Victorian Fisheries Authority
Recreational fishing in Victoria
Report of survey findings

September 2018

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Executive summary

In 2018, the Victorian Fisheries Authority (\VFA) commissioned Australian Survey Research Group (ASR) to develop, conduct and analyse a survey of Victorian fishing licence holders regarding recreational fishing in Victoria.

This report presents the results of the survey conducted in March and April 2018. The survey focused on Victorian fishing licence holders living in Victoria.

ASR invited a total of 288,173 respondents to the survey. The invitation list was based on people who had purchased a Victorian fishing licence between 2013 and 2018. Each survey participant received an invitation email containing a unique link to the online survey. The survey was also available through the VFA website and various social media channels.

Sample and response rates

The survey was open from 13 March 2018 to 23 April 2018, that is, approximately six weeks in field. In total, one email invitation was sent to respondents with valid email addresses.

The table below outlines the invitations sent, completions and email bounce backs. A total of 14,121 respondents completed the 2018 survey. The sample is representative of the population of Victorian recreational fishing licence holders at the 95% confidence level and ±1% confidence interval.

Email invitations count	Completions count - invitation	Completions count – social media	Completions count – total	Bounce-backs count*	Response rate %^
288,173	13,053	1,068	14,121	50,696	4.9

Bounce-backs are an approximation

^ Response rate calculated by dividing the total completions by the number of email invitations.

Key findings

Inland fishing

- Seventy-four percent (74%) of respondents indicated that they had fished in an inland location in the previous 12 months (from when the survey was conducted).

- About 56% of respondents who had fished inland waters in the previous 12 months had at least three favourite fishing locations.

- The most preferred inland fishing location was the Murray River (NSW), selected by 27% of inland fishing respondents, followed by Lake Eildon (25%) and Goulburn River (18%).

- Over 50% of respondents who selected Lake Mulwala NSW (58%), Murray River NSW (53%) and Ovens River (52%) as their favourite locations fished there six or more days in the previous 12 months.

- Over 75% of respondents who listed Lake Mulwala NSW or Lake Purrumbete as their favourite location were *satisfied* or *very satisfied* with fishing at the location.

- Respondents were least satisfied with fishing in the Yarra River (16% were either *dissatisfied* or *very dissatisfied*) and Mitchell River (14% were either dissatisfied or very dissatisfied).

Marine/estuarine fishing

- Eighty-two percent (82%) of respondents indicated that they had fished in a marine/estuarine location in the previous 12 months.

- Approximately 50% of respondents who fished in a marine / estuarine location in the previous 12 months had at least three favourite fishing locations.

- The most preferred marine/estuarine fishing location was Port Philip Bay (52%) followed by Western Port (28%) and Gippsland Lakes (12%).

- Sixty-two (62%) of respondents who selected Port Phillip Bay, 64% of those who selected Western Port and 41% of those who selected the Gippsland Lakes as their favourite location fished there six or more days in the previous 12 months.

- Satisfaction with fishing experiences was greatest for respondents who fished at Portland (77% were either *satisfied* or *very satisfied*), Apollo Bay (73% were either *satisfied* or *very satisfied*) and Lake Tyers (71% were either *satisfied* or *very satisfied*).

- Approximately 9% of respondents had fished for Southern Bluefin tuna in Victoria in the previous 12 months. Most commonly, these respondents spent about one to five days fishing for this type of tuna.

- Six percent (6%) of marine / estuarine fishers indicated that they had fished for Abalone in Victoria in the previous 12 months and this was most commonly in the central zone (waters between Arch Rock and Aire River).

Awareness of improvements

- Eighteen percent (18%) of all respondents indicated that fish stocking in Victorian waters had improved in the previous 12 months.

- 13% of respondents indicated that the number of desirable fish had improved in the previous 12 months while 22% indicated that it had worsened.

Priorities to improve recreational fishing in Victoria

- Thirty-nine percent (39%) of respondents indicated that *enforcing fishing rules* and also *improving fishing habitat* would be an effective way to improve fishing in Victoria.

- Open ended commentary indicated that stopping / limiting commercial fishing, netting and trawling (particularly in certain, specified locations) and improving pest control (carp and cormorants) were the two most frequently mentioned *other* suggestions for improving recreational fishing in Victoria.

Collaboration

- Over a third of respondents (37%) answered that Victorian Fisheries Authority and Victorian natural resource management agencies should work together *a great deal* to create better fisheries and habitat in Victoria.

- When asked about particular agencies VFA should collaborate with, the three most common agencies respondents selected were Parks Victoria (67%), Department of Land, Water & Planning (58%), and Catchment Management Authorities (50%).

Performance

- Sixty-two percent (62%) of respondents indicated that *halting commercial netting in Port Phillip and Corio Bays* had improved recreational fishing in Victoria since 2014.

- Only a small proportion of respondents (6%) answered that the Target One Million investment was *not at all successful*.

Communication

- Forty-one percent (41%) of respondents referred to their fishing colleagues for information on recreational fishing in Victoria.

- The most commonly mentioned magazines used by respondents to source information was *Fishing monthly*. The most commonly mentioned TV show was Ifish and the most commonly mentioned government website was VFA's website.

- Fifty-two percent (52%) of respondents indicated they would like to get their information on recreational fishing in Victoria in the same way as they get it now and 22% would like to use Facebook.

- Almost half of respondents (46%) answered that providing information on where to fish in multiple languages would encourage people in Victoria to fish.

- Sixty percent (60%) of respondents indicated that improving facilities such as toilets close to fishing spots would encourage more women to fish followed by 59% who indicated that promoting fishing in ways that appeal to women would offer encouragement.

- When asked about which information channels respondents used on recreational fishing in Victoria, female respondents were more likely to answer *Facebook* (45%) and less likely to answer *fishing colleagues* (36%) and *YouTube* (9%). *Facebook, Instagram* (7%) and *YouTube* (15%) were more commonly cited by respondents aged under 50 years, whereas *fishing colleagues* was the most common option for those aged over 50 years (36%). Older respondents were also more likely to use *magazines* (13%) and *TV shows* (36%). Long term licence holders were more likely to select *TV fishing shows* (35%), *fishing colleagues* (43%) and *magazines* (12%).

Regulations

- Over half of the respondents answered that the day's take was about right for nearly all of the inland fish species listed in the survey with the exception of yabbies. Thirteen percent (13%) of respondents would like to be able to keep more Murray Spiny Freshwater Crayfish.

- The majority of respondents thought that the day's take was *about right* for Tuna (69%), Gummy shark (71%), Rock lobster (68%) and Blacklip abalone (59%). A relatively larger proportion of respondents indicated the bag limits were either *too many fish* or *way too many fish* for Bream (35%), Flathead (39%), King George Whiting (37%) and Snapper (33%).

Slot limits

- Thirty-four percent of respondents indicated that Snapper should have a slot limit, followed by Gummy shark (32%), Flathead (25%) and King George whiting (24%).

Building great fishing in Victoria

- Open ended commentary indicated that more enforcement and visibility of VFA officers was needed in Victoria as well as improved facilities.

Introduction

In 2018, the Victorian Fisheries Authority (VFA) commissioned Australian Survey Research Group (ASR) to review, conduct and analyse a survey of Victorian fishing licence holders regarding recreational fishing in Victoria.

This report presents the results of the survey conducted in March and April 2018. The survey focused on Victorian Fishing Licence Holders living in Victoria.

Methodology

Data collection

Online invitation

The survey was open from 13 March 2018 to 23 April 2018, that is, approximately six weeks in field. The web survey was loaded into ASR's proprietary web surveying tool, SurveyManager, and hosted on ASR's internet servers located in a high security data centre in Melbourne's CBD. VFA provided the participant list to ASR and the list was based on people who had purchased an online Victorian fishing licence between 2013 and 2018. One email invitation containing a unique link to the online survey was sent to 288,173 participants with valid email addresses.

Online social media

Not all fishers provided VFA with a valid email address, or purchased a Victorian fishing licence online, or are required to have a Victorian fishing licence to fish in Victoria (under 16s and over 70s). To ensure all had an opportunity to answer the survey was also made available through the VFA website and various social media. The survey was promoted twice on the VFA's social media platforms, including Facebook and Instagram. The first promotion occurred when the survey began and the second occurred mid-way through the fieldwork period. The survey was also promoted through a VFA media release when the survey began and through the VFA's email newsletter *FisheFacts*.

Sample and response rates

The table below outlines the invitations sent, completions and email bounce backs. A total of 14,121 respondents completed the 2018 survey and the overall response rate was 5%. The table below outlines the invitations sent, completions by all methods and email bounce backs.

Email invitations count	Completions count - invitation	Completions count – social media	Completions count – total	Bounce-backs count*	Response rate %^
288,173	13,053	1,068	14,121	50,696	4.9

Bounce-backs are an approximation

^ Response rate calculated by dividing the total completions by the number of email invitations.

Data cleansing

Before conducting the numeric analysis, raw data was cleansed using micro (individual) level cleaning. This was done in order to identify and correct data abnormalities and errors. Cleansing included identifying and editing, where ever possible, inland fishing locations that were offered as other locations in marine/estuarine questions and vice versa for marine/estuarine locations. Throughout the cleansing process it was evident that some respondents were confused about the definitions of inland and marine /estuarine water and which species could be found in a water type.

Data analysis

Results were analysed to produce frequency distributions and some percent positive scores (the combined proportion of the two most positive ratings, eg, *excellent* and *good*). Various statistical tests including chi square were used to

determine any statistical differences between sub-groups (such as licence term, fishing preference, and age groups). All tests are reported at the p<0.05 level (95% confidence level).

Data value labels in charts below 2% and some data labels have been removed or truncated for readability in some charts.

Open ended responses were coded and common themes have been listed in this report. Random sample coding was used for all open ended questions and where there were more than 500 responses to open-ended questions, a random selection of approximately 25% of responses were coded. Only the top 10 most commonly mentioned themes have been included in tables.

Weighting

No weighting was applied to the data.

Confidence level and interval

There were sufficient responses for the survey sample to be representative at the 95% confidence level and at the ±1% confidence interval, on the assumption that respondents randomly chose to answer.

This is an excellent result in terms of survey sample.

Confidence level means that you can be 95% sure that if the survey was completed again by the same / similar people that the same result would be achieved. **Confidence interval** is the margin of error that needs to be kept in mind when reading charts and tables. So if a result is 60% in a chart, it should be interpreted as 59% to 61% of respondents had that view.

> **Note about reading the charts and tables in this report**
>
> Some charts display the results for inland fishers, marine / estuary fishers, as well as the total (combined) results. Within the report, data labels in the stacked charts with values less than 2% have been removed for readability. Only values of 2% or higher have been labelled.
>
> The survey was voluntary and only a few questions were made compulsory (required an answer to move on to the next page). This meant that the number of people who answered each question varied throughout the survey. As a result the n count (actual number of answers) varies between answers to questions (charts and tables).
>
> Values in charts may not sum to totals due to rounding.

Response profile

This section outlines the nature of respondents from a state-wide perspective.

General demographics

The vast majority of respondents were male (89%). Refer to the chart below.

Gender
% of respondents, n=14,121

Category	Value
Male	88.8
Female	10.8
Other	0.1
No answer	0.3
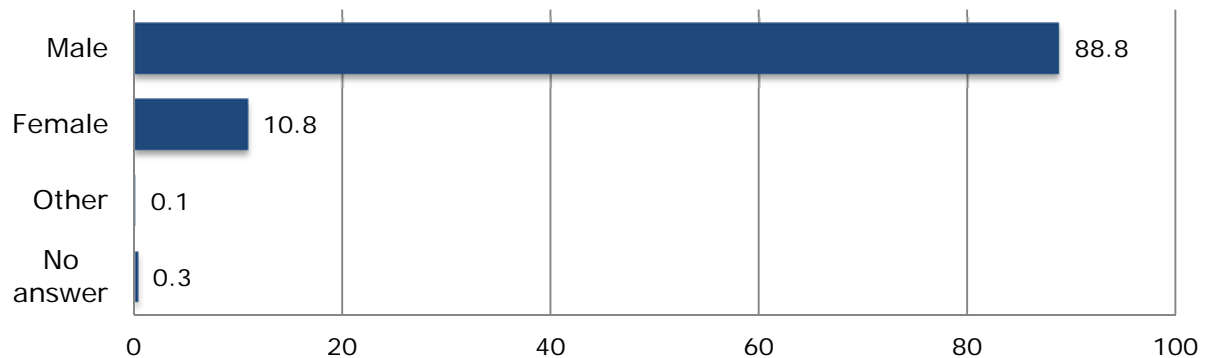
The two largest age groups were 31-49 years and 50-69 years representing 44% and 42% of respondents respectively. Refer to the chart below.

Age group
% of respondents, n=14,121

Category	Value
Younger than 18	0.3
18 - 30	12.8
31 - 49	43.7
50 - 69	42.3
70+	0.8
Prefer not to say	0.0
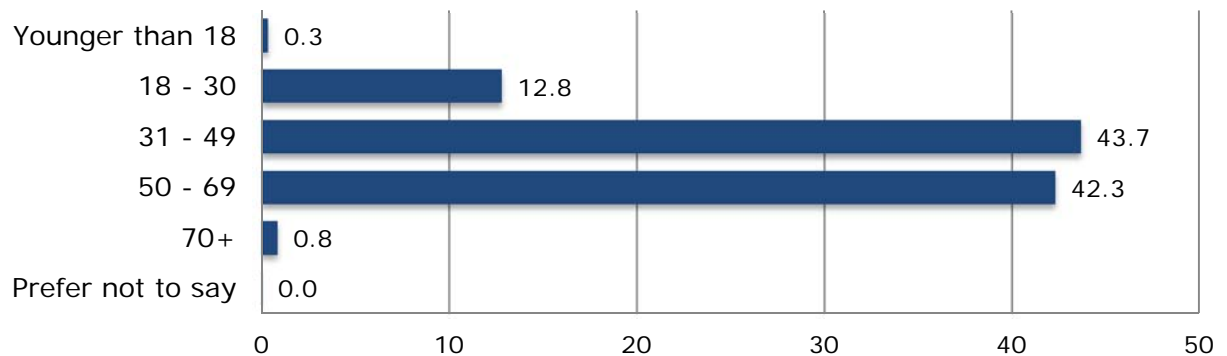
Respondents were more likely to reside in **regional** Victoria (54%) compared with **metropolitan** Victoria (45%). A list of postcodes used to classify metropolitan and regional areas is included Appendix A.

54%

45%

Sixty percent of respondents were longer term licence holders (12 months or more).

Licence term
% of respondents, n=14,121

Category	Value
Under 1 year	15.6
1 year and over	60.0
Unknown	24.4
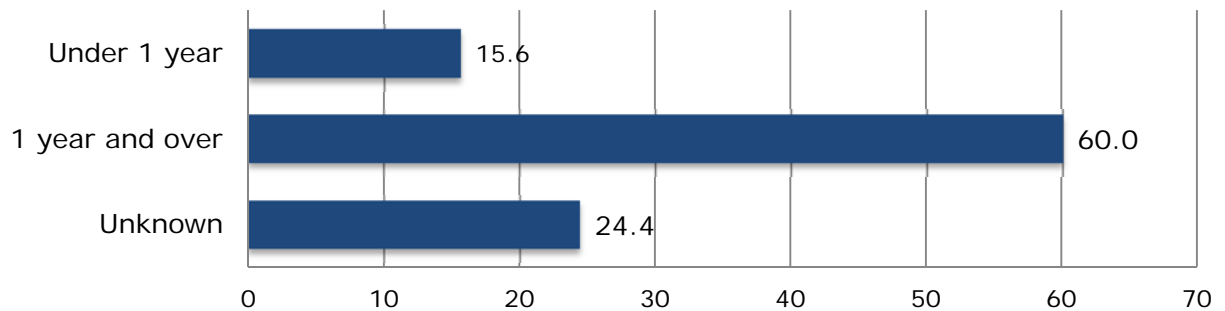
Eighteen percent of respondents were members of online fishing communities, however, most commonly, respondents were not members of any fishing related groups (74%).

Member of …
% of respondents, n=14,121

Category	Value
No club or community	74.0
Online community	17.6
Angling or diving club that gets together regularly face to face	8.1
Another type of fishing related group	3.4
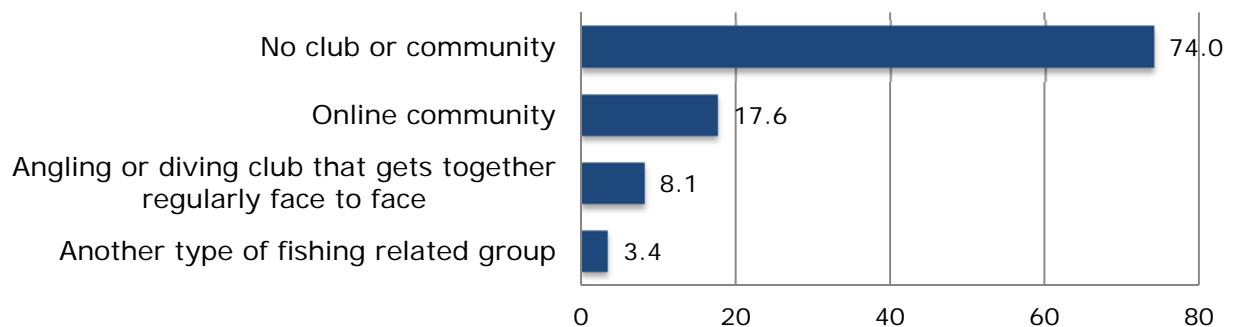
Twenty-one percent of respondents indicated fishing was their number one hobby and 34% indicated that it was a top hobby.

Fishing priority
% of respondents based on n=14,121%

Category	Value
Fishing is my number one hobby	21.2
Fishing is one of my top hobbies	34.3
Fishing is one of many hobbies	15.1
Fishing is an occasional hobby that I do now and then	23.5
I used to fish but don't do it at all or rarely now	4.8
Something else	0.8
No answer	0.2
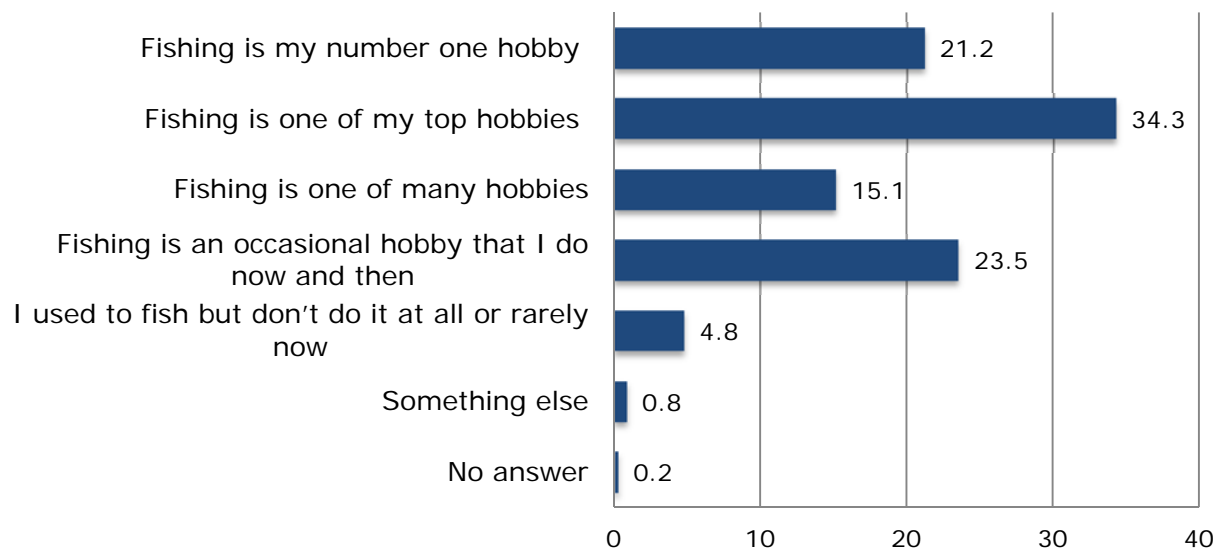
Fishing activity

Respondents were asked to indicate how often, in the previous 12 months, they had fished, spearfished or dived in inland and marine/estuary waters. Respondents had fished more frequently in marine / estuarine waters (52% fished

six or more days) compared with inland waters (45% fished six or more days). Refer to the chart below. The chart immediately below shows more people fished in marine/estuarine waters than fished inland which is also reflected in other tables and charts following.

