Application for assessment of the Victorian Fisheries Authority Abalone Fishery for approval under the *Environment Protection and Biodiversity Conservation Act 1999*

Contents

Introduction

This submission meets the requirements for assessment of the Victorian Fisheries Authority's (VFA) Wild Harvest Abalone Fishery under Part 13A the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).

This submission has been produced to enable the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to assess the Victorian Abalone Fishery management arrangements against the *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition* and the requirements set out in relevant sections of the EPBC Act.

The fishery

Description of the fishery

The commercial Abalone Fishery is a quota managed fishery, which extends the entire coastline of Victoria. It is subdivided into three management zones: Eastern (EZ), Central (CZ) and Western (WZ) (**Fig 1**). Each zone has an annual allocation of quota and a select number of issued licences (**Table 1**). Licence holders must adhere to their zones' regulations.

The recreational Abalone Fishery is regulated by strict size and daily bag limits, with a section of the coast known as Central Victorian Waters (**Fig 2**) having the additional regulation of only allowing select open fishing days.

All fishing activities are managed under the provisions of the *Fisheries Act 1995* (the Act), the *Fisheries Regulations 2019* (Fisheries Regulations), *Victorian Wild Harvest Abalone Fishery Management Plan 2015* (FMP) and other legislative instruments.

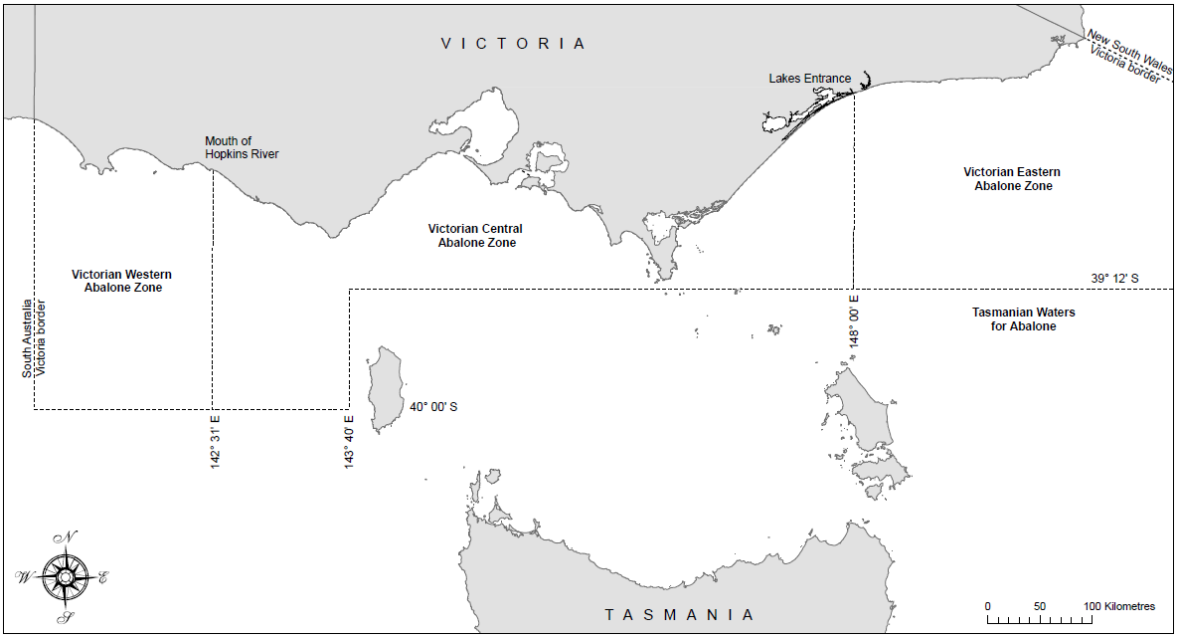

Fig 1. Map of the Abalone Fisheries commercial zones.

