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Economic Indicators for the NSW Abalone Fishery in 2023/24

A report for Department of Primary Industries and Regional Development

2 December 2025

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Abbreviations

ABARES	Australian Bureau of Agriculture and Resource Economics and Science
CPI	Consumer Price Index
DPIRD	the Department of Primary Industries and Regional Development
FRDC	Fisheries Research and Development Corporation
fte	full-time equivalent
GLS	Global Life Satisfaction
GOS	Gross Operating Surplus
GRP	Gross Regional Product
GSP	Gross State Product
GVP	Gross Value of Production
NSW	New South Wales
PWI	Personal Wellbeing Index

Acknowledgements

In the preparation of economic and social indicators for the NSW commercial fisheries, BDO has relied heavily on the voluntary cooperation of fishing operators in providing data for the surveys. We are particularly grateful for the time and cooperation generously provided by fishing businesses in responding to the rather lengthy questionnaire. BDO is also indebted to the members of the Commercial Fishing NSW Advisory Council, NSW Wild Harvest Fishers Inc. and the Sydney Fish Market for providing the necessary information, advice and support. NSW DPIRD officers provided assistance, were supportive of the data collection and offered valuable advice which was much appreciated.

Glossary

Active business: refers to a fisher operating a fishing business which fished at least one day during the relevant period.

Beach price: refers to the unimproved price received by commercial fishers when landing their catch at the beach, wharf or port (also referred to as wharf price and comparable to farm gate price), and is generally expressed in terms of $/kg or $/unit. Processing margins are not included in the beach price as processing operations are assumed to occur further along the value chain. The use of beach prices also removes the effect of transfer pricing by the firm if it is vertically integrated into the value chain.

Boat business profit: is defined as gross operating surplus less depreciation less owner-operator and unpaid family labour. Boat business profit represents a more complete picture of the actual financial status of an individual firm, compared with gross operating surplus, which represents the cash in-cash out situation only.

Boat cash income: is defined as gross operating surplus less imputed wages for owner-operator and unpaid family labour.

Boat gross margin: is defined as gross income less total boat variable costs. This is a basic measure of profit which assumes that capital has no alternative use and that as fishing activity (days fished) varies there is no change in capital or fixed costs.

Cost of management: in a commercial fishery management services will generally include biological monitoring and reporting; policy, regulation and legislation development; compliance and enforcement services; licensing services; and research. Approximated by licence fees in this report.

Days fished: refers to the number of days fished by a fishing business throughout the relevant period.

Depreciation: refers to the annual reduction in the value of working capital due to general wear and tear or the reduction in value of an item over time. Note this is a measure of economic depreciation not accounting depreciation[1].

Employment: is a measure of the number of working proprietors, managers, directors and other employees, in terms of the number (total jobs) or full-time equivalent (fte) jobs. One fte is considered to be 37.5 hours per week for 42 weeks per year.

Endorsement: authorises the holder to take certain species of fish in certain areas using specific methods. To be eligible for an endorsement in a share management fishery, a minimum number of shares of a corresponding type must be held.

Equity: commercial fishing businesses in New South Wales utilise valuable fishery shares, vessels or vehicles and other working capital. They may hold cash and may also hold debt to finance the business and other liabilities. The total assets held by a business less its total liabilities is the business' equity, which can be expressed in dollar terms or as a percentage of total asset value.

Fishing business: for the purpose of this report is an economic entity rather than a legal entity and is defined by Fishing Business ID or Authorised Fisher ID.

Gross income: refers to the cash receipts received by an individual firm and is expressed in Australian dollar terms. *Gross Income* is calculated as catch (kg) multiplied by 'beach price' ($/kg). Total boat income is the contribution of an individual fishing business to the GVP of a fishing sector or fishery.

[1] Accounting depreciation allocates the cost of an asset over its useful life.

Gross operating surplus (GOS): is defined as gross income less total boat cash costs and is expressed in current Australian dollar terms. GOS may be used interchangeably with the term gross boat profit. A GOS value of zero represents a breakeven position for the business, where total boat cash costs (TBCC) equals total boat cash receipts (TBCR). If GOS is a negative value the firm is operating at a cash loss and if positive the firm is making a cash profit. GOS does not include a value for owner/operator wages, unpaid family work, or depreciation.

Gross regional product (GRP) and gross state product (GSP): is a measure of the net contribution of an activity to the regional/state economy. Contribution to GRP or GSP is measured as value of output less the cost of goods and services (including imports) used in producing the output.

Gross value of production (GVP): refers to the value of the total annual catch for individual fisheries, fishing sectors or the fishing industry as a whole, and is measured in dollar terms. GVP, generally reported on an annual basis, is the quantity of catch for the year multiplied by the average monthly landed beach prices.

Sample size: is the total sample, including both 2023/24 survey and 2019/20 supplementary responses.

Total boat cash costs (TBCC): defined as Total Boat Variable Costs plus Total Boat Fixed Costs.

Total boat fixed costs: are costs that remain fixed regardless of the level of catch or the amount of time spent fishing. As such these costs, measured in current dollar terms, are likely to remain relatively constant from one year to the next. Examples of fixed cost include:

- insurance
- administrative and industry fees
- office & business administration (communication, stationery, accountancy fees)
- interest on loan repayments and overdraft
- leasing.

Total variable costs: are costs which are dependent upon the level of catch or, more commonly, the amount of time spent fishing. As catch or fishing time increases, variable costs also increase. Variable costs are measured in current dollar terms and include the following individual cost items:

- fuel, oil and grease for the boat
- bait
- ice
- provisions
- crew payments
- unscheduled repairs & maintenance.

Working capital: includes capital items that are required by the fishing business to earn the gross income[2]. It includes boat hull, engine, electronics and other permanent fixtures and tender boats. Other capital items such as motor vehicles, sheds, cold-rooms, and jetty/moorings are included to the extent that they are used in the fishing business.

[2] Working capital should not be confused with financial capital which is money provided by lenders for a price (interest).

Document history and status

Doc Version	Doc Status	Issued To	Qty Elec	Date	Reviewed	Approved
1	Draft	Tobias Probst	1 Word 1 PDF	19/9/2025	ADM	ADM
2	Draft	DPIRD Fisheries	1 Word 1 PDF	24/10/2025	ADM	ADM
3	Final	DPIRD Fisheries	1 Word 1 PDF	2/12/2025	ADM	ADM

Last Saved:	2/12/2025 9:23 AM
File Name:	Economic_Indicators_FY24_Abalone_Final_251202.docx
Project Manager:	Anders Magnusson
Principal Author/s:	Anders Magnusson & Jasmine Douglas
Name of Client:	Department of Primary Industries and Regional Development
Name of Project:	Economic Indicators for the NSW Abalone Fishery in 2023/24
Document Version:	3
Job Number:	2501

Summary

This report presents economic indicators for the Abalone fishery for 2023/24. This forms the fifth consecutive financial year of annual indicators.

BDO was contracted by the Department of Primary Industries and Regional Development (DPIRD) to develop an independent economic and social indicator monitoring program to inform stakeholders with published financial, economic and social information about commercial fisheries in New South Wales (NSW). The objective is to inform discussions and decisions about fisheries management and to develop an understanding of the values supported by the industry. This report is complemented by a more comprehensive report 'Economic Indicators for NSW Commercial Fisheries for 2023/24' (BDO 2025) that describes the monitoring program in detail and presents results for all NSW commercial fisheries.

A summary of key indicators is provided in Table S-1. In 2023/24, the Abalone fishery produced $3.0 million in gross value of production (at beach price) from a catch of 100 tonnes. The fishery generated -$300,000 in net economic return. Including flow-on contributions to the broader economy, the fishery supported $6.3 million of gross state product and 56 fte jobs in NSW.

An increase, and subsequential decrease, in price led to an overall increase in GVP between 2021/22 and 2023/24. However, rising labour costs during the same period led to a decline in the rate of return and net economic return generated by the fishery.

Table S-1 Summary of key economic indicators, 2021/22 to 2023/24[a,b]

Indicator	2021/22	2022/23	2023/24
Catch (t)	104t	99t	100t
Days fished	543	550	528
Gross value of production (beach price)	$2.7m	$4.7m	$3.0m
Active businesses	31 businesses	38 businesses	34 businesses
Rate of return on total working capital	1.0%	3.1%	0.8%
Fisheries fees/Gross value of production	6.6%	4.5%	7.0%
Active share value per active business[b]	$1,058,237	$901,767	$1,082,113
Gross state product (direct + flow-on)[c]	$4.1m	$9.6m	$6.3m
Employment (direct + flow-on)[c]	39 fte jobs	70 fte jobs	56 fte jobs
Net economic return	-$0.1m	$0.7m	-$0.3m
Net economic return/Gross value of production	-3.2%	15.2%	-11.2%

a All values reported are in real 2023/24 dollars.

b Active Share Value refers to the value of shares held by active fishers.

c The results increase from 2022/23 is due to improved supply-chain modelling.

Source: BDO analysis

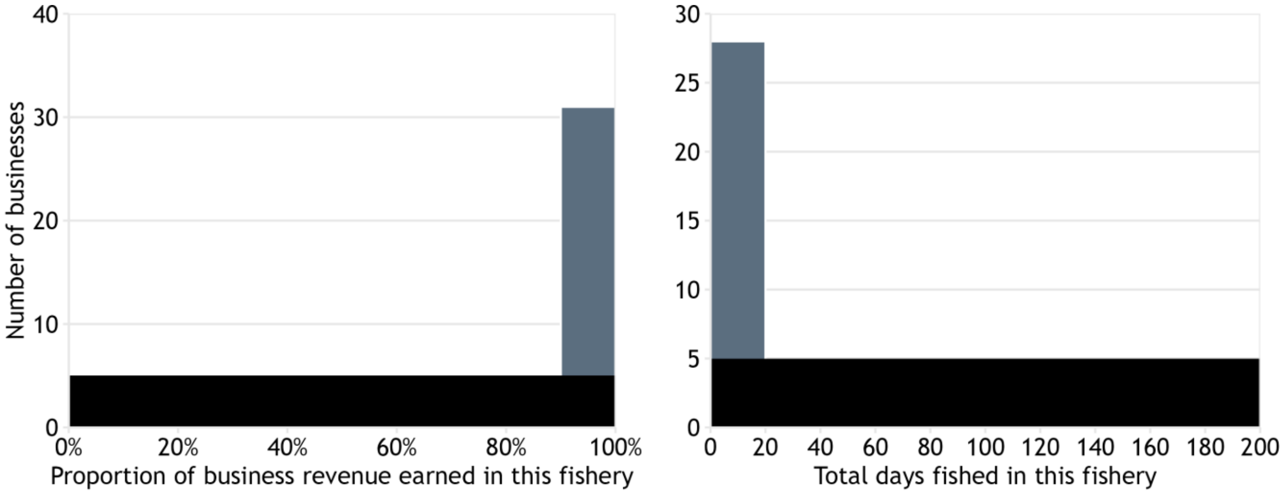
1. Introduction

This report presents economic indicators for the Abalone fishery for 2023/24. BDO was contracted by the Department of Primary Industries and Regional Development (DPIRD) to develop an independent economic and social indicator monitoring program to inform stakeholders with published financial, economic and social information about commercial fisheries in New South Wales (NSW). The objective is to inform discussions and decisions about fisheries management and to develop an understanding of the values supported by the industry. This report is complemented by a more comprehensive report 'Economic Indicators for NSW Commercial Fisheries for 2023/24' (BDO 2025) that describes the monitoring program in detail and presents results for all NSW commercial fisheries.

Abalone has been commercially fished in New South Wales since the 1960s. The Abalone fishery is a share managed fishery with a quota management system in place. Many shareholders employ divers and concentrate their fishing efforts in the south coast of New South Wales around the rock reefs where Abalone live.

The variation in businesses in the Abalone fishery in terms of proportion of revenue earned within the Abalone fishery and total days fished is presented in Figure 1-1. Each visible bar represents at least 5 businesses for confidentiality reasons. The black band along the horizontal axis covers the area between 0 and 4 businesses to ensure confidentiality. The limits of the horizontal axis are set to show non-confidential data only, which means there may be businesses with greater days fished than the maximum axis values.

Figure 1-1 Revenue share and days fished in the Abalone fishery, 2023/24



Source: 2025 survey and BDO analysis

Changes in this report

Compared to previous reports in this series, this report:

- Includes supplementary responses from the previous survey along with 2025 survey responses to bolster sample size and confidence
- Includes average valuation of shares table for access shares and quota shares within the fishery
- Includes a breakdown of supply chain including final sales and economic activity supported by supply-chain activities
- Includes revised supply chain in the economic contribution estimates from 2022/23.

Data

The indicators are based on a confidential survey of fishing businesses undertaken in 2021, 2022 and 2025, and administrative data provided by Department of Primary Industries and Regional Development (DPIRD). Survey data are confidential and BDO will not provide individual data to DPIRD in any form that is not also appropriate to be published publicly, such as by aggregating responses into groups of at least 5 for any statistic (see BDO 2025 for details). All results in this report are calculated from a representative model of the fishery developed from survey data. At a high level, the data collected includes:

- Survey data:
  - Itemised costs of fishing, business administration and associated processing
  - Species prices and market destinations
  - Share values
  - Quota values
  - Working capital values (e.g. vessel, vehicles, buildings and equipment)
  - Perceptions of management, lifestyle and wellbeing.
- Department of Primary Industries and Regional Development data:
  - Fisher level fishing activity such as catch by species and effort, including spatial and temporal dimensions
  - Share ownership and trading
  - Licence fees
  - Catch disposal details
  - Species prices provided by Sydney Fish Market (as a contingency for gaps in survey-based prices only).

Method

Indicators were produced through a number of techniques including:

- Business level statistical matching and imputation
- Supply chain modelling
- Regional economic contribution analysis (using an input-output model approach)
- Established financial reporting techniques
- Data visualisation.

