



# ECONOMIC AND SOCIAL INDICATORS FOR THE QUEENSLAND CHARTER SECTOR IN 2020/21

## A Report for Fisheries Queensland

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Prepared by

**BDO EconSearch**

Level 7, BDO Centre, 420 King William Street  
Adelaide SA 5000

Tel: +61 (8) 7324 6190

<https://www.bdo.com.au/en-au/econsearch>

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## GLOSSARY

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

**Business Profit:** is defined as *Gross Operating Surplus (GOS)* less *Depreciation* less *Owner-operator and Unpaid Family Labour*. Business Profit represents a more complete picture of the actual financial status of an individual firm, compared with GOS.

**Business Profit before Depreciation:** is defined as *Gross Operating Surplus* less imputed wages for *Owner-operator and Unpaid Family Labour*.

**Client days:** refers to the total number of 'single client day trip equivalents' by converting multi-day trips to day trip equivalents and counting each trip once for each client on it. For example, if a charter fisher undertook 10 day trips with 4 clients on each trip plus 2 multi-day trips that went for 3 days with 2 clients on each trip the fisher undertook  $(10 \text{ day trips} \times 4 \text{ clients}) + (2 \text{ multi-day trips} \times 3 \text{ days} \times 2 \text{ clients}) = 52$  client days. Client days data were sourced from Fisheries Queensland logbooks and collected in the survey to allow scaling up of the sample by this variable. What represents a paying client is unclear in Charter Sector logbooks as an entry is required for 'number of fishers' and 'number of guests'. The most common entries for 'number of guests' are zero or the number entered for 'number of fishers' so the number of paying clients was assumed to be the maximum of these two numbers on any one trip.

**Cost of Management Services:** management services will generally include biological monitoring and reporting; policy, regulation and legislation development; compliance and enforcement services; licensing services; and research.

**Depreciation:** refers to the annual reduction in the value of total 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<sup>1</sup>.

**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 for 42 week per year.

**Gross Income:** refers to the cash receipts received by an individual firm and is expressed in dollar terms. *Gross income* is calculated as the number of client days for the year multiplied by the average trip price per client per day.

**Gross Margin:** is defined as *Gross income* less *Total Variable Costs*. This is a basic measure of profit which assumes that capital has no alternative use and that as fishing activity (trip days) varies there is no change in capital or fixed costs.

**Gross Operating Surplus (GOS):** is defined as *Gross income* less *Total Costs* and is expressed in current dollar terms. GOS does not include a value for owner/operator wages, unpaid family work, or depreciation.

**Gross State Product (GSP) and Gross Regional Product (GRP):** are measures of the net contribution of an activity to the state/regional economy. Contribution to GSP or GRP is measured as value of output less the cost of goods and services (including imports) used in producing the output. It can also be measured as household income plus other value added (*gross operating surplus* and all taxes, less subsidies). It represents payments to the primary inputs of production (labour, capital and land).

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<sup>1</sup> Accounting depreciation allocates the cost of an asset over its useful life.

**Gross Value of Production (GVP):** refers to the value of the total annual trips for the Charter Sector or a sector of it and is measured in dollar terms. GVP, generally reported on an annual basis, is the number of client days for the year multiplied by the average trip price per client per day. It is equivalent to *Gross Income*.

**Household Income (economic contribution):** is a component of *Gross State Product (GSP)* and *Gross Regional Product (GRP)* and is a measure of wages and salaries, drawings by owner-operators and other payments to labour including overtime payments and income tax, but excluding payroll tax.

**Owner-operator and Unpaid Family Labour:** in many fishing businesses there is a component of labour that does not draw a direct wage or salary from the business. This will generally include owner/operator labour and often also include some unpaid family labour. The value of this labour needs to be accounted for which involves imputing a labour cost based on the amount of time and equivalent wages rate. In profitability calculations this labour cost can be included simply as another cost so that *Gross Operating Surplus* takes account of this cost. Alternatively, it can be deducted from GOS to give a separate indicator called *Business Profit before Depreciation* in this report. Owner-operator and unpaid family labour is separated into variable labour (fishing and repairs and maintenance) and overhead labour (management and administration).

**Profit at Full Equity:** is calculated as *Business Profit plus rent, interest and lease payments less depreciation associated with leased capital*. *Profit at Full Equity* represents the profitability of an individual fishing business, assuming the business has full equity in the operation, i.e. there is no outstanding debt associated with the investment in capital. *Profit at Full Equity* is a useful absolute measure of the economic performance of firms.

**Rate of Return on Total Capital at Full Equity:** is calculated as *Profit at Full Equity* divided by *Total Capital at Full Equity* multiplied by 100. This rate of return is expressed in percentage terms and is calculated for an individual fishing business. It refers to the economic return to the total investment in capital items, and is a useful relative measure of the performance of individual firms. *Rate of Return to Total Capital at Full Equity* is useful to compare the performance of various fishing businesses, and to compare the performance of other types of operators, and with other industries.

**Total Costs:** defined as *Total Variable Costs* plus *Total Fixed Costs*. It does not include *depreciation*.

**Total 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
- advertising or marketing
- leasing.

**Total Variable Costs:** are costs which are dependent upon the number of client days or, more commonly, the amount of time spent on trips. As clients 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 (net of diesel fuel rebate)
- bait
- ice
- provisions

- crew payments
- fishing equipment, purchase and repairs (lines, etc.)
- repairs & maintenance: ongoing (slipping, painting, overhaul motor).

**Trip days:** refers to the total number of 'day trip equivalents' by converting multi-day trips to daytrip equivalents. For example, a 3 day trip converts to '3 trip days'. Trip days data were sourced from Fisheries Queensland logbooks and collected in the survey to allow scaling up of the sample by this variable.

**Total Capital:** includes capital items that are required by the fishing business to earn the income. It includes boat hull, engine, electronics and other permanent fixtures and tender boats. Other capital items such as motor vehicles, sheds, and jetty/moorings are included to the extent that they are used in the fishing business. The value of capital utilised by the business is included in total capital whether the business owns or leases it. Total capital should not be confused with financial capital which is money provided by lenders for a price (interest).



## ABBREVIATIONS

ABS	Australian Bureau of Statistics
CPI	Consumer Price Index
fte	full time equivalent
GRP	gross regional product
GSP	gross state product
GVP	gross value of production
R&M	repairs and maintenance
RBA	Reserve Bank of Australia

## ACKNOWLEDGMENTS

In the preparation of economic and social indicators for the Charter Sector, 2020/21, BDO EconSearch has relied heavily on the voluntary cooperation of fishing operators in providing data for the surveys and are particularly grateful for the time and cooperation generously provided by fishing businesses in responding to the rather lengthy questionnaire. BDO EconSearch is also indebted to various individuals and institutions for providing the necessary information to supplement the survey data. Industry representatives and Fisheries Queensland officers provided assistance, were supportive of the data collection and offered valuable advice.

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## SUMMARY

This report presents economic and social indicators for the Charter Sector for the 2020/21 financial year.

BDO EconSearch was contracted by Fisheries Queensland to develop economic and social indicators to inform stakeholders with published financial, economic and social information about professional fishers (i.e. commercial fishers and charter operators) in Queensland. Data was previously collected for the financial years 2017/18, 2018/19 and 2019/20 (BDO EconSearch 2022). This report presents the results for the 2020/21 financial year.

For the purpose of this report, the Charter Sector includes all businesses that provide charter fishing services in Queensland under a Charter Fishing licence provided by Fisheries Queensland. These businesses typically charge a fee to take clients on recreational fishing trips with a broad range of objectives ranging from low-cost day trips in rivers or bays to multi-day trips targeting sport and game fish on luxury boats. Some businesses may offer guided fishing trips in waters shallower than 2 meters and are currently not required to be licenced as a charter operator. Businesses which are not licenced charter operators are not included in this report. A summary of key economic indicators is presented in Table ES-1.

In January 2020, the COVID-19 pandemic was beginning to affect the Charter Sector. While charter fishing may have been permitted, closures and lockdowns preventing or discouraging travel were a major reason for the loss of clients. Even as restrictions eased, there was still an initial reluctance to travel given uncertainties around potential for lockdowns, and this continued into the 2020/21 financial year. Many bookings were cancelled, and presumably new bookings were not made because of COVID-19 restrictions. A survey based estimate of the impact of COVID-19 on the Charter Sector in the 2020/21 financial year is presented in this report.

**Table ES-1 Summary of key economic indicators, 2017/18 to 2020/21 for the Charter Sector**

Indicator	2017/18	2018/19	2019/20	2020/21
Client days (no.)	132,276	120,331	74,919	89,037
Trips (no.)	15,255	14,081	8,953	10,353
Gross Value of Production (GVP)	\$35.8m	\$33.1m	\$24.6m	\$30.9m
Export value	\$5.9m	\$5.4m	\$1.2m	\$0.4m
Active businesses (no.)	180	176	149	139
Return on Total Capital at Full Equity <sup>a</sup>	-0.6%	-2.9%	0.9%	5.0%
Gross State Product (GSP) (direct + flow-on)	\$53.1m	\$50.3m	\$33.5m	\$40.0m
Employment (direct + flow-on) (fte jobs)	464	449	306	325

<sup>a</sup> Fishing Gear and Equipment and Total Capital each include the capitalised value of leased equipment.

### Overview of Approach

Development of economic and social indicators for the Charter Sector occurred in parallel to similar research in Queensland's commercial fisheries. The Charter Sector research included a separate data collection process and analysis.

The approach followed the below steps:

1. Collect administrative business level data
2. Collect sector level data

3. Conduct a survey of 2020/21 fishing business activity (less extensive than the survey conducted in 2019/20)
4. Estimate the active population of charter fishers
5. Scale up the survey sample to represent the population
6. Calculate indicators by adjusting the 2019/20 survey data with the 2020/21 update survey data, administrative information on individual businesses and cost indices.

The 2019/20 survey received a total of 55 usable responses, including 52 that were used for economic indicators. The responses that could be used for calculating economic indicators represented 37 per cent of the estimated population of active charter fishers in 2020/21. More active businesses are better represented in the sample with almost half of the most active half of businesses responding to the survey and less than one quarter of the least active half of businesses responding.

The 2020/21 update survey received a total of 31 responses including 29 that were usable for economic analysis, which accounted for 56 per cent of the 2019/20 survey sample (52 responses). A smaller sample was targeted in this update survey as only a sub-set of data was required. The confidentiality of responses was made clear to respondents including that no individual response would be identifiable in reporting or provided to Fisheries Queensland and that any statistic published would be based on at least five responses.

In the 2020/21 survey, participants were asked to estimate the percentage change COVID-19 had on different aspects of their Charter fishing business including business revenue, wage costs and non-wage costs. This was then applied to the 2020/21 estimates and scaled up to the sector total using the same weights used for the indicators.

### **Clients, Gross Value of Production and Exports**

The total client days in the Charter Sector decreased from 132,000 in 2017/18 to just under 75,000 in 2019/20, a decline of 43 per cent. Between 2019/20 and 2020/21 total client days increased by 19 per cent to reach 89,000 in 2020/21. Consequently, Charter Sector GVP declined between 2017/18 (\$35.8m) and 2019/20 (\$24.6m) before increasing to \$30.9m in 2020/21. The value of exports<sup>2</sup> accounted for approximately 17 per cent of GVP in 2017/18 but declined to only 1 per cent in 2020/21.

### **Prices and Customers**

Average price (per client day) was \$271 in 2017/18, \$275 in 2018/19, \$329 in 2019/20 and \$347 in 2020/21 and varied across business model and main trip length of operator. By business model, the highest average price per client day in 2020/21 was \$442 for game fishing focused businesses and the lowest was \$225 for inshore focused businesses. By main trip length, operators focused on day trips had a slightly higher average price per client day (\$354/day) than multi-day focused operators (\$330/day).

The most significant market for the Charter Sector in 2020/21 was Australia. Surveyed businesses reported that 99 per cent of customers were domestic compared to 95 per cent in 2019/20 and 84 per cent in 2018/19. As mentioned above, 2020/21 was impacted by COVID-19 pandemic closures and lockdowns preventing or discouraging travel. By business model, international customers spent the most in sport and rocky reef fishing focused businesses in 2020/21 (2.0 per cent) and the least on inshore focused operators (0.6 per

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<sup>2</sup> Exports were estimated by applying each fishing business's estimate of the total proportion of their customers that are international visitors to their total revenue.

cent). International customers spent more on multi-day focused operators (2.3 per cent) than single day operators (1.0 per cent).

### **Management Costs**

Estimated total Fisheries Queensland management costs for the Charter Sector were \$1.4m in 2020/21 and 2019/20, an increase from \$1.2m in both 2017/18 and 2018/19. This represented 3.3 per cent of GVP in 2017/18 and 4.5 per cent in 2020/21.

### **Business Financial Indicators**

In 2020/21, the average business's activity in the Charter Sector generated a positive gross operating surplus (\$71,000) and profit at full equity (\$35,000), leading to a return on investment at full equity of 5.0 per cent. This means the average business earned enough income to cover its costs, the imputed cost of unpaid labour used to operate the business, and the cost of capital depreciation. As businesses adapted to COVID-19 conditions, remaining operators successfully increased their total revenue and decreased their costs relative to income. This resulted in improved profitability for businesses between 2019/20 and 2020/21 as average profit at full equity and return on investment increased.

Return on investment varied widely across regions in 2020/21 from 60.2 percent in the Dry Tropics and Mackay, Isaac and Whitsunday region to -3.9 per cent in Fitzroy and Wide Bay Burnett. The higher profitability region in 2020/21 (Dry Tropics and Mackay, Isaac and Whitsunday) was characterised by low-cost operations with lower levels of employment relative to income when compared to the state average.

### **Economic Contribution**

In 2020/21, the Charter Sector contributed an estimated \$40.0m in gross state product (GSP) and 325 full-time equivalent (fte) jobs to the Queensland economy. This contribution included \$17.0m in GSP and 123 fte jobs from direct charter fishing activity, and \$0.7m in GSP and 8 fte jobs from direct capital expenditure by charter fishing businesses. Flow-on effects in other sectors of the Queensland economy added a further \$22.3m in GSP and 194 fte jobs.

### **Impact of COVID-19**

In January 2020, the COVID-19 pandemic began to affect the charter sector, and this continued into the 2020/21 financial year. Survey participants estimated that had the COVID-19 pandemic not occurred, GVP in 2020/21 would have been 31 per cent higher than it actually was. Without COVID-19, businesses expected that client days would likely have been 22 per cent higher, and prices would have been 8 per cent higher. Overall, client days would have decreased from pre COVID-19 levels (between 2018/19 and 2020/21), but this would have been offset by an increase in average price, resulting in a notably higher GVP in 2020/21 without COVID.

For Queensland as a whole, the average rate of return was estimated to be 14.7 per cent without the COVID-19 pandemic compared to the actual 5.0 per cent for 2020/21. All regions were estimated to have had an improvement in average rate of return without the COVID-19 pandemic.

The estimated total economic impact of the COVID-19 pandemic's effect on the Charter Sector on the state as a whole (including flow-on effects) was a reduction of \$12.1m in output, the loss of 18 fte jobs, a reduction of \$1.2m in household income and \$10.6m in GSP.

## 1. INTRODUCTION

This report presents economic and social indicators for the Charter Sector for the 2020/21 financial year.

The Queensland Sustainable Fisheries Strategy 2017-2027 (SFS) sets out a comprehensive reform plan with a number of actions which will improve the management of Queensland fisheries. With respect to actions relating to fisheries monitoring, the SFS requires Fisheries Queensland to deliver a practical and cost-effective system to collect data on economic and social indicators from Queensland fishers and directly related stakeholders (e.g. fish processors, wholesalers, community groups). These indicators will be used by Fisheries Queensland to better understand the economic and social aspects of each fishery and sector, and of the different types of fishers (e.g. level of activity, region of activity, mode of fishing) within each fishery and sector.