Number of days spent fishing, spearfishing or diving in the last 12 months
% of respondents, n=14,121

	None	1-5 days	6-14 days	15 or more days
Inland waters	27.0	28.3	17.4	27.4
Marine/estuarine waters	17.7	29.9	20.2	32.2
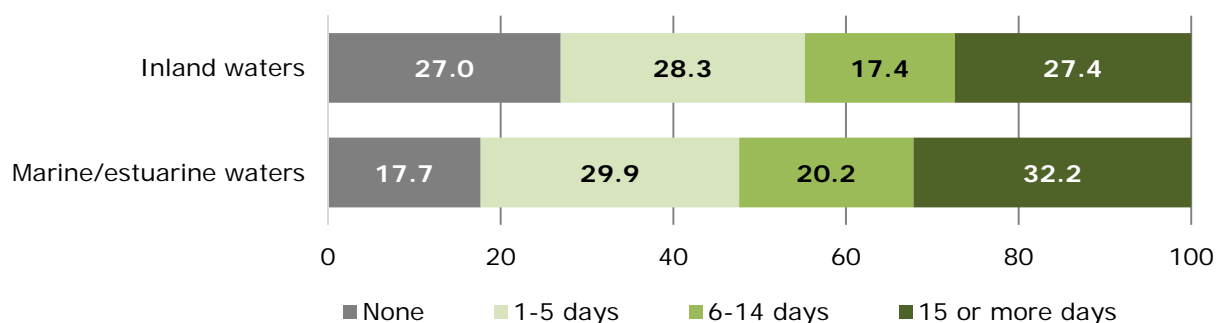
The results of the question above were used to stream respondents through the questionnaire so that only inland fishing questions were shown to those who indicated that they fished inland and similarly for marine / estuarine fishers. The results were also used to derive a variable called *fishing preference.* The derived variable contained four categories: category 1-inland only fishers, category 2-marine / estuarine only fishers, category 3-fished both inland and marine/estuarine fishers and category 4-none.

Most commonly, respondents fished in **both** inland and marine /estuarine locations (59.3%). More respondents indicated fishing in marine / estuarine waters only (23%) than inland waters only (14%). Only 4% of respondents had not fished in either inland or marine / estuarine waters in the past 12 months. Refer to table below.

Fishing preference	Count	% of respondents
Inland fishing waters	1947	13.8
Marine / estuarine fishing waters	3256	23.1
Both	8367	59.3
None - Did not fish either inland or marine waters in the past 12 months*	551	3.9
Total	14,121	100.0

The category Did not fish either inland or marine waters in the past 12 months only *includes respondents who selected None for* **both** *inland and marine/estuarine fishing. These respondents were NOT asked questions about inland and marine/estuarine locations and species.*

Key findings

This section outlines the key findings from the survey. The topics and results are presented in the same order as questions in the online questionnaire: firstly by inland fishing waters followed by marine/estuarine fishing waters and then by common / combined topics.

Results for inland and marine / estuarine display top ten locations only, based on the total combined result of favourite, second favourite and third favourite mentions. Refer to Appendix B for a full list of favourite locations.

Inland fishing waters

Favourite Victorian inland fishing waters

Respondents were asked to indicate their first, second and third favourite Victorian inland fishing locations. Most commonly, respondents had three favourite inland fishing locations. Refer to the table below.

One favourite location		Two favourite locations		Three favourite locations	
Count	%	Count	%	Count	%
2142	20.8	2367	22.9	5805	56.3

The chart below shows results for the top 10 locations only, combining all three favourite mentions. If a location was not on the list, respondents were asked to specify the location. Other common locations that were not individually listed included Tambo River, Dartmouth, Dargo River and Mitta Mitta River.

The most preferred inland fishing location was the Murray River (NSW), selected by 27% of inland fishing respondents, followed by Lake Eildon (25%) and then Goulburn River (18%).

Favourite inland fishing locations - top 10
% of respondents, n=10,314
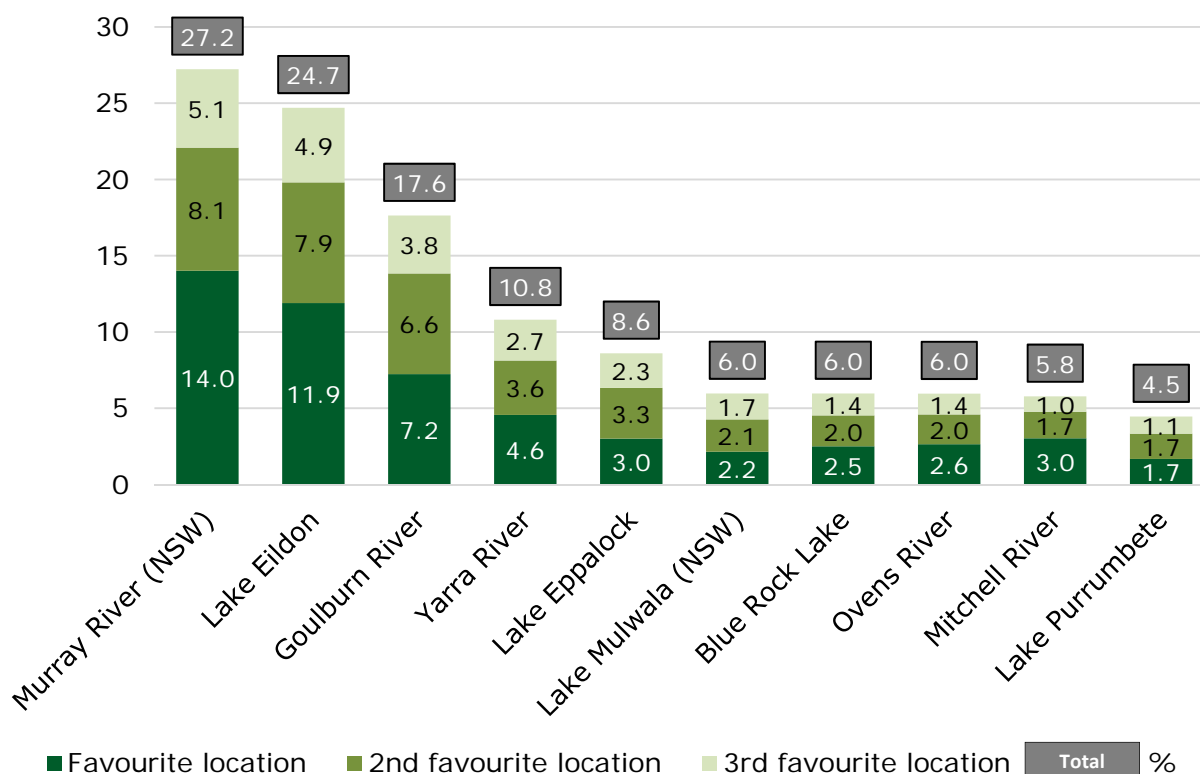
Favourite location

Over 50% of respondents who selected Lake Mulwala (NSW) (58%), Murray River (NSW) (53%) and Ovens River (52%) as their favourite locations fished there for six or more days in the previous 12 months.

Frequency of fishing at favourite inland location
% of respondents, n count varies by location
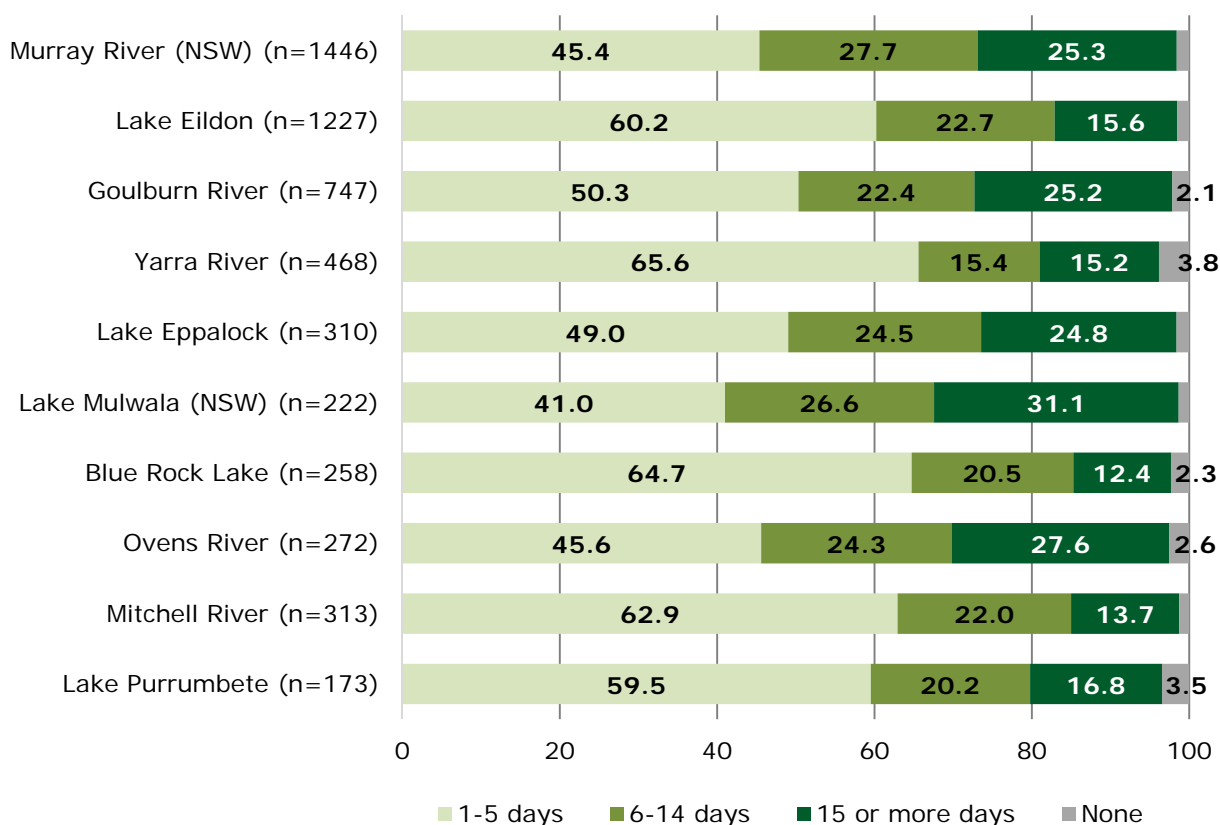
Over 75% of respondents who listed Lake Mulwala and Lake Purrumbete as their favourite location were *satisfied* or *very satisfied* with fishing at the location.

Respondents were least satisfied with fishing in the Yarra River (16% were either *dissatisfied* or *very dissatisfied*) and Mitchell River (14% were either *dissatisfied* or *very dissatisfied*).

Satisfaction with fishing at favourite inland location
% of respondents, n count varies by location

Location	Very satisfied	Satisfied	Sometimes satisfied / sometimes not	Dissatisfied	Very dissatisfied
Murray River (NSW) (n=1420)	20.1	40.4	32.5	6.1	
Lake Eildon (n=1205)	15.5	38.7	37.8	7.2	
Goulburn River (n=728)	18.3	37.6	37.8	5.5	
Yarra River (n=450)	7.1	31.6	45.8	11.1	4.4
Mitchell River (n=308)	14.0	33.8	38.0	10.4	3.9
Lake Eppalock (n=305)	9.2	31.8	47.5	9.8	
Ovens River (n=265)	19.6	39.6	32.1	7.5	
Blue Rock Lake (n=252)	15.5	36.1	37.7	7.9	2.8
Lake Mulwala (NSW) (n=218)	31.2	44.5	22.9		
Lake Purrumbete (n=167)	33.5	43.7	18.6	4.2	

■ Very satisfied ■ Satisfied ■ Sometimes satisfied / sometimes not ■ Dissatisfied ■ Very dissatisfied

Second favourite location

As a pattern, respondents fished less frequently at their second favourite location when compared with the first. Thirty-eight percent (38%) spent six or more days fishing at Lake Mulwala (NSW), followed by 36% at Murray River and 31% at Goulburn River.

Frequency of fishing at 2nd favourite inland location
% of respondents, n count varies by location

Location	1-5 days	6-14 days	15 or more days	None
Murray River (NSW)	58.7	22.4	14.0	4.8
Lake Eildon	71.6	15.7	6.4	6.3
Goulburn River	65.1	17.5	13.1	4.3
Yarra River	71.1	10.6	10.9	7.4
Lake Eppalock	65.8	20.2	9.4	4.7
Lake Mulwala (NSW)	57.8	24.8	12.8	4.6
Blue Rock Lake	75.5	15.9	2.9	5.8
Ovens River	69.8	12.9	12.9	4.5
Mitchell River	69.8	14.0	10.6	5.6
Lake Purrumbete	71.2	15.9	8.2	4.7

■ 1-5 days ■ 6-14 days ■ 15 or more days ■ None

Sixty-four percent (64%) of respondents who listed Lake Mulwala as their second favourite location were *satisfied* or *very satisfied* with fishing at the location, followed by Murray River (58% *satisfied* or *very satisfied*) and Ovens River (55% *satisfied* or *very satisfied*).

Respondents were least satisfied with fishing at the Yarra (19% were either dissatisfied or very dissatisfied.

Satisfaction with fishing at 2nd favourite inland location
% of respondents, n count varies by location

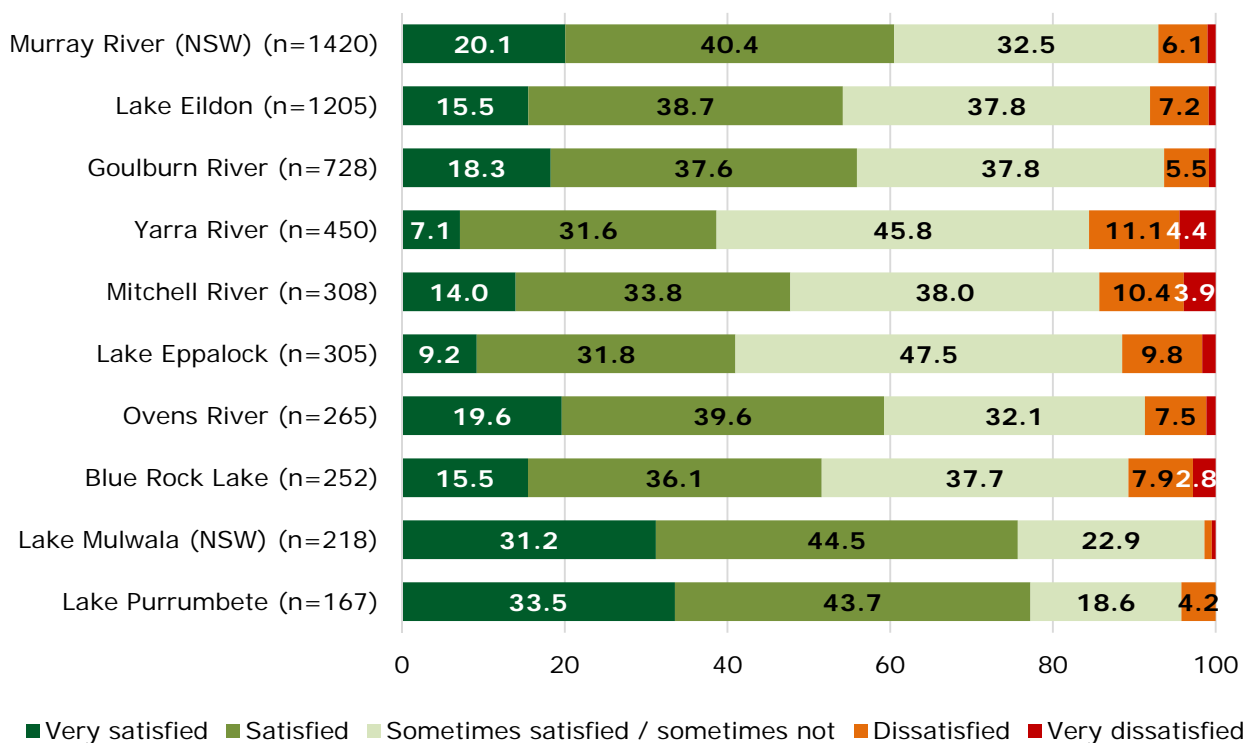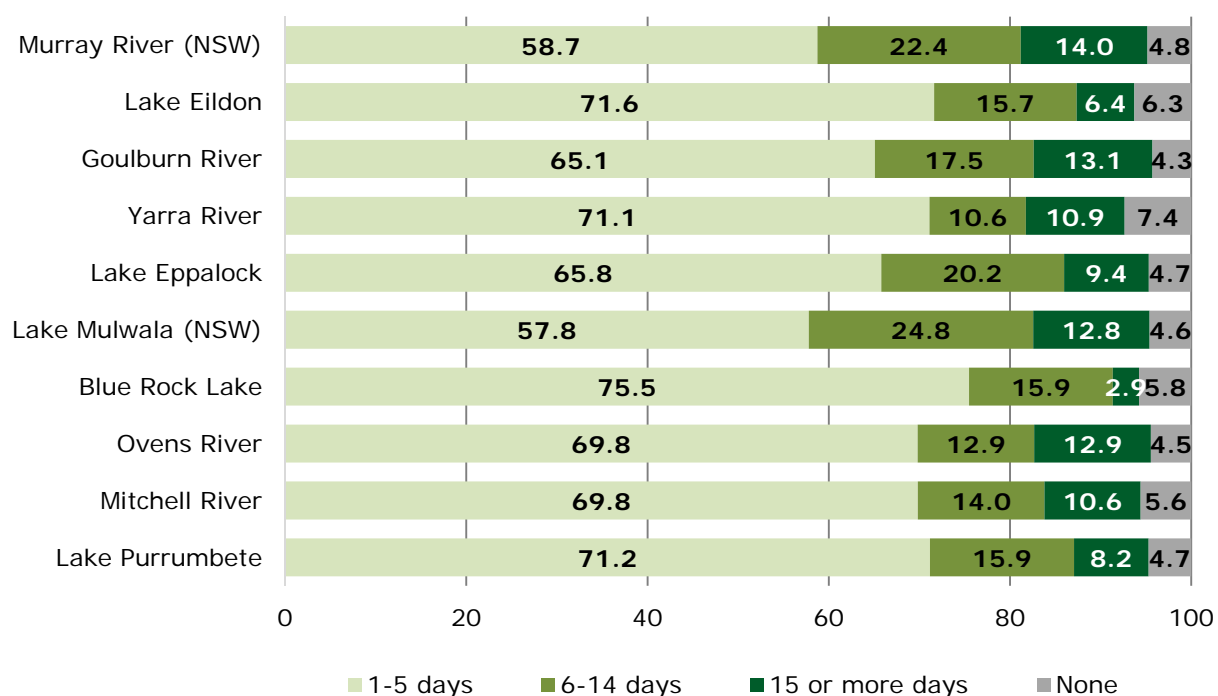| Location	Very satisfied	Satisfied	Sometimes satisfied / sometimes not	Dissatisfied	Very dissatisfied
Murray River (NSW) (n=787)	14.4	43.2	36.2	5.1	
Lake Eildon (n=760)	9.6	38.4	40.3	10.5	
Goulburn River (n=648)	12.2	37.3	40.1	9.0	
Yarra River (n=341)	7.9	29.3	44.0	15.8	2.9
Lake Eppalock (n=323)	7.1	30.0	44.9	14.9	3.1
Lake Mulwala (NSW) (n=205)	21.5	42.9	30.2	4.9	
Blue Rock Lake (n=197)	8.1	36.0	41.6	13.2	
Ovens River (n=193)	18.1	37.3	36.3	6.2	2.1
Mitchell River (n=168)	11.3	41.1	36.9	8.3	2.4
Lake Purrumbete (n=162)	15.4	37.7	40.7	6.2	

Legend: ■ Very satisfied ■ Satisfied ■ Sometimes satisfied / sometimes not ■ Dissatisfied ■ Very dissatisfied

Third favourite location

Of the respondents who listed Murray River (NSW) as their third favourite location, 27% fished there six or more days in the previous 12 months. Refer to the chart below.

Frequency of fishing at 3rd favourite inland location
% of respondents, n count varies by location

Location	1-5 days	6-14 days	15 or more days	None
Murray River (NSW)	65.8	15.8	11.5	6.8
Lake Eildon	74.1	8.7	4.6	12.7
Goulburn River	74.7	12.0	4.6	8.7
Yarra River	68.2	10.8	6.5	14.4
Lake Eppalock	74.8	13.5	4.3	7.4
Lake Mulwala (NSW)	70.9	14.3	6.9	8.0
Blue Rock Lake	82.6	6.0	4.7	6.7
Ovens River	77.9	9.3	6.4	6.4
Mitchell River	68.0	10.7	6.8	14.6
Lake Purrumbete	73.3	10.3		15.5

Legend: ■ 1-5 days ■ 6-14 days ■ 15 or more days ■ None

Sixty-one percent (61%) of respondents who listed Lake Purrumbete as their third favourite fishing location were *satisfied* or *very satisfied* with their fishing experience, followed by 54% who listed Murray River(NSW) and 54% who listed Lake Mulwala (NSW) as their third favourite location.

Respondents were least satisfied with fishing in the Yarra River (25% were either *dissatisfied* or *very dissatisfied*.