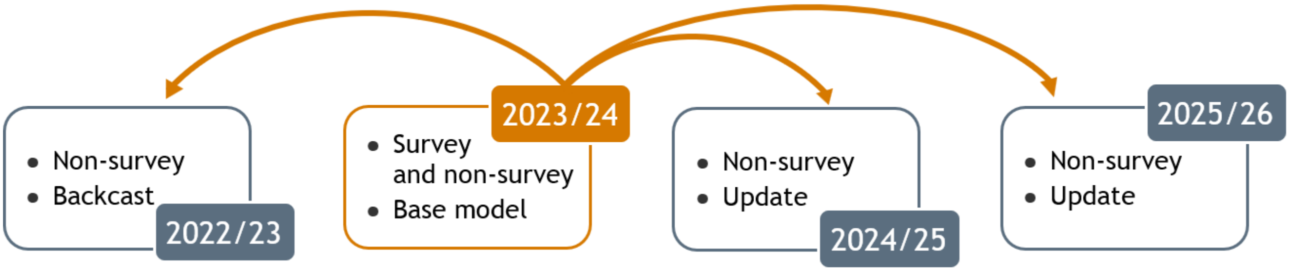
The supply chain analysis, developed under *FRDC Project 2022-038* (BDO 2023), used stakeholder input from six online workshops to map the post-harvest seafood and bait supply chains in NSW. These maps helped to illustrate the flow of products through various stages of the supply chain, from production to end use, and were then used to estimate the economic activity supported by these supply-chain activities.

The 2023/24 economic indicators for the New South Wales commercial fisheries were calculated using a range of primary and secondary data about 2023/24.

The 2022/23 economic indicators for the New South Wales commercial fisheries were calculated by backcasting the 2023/24 indicators using a range of primary and secondary data about 2022/23 and 2023/24.

Figure 1-2 summarises the fisheries reporting year and data approach for each financial year.

Figure 1-2 Methodology, 2022/23 to 2025/26

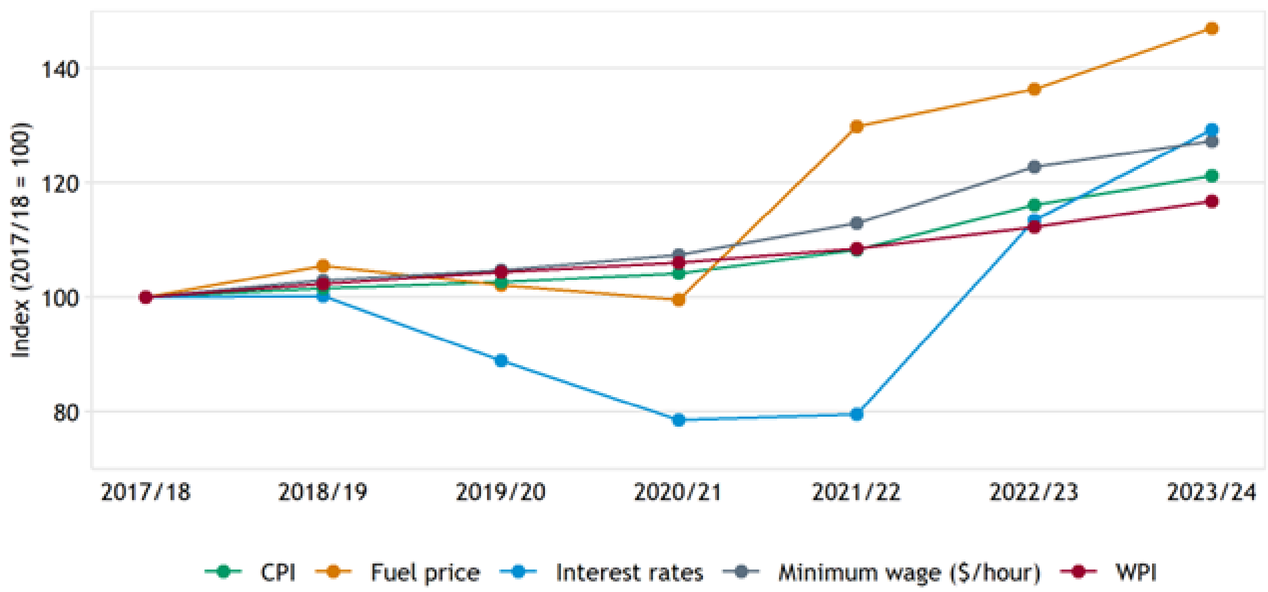


Fisheries monitoring and management data were obtained from NSW Department of Primary Industries and Regional Development for the 2022/23 financial year to adjust the 2023/24 indicators to reflect fishers' fishing and share trading activities in 2022/23. The imputation process involved calculating revenue using backcast species prices for 2022/23, then adjusting operating costs and employment for each business based on the difference in fishing effort and revenue between 2022/23 and 2023/24. Businesses that were active in 2022/23 but not 2023/24 were not represented in the base year data so were imputed in the same way as a non-surveyed business was for the 2023/24 indicators (see BDO 2025). Further, input prices were adjusted in line with changes in relevant cost indices. Figure 1-3 outlines the trend in each cost index for the past seven years and shows that the key feature of 2022/23 was that all indicators were lower compared to 2023/24. Finally, data on the 2022/23 financial year provided by DPIRD were used to quantify fishing licence fees and management costs.

Fish prices were backcast to 2022/23 prices from 2023/24 prices using relative changes in species prices observed in time series of price data provided by Sydney Fish Market and the Australian Bureau of Statistics trade data for exported species.

A description of the methods used to produce these indicators is presented in 'Economic Indicators for NSW Commercial Fisheries for 2023/24' (BDO 2025).

Figure 1-3 Input price indicator[a] trends, 2017/18 to 2023/24



[a] CPI = Consumer Price Index, Index Numbers, all groups CPI, Sydney; Minimum Wage ($/hour) = Fair Work Ombudsman, National Minimal Wage; Fuel Price = Consumer Price Index, Index Numbers, Automotive fuel, Sydney; WPI = Quarterly Index ; Ordinary time hourly rates of pay excluding bonuses; New South Wales; Private and Public; All industries; Interest Rates = Lending rates; Small business; Variable; Overdraft.

Source: BDO analysis

Indicators

This report presents on the following economic indicators:

- Business financial indicators
- Economic contribution indicators
- Fishery economic indicators.

Harvest Strategies

The NSW Harvest Strategies, developed under the NSW Fisheries Harvest Strategy Policy and Guidelines, provide a framework for ecologically sustainable development in fisheries. They set clear ecological, economic, social, and cultural objectives, guiding decision-making through performance indicators and reference points.

The Harvest Strategies focus primarily on catch and biomass indicators. Economic surveys are included in two strategies as a secondary indicator to measure economic performance. However, no reference or trigger points are in place.

The Abalone fishery is not currently subject to a harvest strategy.

Regions

Indicators for the Abalone fishery that have a regional dimension use the regions described in the table below.

Table 1-1 Indicator region definitions

Indicator category	Regions
- Economic contribution indicators	Fishing regions: - Region 1: Upper North Coast - Region 2: Clarence - Region 3: North Coast - Region 4: Central - Region 5: Metropolitan - Region 6: Upper South Coast - Region 7: Lower South Coast
- Survey sample summary - Business financial indicators	Spatial management units: - SMU 1 - SMU 2 - SMU 3 - SMU 4

2. Survey of fishing businesses

Fishing businesses were invited to participate in surveys which collected various data items that are not held by NSW Department of Primary Industries and Regional Development (DPIRD) but are required to calculate economic indicators.

Data were collected respecting the confidentiality of fishing businesses and were used by BDO to produce the economic indicator reports. The data were not distributed outside of BDO and may not be provided to NSW Department of Primary Industries and Regional Development without prior permission from the businesses in question.

2.1. Survey of fishing businesses, 2023/24

The survey of fishing businesses to collect information on the 2023/24 financial year was undertaken between March and May in 2025. Non-survey data were obtained from NSW DPIRD for the 2023/24 financial year.

The survey involved collecting data from fishing businesses for the 2023/24 financial year. Data were collected on species prices and markets, operating costs, processing activity, employment (including unpaid), endorsement values/leasing costs, capital value and depreciation, and social and demographic information. The survey used a questionnaire that was developed in collaboration with NSW DPIRD and with industry representatives. Businesses were asked to include only the amounts that were attributable to their NSW fishing business. If exact figures were not available (e.g. from a tax return), then they were asked to provide careful estimates.

The survey captured responses from 21 per cent of fishing businesses that were active in 2023/24. A business is considered active if it fished at least one day during 2023/24. Due to lower response rates, survey responses from the 2019 survey were used to supplement the sample, as long as they continued to operate in a similar way between the two survey years.

The total sample, including both survey and supplementary responses, represents 32 per cent of active fishing businesses. Regional response rates ranged from 20 per cent (Spatial Management Unit 1) to 37 per cent (Spatial Management Unit 3) (Table 2-1).

Table 2-1 Survey sample from 2025 in the Abalone fishery

Fishing region	Active businesses	Survey responses	Total sample size[a]	% (total sample size)
Spatial Management Unit 1	5	1	1	20.0%
Spatial Management Unit 2	21	4	7	33.3%
Spatial Management Unit 3	30	7	11	36.7%
Spatial Management Unit 4	27	5	8	29.6%
Whole fishery	**34**	**7**	**11**	**32.4%**

[a] Total sample size includes survey and supplementary responses.

Source: BDO analysis

3. Catch, value, prices, and final sales destination

Catch, price, value and market destinations are shown in Table 3-1 for the species where the survey provided at least 5 observations (to maintain confidentiality), these prices were used to calculate indicators. The Abalone fishery produced almost 100 tonnes of catch and $3.0 million in GVP (at beach price).

Trends in prices for key species are presented in Figure 3-1. Historic prices have been transformed into real terms to remove the distorting effect of inflation. In 2023/24, the average price was $30.14 per kg, a decrease from $47.44 per kg in 2022/23, but an increase from $26.30 per kg in 2021/22 (Figure 3-1). The sharp increase in 2022/23 reflects a shift from using 2020/21 survey prices to the 2023/24 survey prices, which aligned more closely with external price points. Notably, external sources indicated stable prices between 2019/20 and 2022/23 where a significant price drop occurred in 2023/24. The decrease in GVP between 2019/20 and 2023/24 was due to a fall in price per kg despite an increase in catch (Figure 3-2).

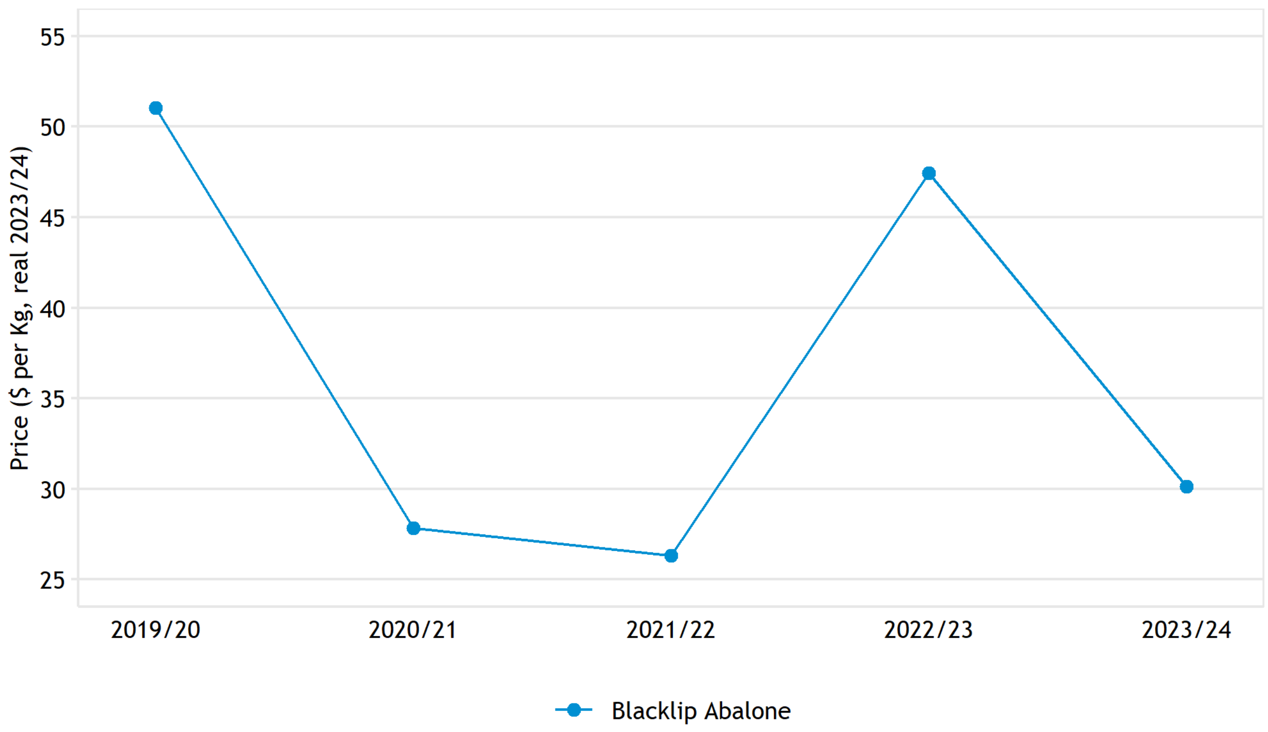
Final sales destinations include NSW (23 per cent) and overseas export (77 per cent).