These economic and social indicators will be used to inform management decisions and to monitor progress towards desired targets. As these surveys continue, they will provide an appropriate time series that can be used to understand the economic impact of management decisions.

BDO EconSearch was contracted by Fisheries Queensland to develop economic and social indicators to inform stakeholders with published financial, economic and social information about professional fishers (i.e. commercial fishers and charter operators) in Queensland. Data was previously collected for the financial years 2017/18, 2018/19 and 2019/20 (BDO EconSearch 2022). This report presents the results for the 2020/21 financial year.

Considering the diverse nature of Queensland's fisheries, management decision making involves a complex mix of biological, economic and social considerations. There is a need to identify and explore cost-effective and efficient ways to incorporate economic and social information in decision-making processes.

In January 2020, the COVID-19 pandemic was beginning to affect the Charter Sector. While charter fishing may have been permitted, closures and lockdowns preventing or discouraging travel were a major reason for the loss of clients. Even as restrictions eased, there was still an initial reluctance to travel given uncertainties around potential for lockdowns, and this continued into the 2020/21 financial year. Many bookings were cancelled, and presumably new bookings were not made because of COVID-19 restrictions. A survey based estimate of the impact of COVID-19 on the Charter Sector in the 2020/21 financial year is presented in this report.

### 1.1. Charter Sector Background

For the purpose of this report, the Charter Sector includes all businesses that provide charter fishing services in Queensland under a Charter Fishing licence provided by Fisheries Queensland. These businesses typically charge a fee to take clients on recreational fishing trips with a broad range of objectives ranging from low-cost day trips in rivers or bays to multi-day trips targeting sport and game fish on luxury boats. Some businesses may offer guided fishing trips in waters shallower than 2 meters and are currently not required to be licenced as a charter operator. Businesses which are not licenced charter operators are not included in this report.

In 2020/21, Fisheries Queensland licensing data and logbooks record 307 businesses licenced in this definition of the Charter Sector but only 107 of them provided activity information through logbooks. Some charter fishing businesses are not required to hold a licence and these businesses are not required to report their fishing activity to Fisheries Queensland. This means the complete scale of the charter fishing activity in Queensland is not represented in full in this economic analysis.

## 1.2. Report Structure

Provided in Section 2 of this report is the method of analysis and a description of the survey of charter fishing businesses.

Indicator results are presented in Sections 3, 4 and 5 for the 2020/21 financial year and include:

- gross value of production
- average trip prices
- the cost of management
- business financial indicators (income, costs, profit and return on investment)
- economic contribution of the Charter Sector
- impact of COVID-19
- social indicators.

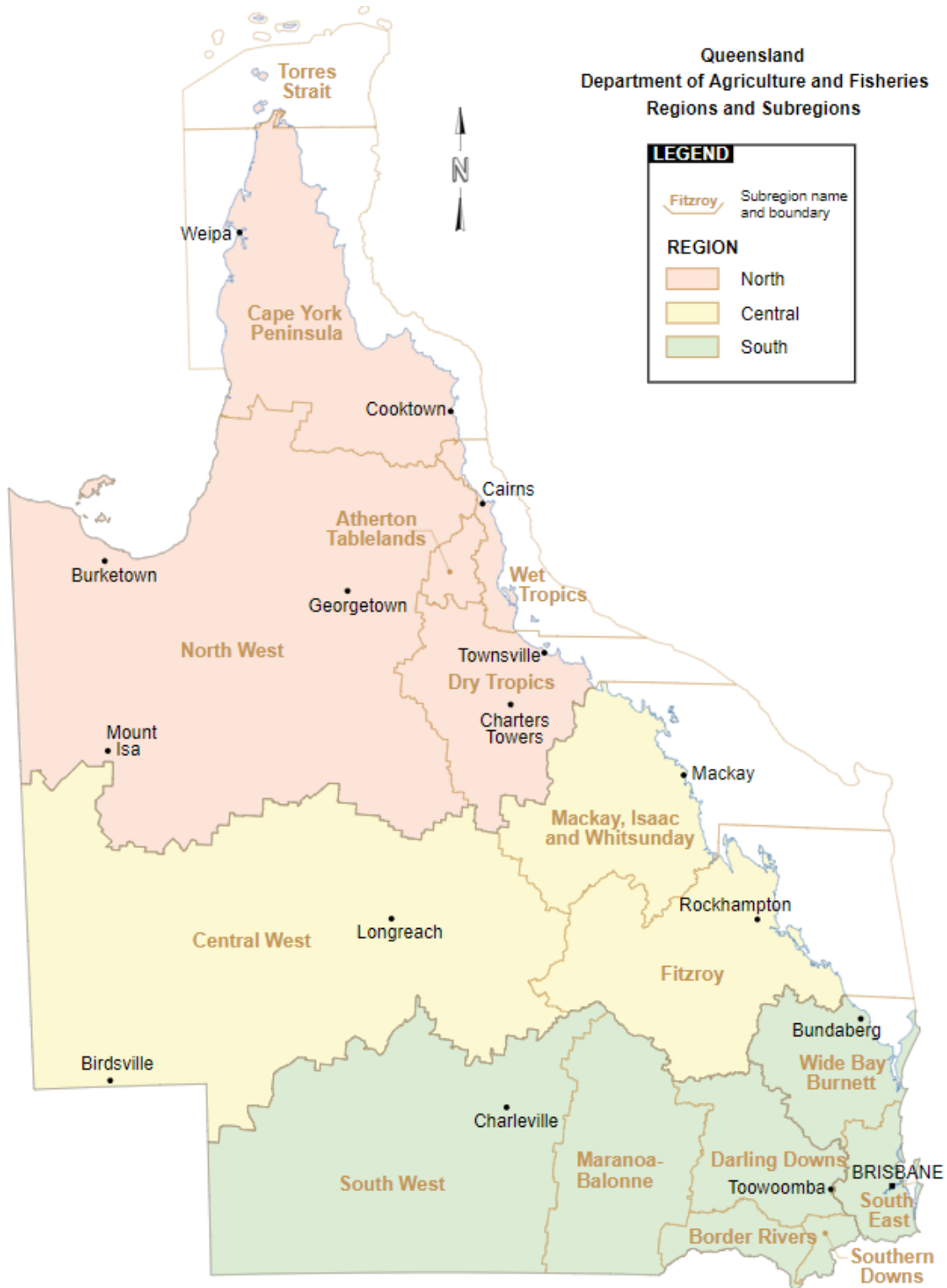
Economic contribution results and business financial indicators are presented for Queensland as a whole and on a regional basis in accordance with the Department of Agriculture and Fisheries Subregion definitions (Figure 1-1). Only coastal regions are reported:

- North West
- Cape York Peninsula (includes Torres Strait)
- Wet Tropics
- Dry Tropics
- Mackay, Isaac and Whitsunday
- Fitzroy
- Wide Bay Burnett
- South East.

To maintain confidentiality of survey respondents, some regions have been combined and the resulting groups are reported:

- North West, Cape York Peninsula and Wet Tropics
- Dry Tropics and Mackay, Isaac and Whitsunday
- Fitzroy and Wide Bay Burnett
- South East.

Figure 1-1 Department of Agriculture and Fisheries Subregions used for reporting



Source: Business Queensland (2019)



## 2. METHOD OF ANALYSIS AND DEFINITION OF TERMS

### 2.1. Overview of Approach

Development of economic and social indicators for the Charter Sector occurred in parallel to similar research in Queensland's commercial fisheries. The Charter Sector research included a separate data collection process and separate analysis.

The approach followed the below steps:

1. **Collect administrative business level data:** catch end effort data from available charter fishing operation logbooks and charter fishing licence data from the licencing data base. All were collected for 2020/21.
2. **Collect fishery and sector level data:** cost of management for 2020/21. The allocation of management costs between fisheries and sectors was based on the Allocation of Fisheries Management Costs to Queensland's Commercial Fisheries for the 2017-18 and 2018-19 Financial Years: The Process of Allocation (Webley and Probst 2020).
3. **Update survey of fishing businesses 2020/21:** a less extensive update survey (e.g. reducing cost, reduce survey fatigue) of the fishing businesses that participated in the 2019/20 survey. Data were collected respecting the confidentiality of fishing businesses and were used by BDO EconSearch to produce the economic and social indicator reports. The data were not distributed outside of BDO EconSearch and have not been provided to Fisheries Queensland.
4. **Estimate the active population of charter fishers:** The scale of charter fishing activity in Queensland is uncertain so total activity was assumed to be only that which was described in either logbook data (step 2) or the surveys of fishing businesses (step 1). This involved adding activity described in the survey by licenced charter fishing businesses that had not completed logbooks to the activity of those that had completed logbooks. This increased the estimated population of active charter fishing businesses from 118 to 139, increased trip days from 9,100 to 10,300 and increased client days from 81,400 to 89,000. This is a conservative estimate of the scale of activity as it is likely that some licenced charter fishers were active but did not complete logbooks or participate in the survey.
5. **Scale up the survey sample to represent the population:** a set of weights was developed to scale up the sample to represent the estimated population activity in each subregion in each financial year in terms of: active businesses, trip days and client days. The weights were applied to the relevant data items i.e. capital and fixed costs were weighted by number of active businesses, most variable costs (such as fuel and variable labour) were weighted by trip days, and revenue and some variable costs (such as provisions) were weighted by client days.
6. **Calculate indicators for 2020/21:** adjust 2019/20 survey data using administrative information on individual businesses and cost indices, and integrate the results with the data from the 2020/21 update survey.
  - a. Business financial indicators are disaggregated by region, return on investment, business model, and main trip length.
  - b. Fisheries economic indicators are reported at the charter sector level as well as disaggregated by fishing region, business model, main trip length and return on investment.

- c. Economic contribution indicators are reported for Queensland and for each of the coastal Subregions (Figure 1-1) with each business attributed to the region of their 'main port' as provided in the survey. The method used was recommended by the National Fisheries and Aquaculture Industry Contributions Study (FRDC project 2017-210) (BDO EconSearch 2019).
- d. Social indicators are reported unweighted and at the charter sector level.

## 2.2. Survey of Fishing Businesses 2019/20

A survey of fishing businesses with respect to the 2019/20 financial year was carried out between March and May, 2021. This coincided with the time of uncertainty around the COVID-19 pandemic and associated government responses impacted fishing businesses. For this reason, the survey was piloted with a small sample of businesses before collecting the full sample. It was determined that the data collected was of sufficient quality to complete data collection over this period. The survey asked about the 2019/20 financial year and specific questions were asked about how fishing businesses were impacted by the COVID-19 pandemic, including what government support was received.

The survey involved collecting data from charter fishing businesses on trip types and prices, operating costs, employment (including unpaid), capital value and depreciation, social and demographic information. The survey was implemented using a questionnaire that was developed in collaboration with Fisheries Queensland and with industry representatives. Businesses were asked to only include the amounts that were attributable to their Queensland charter fishing business. If exact figures were not available (e.g. from a tax return), then they were asked to provide careful estimates.

Businesses were invited to participate through multiple email and phone call invitations as well as through the endorsement of various industry groups. They were invited to respond through an online form or over the phone. Most responses were provided over the phone.

The confidentiality of responses was made clear to respondents including that no individual response would be identifiable in reporting or provided to Fisheries Queensland and that any statistic published would be based on at least five responses. This 'five business rule' is commonly used to maintain confidentiality when reporting professional fishing statistics, including by Fisheries Queensland.

A total of 55 usable responses were received, including 52 that were used<sup>3</sup> for economic indicators and 55 for calculating social indicators. The responses that could be used for calculating economic indicators represented 37 per cent of the estimated population of active licenced charter fishers in 2020/21. More active businesses are better represented in the sample with almost half of the most active half of businesses responding to the survey and less than one quarter of the least active half of businesses responding. (Table 2-1). This sample was sufficient to confidently prepare the economic indicators with the regional and activity based disaggregations that follow in this report. The population and sample size in each disaggregation appears in the same table as the results to illustrate the representativeness of each.

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<sup>3</sup> Responses could only be used to estimate indicators if they were complete for the relevant section. For example, a response that included capital values but not operating costs could not be used to estimate economic indicators. However, if it included responses to demographic and social questions it could still be used to estimate social indicators.

Table 2-1 2019/20 survey sample in the Charter Sector, by main region and client days quartiles

	Active businesses (no.)		Proportion of 2020/21 active businesses that responded to the survey	Proportion of 2020/21 GVP represented by the sample <sup>a</sup>
	2020/21 Population	2019/20 Sample		
<b>Fishing region</b>				
North West	3	2	67%	14%
Cape York Peninsula	16	4	25%	89%
Wet Tropics	24	10	42%	54%
Dry Tropics	10	7	70%	47%
Mackay, Isaac and Whitsunday	21	1	5%	1%
Fitzroy	24	9	38%	33%
Wide Bay Burnett	15	3	20%	67%
South East	26	16	62%	49%
<b>Client days quartiles</b>				
0 to 64 client days	24	2	8%	
65 to 249 client days	27	16	59%	
250 to 789 client days	34	17	50%	
790 to 10,000 client days	33	17	52%	
<b>Queensland</b>	<b>139</b>	<b>52</b>	<b>37%</b>	<b>38%</b>

<sup>a</sup> Not reported for days fished groups as population level GVP is unknown for these categories.

Source: BDO EconSearch analysis

### 2.3. Update Survey of Fishing Businesses 2020/21

A less extensive update survey of the fishing businesses with respect to the 2020/21 financial year was carried out between June and August, 2022. The survey targeted the fishing businesses that participated in the 2019/20 survey with the purpose of gaining insight into changes in business operations between 2019/20 and 2020/21. The survey asked about the 2020/21 financial year and specific questions were asked about how fishing businesses were impacted by the COVID-19 pandemic.

The survey involved collecting updated data from charter fishing businesses on business types, trip types, trip prices, customer profiles and social information. The survey was implemented using a questionnaire that was developed in collaboration with Fisheries Queensland. Businesses were asked to only include the amounts that were attributable to their Queensland charter fishing business. If exact figures were not available (e.g. from a tax return), then they were asked to provide careful estimates.

Businesses were invited to participate through multiple email, SMS and phone call invitations. They were invited to respond through an online form or over the phone. Most responses were provided over the phone. The confidentiality of responses was made clear as with the 2019/20 survey.

The 2020/21 update survey received a total of 31 responses including 29 that were usable for economic analysis, which accounted for 56 per cent of the 2019/20 survey sample (52 responses). A smaller sample was targeted in this update survey as only a sub-set of data was required. These update responses were combined with the detailed responses to the 2019/20 survey to prepare the indicators for this report as

detailed in Section 2.4. Therefore, this sample was sufficient to confidently prepare the economic indicators with the regional and activity based disaggregations that follow in this report.

**Table 2-2 2020/21 survey sample in the Charter Sector, by main region and client days quartiles**

	Active businesses (no.)		
	2020/21 Population	2019/20 Survey Sample	2020/21 Update Survey Sample
<b>Fishing region</b>			
North West	3	2	1
Cape York Peninsula	16	4	2
Wet Tropics	24	10	7
Dry Tropics	10	7	1
Mackay, Isaac and Whitsunday	21	1	1
Fitzroy	24	9	3
Wide Bay Burnett	15	3	3
South East	26	16	11
<b>Client days quartiles</b>			
0 to 64 client days	24	2	1
65 to 249 client days	27	16	7
250 to 789 client days	34	17	11
790 to 10,000 client days	33	17	10
<b>Queensland</b>	<b>139</b>	<b>52</b>	<b>29</b>

## 2.4. Updating the Indicators, 2020/21

The 2020/21 economic indicators were derived by updating the survey-based 2019/20 indicators using responses from the 2020/21 update survey, administrative information on individual businesses and cost indices. Updating the indicators involved adjusting trip prices and customer locality based on the update survey. Operating costs and employment were adjusted based on the difference in trip days and client days between the years. Further, prices of inputs were adjusted in line with changes in relevant cost indices (Table 2-3).