Satisfaction with fishing at 3rd favourite inland location
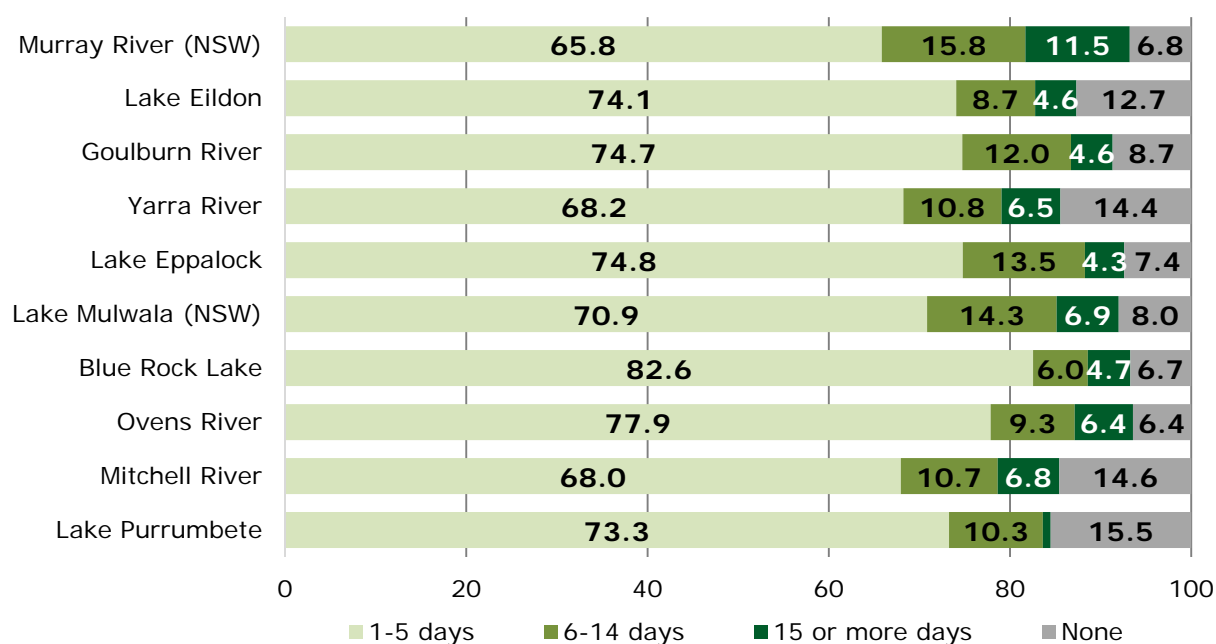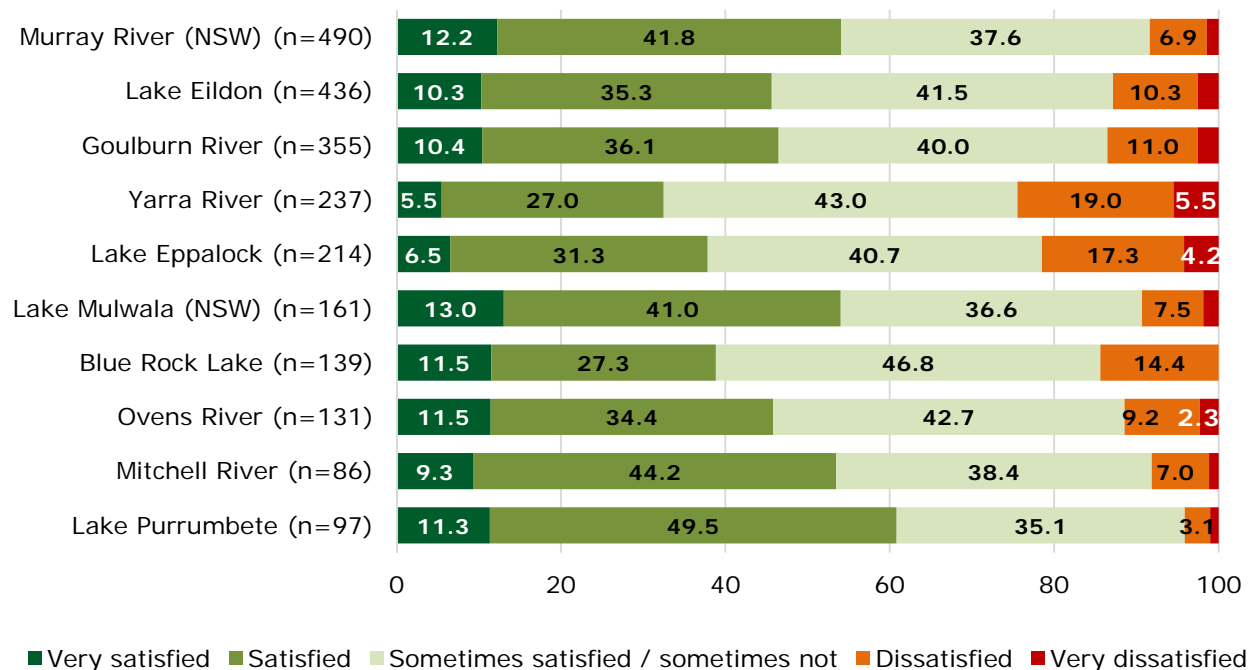% of respondents, n count varies by location

Location	Very satisfied	Satisfied	Sometimes satisfied / sometimes not	Dissatisfied	Very dissatisfied
Murray River (NSW) (n=490)	12.2	41.8	37.6	6.9	
Lake Eildon (n=436)	10.3	35.3	41.5	10.3	
Goulburn River (n=355)	10.4	36.1	40.0	11.0	
Yarra River (n=237)	5.5	27.0	43.0	19.0	5.5
Lake Eppalock (n=214)	6.5	31.3	40.7	17.3	4.2
Lake Mulwala (NSW) (n=161)	13.0	41.0	36.6	7.5	
Blue Rock Lake (n=139)	11.5	27.3	46.8	14.4	
Ovens River (n=131)	11.5	34.4	42.7	9.2	2.3
Mitchell River (n=86)	9.3	44.2	38.4	7.0	
Lake Purrumbete (n=97)	11.3	49.5	35.1	3.1	

■ Very satisfied ■ Satisfied ■ Sometimes satisfied / sometimes not ■ Dissatisfied ■ Very dissatisfied

Murray cod (41%), Rainbow trout (40%), Brown trout (40%) and Redfin (38%) were by far the top four favourite inland fish to catch. Refer to the summary table below and the chart on the following page.

Favourite inland fish to catch	Name	% of respondents
	Murray cod	41
	Rainbow trout	40
	Brown trout	40
	Redfin	38

Favourite fish to catch from Victorian inland waters

% of respondents based on n=10,186; multiple answers allowed so total >100%

Fish	%
Murray cod	40.7
Rainbow trout	39.8
Brown trout	39.5
Redfin	38.3
Golden perch	19.8
Common yabby	8.6
Carp	8.1
Other	7.0
Australian bass	6.6
Silver perch	4.7
Estuary perch	4.3
Murray spiny freshwater crayfish	3.1
Eel	2.6
Trout cod	2.4
River blackfish	1.9
Freshwater catfish	.9
Macquarie perch	.8
None / haven't caught	.7
All / anything / no favourite	.3
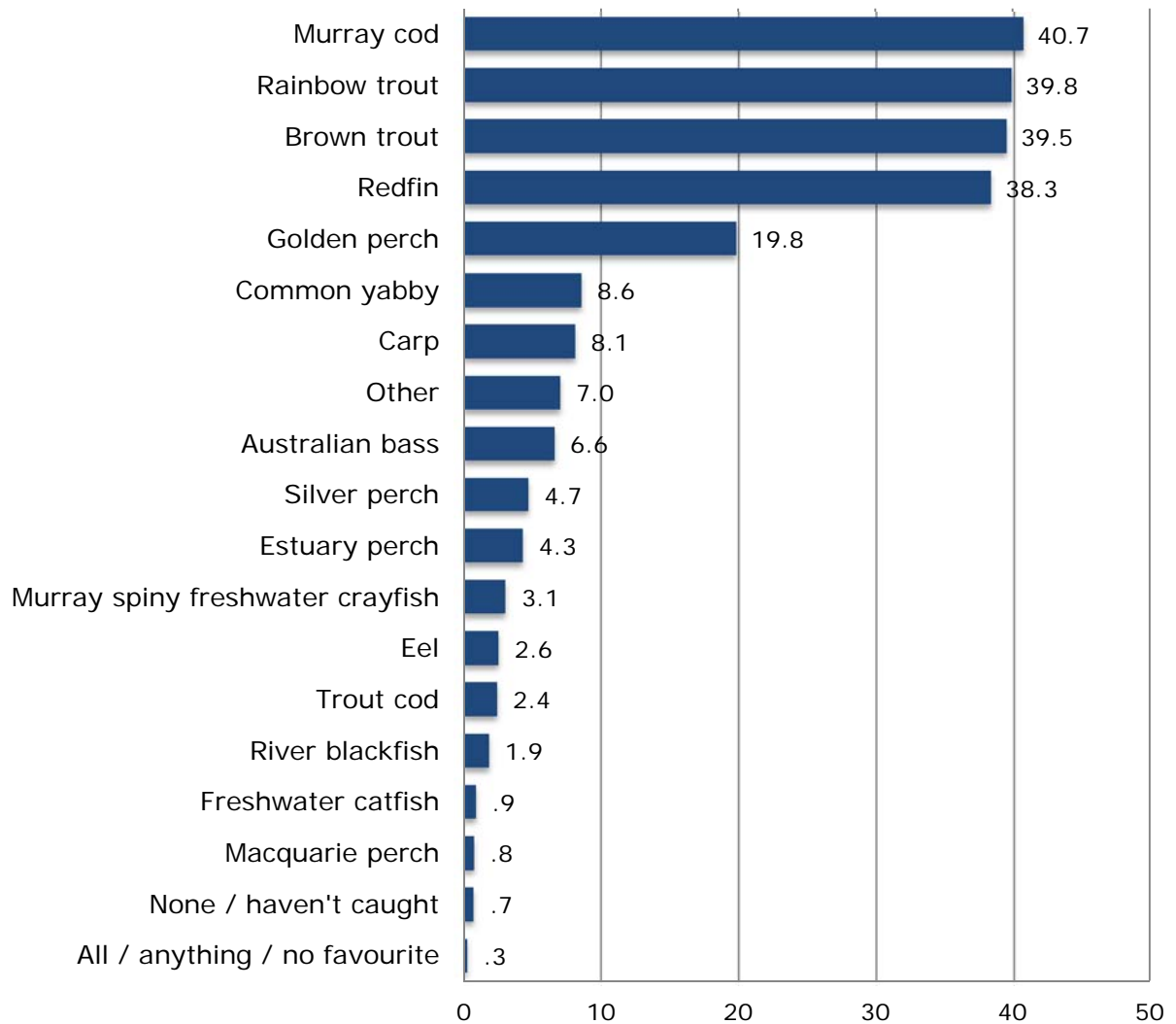
Marine/ estuarine waters

Favourite Victorian marine/estuarine fishing waters

Respondents were asked to indicate their first, second and third favourite Victorian marine / estuarine fishing locations. Most commonly, respondents had three favourite marine / estuarine fishing locations. Refer to the table below.

One favourite location		Two favourite locations		Three favourite locations	
Count	%	Count	%	Count	%
2990	25.7	2891	24.9	5742	49.4

The chart below shows results for the top 10 locations only, combining all three favourite mentions. If a location was not on the list respondents were asked to specify the name. Other common locations that were not individually listed included Tamboon Inlet, Port Welshpool, Marlo, Port Albert, Anderson's Inlet and Corio Bay.

Port Philip Bay was the most preferred location for 52% of respondents followed by Western Port (28%) and the Gippsland Lakes (12%).

Favourite marine/estuarine fishing locations - top 10
% of respondents, n=11,623
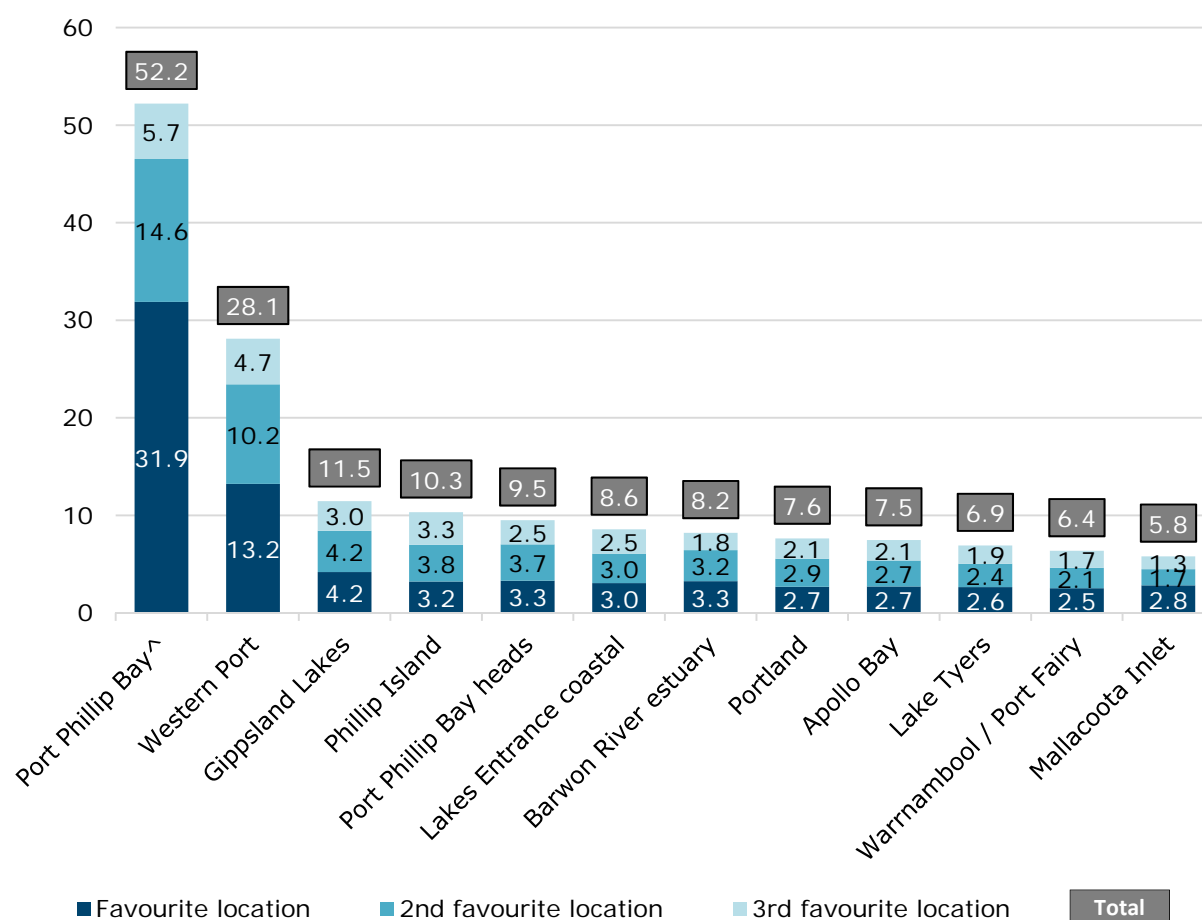
^anywhere except the heads

Favourite location

Sixty-two (62%) of respondents who selected Port Phillip Bay, 64% who selected Western Port and 41% who selected the Gippsland Lakes as their favourite location fished there 6 or more days in the last 12 months.

Frequency of fishing at favourite marine/estuarine location
% of respondents, n count varies by location

Location	1-5 days	6-14 days	15 or more days	None
Port Phillip Bay^ (n=3696)	37.1	24.2	37.8	
Western Port (n=1535)	35.3	26.0	37.7	
Gippsland Lakes (n=487)	56.7	20.3	20.7	2.3
Phillip Island (n=374)	56.1	19.0	21.9	2.9
Port Phillip Bay heads (n=384)	45.8	24.7	28.1	
Lakes Entrance coastal (n=354)	65.5	17.5	13.6	3.4
Barwon River estuary (n=378)	59.8	22.2	15.6	2.4
Portland (n=311)	55.3	25.7	18.0	
Apollo Bay (n=315)	67.0	22.5	7.6	2.9
Lake Tyers (n=305)	57.0	22.6	17.4	3.0

■1-5 days ■6-14 days ■15 or more days ■None

^anywhere except the heads
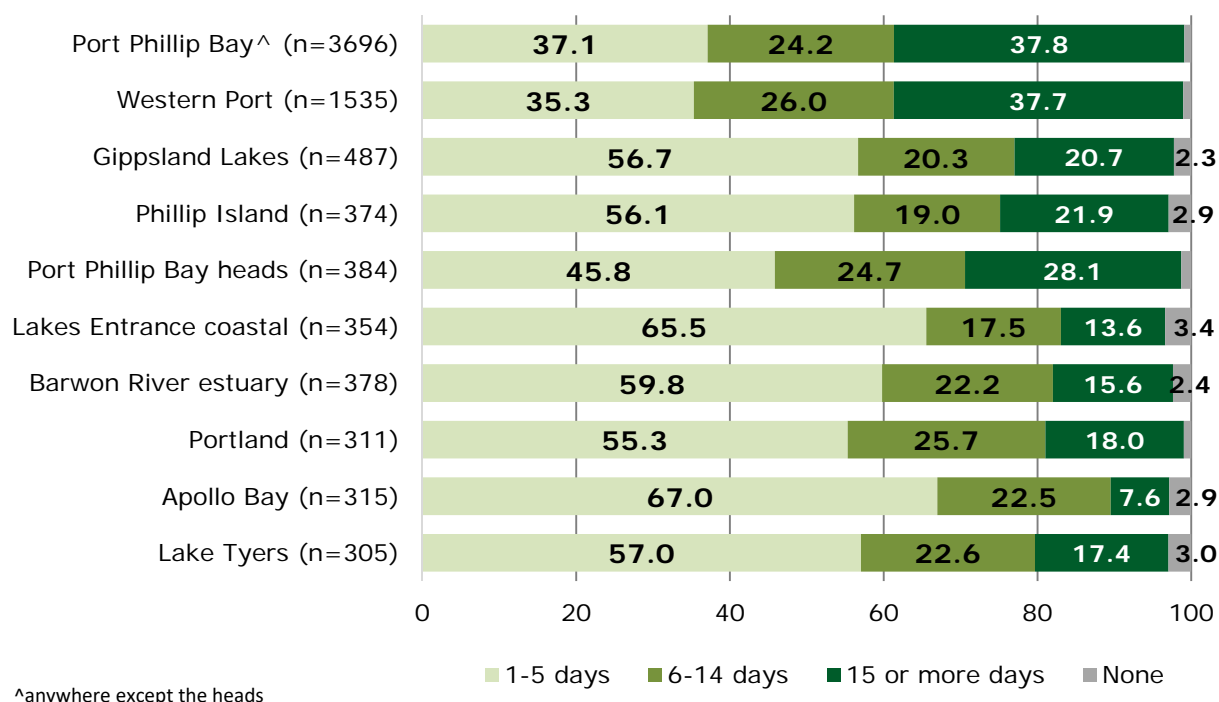
Satisfaction with fishing experiences was greatest for respondents who fished at Portland (77% were either *satisfied* or *very satisfied*), Apollo Bay (73% were either *satisfied* or *very satisfied*) and Lake Tyers (71% were either *satisfied* or *very satisfied*).

Respondents were least satisfied with fishing at Gippsland Lakes (16% were either *dissatisfied* or *very dissatisfied*), Lakes Entrance coastal (10% were either *dissatisfied* or *very dissatisfied*) followed by Port Phillip Bay excluding the heads and Phillip Island (both had 9% of respondents who were either *dissatisfied* or *very dissatisfied*).

