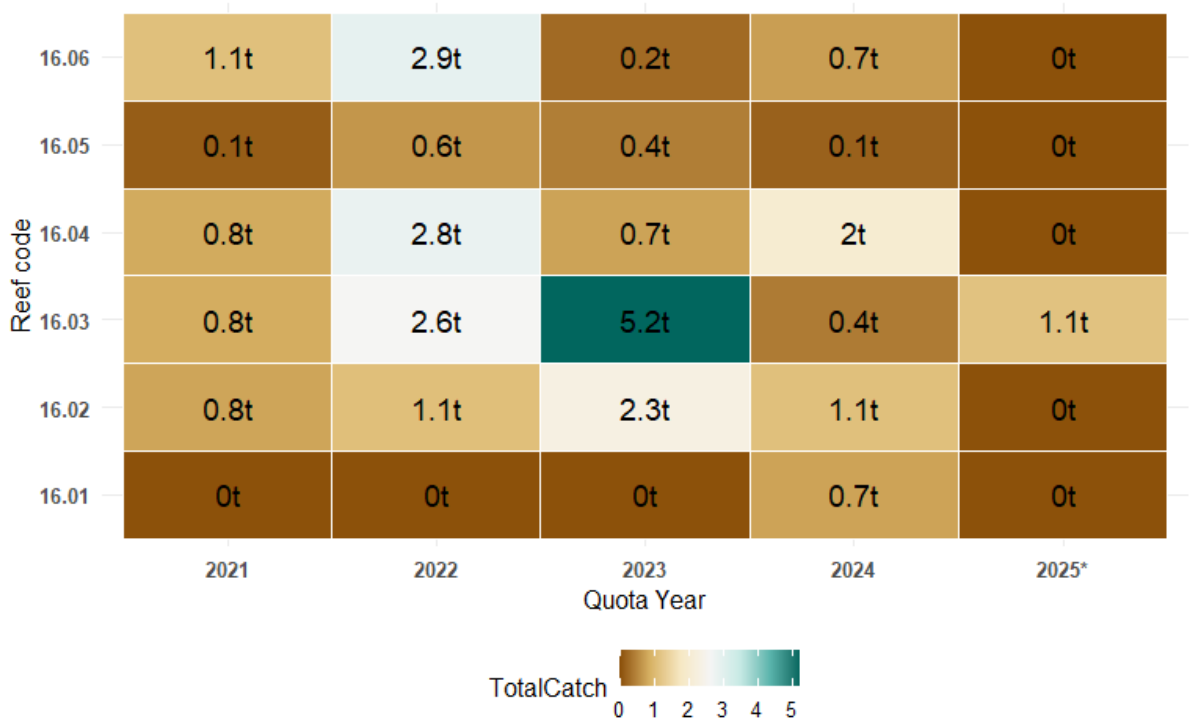

Figure 62: Total catch by reefcode for the Cape Liptrap SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested show a strong increase in nominal and standardised length over time (Figure 63a,b). The increase in standardised mean size has exceeded 10 mm in the last eight years. Under an assumed constant weight to length relationship, this has also resulted in an average increase of close to 25% in average weight of abalone caught (Figure 63c).

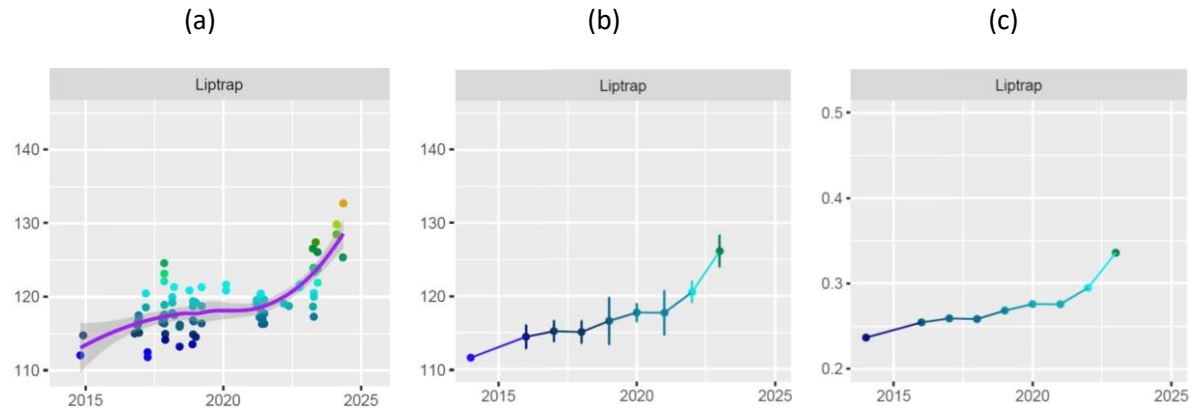

*Figure 63: Commercial length frequency data for the Cape Liptrap SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

The overview of trends in data for the Cape Liptrap SMU is positive. While catches have been highly variable between years and between reefcodes, CPUE at the SMU scale has increased substantially since 2020. Since 2016, there has been a consistent annual increase in the mean length of abalone harvested, particularly in the last three years.

The CPUE has remained above the Threshold level of the Harvest Strategy since 2003. The Primary Indicator was Stable and the Secondary Indicator was Increasing resulting in a Stable Final Category. The current OT is 12.1 t and the suggested OT ranges from 11.5 to 12.7 t.

Catches at the Cape Liptrap SMU were well below the OT in 2024/25. While the reasons for this are unclear, it is noted that catches from this SMU have been highly variable in the past. All evidence indicates that stocks are improving, and the lower catch should support further recovery. Maintaining a Stable OT as suggested by the Harvest Strategy appears to be an appropriate outcome.

3.2.12. Prom Eastside (Small SMU)

The Prom Eastside SMU catch of 5.1 t in 2024/25 represented 2.6% of the total catch for the Zone (Table 13) and 2.6% of the TACC (Table 2). The catch was just above the OT (4.8 t). Standardised CPUE in 2024/25 remains below the long-term level but was 6% higher than the medium-term and 33% higher than 2020/21 levels. Standardised mean daily catch has declined across all time scales.

Table 13: Summary of Catch, Optimum Targets and Performance Indicators for the Prom Eastside SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
5.1	2.6	4.8	4.8	4.8	-6%	6%	33%	-16%	-7%	-2%

Catches from the Prom Eastside SMU were stable from 2003/04 to 2023/24 (Figure 64). In 2024/25, the OT was halved to 7.8 t following concerns regarding stock status, with the full OT caught. The OT was further reduced to 5.5 t in 2025/26, with 1.8 t harvested in the first six months.

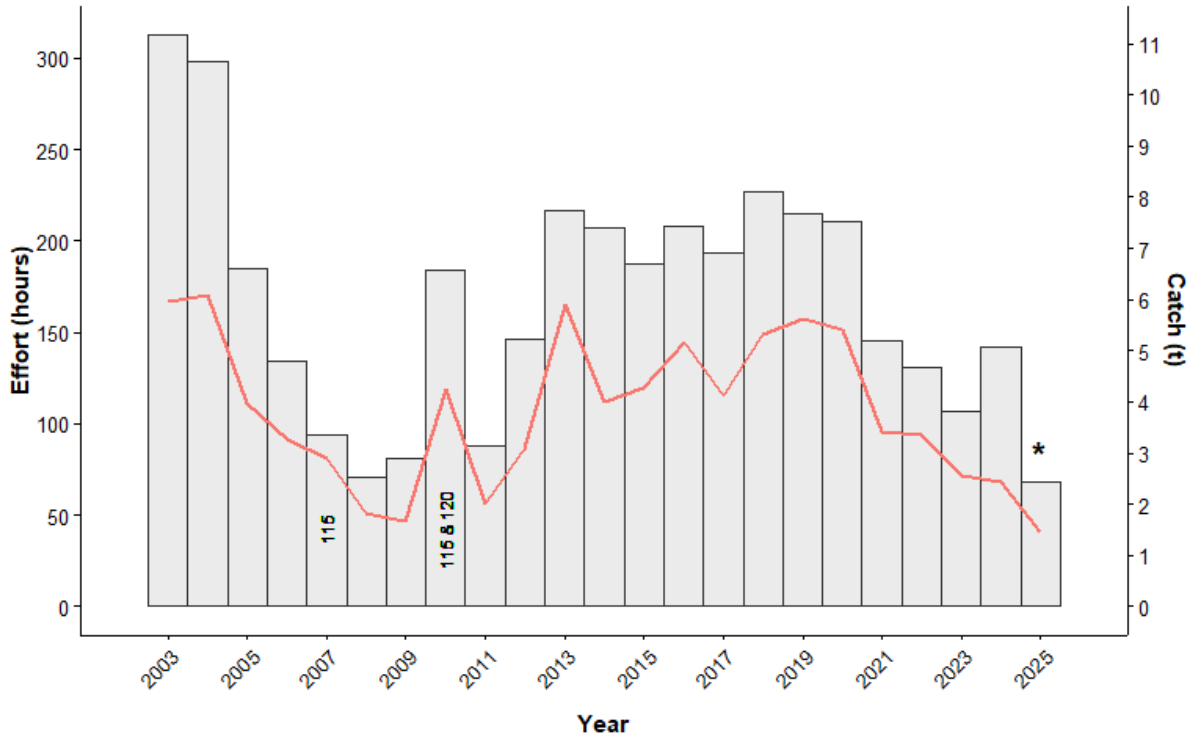

Figure 64: Total catch (bars) and total effort (line) for the Prom Eastside SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE has been low and relatively stable since around 2006 (Figure 65). The CPUE was below the Threshold level in 2020 but has increased from 49 to 64 kg/h in 2024.

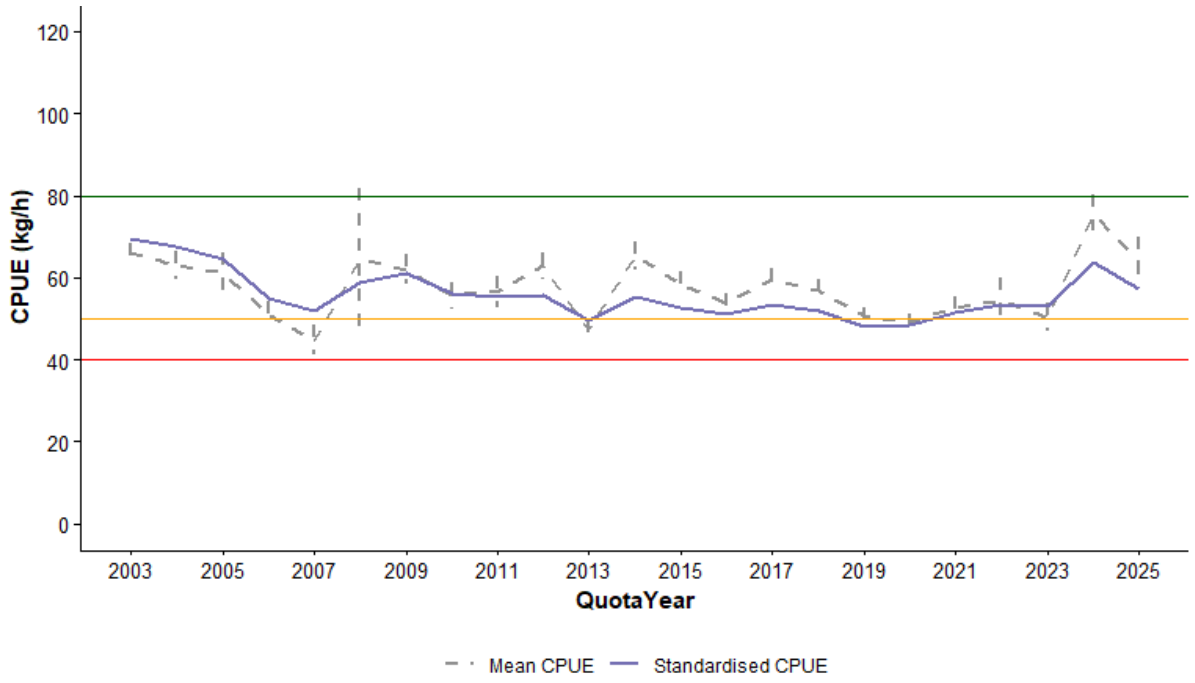

Figure 65: Prom Eastside SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

The majority of the catch in recent seasons has been harvested in Q4 (Figure 66). The differences between seasonal and annual CPUEs show no clear trends (Figure 67).

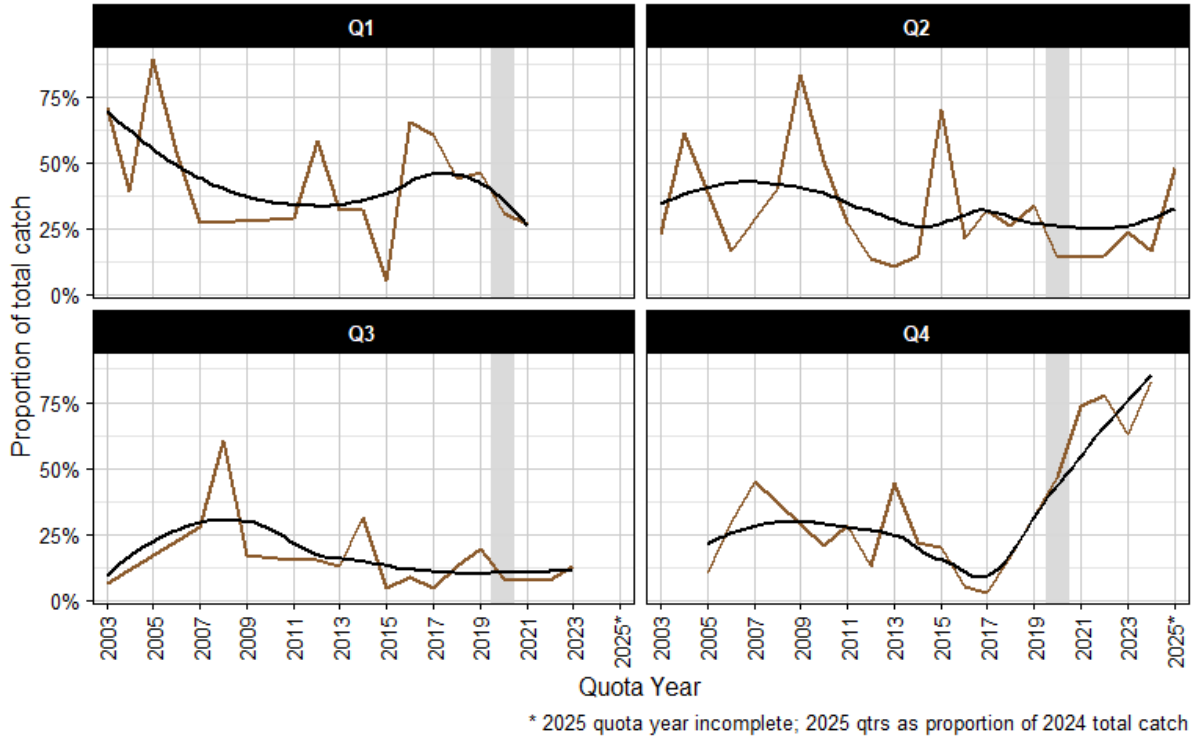

Figure 66: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Prom Eastside SMU. Each panel shows the proportion of total annual catch taken in each quarter., black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

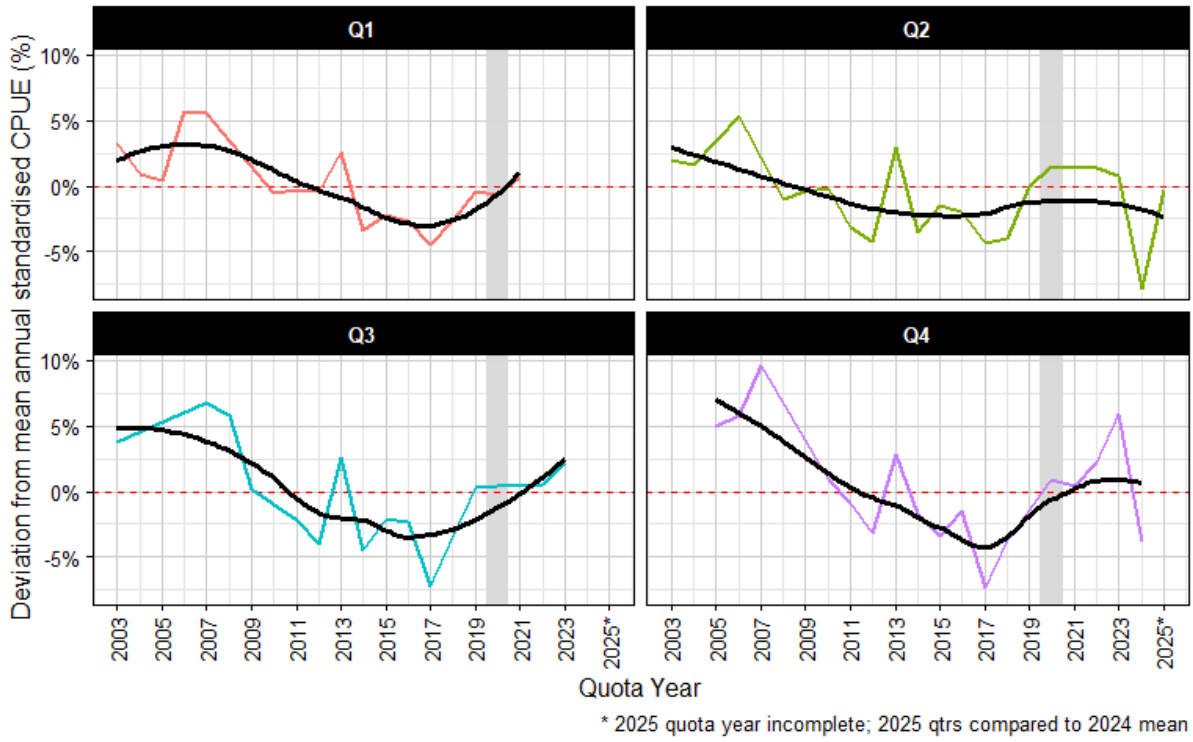

Figure 67: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Prom Eastside SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch generally declined from 2003 to 2013 and has been stable thereafter (Figure 68).

