DECEMBER 2019

COMMONWEALTH FISHERIES 2017/18: ECONOMIC CONTRIBUTIONS SUMMARY

Presented by the Fisheries Research and Development Corporation and the Institute for Marine and Antarctic Studies.
Economic estimates provided by BDO EconSearch.

FRDC UNIVERSITY of TASMANIA IMAS BDO

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Commonwealth Fisheries 2017/18: Economic Contributions Summary
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ACKNOWLEDGMENTS

BDO EconSearch and IMAS have relied heavily on the cooperation of fisheries and aquaculture data custodians in each of the states, the Northern Territory and the Commonwealth.

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PREFACE

This report presents a summary of the economic contributions of Australia's Commonwealth-managed fisheries to the Australian community.

This work is an exciting step forward that lays the groundwork for the seafood industry to celebrate its economic contributions and to showcase these to its communities and to Australians in general. It also provides the starting point for monitoring contributions to Australia's economic prosperity over time.

The FRDC on behalf of the Australian Government funded the *National Fisheries and Aquaculture Industry Contributions Study (FRDC project 2017-210)* to produce evidence of industry's contributions. The project was undertaken by the Institute for Marine and Antarctic Studies, University of Tasmania. As part of this project, BDO EconSearch was commissioned to provide an estimate of the economic contribution of Australia's fisheries and aquaculture industries to the Australian community that is aimed at helping industry tell the story of its contribution.

This summary presents the results of this study for Commonwealth-managed fisheries.

Estimates are based on the best available data and most appropriate methods given data availability. Full results, including the contributions of Commonwealth-managed fisheries to each state and territory, are provided in the *Australian Fisheries and Aquaculture Industry 2017/18: Economic Contributions Estimate Report* and demonstrate the nationally consistent approach.

Project Steering Committee, National Fisheries and Aquaculture Industry Contributions Study (FRDC project 2017–210)

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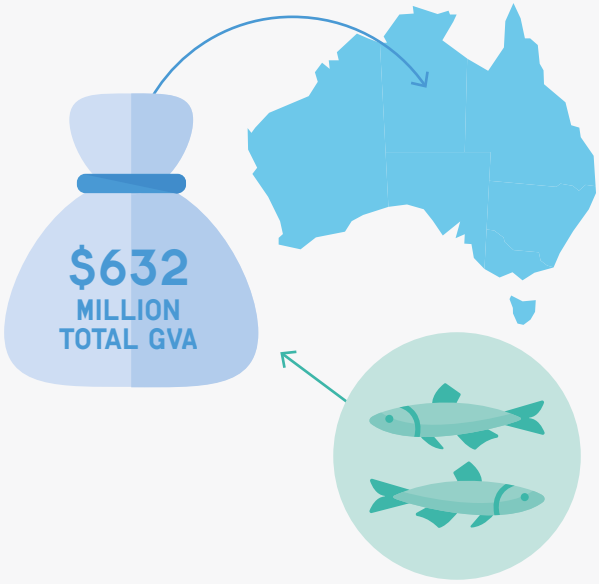
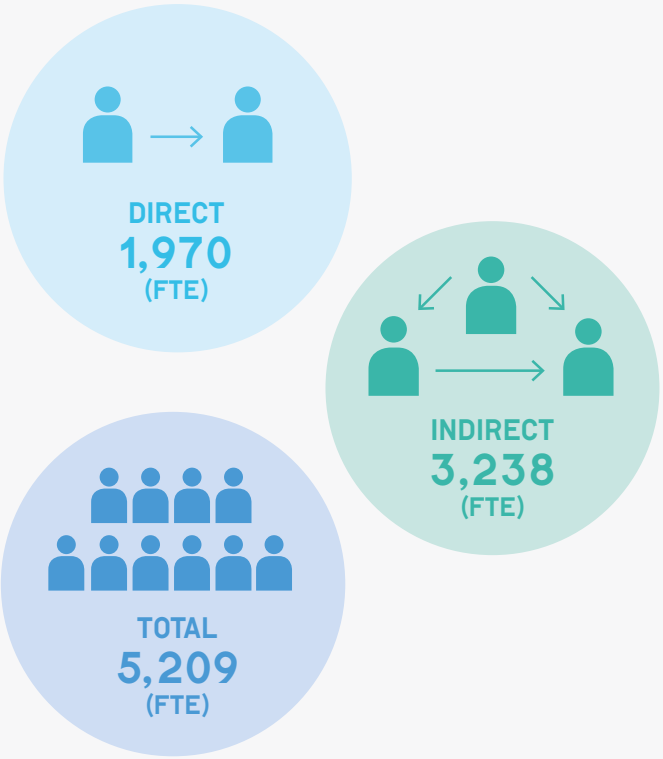
CONTRIBUTING TO AUSTRALIA'S ECONOMIC PROSPERITY