Satisfaction with fishing at favourite marine/estuarine location

% of respondents, n count varies by location

Location	Very satisfied	Satisfied	Sometimes satisfied/ sometimes not	Dissatisfied	Very dissatisfied
Port Phillip Bay^ (n=3663)	15.8	41.2	33.7	7.7	
Western Port (n=1513)	18.6	42.8	31.9	5.6	
Gippsland Lakes (n=472)	16.1	37.7	29.9	9.3	7.0
Phillip Island (n=363)	17.6	40.5	32.8	7.2	
Port Phillip Bay heads (n=377)	24.9	44.6	25.7	3.7	
Lakes Entrance coastal (n=341)	19.4	43.1	27.6	7.3	
Barwon River estuary (n=367)	18.8	41.1	31.9	6.8	
Portland (n=306)	34.0	43.5	19.9	2.3	
Apollo Bay (n=305)	27.2	45.6	22.3	3.9	
Lake Tyers (n=296)	27.0	43.6	23.0	6.1	

- ■ Very satisfied ■ Satisfied ■ Sometimes satisfied/ sometimes not ■ Dissatisfied ■ Very dissatisfied

^anywhere except the heads
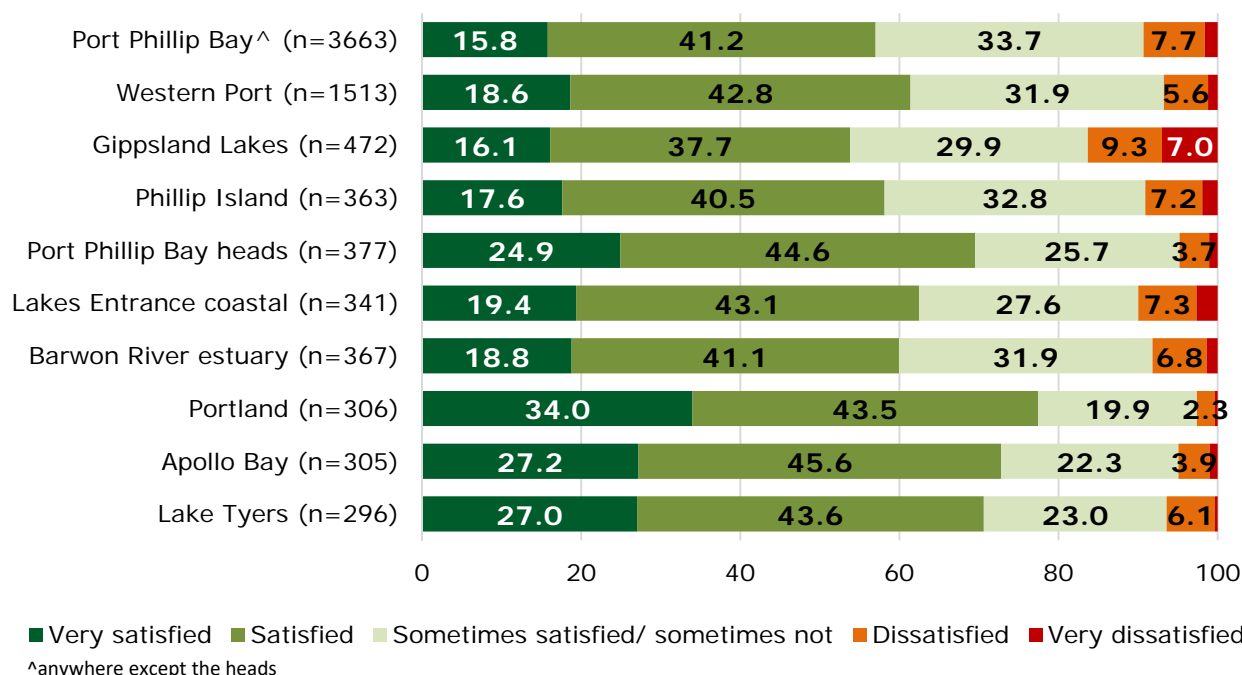
Second favourite location

As a pattern, respondents fished less frequently at their second favourite location when compared with the first. Forty-four percent (44%) spent six or more days fishing at Port Philip Bay excluding the heads, followed by 35% at Western Port and 31% at Port Phillip Bay heads.

Frequency of fishing at 2nd favourite marine/estuarine location

% of respondents, n count varies by location

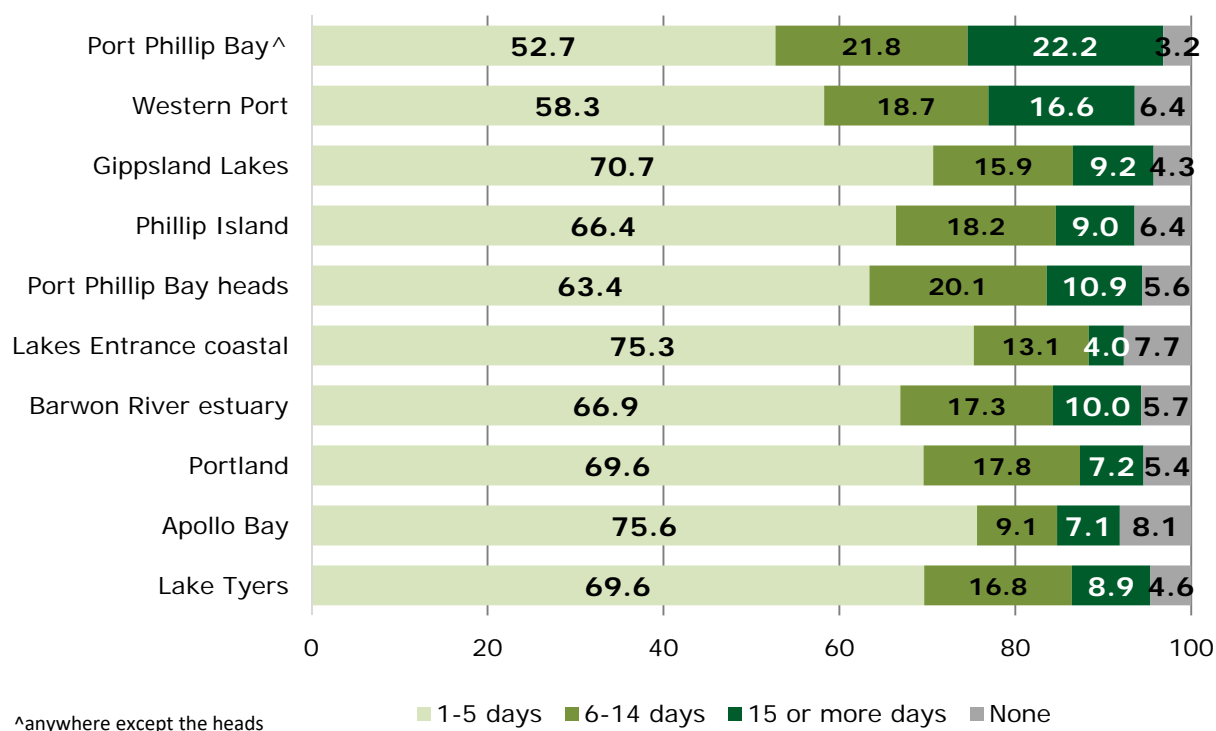| Location	1-5 days	6-14 days	15 or more days	None
Port Phillip Bay^	52.7	21.8	22.2	3.2
Western Port	58.3	18.7	16.6	6.4
Gippsland Lakes	70.7	15.9	9.2	4.3
Phillip Island	66.4	18.2	9.0	6.4
Port Phillip Bay heads	63.4	20.1	10.9	5.6
Lakes Entrance coastal	75.3	13.1	4.0	7.7
Barwon River estuary	66.9	17.3	10.0	5.7
Portland	69.6	17.8	7.2	5.4
Apollo Bay	75.6	9.1	7.1	8.1
Lake Tyers	69.6	16.8	8.9	4.6

- ■ 1-5 days ■ 6-14 days ■ 15 or more days ■ None
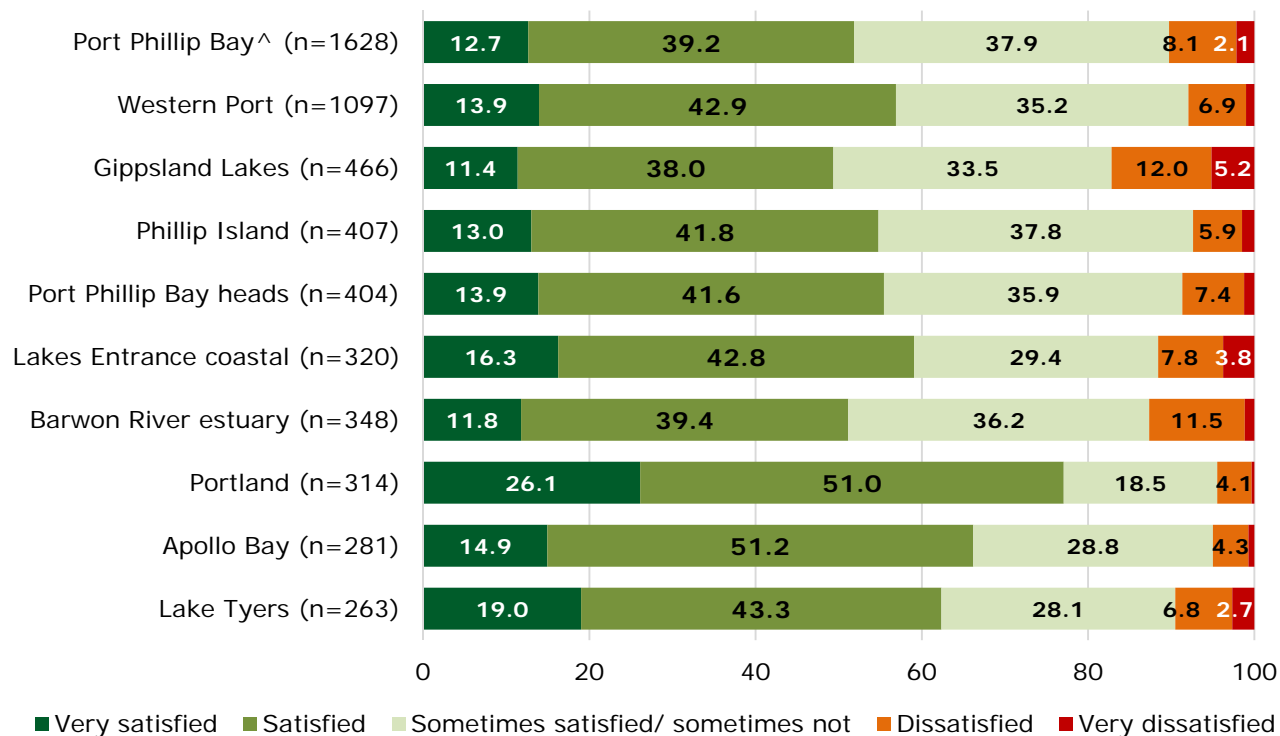
^anywhere except the heads

Seventy-seven percent (77%) of respondents who listed Apollo Bay as their second favourite fishing location were *satisfied* or *very satisfied* with their fishing experience, followed by 66% who listed Apollo Bay and 62% who listed Lake Tyers as their second favourite location.

Respondents were least satisfied with fishing at the Gippsland Lakes (17% were either *dissatisfied* or *very dissatisfied)*, Barwon River estuary (13%) and Lakes Entrance coastal (12%).

Satisfaction with fishing at 2nd marine/estuarine favourite location
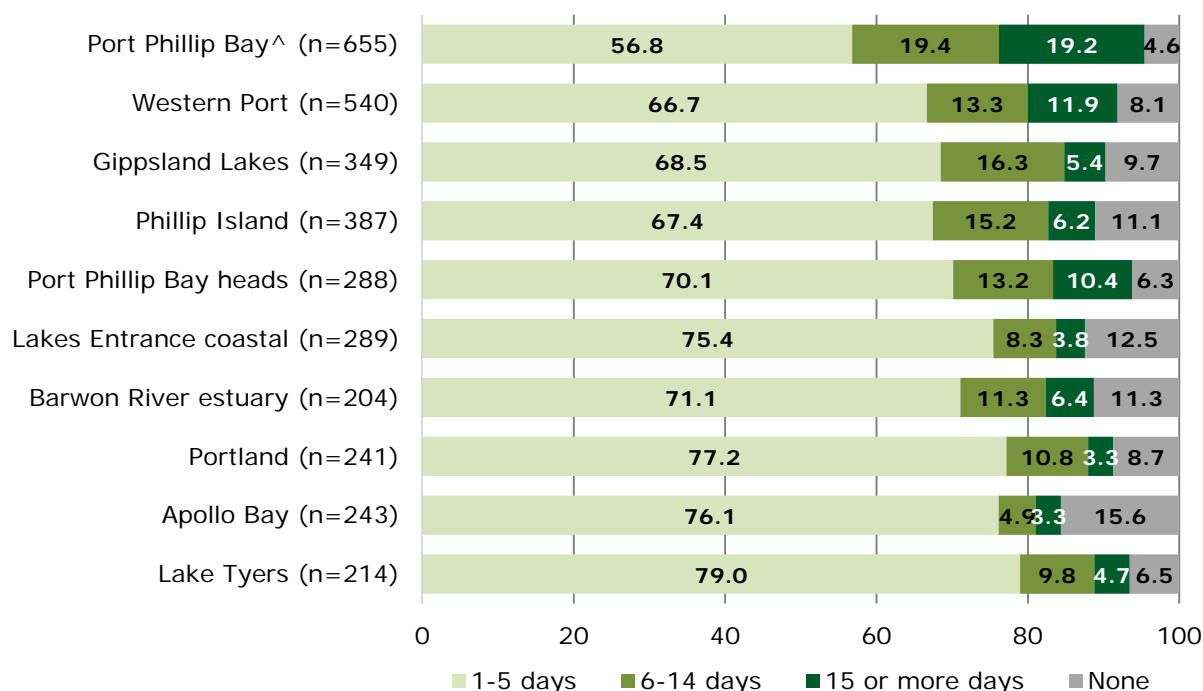% of respondents, n count varies by location

Location	Very satisfied	Satisfied	Sometimes satisfied/ sometimes not	Dissatisfied	Very dissatisfied
Port Phillip Bay^ (n=1628)	12.7	39.2	37.9	8.1	2.1
Western Port (n=1097)	13.9	42.9	35.2	6.9	
Gippsland Lakes (n=466)	11.4	38.0	33.5	12.0	5.2
Phillip Island (n=407)	13.0	41.8	37.8	5.9	
Port Phillip Bay heads (n=404)	13.9	41.6	35.9	7.4	
Lakes Entrance coastal (n=320)	16.3	42.8	29.4	7.8	3.8
Barwon River estuary (n=348)	11.8	39.4	36.2	11.5	
Portland (n=314)	26.1	51.0	18.5	4.1	
Apollo Bay (n=281)	14.9	51.2	28.8	4.3	
Lake Tyers (n=263)	19.0	43.3	28.1	6.8	2.7

^anywhere except the heads

Third favourite location

Of the respondents who listed Port Phillip Bay excluding the heads as their third favourite location, 39% fished there six or more days in the past 12 months. Refer to the chart below.

Frequency of fishing at 3rd favourite marine/estuarine location

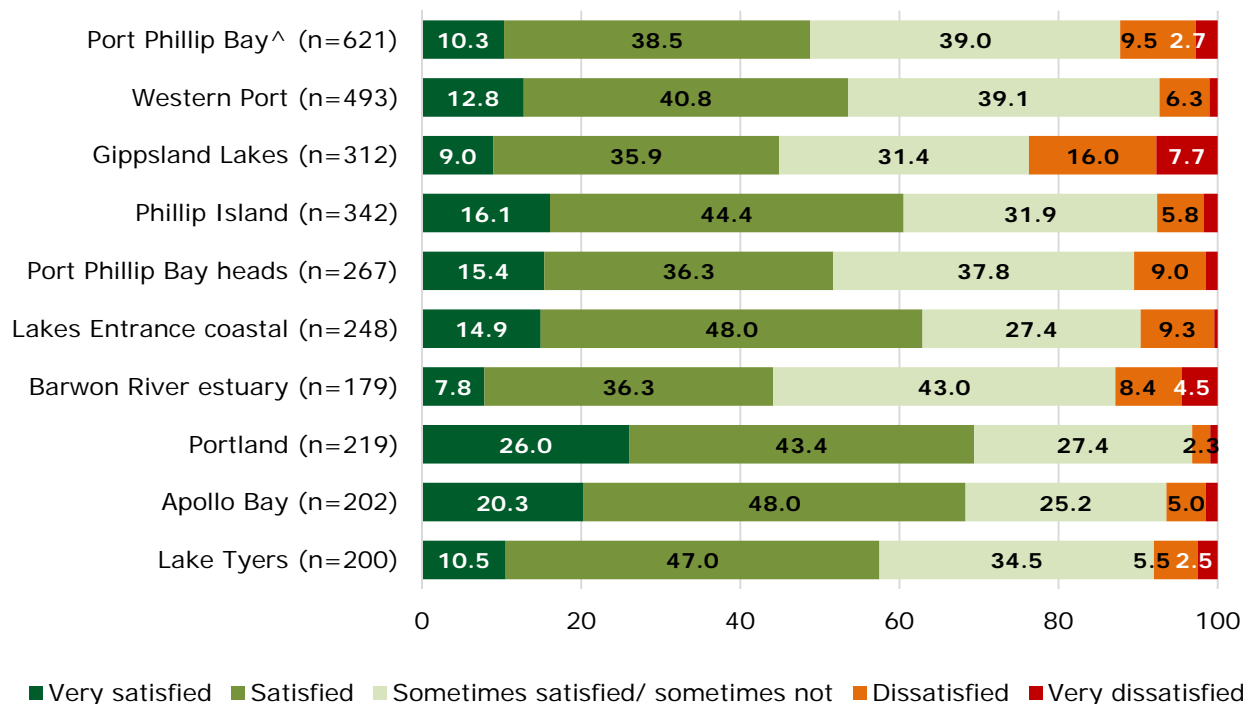% of respondents, n count varies by location

Location	1-5 days	6-14 days	15 or more days	None
Port Phillip Bay^ (n=655)	56.8	19.4	19.2	4.6
Western Port (n=540)	66.7	13.3	11.9	8.1
Gippsland Lakes (n=349)	68.5	16.3	5.4	9.7
Phillip Island (n=387)	67.4	15.2	6.2	11.1
Port Phillip Bay heads (n=288)	70.1	13.2	10.4	6.3
Lakes Entrance coastal (n=289)	75.4	8.3	3.8	12.5
Barwon River estuary (n=204)	71.1	11.3	6.4	11.3
Portland (n=241)	77.2	10.8	3.3	8.7
Apollo Bay (n=243)	76.1	4.9	3.3	15.6
Lake Tyers (n=214)	79.0	9.8	4.7	6.5

Legend: ■ 1-5 days ■ 6-14 days ■ 15 or more days ■ None

^anywhere except the heads

Respondents were most satisfied with fishing at Portland, Apollo Bay and Lakes Entrance coastal and least satisfied with fishing at Gippsland Lakes. Refer to the chart below.

Satisfaction with fishing at 3rd favourite marine/estuarine location

% of respondents, n count varies by location

Location	Very satisfied	Satisfied	Sometimes satisfied/ sometimes not	Dissatisfied	Very dissatisfied
Port Phillip Bay^ (n=621)	10.3	38.5	39.0	9.5	2.7
Western Port (n=493)	12.8	40.8	39.1	6.3	
Gippsland Lakes (n=312)	9.0	35.9	31.4	16.0	7.7
Phillip Island (n=342)	16.1	44.4	31.9	5.8	
Port Phillip Bay heads (n=267)	15.4	36.3	37.8	9.0	
Lakes Entrance coastal (n=248)	14.9	48.0	27.4	9.3	
Barwon River estuary (n=179)	7.8	36.3	43.0	8.4	4.5
Portland (n=219)	26.0	43.4	27.4		2.3
Apollo Bay (n=202)	20.3	48.0	25.2	5.0	
Lake Tyers (n=200)	10.5	47.0	34.5	5.5	2.5

Legend: ■ Very satisfied ■ Satisfied ■ Sometimes satisfied/ sometimes not ■ Dissatisfied ■ Very dissatisfied
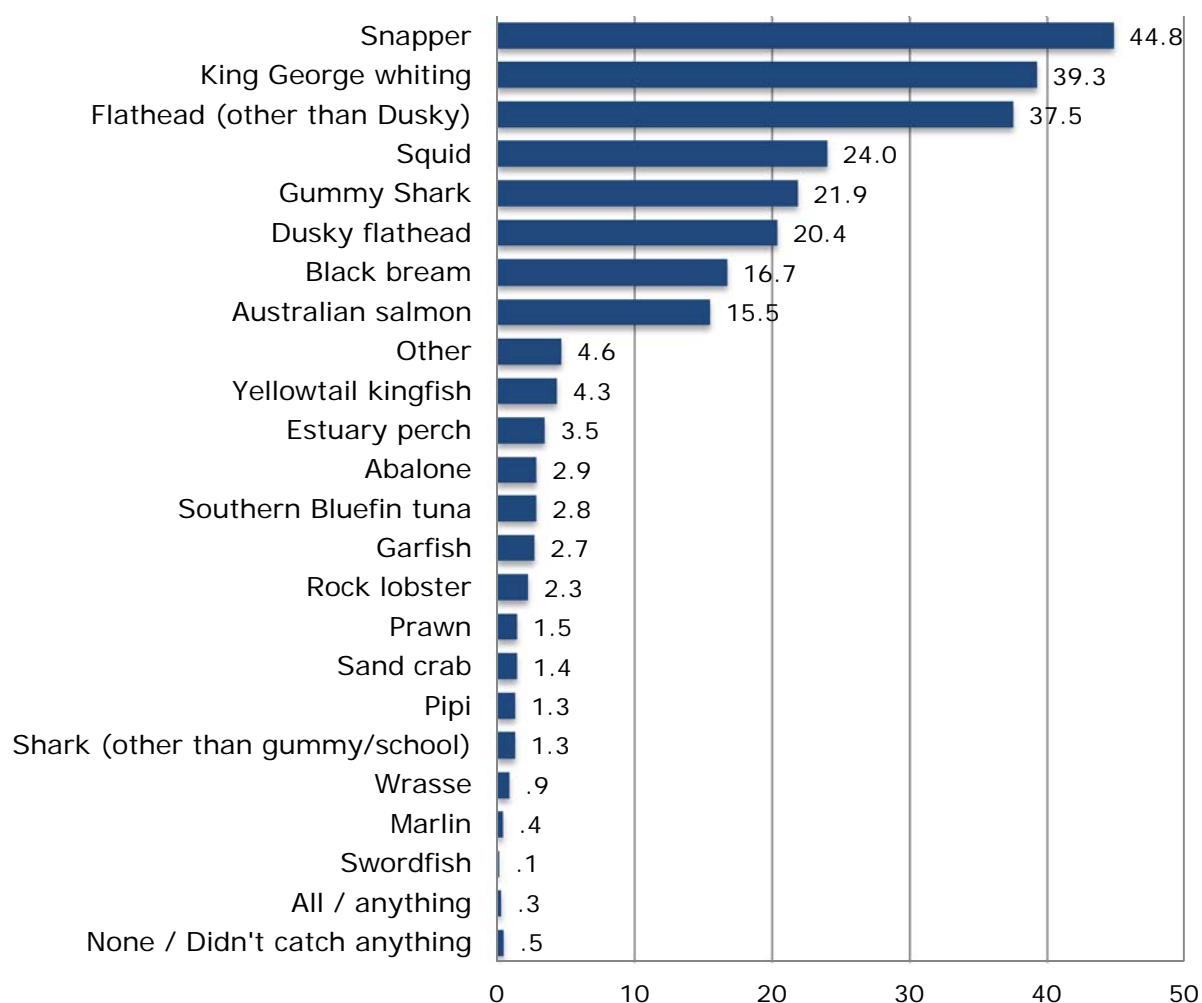
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Marine / estuarine fish species

Snapper (45%), King George whiting (39%), Flathead (other than Dusky) (38%) and squid (24%) were the top four fish to catch for respondents who fished in marine / estuarine species. Refer to the chart and table below.