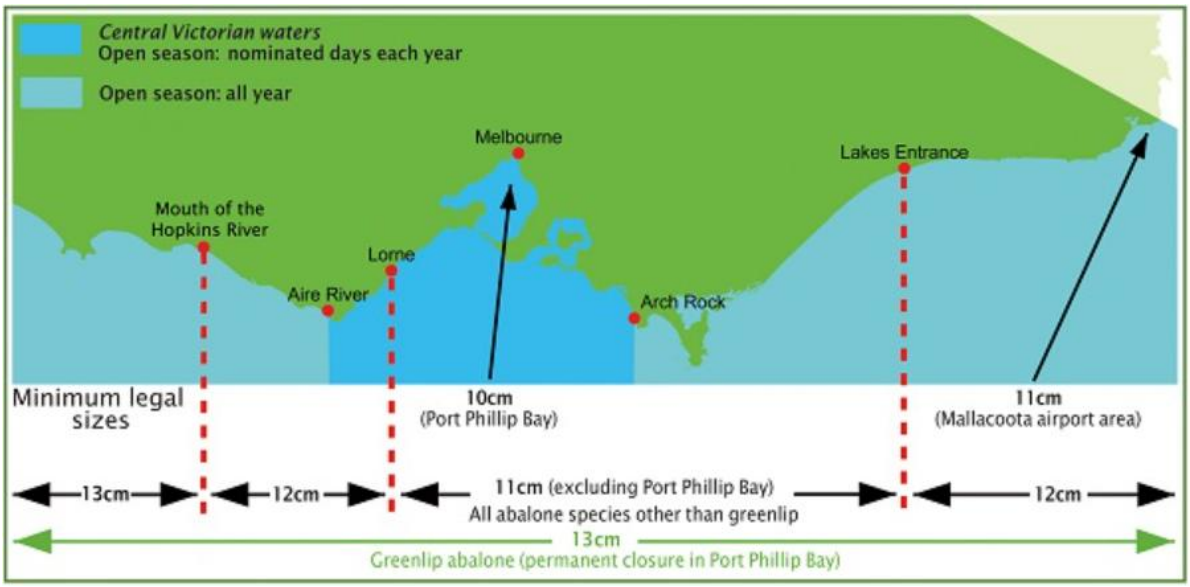

Fig 2. Map of Abalone recreational fishing zones.

Table 1. Key elements of the commercial fishery

	Western Zone	Central Zone	Eastern Zone
Zone boundaries (Figure 1)	South Australian border to Longitude 142o31'E, and south to Latitude 40oS	Longitude 142o31'E to Longitude 148oE, and south to Latitude 39o12'S	Longitude 148oE to New South Wales border, and south to Latitude 39o12'S
Maximum number of licences	14	34	23
Number of blacklip individual quota units	280	680	460
Number of greenlip individual quota units	14	34	0
Maximum number of licences per boat	Not limited		
Minimum quota holding per licence	5 units		
Maximum quota holding per licence/individual	No maximum		

Fishing methods and gear

The Abalone Fishery is a hand collection dive fishery, which allows the use of an abalone tool, abalone measuring tool (**Fig 3**), waist bag, scuba and hookah equipment for both commercial and recreational use. Divers use selective harvesting methods, which prevents bycatch in the fishery. Most divers use hookah equipment, which allows them to spend longer periods of time underwater. The abalone tool, unlike a knife, has a blunt edge squared blade that can separate the abalone from rocky surfaces without harming them. A measuring tool is always carried to ensure abalone are above the minimum size limit. Gear requirements are specified in Part 4 Section 37 of the Act.