ECONOMY

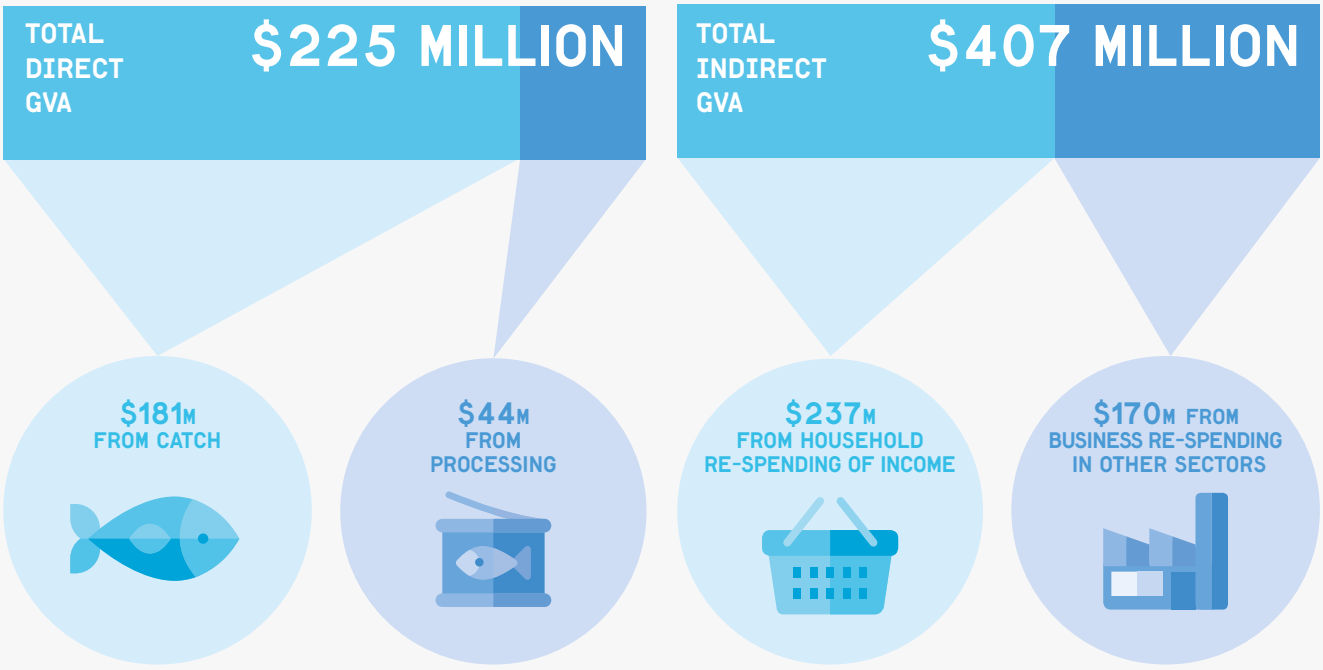
In 2017/18, Commonwealth-managed fishing and associated processing industries contributed $632 million dollars (total GVA) to the Australian economy.



EMPLOYMENT



ADDING VALUE



Note, totals may not sum due to rounding. Some sub-sectors have not been included in the estimates due to data not being available. See Table 3 for details.