Table 2-3 Cost adjustments for updating the indicators for 2020/21

Adjustment	2019/20 value	2020/21 value	Adjustment amount	Cost items adjusted
National minimum wage	\$19.84/hr	\$20.20/hr	2.3%	Unpaid labour
Wage Price Index for ordinary time hourly rates of pay excluding bonuses in public and private sectors	133.3	135.4	1.6%	Paid labour
Automotive fuel component of CPI calculation for Brisbane	102.3	103.0	0.7%	Fuel and lubricants
RBA Indicator Lending Rate: variable weighted-average rate on credit outstanding for businesses	7.37%	6.51%	-11.7%	Interest and borrowing costs
Consumer Price Index for all groups in Brisbane	113.6	119.2	4.9%	All other business operating costs

Source: BDO EconSearch analysis

## 2.5. Business model definitions

For the purpose of reporting financial indicators for different types of businesses, Charter Sector business models were selected collaboratively between Fisheries Queensland, Charter Sector representatives and BDO EconSearch. Survey participants were grouped into these business models based on their identification in the survey of the most important model to them. The business models used to categorise businesses in the Charter Sector are defined as:

1. **Coral reef** is bottom fishing, primarily in North Queensland, for coral reef fish.
2. **Rocky reef** is bottom fishing, primarily in South East Queensland, for rocky reef fish.
3. **Game fishing** is fishing to catch large open-water species such as tuna, marlin and shark.
4. **Inshore** includes fishing in estuary, rivers, freshwater and impoundments.
5. **Sport fishing** is fishing for specific targeted species (other than tuna, marlin and shark) in any body of water.

Business financial indicators for the sample of active businesses are presented in Section 3.4.2 by business model group. Survey respondents selected the most important business model to them based on a list of names of business models without the context provided by a definition. The groupings therefore reflect the survey participants' interpretations of the business model names.

## 2.6. Impact of COVID-19

In the 2020/21 update survey, participants were asked to estimate the impact COVID-19 had on different aspects of their Charter fishing business in 2020/21, including business revenue, wage costs and non-wage costs. The percentage change for each of the different aspects from each survey respondent was applied to the calculated 2020/21 estimates. These estimates were then scaled up to the charter sector total using the same weights as described in Section 2.1.

### 3. ECONOMIC INDICATORS FOR THE QUEENSLAND CHARTER SECTOR

#### 3.1. Clients, Gross Value of Production and Exports

The total client days, shown in Table 3-1, in the Charter Sector decreased from 132,000 in 2017/18 to just under 75,000 in 2019/20, a decline of 43 per cent. Between 2019/20 and 2020/21 total client days increased by 19 per cent to reach 89,000 in 2020/21. Consequently, Charter Sector GVP declined between 2017/18 (\$35.8m) and 2019/20 (\$24.6m) before increasing to \$30.9m in 2020/21. The value of exports<sup>4</sup> accounted for approximately 17 per cent of GVP in 2017/18 but declined to only 1 per cent in 2020/21 (Table 3-1).

In January 2020, the COVID-19 pandemic was beginning to affect the Charter Sector. While charter fishing may have been permitted, closures and lockdowns preventing or discouraging travel were a major reason for the loss of clients. Even as restrictions eased, there was still an initial reluctance to travel given uncertainties around potential for lockdowns, and this continued into the 2020/21 financial year. Many bookings were cancelled, and presumably new bookings were not made because of COVID-19 restrictions.

Table 3-1 Clients, GVP and export value of the Charter Sector, 2017/18 to 2020/21

	2017/18	2018/19	2019/20	2020/21
Client days (no.)	132,276	120,331	74,919	89,037
GVP (\$m)	35.8	33.1	24.6	30.9
Export value (\$m)	5.9	5.4	1.2	0.4

Source: Fisheries Queensland and 2018/19, 2019/20 and 2020/21 surveys

#### 3.2. Prices and Customers

Average price (per client day) was \$271 in 2017/18, \$275 in 2018/19, \$329 in 2019/20 and \$347 in 2020/21 and varied across business model and main trip length of operator (Table 3-2 and Table 3-3). By business model, the highest average price per client day in 2020/21 was \$442 for game fishing focused businesses and the lowest was \$225 for inshore focused businesses. By main trip length, operators focused on day trips had a slightly higher average price per client day (\$354/day) than multi-day focused operators (\$330/day) (Table 3-3).

The most significant market for the Charter Sector in 2020/21 was Australia. Surveyed businesses reported that 99 per cent of customers were domestic compared to 95 per cent in 2019/20 and 84 per cent in 2018/19 (Table 3-2). As mentioned above, 2020/21 was impacted by COVID-19 pandemic closures and lockdowns preventing or discouraging travel. By business model, international customers spent the most in sport and rocky reef fishing focused businesses in 2020/21 (2.0 per cent) and the least on inshore focused operators (0.6 per cent). International customers spent more on multi-day focused operators (2.3 per cent) than single day operators (1.0 per cent) (Table 3-3).

<sup>4</sup> Exports were estimated by applying each fishing business's estimate of the total proportion of their customers that are international visitors to their total revenue.

Table 3-2 Price and customers for Charter Sector, 2017/18 to 2020/21

	2017/18	2018/19	2019/20	2020/21
Price (\$/client/day)	270.75	274.89	328.96	347.15
Domestic Customers (%)	83%	84%	95%	99%
International Customers (%)	17%	16%	5%	1%

Source: 2018/19, 2019/20 and 2020/21 surveys

Table 3-3 Client days, Price, GVP and customers for Charter Sector, 2020/21 financial year

Region	Client days	Price (\$/client/day)	GVP (\$m)	Customers	
				Domestic (%)	International (%)
<b>Fishing region</b>					
North West, Cape York Peninsula and Wet Tropics	13,951	541.11	7.5	98.3%	1.7%
Dry Tropics and Mackay, Isaac and Whitsunday	20,129	371.74	7.5	99.5%	0.5%
Fitzroy and Wide Bay Burnett	31,822	324.86	10.3	98.7%	1.3%
South East	23,135	239.44	5.5	98.0%	2.0%
<b>Business model</b>					
Game fishing	17,362	442.10	7.7	98.9%	1.1%
Sports fishing	18,668	230.20	4.3	97.7%	2.3%
Coral reef	25,565	416.59	10.6	98.9%	1.1%
Rocky reef	10,596	424.30	4.5	98.0%	2.0%
Inshore <sup>a</sup>	16,846	224.98	3.8	99.4%	0.6%
<b>Main trip length</b>					
Multi-day & live aboard (>24hrs)	24,914	330.43	8.2	97.7%	2.3%
Day trips (<24hrs)	64,123	353.64	22.7	99.0%	1.0%
<b>Queensland</b>	<b>89,037</b>	<b>347.15</b>	<b>30.9</b>	<b>98.7%</b>	<b>1.3%</b>

<sup>a</sup> Includes estuary, rivers, freshwater, impoundments.

Source: BDO EconSearch analysis

### 3.3. Cost of Management

The costs incurred by Fisheries Queensland in managing Queensland's fisheries is not equal to the administration fees or licence fees charged by Fisheries Queensland to the fishing businesses. This section discusses the costs incurred by Fisheries Queensland and not the administration and licence fees charged by Fisheries Queensland to fishing businesses.

While the total cost of managing Queensland's commercial fisheries is known, the precise cost of managing each individual fishery and sector is difficult to determine. This is because the costs of activities such as fishery monitoring, assessment, management and compliance overlap several fisheries. For example, a single fishery monitoring activity can collect information for several fisheries which in turn inputs into the management of several different fisheries. Allocating the costs of managing fisheries requires a degree of subjective assessment based on the benefits derived by the individual fisheries from those activities. The

costs of managing the commercial sector for each fishery/sector were provided to BDO EconSearch by Fisheries Queensland. Costs were allocated to the fisheries based on the cost being incurred to enable the management of the fishery/sector and then proportionally attributed to the respective sectors based on the benefits of management to the fishery/sector. This was done for the purpose of developing economic indicators and should not be relied upon for any other purpose.

Estimated total management costs, as detailed in Table 3-4, for the Charter Sector were \$1.4m in 2020/21 and 2019/20, an increase from \$1.2m in both 2017/18 and 2018/19. These costs were incurred while delivering the following services:

- policy and management services
- regulatory/legislation and licensing services
- compliance services
- directorate services
- fishery monitoring and research services.

As a proportion of GVP total management costs were 3.3 per cent in 2017/18 and 4.5 per cent in 2020/21. The overall increase between 2017/18 and 2020/21 is due to the slight increase in management costs and decline in GVP (Table 3-4).

**Table 3-4 Costs of management in the Charter Sector, 2017/18 to 2020/21**

	2017/18	2018/19	2019/20	2020/21
Management costs (\$m)	1.2	1.2	1.4	1.4
GVP (\$m)	35.8	33.1	24.6	30.9
Management costs/GVP (%)	3.3%	3.6%	5.8%	4.5%

Source: Fisheries Queensland and 2018/19, 2019/20 and 2020/21 surveys

### 3.4. Business Financial Indicators

The major measures of the financial performance of active businesses in the Charter Sector for the 2017/18, 2018/19, 2019/20 and 2020/21 financial years are presented in Section 3.4.1. The estimates for 2017/18 and 2018/19 were developed from an earlier survey (BDO EconSearch 2022). The 2019/20 estimates were developed from the 2019/20 survey. The 2020/21 estimates were developed from the 2019/20 survey, the 2020/21 update survey and cost indices and are based on the weighted sample as described in point 5 of Section 2.1. Sample sizes outlined in these tables are from the 2019/20 survey, on which the update to 2020/21 indicators was based. The weights applied to the logbook and other data aim to generate reliable estimates at the scale of the fishery/sector, or average business. Average financial performance masks significant variation across types of businesses and their activities. To describe this variation, the same indicators are presented in Section 3.4.2 with businesses disaggregated by return on investment quartile, business model, main trip length and main fishing region.

#### 3.4.1. Sector average between 2017/18 and 2020/21

Business financial indicators are presented for average business and total activity in the Charter Sector for the 2019/20 and 2020/21 financial years in Table 3-5, and the 2017/18 and 2018/19 financial years in Table 3-6. This section summarises the key points from Table 3-5.



## Income

The average gross income for business activity in the Charter Sector was estimated to be \$222,000 in 2020/21, an increase from \$165,000 in 2019/20. Client days increased by less than gross income over the same period, resulting in higher prices in 2020/21 than in 2019/20 (see Section 3.2).

## Costs

Total costs are separated into variable costs and fixed costs, the sum of the two is total costs. In 2020/21, the total of variable costs (46 per cent of total costs) was slightly lower than the total of fixed costs (54 per cent of total costs). Variable costs as a proportion of total costs increased from 43 per cent in 2019/20 to 46 per cent in 2020/21.

Average total costs increased by 19 per cent between 2019/20 and 2020/21, a result of a 29 per cent increase in variable costs and a 12 per cent increase in fixed costs. In 2020/21, for the sector as a whole, around 23 per cent of the total costs were attributable to labour costs (both paid and imputed), the biggest cost item. Imputed unpaid labour (\$10,000) was divided into variable (fishing and repairs and maintenance) (\$5,000) and fixed (management and administration) (\$5,000) components based on survey data. Other significant costs were repairs and maintenance (17 per cent of total costs) and fuel (14 per cent).

Licence fees are as reported by respondents to the survey and may include other licences that respondents hold in addition to the Fisheries Queensland licence to undertake charter fishing operations. At the time of writing, Fisheries Queensland charged a \$355.52 fee per year for a charter fishing licence (Business Queensland 2022).

## Income and Profit

**Gross margin** is calculated as gross income less total variable costs and is a basic measure of profit. Gross margin was almost \$148,000 in 2020/21 and almost \$107,500 in 2019/20, a 38 per cent increase due to an increase in gross income and despite an increase in variable costs.

**Gross operating surplus** is calculated at gross income less total costs (excluding imputed wages for operator and family members as a cost item). This measure of profit gives an indication of the capacity of the operator to remain in the sector in the short term as unpaid labour does not affect business cash flow in the short term. Gross operating surplus was \$71,000 in 2020/21 and \$39,000 in 2019/20, an increase of approximately 83 per cent. This was due to a significant increase in revenue and a decrease in total costs relative to the increase in income.

**Business Profit before Depreciation** is calculated as gross income less total costs (including imputed wages). Business profit before depreciation was \$60,000 in 2020/21 and \$29,000 in 2019/20, an increase in revenue appeared to drive this increase. Positive business profit before depreciation indicates that the average fishing business earned enough income to cover its costs and the imputed cost of unpaid labour used to operate the business.

**Business profit** is calculated as gross income less total costs (including imputed wages) and less depreciation. This represents a more complete picture of the actual financial status of an individual firm and their capacity to remain in the sector in the long term as a positive business profit is required to pay imputed wages and replace capital at the rate it depreciates. Business profit was \$31,000 in 2020/21, a significant increase from \$1,200 in 2019/20. Therefore, sufficient income was earned by the average business to cover the imputed cost of labour and depreciation of capital in 2020/21.

**Profit at full equity** is a measure of the profitability of an individual fishing business, assuming the business has full equity in their operation (i.e. it excludes interest and borrowing costs). It is a useful absolute measure of the economic performance of firms. Profit at full equity was \$35,000, a significant increase from \$5,800 in 2019/20.

### **Return to Capital at Full Equity**

There are a number of interpretations of return to capital at full equity. For the purpose of this analysis it is appropriate to consider the capital employed by an average business in the sector, that is total capital at full equity for this sector. Capital includes boats, fishing gear, sheds, vehicles and other capital items used as part of the fishing enterprise. It does not include capital associated with non-fishing activities undertaken by the business. The average rate of return on total capital at full equity was 5.0 per cent in 2020/21, an improvement from 2019/20 (0.9 per cent).

### **Summary**

In 2020/21, the average business's activity in the Charter Sector generated a positive gross operating surplus (\$71,000) and profit at full equity (\$35,000), leading to a return on investment at full equity of 5.0 per cent. This means the average business earned enough income to cover its costs, the imputed cost of unpaid labour used to operate the business, and the cost of capital depreciation. As businesses adapted to COVID-19 conditions, remaining operators successfully increased their total revenue and decreased their costs relative to income. This resulted in improved profitability for businesses between 2019/20 and 2020/21 as average profit at full equity and return on investment increased.