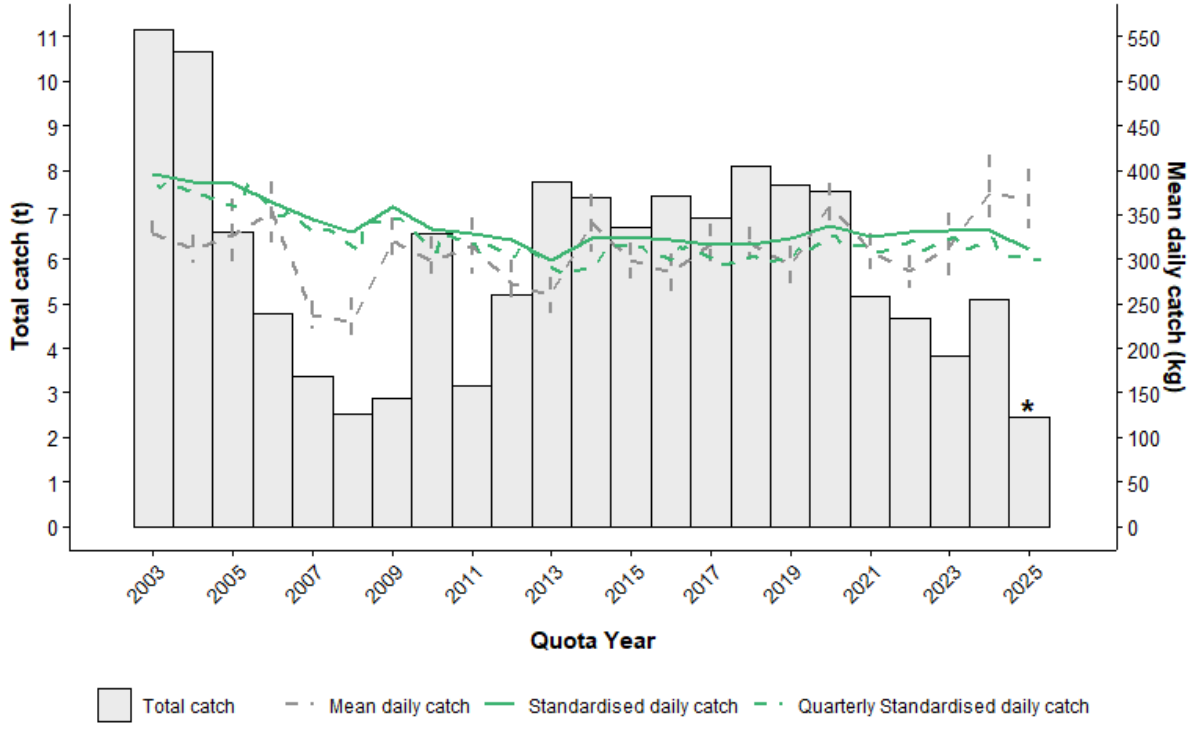

Figure 68: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Prom Eastside SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Prom Eastside SMU comprises four reefcodes, with the majority of catch harvested from 18.03 and 18.04 in recent years (Figure 69).

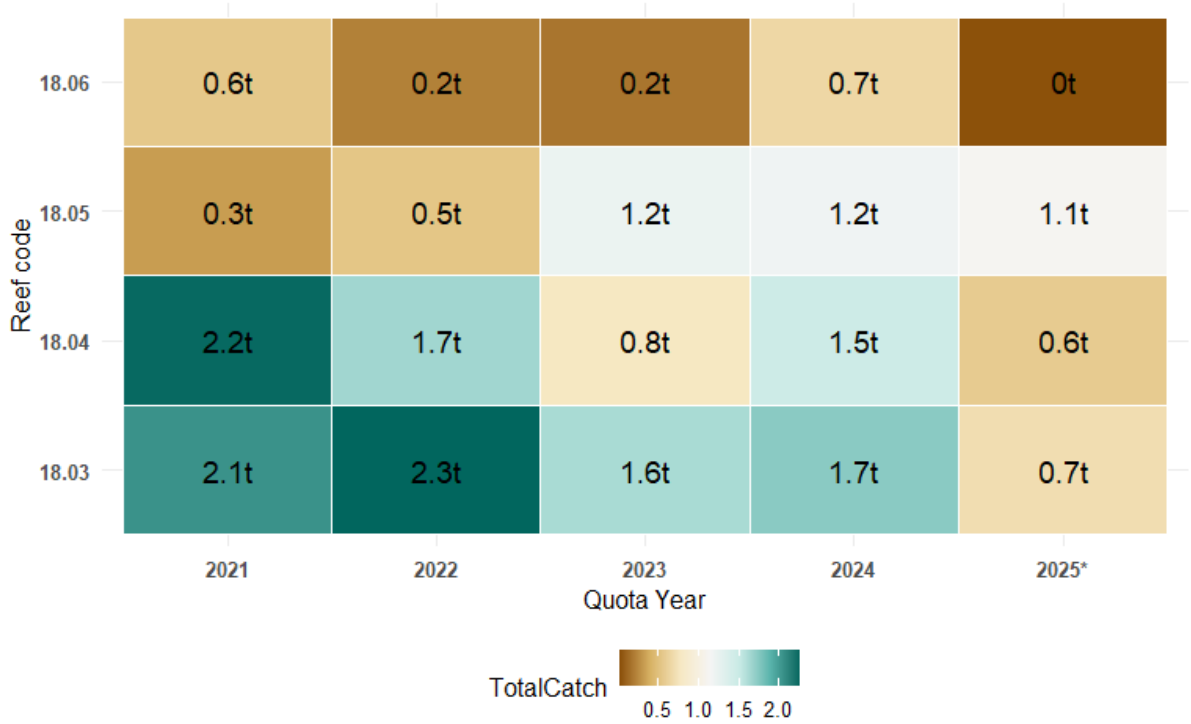

Figure 69: Total catch by reefcode for the Prom Eastside SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Trends in the size of abalone harvested show an increase in nominal and standardised length in the last three years (Figure 70a,b). More data are required to confirm these promising trends.

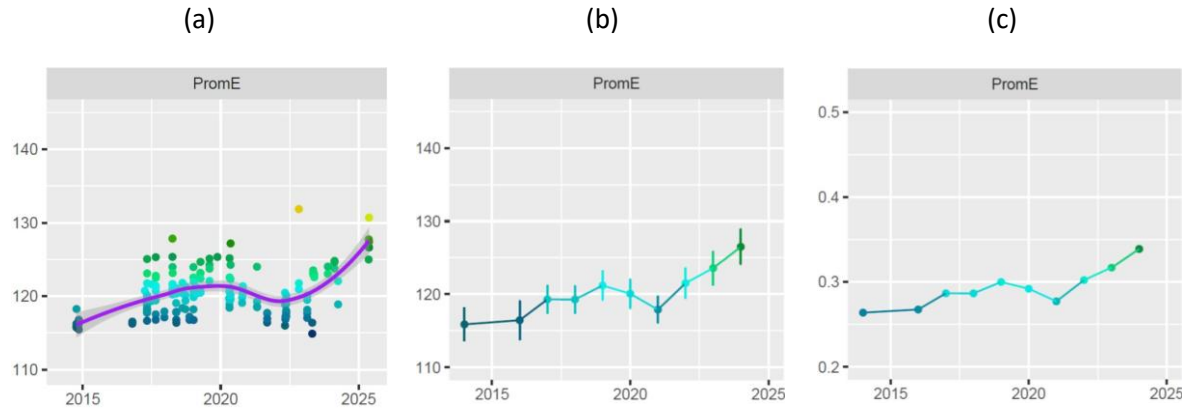

*Figure 70: Commercial length frequency data for the Prom Eastside SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

The overview of trends in data for the Prom Eastside SMU is positive. Lower catches of around 5 t for the past four years appears to have increased CPUE and the mean size of abalone caught.

The CPUE has been above the Threshold level of the Harvest Strategy for the last four years. The Primary Secondary Indicators were Increasing resulting in an Increasing Final Category. The current OT is 4.8 t and the suggested OT ranges from 4.8 to 6.0 t.

Available data suggests that stock status at the Prom Eastside SMU has improved in recent years following stable lower catches around 5 t. While the Harvest Strategy indicates that an increase in OT can be taken, maintaining a stable OT should continue to promote improvement in the stock as seen through recent increases in CPUE and the mean size of abalone caught.

3.2.13. Surf Coast (Small SMU)

The Surf Coast SMU catch of 3.7 t in 2024/25 represented 1.6% of the total catch for the Central Zone (Table 14) and 1.9% of the TACC (Table 2). The catch was more than twice the OT (1.7 t). Standardised CPUE in 2024/25 remains below the long-term level, was the same as 2009/10 but was 17% higher than 2020/21. Standardised mean daily catch has declined across all time scales.

Table 14: Summary of Catch, Optimum Targets and Performance Indicators for the Surf Coast SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
3.7	1.9	1.7	1.7	1.7	-17%	0%	17%	-15%	-6%	-2%

Catches from the Surf Coast SMU have been highly variable over time (Figure 71). The catch of 3.7 t in 2024/25 was the highest in the last four years. Although the catch was more than twice the OT, high catches are encouraged from this rarely fished SMU to spread effort throughout the zone.

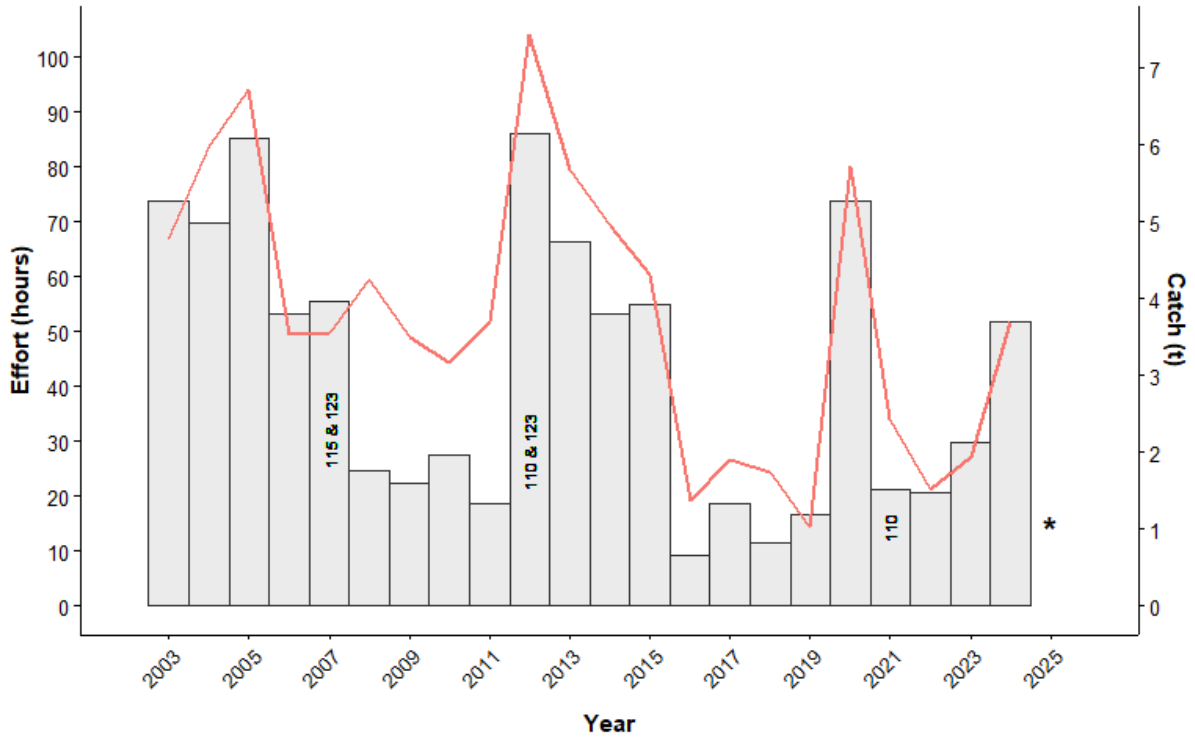

Figure 71: Total catch (bars) and total effort (line) for the Surf Coast SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE declined from 2003 to 2018 and has slowly increased thereafter (Figure 72). The CPUE has been above the Threshold level for the last three years.

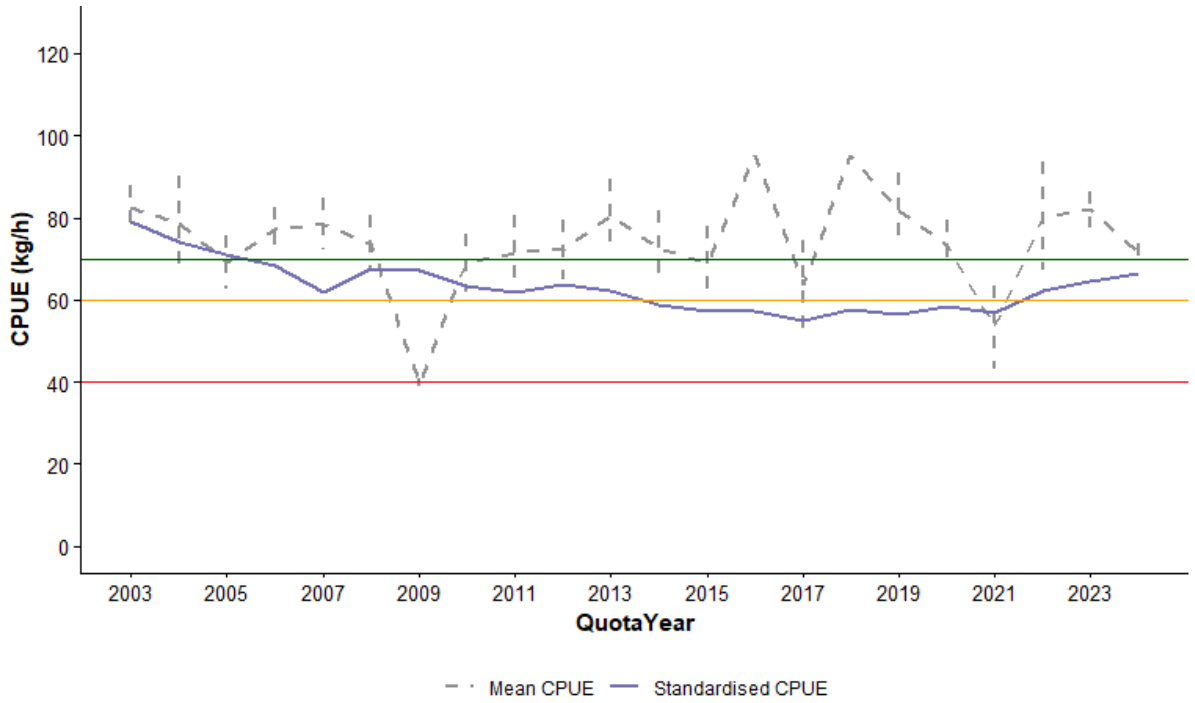

Figure 72: Surf Coast SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

Trends in the quarterly catch distribution show higher catches in Q4 in recent years (Figure 73). There are no clear trends in CPUE variation among quarters (Figure 74).