Favourite marine/estuarine fish to catch	Name	% of respondents
	Snapper	45
	King George whiting	39
	Flathead (other than Dusky)	38
	Squid	24

Favourite fish to catch from Victorian marine/estuarine waters
% of respondents based on n=11,523; multiple answers allowed so total >100%

Snapper — 44.8
King George whiting — 39.3
Flathead (other than Dusky) — 37.5
Squid — 24.0
Gummy Shark — 21.9
Dusky flathead — 20.4
Black bream — 16.7
Australian salmon — 15.5
Other — 4.6
Yellowtail kingfish — 4.3
Estuary perch — 3.5
Abalone — 2.9
Southern Bluefin tuna — 2.8
Garfish — 2.7
Rock lobster — 2.3
Prawn — 1.5
Sand crab — 1.4
Pipi — 1.3
Shark (other than gummy/school) — 1.3
Wrasse — .9
Marlin — .4
Swordfish — .1
All / anything — .3
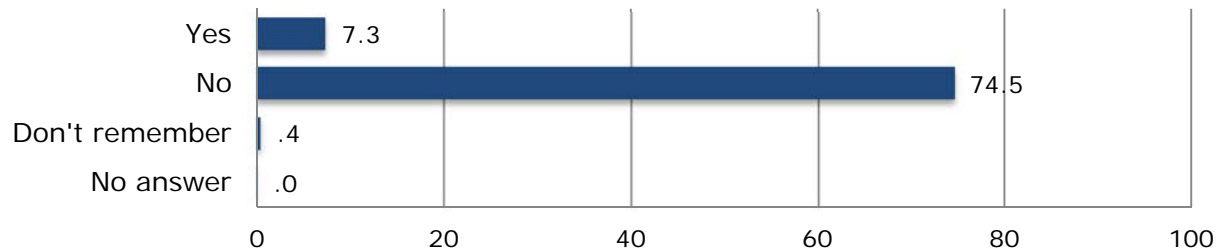None / Didn't catch anything — .5

Southern Bluefin tuna

Approximately 9% of respondents had fished for Southern Blue Fin tuna in Victoria in the previous 12 months.

**Fished for Southern Bluefin tuna in Victoria
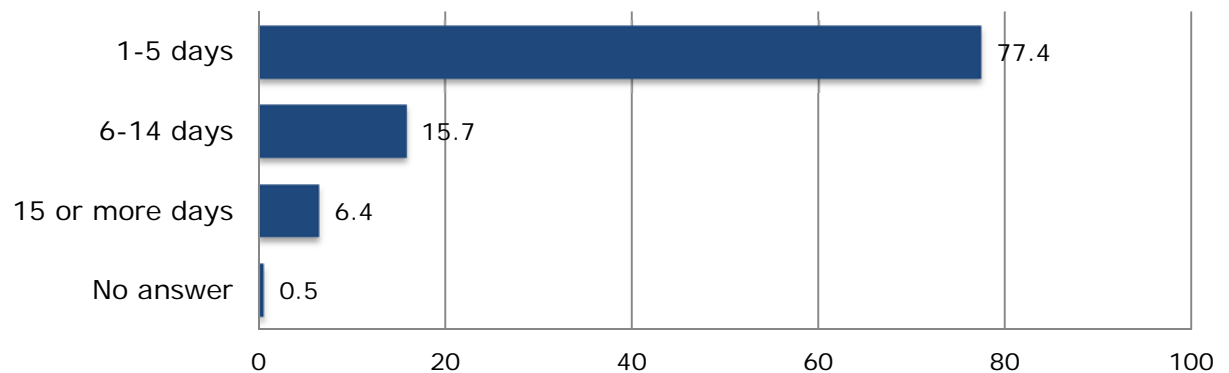in previous 12 months**
% of respondents, n=11,621

Seventy-seven percent (77%) of respondents who indicated that they had fished for Southern Blue Fin tuna in Victoria in the previous 12 months spent one to five days fishing for them.

Number of days fished for Southern Bluefin tuna in Victoria
% of respondents, n=1,037

Most commonly, those who fished for Southern Blue Fin tuna in Victoria in the previous 12 months caught between one to three tuna (39%) but notably, just under a third (31%) had caught none.

Abalone

Six percent (6%) of respondents indicated that they had fished for Abalone in Victoria in the last 12 months. Refer to the chart below.

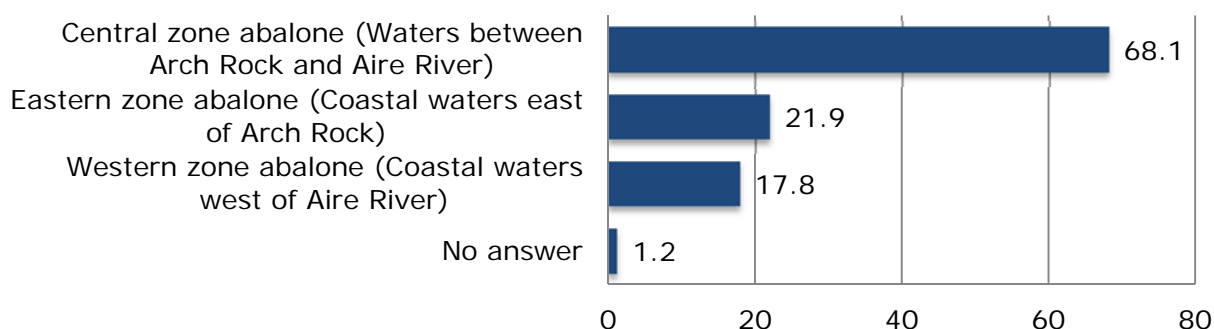**Fished for Abalone in Victoria in previous 12 months**
% of respondents, n=11,620
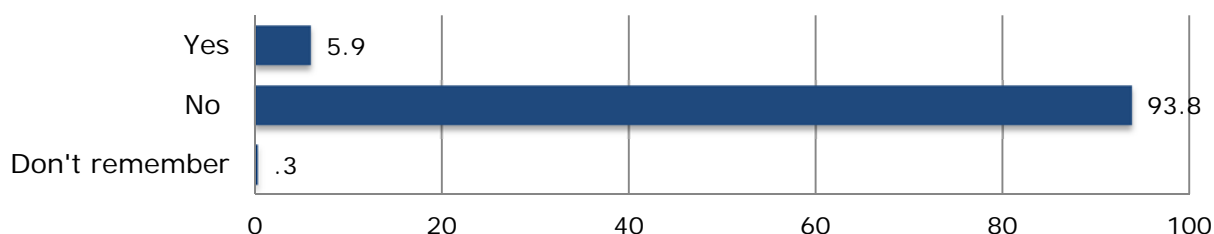
Most commonly, respondents fished in the central zone (waters between Arch Rock and Aire River) for Abalone (68%).

Location fished for Abalone
% of respondents, n=690, multiple response question

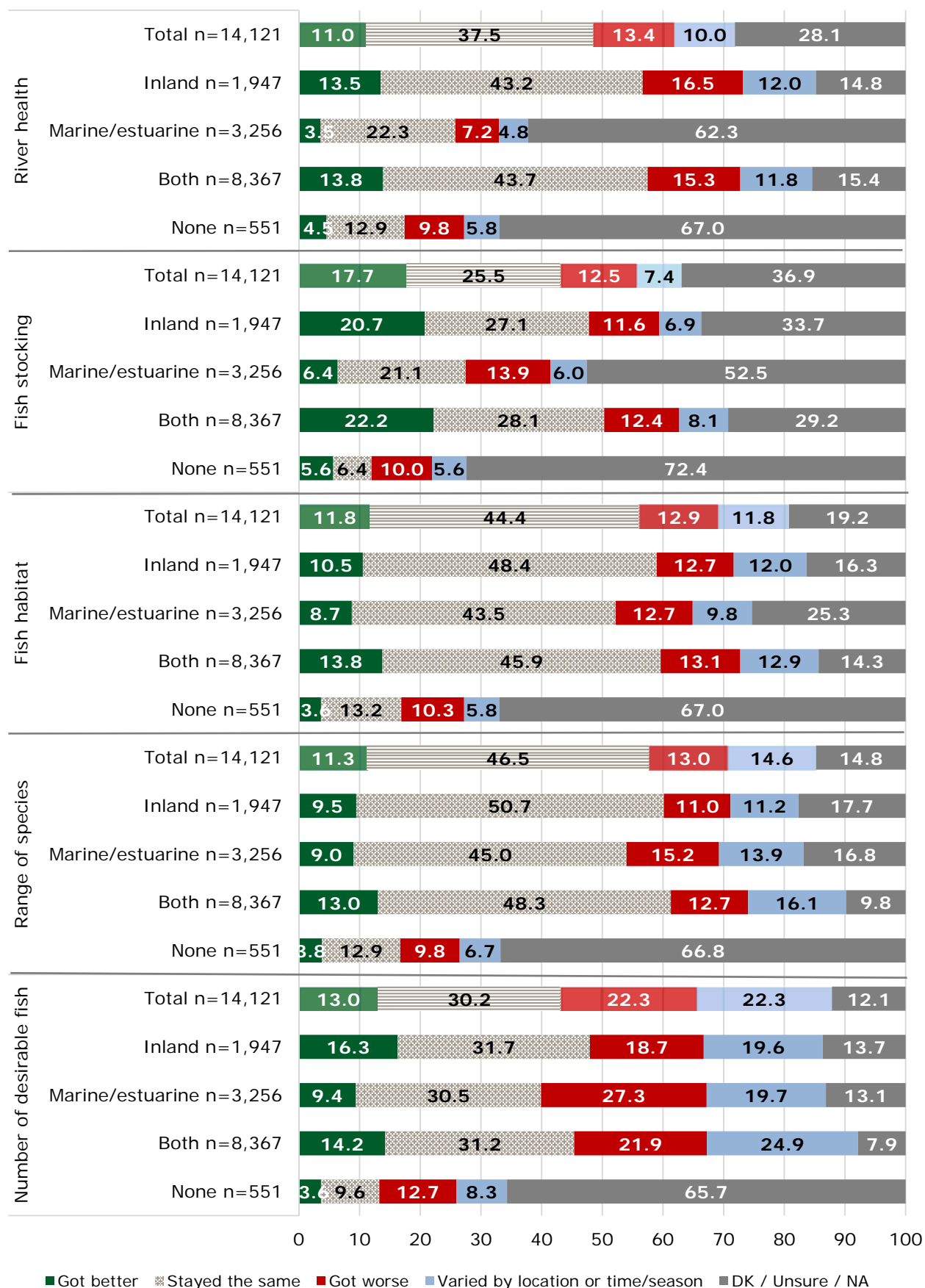# Improvements to recreational fishing in Victoria

All respondents were asked to indicate what they had generally noticed about five key issues while fishing in Victoria over the previous 12 months. Views varied by fishing water preference. Initial analysis suggests that, on average, at least 20% of respondents had no knowledge of any of the improvements. The highest proportion of *don't know / no answer* selections were from those respondents who had not fished in the previous 12 months (see chart on following page, group name = none)

Additionally, there were two improvements where fishing water preference affected results: fish stocking and river health which predominantly affect inland waters. Hence those who only fish in marine / estuarine waters are less likely to have an informed view.

With this in mind, two separate charts were produced for this topic: the first chart includes *don't know / unsure / no answers* and the second excludes these answers. The removal of the *don't know* category allows us to investigate the proportions of respondents who **did** have views about these issues. But it is also important to understand the proportion of the fishing population who have no views on these activities.

View of Victorian fishing improvements in the previous 12 months
% of respondents, *including* don't know / unsure / no answer responses

River health

	Got better	Stayed the same	Got worse	Varied by location or time/season	DK / Unsure / NA
Total n=14,121	11.0	37.5	13.4	10.0	28.1
Inland n=1,947	13.5	43.2	16.5	12.0	14.8
Marine/estuarine n=3,256	3.5	22.3	7.2	4.8	62.3
Both n=8,367	13.8	43.7	15.3	11.8	15.4
None n=551	4.5	12.9	9.8	5.8	67.0

Fish stocking

	Got better	Stayed the same	Got worse	Varied by location or time/season	DK / Unsure / NA
Total n=14,121	17.7	25.5	12.5	7.4	36.9
Inland n=1,947	20.7	27.1	11.6	6.9	33.7
Marine/estuarine n=3,256	6.4	21.1	13.9	6.0	52.5
Both n=8,367	22.2	28.1	12.4	8.1	29.2
None n=551	5.6	6.4	10.0	5.6	72.4

Fish habitat

	Got better	Stayed the same	Got worse	Varied by location or time/season	DK / Unsure / NA
Total n=14,121	11.8	44.4	12.9	11.8	19.2
Inland n=1,947	10.5	48.4	12.7	12.0	16.3
Marine/estuarine n=3,256	8.7	43.5	12.7	9.8	25.3
Both n=8,367	13.8	45.9	13.1	12.9	14.3
None n=551	3.5	13.2	10.3	5.8	67.0

Range of species

	Got better	Stayed the same	Got worse	Varied by location or time/season	DK / Unsure / NA
Total n=14,121	11.3	46.5	13.0	14.6	14.8
Inland n=1,947	9.5	50.7	11.0	11.2	17.7
Marine/estuarine n=3,256	9.0	45.0	15.2	13.9	16.8
Both n=8,367	13.0	48.3	12.7	16.1	9.8
None n=551	3.8	12.9	9.8	6.7	66.8

Number of desirable fish

	Got better	Stayed the same	Got worse	Varied by location or time/season	DK / Unsure / NA
Total n=14,121	13.0	30.2	22.3	22.3	12.1
Inland n=1,947	16.3	31.7	18.7	19.6	13.7
Marine/estuarine n=3,256	9.4	30.5	27.3	19.7	13.1
Both n=8,367	14.2	31.2	21.9	24.9	7.9
None n=551	3.6	9.6	12.7	8.3	65.7

Legend: ■ Got better ▨ Stayed the same ■ Got worse ■ Varied by location or time/season ■ DK / Unsure / NA
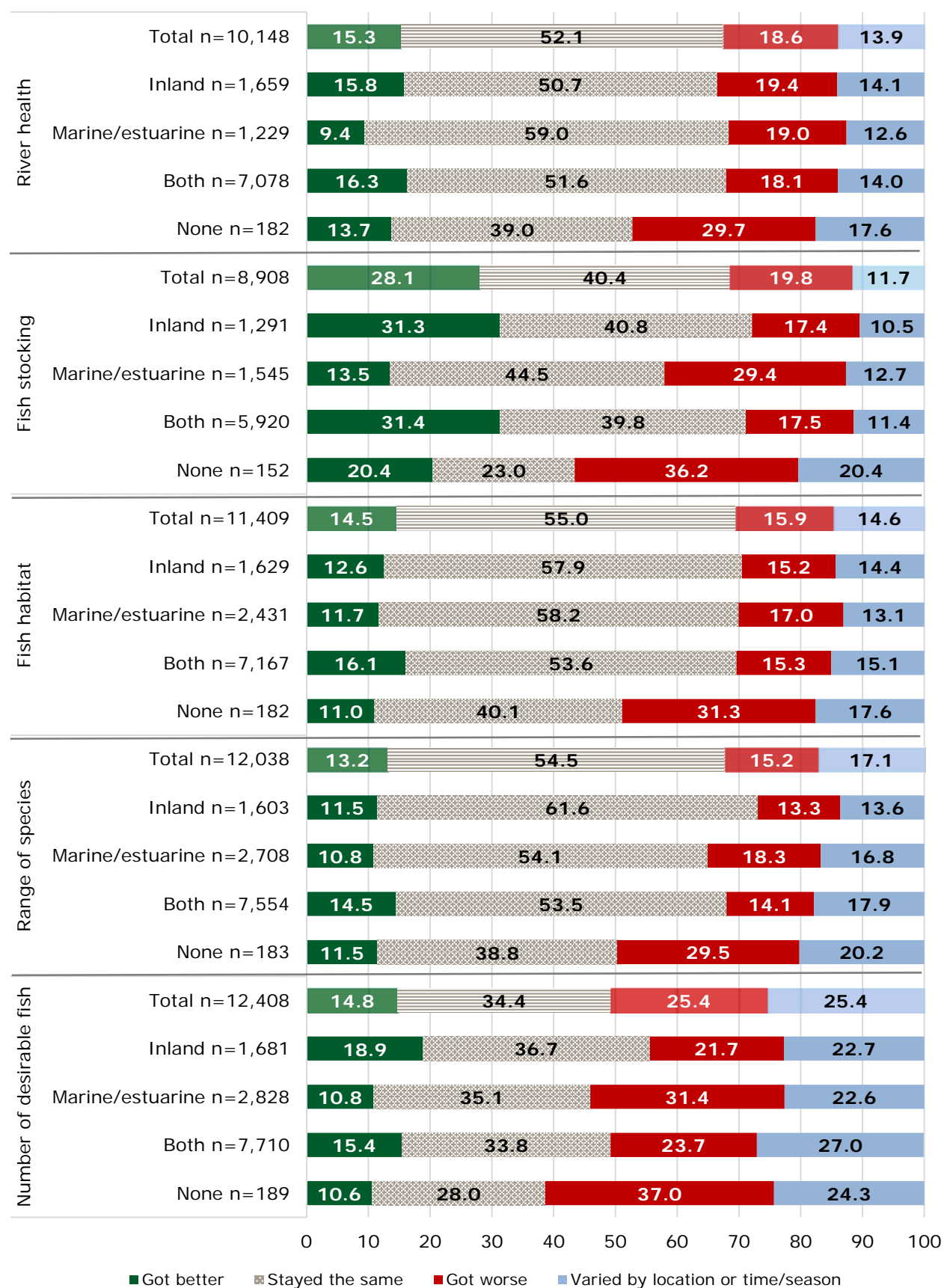
The following discussion relates to the chart on the following page which excludes the *don't know* response category. Twenty-eight percent (28%) of respondents indicated that fish stocking had improved in the previous 12 months. While 15% of respondents indicated that the number of desirable fish had improved in the previous 12 months, a further 25% indicated that it had worsened. The number of desirable fish was the lowest rated activity regardless of fishing water preference.

Female respondents were more likely to answer that all items in the chart below got *worse* over the last 12 months. Respondents aged under 50 years were more likely to indicate that all items had got *better* over the last 12 months.

Thirty percent of respondents with long term licences indicated that fish stocking had improved over the previous 12 months compared with 20% of short term licence holders. Refer to table D1 in Appendix D for demographic results.

View of improvements to fishing in Victoria over the last 12 months
% of respondents, *excluding* don't know / unsure / no answer

River health

	Got better	Stayed the same	Got worse	Varied by location or time/season
Total n=10,148	15.3	52.1	18.6	13.9
Inland n=1,659	15.8	50.7	19.4	14.1
Marine/estuarine n=1,229	9.4	59.0	19.0	12.6
Both n=7,078	16.3	51.6	18.1	14.0
None n=182	13.7	39.0	29.7	17.6

Fish stocking

	Got better	Stayed the same	Got worse	Varied by location or time/season
Total n=8,908	28.1	40.4	19.8	11.7
Inland n=1,291	31.3	40.8	17.4	10.5
Marine/estuarine n=1,545	13.5	44.5	29.4	12.7
Both n=5,920	31.4	39.8	17.5	11.4
None n=152	20.4	23.0	36.2	20.4

Fish habitat

	Got better	Stayed the same	Got worse	Varied by location or time/season
Total n=11,409	14.5	55.0	15.9	14.6
Inland n=1,629	12.6	57.9	15.2	14.4
Marine/estuarine n=2,431	11.7	58.2	17.0	13.1
Both n=7,167	16.1	53.6	15.3	15.1
None n=182	11.0	40.1	31.3	17.6

Range of species

	Got better	Stayed the same	Got worse	Varied by location or time/season
Total n=12,038	13.2	54.5	15.2	17.1
Inland n=1,603	11.5	61.6	13.3	13.6
Marine/estuarine n=2,708	10.8	54.1	18.3	16.8
Both n=7,554	14.5	53.5	14.1	17.9
None n=183	11.5	38.8	29.5	20.2

Number of desirable fish

	Got better	Stayed the same	Got worse	Varied by location or time/season
Total n=12,408	14.8	34.4	25.4	25.4
Inland n=1,681	18.9	36.7	21.7	22.7
Marine/estuarine n=2,828	10.8	35.1	31.4	22.6
Both n=7,710	15.4	33.8	23.7	27.0
None n=189	10.6	28.0	37.0	24.3

■ Got better   ▨ Stayed the same   ■ Got worse   ■ Varied by location or time/season

Priorities to improve recreational fishing

When asked for effective ways to improve fishing in Victoria 39% of respondents chose *enforcing fishing rules*; the same proportion (39%) chose *improving fishing habitat*, while 37% chose *increasing the number of fish by stocking*. Respondents who fished both inland and in marine / estuarine waters were more likely to suggest these three improvements. Refer to the chart on the following page.