Table 3-5 Financial performance in the Charter Sector, 2019/20 and 2020/21

	2019/20			2020/21		
	Average per Business	Total for the Whole Sector	%	Average per Business	Total for the Whole Sector	%
<b>Charter Businesses</b>						
Active Businesses (no.)	149	149		139	139	
Sample Size (n)	52	52		52	52	
<b>Charter Activity</b>						
Trip days (no.)	60	8,953		74	10,353	
Client days (no.)	503	74,919		641	89,037	
<b>Employment</b>						
FTE Jobs	0.8	115		0.9	123	
Total Jobs	1.6	245		1.9	266	
<b>(1) Gross Income</b>	<b>\$165,406</b>	<b>\$24,645,444</b>		<b>\$222,367</b>	<b>\$30,908,975</b>	
<b>Variable costs</b>						
Fuel	\$18,054	\$2,690,112	13%	\$23,180	\$3,221,984	14%
Ice & Bait	\$3,583	\$533,798	3%	\$4,862	\$675,865	3%
Fishing tackle	\$2,549	\$379,769	2%	\$3,469	\$482,173	2%
Provisions	\$11,637	\$1,733,903	9%	\$15,275	\$2,123,243	9%
Labour - paid	\$13,228	\$1,971,021	10%	\$16,729	\$2,325,311	10%
(2) Labour - unpaid	\$4,415	\$657,769	3%	\$5,356	\$744,454	3%
Repairs and maintenance	\$4,465	\$665,239	3%	\$5,584	\$776,227	3%
<b>(3) Total Variable Costs</b>	<b>\$57,930</b>	<b>\$8,631,611</b>	<b>43%</b>	<b>\$74,455</b>	<b>\$10,349,258</b>	<b>46%</b>
<b>Fixed costs</b>						
Licence Fee	\$300	\$44,703	0%	\$321	\$44,559	0%
Repairs and maintenance	\$19,142	\$2,852,130	14%	\$26,769	\$3,720,885	17%
Insurance	\$10,361	\$1,543,795	8%	\$10,925	\$1,518,562	7%
(4) Interest	\$3,241	\$482,959	2%	\$2,863	\$397,981	2%
Labour - paid	\$9,739	\$1,451,167	7%	\$9,940	\$1,381,610	6%
(5) Labour - unpaid	\$4,944	\$736,706	4%	\$5,091	\$707,656	3%
(6) Leasing and rent	\$2,742	\$408,583	2%	\$2,870	\$398,863	2%
Rates	\$690	\$102,861	1%	\$801	\$111,372	0%
Power	\$991	\$147,594	1%	\$1,004	\$139,538	1%
Communications	\$2,310	\$344,163	2%	\$2,393	\$332,643	1%
Legal & Accounting	\$2,468	\$367,684	2%	\$2,587	\$359,606	2%
Slipping, Mooring & survey	\$6,901	\$1,028,286	5%	\$7,099	\$986,697	4%
Travel	\$924	\$137,639	1%	\$942	\$130,925	1%
Protective clothing & Uniforms	\$868	\$129,276	1%	\$894	\$124,249	1%
Membership, Assoc. expenses	\$393	\$58,556	0%	\$418	\$58,145	0%
Advertising	\$5,016	\$747,344	4%	\$5,213	\$724,568	3%
Other	\$7,106	\$1,058,737	5%	\$7,591	\$1,055,147	5%
<b>(7) Total Fixed Costs</b>	<b>\$78,135</b>	<b>\$11,642,184</b>	<b>57%</b>	<b>\$87,719</b>	<b>\$12,193,006</b>	<b>54%</b>
<b>(8) Total Costs (3+7)</b>	<b>\$136,066</b>	<b>\$20,273,795</b>	<b>100%</b>	<b>\$162,175</b>	<b>\$22,542,264</b>	<b>100%</b>
<b>Gross Margin (1-3)</b>	<b>\$107,475</b>	<b>\$16,013,833</b>		<b>\$147,912</b>	<b>\$20,559,718</b>	
<b>(9) Total Unpaid Labour (2+5)</b>	<b>\$9,359</b>	<b>\$1,394,475</b>		<b>\$10,447</b>	<b>\$1,452,110</b>	
<b>Gross Operating Surplus (1-8+9)</b>	<b>\$38,699</b>	<b>\$5,766,124</b>		<b>\$70,639</b>	<b>\$9,818,821</b>	
<b>(10) Business Profit before Depreciation (1-8)</b>	<b>\$29,340</b>	<b>\$4,371,649</b>		<b>\$60,192</b>	<b>\$8,366,711</b>	
<b>(11) Depreciation</b>	<b>\$28,131</b>	<b>\$4,191,571</b>		<b>\$29,073</b>	<b>\$4,041,080</b>	
<b>(12) Business Profit (10-11)</b>	<b>\$1,209</b>	<b>\$180,078</b>		<b>\$31,120</b>	<b>\$4,325,631</b>	
<b>(13) Profit at Full Equity<sup>b</sup> (12+4+6*)</b>	<b>\$5,821</b>	<b>\$867,328</b>		<b>\$35,418</b>	<b>\$4,923,043</b>	
<b>(14) Fishing Gear and Equipment<sup>c</sup></b>	<b>\$684,736</b>	<b>\$102,025,647</b>		<b>\$703,964</b>	<b>\$97,851,029</b>	
<b>Rate of Return on Fishing Gear and Equipment at Full Equity (13/14*100)</b>	<b>0.9%</b>	<b>0.9%</b>		<b>5.0%</b>	<b>5.0%</b>	

<sup>a</sup> Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

<sup>b</sup> The capital values in the calculation of Profit at Full Equity include the capitalised value of leased equipment (6). They are therefore larger than the capital values stated in the table.

<sup>c</sup> Includes items such as boats, boat and fishing gear, electronic equipment, trailers, buildings and motor vehicles.

Source: 2019/20 and 2020/21 surveys

Table 3-6 Financial performance in the Charter Sector, 2017/18 and 2018/19

	2017/18			2018/19		
	Average per Business	Total for the Whole Sector	%	Average per Business	Total for the Whole Sector	%
<b>Charter Businesses</b>						
Active Businesses (no.)	180	180		176	176	
Sample Size (n)	92	92		92	92	
<b>Charter Activity</b>						
Trip days (no.)	85	15,255		80	14,081	
Client days (no.)	735	132,276		684	120,331	
<b>Employment</b>						
FTE Jobs	1.0	188		1.0	177	
Total Jobs	2.1	377		2.0	354	
<b>(1) Gross Income</b>	<b>\$199,049</b>	<b>\$35,813,264</b>		<b>\$187,945</b>	<b>\$33,078,369</b>	
<b>Variable costs</b>						
Fuel	\$25,315	\$4,554,821	14%	\$25,369	\$4,464,860	14%
Ice & Bait	\$6,300	\$1,133,471	4%	\$6,317	\$1,111,799	3%
Fishing tackle	\$3,070	\$552,366	2%	\$2,928	\$515,407	2%
Provisions	\$11,985	\$2,156,426	7%	\$12,314	\$2,167,344	7%
Labour - paid	\$18,094	\$3,255,555	10%	\$17,867	\$3,144,664	10%
(2) Labour - unpaid	\$12,348	\$2,221,647	7%	\$12,194	\$2,146,231	7%
Repairs and maintenance	-	n.a	-	-	n.a	-
<b>(3) Total Variable Costs</b>	<b>\$77,113</b>	<b>\$13,874,285</b>	<b>43%</b>	<b>\$76,990</b>	<b>\$13,550,304</b>	<b>43%</b>
<b>Fixed costs</b>						
Licence Fee	\$1,072	\$192,961	1%	\$1,107	\$194,878	1%
Repairs and maintenance	\$30,162	\$5,426,850	17%	\$30,909	\$5,440,044	17%
Insurance	\$8,565	\$1,541,056	5%	\$8,770	\$1,543,484	5%
(4) Interest	\$4,837	\$870,276	3%	\$4,859	\$855,116	3%
Labour - paid	\$10,174	\$1,830,502	6%	\$10,442	\$1,837,846	6%
(5) Labour - unpaid	\$15,299	\$2,752,648	9%	\$15,900	\$2,798,342	9%
(6) Leasing and rent	\$5,773	\$1,038,703	3%	\$5,961	\$1,049,136	3%
Rates	\$878	\$157,914	0%	\$816	\$143,689	0%
Power	\$1,134	\$204,022	1%	\$1,111	\$195,581	1%
Communications	\$2,406	\$432,944	1%	\$2,521	\$443,636	1%
Legal & Accounting	\$2,524	\$454,158	1%	\$2,624	\$461,830	1%
Slipping, Mooring & survey	\$11,213	\$2,017,472	6%	\$11,580	\$2,038,029	6%
Travel	\$1,106	\$198,951	1%	\$1,100	\$193,647	1%
Protective clothing & Uniforms	\$1,200	\$215,941	1%	\$1,196	\$210,462	1%
Membership, Assoc. expenses	\$351	\$63,074	0%	\$360	\$63,430	0%
Advertising	\$3,580	\$644,160	2%	\$3,622	\$637,540	2%
Other	\$643	\$115,643	0%	\$641	\$112,861	0%
<b>(7) Total Fixed Costs</b>	<b>\$100,917</b>	<b>\$18,157,275</b>	<b>57%</b>	<b>\$103,520</b>	<b>\$18,219,552</b>	<b>57%</b>
<b>(8) Total Costs (3+7)</b>	<b>\$178,030</b>	<b>\$32,031,560</b>	<b>100%</b>	<b>\$180,511</b>	<b>\$31,769,856</b>	<b>100%</b>
<b>Gross Margin (1-3)</b>	<b>\$121,936</b>	<b>\$21,938,979</b>		<b>\$110,955</b>	<b>\$19,528,065</b>	
<b>(9) Total Unpaid Labour (2+5)</b>	<b>\$27,647</b>	<b>\$4,974,296</b>		<b>\$28,094</b>	<b>\$4,944,572</b>	
<b>Gross Operating Surplus (1-8+9)</b>	<b>\$48,665</b>	<b>\$8,756,000</b>		<b>\$35,529</b>	<b>\$6,253,085</b>	
<b>(10) Business Profit before Depreciation (1-8)</b>	<b>\$21,019</b>	<b>\$3,781,704</b>		<b>\$7,435</b>	<b>\$1,308,513</b>	
<b>(11) Depreciation</b>	<b>\$31,984</b>	<b>\$5,754,686</b>		<b>\$32,765</b>	<b>\$5,766,609</b>	
<b>(12) Business Profit (10-11)</b>	<b>-\$10,966</b>	<b>-\$1,972,982</b>		<b>-\$25,330</b>	<b>-\$4,458,096</b>	
<b>(13) Profit at Full Equity<sup>b</sup> (12+4+6*)</b>	<b>-\$3,242</b>	<b>-\$583,354</b>		<b>-\$17,491</b>	<b>-\$3,078,411</b>	
<b>(14) Fishing Gear and Equipment<sup>c</sup></b>	<b>\$569,406</b>	<b>\$102,448,891</b>		<b>\$593,297</b>	<b>\$104,420,286</b>	
<b>Rate of Return on Fishing Gear and Equipment at Full Equity (13/14*100)</b>	<b>-0.6%</b>	<b>-0.6%</b>		<b>-2.9%</b>	<b>-2.9%</b>	

<sup>a</sup> Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

<sup>b</sup> The capital values in the calculation of Profit at Full Equity include the capitalised value of leased equipment (6). They are therefore larger than the capital values stated in the table.

<sup>c</sup> Includes items such as boats, boat and fishing gear, electronic equipment, trailers, buildings and motor vehicles.

Source: 2018/19 survey

### 3.4.2. Disaggregation of business financial indicators for 2020/21

The tables in this section present financial indicators for the sector with the population of active businesses disaggregated across various dimensions: return on investment quartile, business model, main trip length and main fishing region. Grouping businesses in different ways and comparing the financial indicators between groups provides insight into the relationships between business characteristics and financial performance. The tables disaggregate the same weighted sample as appears in Section 3.4.1.

#### Return on Investment Quartiles

Business financial indicators are presented in Table 3-7 for the sample of active businesses split into quarters of approximately equal size based on return on investment in 2020/21. This provides insight into the differences between the most and least profitable businesses such as cost relative to income, itemised cost amounts, capital utilised, scale of operation, etc.

The top two quartiles have a positive profit at full equity on average and a positive return on investment, and the bottom two quartiles have a negative profit at full equity on average and a negative return on investment. The top quartiles are characterised by being more active than average and having more revenue as a consequence, but also having low variable and fixed cost and using less capital.

#### Employment (fte) Quartiles

Business financial indicators are presented in Table 3-8 for the sample of active businesses split into quarters of approximately equal size based on the size of employment (fte) in 2020/21. This provides insight into the differences in cost structures and profitability of different scales of businesses in the sector.

The middle two quartiles had the most positive profit at full equity and return on investment, suggesting that the most profitable businesses in 2020/21 tended to be those that were smaller and worked part-time. The group of small operators working very infrequently (the bottom quartile) tended to be marginally profitable and the group of largest businesses (the top quartile) tended to be marginally unprofitable. The top quartile is characterised by being more active than average and having more revenue as a consequence, but also having significantly higher paid labour and other costs which decreased overall profitability.

#### Business Model

Business financial indicators are presented in Table 3-9 for the sample of active businesses split into business model groups (Game fishing, Sports fishing, Coral reef, Rocky reef and Inshore). Businesses were divided into business models based on their identification of the most important model to their business in the survey.

Profitability varies widely between the different models in terms of return on investment. In 2020/21, the most profitable model was sports fishing (19.2 per cent return on investment) and the least was inshore (-7.5 per cent return on investment).

#### Main Trip Length

Business financial indicators are presented in Table 3-10 for the population of active businesses in this sector split into groups that focus more on day trips or multi-day trips. Businesses were divided into these groups based on their identification of the most important type to their business in the survey.

In 2020/21, return on investment including endorsement value was above the sector average for businesses that focus on day trips (6.4 per cent) and below average for those that focus on multi-day trips (3.1 per cent).

### **Fishing Regions**

Business financial indicators are presented in Table 3-11 by main fishing region. Each business was allocated to the region of their 'main port' as provided in the survey.

Return on investment varied widely across regions in 2020/21 from 60.2 percent in the Dry Tropics and Mackay, Isaac and Whitsunday region to -3.9 per cent in Fitzroy and Wide Bay Burnett. The higher profitability region in 2020/21 (Dry Tropics and Mackay, Isaac and Whitsunday) was characterised by low-cost operations with lower levels of employment relative to income when compared to the state average.