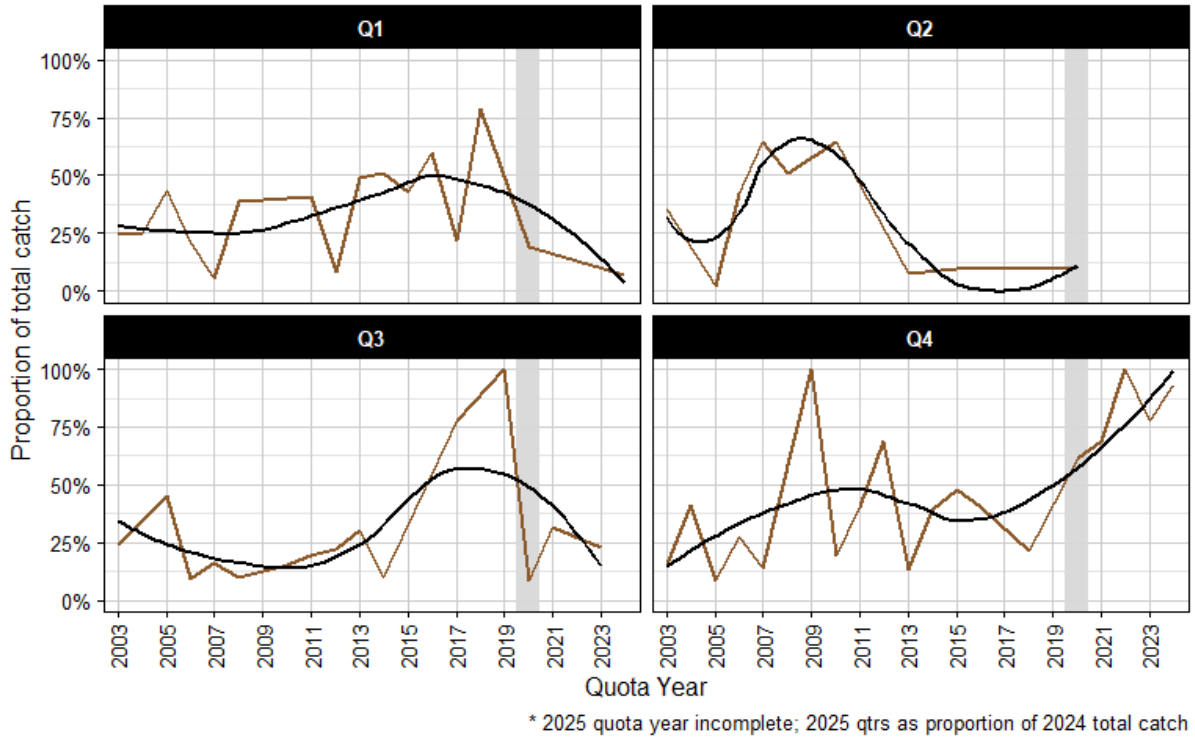

Figure 73: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Surf Coast SMU. Each panel shows the proportion of total annual catch taken in each quarter. Black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

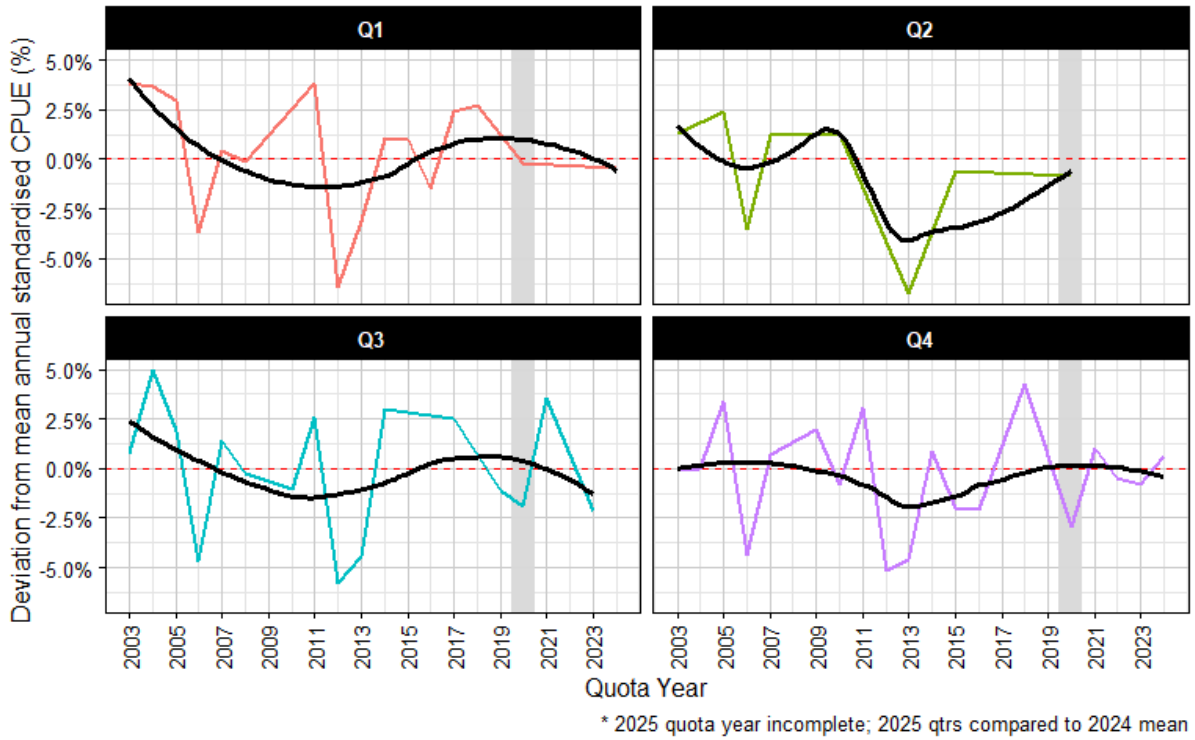

Figure 74: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Surf Coast SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch is generally lower for this SMU than others, with catches around 200 kg/day harvested since around 2010 (Figure 75).

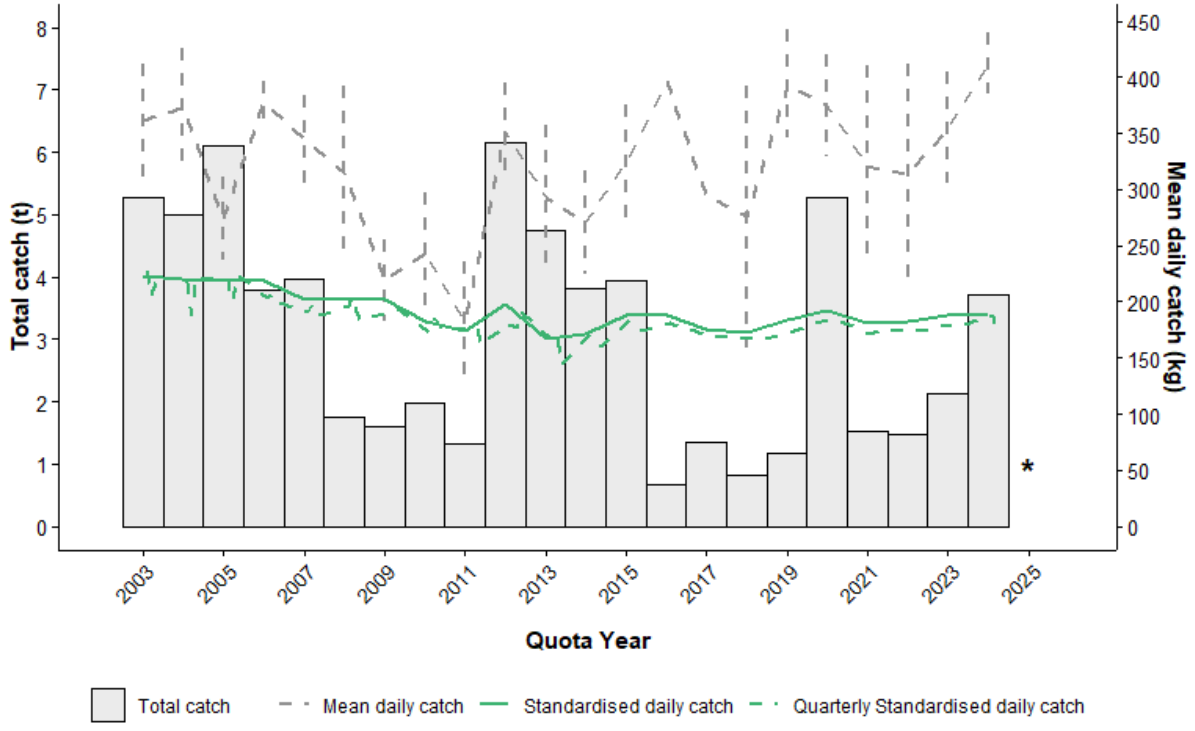

Figure 75: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Surf Coast SMU. Data are reported in quota years, with 2025 up to 31 December only.

The Surf Coast SMU comprises five reefcodes, with the majority of catch harvested from 10.02 (Figure 76). Reefcodes 9.01. 10.03 and 10.04 have not produced any catch in the last three quota years.

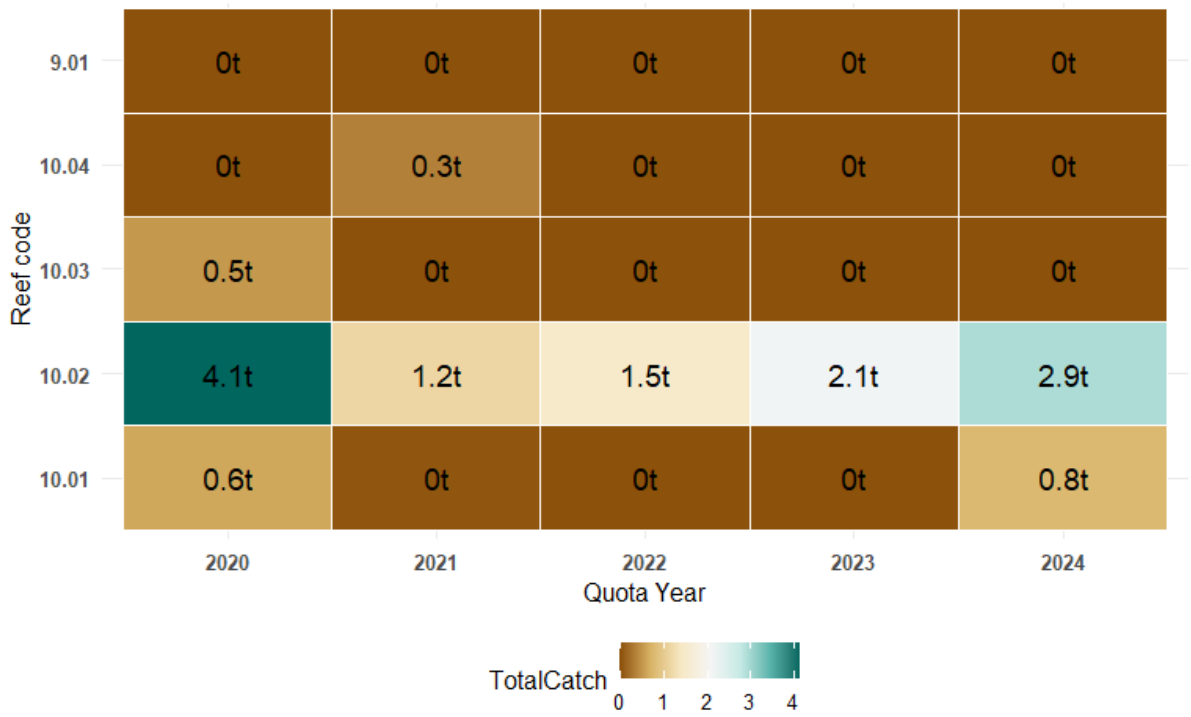

Figure 76: Total catch by reefcode for the Surf Coast SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Summary

The assessment of the Surf Coast SMU relies on catch and effort data only. Catches from this SMU are highly variable. While CPUE trends have increased in recent years, the standardisation is reliant on very few data points and trends should treated with caution.

The CPUE has been above the Threshold level of the Harvest Strategy for the last three years. The Primary and Secondary Indicators were Increasing, resulting in an Increasing Final Category. The current OT is 1.7 t and the suggested OT ranges from 1.7 to 2.1 t.

It is difficult to assess the status of stocks in the Surf Coast SMU. While the Harvest Strategy indicates that an increase in OT could be taken, trends in standardised CPUE at this SMU should be treated cautiously. Maintaining a stable OT would appear to be a sensible approach.

3.2.14. Cliffy Group (Small SMU)

The Cliffy Group SMU catch of 2.7 t in 2024/25 represented 1.4% of the total catch for the Central Zone (Table 15) and 1.2% of the TACC (Table 2). The catch was 42% lower than the OT (4.7 t). Standardised CPUE in 2024/25 remains below the long and medium-term levels but has increased by 22% in the last 4 years. Standardised mean daily catch has declined across all time scales.

Table 15: Summary of Catch, Optimum Targets and Performance Indicators for the Cliffy Group SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
2.7	1.4	4.7	4.7	4.7	-17%	-6%	22%	-16%	-10%	-2%

Catches from the Cliffy Group SMU have been highly variable over time, however over the last 4 years catches have stabilised around 3 t (Figure 77). The 2024 catch of 2.7 t was well below the OT of 4.7 t.