Table 3-1 Catch, GVP and final sales destination for the Abalone fishery, 2023/24

Species	Catch	Price	Unit	GVP ($m)	Final sales destination (%)		
					NSW	Interstate	Overseas
Blacklip Abalone	**99,638**	**$30.14**	**Kg**	**$3.0m**	**22.8%**	**0.0%**	**77.2%**

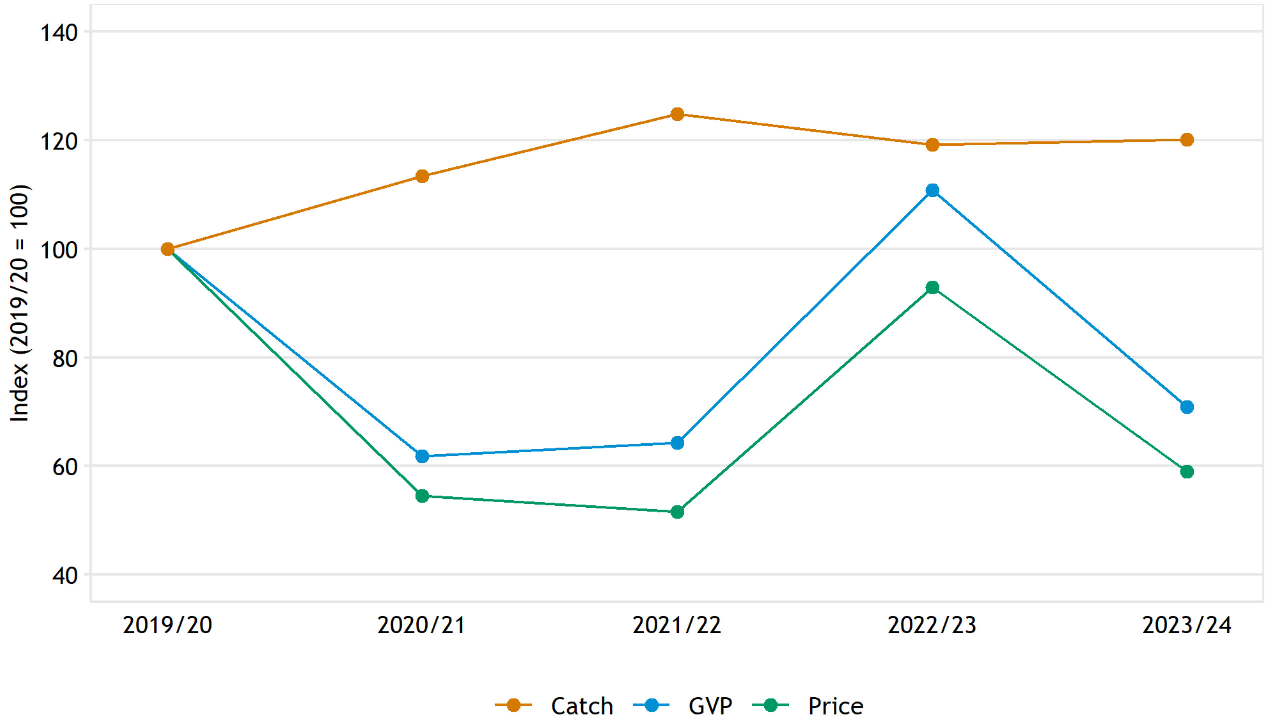
Source: BDO analysis

Figure 3-1 Prices for selected major species in the Abalone fishery, 2019/20 to 2023/24



Source: BDO analysis

Figure 3-2 GVP, price and catch indices for the Abalone fishery, 2019/20 to 2023/24



Source: BDO analysis

4. Financial performance

This section presents a series of tables that describe the average financial performance of businesses in the Abalone fishery in 2023/24. Sample sizes outlined in these tables are from the 2023/24 and 2019/20 surveys, on which the 2021/22 and 2023/24 indicators were based.

The average business refers to the average activity within the Abalone fishery of businesses that access the fishery, which means that a ‘business’ as represented in the financial indicators table may actually be just the proportion of the business attributable to the Abalone fishery. For example, a business that is active in both the Abalone fishery and another fishery will have their business activity (employment, expenditure, capital values, etc.) proportionally split between the financial indicators tables of the two fisheries.

Following the financial indicators tables, the value of assets, liabilities and equity of fishing businesses that accessed the Abalone fishery in 2023/24 is summarised.

4.1. Financial performance

Financial performance indicators are presented in Table 4-1 to Table 4-4 using the following various groupings:

- **Whole fishery:** provides an understanding of the average performance across the whole fishery.
- **Profitability quartiles:** provides an understanding of the performance of the average business in each profitability quartile (defined by return on investment). This allows comparison of business characteristics at different levels of profitability.
- **Activity level quartiles:** provides an understanding of the performance of the average business in each activity level quartile (by days fished). This allows comparison of the business characteristics of businesses with different levels of activity.
- **Fishing regions:** provides an understanding of the performance of the average business in each fishing region. This allows comparison of the business characteristics and performance of businesses active in each region. Business activity is proportionally split between regions in the same way it is split between fisheries.

Table 4-1 Financial performance of the average business in the Abalone fishery, 2021/22 to 2023/24[a]

Indicator		2021/22		2022/23		2023/24	
		Value per active business	%	Value per active business	%	Value per active business	%
Fishing businesses							
	Active businesses	31		38		34	
	Sample size	11		8		11	
Fishing activity							
	Days fished	18		14		16	
	Catch (kg)	3,340		2,603		2,931	
	Catch (no.)	-		-		-	
	Prop. of revenue earned in this fishery	95.3%		99.7%		97.3%	
Employment							
	Total jobs	1.9		1.9		1.8	
	Fte jobs	0.7		0.8		0.7	
(1)	**Gross income**	**$87,854**		**$123,496**		**$88,326**	
Variable costs							
	Bait/ice	$173	0%	$203	0%	$270	0%
	Fuel	$12,734	17%	$8,471	10%	$8,257	11%
	Labour - paid	$10,359	14%	$41,102	47%	$29,918	38%
(2)	Labour - unpaid	$6,949	9%	$3,081	4%	$2,799	4%
	Provisions	$1,733	2%	$700	1%	$848	1%
	Repairs & maintenance	$7,154	9%	$5,876	7%	$6,318	8%
	Other	$630	1%	$322	0%	$354	0%
(3)	**Total variable costs**	**$39,733**	**52%**	**$59,755**	**68%**	**$48,763**	**62%**
Fixed costs							
	Insurance	$5,100	7%	$4,114	5%	$4,026	5%
(4)	Interest	$4,754	6%	$3,056	3%	$3,782	5%
(5)	Labour - unpaid	$8,256	11%	$5,723	7%	$5,709	7%
(6)	Leasing of building, equipment & quota transfers	$0	0%	$4,790	5%	$5,279	7%
	Legal & accounting	$1,805	2%	$1,483	2%	$1,505	2%
	Fishing licence fees	$5,673	7%	$5,587	6%	$5,994	8%
	Office & admin	$6,255	8%	$348	0%	$356	0%
	Other licence fees	$1,364	2%	$626	1%	$564	1%
	Slipping & mooring	$577	1%	$9	0%	$10	0%
	Telephone etc.	$1,986	3%	$1,123	1%	$1,018	1%
	Travel	$966	1%	$1,395	2%	$1,506	2%
	Other	$0	0%	$0	0%	$0	0%
(7)	**Total fixed costs**	**$36,733**	**48%**	**$28,252**	**32%**	**$29,749**	**38%**
(8)	**Total boat cash costs (3+7)**	**$76,466**	**100%**	**$88,007**	**100%**	**$78,512**	**100%**
Profitability							
	Boat gross margin (1-3)	$48,121		$63,741		$39,562	
(9)	Total unpaid labour (2+5)	$15,206		$8,804		$8,509	
	Gross operating surplus (1-8+9)	$26,593		$44,294		$18,322	
(10)	Boat cash income (1-8)	$11,387		$35,489		$9,813	
(11)	Depreciation	$6,471		$7,663		$6,411	
(12)	Boat business profit (10-11)	$4,916		$27,826		$3,402	
(13)	Profit at full equity (12+4+6)[b]	$12,678		$33,314		$9,874	
Boat capital							
(14)	Fishing gear and equipment	$147,624		$131,303		$170,665	
	Licence value	$1,058,237		$901,767		$1,082,113	
(15)	**Total working capital**	**$1,205,861**		**$1,033,071**		**$1,252,778**	
Rate of return							
	Rate of return on fishing gear and equipment (13[b]/14*100)	6.1%		18.5%		4.4%	
	Rate of return on total working capital (13[b]/15*100)	1.0%		3.1%		0.8%	

[a] All values reported are in real 2023/24 dollars.

[b] Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: BDO analysis

Table 4-2 Financial performance in the Abalone fishery, average business in each profitability quartile, 2023/24

Indicator		Return on investment quartile Q1	Q2	Q3	Q4
Fishing businesses					
	Active businesses	9	8	8	9
	Sample size	3	4	1	3
Fishing activity					
	Days fished	11	14	13	23
	Catch (kg)	1,518	1,894	2,813	5,369
	Prop. of revenue earned in this fishery	97.0%	91.8%	100.0%	100.0%
Employment					
	Total jobs	2.2	1.9	1.8	1.5
	Fte jobs	1.1	0.8	0.6	0.5
(1)	**Gross income**	**$46,236**	**$56,972**	**$89,429**	**$157,305**
Variable costs					
	Bait/ice	$94	$0	$620	$375
	Fuel	$10,064	$7,778	$9,286	$5,959
	Labour - paid	$31,687	$14,798	$22,116	$48,525
(2)	Labour - unpaid	$3,440	$2,945	$959	$3,666
	Provisions	$549	$348	$1,635	$891
	Repairs & maintenance	$6,534	$5,927	$7,878	$5,063
	Other	$385	$293	$401	$334
(3)	**Total variable costs**	**$52,752**	**$32,090**	**$42,896**	**$64,812**
Fixed costs					
	Insurance	$4,361	$4,495	$4,083	$3,224
(4)	Interest	$2,465	$4,285	$4,632	$3,898
(5)	Labour - unpaid	$2,287	$10,636	$3,871	$6,385
(6)	Leasing of building, equipment & quota transfers	$1,360	$9,250	$6,258	$4,800
	Legal & accounting	$1,699	$1,593	$1,424	$1,306
	Fishing licence fees	$4,693	$6,611	$5,940	$6,794
	Office & admin	$327	$133	$564	$396
	Other licence fees	$920	$423	$574	$322
	Slipping & mooring	$6	$6	$15	$13
	Telephone etc.	$1,388	$599	$1,205	$855
	Travel	$928	$1,754	$2,020	$1,405
	Other	$0	$0	$0	$0
(7)	**Total fixed costs**	**$20,434**	**$39,785**	**$30,586**	**$29,398**
(8)	**Total boat cash costs (3+7)**	**$73,186**	**$71,875**	**$73,482**	**$94,210**
Profitability					
	Boat gross margin (1-3)	-$6,516	$24,882	$46,533	$92,494
(9)	Total unpaid labour (2+5)	$5,727	$13,581	$4,830	$10,051
	Gross operating surplus (1-8+9)	-$21,223	-$1,322	$20,777	$73,146
(10)	Boat cash income (1-8)	-$26,951	-$14,903	$15,947	$63,095
(11)	Depreciation	$8,147	$2,782	$8,210	$6,303
(12)	Boat business profit (10-11)	-$35,098	-$17,685	$7,737	$56,793
(13)	Profit at full equity (12+4+6)[a]	-$31,953	-$8,775	$15,634	$63,160
Boat capital					
(14)	Fishing gear and equipment	$141,134	$314,394	$112,033	$124,554
	Licence value	$853,760	$1,274,979	$1,033,538	$1,182,207
(15)	**Total working capital**	**$994,893**	**$1,589,373**	**$1,145,571**	**$1,306,761**
Rate of return					
	Rate of return on fishing gear and equipment (13[a]/14*100)	-20.7%	-2.2%	8.8%	36.3%
	Rate of return on total working capital (13[a]/15*100)	-3.2%	-0.5%	1.3%	4.7%

[a] Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: BDO analysis

Table 4-3 Financial performance in the Abalone fishery, average business in each days fished quartile, 2023/24

Indicator		Days fished quartile Q1	Q2	Q3	Q4
Fishing businesses					
	Active businesses	9	10	7	8
	Sample size	2	1	5	3
Fishing activity					
	Days fished	4	11	15	34
	Catch (kg)	823	2,121	3,091	6,173
	Prop. of revenue earned in this fishery	92.7%	98.9%	100.0%	98.1%
Employment					
	Total jobs	1.8	1.9	1.8	1.9
	Fte jobs	0.7	0.7	0.8	0.7
(1)	**Gross income**	**$24,797**	**$63,905**	**$98,334**	**$181,565**
Variable costs					
	Bait/ice	$0	$76	$457	$651
	Fuel	$3,416	$9,281	$13,526	$7,811
	Labour - paid	$6,106	$15,936	$31,295	$72,980
(2)	Labour - unpaid	$349	$718	$1,045	$9,694
	Provisions	$129	$842	$1,243	$1,318
	Repairs & maintenance	$3,038	$7,446	$7,939	$7,180
	Other	$104	$356	$384	$605
(3)	**Total variable costs**	**$13,141**	**$34,655**	**$55,890**	**$100,239**
Fixed costs					
	Insurance	$3,774	$4,395	$4,231	$3,668
(4)	Interest	$5,103	$5,255	$4,067	$207
(5)	Labour - unpaid	$2,029	$4,062	$5,856	$11,780
(6)	Leasing of building, equipment & quota transfers	$2,626	$6,839	$7,675	$4,218
	Legal & accounting	$1,232	$1,257	$1,889	$1,788
	Fishing licence fees	$4,922	$5,163	$6,066	$8,175
	Office & admin	$210	$353	$428	$459
	Other licence fees	$557	$801	$469	$357
	Slipping & mooring	$16	$16	$4	$0
	Telephone etc.	$910	$1,337	$721	$1,002
	Travel	$877	$1,671	$2,106	$1,480
	Other	$0	$0	$0	$0
(7)	**Total fixed costs**	**$22,256**	**$31,150**	**$33,513**	**$33,134**
(8)	**Total boat cash costs (3+7)**	**$35,397**	**$65,805**	**$89,403**	**$133,372**
Profitability					
	Boat gross margin (1-3)	$11,656	$29,251	$42,444	$81,326
(9)	Total unpaid labour (2+5)	$2,378	$4,779	$6,901	$21,474
	Gross operating surplus (1-8+9)	-$8,223	$2,880	$15,831	$69,666
(10)	Boat cash income (1-8)	-$10,600	-$1,899	$8,931	$48,192
(11)	Depreciation	$6,351	$5,904	$4,210	$9,040
(12)	Boat business profit (10-11)	-$16,951	-$7,803	$4,721	$39,152
(13)	Profit at full equity (12+4+6)[a]	-$10,536	$895	$12,737	$41,556
Boat capital					
(14)	Fishing gear and equipment	$121,849	$98,705	$354,970	$154,264
	Licence value	$967,355	$906,928	$1,055,472	$1,453,507
(15)	**Total working capital**	**$1,089,205**	**$1,005,633**	**$1,410,442**	**$1,607,771**
Rate of return					
	Rate of return on fishing gear and equipment (13[a]/14*100)	-7.1%	0.5%	2.9%	21.0%
	Rate of return on total working capital (13[a]/15*100)	-0.9%	0.1%	0.9%	2.5%