Table 3-7 Financial performance in the Charter Sector, by return on investment quartile, 2020/21

	Average per Business				
	Lowest 25%	Second Quartile	Third Quartile	Highest 25%	All Businesses
<b>Charter Businesses</b>					
Active Businesses (no.)	30	37	28	44	139
Sample Size (n)	13	13	13	13	52
<b>Charter Activity</b>					
Trip days (no.)	62	77	78	79	74
Client days (no.)	270	888	768	601	641
<b>Employment</b>					
FTE Jobs	0.3	1.8	1.2	0.3	0.9
Total Jobs	1.2	2.7	2.5	1.3	1.9
<b>(1) Gross Income</b>	<b>\$92,224</b>	<b>\$256,974</b>	<b>\$330,769</b>	<b>\$212,124</b>	<b>\$222,367</b>
<b>Variable costs</b>					
Fuel	\$10,434	\$38,976	\$37,182	\$9,434	\$23,180
Ice & Bait	\$2,619	\$5,507	\$7,301	\$4,279	\$4,862
Fishing tackle	\$2,230	\$2,981	\$6,361	\$2,873	\$3,469
Provisions	\$1,500	\$42,080	\$10,013	\$5,221	\$15,275
Labour - paid	\$4,809	\$34,315	\$30,378	\$1,120	\$16,729
(2) Labour - unpaid	\$7,342	\$5,988	\$6,067	\$3,005	\$5,356
Repairs and maintenance	\$3,546	\$5,845	\$7,524	\$5,509	\$5,584
<b>(3) Total Variable Costs</b>	<b>\$32,481</b>	<b>\$135,691</b>	<b>\$104,826</b>	<b>\$31,439</b>	<b>\$74,455</b>
<b>Fixed costs</b>					
Licence Fee	\$374	\$324	\$261	\$320	\$321
Repairs and maintenance	\$12,342	\$53,293	\$30,273	\$11,771	\$26,769
Insurance	\$9,763	\$14,341	\$12,694	\$7,672	\$10,925
(4) Interest	\$3,229	\$5,930	\$2,864	\$0	\$2,863
Labour - paid	\$2,419	\$21,766	\$17,217	\$326	\$9,940
(5) Labour - unpaid	\$3,219	\$8,732	\$4,341	\$3,749	\$5,091
(6) Leasing and rent	\$1,897	\$4,909	\$4,364	\$836	\$2,870
Rates	\$240	\$2,552	\$0	\$207	\$801
Power	\$222	\$1,524	\$2,498	\$136	\$1,004
Communications	\$1,823	\$4,013	\$3,661	\$588	\$2,393
Legal & Accounting	\$3,192	\$4,645	\$2,147	\$704	\$2,587
Slipping, Mooring & survey	\$14,971	\$5,812	\$5,000	\$4,168	\$7,099
Travel	\$375	\$2,041	\$1,211	\$220	\$942
Protective clothing & Uniforms	\$612	\$1,570	\$1,217	\$303	\$894
Membership, Assoc. expenses	\$145	\$748	\$405	\$333	\$418
Advertising	\$2,339	\$10,688	\$7,689	\$920	\$5,213
Other	\$15,088	\$11,557	\$2,208	\$2,551	\$7,591
<b>(7) Total Fixed Costs</b>	<b>\$72,248</b>	<b>\$154,443</b>	<b>\$98,049</b>	<b>\$34,804</b>	<b>\$87,719</b>
<b>(8) Total Costs (3+7)</b>	<b>\$104,729</b>	<b>\$290,134</b>	<b>\$202,875</b>	<b>\$66,243</b>	<b>\$162,175</b>
<b>Gross Margin (1-3)</b>	<b>\$59,743</b>	<b>\$121,283</b>	<b>\$225,943</b>	<b>\$180,685</b>	<b>\$147,912</b>
<b>(9) Total Unpaid Labour (2+5)</b>	<b>\$10,561</b>	<b>\$14,720</b>	<b>\$10,408</b>	<b>\$6,754</b>	<b>\$10,447</b>
<b>Gross Operating Surplus (1-8+9)</b>	<b>-\$1,943</b>	<b>-\$18,440</b>	<b>\$138,302</b>	<b>\$152,634</b>	<b>\$70,639</b>
<b>(10) Business Profit before Depreciation (1-8)</b>	<b>-\$12,505</b>	<b>-\$33,160</b>	<b>\$127,894</b>	<b>\$145,880</b>	<b>\$60,192</b>
<b>(11) Depreciation</b>	<b>\$9,413</b>	<b>\$58,838</b>	<b>\$40,494</b>	<b>\$9,801</b>	<b>\$29,073</b>
<b>(12) Business Profit (10-11)</b>	<b>-\$21,917</b>	<b>-\$91,998</b>	<b>\$87,400</b>	<b>\$136,079</b>	<b>\$31,120</b>
<b>(13) Profit at Full Equity (12+4+6<sup>a</sup>)</b>	<b>-\$17,739</b>	<b>-\$83,614</b>	<b>\$92,446</b>	<b>\$136,498</b>	<b>\$35,418</b>
<b>(14) Fishing Gear and Equipment</b>	<b>\$259,907</b>	<b>\$1,445,642</b>	<b>\$919,236</b>	<b>\$237,014</b>	<b>\$703,964</b>
<b>Rate of Return on Fishing Gear and Equipment at Full Equity (13/14*100)</b>	<b>-6.8%</b>	<b>-5.8%</b>	<b>10.1%</b>	<b>57.6%</b>	<b>5.0%</b>

<sup>a</sup> Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: 2019/20 and 2020/21 surveys

Table 3-8 Financial performance in the Charter Sector, by employment (fte) quartile, 2020/21

	Average per Business				
	Lowest 25%	Second Quartile	Third Quartile	Highest 25%	All Businesses
<b>Charter Businesses</b>					
Active Businesses (no.)	25	27	51	36	139
Sample Size (n)	13	13	13	13	52
<b>Charter Activity</b>					
Trip days (no.)	65	79	57	102	74
Client days (no.)	274	498	542	1,142	641
<b>Employment</b>					
FTE Jobs	0.1	0.3	0.5	2.3	0.9
Total Jobs	1.0	1.4	1.6	3.4	1.9
<b>(1) Gross Income</b>	<b>\$78,855</b>	<b>\$191,794</b>	<b>\$196,203</b>	<b>\$381,904</b>	<b>\$222,367</b>
<b>Variable costs</b>					
Fuel	\$10,364	\$14,013	\$10,910	\$56,313	\$23,180
Ice & Bait	\$2,095	\$3,765	\$4,433	\$8,208	\$4,862
Fishing tackle	\$2,279	\$3,413	\$2,606	\$5,564	\$3,469
Provisions	\$584	\$5,105	\$5,856	\$46,403	\$15,275
Labour - paid	\$368	\$5,811	\$5,065	\$52,760	\$16,729
(2) Labour - unpaid	\$2,008	\$5,703	\$6,901	\$5,228	\$5,356
Repairs and maintenance	\$4,202	\$7,907	\$1,771	\$10,245	\$5,584
<b>(3) Total Variable Costs</b>	<b>\$21,902</b>	<b>\$45,717</b>	<b>\$37,542</b>	<b>\$184,720</b>	<b>\$74,455</b>
<b>Fixed costs</b>					
Licence Fee	\$327	\$513	\$210	\$331	\$321
Repairs and maintenance	\$10,916	\$17,544	\$16,202	\$59,636	\$26,769
Insurance	\$5,136	\$9,571	\$10,006	\$17,256	\$10,925
(4) Interest	\$171	\$3,454	\$689	\$7,386	\$2,863
Labour - paid	\$152	\$2,175	\$2,861	\$32,552	\$9,940
(5) Labour - unpaid	\$835	\$4,973	\$3,914	\$9,809	\$5,091
(6) Leasing and rent	\$2,384	\$2,430	\$1,204	\$5,899	\$2,870
Rates	\$170	\$449	\$382	\$2,096	\$801
Power	\$112	\$365	\$481	\$2,840	\$1,004
Communications	\$1,200	\$1,020	\$1,608	\$5,355	\$2,393
Legal & Accounting	\$1,571	\$2,662	\$1,013	\$5,475	\$2,587
Slipping, Mooring & survey	\$19,055	\$2,800	\$3,639	\$6,893	\$7,099
Travel	\$301	\$498	\$411	\$2,471	\$942
Protective clothing & Uniforms	\$510	\$624	\$502	\$1,918	\$894
Membership, Assoc. expenses	\$56	\$253	\$281	\$988	\$418
Advertising	\$1,930	\$2,020	\$1,933	\$14,519	\$5,213
Other	\$928	\$17,048	\$2,761	\$12,083	\$7,591
<b>(7) Total Fixed Costs</b>	<b>\$45,753</b>	<b>\$68,399</b>	<b>\$48,097</b>	<b>\$187,507</b>	<b>\$87,719</b>
<b>(8) Total Costs (3+7)</b>	<b>\$67,655</b>	<b>\$114,117</b>	<b>\$85,639</b>	<b>\$372,228</b>	<b>\$162,175</b>
<b>Gross Margin (1-3)</b>	<b>\$56,953</b>	<b>\$146,076</b>	<b>\$158,661</b>	<b>\$197,183</b>	<b>\$147,912</b>
<b>(9) Total Unpaid Labour (2+5)</b>	<b>\$2,843</b>	<b>\$10,676</b>	<b>\$10,815</b>	<b>\$15,037</b>	<b>\$10,447</b>
<b>Gross Operating Surplus (1-8+9)</b>	<b>\$14,043</b>	<b>\$88,353</b>	<b>\$121,379</b>	<b>\$24,713</b>	<b>\$70,639</b>
<b>(10) Business Profit before Depreciation (1-8)</b>	<b>\$11,200</b>	<b>\$77,677</b>	<b>\$110,564</b>	<b>\$9,676</b>	<b>\$60,192</b>
<b>(11) Depreciation</b>	<b>\$6,151</b>	<b>\$9,135</b>	<b>\$31,043</b>	<b>\$56,959</b>	<b>\$29,073</b>
<b>(12) Business Profit (10-11)</b>	<b>\$5,049</b>	<b>\$68,542</b>	<b>\$79,521</b>	<b>-\$47,283</b>	<b>\$31,120</b>
<b>(13) Profit at Full Equity (12+4+6<sup>a</sup>)</b>	<b>\$6,412</b>	<b>\$73,211</b>	<b>\$80,813</b>	<b>-\$36,948</b>	<b>\$35,418</b>
<b>(14) Fishing Gear and Equipment</b>	<b>\$188,029</b>	<b>\$275,121</b>	<b>\$692,849</b>	<b>\$1,395,759</b>	<b>\$703,964</b>
<b>Rate of Return on Fishing Gear and Equipment at Full Equity (13/14*100)</b>	<b>3.4%</b>	<b>26.6%</b>	<b>11.7%</b>	<b>-2.6%</b>	<b>5.0%</b>

<sup>a</sup> Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: 2019/20 and 2020/21 surveys



Table 3-9 Financial performance in the Charter Sector, by business model, 2020/21

	Average per Business					
	Game fishing	Sports fishing	Coral reef	Rocky reef	Inshore <sup>a</sup>	All Businesses
<b>Charter Businesses</b>						
Active Businesses (no.)	33	23	40	13	30	139
Sample Size (n)	14	11	9	6	12	52
<b>Charter Activity</b>						
Trip days (no.)	86	78	76	77	56	74
Client days (no.)	520	826	646	811	554	641
<b>Employment</b>						
FTE Jobs	1.1	0.8	0.5	1.2	1.0	0.9
Total Jobs	2.0	1.7	1.7	3.6	1.5	1.9
<b>(1) Gross Income</b>	<b>\$229,892</b>	<b>\$190,177</b>	<b>\$269,310</b>	<b>\$344,191</b>	<b>\$124,641</b>	<b>\$222,367</b>
<b>Variable costs</b>						
Fuel	\$25,343	\$21,522	\$15,569	\$46,018	\$22,123	\$23,180
Ice & Bait	\$5,074	\$1,351	\$6,103	\$8,388	\$4,111	\$4,862
Fishing tackle	\$4,551	\$1,246	\$4,213	\$4,277	\$2,618	\$3,469
Provisions	\$5,514	\$6,112	\$6,765	\$101,552	\$6,809	\$15,275
Labour - paid	\$28,461	\$14,696	\$10,551	\$20,814	\$11,635	\$16,729
(2) Labour - unpaid	\$4,113	\$6,187	\$3,388	\$11,378	\$6,074	\$5,356
Repairs and maintenance	\$4,316	\$4,995	\$4,519	\$4,590	\$9,228	\$5,584
<b>(3) Total Variable Costs</b>	<b>\$77,423</b>	<b>\$56,033</b>	<b>\$51,109</b>	<b>\$197,018</b>	<b>\$62,599</b>	<b>\$74,455</b>
<b>Fixed costs</b>						
Licence Fee	\$462	\$373	\$98	\$260	\$441	\$321
Repairs and maintenance	\$29,101	\$15,888	\$19,662	\$65,515	\$24,893	\$26,769
Insurance	\$10,565	\$7,891	\$9,815	\$10,135	\$15,358	\$10,925
(4) Interest	\$4,171	\$1,142	\$2,211	\$3,361	\$3,340	\$2,863
Labour - paid	\$16,152	\$6,336	\$6,739	\$11,631	\$9,231	\$9,940
(5) Labour - unpaid	\$9,024	\$1,692	\$3,514	\$3,016	\$6,241	\$5,091
(6) Leasing and rent	\$2,169	\$3,081	\$2,173	\$6,228	\$2,945	\$2,870
Rates	\$510	\$0	\$0	\$5,380	\$792	\$801
Power	\$607	\$382	\$1,643	\$1,327	\$932	\$1,004
Communications	\$3,188	\$2,119	\$1,974	\$3,407	\$1,833	\$2,393
Legal & Accounting	\$4,441	\$2,069	\$1,398	\$3,465	\$2,105	\$2,587
Slipping, Mooring & survey	\$5,499	\$2,065	\$15,666	\$1,763	\$3,745	\$7,099
Travel	\$493	\$1,135	\$754	\$2,035	\$1,067	\$942
Protective clothing & Uniforms	\$938	\$936	\$683	\$1,285	\$921	\$894
Membership, association expenses	\$505	\$419	\$351	\$386	\$423	\$418
Advertising	\$2,153	\$7,573	\$1,345	\$10,788	\$9,454	\$5,213
Other	\$24,077	\$1,176	\$3,167	\$4,544	\$1,319	\$7,591
<b>(7) Total Fixed Costs</b>	<b>\$114,087</b>	<b>\$54,231</b>	<b>\$71,193</b>	<b>\$134,526</b>	<b>\$85,038</b>	<b>\$87,719</b>
<b>(8) Total Costs (3+7)</b>	<b>\$191,497</b>	<b>\$110,285</b>	<b>\$122,302</b>	<b>\$331,543</b>	<b>\$147,637</b>	<b>\$162,175</b>
<b>Gross Margin (1-3)</b>	<b>\$152,487</b>	<b>\$134,116</b>	<b>\$218,201</b>	<b>\$147,174</b>	<b>\$62,042</b>	<b>\$147,912</b>
<b>(9) Total Unpaid Labour (2+5)</b>	<b>\$13,137</b>	<b>\$7,879</b>	<b>\$6,902</b>	<b>\$14,394</b>	<b>\$12,315</b>	<b>\$10,447</b>
<b>Gross Operating Surplus (1-8+9)</b>	<b>\$51,891</b>	<b>\$87,243</b>	<b>\$153,910</b>	<b>\$27,042</b>	<b>-\$10,681</b>	<b>\$70,639</b>
<b>(10) Business Profit before Depreciation (1-8)</b>	<b>\$38,792</b>	<b>\$79,306</b>	<b>\$147,008</b>	<b>\$12,648</b>	<b>-\$22,996</b>	<b>\$60,192</b>
<b>(11) Depreciation</b>	<b>\$29,980</b>	<b>\$12,629</b>	<b>\$33,601</b>	<b>\$61,426</b>	<b>\$20,508</b>	<b>\$29,073</b>
<b>(12) Business Profit (10-11)</b>	<b>\$9,089</b>	<b>\$66,268</b>	<b>\$113,407</b>	<b>-\$48,778</b>	<b>-\$43,504</b>	<b>\$31,120</b>
<b>(13) Profit at Full Equity (12+4+6<sup>b</sup>)</b>	<b>\$14,283</b>	<b>\$69,042</b>	<b>\$116,705</b>	<b>-\$42,303</b>	<b>-\$38,692</b>	<b>\$35,418</b>
<b>(14) Fishing Gear and Equipment</b>	<b>\$785,824</b>	<b>\$358,834</b>	<b>\$743,037</b>	<b>\$1,409,572</b>	<b>\$516,630</b>	<b>\$703,964</b>
<b>Rate of Return on Fishing Gear and Equipment at Full Equity (13/14*100)</b>	<b>1.8%</b>	<b>19.2%</b>	<b>15.7%</b>	<b>-3.0%</b>	<b>-7.5%</b>	<b>5.0%</b>

<sup>a</sup> Includes estuary, rivers, freshwater, impoundments.