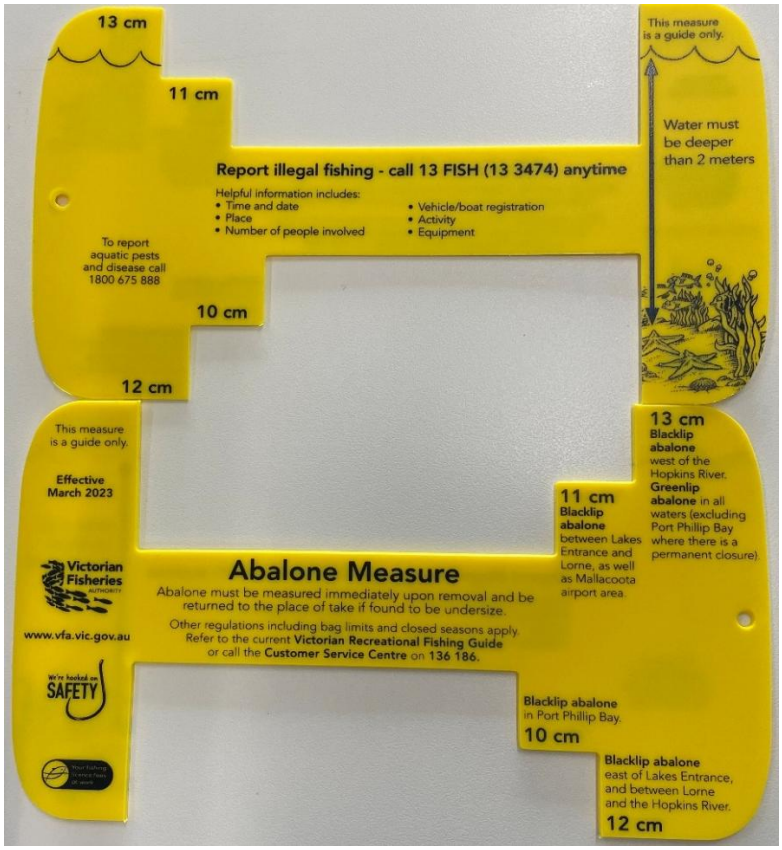

Fig 3. VFA recreational abalone measuring tool

Target and byproduct species

The fishery only targets blacklip abalone, *Haliotis rubra,* and greenlip abalone, *Haliotis laevigata*. It is a hand collection (selective) dive fishery, which results in no recorded byproduct. Divers can selectively harvest catch without harming or mistakenly catching other species. The target species are each managed with species-specific and zone specific annual Total Allowable Commercial Catch (TACC) limits. Annual TACC setting involves public consultation with key industry stakeholders and is supported by annual stock assessments containing fishery dependent and fishery independent data.

Value of the fishery

The VFA's estimated Gross Value of Production of the Abalone Fishery in the 2024-25 financial year was $13.3 million. Most wild caught abalone is exported, primarily to Hong Kong, China and Japan, while a small portion is sold to domestic markets.

Management regime

Description of the management regime

The Abalone Fishery is managed under the Act, the Fisheries Regulations, and the FMP. The EZ and CZ are directly managed by the VFA, whilst the much smaller WZ fishery is managed under a co-management arrangement with the Western Abalone Divers Association, via an annual co-management agreement.

The FMP was developed through a consultative process with industry stakeholders and the general public.

Incorporated in the FMP are two harvest strategies, which were also created through a consultation process. They were developed to apply specific management guidelines to the zones. The varying conditions used in the two harvest strategies enabled a more direct approach to sustainably manage the EZ and CZ fishery and the WZ fishery.

The management regime includes strategic objectives linked to actions and performance criteria to help identify and address industry concerns and assess the performance of the fishery. The FMP contains management controls for both the commercial and recreational fisheries (**Table 2**).

Table 2. Key management controls for the commercial and recreational Abalone Fishery

Element	Commercial Fishery	Recreational Fishery
Access to fishery	Entry limited to holders of an Abalone Fishery Access Licence Limited number of licences for each fishery zone Access to the intertidal zone permitted	Open access Recreational Fishery Access Licence (unless exempt)
Management Zones	Western Zone, Central Zone and Eastern Zone	Statewide
Output Controls	Total Allowable Commercial Catch and Individual Transferable Quotas	Daily bag and possession limit, spatial closures
Size Limits	Legal minimum size limits	Legal minimum size limits
Allowed fishing method and equipment	Abalone tool, Skindiving, SCUBA, hookah equipment	Abalone tool, Skindiving, SCUBA, hookah equipment
Other input controls (with scope to adjust via regulations, Fisheries Notice or permits)	Permanent closure for greenlip abalone in Port Phillip Bay Fishing only allowed between sunrise and sunset	Permanent closure for greenlip abalone in Port Phillip Bay Fishing only allowed between sunrise and sunset
Method of monitoring	Quota management system Random and targeted inspections	Random and targeted inspections

The Abalone Fishery management overview and link to the FMP can be found online at: https://vfa.vic.gov.au/commercial-fishing/commercial-fisheries/abalone

Consultation processes

The VFA undertakes public consultation with a wide range of stakeholders when developing or updating fisheries management arrangements. These consultative processes are a requirement under Part 1 Section 3A of the Act.

All items currently under consultation are placed on the VFA's website (Current Consultation link) in addition to being sent directly to key stakeholders. When consultation is finalised, the results of the consultation, including all public submissions, are published on the VFA's website (Completed Consultation link).

The VFA has annual consultation forums with industry stakeholders from each zone to discuss the annual stock assessment report and the setting of TACC for the next year. Minutes from annual TACC Forums can be found at the following link https://vfa.vic.gov.au/commercial-fishing/commercial-fisheries/abalone/total-allowable-commercial-catch.

The VFA holds forums and requests input from the following State and Zone management groups:

- Abalone Council Victoria
- Eastern Zone Abalone Industry Association
- Abalone Victoria Central Zone
- Central Abalone Victoria
- Western Abalone Divers Association (WADA)

The VFA, in conjunction with key stakeholders from each zone, meets quarterly as a part of an Abalone Scientific Working Group. During these meetings, the VFA utilises the experience and expertise of independent scientific personnel, fishery managers and abalone industry members to provide recommendations on how best to assess and monitor the Abalone Fishery across all three zones.