[a] Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: BDO analysis

Table 4-4 Financial performance in the Abalone fishery, average business in each region, 2023/24

Indicator		Region			
		SMU 1	SMU 2	SMU 3	SMU 4
Fishing businesses					
	Active businesses	5	21	30	27
	Sample size	1	7	11	8
Fishing activity					
	Days fished	3	7	7	6
	Catch (kg)	295	1,061	1,283	1,385
	Prop. of revenue earned in this region	8.5%	36.1%	41.2%	47.1%
Employment					
	Total jobs	0.2	0.7	0.7	0.9
	Fte jobs	0.1	0.3	0.3	0.3
(1)	**Gross income**	**$8,735**	**$31,041**	**$39,060**	**$42,065**
Variable costs					
	Bait/ice	$23	$43	$124	$164
	Fuel	$715	$3,057	$3,180	$4,354
	Labour - paid	$4,860	$10,570	$13,523	$13,528
(2)	Labour - unpaid	$571	$1,505	$1,140	$982
	Provisions	$50	$180	$359	$519
	Repairs & maintenance	$583	$2,288	$2,599	$3,608
	Other	$32	$133	$141	$179
(3)	**Total variable costs**	**$6,835**	**$17,777**	**$21,067**	**$23,334**
Fixed costs					
	Insurance	$428	$1,494	$1,673	$1,970
(4)	Interest	$227	$1,542	$1,466	$1,894
(5)	Labour - unpaid	$592	$3,020	$2,411	$2,051
(6)	Leasing of building, equipment & quota transfers	$707	$1,678	$2,409	$2,535
	Legal & accounting	$95	$619	$614	$714
	Fishing licence fees	$1,084	$5,008	$4,768	$5,703
	Office & admin	$20	$85	$157	$203
	Other licence fees	$47	$180	$227	$309
	Slipping & mooring	$1	$3	$4	$5
	Telephone etc.	$98	$303	$442	$582
	Travel	$174	$452	$663	$775
	Other	$0	$0	$0	$0
(7)	**Total fixed costs**	**$3,472**	**$14,384**	**$14,834**	**$16,741**
(8)	**Total boat cash costs (3+7)**	**$10,307**	**$32,161**	**$35,901**	**$40,075**
Profitability					
	Boat gross margin (1-3)	$1,899	$13,263	$17,993	$18,731
(9)	Total unpaid labour (2+5)	$1,163	$4,526	$3,551	$3,033
	Gross operating surplus (1-8+9)	-$409	$3,405	$6,710	$5,023
(10)	Boat cash income (1-8)	-$1,573	-$1,121	$3,159	$1,990
(11)	Depreciation	$771	$1,655	$2,840	$3,488
(12)	Boat business profit (10-11)	-$2,344	-$2,776	$318	-$1,498
(13)	Profit at full equity (12+4+6)[a]	-$1,763	-$390	$3,012	$1,696
Boat capital					
(14)	Fishing gear and equipment	$9,618	$97,534	$58,817	$71,918
	Licence value	$99,235	$477,214	$425,568	$500,264
(15)	**Total working capital**	**$108,853**	**$574,748**	**$484,385**	**$572,182**
Rate of return					
	Rate of return on fishing gear and equipment (13[a]/14*100)	-10.5%	-0.3%	3.6%	1.7%
	Rate of return on total working capital (13[a]/15*100)	-1.5%	-0.1%	0.6%	0.3%

[a] Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: BDO analysis

Fishing activity

The average business that accessed the Abalone fishery in 2023/24 employed 0.7 fte jobs and fished on 16 days of the year, an increase from 14 days of fishing on average in 2022/23, but a decrease from 18 days in 2021/22 (Table 4-1).

Revenue and costs

Average gross income was $88,326 and average total variable costs was $48,763 producing an average boat gross margin of $39,562. Average total fixed costs were $29,749 which produces an average gross operating surplus of $18,322 (excluding unpaid labour), a decrease from $44,294 in 2022/23 and $26,593 in 2021/22 (Table 4-1).

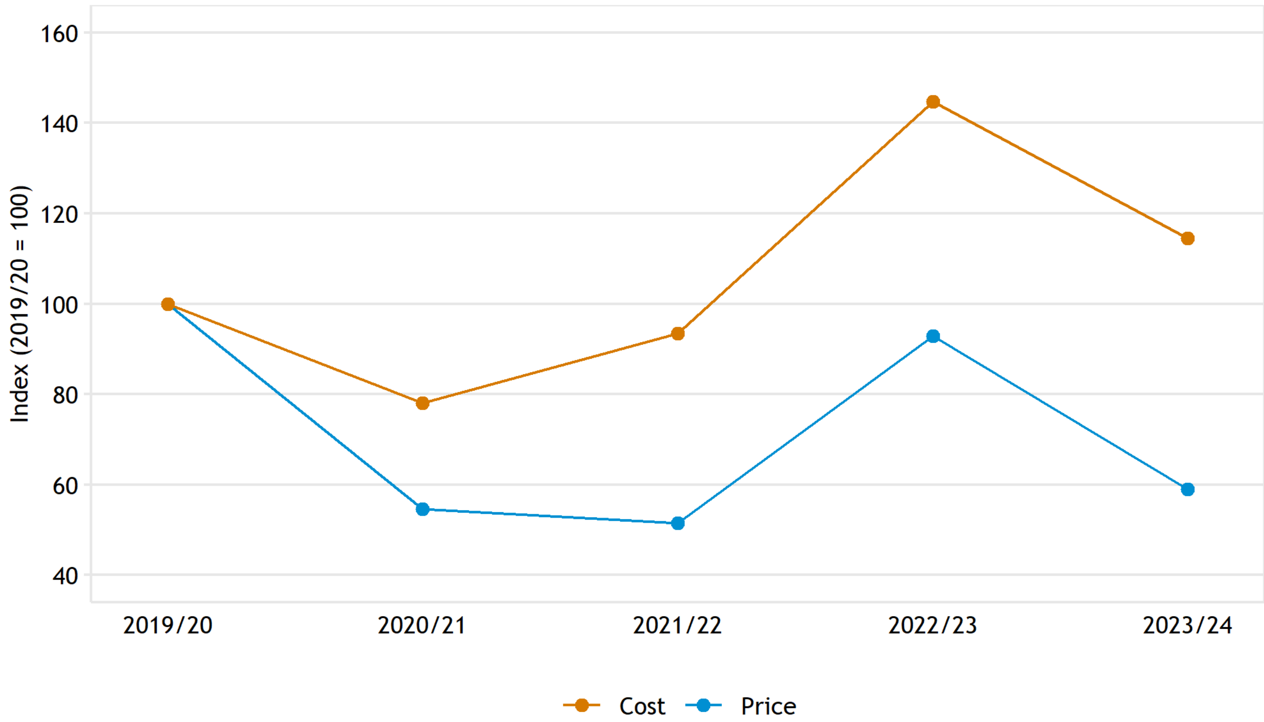
Profitability

Average boat business profit, which accounts for depreciation and unpaid labour, was $3,402 in 2023/24. Average profit at full equity, which excludes any leasing and interest costs, was $9,874. Dividing profit at full equity by the value of capital produces a return on investment of 4.4 per cent for 2023/24 (down from 18.5 per cent in 2022/23 and 6.1 per cent in 2021/22) including the capital value of fishing gear and equipment only, or 0.8 per cent (down from 3.1 per cent in 2022/23 and 1.0 per cent in 2021/22) when also including the capital value of fishery shares or licences (Table 4-1).

Cost prize squeeze

Price and cost indices for the Abalone Fishery for the years 2019/20 to 2023/24 are summarised in Figure 4-1. These indicators are derived from the average price and average cost per kilogram of catch. Between 2019/20 and 2023/24, the average price decreased in real terms, while the average cost increased, squeezing profits in the fishery.

Figure 4-1 Price and cost indices for the Abalone fishery, 2019/20 to 2023/24



Source: BDO analysis

4.2. Assets, liabilities, and equity

Commercial fishing businesses in New South Wales utilise valuable fishery shares, vessels or vehicles and other working capital. They may hold cash and may also hold debt to finance the business and other liabilities. The total assets held by a business less its total liabilities is the business' equity, which can be expressed in dollar terms or as a percentage of total asset value. Table 4-5 presents a simple average of the equity of all surveyed businesses that access the Abalone fishery. The averages are based on business asset and debt data collected in the 2023/24 survey. The average is of whole businesses and includes the share values for all fisheries that they access, unlike the financial indicator tables above which present averages of proportions of businesses that access the fishery.

Table 4-5 Assets, liabilities and equity in the Abalone fishery, 2023/24

	Value
Assets	
Share value	$1,409,532
Working capital	$477,989
Other assets	$432,057
Total assets	$2,319,578
Liabilities	
Total liabilities	$192,198
Equity	
Total equity	$2,127,381
Equity/Total assets	91.7%

Source: BDO analysis

Share values in the Abalone fishery are shown in Table 4-6. Values are self-reported by respondents in the 2023/24 survey and are shown where the surveys provided at least 5 observations (to maintain confidentiality), these prices were used to calculate indicators. Share values for other fisheries are shown in 'Economic Indicators for NSW Commercial Fisheries for 2023/24' (BDO 2025).

Table 4-6 Share values in the Abalone fishery, 2023/24

Endorsement	Abbreviation	Value per unit
Access share		
Abalone	AB	$11,000

Source: BDO analysis

5. Economic contribution

Estimates of the economic contribution of the Abalone fishery to the NSW and regional economies in 2023/24 are outlined in this section.

Economic contribution analysis is a descriptive analysis that traces the gross economic activity of the fishery as dollars of expenditure cycle through the regional and state economies. The analysis utilised the detailed industry specific data reported above in combination with other regional/state data that describe the linkages that exist within the regional economies.

Contribution or impact?

An *economic contribution analysis* (presented in this report) can be thought of as a *footprint* or *snapshot* analysis of economic activity. It is distinctly different to an *economic impact analysis*, which can be thought of as an analysis of a *change* in economic activity (not the subject of this report). An *economic impact analysis* is an appropriate approach for evaluating a *change* where an industry is generating new revenues that would otherwise not occur, keeping revenues in the region that would otherwise be lost, or being subject to changes that result in existing revenues being lost.

Direct and flow-on effects

The following types of activity are presented in this report as *direct* economic contribution:

- the landed beach value of production
- the sustaining capital expenditure of fishing businesses
- the margin value of each stage of the supply chain.

Each of these activities generates flow-on effects to other sectors through purchases of inputs and the employment of labour. These effects have been estimated using input-output analysis (BDO 2025).

Post-harvest supply chain

Figure 5-1 illustrates the direct output at key stages of the Abalone post-harvest supply chain used to calculate economic contribution, along with the final sales destinations (indicated by green arrows). The market destination values in Figure 5-1 differ from those implied by Table 3-1 as Figure 5-1 captures all value-added products downstream of the landed catch, while Table 3-1 captures catch exported by fishers or processors at beach price.

In 2023/24, the value of output from fishing (also known as GVP) generated in the Abalone fishery was $3.0 million. The product then moved through processing and marketing, including wholesaling, which generated approximately $1.2 million. Around 23 per cent of the product was distributed across the food services and retail sectors within the NSW market, generating an additional $390,000 and less than $100,000, respectively. The remaining 77 per cent was directly exported. Supporting transport activities contributed a further $247,000.

This resulted in a total final sales value of $5.0 million, comprising $3.4 million in overseas export sales, and the remainder in NSW sales.

Figure 5-1 Abalone post-harvest supply chain, direct output generated by each sector and final market destination value ($m)

Source: BDO analysis

Economic contribution indicators

Economic contributions have been specified in terms of the following indicators.

- Value of output (direct only and equivalent to gross value of production or GVP)
- Employment (fte and total jobs)
- Household income
- Gross regional (and state) product.

5.1. Economic contribution to New South Wales

The estimated economic contribution of the Abalone fishery to New South Wales in 2023/24 is presented in Table 5-1.

Direct contribution measures fishing and downstream supply chain activities (i.e. capital expenditure, processing and marketing, retail, food service and transport). Flow-on contribution measures the economic effects in other sectors of the economy (retail and wholesale trade, manufacturing, etc.) generated by fishing and supply chain activities, that is, the multiplier effects. Flow-on effects are disaggregated by industry with the top 10 industries shown separately in the table. Capital expenditures are assumed to be the same as depreciation (i.e. sustaining the capital stock) which may or may not be the case in a given year but is a reasonable assumption in the long-run. Economic contribution of capital expenditure should, therefore, be interpreted as a long-run average.

Value of output

The value of output at beach price (also known as GVP) generated directly in the Abalone fishery in 2023/24 was $3.0 million. The remainder of the post-harvest supply chain generated an additional $2.0 million in output (Table 5-1).

Household income

Estimated household income of $1.3 million was earned in 2023/24 in the Abalone fishery (wages of employees and estimated drawings by owner/operators) while the associated post-harvest supply chain of the catch and capital expenditure by fishing businesses generated an estimated additional household income of $0.5 million.

Flow-on business activity was estimated to support a further $1.9 million of household income in 2023/24 state-wide. The estimated total household income contribution in New South Wales was $3.8 million in 2023/24 (Table 5-1), a decrease from $5.0 million in 2022/23.