ECONOMIC CONTRIBUTIONS

GROSS VALUE ADDED

In 2017/18, total GVA contribution to Australia from Commonwealth-managed fisheries was $632 million

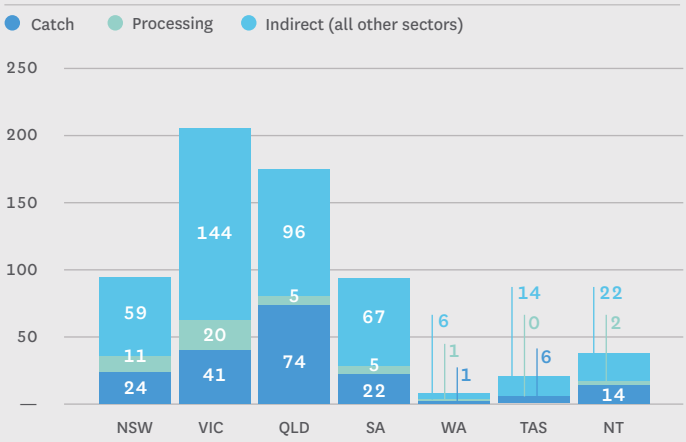
$181 million generated by fishing

$44 million generated by associated seafood processing activities

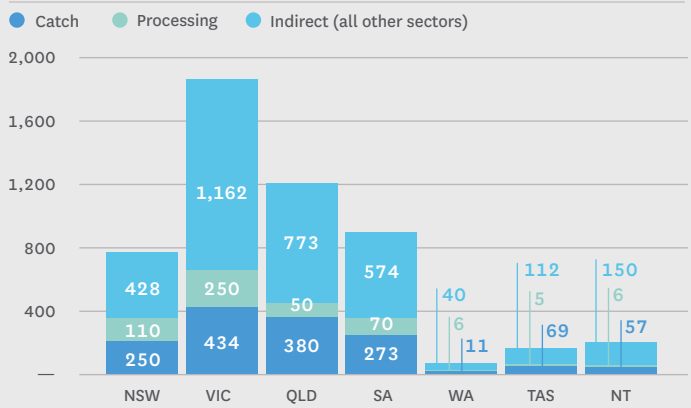
$407 million generated by flow-on business activity in other sectors of the economy

Gross Value Added (GVA) represents the value of all goods and services produced in an industry, minus the cost of all inputs and raw materials used to produce that good or service. It provides a measure of the net contribution of an activity to the State/Territory economies, excluding net taxes.

GROSS VALUE ADDED IN AUSTRALIA BY STATE AND TERRITORY 2017/18 ($ MILLIONS)



EMPLOYMENT IN AUSTRALIA BY STATE AND TERRITORY 2017/18 (FTE JOBS)



EMPLOYMENT

In 2017/18, total employment contribution to Australia from Commonwealth-managed fisheries was 5,209 full-time equivalent (FTE) jobs

1,474 FTE jobs contributed by fishing

496 FTE jobs contributed by associated seafood processing

3,238 FTE jobs contributed by flow-on business activity in other sectors

HOUSEHOLD INCOME

In 2017/18, total household income contribution to Australia from Commonwealth-managed fisheries was $362 million

$87 million earned as income in fishing

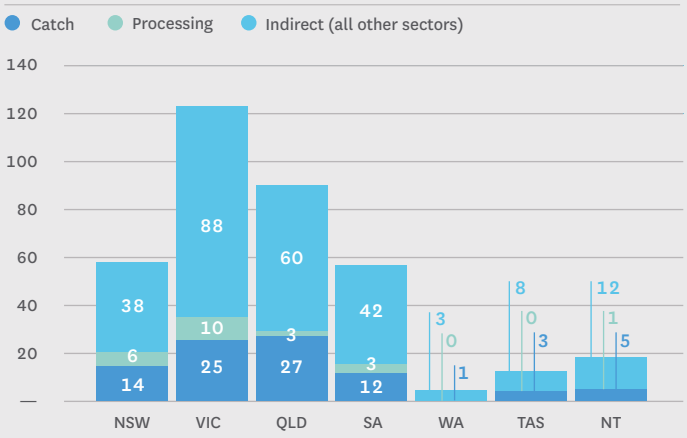
$22 million earned in associated seafood processing

$253 million earned in other businesses in Australia as a result of fishing and associated processing activities

Household income is a measure of wages and salaries paid in cash and in kind, drawings by owner operators and other payments to labour. It includes overtime payments, employer's superannuation contributions and income tax, but excludes payroll tax.

Note, totals may not sum due to rounding.