Under Division 3 Section 152 of the Act, the VFA can implement change to a regulation by issuing a Fisheries Notice. Prior to the issue of a Fisheries Notice, the VFA is required to consult with industry, stakeholders and the public.

Performance against objectives, performance indicators and performance measures

The performance of the EZ, CZ and WZ fisheries are assessed annually as part of the stock assessment and quota setting process. The Abalone Fishery is managed under the FMP. The VFA has developed two harvest strategies which outline performance measures and indicators. The harvest strategy for the EZ and CZ was developed collectively due to close similarities within the fisheries. The WZ is under a co-managed arrangement due to differing management structures within the fishery and an individualised harvest strategy specific to the WZ has been produced.

The EZ and CZ performance indicators measure and track the performance of the stock against the operational objectives in this harvest strategy and are integral in determining the level the TACC will be set at.

Three biological performance indicators are used in setting the TACC for the EZ and CZ Zone:

1. Primary Indicator: long term biomass trend measured using the four-year gradient CPUE
2. Secondary Indicator: short term biomass trend measured using a two-year CPUE ratio.
3. Depending on the zone, the tertiary indicator is:

a. Pre-recruit trend using the standardised average count of abalone from the fishery independent surveys (FIS) in the size range of the current legal minimum length (LML) to 20 mm below LML.
b. Fishing mortality measure using the mean weight converted from commercial catch length measurements.

Additional performance indicators are used in the assessment of the fishery. These do not result in explicit catch range adjustments in the fishery. They are used to provide a more comprehensive picture of the status of the fishery and trends over time during the stock assessment meetings. The additional performance indicators include:

1. Commercial diver observations
2. Commercial weight composition and logger data
3. FIS data

The WZ Primary Performance Indicators and Reference Points from the Harvest Strategy are based only on an abundance survey. These include estimates of the legal and mature biomass, and the number of pre-recruit abalone, with the WZ-scale indicators used to assess overall status of the stock. Secondary Indicators include commercial catch, catch rate and the lengths of abalone landed, interpreted at various spatial scales

The most recent stock assessments can be found at the following: Stock Assessment Reports - VFA

Controlling the level of harvest

The FMP and harvest strategies contain measures capable of controlling harvest levels of blacklip and greenlip abalone based primarily on output controls and input controls as a secondary mechanism.

Output controls:

- annual TACC for each management zone
- individual transferable quota
- zone-specific Abalone Fishery Access Licence, and
- recreational daily bag limit and possession limits
- catch is electronically monitored via VIC-eCatch (See section: Changes since the previous assessment)
- Vessel Monitoring System (VMS) (See section: Changes since the previous assessment)
- catch verification – catch must be recorded and only sold to licensed processors who must verify the catch amount recorded.

Input controls:

- spatial closures including permanent closure for greenlip abalone in Port Phillip Bay, and permanent closure of Central Victorian Waters to the recreational fishery except for select fishery open days (~62 days/year).
- fishing restricted to daylight hours (sunrise to sunset)
- limited entry - max 71 licences between WZ (14), CZ (34) and EZ (23)
- legal minimum size limit for each management zone
- gear restrictions (only allow abalone removal tool, SCUBA, and hookah), and
- spatial management (WZ, CZ and EZ) with individual TACCs for different species.

With regard to spatial management, the Abalone Fishery is a fine scale managed quota fishery, in which each zone is broken down into numbered reef codes. These are then grouped together based

on location and structural similarities, called Spatial Management Units (SMU's). The SMU's can encompass as low as three or as many as 15 reef codes depending on the area.

In determining TACC's and licence conditions, the VFA in consultation with each management zone, holds annual stock assessments and TACC forums. The workshops are facilitated by an independent chairperson and are open to attendance by all commercial quota holders, commercial abalone divers, representatives of the recreational fishing sector and other relevant stakeholders.

Harvest strategy

All parts of the fishery are managed by the EZ and CZ Harvest Strategy and WZ Harvest Strategy. The harvest strategies include reference points against which the fishery's performance is monitored and managed.

The harvest strategy is designed to provide a level of consistency and predictability in catch ranges and avoid large annual changes. The harvest strategy contains reference points that are linked to biological performance indicators to actively manage the fishery.

The EZ and CZ reference points are linked to the performance indicators, there are three types of reference points used; these are limit, threshold and target reference points (**Table 3**). All three reference points are calculated from a three-year moving average of the nominal CPUE from 1989 to 2015 for each commercial fishing zone and SMU's (**Table 3**). The reference period was selected as the first year after quota was introduced (1989) to the available data at the time of the harvest strategy development (2015).