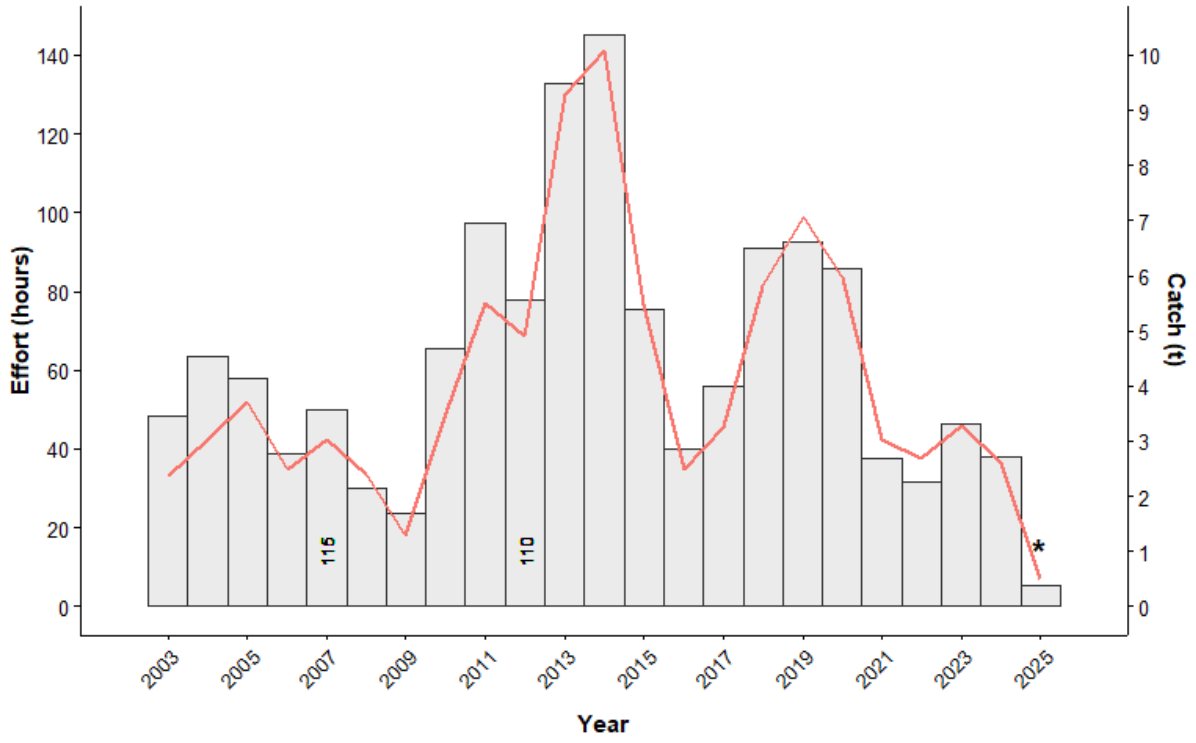

Figure 77: Total catch (bars) and total effort (line) for the Cliffy Group SMU from 2003 to 2025, with 2025 up to 31 December only.

Standardised CPUE declined from 2003 to 2019 but has increased every year that catch has been around 3 t (i.e. since 2021, Figure 78). The CPUE has remained above the Threshold level since 2003.

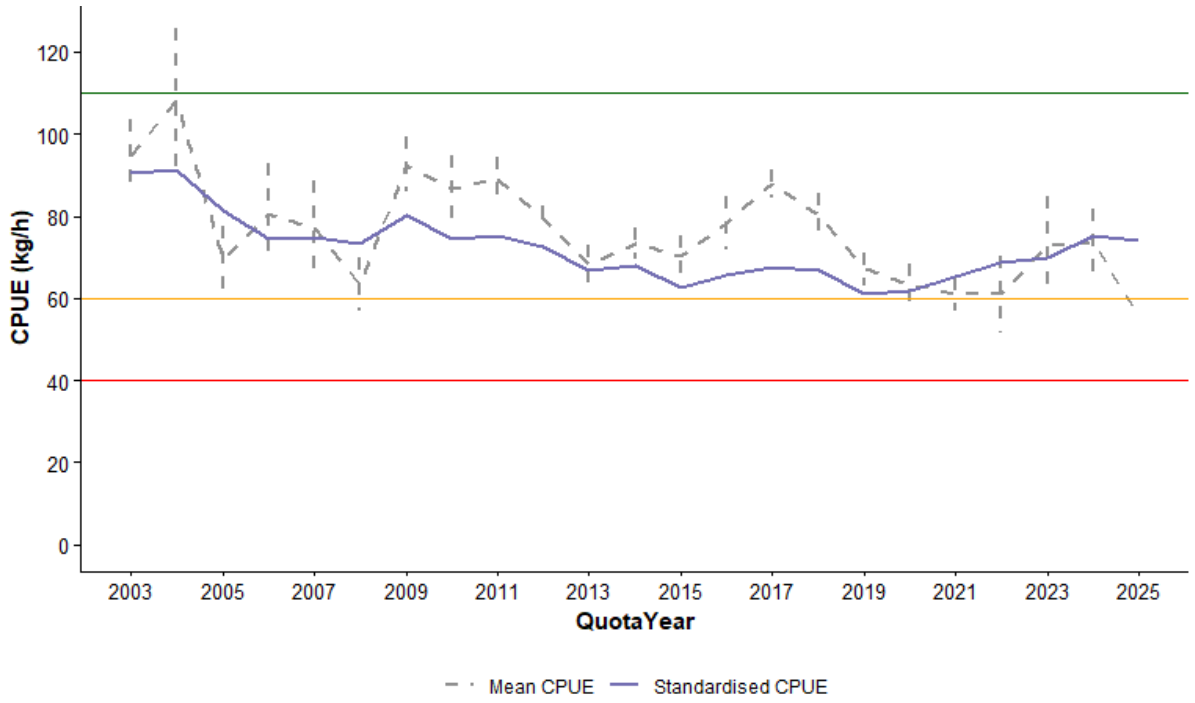

Figure 78: Cliffy Group SMU CPUE from 2003 – 2025 with Harvest Strategy Reference Points. Nominal CPUE = grey series (+/- SE), standardised series = blue line. 2025 up to 31 December only.

Trends in the temporal catch distribution show an increase in catches in the last quarter in recent years (Figure 79). There are no clear trends in CPUE variation among quarters (Figure 80).

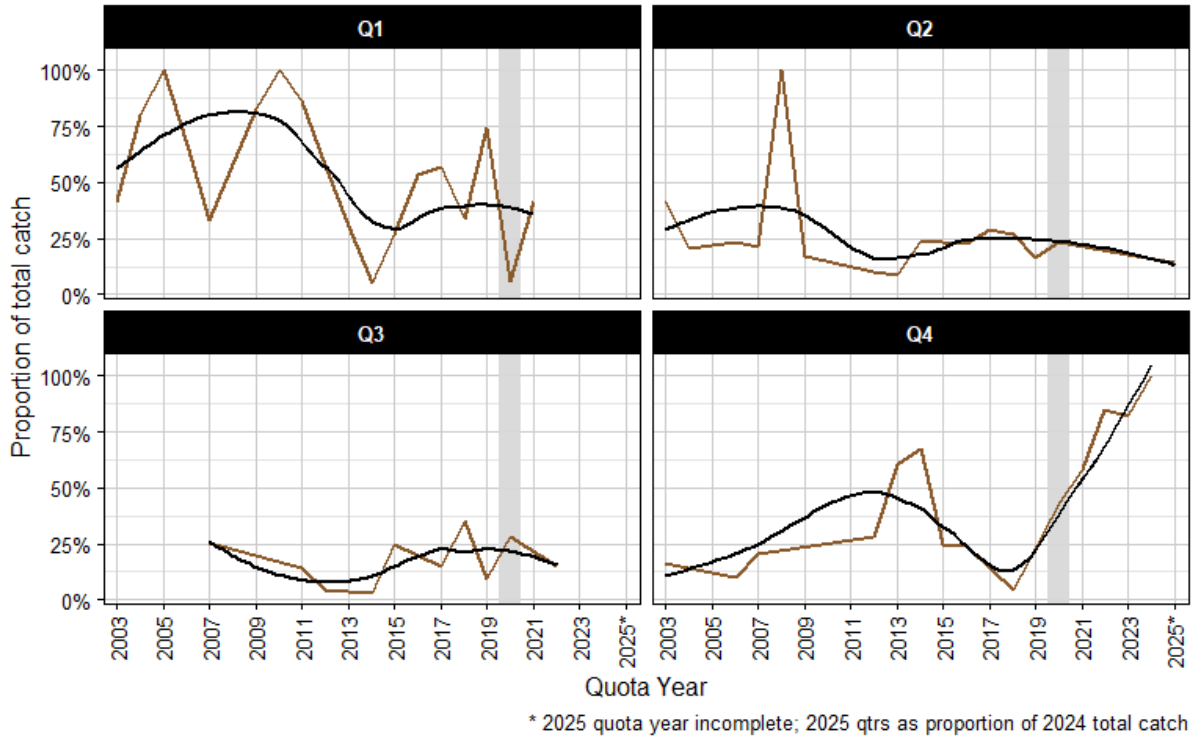

Figure 79: Distribution of total catch by quarter (Q1–Q4) from 2003–2025 for the Cliffy Group SMU. Each panel shows the proportion of total annual catch taken in each quarter., black lines are LOESS trends over time. Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

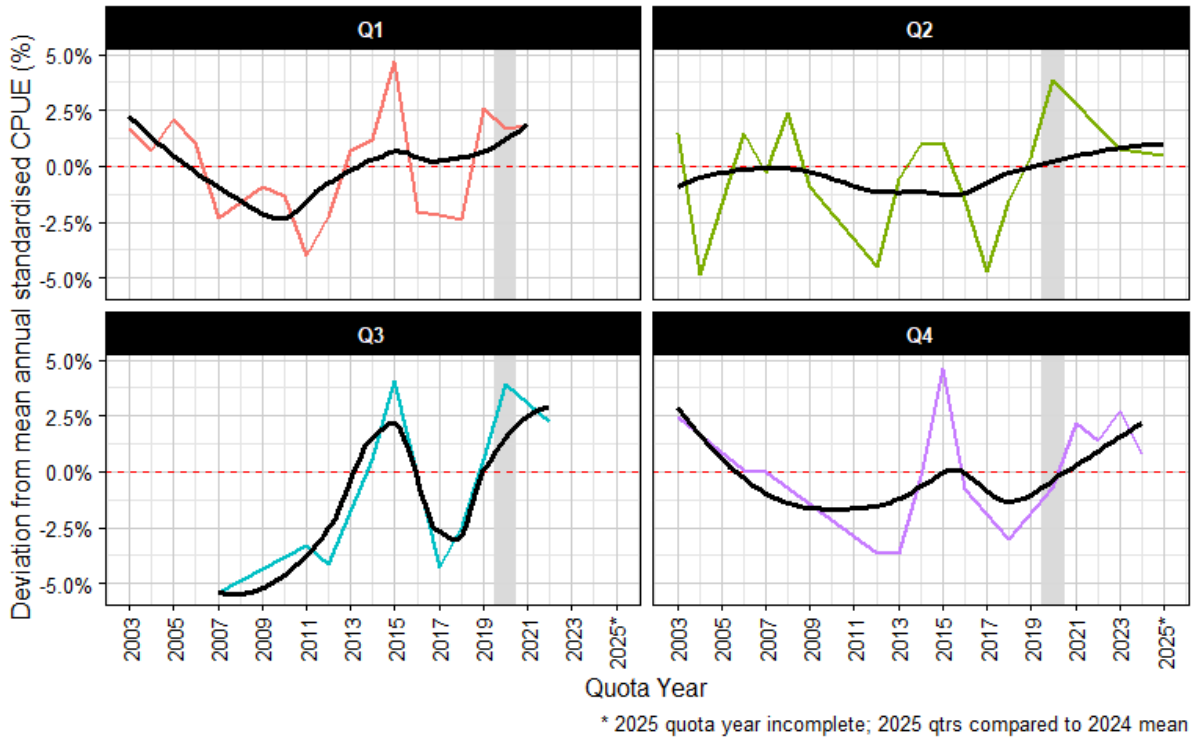

Figure 80: Variation in standardised CPUE by quarter (Q1–Q4) from 2003–2025 for the Cliffy Group SMU. Each panel shows percentage deviation from the annual mean CPUE. Coloured lines represent quarterly estimates of standardised CPUE, and black lines show smoothed loess fits through time. The red dotted line provides a baseline (values above this were higher than average for the year, values below are lower than average for the year). Grey shading indicates the 2020 quota-year transition from April–March to July–June (15-month transitional period).

Standardised mean daily catch declined from 2003 to 2013 and has been relatively stable thereafter (Figure 81). Compared to other SMUs, the mean daily catch is relatively high at close to 400 kg/day.

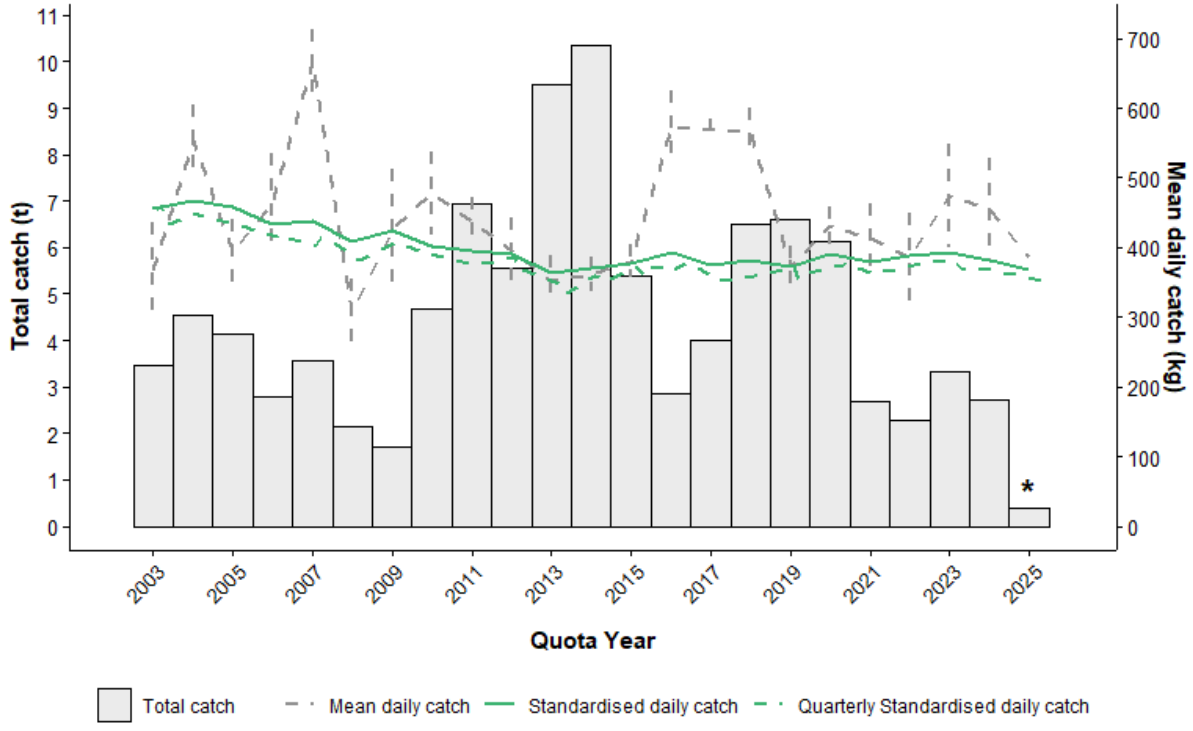

Figure 81: Total catch, nominal mean daily catch (grey line, kg per fishing day +/- SE) and standardised (green line) from 2003 to 2025 for the Cliffy Group SMU. Data are reported in quota years, with 2025 up to 31 December only.

There is only one reefcode for the Cliffy Group SMU.

Trends in the size of commercial abalone harvested should be interpreted with caution as there are insufficient data to determine temporal trends (Figure 82a,b,c).

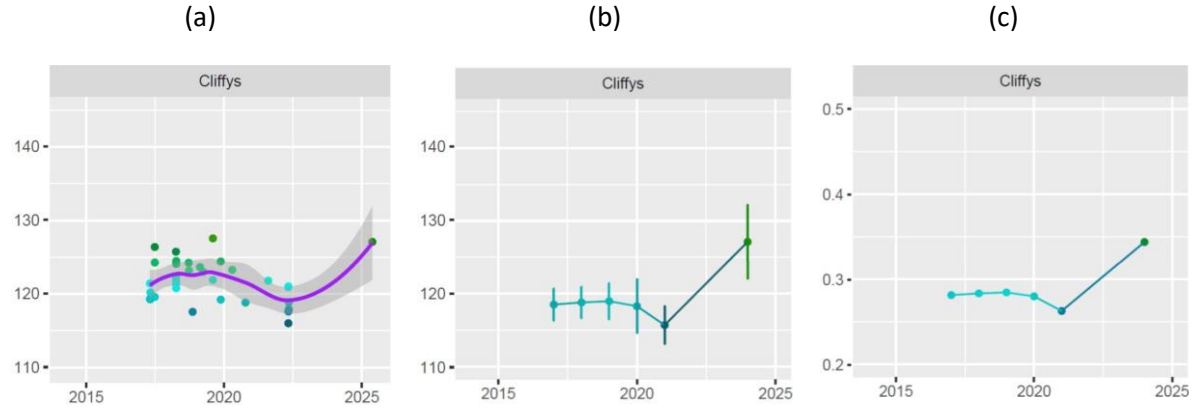

*Figure 82: Commercial length frequency data for the Cliffy Group SMU represented as (a) raw mean length (mm) per site*day, (b) standardised mean length (mm) per site * day, and (c) standardised length data converted to weight (kg). Full data presented in Appendix 1.*

Summary

Recent low and stable catches around 3 t appear to have had a positive effect on CPUE at the Cliffy Group SMU. Catches remain below the OT, but this may be the result of the remoteness of this location. There is insufficient data to interpret temporal trends in mean size of the commercial harvest.