Table 5-1 Economic contribution to New South Wales of the Abalone fishery, 2023/24

Sector	Output ($m)	Gross state product ($m)	Household income ($m)	Employment (fte jobs)	Employment (total jobs)
Direct					
Fishing business operation	3.0	2.0	1.3	25	63
Fishing business capital expenditure	<0.1	<0.1	<0.1	<1	1
Processing and marketing	1.2	0.6	0.3	4	4
Transport	0.2	0.1	<0.1	<1	1
Retail	<0.1	<0.1	<0.1	<1	1
Food service	0.4	0.2	0.1	3	3
Total direct	**5.0**	**2.9**	**1.8**	**33**	**71**
Flow-on					
Retail trade		0.3	0.2	3	3
Personal & other services		0.2	0.2	2	2
Professional, scientific & technical services		0.3	0.3	2	2
Admin support services		0.2	0.1	2	2
Public order & safety		0.1	0.1	2	2
Food & beverage services		0.1	0.1	2	2
Health & community services		0.1	0.1	2	2
Public admin & regulatory services		0.1	0.1	1	1
Wholesale trade		0.2	0.1	1	1
Finance		0.3	<0.1	<1	1
Other sectors		1.6	0.6	6	5
Total flow-ons		**3.4**	**1.9**	**22**	**23**
Total contribution		**6.3**	**3.8**	**56**	**94**

Source: BDO analysis

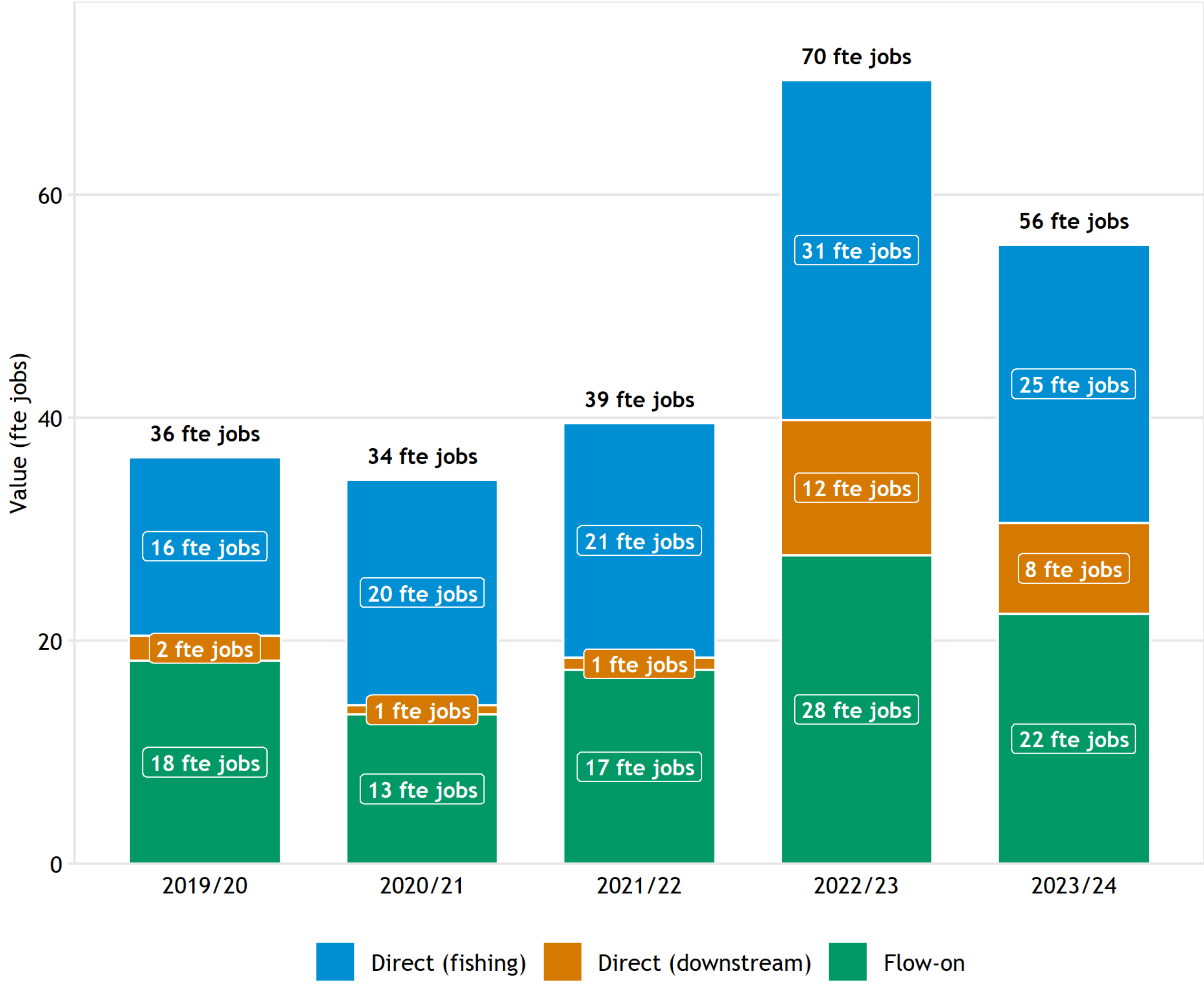
Employment

The Abalone fishery directly contributed an estimated 25 fte jobs in 2023/24 while associated post-harvest supply chain of the catch and capital expenditure by fishing businesses supported additional employment of around 8 fte jobs (Table 5-1).

Flow-on business activity was estimated to support a further 22 fte jobs in 2023/24 state-wide. These jobs were concentrated in the retail trade, personal and other services, and professional, scientific and technical service sectors. The total employment contribution to New South Wales was estimated to be 56 fte jobs in 2023/24 (Table 5-1), a decrease from 70 fte jobs in 2022/23 (Figure 5-2).

The economic contribution to employment of the Abalone fishery between 2019/20 to 2023/24 is illustrated in Figure 5-2. Direct employment has increased since 2019/20 from around 16 fte jobs to 25 fte jobs in 2023/24. Direct downstream activity saw an increase over the same period which is driven by the inclusion of additional supply chain activities in 2022/23. Flow-on business activity has increased from 18 fte jobs in 2019/20 to 22 fte jobs in 2023/24. Overall total employment has increased.

Figure 5-2 Economic contribution to employment of the Abalone fishery, 2019/20 to 2023/24[a]



[a] The results increase from 2022/23 is due to improved supply-chain modelling.

Source: BDO analysis

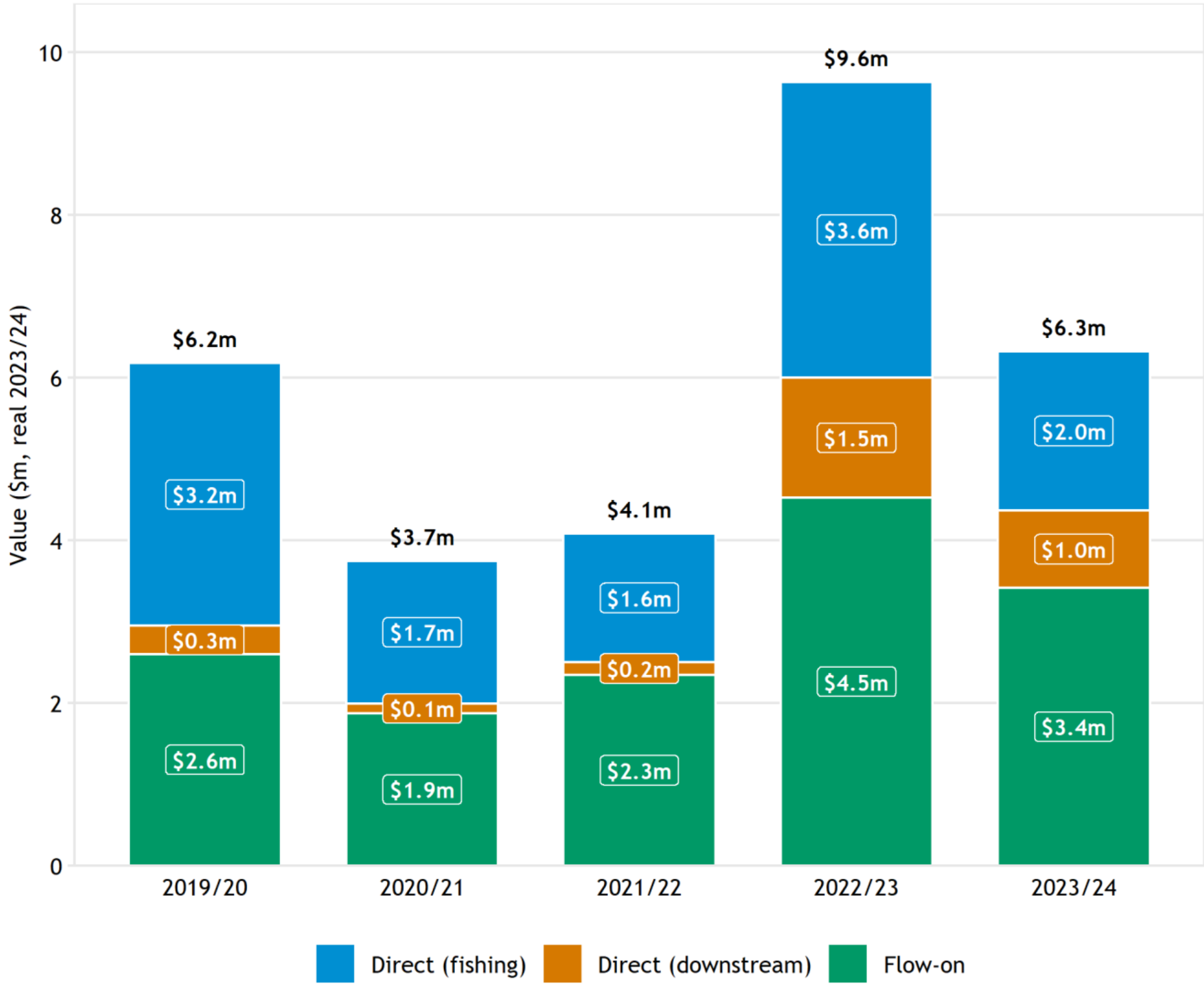
Contribution to GSP

Contribution to GSP is measured as value of output less the cost of goods and services (including imports but excluding wages) used in producing the output. Estimated GSP of $2.0 million was produced in 2023/24 by the Abalone fishery while associated post-harvest supply chain of the catch and capital expenditure by fishing businesses generated an estimated additional GSP of around $1.0 million.

Flow-on business activity was estimated to support a further $3.4 million of GSP in 2023/24 state-wide. The estimated total GSP contribution in New South Wales was $6.3 million in 2023/24 (Table 5-1), a decrease from $9.6 million in 2022/23 (Figure 5-3).

Figure 5-3 illustrates the total economic contribution (direct and flow-on effects) of the fishery to GSP. Direct contribution to fishing has decreased from $3.2 million in 2019/20 to $2.0 million in 2023/24. Direct downstream effects have increased over the same period which is driven by the inclusion of additional supply chain activities in 2022/23. Flow-on business activity has decreased from $2.6 million in 2019/20 to $2.0 million in 2023/24. Overall economic contribution to GSP has increased.

Figure 5-3 Economic contribution to GSP of the Abalone fishery, 2019/20 to 2023/24[a]



[a] The results increase from 2022/23 is due to improved supply-chain modelling.
Source: BDO analysis

5.2. Economic contribution to regions of New South Wales

Table 5-2 presents the estimated economic contribution of the Abalone fishery to regions of New South Wales in 2023/24. Direct activity includes fishing, capital and post-harvest supply chain activity. In terms of fte employment including all flow-on effects, the largest contribution of the Abalone fishery was to Lower South Coast (44 fte jobs).

Table 5-2 Economic contribution to New South Wales of the Abalone fishery, by region, 2023/24

Region	Output ($m)	Gross regional product ($m)	Household income ($m)	Employment (fte jobs)	Employment (total jobs)
Direct					
North Coast	<0.1	<0.1	<0.1	<1	1
Central	<0.1	<0.1	<0.1	<1	1
Metropolitan	0.8	0.4	0.2	4	5
Upper South Coast	<0.1	<0.1	<0.1	<1	1
Lower South Coast	4.1	2.5	1.6	29	66
New South Wales[a]	**5.0**	**2.9**	**1.8**	**33**	**71**
Flow-on					
North Coast		<0.1	<0.1	<1	1
Central		<0.1	<0.1	<1	1
Metropolitan		0.4	0.2	2	3
Upper South Coast		<0.1	<0.1	<1	1
Lower South Coast		2.0	1.2	15	16
New South Wales[a]		**3.2**	**1.8**	**21**	**22**
Total					
North Coast		<0.1	<0.1	<1	1
Central		<0.1	<0.1	<1	1
Metropolitan		0.8	0.4	6	8
Upper South Coast		<0.1	<0.1	<1	1
Lower South Coast		4.5	2.7	44	81
New South Wales[a]		**6.3**	**3.8**	**56**	**94**

[a] Regions do not sum to the state total due to exclusion of inter-regional flow-on effects.

Source: BDO analysis

6. Net economic return

Net economic return is the long-run profit from a fishery after all costs have been met, including fuel, crew costs, repairs, the opportunity cost of family and owner labour, fishery management costs, depreciation and the opportunity cost of capital (excluding endorsement) (Bath et al. 2018). These unit costs or long-term costs all need to be covered if the fishing business is to remain viable in the fishery. The cost of fisheries management is included as a cash cost to fishing businesses through licence fees, though this likely underestimates the cost of fisheries management as this cost is not fully recovered from businesses. The opportunity cost of capital is equivalent to what the fisher's investment could have earned in the next most similar alternative use considering risk and skills required. What remains after the value of these inputs (labour, capital, materials and services) has been netted out is the net economic return.

Commercial fishing operations in Australia are not risk free. Returns can be impacted both positively and negatively by factors such as natural events, changes in market conditions, disease, and management regulations. Determining the opportunity cost of capital involves an assessment of the degree of financial risk involved in the activity. For a risk-free operation, an appropriate opportunity cost of capital might be the long-term real rate of return on government bonds. The greater the risks involved, the greater is the necessary return on capital to justify the investment in that particular activity. For this analysis an opportunity cost of capital of 10 per cent has been used with sensitivity analysis at 7 and 15 per cent. The lower-bound is consistent with ABARES Australian fisheries economic indicator reporting for commonwealth managed fisheries (Bath et al. 2018). Commonwealth managed fisheries are generally larger and characterised by larger businesses with less overall variation than state managed inshore fisheries. This is why the 7 per cent used by ABARES is used as a lower-bound in this analysis. The upper-bound of 15 per cent represents a reasonable estimate for what an investor might expect when buying into a commercial fishery in New South Wales, given the variability and risk involved in this type of fishing business.