<sup>b</sup> Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: 2019/20 and 2020/21 surveys

Table 3-10 Financial performance in the Charter Sector, by main trip length, 2020/21

	Average per business		
	Multi-day trips & live aboard (>24hrs)	Day trips (<24hrs)	All Businesses
<b>Charter Businesses</b>			
Active Businesses (no.)	35	104	139
Sample Size (n)	16	36	52
<b>Charter Activity</b>			
Trip days (no.)	100	66	74
Client days (no.)	712	617	641
<b>Employment</b>			
FTE Jobs	0.9	0.9	0.9
Total Jobs	2.2	1.8	1.9
<b>(1) Gross Income</b>	<b>\$235,127</b>	<b>\$218,071</b>	<b>\$222,367</b>
<b>Variable costs</b>			
Fuel	\$24,616	\$22,696	\$23,180
Ice & Bait	\$3,841	\$5,206	\$4,862
Fishing tackle	\$3,256	\$3,540	\$3,469
Provisions	\$8,251	\$17,640	\$15,275
Labour - paid	\$17,192	\$16,573	\$16,729
(2) Labour - unpaid	\$7,927	\$4,490	\$5,356
Repairs and maintenance	\$9,117	\$4,395	\$5,584
<b>(3) Total Variable Costs</b>	<b>\$74,200</b>	<b>\$74,541</b>	<b>\$74,455</b>
<b>Fixed costs</b>			
Licence Fee	\$458	\$274	\$321
Repairs and maintenance	\$24,523	\$27,525	\$26,769
Insurance	\$10,673	\$11,010	\$10,925
(4) Interest	\$2,068	\$3,131	\$2,863
Labour - paid	\$11,264	\$9,494	\$9,940
(5) Labour - unpaid	\$6,233	\$4,707	\$5,091
(6) Leasing and rent	\$4,180	\$2,428	\$2,870
Rates	\$464	\$915	\$801
Power	\$516	\$1,168	\$1,004
Communications	\$2,119	\$2,485	\$2,393
Legal & Accounting	\$2,407	\$2,648	\$2,587
Slipping, Mooring & survey	\$5,689	\$7,573	\$7,099
Travel	\$1,191	\$858	\$942
Protective clothing & Uniforms	\$1,176	\$799	\$894
Membership, association expenses	\$305	\$456	\$418
Advertising	\$2,926	\$5,983	\$5,213
Other	\$2,090	\$9,443	\$7,591
<b>(7) Total Fixed Costs</b>	<b>\$78,280</b>	<b>\$90,898</b>	<b>\$87,719</b>
<b>(8) Total Costs (3+7)</b>	<b>\$152,481</b>	<b>\$165,438</b>	<b>\$162,175</b>
<b>Gross Margin (1-3)</b>	<b>\$160,927</b>	<b>\$143,530</b>	<b>\$147,912</b>
<b>(9) Total Unpaid Labour (2+5)</b>	<b>\$14,159</b>	<b>\$9,197</b>	<b>\$10,447</b>
<b>Gross Operating Surplus (1-8+9)</b>	<b>\$96,806</b>	<b>\$61,829</b>	<b>\$70,639</b>
<b>(10) Business Profit before Depreciation (1-8)</b>	<b>\$82,646</b>	<b>\$52,632</b>	<b>\$60,192</b>
<b>(11) Depreciation</b>	<b>\$50,880</b>	<b>\$21,730</b>	<b>\$29,073</b>
<b>(12) Business Profit (10-11)</b>	<b>\$31,766</b>	<b>\$30,902</b>	<b>\$31,120</b>
<b>(13) Profit at Full Equity (12+4+6<sup>a</sup>)</b>	<b>\$35,923</b>	<b>\$35,247</b>	<b>\$35,418</b>
<b>(14) Fishing Gear and Equipment</b>	<b>\$1,161,387</b>	<b>\$549,954</b>	<b>\$703,964</b>
<b>Rate of Return on Fishing Gear and Equipment at Full Equity (13/14*100)</b>	<b>3.1%</b>	<b>6.4%</b>	<b>5.0%</b>

<sup>a</sup> Part of leasing and rent is assumed to cover depreciation of buildings and equipment so is excluded from profit at full equity.

Source: 2019/20 and 2020/21 surveys

Table 3-11 Total financial performance in the Charter Sector, by fishing region, 2020/21

	Region Total				
	North West, Cape York Peninsula and Wet Tropics	Dry Tropics and Mackay, Isaac and Whitsunday	Fitzroy and Wide Bay Burnett	South East	Queensland
<b>Charter Businesses</b>					
Active Businesses (no.)	43	31	39	26	139
Sample Size (n)	16	8	12	16	52
<b>Charter Activity</b>					
Trip days (no.)	2,727	2,204	2,776	2,646	10,353
Client days (no.)	13,951	20,129	31,822	23,135	89,037
<b>Employment</b>					
FTE Jobs	35.0	10.2	53.1	24.3	122.7
Total Jobs	62.9	48.8	98.3	56.5	266.5
Gross Income	\$7,548,983	\$7,482,728	\$10,337,851	\$5,539,413	\$30,908,975
Total Variable Costs	\$2,554,298	\$1,115,876	\$4,734,185	\$1,944,899	\$10,349,258
Total Fixed Costs	\$3,996,014	\$902,553	\$5,523,790	\$1,770,650	\$12,193,006
Total Costs	\$6,550,311	\$2,018,428	\$10,257,975	\$3,715,549	\$22,542,264
Gross Margin	\$4,994,685	\$6,366,853	\$5,603,666	\$3,594,514	\$20,559,718
Total Unpaid Labour	\$319,227	\$116,843	\$653,066	\$362,974	\$1,452,110
Gross Operating Surplus	\$1,317,898	\$5,581,143	\$732,942	\$2,186,839	\$9,818,821
Business Profit before Depreciation	\$998,671	\$5,464,300	\$79,876	\$1,823,864	\$8,366,711
Depreciation	\$958,805	\$337,670	\$2,475,045	\$269,560	\$4,041,080
Business Profit	\$39,866	\$5,126,630	-\$2,395,169	\$1,554,304	\$4,325,631
Profit at Full Equity	\$253,990	\$5,163,162	-\$2,187,315	\$1,693,206	\$4,923,043
Fishing Gear and Equipment	\$24,999,320	\$8,570,714	\$55,900,333	\$8,380,661	\$97,851,029
Rate of Return on Fishing Gear and Equipment at Full Equity	1.0%	60.2%	-3.9%	20.2%	5.0%

Source: 2019/20 and 2020/21 surveys

### 3.5. State and Regional Economic Contribution

Estimates of the economic contribution of the Charter Sector to the Queensland and regional economies in 2020/21 are outlined in this section. Contribution analysis is a descriptive analysis that traces the gross economic activity of the sector as dollars of expenditure cycle through the regional and state economies. The analysis has utilised the detailed industry specific data reported above in combination with other regional/state data that highlight the current linkages that exist within the economy to estimate indicators such as gross regional product and employment. The analysis has been undertaken within a modelling framework known as input-output analysis, with the purpose being to determine how much direct and indirect economic activity is associated with the sector. This is because the contribution of the sector extends beyond the initial round of output, income and employment generated by the sector. These indirect or flow-on effects are part of the contribution of fishing related businesses to the economy and must be added to the direct effects in order to get a full appreciation of the economic contribution of the sector. This method was recommended by the National Fisheries and Aquaculture Industry Contributions Study (FRDC project 2017-210) (BDO EconSearch 2019). Though charter fishing was not in scope of the study, the method transfers well to charter fishing.

The terms 'contribution' and 'impact' are often used interchangeably, particularly in the context of regional economic analysis where decision makers wish to use the results from such analyses to inform policy decisions, to facilitate industry development or support a particular business strategy. However, they are

distinctly different types of analysis. At the most basic level, a contribution analysis can be thought of as a ‘footprint’ or ‘snapshot’ analysis of economic activity, whereas an impact analysis can be thought of as an analysis of a change in economic activity. An economic impact analysis is an appropriate approach 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. Economic impact analysis will generally require more data than a contribution analysis and may require more sophisticated models, such as an extended input-output model or a properly specified computable general equilibrium model, or means to estimate people’s likely behaviour in response to the change (Watson et al. 2014).

### 3.5.1. Measuring direct and flow-on effects

The activities have been included in the quantifiable economic contribution:

- operation of charter fishing businesses
- capital expenditure by charter fishing businesses.

Each of these activities generates flow-on effects to other sectors through purchases of inputs and the employment of labour. As noted above, these flow-on effects have been estimated using input-output analysis.

Since charter fishing involves providing an experience to visitors, it is likely that the activity draws visitors to the regions where it takes place that would not otherwise have visited. These visitors spend in the region, causing further flow-on economic effects. Significant uncertainty surrounds quantification of this type of economic effect so it has been excluded from this analysis. Further research into the effect that charter fishing has on visitation to the regions is recommended to quantify this economic contribution.

In order to compile a representative cost structure for the Charter Sector, costs per business were derived from survey data provided by operators in the sector (for detail see Section 1.2). On an item-by-item basis, the expenditures were allocated between those occurring in the fishing region, those occurring in Queensland and those goods and services imported from outside the state.

Estimates of the capital expenditure per fishing business were derived from the survey of fishing businesses and regional economic models.

Economic contributions have been specified in terms of the following economic indicators:

- value of output
- employment
- household income
- contribution to gross state or regional product.

**Value of output** is a measure of the gross revenue of goods and services produced by commercial organisations plus gross expenditure by government agencies. This indicator needs to be used with care as it includes elements of double counting.

**Employment** is a measure of the number of working proprietors, managers, directors and other employees, in terms of the number of full-time equivalent jobs.

**Household income** is a component of Gross State Product (GSP) and Gross Regional Product (GRP) and is a measure of wages and salaries, drawings by owner operators and other payments to labour including overtime payments and income tax, but excluding payroll tax.

**Contribution to GSP or GRP** is a measure of the net contribution of an activity to the state/regional economy. Contribution to GSP or GRP is measured as value of output less the cost of goods and services (including imports) used in producing the output. It can also be measured as household income plus other value added (gross operating surplus and all taxes, less subsidies). It represents payments to the primary inputs of production (labour, capital and land). Using GSP or GRP as a measure of economic contribution avoids the problem of double counting that may arise from using value of output for this purpose.

### 3.5.2. Economic contribution to Queensland

Estimates of the economic contribution to Queensland generated in 2020/21 by the Charter Sector are outlined in Table 3-12. This section summarises the key points from these tables.

Direct contribution measures charter fishing activity and associated capital expenditure. The flow-on contribution measures the economic effects in other sectors of the economy (retail and wholesale trade, manufacturing, etc.) generated by direct activity, that is, the multiplier effects. Flow-on effects are disaggregated by industry with the top 10 industries shown separately in each on the table. Capital expenditures are assumed to be the same as depreciation 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 (GVP) generated directly in the Charter Sector was \$30.9m in 2020/21 while output generated by associated capital expenditure was \$1.4m.

Flow-on effects to other sectors of the state economy added another \$42.0m. The sectors most affected were personal and other services, administrative and support services, insurance and other financial services, professional, scientific and technical services, and retail trade. The total output contribution to Queensland (direct plus flow-on) was estimated to be \$74.3m.

#### Employment

The Charter Sector was responsible for the direct employment of an estimated 123 full-time equivalent (fte) jobs in 2020/21 while capital expenditure supported another 8 fte jobs. Flow-on business activity was estimated to support a further 194 fte jobs state-wide. These jobs were concentrated in the personal and other services, administrative and support services, retail trade and professional, scientific and technical services sectors. The total employment contribution to Queensland was estimated to be 325 fte jobs.

#### Household Income

Personal income of \$5.2m was earned in 2020/21 in the Charter Sector (wages of employees and estimated drawings by owner/operators). A further \$0.5m of income was earned in capital expenditure activities. An additional \$13.7m was earned by wage earners in other businesses in Queensland from the flow-on effects of fishing and associated activities. The total household income contribution in Queensland was \$19.3m.

#### Contribution to GSP and GRP

As noted above, contribution to GSP or GRP is measured as value of output less the cost of goods and services (including imports) used in producing the output. Total Charter Sector related contribution to GSP in Queensland was \$40.0m in 2020/21, with \$17.0 generated by charter fishing directly, \$0.7m generated by capital expenditure activities and \$22.3m supported in other sectors of the state economy.

Table 3-12 Economic contribution of the Charter Sector to Queensland, 2020/21

Sector	Output (\$m)	GSP (\$m)	Household Income (\$m)	Employment (fte)	Employment (total)
<b>Direct effects</b>					
Charter Fishing	30.9	17.0	5.2	123	266
CAPEX	1.4	0.7	0.5	8	9
<b>Total Direct</b>	<b>32.3</b>	<b>17.7</b>	<b>5.7</b>	<b>131</b>	<b>275</b>
<b>Flow-on effects</b>					
Personal & Other Serv	4.1	2.4	2.1	33	34
Admin Support Serv	3.0	1.9	1.9	30	31
Retail Trade	2.5	1.5	1.1	23	27
Prof Scientific Tech Serv	2.6	1.4	1.4	15	14
Food & Beverage Services	1.1	0.6	0.4	11	14
Insurance & Other Fin Serv	3.0	1.4	0.9	11	10
Health & Community Serv	1.2	0.9	0.8	10	12
Education & Training	1.1	0.7	0.7	10	10
Wholesale Trade	1.5	0.8	0.6	8	7
Road Transport	1.2	0.5	0.4	4	4
Other Sectors	20.6	10.1	3.3	40	37
<b>Total Flow-on</b>	<b>42.0</b>	<b>22.3</b>	<b>13.7</b>	<b>194</b>	<b>198</b>
<b>Total</b>	<b>74.3</b>	<b>40.0</b>	<b>19.3</b>	<b>325</b>	<b>473</b>
<i>Total/Direct</i>	<i>2.3</i>	<i>2.3</i>	<i>3.4</i>	<i>2.5</i>	<i>1.7</i>

Source: BDO EconSearch analysis

### 3.5.3. Regional economic contributions

Direct economic contribution of fishing activity by fishing region in 2020/21 is detailed in Table 3-13. This includes direct activity only and excludes flow-on activity. The regions appear in the table in order of the magnitude of economic contribution to fte employment.

On the following pages (Table 3-14 to Table 3-17), estimates of the economic contribution of the Charter Sector to each fishing region are presented in detail for the 2020/21 year. Estimates presented in the tables can be interpreted in the same way as those presented at the state level (see Section 3.5.2).