The CPUE has remained above the Threshold level of the Harvest Strategy since 2003. The Primary Indicator was Stable, and the Secondary Indicator was Increasing, resulting in a Stable Final Category. The current OT is 4.7 t and the suggested OT ranges from 4.5 to 4.9 t.

Recent low catches may have improved the Cliffy Group stocks, however trends in CPUE and mean size must both be interpreted with caution. Maintaining a stable OT as suggested by the Harvest Strategy would appear to be a sensible approach.

3.2.15. Port Phillip Bay (Small SMU)

The Port Phillip Bay SMU catch of 0.5 t in 2024/25 represented 0.3% of the total catch for the Central Zone (Table 16) and 0.2% of the TACC (Table 2). There is no OT and there are no statistics associated with CPUE or mean daily catch.

Table 16: Summary of Catch, Optimum Targets and Performance Indicators for the Port Phillip Bay SMU.

Catch					CPUE %change			Mean Daily Catch %change		
2024/25		OT (t)			long	med	short	long	med	short
(t)	(%)	23/24	24/25	25/26	03/04	09/10	20/21	03/04	09/10	20/21
0.5	0.3	0	0	0	NA	NA	NA	NA	NA	NA

The Port Phillip Bay SMU was a very important contributor to the Central Zone TACC from 1992 to 2007, with an average catch of 56 t during this period and a peak catch of 102 t taken during 2000 (Figure 83). However, catches declined dramatically thereafter and have not exceeded 6 t since 2010. The catch from the PPB SMU in 2024/25 was 0.5 t.

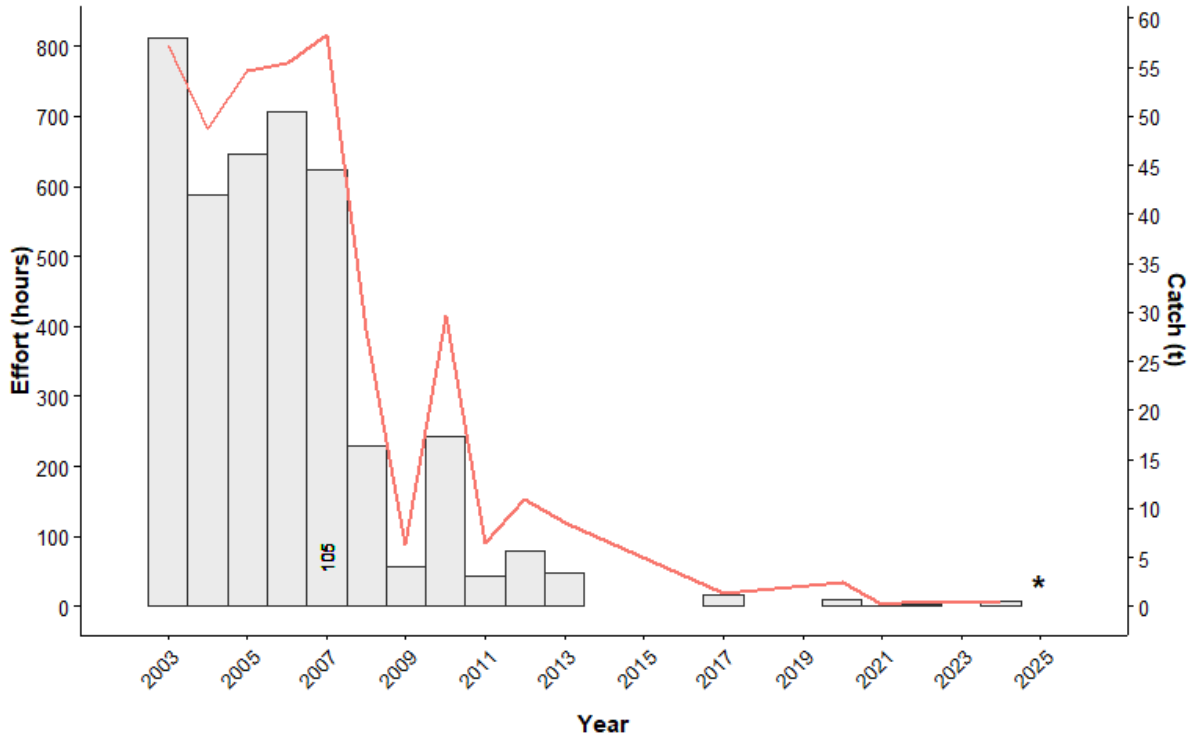

Figure 83: Total catch (bars) and total effort (line) for the Port Phillip Bay SMU from 2003 to 2025, with 2025 up to 31 December only.

The Port Phillip Bay SMU comprises nine reefcodes (Figure 84). The catch in 2024/25 was harvested from 11.07 and was the first catch from this reefcode since at least 2017.

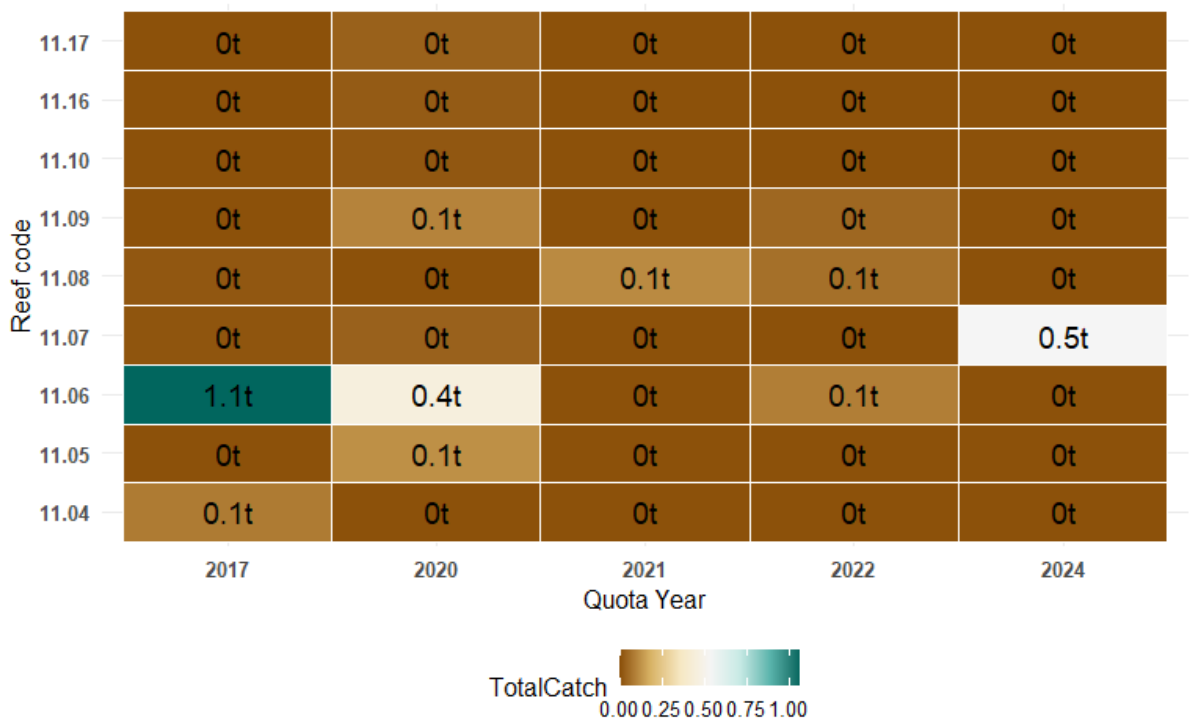

Figure 84: Total catch by reefcode for the Port Phillip Bay SMU from 2021 to 2025, with 2025 up to 31 December only. Colours reflect relative catch (t).

Summary

Prior to 2008, the Port Phillip Bay SMU was a very important contributor to the Central Zone TACC. Catch and CPUE data suggest that the decline in abundance of legal-size abalone from 2008 was substantial and occurred rapidly. The primary driver for the decline appears to be environmental effects, including changes to nutrient levels with a consequent reduction in algal productivity and an increase in urchin density (Mayfield et al. 2012).

There is no OT for the Port Phillip Bay SMU and thus it was not assessed under the Draft Harvest Strategy. Maintaining a zero catch is appropriate.

3.3 Reefcode level blacklip assessment

The following figures 85 and 86, show catch, nominal CPUE and standardised CPUE for the 12 highest producing reefcodes in the Central Zone over the last four years. From west to east, these reefcodes occur in the Shipwreck Coast SMU (4.01 and 4.02), the Cape Otway SMU (6.01, 6.02 and 7.08), the Back Beaches SMU (12.02 and 12.03), the Flinders SMU (12.06), the Phillip Island SMU (14.02 and 14.03), the Kilcunda SMU (15.01) and the Prom Westside SMU (17.10).

Trends in standardised CPUE at high catch reefcodes reflect similar patterns to SMU and zone-wide CPUE, with small to moderate increases in the last four to five years at all assessed reefcodes.

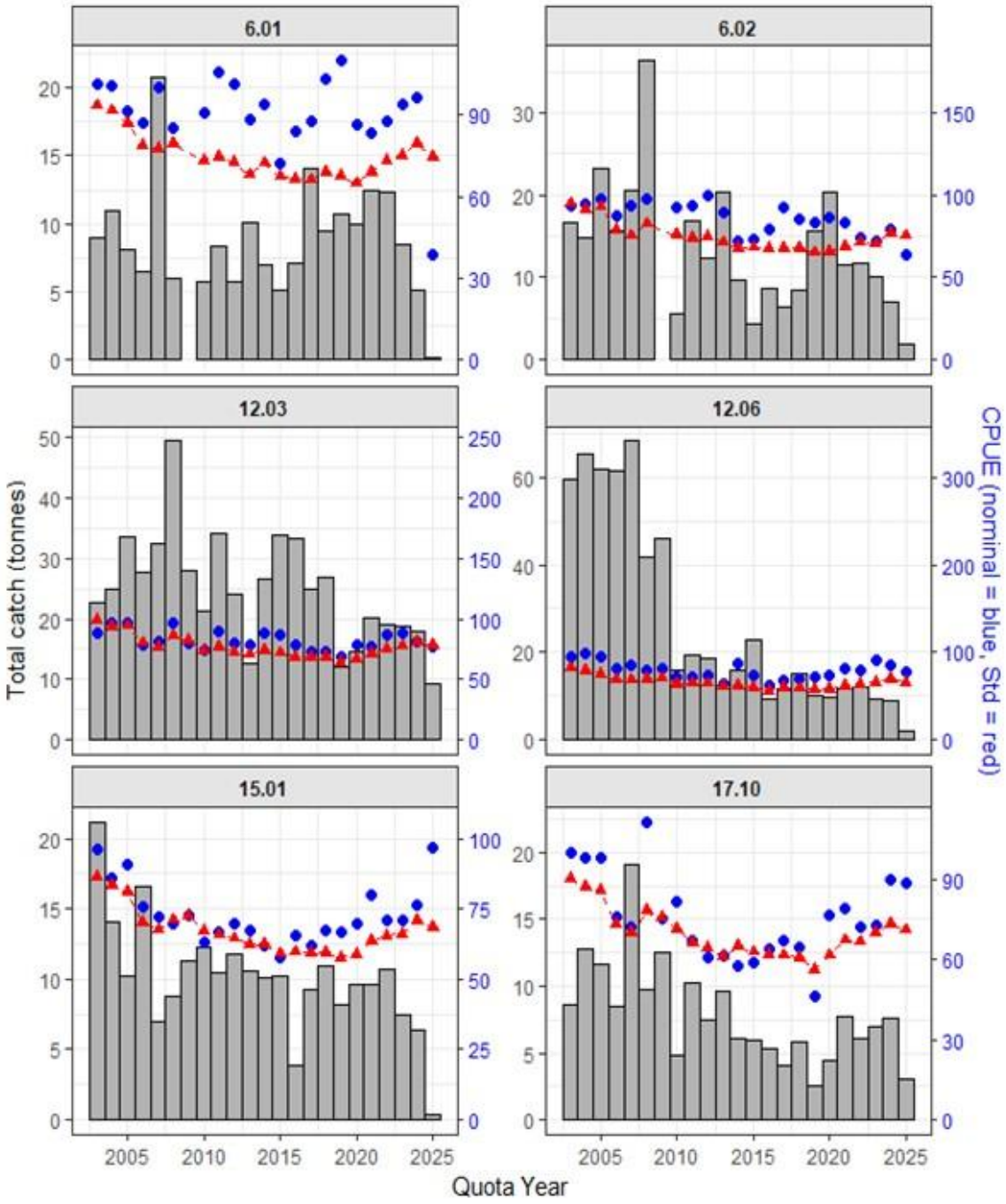

Figure 85: Total catch (bars) and CPUE (nominal - blue dots and standardised - red triangles) for six of the twelve highest producing reefcodes in the Eastern Zone.

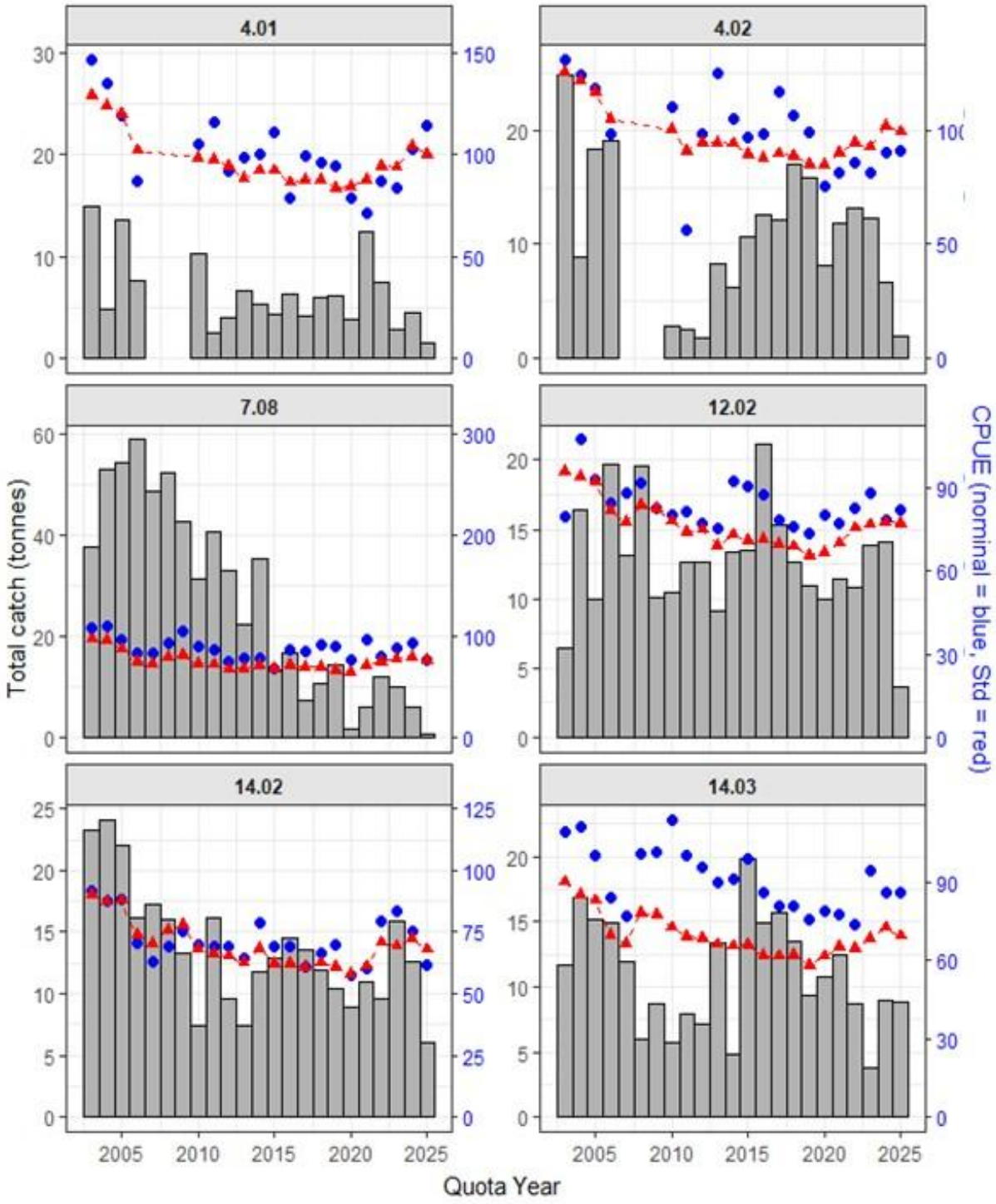

Figure 86: Total catch (bars) and CPUE (nominal - blue dots and standardised - red triangles) for six of the twelve highest producing reefcodes in the Eastern Zone.