A larger proportion of female respondents answered *educating people about sustainable recreational fishing practices (44%).*

The three most commonly selected priorities for improvement varied by age group. Respondents aged under 50 years selected *improving fish habitat* (41%), *increasing the number of fish by stocking* (39%), and *enforcing fishing rules* (38%) as the most effective priorities. Whereas, respondents aged over 50 years selected *enforcing fishing rules* (40%), e*ducating people about sustainable recreational fishing practices* (39%) and *improving fish habitat* (36%) as the most effective priorities.

Three improvement areas had a difference of seven percent or more between long term and short term licence holders. They were, *enforcing fishing rules* and *improving access and facilities* which were selected by more long term licence holders and *information to help people catch more fish* which was selected by proportionally more short term licence holders.

Refer to table D2 in Appendix D for demographic results.

Effective ways to improve recreational fishing in Victoria

% of respondents based in n counts in legend
Multiple answers allowed so total >100%
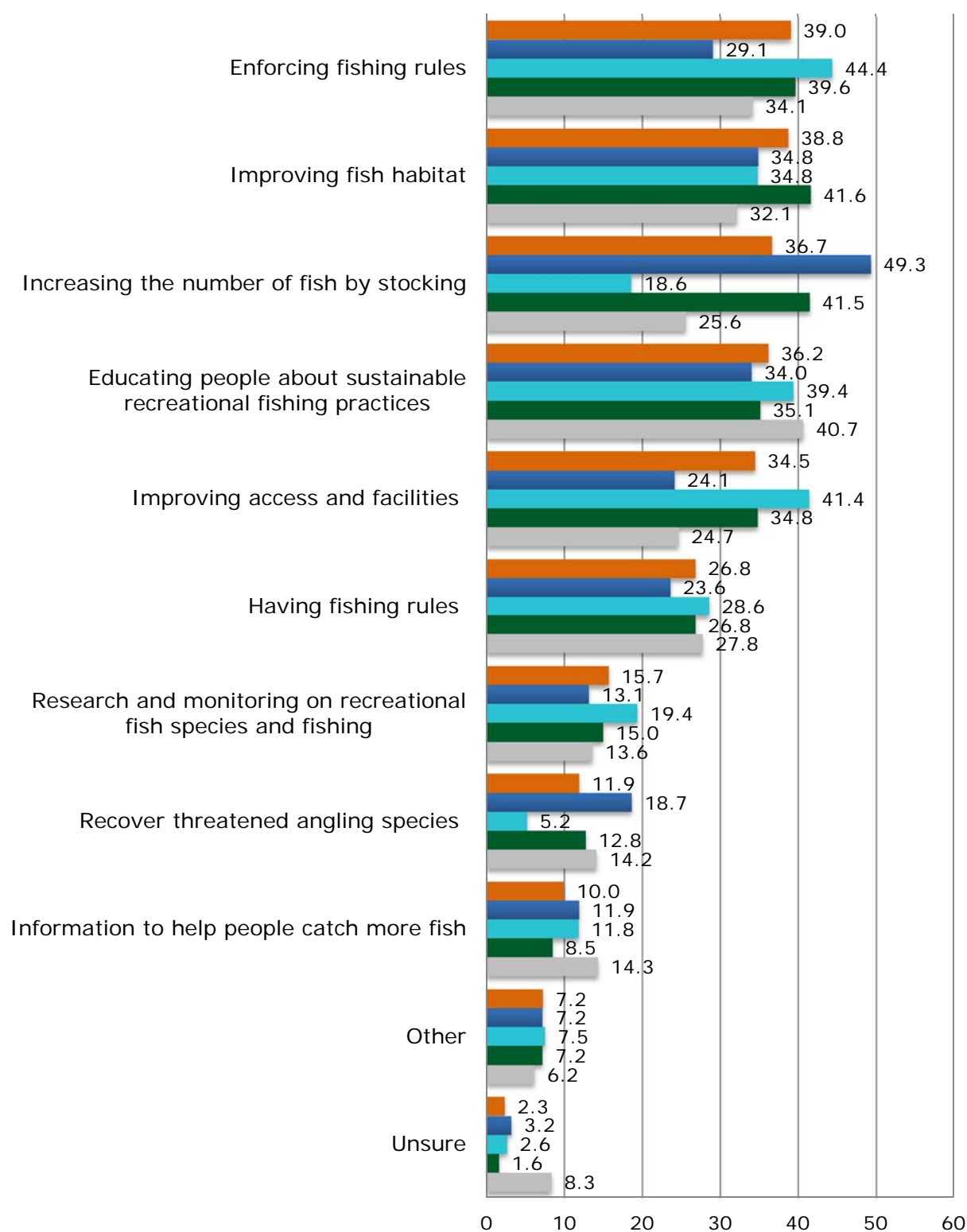
	Total n=14,098	Inland n=1,940	Marine/estuarine n=3,249	Both n=8,358	None n=551
Enforcing fishing rules	39.0	29.1	44.4	39.6	34.1
Improving fish habitat	38.8	34.8	34.8	41.6	32.1
Increasing the number of fish by stocking	36.7	49.3	18.6	41.5	25.6
Educating people about sustainable recreational fishing practices	36.2	34.0	39.4	35.1	40.7
Improving access and facilities	34.5	24.1	41.4	34.8	24.7
Having fishing rules	26.8	23.6	28.6	26.8	27.8
Research and monitoring on recreational fish species and fishing	15.7	13.1	19.4	15.0	13.6
Recover threatened angling species	11.9	18.7	5.2	12.8	14.2
Information to help people catch more fish	10.0	11.9	11.8	8.5	14.3
Other	7.2	7.2	7.5	7.2	6.2
Unsure	2.3	3.2	2.6	1.6	8.3

Respondents who selected *other* in the question above were asked to detail their answer. A total of 990 valid responses were thematically coded. The table below displays the 10 most common suggestions.

Top 10 most common suggestions **for improving recreational fishing** in Victoria n=990	Count	% of respondents
Stop/limit commercial fishing, netting, trawling	332	33.5
Improve pest control (carp, toadfish, weeds, cormorants)	104	10.5
More enforcement, including of specific groups of people, at certain times & particular locations	84	8.5
Improve facilities like toilets, piers, jetties, bins	51	5.2
Change regulations (bag limit, slot size, line limit, bait type for certain species)	50	5.1
Improve water levels / flow	42	4.2
Healthier / better managed waterways better like no blackwater, better river mouths, better water quality, reduced silt	38	3.8
Reduce / remove fishing licence fee	34	3.4
Ban or limit jet skis / wakeboarding speed boats from some areas	30	3.0
Improve stocking, not just trout and more locations	29	2.9

Collaboration

Over a third of respondents (37%) answered that Victorian Fisheries Authority and Victorian natural resource management agencies should work together *a great deal* to create better fisheries and habitat in Victoria, another 34% answered they should work together *a lot*.

Female respondents, younger respondents and short term licence holders were most likely to answer they'd like Victorian Fisheries Authority and Victorian natural resource management agencies to work together a moderate amount. A higher proportion of respondents aged over 50 years indicated that the VFA and other Victorian natural resource management agencies should collaborate a lot or a great deal (74%). Refer to table D4 in Appendix D for demographic results.

Level of collaboration between VFA / Victorian natural resource management agencies to create better fisheries and habitat in Victoria
% of respondents; n count varies
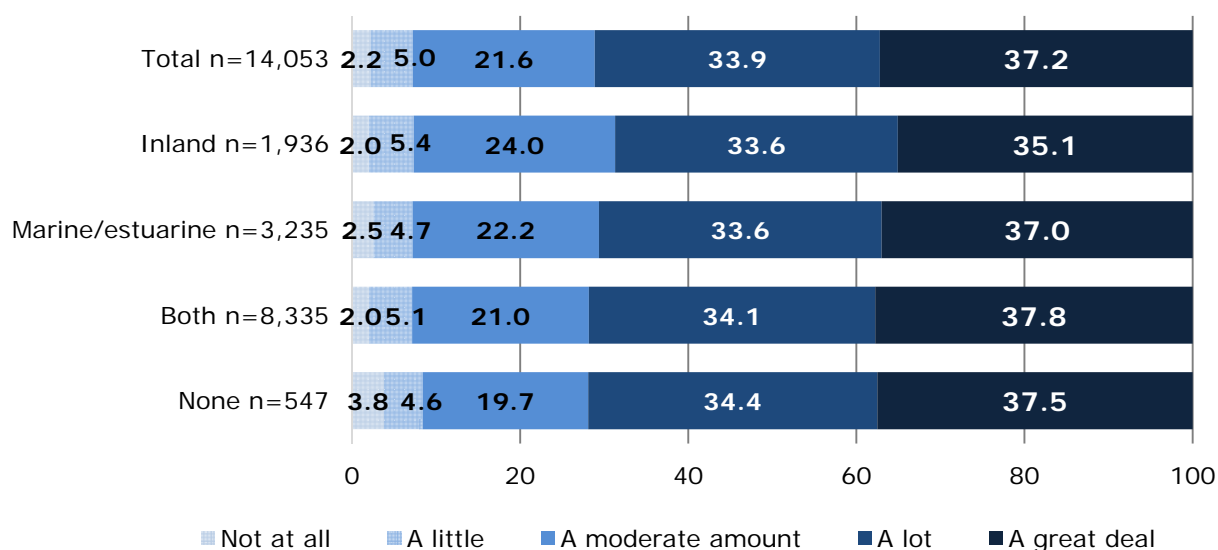
Sixty-seven percent (67%) of respondents answered VFA should collaborate with Parks Victoria, 58% answered Department of Land, Water & Planning and 50% answered Catchment Management Authorities. Additionally, open ended commentary indicated that some respondents wanted VFA to collaborate with local government regarding monitoring, reducing or capping boat ramp and jetty fees.

Female respondents were more likely to answer that VFA should collaborate with Victorian Environmental Water Holder (55%). There were minimal differences between age groups regarding collaboration with the different types of natural resource management agencies in Victoria. Long term licence holders were more likely to select Parks Victoria (69%) compared with short term licence holders (60%). Refer to table D5 in Appendix D.

Departments / organisations VFA should collaborate with
% of respondents based on n count in legend
Multiple answers allowed so totals >100%

Parks Victoria
66.6
57.5
70.4
67.4

Department of Land, Water & Planning
57.8
57.8
51.0
60.3

Catchment Management Authorities
49.9
53.0
41.0
52.5

Victorian Environmental Water Holder
48.1
49.8
39.7
50.7

Water Authorities
43.8
47.7
32.9
47.0

Don't know
13.4
13.0
18.0
11.5
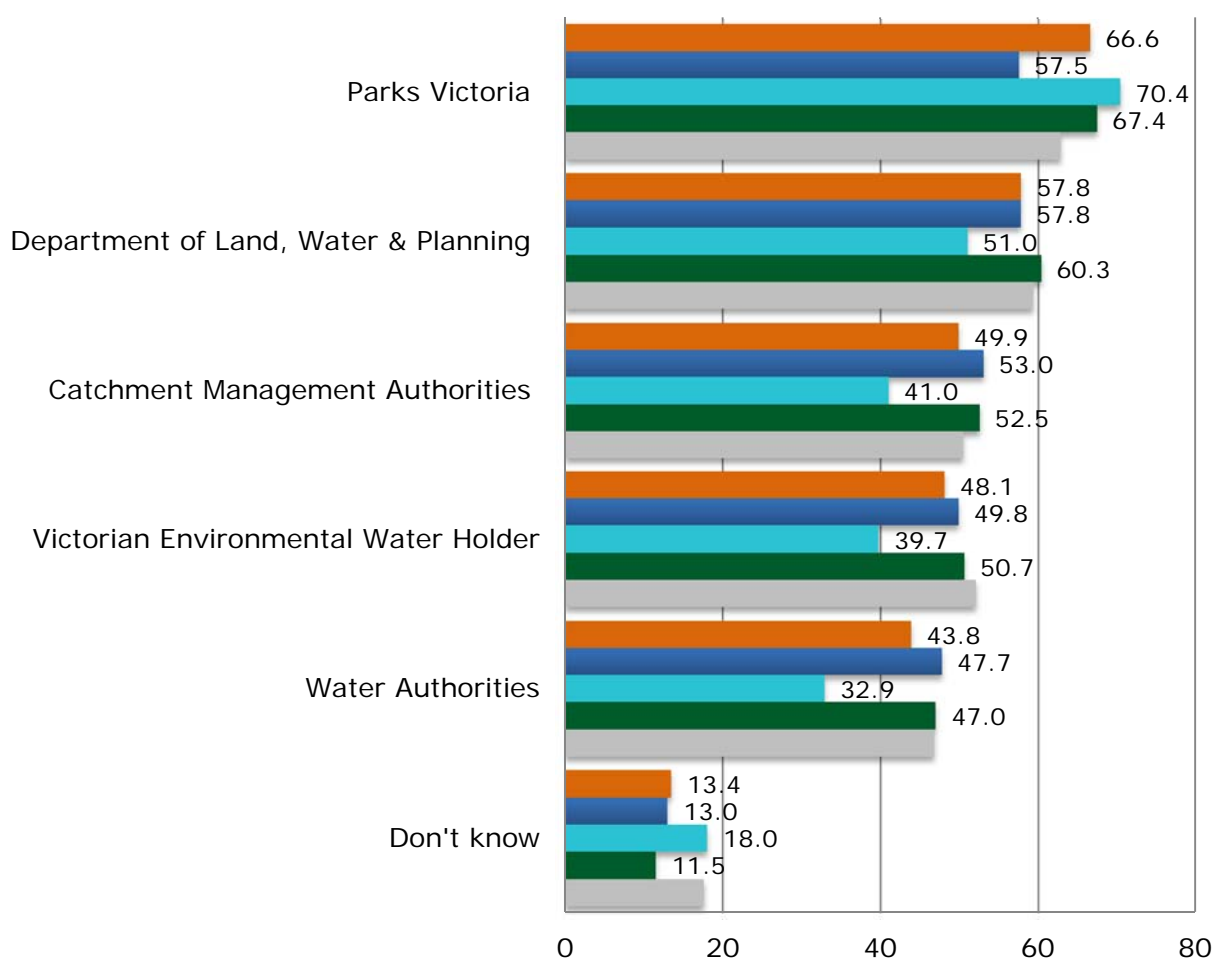
■Total n=14,089 ■Inland n=1,944 ■Marine/estuarine n=3,243 ■Both n=8,351 ■None n=551

Previous improvements

When asked which actions improved recreational fishing in Victoria, 62% selected *halting commercial netting in Port Phillip and Corio Bays*, 49% answered *increasing fish stocking to 5 million fish per year* and 44% answered *banning netting at the mouths of rivers in the Gippsland Lakes.*

Female respondents were less likely to answer *halting commercial netting in Port Phillip and Corio Bays* (44%) and *Increasing fish stocking to 5 million fish per* (41%). Respondents aged over 50 years rated *halting commercial netting in Port Phillip and Corio Bays* (68%) and *banning netting at the mouths of rivers in the Gippsland Lakes* (49%) significantly higher than those aged under 50 years, with a difference of 10% and 9% respectively. Long term licence holder were also more likely to select the aforementioned items than short term licence holders.

Refer to table D6 in Appendix D for demographic results.

Actions that have improved recreational fishing in Victoria

% of respondents based on n count in legend
Multiple answers allowed so totals >100%

Halting commercial netting in Port Phillip and Corio Bays
- 62.0
- 31.0
- 72.7
- 65.4
- 56.4

Increasing fish stocking to 5 million fish per year
- 49.1
- 63.9
- 24.4
- 55.7
- 40.5

Banning netting at the mouths of rivers in the Gippsland Lakes
- 43.8
- 28.4
- 39.9
- 48.7
- 46.3

Establishing better fishing facilities
- 35.2
- 23.7
- 35.2
- 38.2
- 30.2

Introducing a minimum legal size for trout
- 26.0
- 30.7
- 14.9
- 28.7
- 35.2

Implementing a marine species stocking program
- 24.9
- 14.5
- 23.8
- 27.6
- 26.2

Delivering school education and children's fishing programs
- 24.3
- 22.4
- 21.0
- 25.7
- 28.7

Saving Lake Toolondo with more water and trout stocking
- 20.6
- 21.3
- 10.7
- 24.4
- 18.4

Stocking native fish in Rocklands Reservoir
- 17.0
- 17.2
- 8.3
- 20.3
- 17.4

Stocking barramundi in Hazelwood Pondage
- 14.7
- 11.6
- 10.5
- 17.0
- 15.9

Delivering 'Stronger Fishing Club' grants
- 10.7
- 9.5
- 7.6
- 12.2
- 9.4

Opening recreational trout cod fisheries in Beechworth
- 9.7
- 12.8
- 5.4
- 10.4
- 13.6

Delivering defibrillators for angling clubs
- 8.9
- 7.6
- 7.4
- 9.6
- 12.6

Growing the Victorian Trout Opening Festival
- 8.6
- 10.1
- 4.0
- 9.9
- 11.5

Removing horsepower and boat length restrictions at Blue Rock Lake
- 8.4
- 6.0
- 4.4
- 10.5
- 8.2

None of the above
- 7.8
- 11.5
- 11.3
- 5.2
- 14.3

Legend:
- ■ Total n=13,839
- ■ Inland n=1,894
- ■ Marine/estuarine n=3,179
- ■ Both n=8,243
- ■ None n=523

Nearly all respondents (94% indicated that the Target One Million investment had some level of success. There were minimal difference across age groups and gender regarding the success of the Target One Million campaign. However long term licence holders were more likely to rate the Target One Million campaign as moderately to extremely successful (75%). Refer to table D7 Appendix D for demographic results.

Level of success of the Target One Million investment in relation to actions to improve recreational fishing in Victoria
% of respondents; n counts vary

	Not at all successful	Slightly successful	Moderately successful	Very successful	Extremely successful
Total n=13,682	6.2	22.1	48.8	19.7	3.1
Inland n=1,883	6.6	21.5	50.2	18.6	3.1
Marine/estuarine n=3,113	9.7	24.4	48.8	15.7	
Both n=8,175	4.5	21.3	48.5	21.9	3.8
None n=511	12.5	22.5	48.9	14.5	
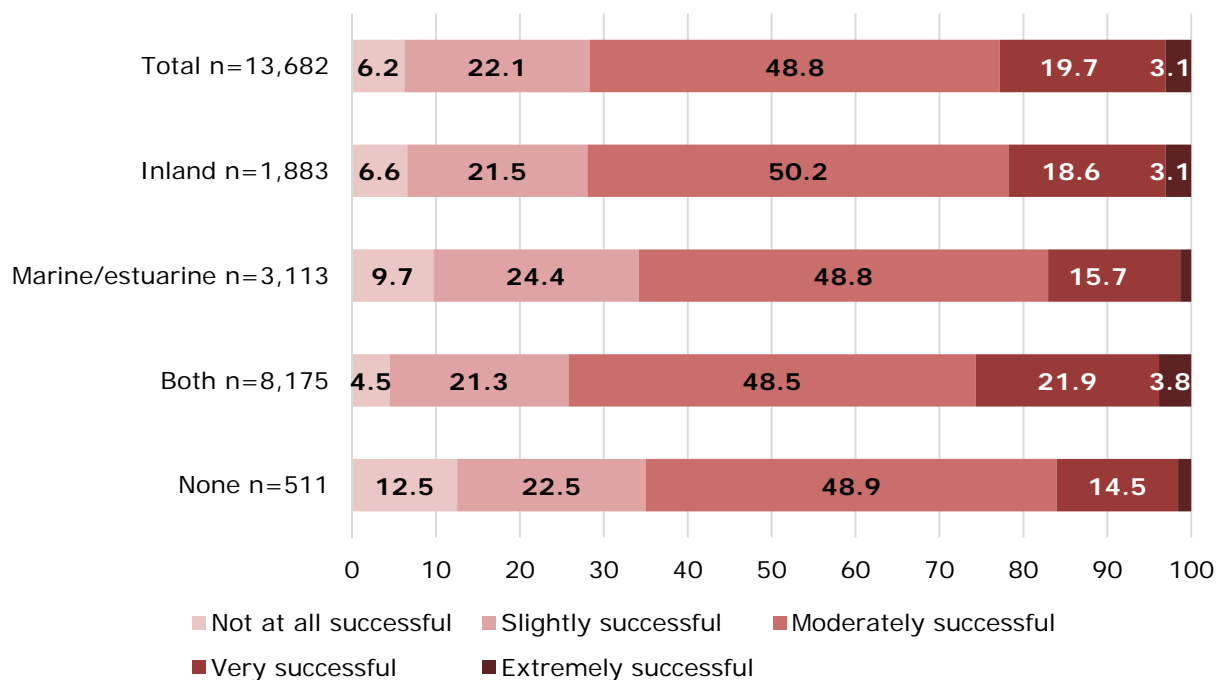
Communication

Channels

Forty-one percent (41%) of respondents referred to their fishing colleagues for information on recreational fishing in Victoria and a similar proportion referred to Facebook (41%). Thirty-two percent used TV fishing shows and 19% used government websites.