Table 3-13 Direct economic contribution of fishing activity in the Charter Sector to regions, 2020/21

	Output (\$m)	GSP (\$m)	Household Income (\$m)	Employment (fte)	Employment (total)
Queensland	32.3	17.7	5.7	131	275
Fitzroy & Wide Bay-Burnett	12.3	6.1	1.8	40	96
North West, Cape York Peninsula & Wet Tropics	7.8	3.7	1.6	37	65
South East	5.6	3.7	1.1	25	57
Dry Tropics & Mackay, Isaac and Whitsunday	6.4	4.2	1.2	29	57

Source: BDO EconSearch analysis

Table 3-14 Economic contribution of the Charter Sector to North West, Cape York Peninsula and Wet Tropics, 2020/21

Sector	Output (\$m)	GSP (\$m)	Household Income (\$m)	Employment (fte)	Employment (total)
<b>Direct effects</b>					
Charter Fishing	7.5	3.5	1.5	35	63
CAPEX	0.3	0.1	0.1	2	2
<b>Total Direct</b>	<b>7.8</b>	<b>3.7</b>	<b>1.6</b>	<b>37</b>	<b>65</b>
<b>Flow-on effects</b>					
Admin Support Serv	0.4	0.2	0.2	3	3
Personal & Other Serv	0.2	0.2	0.2	2	2
Prof Scientific Tech Serv	0.2	0.1	0.1	1	1
Retail Trade	0.1	0.1	0.0	1	1
Education & Training	0.0	0.0	0.0	0	0
Health & Community Serv	0.0	0.0	0.0	0	0
Food & Beverage Services	0.0	0.0	0.0	0	0
Fishing, Hunting & Trapping	0.0	0.0	0.0	0	0
Public Admin & Regltry Serv	0.0	0.0	0.0	0	0
Rental Hiring Real Estate	0.1	0.0	0.0	0	0
Other Sectors	0.5	0.3	0.1	0	0
<b>Total Flow-on</b>	<b>1.6</b>	<b>1.0</b>	<b>0.7</b>	<b>9</b>	<b>9</b>
<b>Total</b>	<b>9.4</b>	<b>4.7</b>	<b>2.3</b>	<b>46</b>	<b>74</b>
<i>Total/Direct</i>	<i>1.2</i>	<i>1.3</i>	<i>1.4</i>	<i>1.2</i>	<i>1.1</i>

Source: BDO EconSearch analysis

Table 3-15 Economic contribution of the Charter Sector to Dry Tropics and Mackay, Isaac and Whitsunday, 2020/21

Sector	Output (\$m)	GSP (\$m)	Household Income (\$m)	Employment (fte)	Employment (total)
<b>Direct effects</b>					
Charter Fishing	7.5	6.3	0.5	10	49
CAPEX	0.1	0.1	0.0	1	1
<b>Total Direct</b>	<b>7.6</b>	<b>6.3</b>	<b>0.5</b>	<b>11</b>	<b>50</b>
<b>Flow-on effects</b>					
Admin Support Serv	0.1	0.1	0.1	1	1
Personal & Other Serv	0.2	0.1	0.1	1	1
Retail Trade	0.1	0.1	0.1	1	1
Prof Scientific Tech Serv	0.1	0.1	0.1	1	1
Food & Beverage Services	0.0	0.0	0.0	0	1
Health & Community Serv	0.0	0.0	0.0	0	0
Wholesale Trade	0.1	0.0	0.0	0	0
Education & Training	0.0	0.0	0.0	0	0
Road Transport	0.1	0.0	0.0	0	0
Insurance & Other Fin Serv	0.0	0.0	0.0	0	0
Other Sectors	1.3	0.6	0.3	4	4
<b>Total Flow-on</b>	<b>2.1</b>	<b>1.1</b>	<b>0.7</b>	<b>9</b>	<b>10</b>
<b>Total</b>	<b>9.7</b>	<b>7.4</b>	<b>1.2</b>	<b>20</b>	<b>59</b>
<i>Total/Direct</i>	<i>1.3</i>	<i>1.2</i>	<i>2.3</i>	<i>1.9</i>	<i>1.2</i>

Source: BDO EconSearch analysis

Table 3-16 Economic contribution of the Charter Sector to Fitzroy and Wide Bay-Burnett, 2020/21

Sector	Output (\$m)	GSP (\$m)	Household Income (\$m)	Employment (fte)	Employment (total)
<b>Direct effects</b>					
Charter Fishing	10.3	3.5	2.2	53	98
CAPEX	0.8	0.4	0.3	5	5
<b>Total Direct</b>	<b>11.2</b>	<b>3.9</b>	<b>2.5</b>	<b>58</b>	<b>103</b>
<b>Flow-on effects</b>					
Personal & Other Serv	2.2	1.2	1.1	16	16
Retail Trade	1.0	0.6	0.4	9	10
Admin Support Serv	0.8	0.5	0.5	8	8
Food & Beverage Services	0.3	0.2	0.1	3	4
Health & Community Serv	0.3	0.2	0.2	3	3
Prof Scientific Tech Serv	0.4	0.2	0.2	2	2
Wholesale Trade	0.4	0.2	0.2	2	2
Education & Training	0.2	0.1	0.1	2	2
Road Transport	0.4	0.2	0.1	2	1
Fishing, Hunting & Trapping	0.1	0.0	0.0	1	1
Other Sectors	7.4	3.5	1.2	15	14
<b>Total Flow-on</b>	<b>13.5</b>	<b>7.0</b>	<b>4.2</b>	<b>62</b>	<b>63</b>
<b>Total</b>	<b>24.7</b>	<b>10.9</b>	<b>6.6</b>	<b>120</b>	<b>167</b>
<i>Total/Direct</i>	<i>2.2</i>	<i>2.8</i>	<i>2.7</i>	<i>2.1</i>	<i>1.6</i>

Source: BDO EconSearch analysis

Table 3-17 Economic contribution of the Charter Sector to South East, 2020/21

Sector	Output (\$m)	GSP (\$m)	Household Income (\$m)	Employment (fte)	Employment (total)
<b>Direct effects</b>					
Charter Fishing	5.5	3.6	1.0	24	56
CAPEX	0.1	0.0	0.0	1	1
<b>Total Direct</b>	<b>5.6</b>	<b>3.7</b>	<b>1.1</b>	<b>25</b>	<b>57</b>
<b>Flow-on effects</b>					
Personal & Other Serv	0.6	0.3	0.3	5	5
Admin Support Serv	0.4	0.3	0.3	4	4
Retail Trade	0.4	0.2	0.2	3	4
Prof Scientific Tech Serv	0.3	0.2	0.2	2	2
Insurance & Other Fin Serv	0.5	0.2	0.2	2	2
Health & Community Serv	0.2	0.1	0.1	1	2
Food & Beverage Services	0.1	0.1	0.1	1	2
Education & Training	0.2	0.1	0.1	1	1
Wholesale Trade	0.2	0.1	0.1	1	1
Rental Hiring Real Estate	0.2	0.1	0.0	1	1
Other Sectors	2.7	1.4	0.5	6	6
<b>Total Flow-on</b>	<b>5.8</b>	<b>3.1</b>	<b>1.9</b>	<b>27</b>	<b>28</b>
<b>Total</b>	<b>11.4</b>	<b>6.8</b>	<b>3.0</b>	<b>52</b>	<b>85</b>
<i>Total/Direct</i>	<i>2.0</i>	<i>1.9</i>	<i>2.8</i>	<i>2.1</i>	<i>1.5</i>

Source: BDO EconSearch analysis



### 3.6. Impact of COVID-19

In January 2020, the COVID-19 pandemic was beginning to affect the Charter Sector. While charter fishing may have been permitted, closures and lockdowns preventing or discouraging travel were a major reason for the loss of clients. Even as restrictions eased, there was still an initial reluctance to travel given uncertainties around potential for lockdowns, and this continued into the 2020/21 financial year. Many bookings were cancelled, and presumably new bookings were not made because of COVID-19 restrictions.

GVP, prices and customers for 2017/18, 2018/19, 2019/20 and 2020/21 with, and estimates of without, the impact of COVID-19 are detailed in Table 3-18. Survey participants estimated that had the COVID-19 pandemic not occurred, GVP in 2020/21 would have been 31 per cent higher than it actually was, reaching the highest value of the 4 year period. Without COVID-19, businesses expected that client days would likely have been 22 per cent higher, and prices would have been 8 per cent higher. Overall, client days would have decreased from pre COVID-19 levels (between 2018/19 and 2020/21), but this would have been offset by an increase in average price, resulting in a notably higher GVP in 2020/21 without COVID.

**Table 3-18** GVP, prices and customers for Charter Sector, 2017/18, 2018/19, 2019/20 and 2020/21 (with and without COVID-19)

	2017/18	2018/19	2019/20	2020/21 With COVID-19 <sup>a</sup>	2020/21 Without COVID-19
Client days (no.)	132,276	120,331	74,919	89,037	108,263
GVP (\$m)	35.8	33.1	24.6	30.9	40.5
Price (\$/client/day)	271	275	329	347	374

<sup>a</sup> 2020/21 actual.

Source: BDO EconSearch analysis

The financial performance estimates by fishing region (Table 3-11) were estimated without the impact of the COVID-19 pandemic (Table 3-19). Survey participants estimated that had the COVID-19 pandemic not occurred, wage costs would have been 17 per cent higher, and non-wage costs would have been 3 per cent lower at the business level. As a result, total costs for Queensland as a whole were estimated to be 2 per cent higher without the impact of COVID-19. The estimated large increase in GVP and small corresponding increase in estimated costs indicates that the sector would have been significantly more profitable without COVID-19. For Queensland as a whole, the average rate of return was estimated to be 14.7 per cent without the COVID-19 pandemic compared to the actual 5.0 per cent for 2020/21. All regions were estimated to have had an improvement in average rate of return without the COVID-19 pandemic.

The estimated economic impact on Queensland of the effects of COVID-19 on the Charter Sector is presented in Table 3-20. The impact on employment was a loss of 18 fte jobs, all of which were within Charter fishing businesses. The loss in total GSP was approximately \$10.6m, including \$9.8m directly from Charter fishing businesses and \$0.8m in other sectors.

Table 3-19 Total financial performance in the Charter Sector, by fishing region, 2020/21, estimate of 'without COVID-19'

	Region Total				
	North West, Cape York Peninsula and Wet Tropics	Dry Tropics and Mackay, Isaac and Whitsunday	Fitzroy and Wide Bay Burnett	South East	Queensland
<b>Charter Businesses</b>					
Active Businesses (no.)	43	31	39	26	139
Sample Size (n)	16	8	12	16	52
<b>Charter Activity</b>					
Trip days (no.)	4,243	3,276	3,974	4,056	15,857
Client days (no.)	16,623	22,972	40,227	30,665	108,263
<b>Employment</b>					
FTE Jobs	38.4	14.6	59.5	28.3	140.7
Total Jobs	66.3	53.2	104.7	60.4	284.5
Gross Income	\$9,949,664	\$8,896,312	\$14,133,475	\$7,498,473	\$40,477,923
Total Variable Costs	\$2,621,789	\$1,170,297	\$4,764,015	\$2,011,778	\$10,567,878
Total Fixed Costs	\$6,646,431	\$2,098,261	\$10,404,520	\$3,778,524	\$12,359,857
Total Costs	\$7,327,875	\$7,726,015	\$9,369,459	\$5,486,695	\$22,927,736
Gross Margin	\$7,327,875	\$7,726,015	\$9,369,459	\$5,486,695	\$29,910,044
Total Unpaid Labour	\$347,241	\$157,655	\$695,623	\$420,876	\$1,621,395
Gross Operating Surplus	\$3,650,474	\$6,955,706	\$4,424,578	\$4,140,825	\$19,171,583
Business Profit before Depreciation	\$3,303,233	\$6,798,051	\$3,728,955	\$3,719,949	\$17,550,187
Depreciation	\$958,805	\$337,670	\$2,475,045	\$269,560	\$4,041,080
Business Profit	\$2,344,427	\$6,460,380	\$1,253,910	\$3,450,389	\$13,509,107
Profit at Full Equity	\$2,617,223	\$6,512,200	\$1,565,530	\$3,641,022	\$14,335,976
Fishing Gear and Equipment	\$24,999,320	\$8,570,714	\$55,900,333	\$8,380,661	\$97,851,029
Rate of Return on Fishing Gear and Equipment at Full Equity	10.5%	76.0%	2.8%	43.4%	14.7%

Source: BDO EconSearch analysis

Table 3-20 Economic impact of the COVID-19 pandemic on the Charter Sector, 2020/21

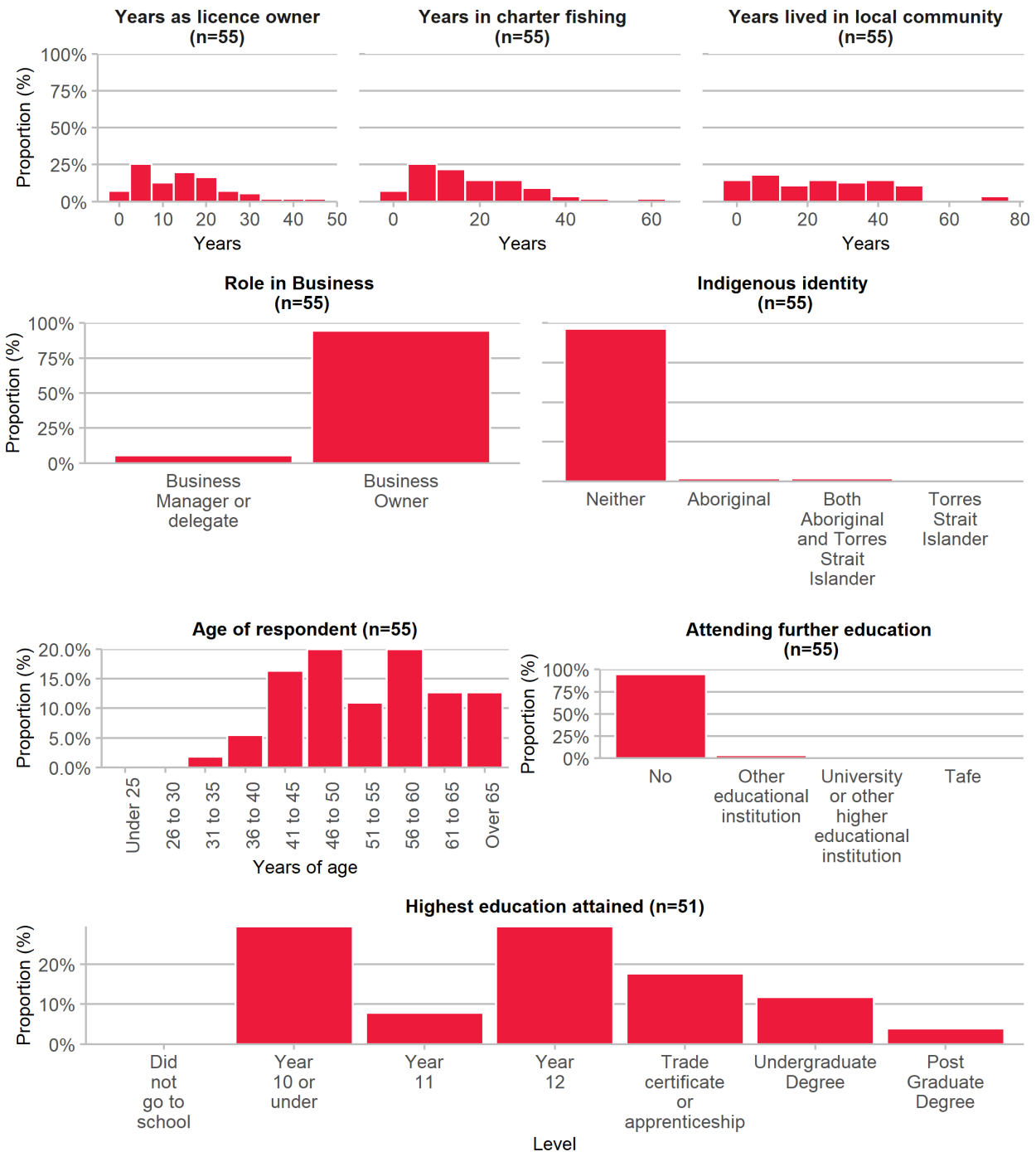
Sector	Output (\$m)	GSP (\$m)	Household Income (\$m)	Employment (fte)	Employment (total)
Charter Fishing	-9.6	-9.8	-0.8	-18	-18
Total Flow-on	-2.5	-0.8	-0.4	0	1
<b>Total</b>	<b>-12.1</b>	<b>-10.6</b>	<b>-1.2</b>	<b>-18</b>	<b>-17</b>