The net economic return results are presented in Table 6-1. Assuming an opportunity cost of capital of 10 per cent, net economic return generated in the Abalone fishery was estimated to be -$336,000 in 2023/24, a decrease from $715,000 in 2022/23 in real terms.

Table 6-1 Net economic return of the Abalone fishery, 2023/24

	Value ($m)
Gross value of production	3.0
Less labour costs	1.3
Less materials & services	1.2
Less depreciation	0.2
Less opportunity cost of capital (10%)	0.6
Net economic return	**-0.3**

Source: BDO analysis

The sensitivity analysis in Table 6-2 shows that, with the varying assumptions about opportunity cost of capital, net economic return was likely in the range of -$0.6 million to -$0.2 million.

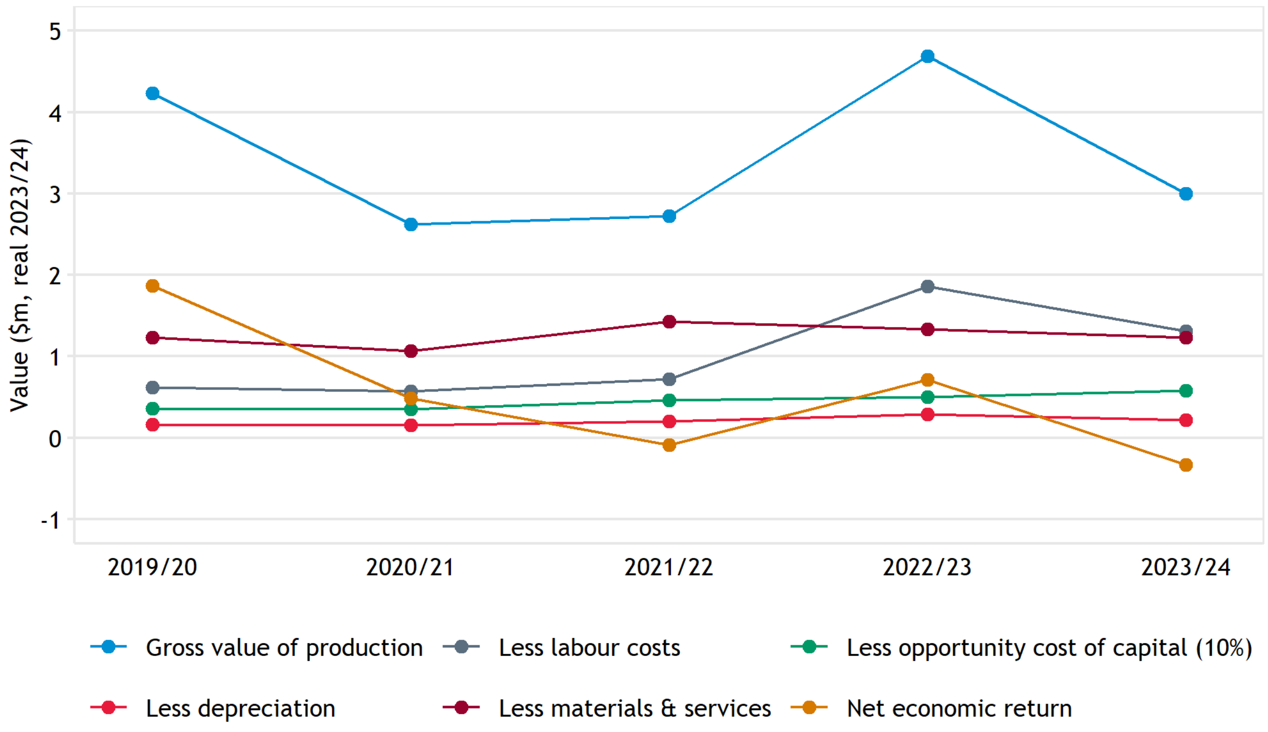
NER illustrated in Figure 6-1 shows an overall downward trend, with some fluctuations, between 2019/20 and 2022/23. NER significantly declined in 2023/24 due to a decrease in GVP. The other indicators moved only marginally between 2019/20 and 2023/24.

Table 6-2 Sensitivity analysis of opportunity cost of capital on net economic return, 2023/24

Opportunity cost of capital (%)	7%	10%	15%
Less opportunity cost of capital ($m)	0.4	0.6	0.9
Net economic return ($m)	-0.2	-0.3	-0.6

Source: BDO analysis

Figure 6-1 Net economic return for the Abalone fishery, 2019/20 to 2023/24

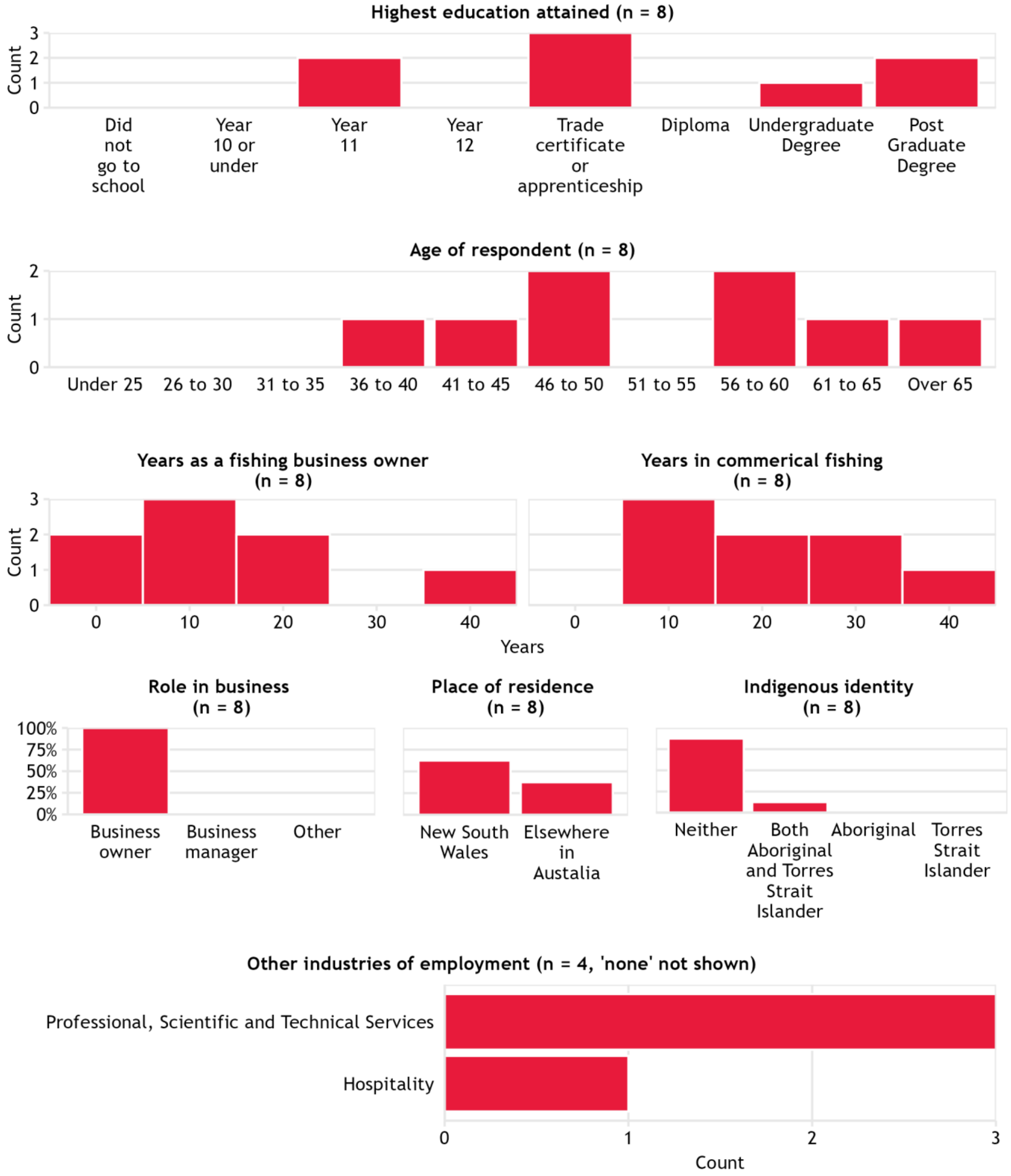


Source: BDO analysis

7. Demographics

Figure 7-1 present a demographic profile of fishers who accessed the Abalone fishery in New South Wales in 2023/24.

Figure 7-1 Demographic profile of the Abalone fishery in 2023/24



Source: 2025 survey

8. Social indicators

Fishers may derive non-financial benefits or costs from the Abalone fishery and may contribute to the community in different ways. This section presents a series of social indicators including:

- Perceptions of management
- Lifestyle and satisfaction
- Personal wellbeing
- Community contribution.

Questions were asked on a point scale of 0 to 10, the annual change is then presented as the change from the average point of 2019/20 to the average point of 2023/24. The results for each fishery are calculated from the unweighted sub-sample of fishers who accessed each fishery during 2023/24.

The results in this section should be interpreted with caution due to potential non-response bias. Since participation in the survey was voluntary, the findings may disproportionately reflect the views of those who chose to respond.

8.1. Management

Figure 8-1 to Figure 8-3 presents fishers' perceptions of different aspects of fishery management and participation in management.

Understanding and compliance with regulations

Fishers who access the Abalone fishery were unanimous in agreement that they had a good understanding of the fishing rules and regulations that apply to their fishing activities (100 per cent). There was also unanimous agreement that most commercial fishers comply with fishing rules and regulations (100 per cent) (increased by 0.7 points since fishers were asked in 2019/20) and most fishers felt that it was easy for their business to comply with them (71 per cent) (down by 0.8 points). These results indicate a high level of stewardship amongst fishers who access the Abalone fishery which is associated with lower costs of management and compliance activities, and a greater ability to achieve ecological sustainability.

Confidence in fisheries management

Importantly, 88 per cent of fishers who access the Abalone fishery do not trust DPIRD Fisheries to make the right decisions for managing commercial fishing in NSW. Trust has declined by 1.1 points since 2019/20, indicating that there may be problems in terms of management achieving desired social outcomes. Fishers are more likely to trust fisheries management if they feel the processes used to make decisions are transparent. Around 38 per cent of fishers who access the Abalone fishery indicated that they do not think the information DPIRD Fisheries produces is easy to understand and 25 per cent indicated that it is not easy to access information about commercial fishing management in NSW. Conversely, 75 per cent of fishers indicated that they do understand how fisheries management decisions are made. Most indicators have not improved since 2019/20, with some showing slight declines.

These perceptions suggest that communication and transparency between DPIRD Fisheries and fishers that access the Abalone fishery may be affecting trust in fisheries management.

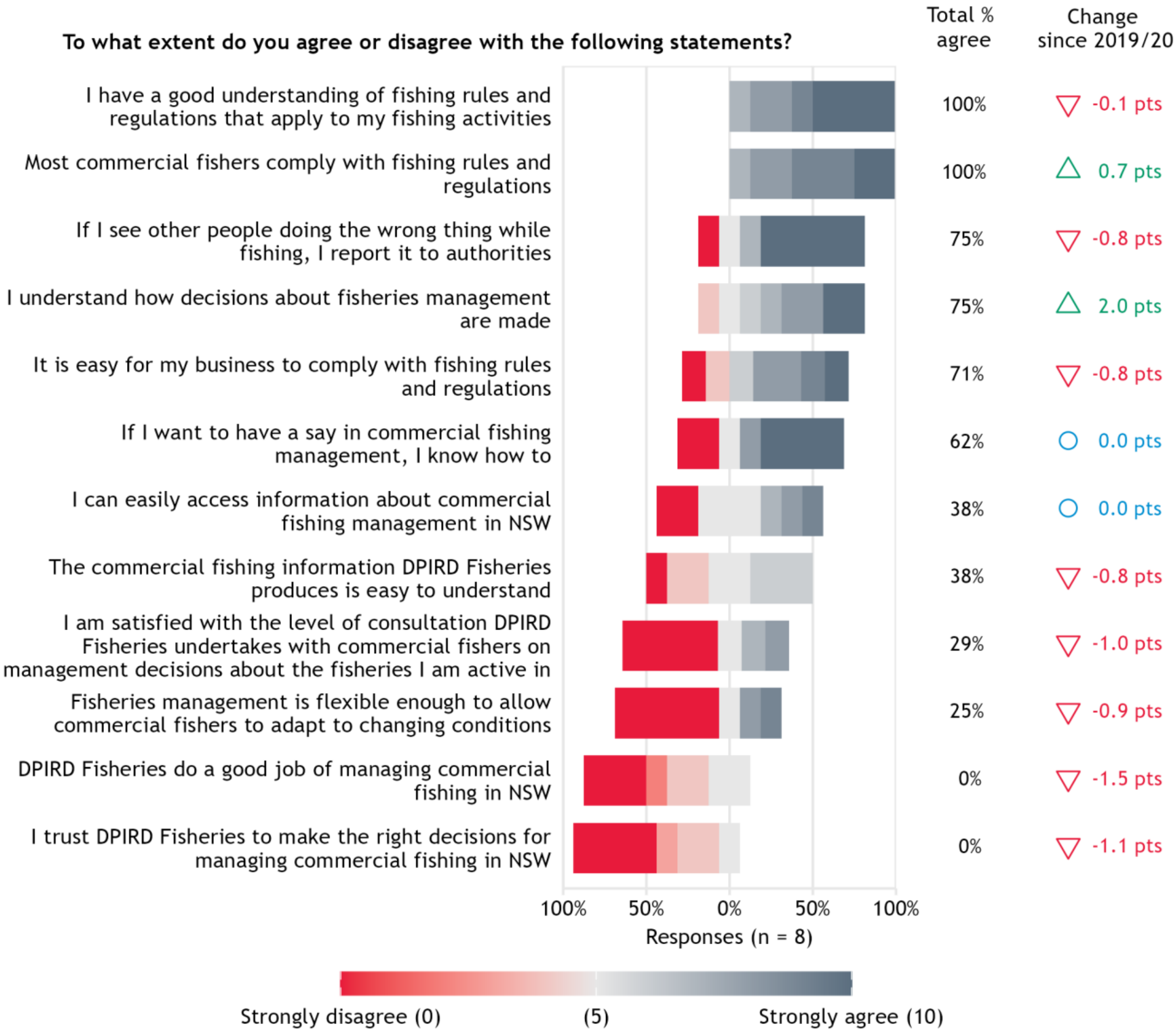
Perceptions of management fairness

Most Abalone fishers felt fairly treated by fisheries managers regarding allocation of catch (50 per cent), though perceptions have declined since 2019/20, with a 0.8 point drop. Around half felt unfairly treated in relation to gear restrictions (43 per cent) and decision-making processes (57 per cent). Fairness perceptions declined across most aspects since 2019/20.