HOUSEHOLD INCOME IN AUSTRALIA BY STATE AND TERRITORY 2017/18 ($ MILLIONS)



ECONOMIC ACTIVITY

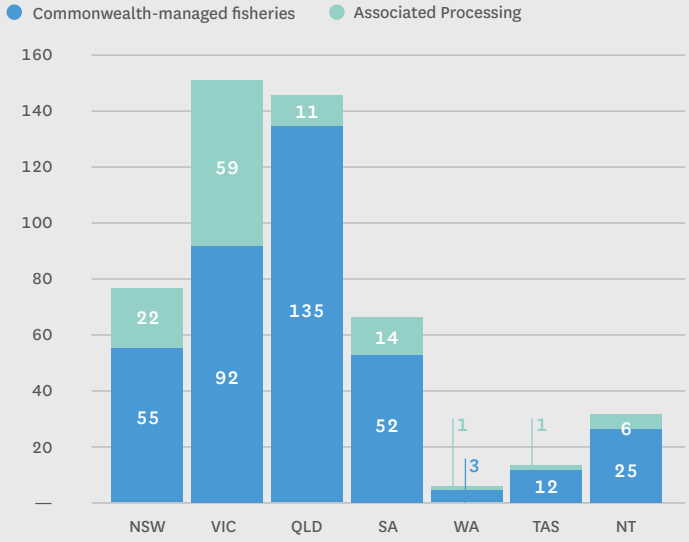
GROSS VALUE OF PRODUCTION

In 2017/18, GVP of Commonwealth-managed fisheries and associated seafood processing was $489 million

77% from Commonwealth-managed fisheries catch

23% from associated seafood processing

GVP OF CATCH/PRODUCTION AND PROCESSING IN AUSTRALIA BY STATE AND TERRITORY ($ MILLIONS)



TECHNICAL SUMMARY

This is a summary of the economic contributions of Commonwealth-managed fisheries and associated processing industries to the Australian economy. National-level contributions are reported separately for each of the states and territories in which Commonwealth catch is landed. The full national report of economic estimates is the *Australian Fisheries and Aquaculture Industry 2017/18: Economic Contributions Estimates Report*.

SCOPE

The estimates reported are for economic contributions of Commonwealth-managed commercial fishing and associated processing activities.

Commercial activities by Indigenous fishing and aquaculture businesses are included in commercial fishing. Commercial charter fishing activity is excluded. Fishery sector management activity (other than where these costs are recovered through licence fees) is excluded. Indirect contributions include both the indirect contribution made to the state or territory in which Commonwealth catch was landed and the indirect contribution of this catch to other jurisdictions.

The economic activity of sectors that supply goods and services to the commercial fishing industry are included in the analysis as the flow-on effects from the expenditures by the commercial fishing industry. This includes fishing support services.

DATA

Best available data for 2017/18 was used to produce estimates of GVP, and of direct employment, GVA, GSP/GDP and household income. Data was collected from primary sources (databases) and published sources, where available, for the individual fisheries sectors. This data included: wild catch production, product prices, cost of production, licence fees, employment. Further information on data sources and validation is provided in the Australian Fisheries and Aquaculture Industry Economic Contributions – Data Framework.

Where cost data was not available for a particular sub-sector, it was matched with an equivalent sub-sector for which data was available and cost data was then imputed based on available activity data (including: production, GVP, total days fished, average vessel length, active vessels).

MODEL APPROACH

The flow-on effects of State and Territory fisheries, Commonwealth fisheries and aquaculture sectors for each State or Territory were estimated using multi-region input-output (MRIO) analysis. An extended input-output model known as the RISE model (Regional Industry Structure and Employment) was used. The model includes one region for each state and territory in Australia and captures the interstate trade effects between them.

LIMITATIONS

The main limitations are due to data gaps and issues with data quality for some sectors. These were identified in the process of building the national data framework which supports the estimation of contributions.

Limited data was available to estimate the contributions of the processing sector, and the estimates of the processing sector should be regarded as preliminary. Similarly, the estimates present an incomplete profile of economic contributions made along the seafood supply chain, as secondary processing and retail sectors are not included due to lack of data. Addressing this by collecting data on these sectors presents an opportunity to produce more comprehensive estimates in future.

COMPARISON

Comparisons of these estimates can also be made with other productive industries (for example, beef or sheep). These will be less reliable due to differences in the number of sectors included (this study included only the catch/production and processing sectors), data availability and quality, and modelling across various studies.

The use of these estimates to predict the impact of changes in the level of activity of the fisheries industries is not advised. While results can be used to highlight the possible size and nature of impacts, further analysis would be required to estimate the actual impact on the economic measures of such changes.