4. Greenlip Abalone

Greenlip abalone are a small but important contributor to the Central Zone abalone catch, with catches recorded in commercial logbooks since 1979. Total catches greater than 1 t have been recorded in nine of the 12 SMUs, as well as in a number of reefcodes that are now part of the Marine Park network (Figure 87). In the past decade, greenlip catches have been harvested from eight of the nine SMUs (Figure 88). Total catches since 2008 have been very consistent, with an average annual catch of 3.2 t and a range of 2.5 to 3.6 t, with the highest catch being harvested in 2022.

Cape Liptrap has been the highest producing SMU in the Central Zone, with a total catch of 37.0 t since 1979. More than half of this catch (22.0 t) has been harvested in the last 17 years, with an average annual catch of 1.3 t and a range of 0.9 to 2.0 t.

With a total catch of 22.8 t since 1979, the largest annual catches came from the Flinders SMU in the 1980s. From 1980 to 1986, around 13.0 t of greenlip was harvested with a maximum annual catch of approximately 3.5 t in 1985. In the last decade, an average of 0.6 t has been harvested from the Flinders SMU with a peak annual catch of 1.0 t in 2020.

The Surf Coast SMU has produced 21.6 t of greenlip abalone since 1979. Since 2008, the Surf Coast SMU has had an average annual catch of 0.5 t and a maximum catch of 1.5 t in 2008, however no greenlip were recorded in 2024 despite 3.7 t of blacklip being harvested.

The Phillip Island SMU has produced 19.6 t of greenlip since 1979. The stock produced consistent catches from 2008 to 2019, ranging from 0.3 to 0.8 t with an average of 0.5 t. The catch in 2023 was at the time the highest recorded at 1.2 t and the catch increased again in 2024 to 1.4 t.

Smaller contributions have come from the five other SMUs, while 3.0 t in total was harvested from reefcodes that have subsequently been declared as Marine Parks. In the past decade, the Kilcunda, Prom West and Back Beaches SMUs have produced 2.2 t of greenlip abalone in total.

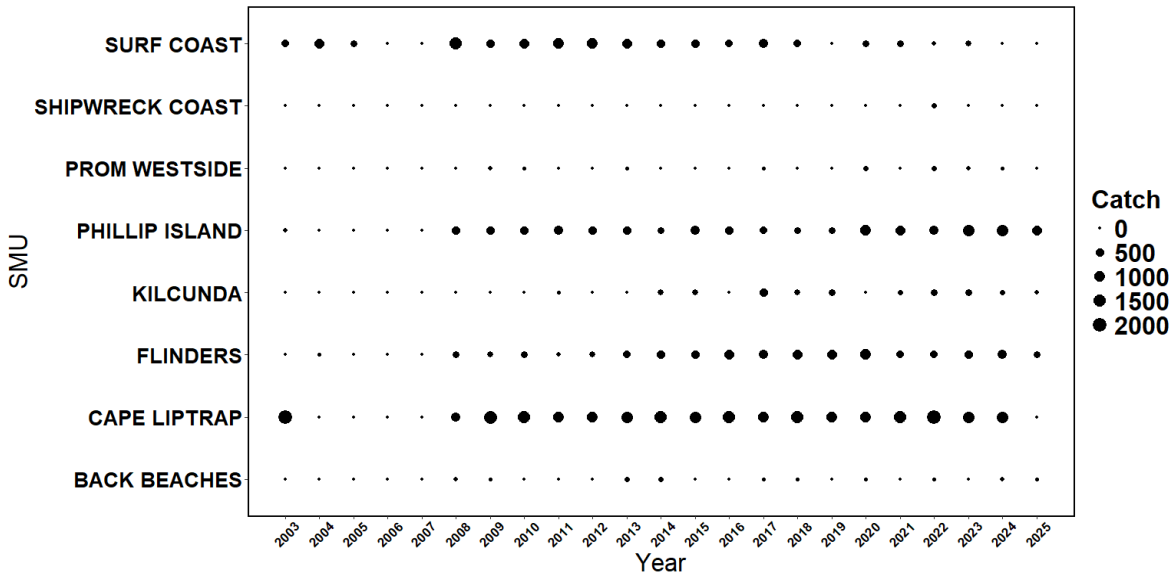

Figure 87: Bubble plot of catch distribution for greenlip abalone in the Central Zone from 1979 to 2025 quota years. Only SMUs where >1 t of greenlip have been caught in total are shown. 2025 data up to 31 December only.

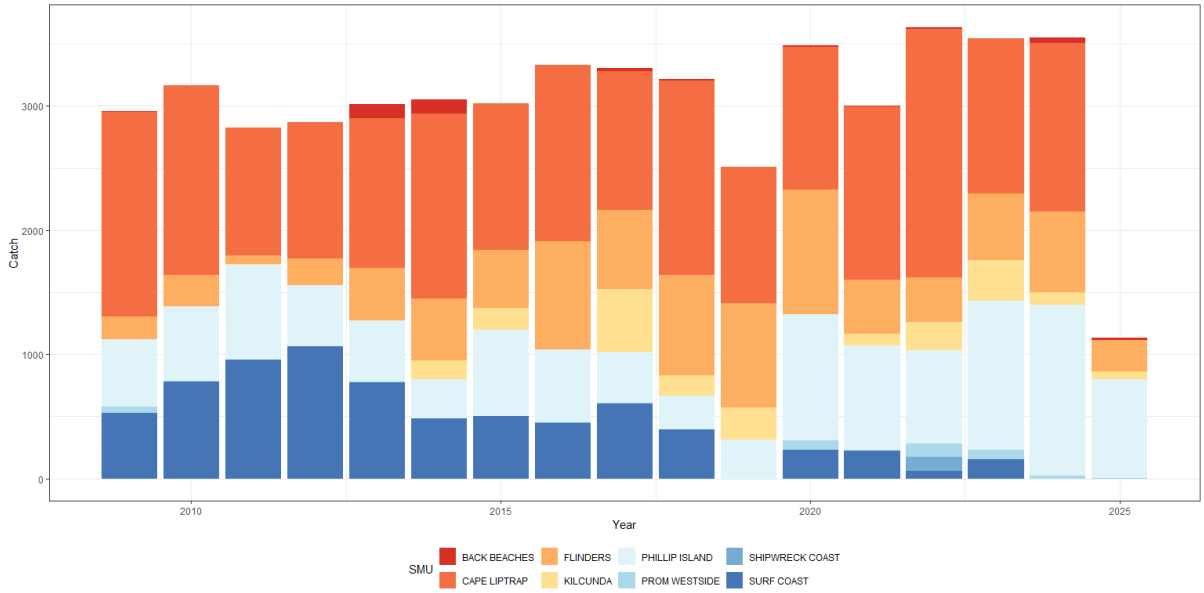

Figure 88: Catch distribution for greenlip abalone in the Central Zone from 2009 to 2025 quota years. 2025 data up to 31 December only.

5. Discussion

5.1 What's new in this report?

Reduced scope of the report

This stock assessment report focuses on available data for 2024/25 only (i.e. catch and effort data and commercial length frequency data only). Previous analyses conducted that use historical FIS data are reported in a separate document that also reports all methods used for this assessment (Dixon and Lowe 2026).

Inclusion of the data from the first six months of the current season

Previous reports have included only data from the previous full quota year. In this report, we have included data from the first six months of the current 2025/26 quota year to provide an assessment that is as close to real-time as practical.

CPUE standardisation model update

The latest CPUE standardisation model incorporates a seasonal component, with the quota year split into quarters. Examination of quarterly trends within quota years at the zone and SMU scales provides insights into how changes in the spatial and temporal fishing patterns may affect CPUE.

Reefcode level assessments of standardised CPUE

Results from standardised CPUE modelling at the reefcode scale is provided for the 12 highest catch reefcodes for the last four years (on average).

5.2 The approach to stock assessment

This Stock Assessment Report relies primarily on catch and effort data, supplemented by analyses on mean length of the commercial catch from the *Central Abalone Victoria – Abalone Council Victoria* (CAV-ACV) database provided by Dr. Duncan Worthington. The performance framework has been modified over time and includes three scales of temporal assessment (long-, medium- and short-term) assessed at the zone and SMU scales. The key measures are 1) catch compared to the TACC for the zone scale and OTs at the SMU scale, 2) standardised annual CPUE at the zone and SMU scales and 3) mean daily catch at the zone and SMU scales.

The Harvest Strategy relies on catch and effort data only. In this report, we have used the nominal reference points in VFA (2019b). We note that the reference points are currently being reviewed through the Abalone Scientific Working Group (ASWG).

A weight of evidence assessment is undertaken at the zone and SMU scales. Figures are presented at each spatial scale that examine 1) catch trends at the zone scale against the TACC and at the SMU scale against OTs, 2) standardised CPUE trends since 2003 and 3) standardised mean daily catch since 2003.

5.3 Trends in available data

The commercial catch in the Central Zone for 2024/25 was 197.7 t, which was 12% below the TACC of 225.1 t. Divers suggest that the shortfall in TACC primarily resulted from unfavourable weather conditions in the Cape Otway and Shipwreck Coast SMUs. The OT was exceeded by 0-10% at six of the 11 Central Zone SMUs. Four SMUs were harvested well below their respective OTs, including Cape Otway (38% below), Shipwreck Coast (39% below), Cape Liptrap (46%) and the Cliffy Group (42% below). Catch from the Surf Coast SMU was more than twice the OT, however this was undertaken as part of a strategy to spread effort across the zone (including in rarely fished areas) and is not of immediate concern.

At the zone scale, standardised CPUE for 2024/25 (80.2 kg/h) was 20% higher than 2020/21 levels (67.0 kg/h), and similar to 2009/10 levels (83.8 kg/h), however remains well below 2003/04 levels (98.7 kg/h). These trends are also reflected at the SMU scale, with short-term (4 year) increases in CPUE at all SMUs ranging from 9 to 31%.

Standardised mean daily catch in 2024/25 was 391.6 kg/day, which was the lowest level since 2003. The mean daily catch measure may have been impacted by market forces in recent years with some divers being restricted to daily catch limits. Thus trends should be interpreted cautiously.

New analyses in this report examine shifts in the temporal and spatial distribution of the catch and their impacts on quarterly CPUE. Despite a change in the timing of the quota year in 2020, there are few clear trends that can be determined from these data. Of importance, CPUE appears to be maintained at relatively high levels at the end of each quota year which could be interpreted as a positive sign for the fishery.

Analyses of commercial length frequency data were provided to MRAG by Dr. Duncan Worthington. The trends in these data clearly demonstrate an increase in the mean length of abalone harvested at the majority of Central Zone SMUs over most of the last decade. Provided these data are representative of changes in the stock, the increases in length also translate to an increase in mean weight and a reduction in the number of abalone caught for any given TACC.

5.4 Central Zone Stock Status

The latest Status of Australian Fish Stocks (SAFS) assessment of the Central Zone is based on data up to and including 2021/22 (Mundy et al. 2024). The authors classified stocks as depleting based primarily on the MRAG Central Zone Stock Assessment completed in 2023 (Dixon et al 2023). Recent stock assessment reports have provided a far more optimistic outlook for the Central Zone, with the 2025 report stating: *This report provides the strongest evidence to date that biomass is likely recovering* (Dixon and Lowe 2025).

This report further evidence that the fishable biomass is likely to be recovering. Commercial CPUE has increased in recent years at all SMUs. Increasing CPUE trends are also evident at the key reefcodes. While the mean catch per day has decreased in recent years, this may be impacted by market conditions.

Length frequency data from the commercial catch indicate large increases in the average size of abalone harvested at all SMUs where abalone were measured. Incremental annual increases have occurred for at least four years at all SMUs and up to a decade at others. The data are standardised and analyses account for historic changes in LML. While increases in size of the commercial catch may also reflect market preferences, critically, the increases in average size are occurring simultaneously with increases in commercial CPUE. This provides confidence that the trends reflect an improving status of the resource.

While the TACC was substantially under-caught, the benefits of “leaving abalone in the water” were not observed across all SMUs. Rather, catches from traditional high catch SMUs closer to easily accessible ports, such as Phillip Island, Back Beaches and Flinders were all caught at or above their respective OTs. The two SMUs most likely to derive benefit from the low catches were the Cape Otway and Shipwreck Coast SMUs, where catches were 18 and 12 t below their OTs, respectively. These trends of low catches appear to have continued in the first half of the 2025/26 quota year.

To summarise, there is strong evidence that the fishable biomass of the Central Zone blacklip abalone stock is recovering. Poor weather conditions appear to have led to low catches at the Cape Otway and Shipwreck Coast SMUs, however all other high catch SMUs have been harvested at or above their respective OTs. **Maintaining stable OTs for 2026/27 at most if not all SMUs seems to be a sensible approach to ensure further stock recovery occurs.**

5.5 Future Monitoring and Research

The research, assessment and management framework for the fishery is evolving, with progress structured through recommendations from the ASWG. This report identifies several key issues that should be considered as part of this strategic development.

This is the first report to incorporate the length frequency data from industry into the body of the report. Further investment is required to develop approaches to better integrate these data into the assessment process. Importantly, the number of participants in the shell measuring program has declined in recent years, and efforts should be made to improve the representativeness of the data gathered.

This report examines the 12 highest producing reefcodes in the Central Zone, demonstrating that trends in standardised CPUE appear consistent with broader SMU trends (at least for high catch reefcodes). Ways to further evolve the process to incorporate finer scale assessments should be addressed through the ASWG.

The Harvest Strategy outputs support the need for a review of Reference Points, which is currently underway. A consistent approach is required to adjust the Threshold Reference Point at each SMU relative to current CPUE values and overall status at each SMU. Moreover, recognition of the volatility in CPUE trends in low catch SMUs (due to low numbers of days fished and high interannual variability in catch) is also required.

The process to begin establishing new FIS sites in the Central Zone will occur in the next few months. Site establishment and the FIS survey design will evolve over time. It is anticipated that in 3 to 4 years these data will contribute meaningfully to assessment.

The VFA is also in the process of working with ACV to get scientific data loggers on board all abalone vessels. This will greatly improve the information base upon which to assess the fishery.

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7. Appendix 1

Table 17: Summary of changes in LML for the Central Zone. All measurements are in millimetres. Multiple LMLs indicate different LMLs for reefcodes within an SMU.