Satisfaction with access to infrastructure

Fishers who access the Abalone fishery indicated high levels of satisfaction with infrastructure access across all facilities. Satisfaction increased the most for seafood sorting facilities (up 0.6 points to have 43 per cent satisfied), while roads accessing fishing areas saw the largest decline (down 2.3 points with only 29 per cent satisfied).

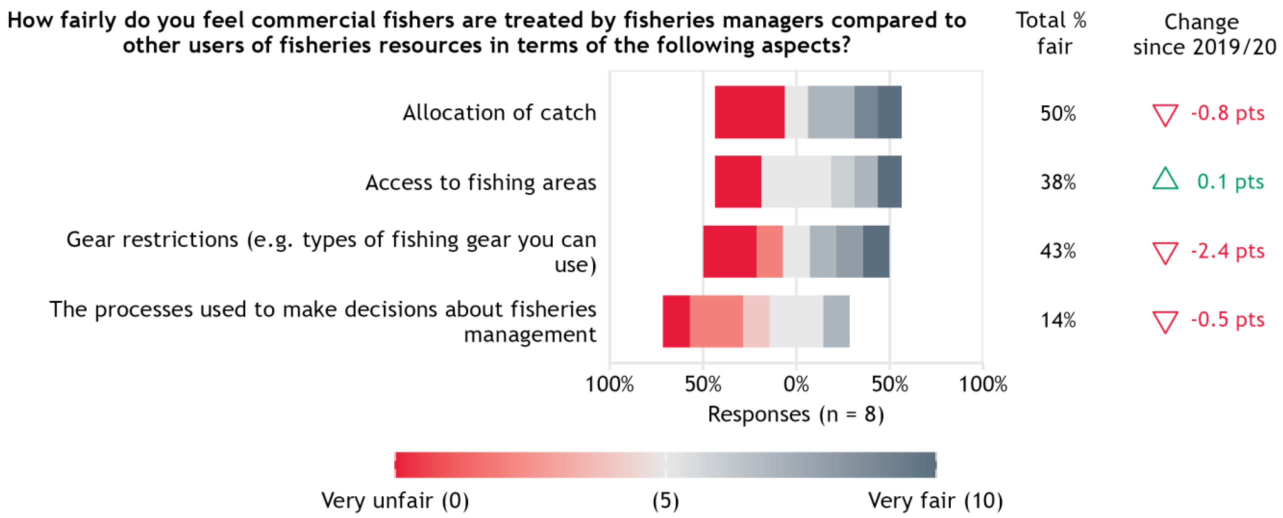
Figure 8-1 Perceptions of fishery management in the Abalone fishery, 2023/24[a]



[a] The change between the 2019/20 and 2023/24 surveys is calculated between licence holders who participated in both surveys and is quantified in points out of 10. For example, a change in average from 5 to 6 is stated as a change of 1.0 pts.

Source: 2025 survey

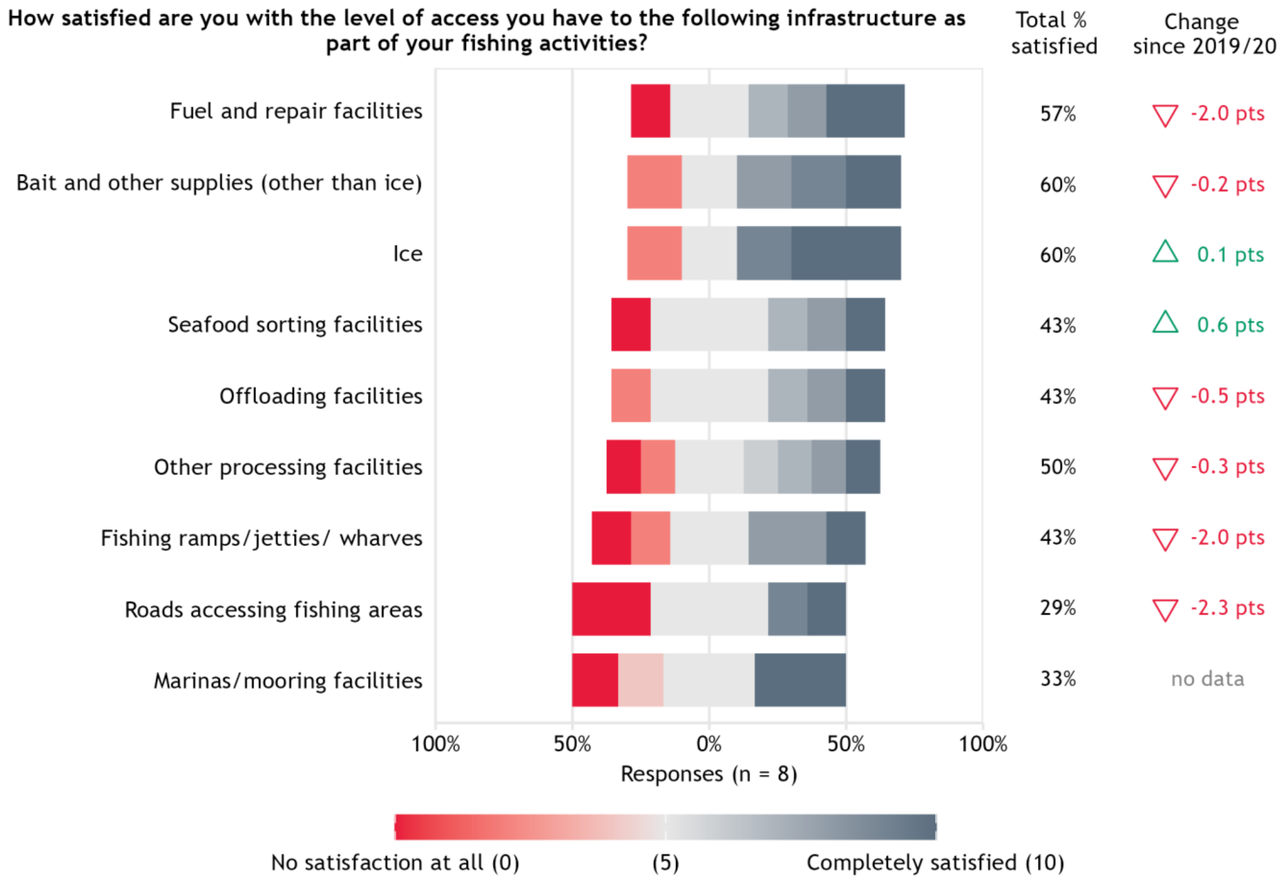
Figure 8-2 Perceptions of management fairness in the Abalone fishery, 2023/24[a]



[a] The change between the 2019/20 and 2023/24 surveys is calculated between licence holders who participated in both surveys and is quantified in points out of 10. For example, a change in average from 5 to 6 is stated as a change of 1.0 pts.

Source: 2025 survey

Figure 8-3 Perceptions of infrastructure access in the Abalone fishery, 2023/24[a]



[a] The change between the 2019/20 and 2023/24 surveys is calculated between licence holders who participated in both surveys and is quantified in points out of 10. For example, a change in average from 5 to 6 is stated as a change of 1.0 pts.

Source: 2025 survey

8.2. Fishing and lifestyle satisfaction

Figure 8-4 and Figure 8-5 present indicators of continuity, importance and satisfaction with different aspects of fisher's activity in the Abalone fishery.

Lifestyle satisfaction

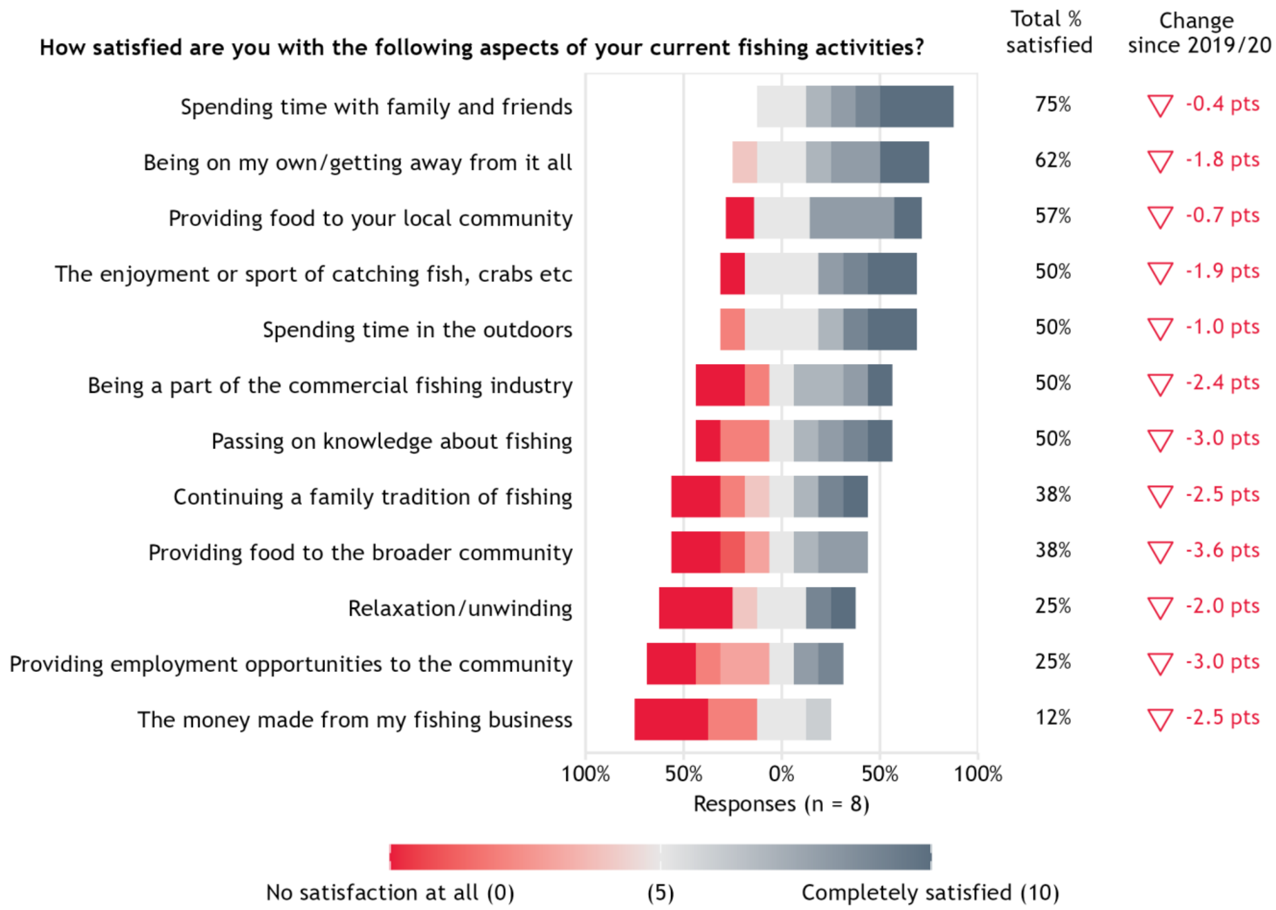
Fishers who access the Abalone fishery were near unanimous in agreement that fishing is a very important aspect of their lives (88 per cent), though this has decreased by 0.7 points since 2019/20. Half indicated that they intend to continue fishing for as long as possible (50 per cent) (fallen by 2.5 points), but only 38 per cent were satisfied with their commercial fishing activities over the last 12 months (down by 1.0 point).

Fishing Satisfaction

Most Abalone fishers were satisfied with their current fishing activities with fishers being the most satisfied with spending time with family and friends (75 per cent), though all aspects saw declines since 2019/20. Satisfaction dropped notably for providing food to the broader community (3.6 points), providing employment opportunities to the community and passing fishing knowledge (both down 3.0 points).

Overall, these results indicate that Abalone fishers are achieving general satisfaction with some cultural, recreational and lifestyle benefits derived from their fishing activities (as per Triantafillos et al.).