Table 3. Spatial management unit reference points

Zone	Spatial Management Unit (SMU)	Limit Reference Point	Threshold Reference Point	Target Reference Point
Central	Back Beaches	50	70	100
	Cape Liptrap	40	60	120
	Cape Otway	50	70	100
	Cliffy Group	40	60	110
	Flinders	50	70	100
	Kilcunda	50	70	110
	Phillip Island	50	70	110
	Port Phillip Bay	20	30	70
	Prom Eastside	40	50	80
	Prom Westside	50	70	100
	Shipwreck Coast	40	60	130
	Surfcoast	40	60	70
Zone	Spatial Management Unit (SMU)	Limit Reference Point	Threshold Reference Point	Target Reference Point
Eastern	Airport	50	80	110
	Mallacoota Central	50	80	110
	Mallacoota East	50	80	110
	Mallacoota Large	50	70	110
	Mallacoota Small	50	70	100
	Mallacoota West	50	80	120
	Marlo	50	80	120

The WZ Harvest Strategy contains mature biomass targets and limits:

- **Target Reference Point**: The mature biomass (abalone ≥130 mm) is set at 1.7× the 2012–13 baseline
- **Limit Reference Point**: A critical threshold set at 0.5× the 2012–13 mature biomass baseline. If biomass falls below this, urgent management interventions are triggered

Pre-recruit Biomass Thresholds

- **Pre-recruit Reference Point**: Pre-recruits (~80–119 mm) are compared to a 2003–06 baseline. Falling below this baseline also triggers management review.

The most recent harvest strategies can be found at the following:

https://vfa.vic.gov.au/__data/assets/pdf_file/0018/1106136/EZ-and-CZ-Harvest-Strategy_May19.pdf

https://vfa.vic.gov.au/__data/assets/pdf_file/0020/1116452/Assessment-of-Abalone-Stocks-in-Western-Zone-Victoria-2025.pdf

Recovery strategies for overfished stocks

If abalone stocks are depleted below sustainable levels, the VFA has a range of strategies to implement to assist the recovery of the population:

- **TACC Adjustment**
  - The TACC for each zone is set annually and can be reduced in a specific zone if a depletion in stocks has been identified.
- **Minimum Legal-Size Adjustment**
  - The VFA can increase the minimum legal size for an abalone to further protect juvenile stocks to allow recovery.
- **Spatial Management and Reef code Closures**
  - If stock has declined in a specific area the VFA can reduce or close specific reef codes to fishing.
  - During the 2021 Abalone Viral Ganglioneuritis (AVG) outbreak areas in the WZ near Cape Nelson were closed for fishing.
- **Enhanced Monitoring and Research**
  - The VFA regularly collaborates with industry stakeholders including the Abalone Scientific Working Group to evaluate stock populations and has recently developed and implemented a new FIS data collection methodology representative of the modern fishery.

Eastern Zone - Recent trends in available data indicate that the stock has been in decline in recent years and the status of the EZ stock remains ‘declining’. Industry recommendations have been large reductions in the TACC for the 2024/25 and 2025/26 seasons, which were implemented by VFA.

Central Zone - The positive trends observed in all indicators over recent years suggests that the decline in zonal biomass has stabilised and biomass is likely increasing. On this basis, maintaining the TACC at current levels while continuing to monitor and improve biomass indicators has been the focus of management decisions.

Western Zone - Since AVG was confirmed in 2006, the WZ industry and the VFA have worked together to encourage conservative management and demonstrate rebuilding in the WZ Abalone Fishery. Through a combination of conservative catch and minimum size limits, spatial management of fishing and catch, and collection of data to demonstrate ongoing recovery and guide future TACC setting. There is considerable optimism about the state of the stocks and their ongoing recovery, consistent with high fishery performance indicators.

Enforcement of the management arrangements

The FMP contains enforcement measures supported by provisions under the Act and Fisheries Regulations. The key enforcement strategies for managing harvest are Abalone Quota Management System (AQMS), individual transferable quota units, TACC, electronic monitoring (known as VIC e-Catch), VMS and random and targeted inspections by Fisheries Officers. The AQMS begins reporting and tracks catch from the point of landing to the export or domestic retail sale of abalone. It assists the VFA to monitor the compliance of licence holders and processors.

The fishery uses electronic monitoring to record real-time catch, effort, and catch disposal data. Catches are validated via inspections in port and at processors (abalone fishers are required to sell to licensed processors and processors are required to record amounts via the VFA's e-Catch system of electronic monitoring). All vessels are required to have VMS on board and operating to track their movement. Compliance activities occur throughout the year and include random and targeted inspections on land, at sea and at processing facilities. An annual compliance risk assessment helps determine the level and location of compliance activity required.