Female respondents were more likely to answer *Facebook* (45%), and less likely to answer *fishing colleagues* (36%) and *YouTube* (9%).

Differences in the sources of information used regarding recreational fishing in Victoria varied considerably by age group. *Facebook* was the most commonly selected source for those aged under 50 years with 50% of respondents selecting *Facebook* compared with 29% of respondents aged over 50 years. The most commonly selected source of information for those aged over 50 years was *fishing colleagues* (47%). *Fishing colleagues* was the second most common option for those aged under 50 years (36%). Older respondents were more likely to use *magazines* (13%) and *TV shows* (36%) compared with younger respondents (9% and 30% respectively). While younger respondents were more likely to use *Instagram* (7%) and *YouTube* (15%) compared with older respondents (2% and 12% respectively).

Long term licence holders were more likely to select *TV fishing shows* (35%), *fishing colleagues* (43%) and *magazines* (12%) compared with short term licence holders, chosen by 25%, 34%, 6% respectively.

Refer to table D8 in Appendix D for demographic results.

Information channels used on recreational fishing in Victoria

% of respondents based on n count in legend

Multiple answers allowed so total >100%

Channel	Total	Inland	Marine/estuarine	Both	None
Fishing colleagues	40.8	35.9	36.7	44.4	27.3
Facebook	40.7	38.8	33.4	45.0	25.6
TV fishing shows	32.4	22.4	32.7	35.2	24.4
Government websites	18.7	18.7	18.0	19.1	17.2
Blogs and online magazines	14.3	11.2	14.8	15.2	9.3
Youtube	13.8	13.0	12.3	14.7	10.3
Magazines (hard copy)	10.5	10.4	6.8	12.4	4.8
Angling/diving club	8.1	5.6	6.4	9.6	2.7
Instagram	4.6	3.9	3.1	5.4	1.6
Twitter	1.0	.8	.9	1.2	0.9
Snapchat	.7	.7	.4	.8	.7
Other	11.0	10.2	12.3	10.6	13.0
Nowhere	9.5	12.3	12.2	7.0	22.0

Legend:
- Total n=14,060
- Inland n=1,935
- Marine/estuarine n=3,241
- Both n=8,338
- None n=546
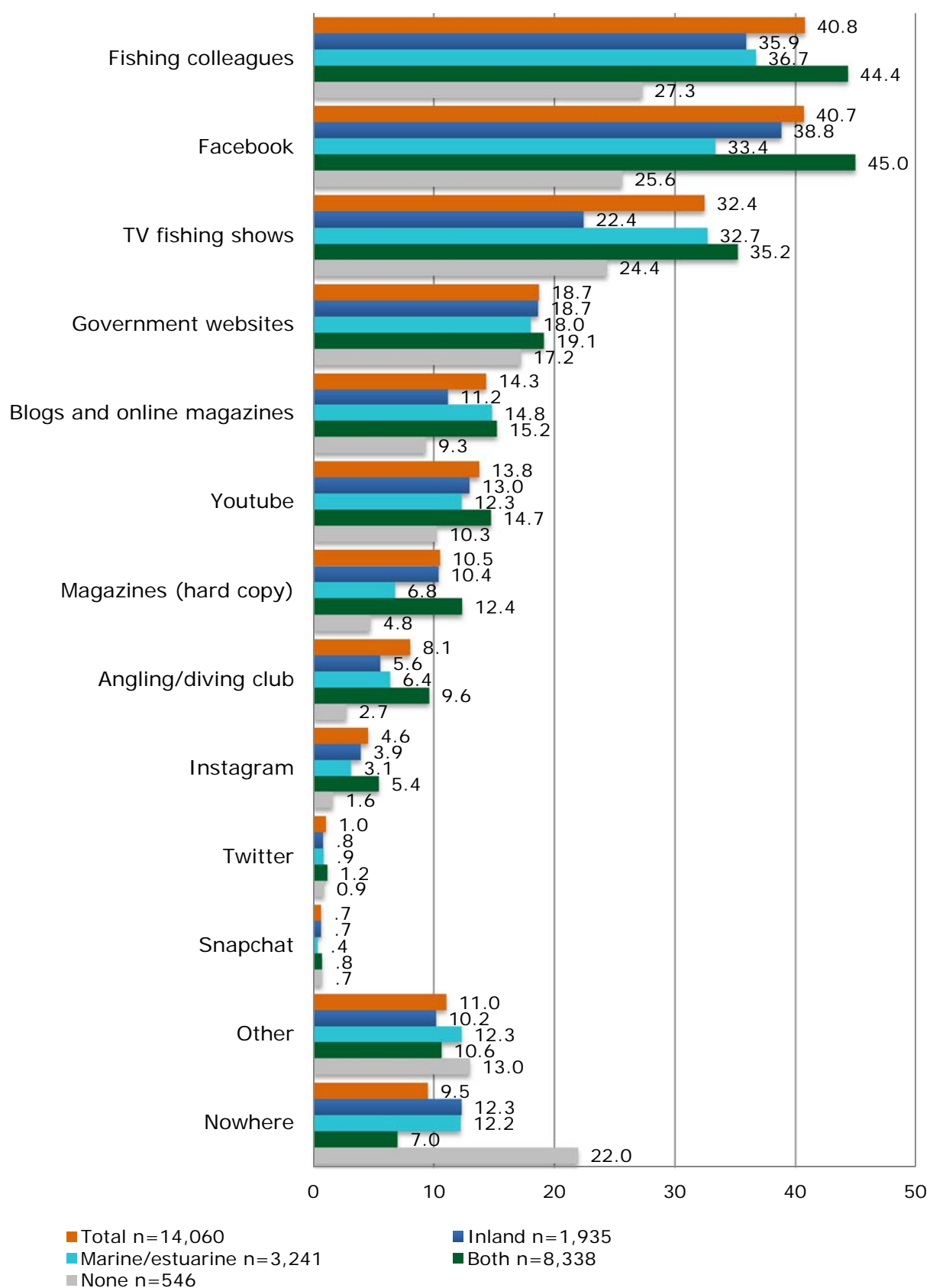
Respondents who selected magazines, TV fishing shows and Government websites were asked to list the names of the titles, shows and websites that they had used. The three tables shown below display the top 10 most commonly mentioned sources of information for each communication channel.

Other commonly mentioned sources of information that were not presented in the tables below included internet searches, emails and newsletters, retail shops and word of mouth.

Top 10 most common **magazines** used for information regarding recreational fishing in Victoria n=822	Count	% of respondents
Fishing monthly (& Boating) (not further specified/ NSW/ VIC & TAS)	224	27.3
AFN - Freshwater Fishing Australia magazine (contains: Freshwater, Freshwater Fishing, Freshwater Fishing Magazine)	222	27.0
Flylife Magazine	73	8.9
Fishing World	49	6.0
Victorian Recreational Fishing Guide	40	4.9
Many different titles	39	4.7
Fishing magazines (not further specified)	27	3.3
Modern Fishing Magazine	24	2.9
North East Angler	21	2.6
Club Marine Magazine	14	1.7

Top 10 most common **TV shows** used for information regarding recreational fishing in Victoria n=2616	Count	% of respondents
Ifish	986	37.7
Talking Fishing	742	28.4
All / All of them / All fishing shows / Any (not further specified)	194	7.4
Channel 31 (not further specified)	191	7.3
Many / Various / Lots	106	4.1
Hook, Line and Sinker	92	3.5
Fishing shows (not further specified)	80	3.1
Et/ Fishing with Et/ Escape with Et	59	2.3
Fishing Edge/ Fishing Fever	53	2.0
Oz Fish TV	49	1.9

Top 10 most common **government websites** used for information regarding recreational fishing in Victoria n=1226	Count	% of respondents
Department of Primary Industries (DPI) / Department of Fisheries (and Wildlife) / Victorian Fisheries Authority (contains: Fisheries/ Fisheries VIC/ Victorian Fisheries)	793	64.7
App (Victorian Recreational Fishing Guide Application/ Fisheries App/ VFA App)	79	6.4
Google/ Internet search (not further specified)	51	4.2
Parks Victoria (Parkweb)	40	3.3

Top 10 most common **government websites** used for information regarding recreational fishing in Victoria n=1226	Count	% of respondents
VFA - email / newsletter/ Fish-e-facts	38	3.1
Government websites (not further specified)	28	2.3
Department of Environment, Land, Water and Planning (DELWP)	22	1.8
Fishing App (not further specified)	22	1.8
Fishing Victoria	20	1.6
Bureau of Meteorology (BOM)	19	1.5

Over half of the respondents (52%) answered they would like to get their information on recreational fishing in Victoria in the same way as they get it now and 22% answered Facebook, followed by a wide range of other sources. There were minimal differences between gender groups regarding the preferred source of information.

Most respondents would like to use the same method to get information about recreational fishing regardless of age group. Younger respondents would prefer to use Facebook (26%) compared with 16% of older respondents and a higher proportion of older respondents preferred to use fishing colleagues (13%) compared with younger respondents (9%).

Results by licence term varied minimally with just under half of short term licence holders preferring to use the same source of information (46%) compared with 53% of long term licence holders. Refer to table D9 in Appendix D for demographic results.

Preferred information channels on recreational fishing in Victoria

% of respondents based on n count in legend
Multiple answers allowed so total >100%

Channel	Total	Inland	Marine/estuarine	Both	None
Same as what I do now	51.8	49.8	49.1	54.1	39.0
Facebook	21.7	21.7	20.6	22.0	23.4
Government websites	13.2	13.3	13.4	12.8	19.5
TV fishing shows	12.6	10.6	12.9	13.1	11.4
Fishing colleagues	10.3	10.2	10.1	10.5	9.9
Youtube	8.3	8.6	8.2	8.2	9.4
Blogs and online magazines	6.8	6.3	7.3	6.6	8.3
Angling/diving club	4.0	3.0	3.9	4.4	2.0
Magazines (hard copy)	3.8	5.3	2.9	3.9	2.6
Instagram	3.2	2.7	2.8	3.5	3.3
Twitter	1.4	1.0	1.4	1.4	2.2
Snapchat	1.2	1.0	.8	1.5	.6
Other	4.9	4.5	5.4	4.6	7.2
Nowhere	4.4	5.7	5.7	3.4	8.8

Legend:
- ■ Total n=13,896
- ■ Inland n=1,914
- ■ Marine/estuarine n=3,197
- ■ Both n=8,242
- ■ None n=543
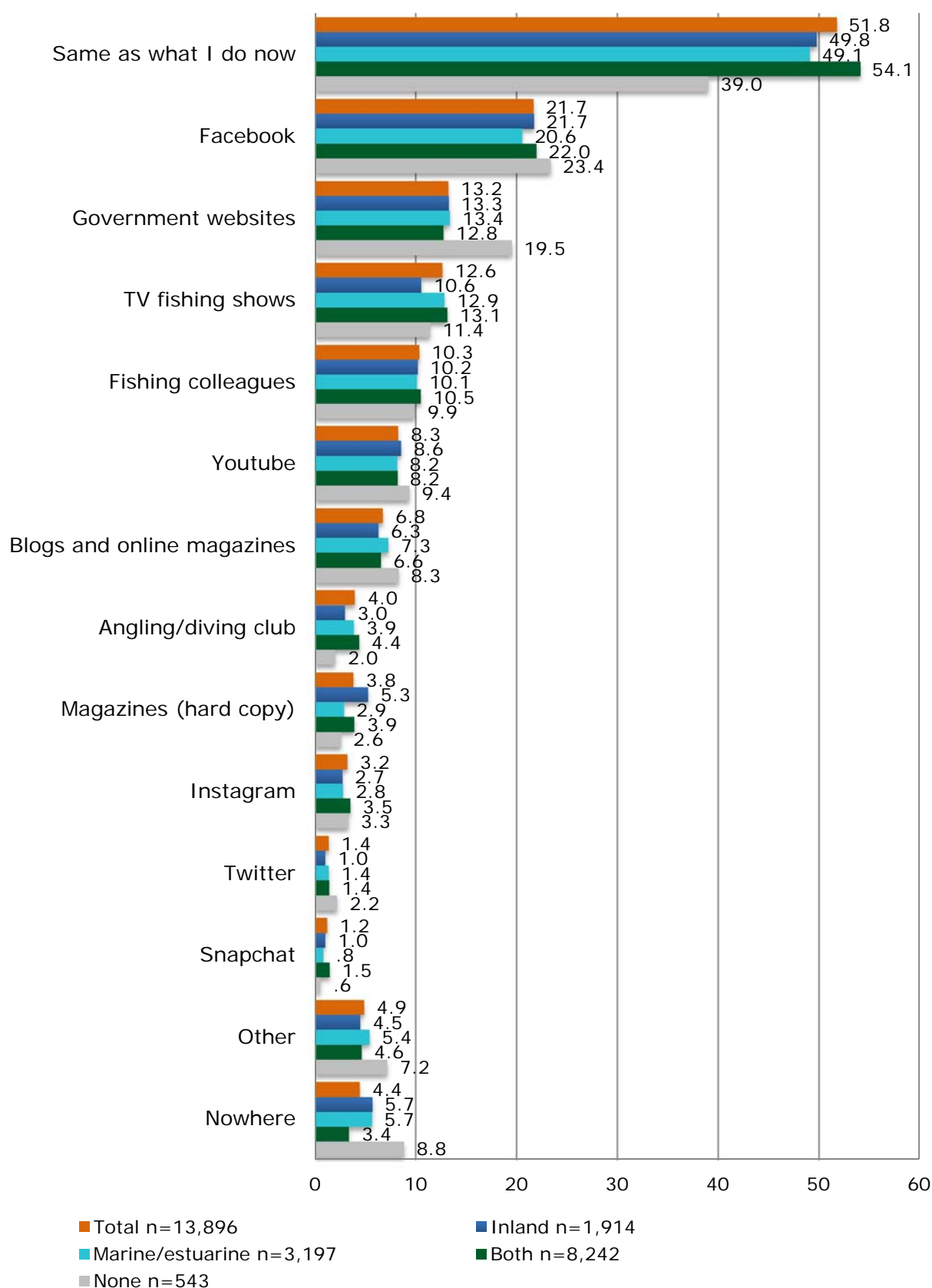
Respondents who selected magazines, TV fishing shows and Government websites were asked to list the names of the titles, shows and websites that they would like to use to obtain information on recreational fishing in Victoria.

The most common responses regarding **magazines** included:
- Freshwater Fishing
- Fishing Monthly
- Flylife
- Fishing World
- Any/ All/ Many/ Various/ Most (not further specified)
-

The most common responses regarding **TV shows** included:
- Talking Fishing
- I Fish
- Channel 31 (not further specified)
- Any/ All/ Many/ Various/ Most (not further specified)

The most common responses regarding **government websites** included:
- Victorian Fisheries Authority (contains: Fisheries/ Fisheries VIC/ Victorian Fisheries)
- Parks Victoria
- DELWP
- Any/ All/ Many/ Various/ Most (not further specified)

Encouraging Victorians to fish

Just under half of respondents (47%) answered that *providing information on where to fish in multiple languages* would encourage people in Victoria to fish, 44% answered free events to promote fishing and 39% partnering with local angling clubs.

Females, younger respondents and short term licence holders were more likely to answer free events to promote fishing in Victoria as a way to encourage people to fish in Victoria. Refer to table D10 in Appendix D for demographic results.

Ways to encourage people in Victoria to fish

% of respondents based on n count in legend
Multiple answers allowed so total >100%

Provide where to fish information in multiple languages including English
- 46.6
- 44.8
- 48.7
- 45.7
- 53.3

Hold free events to promote fishing in Victoria
- 44.2
- 45.6
- 40.4
- 45.4
- 44.6

Partner with local angling clubs
- 39.1
- 38.6
- 35.9
- 40.7
- 36.3

Make presentations to community groups
- 18.1
- 18.3
- 17.3
- 18.2
- 21.1

VFA staff to attend community group events
- 15.4
- 14.8
- 13.7
- 16.2
- 16.0

Identify ambassadors from community groups
- 14.2
- 12.6
- 13.7
- 15.0
- 12.1

Other
- 7.9
- 6.7
- 9.4
- 7.4
- 10.5

Legend:
- Total n=13,513
- Inland n=1,870
- Marine/estuarine n=3,119
- Both n=7,993
- None n=531

Respondents who selected *other* were asked to explain their answer. A total of 819 respondents provided a valid response. The top 10 most common themes are presented in the table below.

Top 10 most common suggestions for **encouraging recreational fishing** in Victoria n=819	Count	% of respondents
Don't encourage any more - too many fishing now	210	25.6
Educate, inform, advertise, promote, including in schools, with licence, at fishing shows and gear shops	186	22.7
Increase enforcement	88	10.7
Improve the quality of fisheries, more fish, more fish stocking, less carp	54	6.6
Improve facilities including ramps and access	49	6.0
Reduce or remove licences / licence fee	46	5.6
Use multiple languages / have more signs	24	2.9
Make licences Australia-wide and rules consistent	23	2.8
Websites including government website on where and how to fish	19	2.3
Mass media (TV radio print)	17	2.1

When asked about what would encourage women to fish in Victoria, 60% of respondents answered *improving facilities* such as toilets close to fishing spots, 59% answered *promoting fishing in ways that appeal to women* and 37% answered to *offer introductory events for mums and their kids*.

Female respondents were more likely to select all the ways to encourage women to fish as listed in the chart below, with the exception of the item *Promote fishing in ways that appeal to women.* Respondents aged under 50 years rated all but two items (*promote fishing in ways that appeal to women* and *Partner with local angling clubs*) higher than older respondents. There was an 11% difference between age groups regarding the item *introductory event for mums and their kids*, which was selected by 42% of younger respondents compared with 31% of older respondents. The results followed a fairly similar pattern across licence terms with slightly more short term licence holders selecting *introductory event for mums and their kids* (40%) compared with 36% for long term respondents. Refer to table D11 in Appendix D for demographic results.

Ways to encourage women to fish
% of respondents based on n count in legend
Multiple answers allowed so total >100%

Legend:
- Total n=13,721
- Inland n=1,894
- Marine/estuarine n=3,159
- Both n=8,137
- None n=531
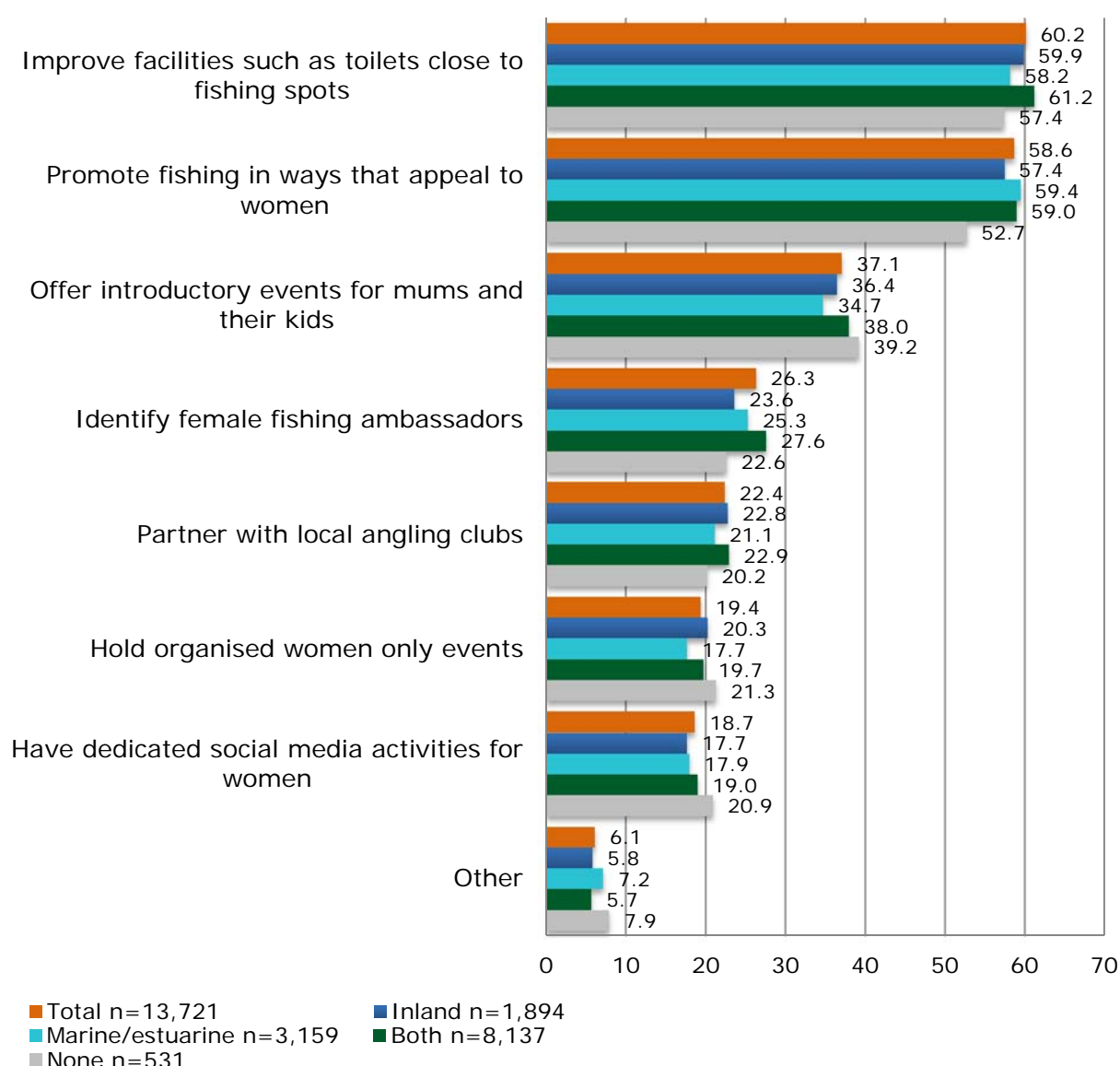
Respondents who selected *other* were asked to explain their responses. A total of 663 respondents provided a valid response. The top 10 most common themes are presented in the table below.