Date from	Shipwreck Coast	Cape Otway	Surf Coast	PPB	Back Beaches	Flinders	Phillip Island	Kilcunda	Cape Liptrap	Prom Westside	Prom Eastside	Cliffy Group
1 Apr 1998	120	120	110 & 120	100	110	110	110	110	110	110	110	110
1 Feb 2007	123	123	115 & 123	100	115	115	115	115	115	115	115	115
5 Mar 2009	123	123	115 & 123	105	120	115	113 & 115	113 & 115	105	115	115	115
1 Apr 2010	123	123	115 & 123	105	120	115	113 & 115	110 & 115	105 & 110	115 & 120	115	115
1 Apr 2012	123	123	110 & 123	105	120	115	113 & 115	110 & 115	105 & 110	115 & 120	115	110
1 Apr 2014	123	123	110 & 123	105	117	110	110	110 & 115	105 & 110	115 & 120	110	110
1 Apr 2016	123	123	110 & 123	105	117	110	110	110 & 115	105 & 110	115 & 120	110	110
1 Apr 2017	125	123	110 & 123	105	117	110	110	110 & 115	105 & 110	115 & 120	110	110
1 Apr 2018	125	123	110 & 123	105	117	110	110	110 & 115	105 & 110	115 & 120	110	110
1 Apr 2019	125	123	110 & 123	105	117	110	110	110 & 115	105 & 110	120	110	110
1 Apr 2020	130	125	110 & 123	105	119	112	112	115	110	115 & 120	110	110
1 July 2021	130	125	110	105	119	114	112	110 & 115	110	115 & 120	110	110

8. Appendix 2

Summary of abalone length measuring in CZ updated to June 2025

Prepared by Dr Duncan Worthington

5 March 2026

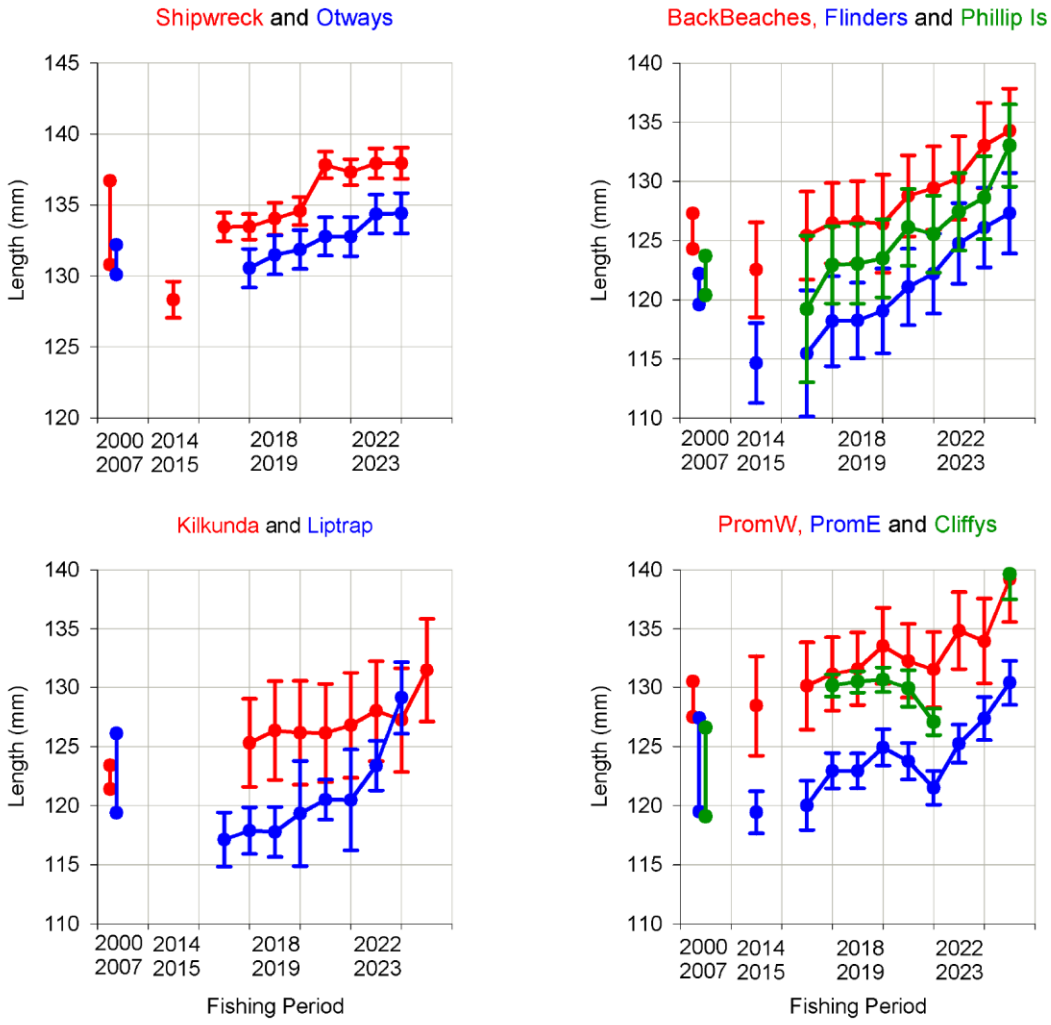

Figure 1. Trends in the average length of abalone landed for each SMU since 2014, with error bars showing SE among diver-days, and standardised values normalised to the raw average in the most recent fishing period with data in each SMU. The range of annual un-standardised average length from the earlier 2000-2007 dataset are also shown for individuals above the size limits in 2019-20.

Table 1. Number of abalone measured within each SMU and Fishing Period from 2014 until June 2025, and used in the standardisation. Note, this includes filtering the lengths of abalone, and several other filters for sample consistency, including a spatial location within the Reefcodes and SMU (i.e. not a GPS outside the Reefcodes).

	SMU										
Quota Year	**Shipwreck**	**Otways**	**Back Beaches**	**Flinders**	**Phillip Is**	**Kilkunda**	**Liptrap**	**PromW**	**PromE**	**Cliffys**	**Total**
2014-15	1553		10739	10026			2435	3449	4026		32228
2015-16											
2016-17	5825		17708	4510	1270		13477	3850	2383		49023
2017-18	16830	58261	37134	7670	44029	9574	20384	29315	12793	7426	243416
2018-19	5847	25675	40104	18362	28946	14583	12891	20564	20701	12364	200037
2019-20	14773	58555	13217	12214	29807	7108	2755	11702	3018	3371	156520
2020-21	14334	59903	35280	18068	49858	23228	24927	41488	10965	2179	280230
2021-22	9545	21735	35634	12650	27101	3380	629	15609	3887	2041	132211
2022-23	3113	9636	26526	13117	24779	12337	15548	23262	5941		134259
2023-24	3833	4300	24083	17381	21220	3313	4954	10522	2327		91933
2024-25			21655	6900	9058	4294		7773	3227	994	53901
Total	**75653**	**238065**	**262080**	**120898**	**236068**	**77817**	**98000**	**167534**	**69268**	**28375**	**1373758**

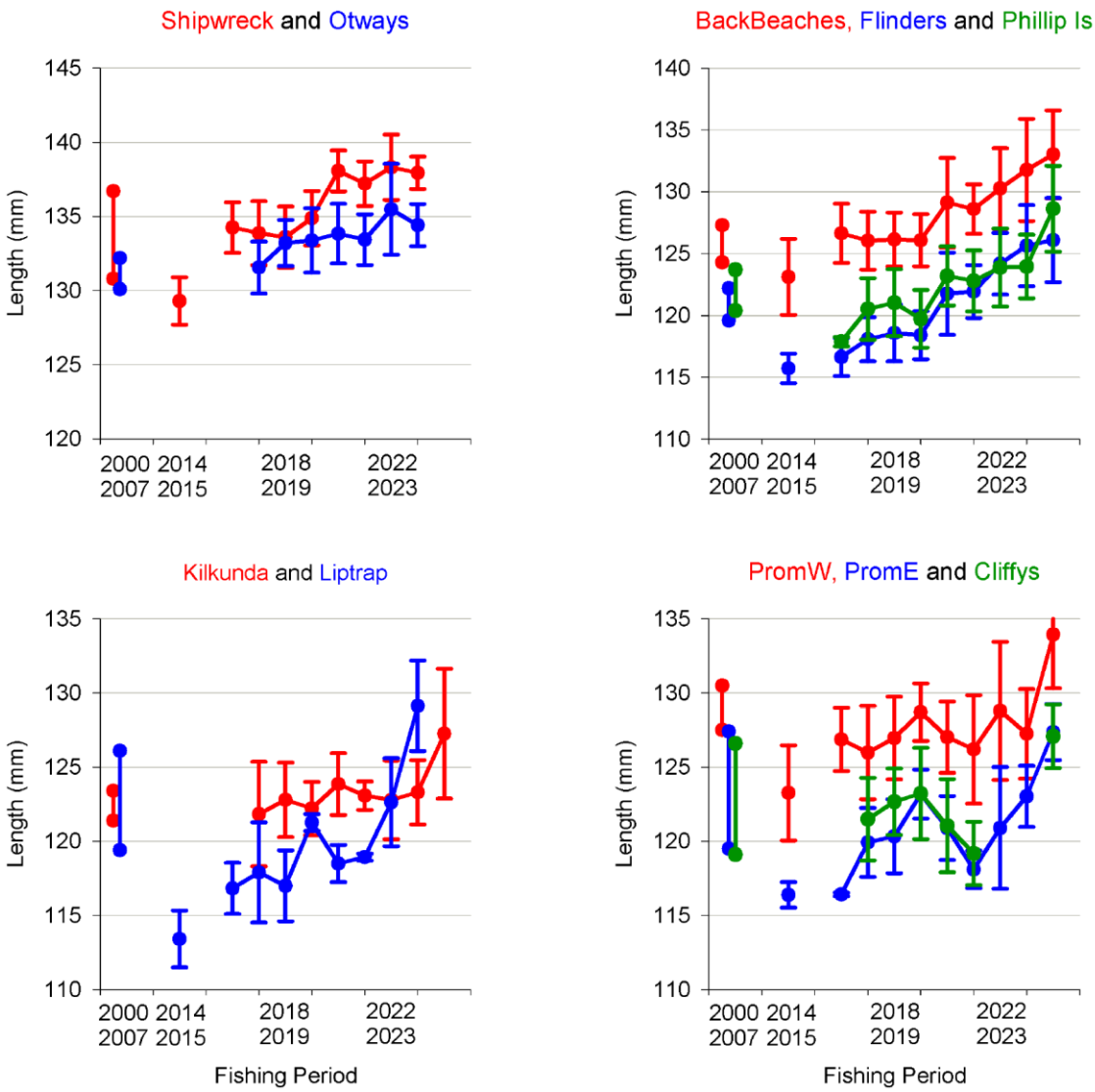

Figure 4. Trends in the raw average length of abalone landed for each SMU since 2014, with error bars showing SE (i.e. SD among means). The range of annual raw average length from the earlier 2000-2007 dataset are also shown for individuals above the size limits in 2019-20 (i.e. before the most recent LML increases).

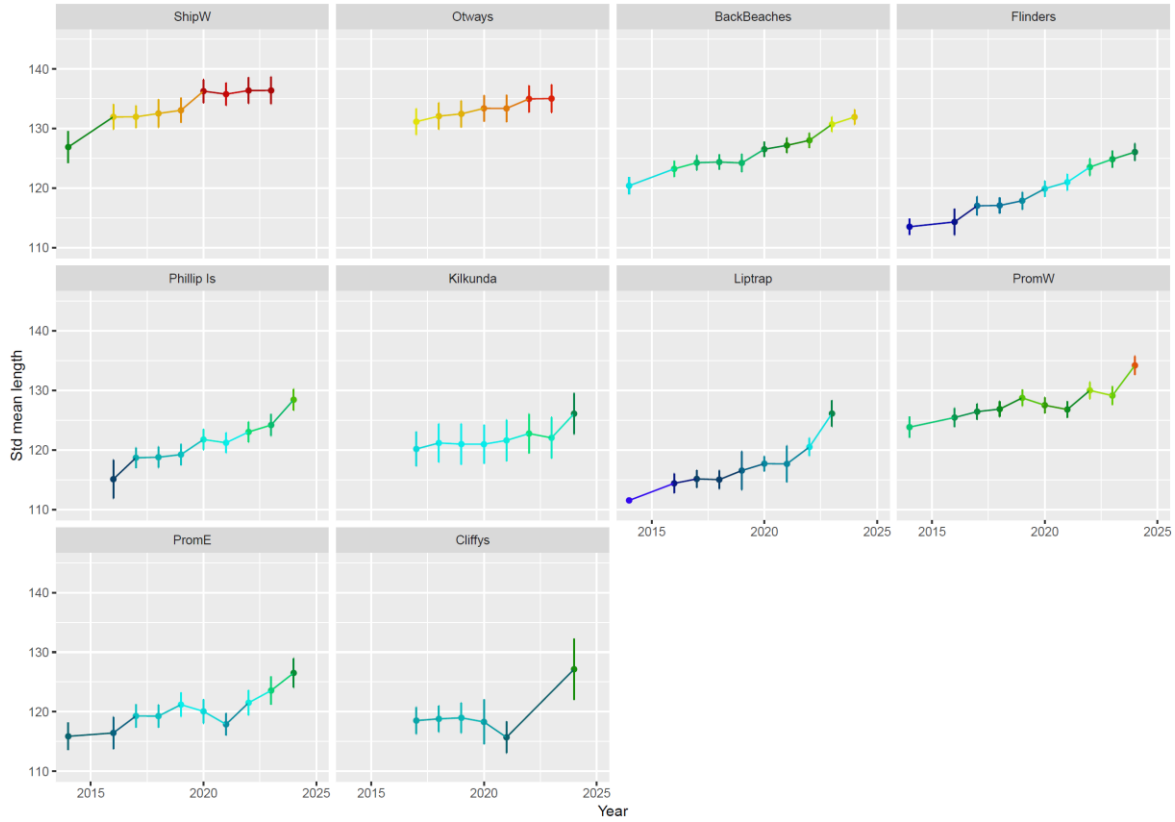

Figure 5. Standardised average length (+SE) of measured abalone by SMU.

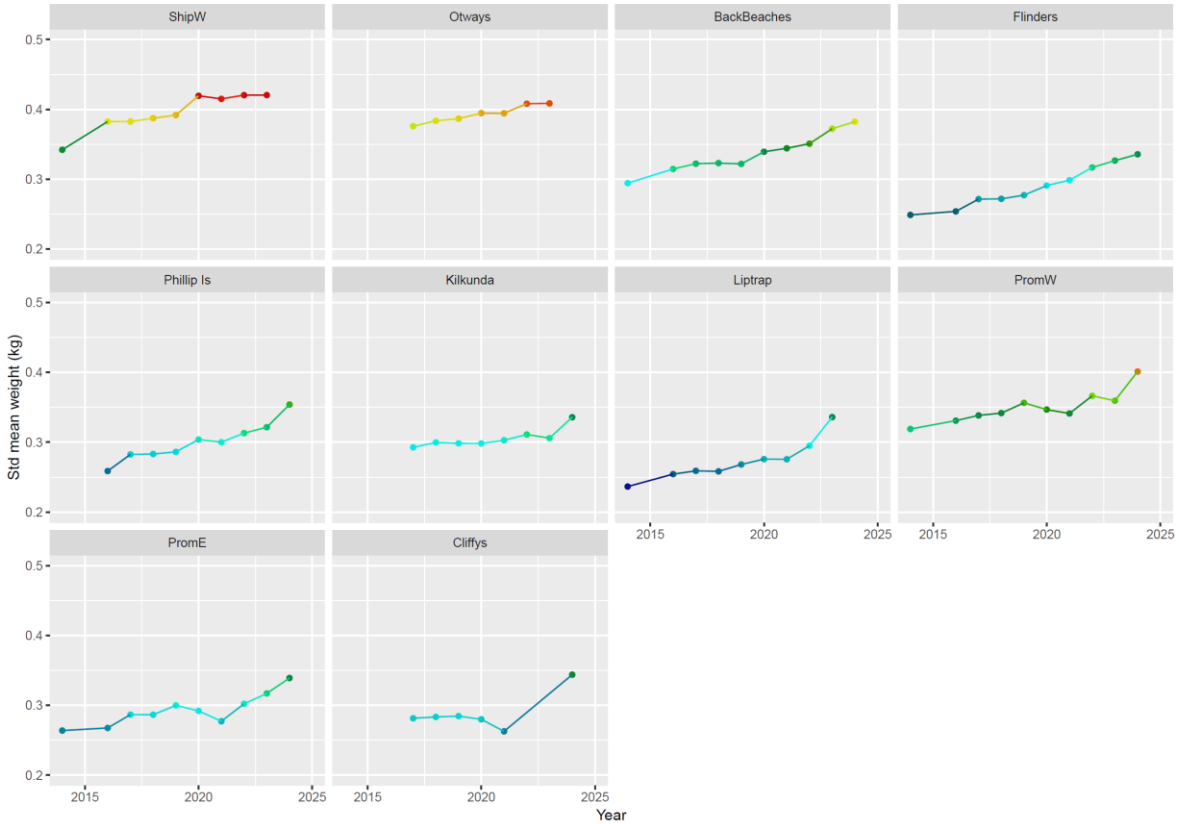

Figure 6. Standardised average weight of measured abalone by SMU, calculated from standardised lengths and a length-weight relationship.