Mitigating impacts on the wider ecosystem

Ecosystem management include actions and measures to identify and address any adverse impacts on the wider marine ecosystem. Annual FIS provide information on the wider marine ecosystem, including the abundance of competitor and predator species, substrate, food organisms and shelter species. The fishery is not likely to impact on the wider marine ecosystem therefore no risk assessment has been established.

National policies, plans and strategies

Abalone in Victorian waters are managed by Victoria, as such, national plans and strategies are not explicitly required for this application. However, the fishery's management are consistent with these arrangements.

Changes since the previous assessment

Electronic Logbooks - VIC-eCatch

The system of VIC-eCatch was introduced in 2020 under the Fisheries Regulations to phase out paper logbooks and was successfully implemented in the Abalone fishery. Commercial fishers use the VIC-eCatch app to provide an end-to-end service for catch reporting, including the creation and distribution of Catch Disposal Records. Electronic logbook reporting is legislated under Regulation 95 of the Fisheries Regulations.

There is a range of information recorded on VIC-eCatch that helps the VFA monitor the Abalone Fishery. Operators are required to fill in an online form with the following information every time they fish. Below is a summary of some key details they must enter:

1. Select boat registration and licence(s) fished

2. Select Port of departure and landing
3. Enter each reef fished (SMU or reef code)
4. Log dive effort – Time spent underwater fishing
5. Record weight caught and allocate to licences fished
6. Create separate catch disposal records for blacklip and greenlip abalone. Include number of bins, bin tag numbers, and the selected processor for sale/consignment
7. Fishers will be able to view their remaining quota by licence and species once complete

Vessel Monitoring System (VMS)

The introduction of VMS was formalised under the Fisheries Regulations, which required vessels operating in the abalone fishery to have an operating VMS installed and maintained in accordance with VFA-approved standards. VMS devices are used for the purpose of providing the VFA with information on vessel position, bearing and speed. This helps contribute to ensuring the sustainability of Victoria's marine resources and to make the VFA a more efficient and effective fisheries management agency. The use of VMS is stipulated under Regulation 77 and Division 2 of Part 17 of the Fisheries Regulations.

New Fishery Independent Survey (FIS) Strata

- The FIS program has been in place since 1992, with the same sites surveyed annually to maintain scientific consistency. In recent years however, licence holders in all zones have maintained that the locations are not representative of the areas fished, which has led to a lack of industry confidence in both the FIS and catch per unit effort (CPUE) trends used in stock assessments.
- In response, a review of the FIS program was commenced in 2022 through a working group comprising representatives from each zone to ensure alignment across the zones was achieved where possible.
- The outcome of the review recommended a new Fishery Independent Survey (FIS) Program for the central and eastern zones of the Abalone Fishery, which combined some elements of the historic program in order to maintain long-term data sets with new locations that are more representative of the currently fished areas.

Monitoring and data collection

Data collection, data validation and data monitoring programs

The VFA collects fishery dependent data in the form of catch per unit effort information via the VIC-eCatch application. This data is later standardised using an R script code that filters agreed outliers and the first 40 fishing trips of a new entrant. The standardised data is then used for the stock assessment process.

To collect fishery independent data, the VFA is in the process of installing 80+ new survey sites in shallow water fishing grounds in the CZ and EZ. These new transects follow a review of the FIS program, due to the contraction of the Abalone fishery into shallow water, whilst long term survey sites were located in deep and intermediate areas.

Stock assessments

Key target and byproduct species

The Abalone Fishery undergoes an annual stock assessment in each zone to determine the current sustainability, set quotas and decide on how the quota will be distributed within the zones. The stock assessment analyses the stock against performance indicators and reference points outlined in the current harvest strategy.

The EZ and CZ stock assessments are the responsibility of the VFA and are delivered by MRAG Asia Pacific. These stock assessments contain data from the most recently completed fishing season to inform the upcoming season. The WZ stock assessment is undertaken by WADA through the co-management agreement. This stock assessment uses the current season data.

Eastern Zone

- The total catch of 284.5 t in 2023/24 was close to 100% of the TACC (284.6 t), however it is currently around 60% of the peak historic catch following the introduction of quota in 1988.
- Standardised CPUE has declined by around 20% since 2019. Mean daily catches are at low levels from an historic perspective, however this appears to have been affected by individual daily catch limits applied by the region's licensed abalone processor.
- The analyses and trends in available data indicate that the stock has been in decline in recent years, and the status of the EZ stock remains 'declining'. Importantly, industry recommended a 77.0 tonne reduction in the TACC for the 2024/25 season and a 26.05 tonne reduction for the 2025/26 season to arrest the decline, which was implemented by the VFA.
- It is too early for any response to be observed in the available biomass, and on this basis, the assessment recommended maintaining the TACC settings at the current level until clear evidence of stock recovery over several years is apparent.