Source: BDO EconSearch analysis

## 4. DEMOGRAPHIC INDICATORS

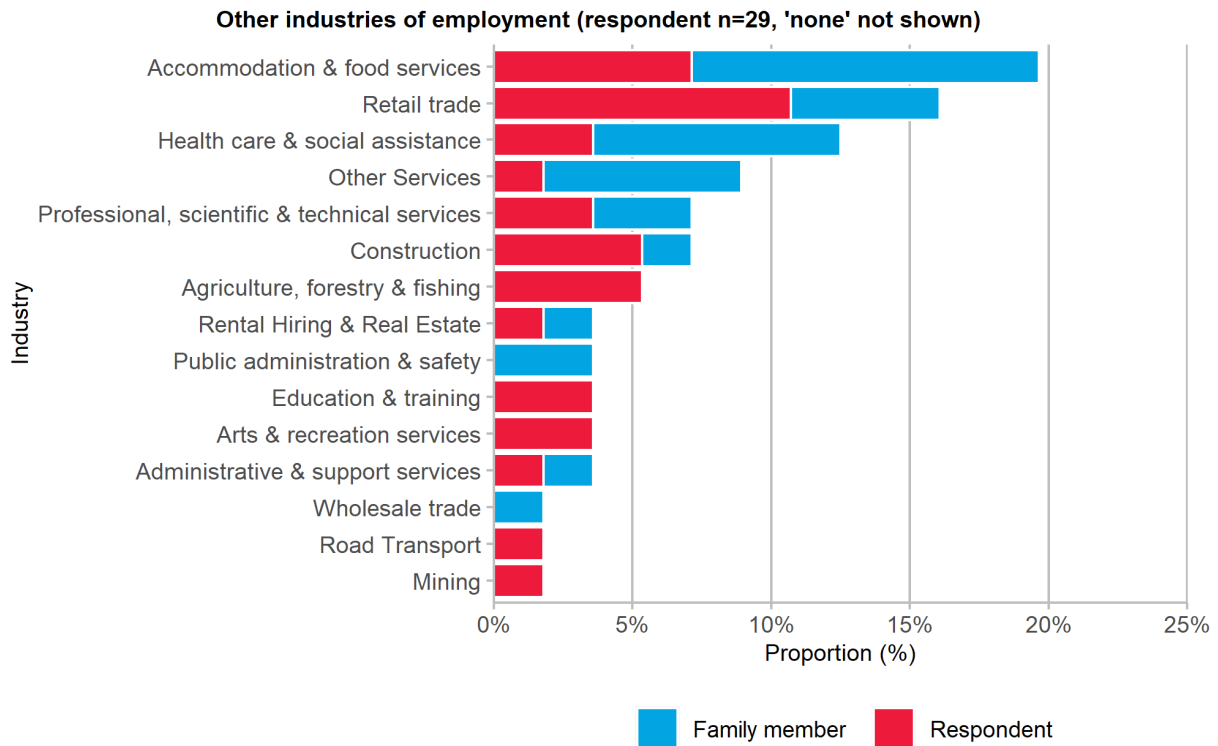
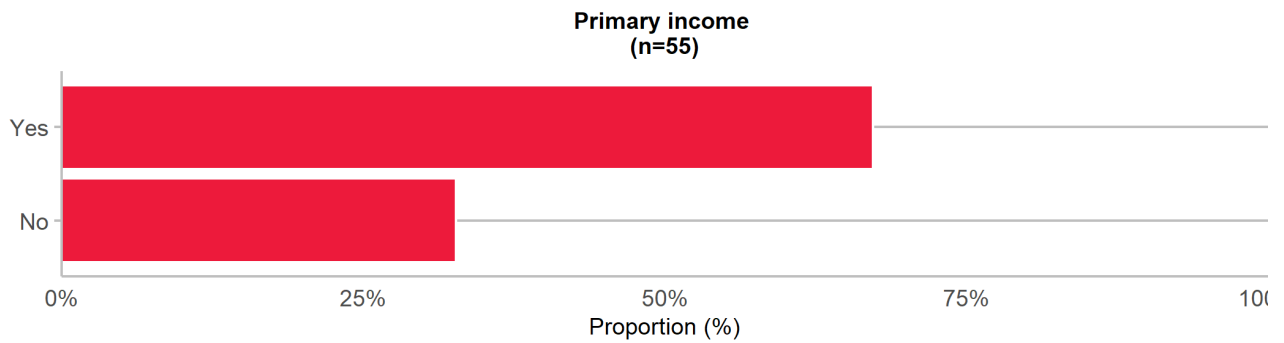
The charts below and on the following page present a demographic profile of fishers who accessed the Charter sector in Queensland in 2019/20. These are raw sample data and have not been expanded to the sector level. An updated demographic profile of fishers was not captured in the 2020/21 update.

Figure 4-1 Demographic profile of the Charter Sector in 2019/20 - part 1

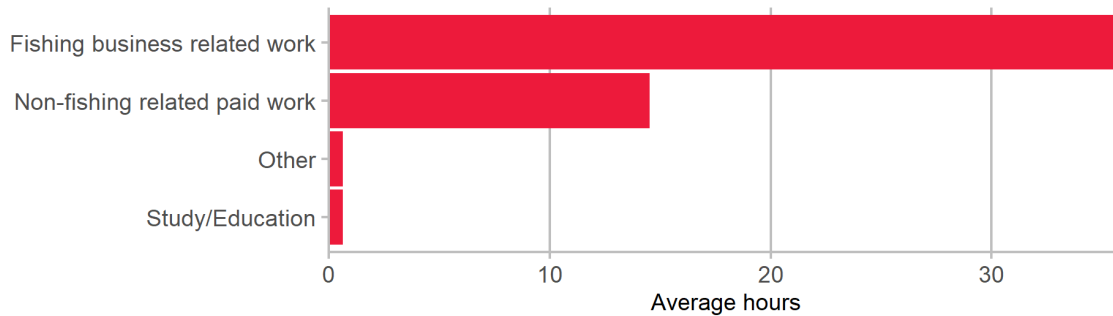


Source: BDO EconSearch analysis

Figure 4-2 Demographic profile of the Charter Sector in 2019/20 - part 2



**Time per week spent on activities in 2019/20 (n=55)**



Source: BDO EconSearch analysis

## 5. SOCIAL INDICATORS

Fishers may derive non-financial benefits or costs from Charter fishing and may contribute to the community in different ways. A comprehensive set of social indicators, including community contribution and personal wellbeing, were captured in the 2019/20 base year survey and can be found in BDO EconSearch (2022). The 2020/21 update survey collected updated observations for a selected subset of social indicators. The indicators were selected due to their importance as a standalone indicator and the utility of tracking annual changes. Questions are asked on a point scale of 0 to 10, the annual change is then presented as the change from the average point of the previous year to the average point of the current year. For example, if an indicator score was 7.1 in 2019/20 and 8.0 in 2020/21 then the reported change in average would be +0.9 points.

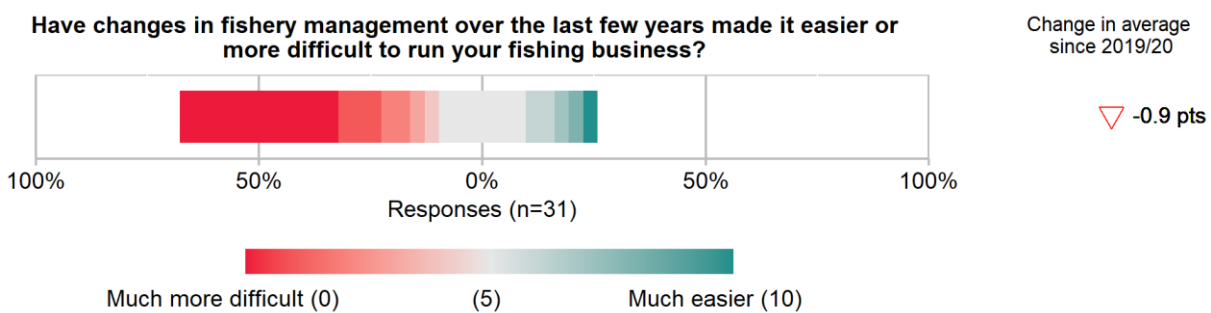
This section presents the updated series of social indicators including:

- Fisheries management
- Understanding of fisheries management
- Global life satisfaction
- Future security.

## 5.1. Fisheries Management

The chart below presents the perceived impact of fishery/sector management arrangements on business operations in 2020/21 as well as the change in perceptions since the previous survey. Understanding whether fishery/sector management changes have influenced fishing business operations provides an understanding of whether rules and regulations are easy to comply with and may be associated with lower costs of management and compliance activities. Figure 5-1 shows that most Charter fishers feel that fishery/sector management changes in the last few years have made it more difficult to operate their business. Since 2019/20 this indicator has declined overall by 0.9 points.

Figure 5-1 Perceptions of fishery/sector management in the Charter Sector (2020/21)<sup>a</sup>



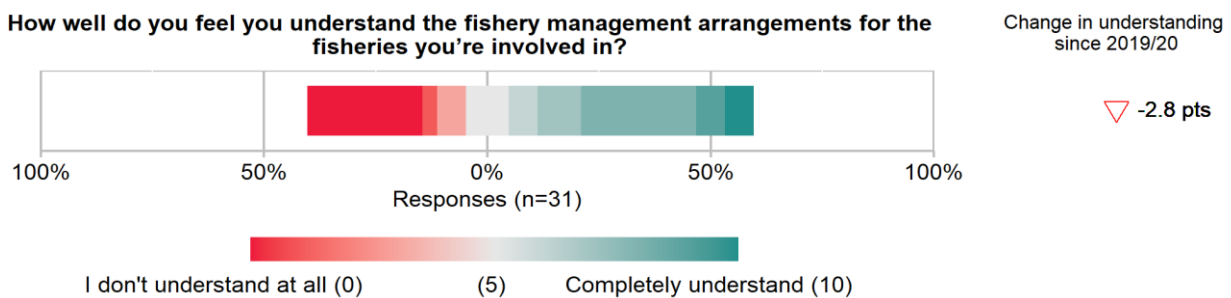
<sup>a</sup> The proportion of change between the 2019/20 and 2020/21 surveys is calculated between licence holders who participated in both surveys.

Source: BDO EconSearch analysis

## 5.2. Understanding of Fisheries Management

The chart below presents the level of fishers' understanding of fishery/sector management arrangements in 2020/21 as well as the sector-level change in understanding since 2019/20. High levels of understanding of fisheries management amongst fishers are associated with a good understanding of the rules and regulations that apply to fishing activities and ease of compliance. Fishers cannot be successful stewards if they lack knowledge of fishing rules and regulations. Figure 5-2 shows that over half of Charter fishers feel that they understand the fishery/sector management arrangements for the Charter Sector. Since 2019/20 this indicator has declined overall by 2.8 points.

Figure 5-2 Impact of fishery/sector management on stewardship in the Charter Sector (2020/21)<sup>a</sup>



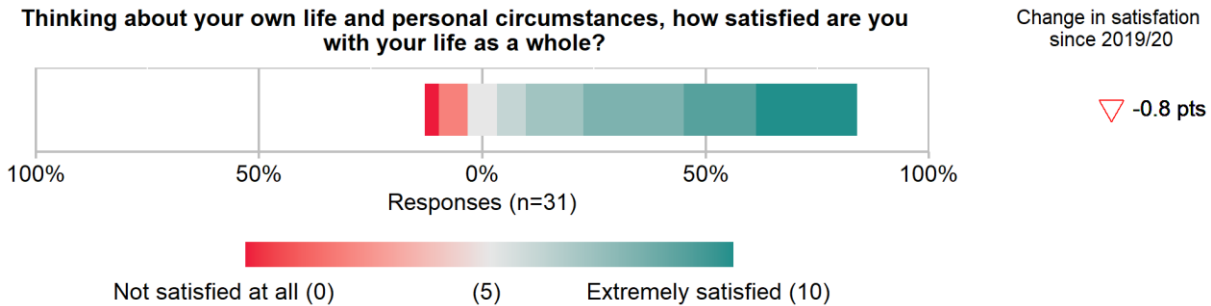
<sup>a</sup> The proportion of change between the 2019/20 and 2020/21 surveys is calculated between licence holders who participated in both surveys.

Source: BDO EconSearch analysis

### 5.3. Global Life Satisfaction

The chart below shows average life satisfaction of fishers in the Charter sector in 2020/21 as well as the change in satisfaction since 2019/20. Figure 5-3 shows that over three quarters of Charter fishers are more satisfied than not with their life as a whole. However, since 2019/20 this indicator has declined overall by 0.8 points.

Figure 5-3 Life satisfaction in the Charter Sector (2020/21)<sup>a</sup>



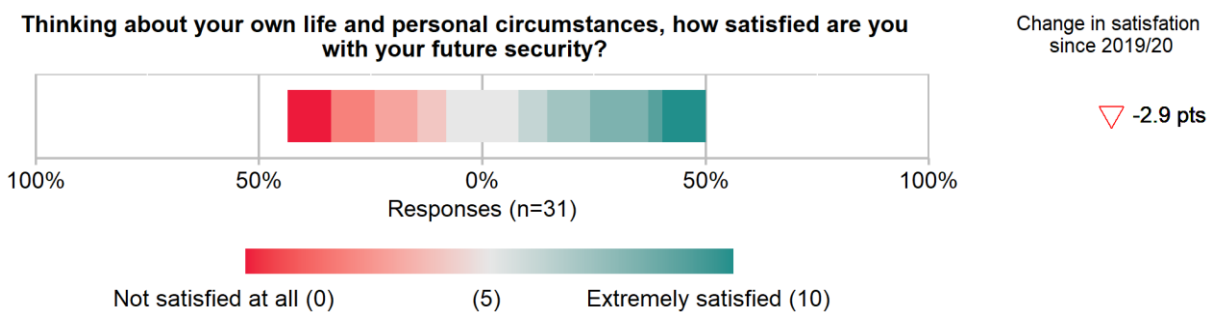
<sup>a</sup> The proportion of change between the 2019/20 and 2020/21 surveys is calculated between licence holders who participated in both surveys.

Source: BDO EconSearch analysis

### 5.4. Future Security

The chart below shows average satisfaction levels amongst Charter fishers in 2020/21 regarding future security and the change in these satisfaction levels since 2019/20. A higher satisfaction with one's future security indicates a state of comfort and positive outlook on future prospects. Figure 5-4 shows that around half of Charter fishers are satisfied with their future security. Since 2019/20 this indicator has declined overall by 2.9 points.

Figure 5-4 Perception of future security in the Charter Sector (2020/21)<sup>a</sup>



<sup>a</sup> The proportion of change between the 2019/20 and 2020/21 surveys is calculated between licence holders who participated in both surveys.

Source: BDO EconSearch analysis

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The assignment is a consulting engagement as outlined in the ‘Framework for Assurance Engagements’, issued by the Auditing and Assurances Standards Board, Section 17. Consulting engagements employ an assurance practitioner’s technical skills, education, observations, experiences and knowledge of the consulting process. The consulting process is an analytical process that typically involves some combination of activities relating to: objective-setting, fact-finding, definition of problems or opportunities, evaluation of alternatives, development of recommendations including actions, communication of results, and sometimes implementation and follow-up.

The nature and scope of work has been determined by agreement between BDO and the Client. This consulting engagement does not meet the definition of an assurance engagement as defined in the ‘Framework for Assurance Engagements’, issued by the Auditing and Assurances Standards Board, Section 10.

Except as otherwise noted in this report, we have not performed any testing on the information provided to confirm its completeness and accuracy. Accordingly, we do not express such an audit opinion and readers of the report should draw their own conclusions from the results of the review, based on the scope, agreed-upon procedures carried out and findings.





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