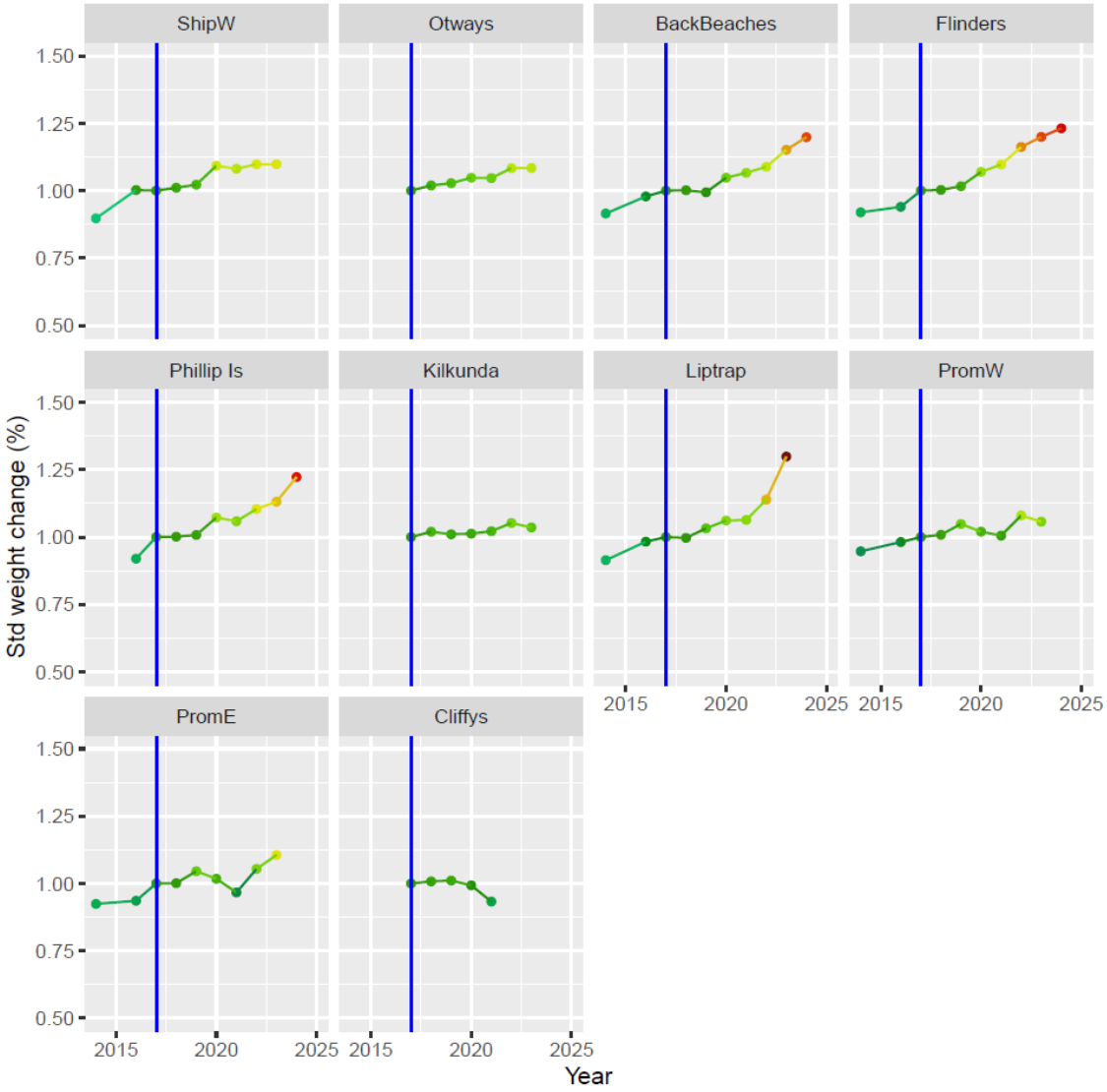

Figure 7. Standardised average weight change (i.e. as a proportion of those in 2016-17, shown by vertical blue line = 1.0) of measured abalone by SMU, from standardised lengths and a length-weight relationship. For example, the standardised average weight of an abalone measured at Flinders in 2024-25 is estimated about 25% larger (i.e. 1.25) than in 2016-17. NOTE NOT UPDATED

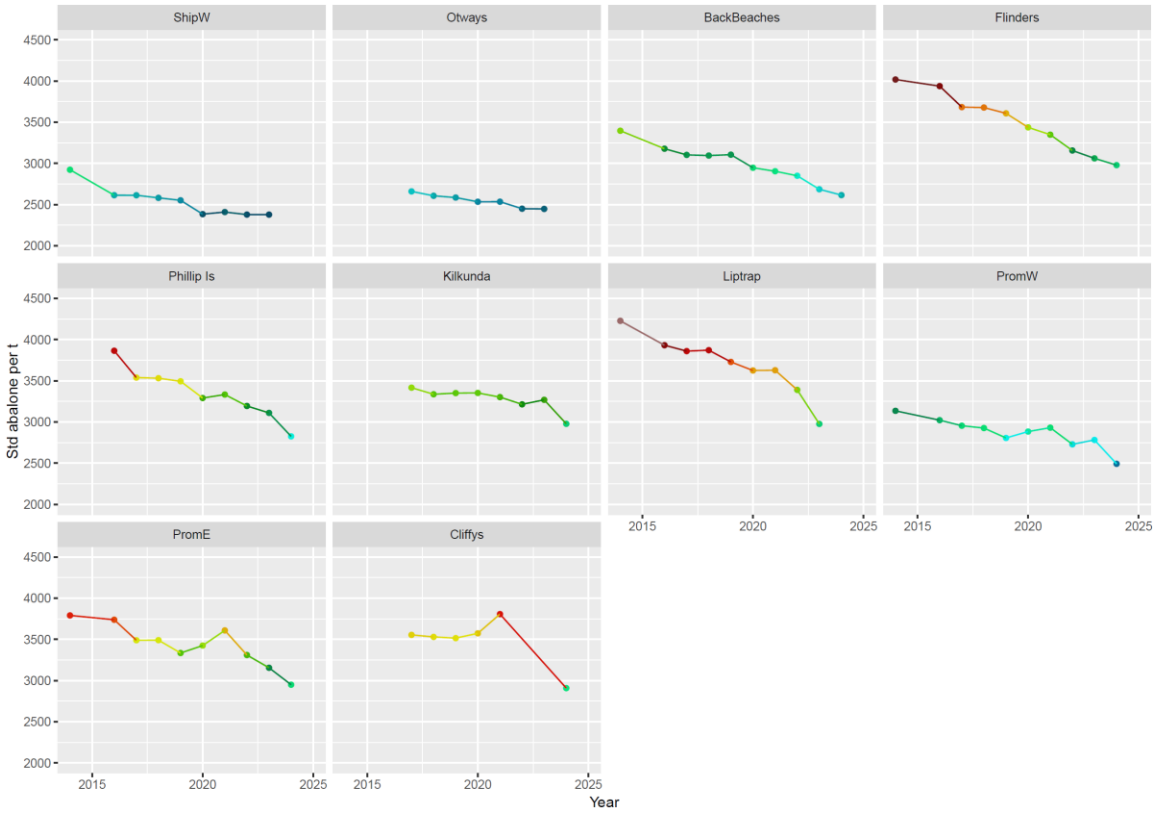

Figure 8. Estimated number of abalone per t of catch or TAC, calculated from standardised length and weight of measured abalone by SMU.

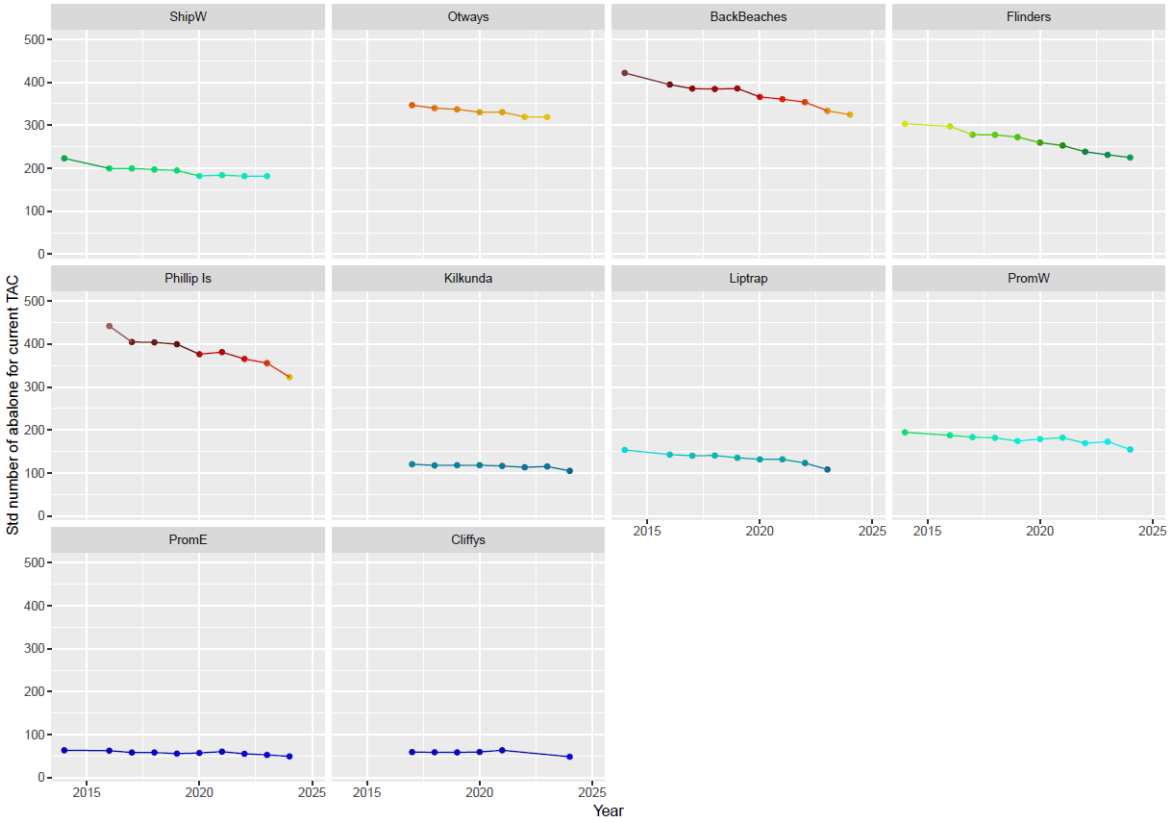

Figure 8b. Estimated number of individual abalone (in units of 1000) landed to catch the current TAC, calculated from standardised length and weight of measured abalone by SMU.

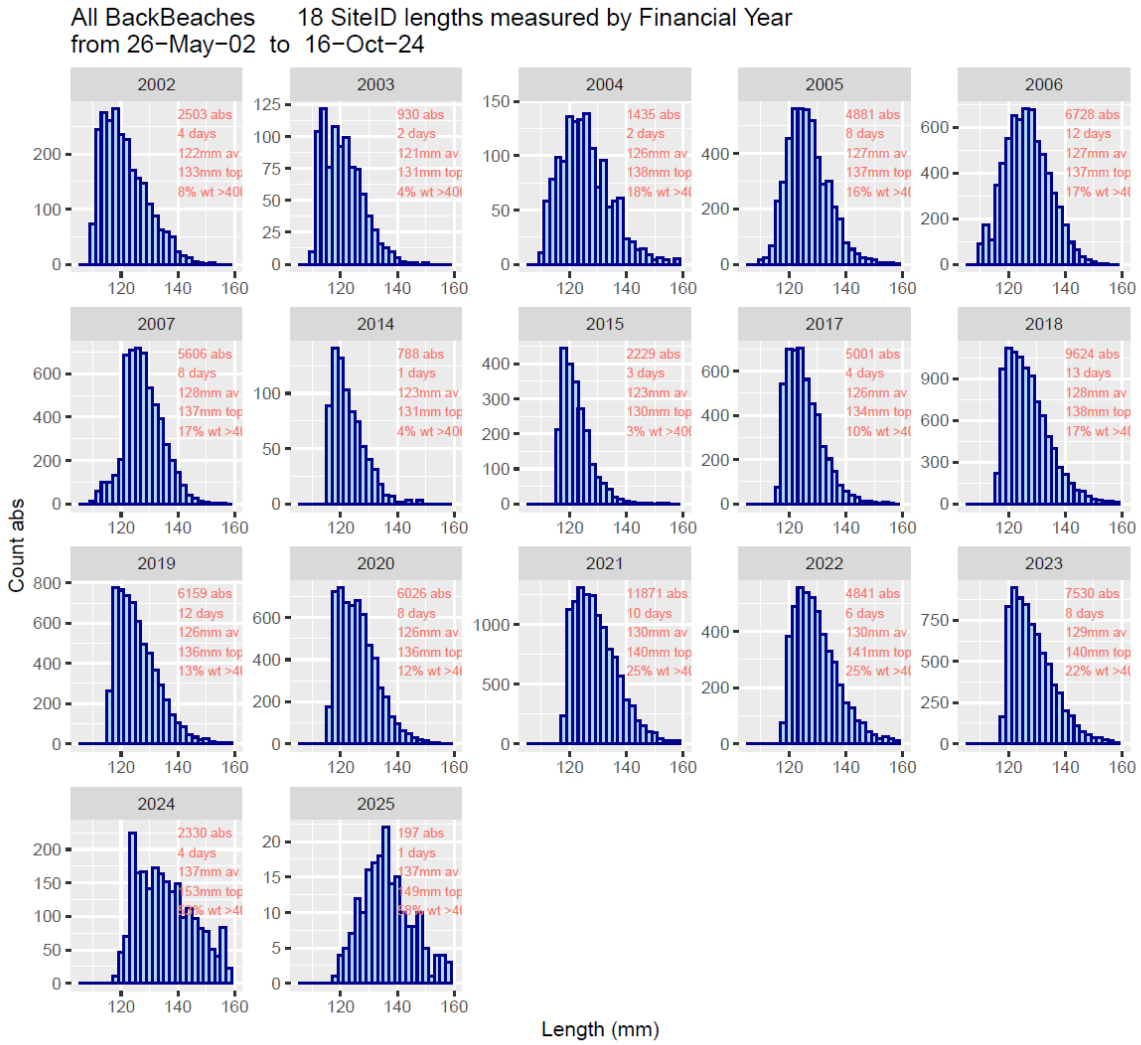

Figure 9. Length-frequency distributions at the scale of a site (i.e. SiteID 18) used for standardisation on the Back Beaches by Quota Year from 2017-2025, and with similar data from 2002-2007. Red text provides the number of abalone measured at the site each year, the number of diver-days, the average length, the length of the Top 10% (i.e. 90th percentile), and the % of abalone weight >400 g (i.e. using a length to weight relationship). NOTE NOT UPDATED

Figure 10. Raw average length per diver-day and site for measured abalone by SMU. Each dot represents a diver day within a defined site in each SMU with >30 measured abalone.