Central Zone

- The commercial catch in the CZ for 2023/24 was 222.3 t, which was 99.7% of the 222.9 t TACC.
- The weight of evidence assessment provides clear indications that stock recovery has begun to occur in the CZ, with increases in the main indicators of CPUE, mean daily catch, biomass survey data and average commercial size of abalone over the last four or more years.
- The stock assessment recommended that the TACC should be maintained around current levels to continue stock recovery, with allowance of small increases (up to five percent) in some of the reef codes.
- The 2024/25 quota period has a TACC of 225.1 t. Although data for the current 2024/25 quota year are not presented in the most recent stock assessment due to the timing the assessment is undertaken, the commercial catch was approximately 10 t below the TACC due to market factors.
- Recruit and pre-recruit abundance had increased by 16% and 37% respectively, and shell measure data shows increases in mean size.
- The most recent stock assessment provides the strongest evidence to date that biomass is likely recovering. However, it should be noted that stocks likely remain well below the conceptual target of biomass at maximum sustainable yield.

Western Zone

- The TACC for the 2024/25 season was 41.8 t blacklip and 1.9 t greenlip abalone.
- Under the co-management agreement, the stock assessment is undertaken by an industry appointed scientist, with the report provided to licence holders and the VFA. The assessment includes catch and effort data to the end of 2024. Estimates of biomass are derived from an independent survey conducted by the VFA in 2020.
- Fishery Performance Indicators have remained high where commercial fishing has continued at Port Fairy, Warrnambool and Lady Julia Percy, logger data suggested that abundance of legally sized abalone has remained stable in these SMUs. More productive reef codes (e.g. Crags, Killarney) have retained high fishery performance indicators and target catches, which are quickly landed early in the year following opening of the reef code, allowing strong recovery from fishing before the following season.
- The Portland SMU was fished for the first time since being closed in 2022 due to the presence of AVG. There appeared to be some recovery, but indications suggest that the population is still heavily depleted.

There is no bycatch or byproduct associated with this fishery.

Current stock assessments can be found here: Stock Assessment Reports - VFA

Indicator species

The Abalone Fishery is highly selective and only targets blacklip and greenlip abalone species and does not produce bycatch. These two species are the indicators of the health of the fishery. The harvest strategy contains trigger points when health of the fishery is in decline and aim to recover the fishery and maintain sustainability.

Distribution and spatial structure of key stocks

The Abalone Fishery is a fine scale managed quota fishery. Divided into three zones (EZ, CZ and WZ), individual TACC limits are set based on stock assessment and harvest strategy recommendations. Within each zone the coastline is broken down into individual reef codes, which are grouped into SMU's based on location. To build the TACC in each zone, catch targets and limits are set for each SMU. The sum of the SMU targets sets the TACC, which is divided evenly amongst the number of quota units in that zone. A small percentage of flexibility between SMU's is provided to allow for seasonal variation. The EZ and WZ is further broken down, with sustainable catch targets and limits set for each individual reef codes.

Positional data is a requirement for all operators within the fishery. All operators must have a VFA and AFMA approved Vessel Monitoring System (VMS) installed on their vessel to confirm they are fishing the correct reef code and not fishing marine parks and sanctuaries.

Recreational fishing is managed through regulating select open days in which fishers are allowed to dive for abalone. There is strict bag and size limits to prevent overfishing and protect juvenile populations.

Estimates of total removals

The Abalone Fishery is a strictly managed quota fishery. The annual TACC limits have not been exceeded in the last five years (see appendix 1 for total removals per quota year). The estimate of

total removals is only recorded on a commercial scale as the recreational fishery has strict bag and size limits which restrict the amount that can be taken.

Bycatch

Bycatch composition

Non – applicable as the abalone fishery does not produce bycatch.

Risk assessment on the effects of fishing on bycatch

There are no risk assessments for bycatch in this fishery due to the highly selective nature of the abalone fishery and the limited impact on other species and the surrounding environment.

Bycatch mitigation measures

Not applicable

Indicator bycatch species

Not applicable

Management actions

Not applicable

Protected species and threatened ecological communities

Fishery impacts on protected species and communities

There is no impact on threatened, endangered and protected species due to selective harvesting methods.

Mitigating risks to protected species

The fishery is not likely to impact protected species so therefore there are currently no measures in place to mitigate the risks to protected species.

CITES-listed species

The Victorian Abalone fishery does not harvest any CITES-listed species.