Comparisons of the economic contributions of commercial fisheries and recreational fisheries (made as fishing-related expenditures generate direct and indirect economic impacts) need to be made very cautiously. The two activities are fundamentally different and require different input-output modelling approaches, and comparison can only be made where estimates are comprehensive.

For commercial fisheries this requires that estimates include backward and forward linked sectors (for example, boat building sectors, as well as seafood retail sectors). For recreational fisheries this requires that only expenditures that are directly attributable to fishing are included in the estimate.

The use of estimates of economic contributions to predict the impact on a state or territory economy of changes in resource allocation between commercial and recreational fisheries can complement economic benefit or efficiency analysis. However, it will require further knowledge to determine how inputs would be redeployed in the economy by other sectors were commercial fishing no longer occurring, and how recreational fishers would spend their discretionary income on substitutable activities were they not able to recreationally fish.

This project also supports the ability for individual industries and jurisdictions to monitor trends in the size of contributions over time.

APPENDIX 1
BACKGROUND DATA

TABLE 1. ECONOMIC CONTRIBUTION OF COMMONWEALTH FISHERIES BY STATE AND TERRITORY TO THE AUSTRALIAN ECONOMY, 2017/18

	JURISDICTION							TOTAL STATE AND TERRITORIES
	NSW	VIC	QLD	SA	WA	TAS	NT	
GROSS VALUE ADDED ($M)								
DIRECT								
Fishing	24	41	74	22	1	6	14	181
Processing	11	20	5	5	1	0	2	44
INDIRECT (ALL OTHER SECTORS)[A]								
Production induced	24	66	38	28	3	4	6	170
Consumption induced	35	77	58	39	3	9	15	237
Total indirect	**59**	**144**	**96**	**67**	**6**	**14**	**22**	**407**
TOTAL[B]	**93**	**204**	**175**	**95**	**8**	**20**	**38**	**632**
EMPLOYMENT (FTE JOBS)								
DIRECT								
Fishing	250	434	380	273	11	69	57	1,474
Processing	110	250	50	70	6	5	6	496
INDIRECT (ALL OTHER SECTORS)[A]								
Production induced	189	569	340	268	21	39	55	1,481
Consumption induced	239	592	433	306	19	72	96	1,757
Total indirect	**428**	**1,162**	**773**	**574**	**40**	**112**	**150**	**3,238**
TOTAL[B]	**788**	**1,845**	**1,204**	**916**	**57**	**185**	**213**	**5,209**
HOUSEHOLD INCOME ($M)								
DIRECT								
Fishing	14	25	27	12	1	3	5	87
Processing	6	10	3	3	0	0	1	22
INDIRECT (ALL OTHER SECTORS)[A]								
Production induced	19	44	28	20	2	3	6	121
Consumption induced	19	45	32	22	1	5	7	132
Total indirect	**38**	**88**	**60**	**42**	**3**	**8**	**12**	**253**
TOTAL[B]	**58**	**123**	**90**	**57**	**4**	**12**	**18**	**362**
GVP ($M)								
DIRECT[C]								
Fishing	55	92	135	52	3	12	25	375
Processing	22	59	11	14	1	1	6	115
TOTAL[B]	**77**	**152**	**146**	**66**	**5**	**13**	**31**	**489**

A Indirect contributions to Australia of Commonwealth catch landed in each jurisdiction. This includes the indirect contribution made to the state or territory in which Commonwealth catch was landed and the indirect contribution of this catch to other jurisdictions.

B Totals may not sum due to rounding.
C Indirect GVP effects are excluded to avoid double counting.
Source: Mobsby, D. (2018) and BDO Econsearch analysis.

TABLE 2: COMMONWEALTH-MANAGED FISHERIES SUB-SECTORS EXCLUDED FROM THE ANALYSIS

FISHERY	REASON FOR EXCLUSION
Cth Heard Island & McDonald Island, Cth Macquarie Island Toothfish	Negligible catch attributable to landing ports in the States and Northern Territory
Cth Torres Strait Bêche-de-mer	No GVP data published or means to estimate it
Cth Christmas Island and Cocos (Keeling) Islands, Norfolk Island, Cth South Tasman Rise Trawl, Cth Western Skipjack, Cth East Coast Deepwater Trawl, Cth Eastern Skipjack, Cth Torres Strait Trochus	No catch

Source: Australian Fisheries and Aquaculture Industry 2017/18: Economic Contributions Estimates Report (BDO 2019).

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