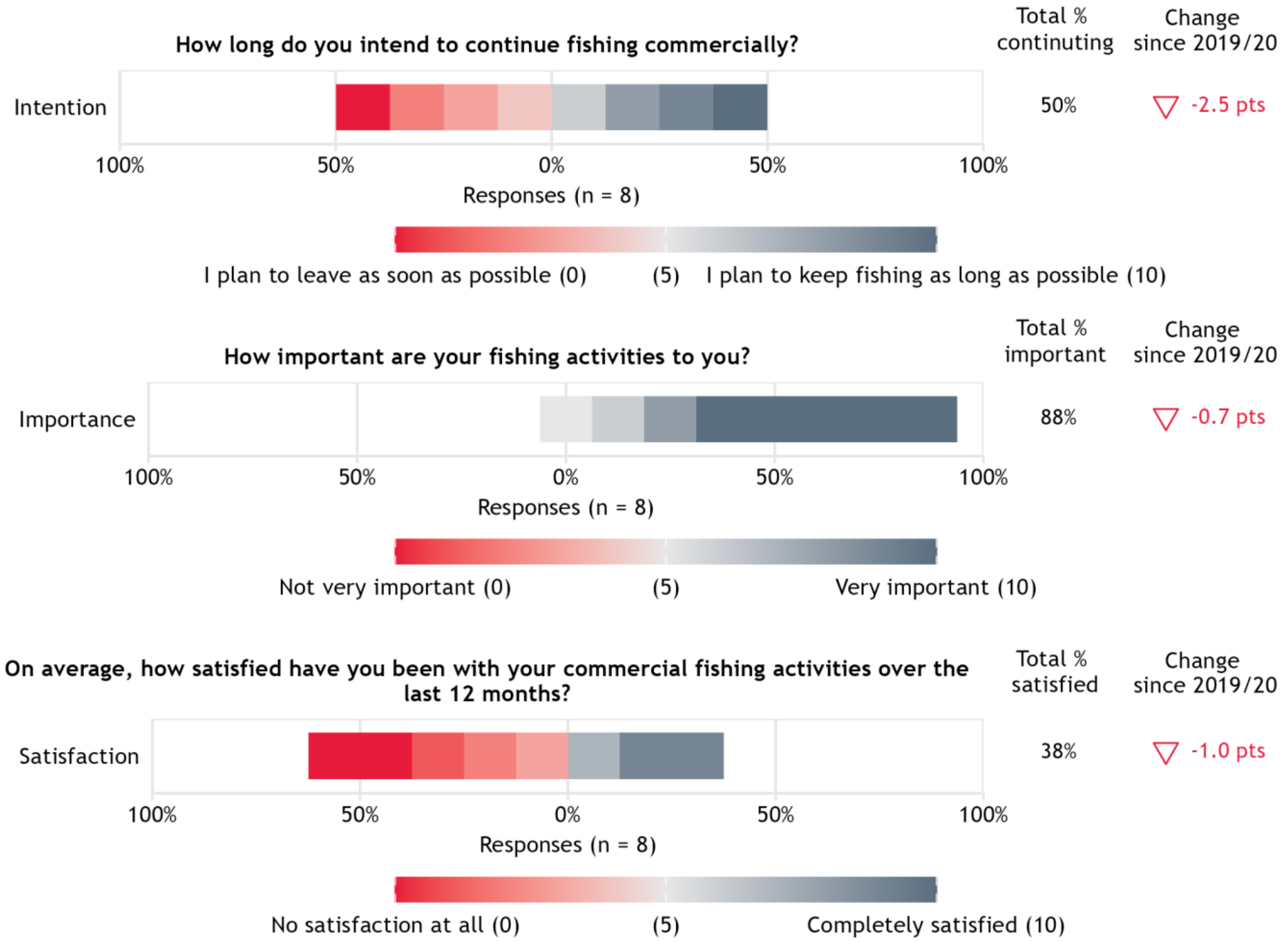
Figure 8-4 Satisfaction with aspects of the Abalone fishery, 2023/24[a]



[a] The change between the 2019/20 and 2023/24 surveys is calculated between licence holders who participated in both surveys and is quantified in points out of 10. For example, a change in average from 5 to 6 is stated as a change of 1.0 pts.

Source: 2025 survey

Figure 8-5 Satisfaction in the Abalone fishery, 2023/24[a]



[a] The change between the 2019/20 and 2023/24 surveys is calculated between licence holders who participated in both surveys and is quantified in points out of 10. For example, a change in average from 5 to 6 is stated as a change of 1.0 pts.

Source: 2025 survey

8.3. Global life satisfaction and personal wellbeing

Global life satisfaction index

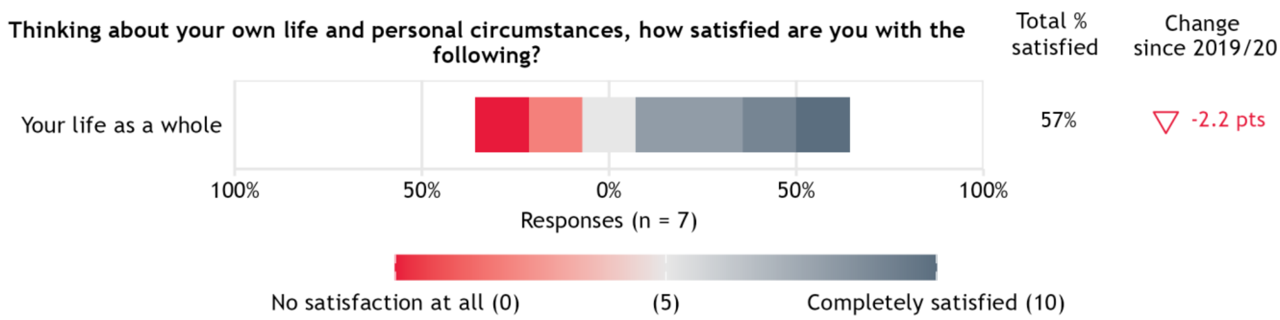
The Global Life Satisfaction (GLS) index is a widely recognised, validated measure of overall life satisfaction, designed to capture an individual's subjective assessment of their life as a whole. The GLS provides a benchmark for comparing life satisfaction between groups, regions, or over time. A higher GLS score indicates greater overall satisfaction with life.

The GLS is typically calculated based on survey responses to a single, global question such as "All things considered, how satisfied are you with your life as a whole these days?". Respondents rate their satisfaction on a scale from 0 (not at all satisfied) to 10 (completely satisfied). The average of these responses, multiplied by 10, forms the GLS index.

This index is particularly useful for summarising the overall quality of life experienced by individuals, beyond specific domains of wellbeing. The GLS index for the Abalone fishery (Figure 8-6) is compared against the average for Australia, New South Wales and regional New South Wales, as reported in the Regional Wellbeing Survey (UC 2023), below:

- Australia: 71.9
- New South Wales: 71.6
- Regional New South Wales: 71.8
- Abalone fishery: 60.0.

Figure 8-6 Global life satisfaction in New South Wales fisheries, 2023/24[a]



[a] The change between the 2019/20 and 2023/24 surveys is calculated between licence holders who participated in both surveys and is quantified in points out of 10. For example, a change in average from 5 to 6 is stated as a change of 1.0 pts.

Source: 2025 survey

Personal wellbeing index

The Personal Wellbeing Index (PWI) is a validated measure of wellbeing with established benchmarks that are useful for comparing between groups. A higher PWI means higher subjective wellbeing.

The PWI is based on the answers of respondents to the seven questions shown in Figure 8-7. Each question asks about satisfaction with a specific domain of life. Respondents rate each domain on a scale from 0 (completely dissatisfied) to 10 (completely satisfied). The PWI is then calculated as the average of these seven questions, multiplied by 10.

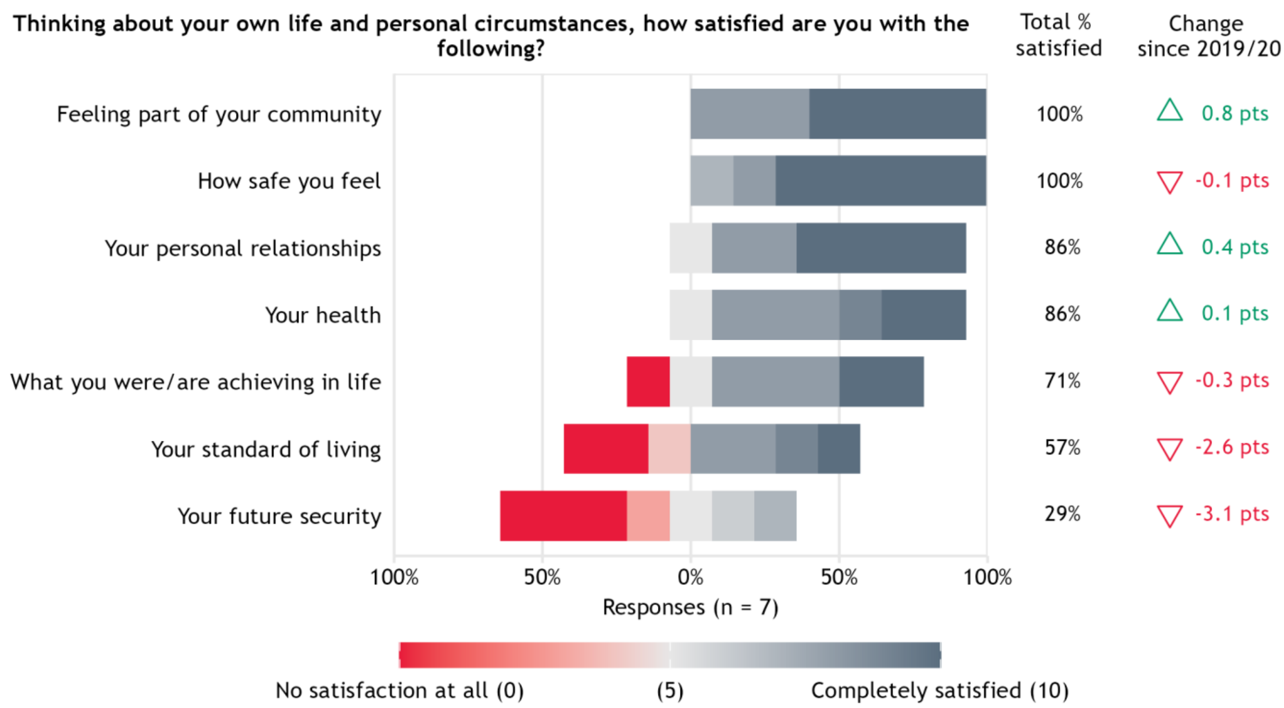
While the PWI offers a valuable overall measure, the individual questions themselves also provide useful information about the levels of different domains of wellbeing for fishers that access the Abalone fishery.

The PWI for the Abalone fishery is compared against the average for Australia, New South Wales and regional New South Wales, as reported in the Regional Wellbeing Survey (UC 2023), below:

- Australia: 70.9
- New South Wales: 71.0
- Regional New South Wales: 70.8
- Abalone fishery: 81.5

Fishers who access the Abalone fishery indicated that they had high levels of personal wellbeing across all PWI domains. However, 57 per cent of fishers who access the Abalone fishery indicated that they were dissatisfied with their future security, and most wellbeing indicators saw a decrease since 2019/20. This reflects the broader trend observed across NSW commercial fisheries.

Figure 8-7 Personal wellbeing in the Abalone fishery, 2023/24[a]



[a] The change between the 2019/20 and 2023/24 surveys is calculated between licence holders who participated in both surveys and is quantified in points out of 10. For example, a change in average from 5 to 6 is stated as a change of 1.0 pts.

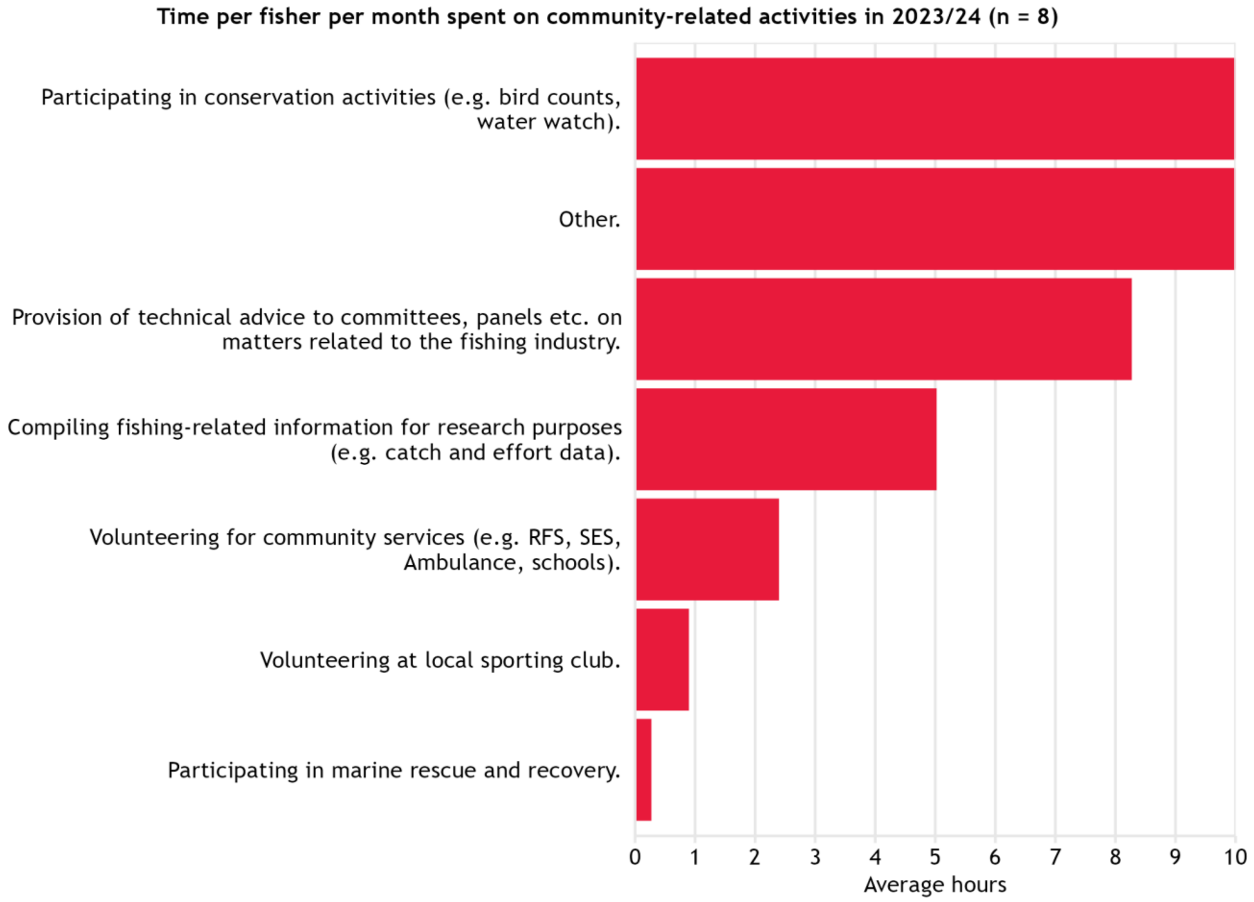
Source: 2025 survey

8.4. Community contribution

Fishers that access the Abalone fishery spend some of their time contributing to the community through various activities. The average number of hours contributed per month is presented in Figure 8-8.

Fishers who access the Abalone fishery indicated that they make a contribution to the community. This was particularly in the form of time spent contributing to participating in conservation activities, other activities (such as lecturing or assisting marine research), providing technical advice related to the fishing industry, compiling fishing related information for research.

Figure 8-8 Community contribution in the Abalone fishery, 2023/24



Source: 2025 survey

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