Ecosystem

Ecosystem management actions

This application has negligible ecosystem impact. It is for hand collection fishery which is very selective about the product taken. The VFA is of the view there is no impact to the ecosystem.

Management responses

Not applicable

Marine bioregional plans

This fishery does not operate within a current Marine Bioregional Area. However, Marine Protected Areas (MPA's) are found within all three zones of the Victorian Abalone fishery. The boundaries or MPA's are defined by GPS coordinates, and it is an offence to fish for abalone within MPA's in Victoria. Fisheries officers with enforcement powers proactively oversee the compliance of all fishing of MPA. Commercial abalone vessels are fitted with VMS units which provide live tracking of vessels and alerts to fisheries officers when a vessel is within the geo-fence of an MPA. Further to this, the coordinates of MPA's are outlined in the Fisheries Notices which set out the annual TACC in each zone.

Research

1. FRDC project: *Determine the risk that Southern Rock Lobster (SRL) fishing and other recreational and commercial fishing activities act as a vector of transmission AVG*.
    - This project seeks to apply risk assessment to explore the risk that SRL fishers and other activities pose to transmission of AVG and what level of risk mitigation is required to manage that risk. It may be possible to relax fishing and movement restrictions if the risk can be mitigated, or wider consideration of more activities may lead to risk mitigation recommendations for various activities.
    - https://www.frdc.com.au/project/2023-133

2. 2023 Review of Fishery-independent surveys for the central and eastern zone of the Victorian Abalone Industry
    - A review of the FIS program was commissioned by the VFA, informed by a Working Group that included commercial representatives.
    - The objectives of this review were:
        i. To map existing GPS data of fishing effort relative to FIS locations to examine historic shifts in effort and the extent to which current FIS sites represent fished areas.
        ii. To recommend options for a revised FIS program that captures:
            a. Existing FIS sites to monitor long-term recovery in the intermediate/deep reef strata and ensure continuation of historic dataset; and
            b. New FIS sites in current shallow reef fishing grounds to determine an index of abundance/biomass for this strata.

    A new FIS strata is currently being implemented.

Progress against current Conditions

Progress against current conditions placed on the abalone export approval are outlined in **Table 4.**

Table 4. Progress against current conditions placed on the Abalone Fishery

Condition	Progress
Conduct a review of the performance of the fishery in 2020 and provide a report of its findings to the Department. The review will enable progress from the management regime to be substantiated and ensure the fishery continues to be sustainable in the long term.	The performance report was completed in 2020 and formally submitted as required in 2022. The report covered the following questions. • Have the actions in the Plan been completed? • Did the actions result in the achievement of the objectives? • Are the objectives still relevant to management of the fishery? • What more is needed to achieve the objectives?

Appended Data Tables

APPENDIX 1 – Total catch data (per quota year)

Table 1A – Annual catch in kilograms per quota year of Blacklip Abalone in the Eastern Zone.

Eastern Zone	
Quota Year (Apr to Mar)	**Blacklip Catch (kg)**
2015/16	375,964.42
2016/17	362,984.99
2017/18	352,523.85
2018/19	346,483.25
2019/20	321,945.67
2020/21	282,534.77
2021/22	357,006.71
2022/23	330,947.47
2023/24	284,497.12
2024/25	208,499.44

Table 1B – Annual catch in kilograms per quota year of Blacklip and Greenlip Abalone in the Central Zone.

Central Zone		
Quota Year (Jul to Jun)	**Blacklip Catch (kg)**	**Greenlip Catch (kg)**
2015/16	261,283.00	2,858.69
2016/17	294,537.56	3,350.77
2017/18	319,116.21	3,755.48
2018/19	270,573.09	3,088.86
2019/20	177,055.44	2,350.71
2020/21	194,166.73	2,862.44
2021/22	241,351.30	2,999.02
2022/23	252,531.74	3,635.59
2023/24	222,327.48	3,545.81
2024/25	197,717.28	3,553.45

Table 1C - Annual catch in kilograms per quota year of Blacklip and Greenlip Abalone in the Western Zone.

Western Zone		
Quota Year (Jul to Jun)	**Blacklip Catch (kg)**	**Greenlip Catch (kg)**
2015/16	54,788.00	-
2016/17	58,448.49	id[1]
2017/18	75,350.70	1,355.73
2018/19	68,233.12	1,534.34
2019/20	44,710.24	id
2020/21	73,142.51	2,016.94
2021/22	60,731.29	1,614.29
2022/23	33,838.32	890.43
2023/24	30,649.03	id
2024/25	41,189.75	id

[1]id, insufficient data to report because there are less than five licence holders (policy requirement to protect commercial confidentiality of data).