Top 10 most common suggestions for **encouraging women to fish** recreationally n=663	Count	% of respondents
If you want to fish you will - there's nothing stopping you	72	10.9
Remove licence / reduce fees / have family or national licence	48	7.2
Women are not interested / don't like fishing	47	7.1
Promote as family or group activities / hold family activities	44	6.6
Don't tell people what to do, let them decide, women do what they want	38	5.7
Sexist question / don't segregate or treat any differently	37	5.6
Don't - enough people fish now	35	5.3
Improve facilities and safety	30	4.5
Word of mouth / fathers and partners asking their partner and children to fish with them	27	4.1

Fair and reasonable day's take

Over half of respondents answered that the day's take was *about right* for nearly all of the inland fish species in the chart below. The exception was *Yabbies* where 46% answered the bag limit was *about right*. However, 33% thought that the bag limit for *Yabbies* was *too many* or *way too many*). Thirteen percent (13%) of respondents would like to be able to keep more *Murray Spiny Freshwater Crayfish*. Refer to the chart below. Note that a considerable portion of respondents did not have views on this topic (the grey in the chart).

The results followed a very similar pattern for gender, however, female respondents were slightly less likely to answer that the slot limit was about right for *Murray Cod* (67%). Views regarding existing regulations varied by age group. Older respondents were more likely to rate bag limits for nearly all species as *about right* compared with younger

respondents. Proportionally more long term licence holders indicated that bag limits were too high (*too many fish* combined with *way too many fish*) for all species apart from trout.

Refer to table D12 in Appendix D for demographic results.

Views on current regulation
A fair and reasonable day's take - Inland
Number of respondents, n=14,121

Species	Should be able to keep more	About right	Too many fish	Way too many fish	Don't know / NA
Golden perch (bag limit : 5)	2.2	54.4	20.6	3.9	18.9
Murray cod (bag limit : 1 in rivers 2 in lakes)	7.9	71.3		4.1	15.0
Trout (bag limit : 3 to 5 depending on water)	10.5	67.3		7.5	13.5
Australian bass (bag limit : 5 Lake bullen Merri & 2 all other waters)	3.1	60.8	11.1		23.1
Estuary perch (bag limit : 5)	2.5	55.4	17.2	2.5	22.4
Silver perch (bag limit : 5 in certain locations)	3.8	55.4	16.7	2.4	21.6
Murray Spiny Freshwater Crayfish (bag limit : 2)	12.6	58.9	6.1	2.3	20.2
River blackfish (bag limit : 5)	2.1	49.5	17.7	4.1	26.6
Yabbies (bag limit : 150)	6.4	46.3	23.4	9.4	14.5

■ Should be able to keep more ■ About right ■ Too many fish
■ Way too many fish ■ Don't know / NA

The majority of respondents thought the day's take was *about right* for Tuna (69%), Gummy shark (71%), Rock lobster (68%) and Blacklip abalone (59%). A relatively larger proportion of respondents indicated the bag limits were either *too many fish* or *way too many fish* for Bream (35%), Flathead (39%), King George Whiting (37%) and Snapper (33%).

Female respondents were less likely to answer that the bag limit was about right for Flathead (42%) and King George whiting (46%). A higher proportion of younger respondents wanted to keep more of all species; for tuna (including Southern Bluefin, bag limit: 2) this proportion was 9% compared with 4% of older respondents. However younger respondents were more likely to indicate that bag limits for bream were *way too high*. Short term licence holders were more likely to select *don't know /unsure* for all species compared with long term licence holders.

Refer to table D13 in Appendix D for demographic results.

Views on current regulation
A fair and reasonable day's take - Marine / Estuarine
Number of respondents, n=14,121

	Should be able to keep more	About right	Too many fish	Way too many fish	Don't know / NA
Bream (bag limit : 10)	2.6	50.8	29.7	5.7	11.2
Flathead (all species except Dusky flathead) (bag limit : 20)	4.1	48.9	31.4	8.0	7.6
King George whiting (bag limit: 20)	3.4	51.7	30.2	6.5	8.1
Snapper (bag limit: 10 (3 over 40cm)	4.8	54.4	27.1	5.7	7.9
Tuna (including southern bluefin) (bag limit: 2)	5.6	69.2	7.7		15.9
Gummy shark (bag limit: 2)	8.0	71.0	8.1		11.3
Rock lobster (bag limit: 2)	9.0	67.8	5.1		17.0
Blacklip abalone (bag limit: 5)	6.5	59.2	8.3	2.2	23.7

Slot limits

Respondents were asked which fish species they thought should have a slot limit. The below chart shows the results for inland fish species.

Twenty-two percent of respondents answered that *Rainbow trout* should have a slot limit, followed by *Trout cod* (21%) and *Brown trout* (21%). Respondents who fished in both inland and in marine / estuarine waters were more likely overall to answer inland species should have slot limits compared to the other groups.

The biggest differences between genders were for *Rainbow trout*, *Redfin*, *Common yabby* and *Silver perch*, with females more likely to answer these species should have slot limits (30%, 16%, 15% and 19% respectively).

Older respondents were more likely to answer all species should have slot limits except for eel and carp. Results were very similar for short term and long term licence holders. Refer to table D14 in Appendix D for demographic results.

Slot limits - Inland species

% of respondents based on n count in legend
Multiple answers allowed so total >100%
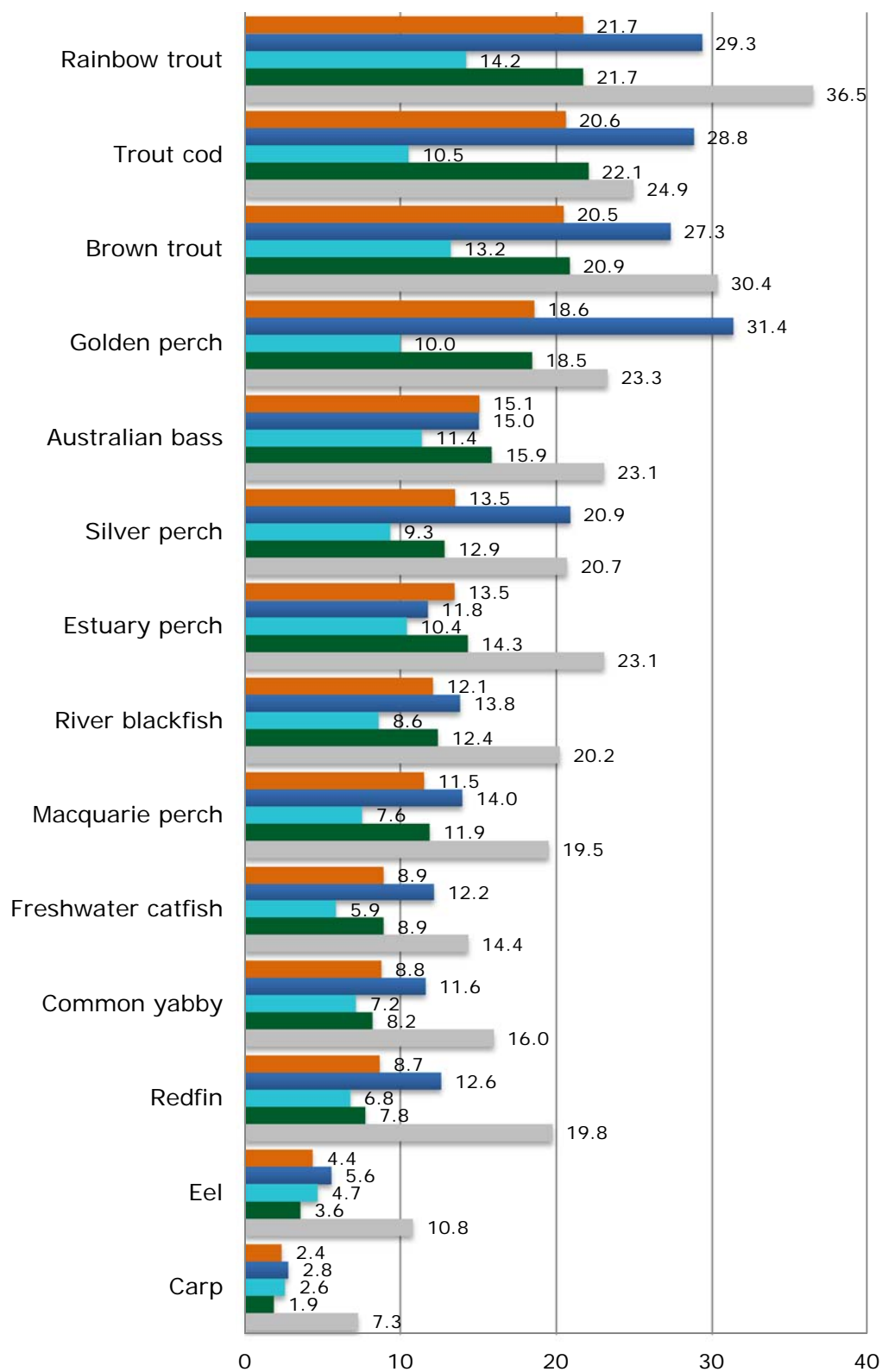
Rainbow trout
- 21.7
- 29.3
- 14.2
- 21.7
- 36.5

Trout cod
- 20.6
- 28.8
- 10.5
- 22.1
- 24.9

Brown trout
- 20.5
- 27.3
- 13.2
- 20.9
- 30.4

Golden perch
- 18.6
- 31.4
- 10.0
- 18.5
- 23.3

Australian bass
- 15.1
- 15.0
- 11.4
- 15.9
- 23.1

Silver perch
- 13.5
- 20.9
- 9.3
- 12.9
- 20.7

Estuary perch
- 13.5
- 11.8
- 10.4
- 14.3
- 23.1

River blackfish
- 12.1
- 13.8
- 8.6
- 12.4
- 20.2

Macquarie perch
- 11.5
- 14.0
- 7.6
- 11.9
- 19.5

Freshwater catfish
- 8.9
- 12.2
- 5.9
- 8.9
- 14.4

Common yabby
- 8.8
- 11.6
- 7.2
- 8.2
- 16.0

Redfin
- 8.7
- 12.6
- 6.8
- 7.8
- 19.8

Eel
- 4.4
- 5.6
- 4.7
- 3.6
- 10.8

Carp
- 2.4
- 2.8
- 2.6
- 1.9
- 7.3

Legend:
- ■ Total n=10,785
- ■ Inland n=1,489
- ■ Marine/estuarine n=2,344
- ■ Both n=6,527
- ■ None n=425

The below chart shows which marine / estuarine fish species respondents thought should have a slot limit. Thirty-five percent (35%) of respondents answered *Snapper*, 32% *Gummy shark*, 25% *Flathead* and 24% *King George whiting*. Similar to the inland fish species result, respondents who fished in both Inland and in Marine / Estuarine waters were more likely overall to answer marine / estuarine fish species should have slot limits compared to the other groups.

Female respondents were more likely overall to answer marine / estuarine fish species should have slot limits, with the biggest differences for *Abalone* (26%), *Australian salmon* (23%), *Rock lobster* (31%), *Shark* (28%), *Sand crab* (17%) and *Prawn* (15%) (differences between 9% and 12%).

Older respondents selected all items except *Shark* and *Squid* more than younger respondents. The largest differences in selections were for *King George whiting* (29%), *Flathead* (29%) ad *Snapper* (37%) which had a difference of 9%, 7% and 5% respectively between age groups.

Short term licence holders were more likely to answer *Abalone* (20%) and *Australian Salmon* (17%) with the difference between groups being 5% and 6% respectively. Long term licence holders were more likely to select *Black bream* (22%) compared with 17% of short term licence holders.

Refer to table D15 in Appendix D for demographic results.

Slot limits - Marine / Estuarine species

% of respondents based on n count in legend
Multiple answers allowed so total >100%

Snapper
- 34.6
- 22.7
- 41.0
- 34.6
- 42.1

Gummy shark
- 31.7
- 19.3
- 36.9
- 32.3
- 36.5

Flathead (other than Dusky)
- 25.3
- 19.3
- 28.4
- 25.0
- 32.2

King George whiting
- 24.1
- 19.5
- 28.6
- 22.6
- 37.2

Southern Bluefin tuna
- 22.9
- 15.8
- 25.3
- 23.1
- 30.6

Rock lobster
- 22.0
- 21.4
- 24.8
- 20.2
- 36.2

Black bream
- 20.4
- 13.6
- 19.0
- 22.1
- 24.7

Shark (other than gummy/school)
- 20.1
- 16.7
- 23.3
- 19.0
- 30.6

Swordfish
- 19.4
- 15.6
- 21.7
- 18.6
- 31.5

Yellowtail kingfish
- 18.2
- 12.2
- 20.2
- 18.4
- 25.4

Abalone
- 16.2
- 14.9
- 18.4
- 14.6
- 33.4

Australian salmon
- 11.8
- 12.8
- 12.0
- 10.4
- 28.0

Squid
- 9.4
- 8.4
- 10.9
- 8.3
- 20.5

Sand crab
- 9.0
- 8.3
- 10.1
- 7.9
- 21.6

Pipi
- 8.2
- 7.3
- 10.0
- 7.0
- 18.6

Prawn
- 7.5
- 9.5
- 7.5
- 6.2
- 20.5

Garfish
- 7.3
- 7.0
- 8.5
- 6.3
- 17.4

Wrasse
- 5.7
- 5.7
- 6.1
- 5.0
- 15.5

■ Total n=10,785   ■ Inland n=1,489
■ Marine/estuarine n=2,344   ■ Both n=6,527
■ None n=425

Building great fishing in Victoria

The final open-ended question of the survey asked respondents to include any suggestions regarding building great recreational fishing in Victoria. A total of 4,948 respondents provided a response. A random sample of 25% of comments were coded thematically (n=1,237). The top 10 most common suggestions are presented in the table below. Most commonly, respondents indicated that there was a need for increased enforcement and visibility of VFA officers (20%).

Top 10 most common suggestions for **building great Victorian fishing** n=1,237	Count	% of respondents
More enforcement , visibility of VFA officers	245	19.8
More and better boating facilities (ramps, jetties, piers)	161	13.0
Keep up the good work / positive comment about VFA	134	10.8
Increase education and community awareness (including more signage)	127	10.3
More toilets / more shelter / bins / parking / cleaning facilities	124	10.0
Change to catch bag limits (increase for some and decrease for others)	116	9.4
Increase fish stocking (especially native species)	96	7.8
Commercial fishing (buyout, regulation and ceasing of licences, stop netting and trawling, sustainable fishing)	82	6.6
Fishing Licence (too expensive / should be free / should be national / loyalty scheme)	68	5.5
Pollution / water condition / toxicity / improve environmental conscious	59	4.8

Appendix A: Postcode categories

Table A1: Victorian Metro Postcodes

3114, 3004, 3052, 3000, 3002, 3003, 3006, 3008, 3011, 3012, 3013, 3015, 3016, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3046, 3047, 3048, 3049, 3051, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3078, 3079, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3093, 3094, 3095, 3096, 3097, 3099, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3111, 3113, 3115, 3116, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3158, 3159, 3160, 3161, 3162, 3163, 3165, 3166, 3167, 3168, 3169, 3170, 3171, 3172, 3173, 3174, 3175, 3177, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3196, 3197, 3198, 3199, 3200, 3201, 3202, 3204, 3205, 3206, 3207

Table A2: Victorian Regional Postcodes

3687, 3946, 3676, 3211, 3212, 3213, 3214, 3215, 3216, 3217, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3230, 3231, 3232, 3233, 3235, 3236, 3237, 3238, 3239, 3240, 3241, 3242, 3243, 3249, 3250, 3251, 3254, 3260, 3264, 3265, 3266, 3267, 3268, 3269, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3280, 3281, 3282, 3283, 3284, 3285, 3286, 3287, 3289, 3292, 3294, 3300, 3301, 3302, 3303, 3304, 3305, 3309, 3310, 3311, 3312, 3314, 3315, 3317, 3318, 3319, 3321, 3324, 3325, 3328, 3329, 3330, 3331, 3332, 3333, 3334, 3335, 3337, 3338, 3340, 3341, 3342, 3345, 3350, 3351, 3352, 3355, 3356, 3357, 3358, 3360, 3361, 3363, 3364, 3370, 3371, 3373, 3374, 3375, 3377, 3378, 3379, 3380, 3381, 3384, 3385, 3387, 3388, 3390, 3391, 3392, 3393, 3395, 3396, 3400, 3402, 3401, 3407, 3409, 3412, 3413, 3414, 3418, 3419, 3420, 3423, 3424, 3427, 3428, 3429, 3430, 3431, 3433, 3434, 3435, 3437, 3438, 3440, 3441, 3442, 3444, 3446, 3448, 3450, 3451, 3453, 3458, 3460, 3461, 3462, 3463, 3464, 3465, 3467, 3468, 3469, 3472, 3475, 3477, 3478, 3480, 3482, 3483, 3490, 3491, 3494, 3496, 3498, 3500, 3501, 3505, 3507, 3509, 3512, 3515, 3516, 3517, 3518, 3520, 3521, 3522, 3523, 3525, 3527, 3530, 3531, 3533, 3537, 3540, 3542, 3544, 3546, 3549, 3550, 3551, 3552, 3555, 3556, 3557, 3558, 3559, 3561, 3562, 3563, 3564, 3566, 3567, 3568, 3570, 3571, 3572, 3573, 3575, 3579, 3580, 3581, 3584, 3585, 3586, 3588, 3589, 3590, 3591, 3594, 3595, 3596, 3597, 3608, 3610, 3612, 3614, 3616, 3617, 3618, 3620, 3621, 3622, 3623, 3624, 3629, 3630, 3631, 3633, 3634, 3635, 3636, 3637, 3638, 3639, 3640, 3641, 3644, 3646, 3649, 3658, 3659, 3660, 3662, 3663, 3664, 3666, 3669, 3670, 3672, 3673, 3675, 3677, 3678, 3682, 3683, 3685, 3688, 3690, 3691, 3694, 3695, 3697, 3699, 3700, 3701, 3705, 3707, 3709, 3711, 3712, 3713, 3714, 3715, 3717, 3719, 3720, 3722, 3723, 3725, 3726, 3727, 3728, 3730, 3732, 3733, 3735, 3737, 3739, 3740, 3741, 3744, 3746, 3747, 3749, 3750, 3751, 3752, 3753, 3754, 3756, 3757, 3758, 3759, 3760, 3761, 3763, 3764, 3765, 3766, 3767, 3770, 3775, 3777, 3778, 3779, 3781, 3782, 3783, 3785, 3786, 3788, 3789, 3791, 3792, 3793, 3795, 3796, 3797, 3799, 3802, 3803, 3804, 3805, 3806, 3807, 3808, 3809, 3810, 3812, 3813, 3814, 3815, 3816, 3818, 3820, 3821, 3822, 3823, 3824, 3825, 3831, 3832, 3833, 3835, 3840, 3842, 3844, 3847, 3850, 3851, 3852, 3854, 3856, 3857, 3858, 3859, 3860, 3862, 3864, 3869, 3870, 3871, 3873, 3874, 3875, 3878, 3880, 3882, 3885, 3886, 3887, 3888, 3889, 3890, 3891, 3892, 3895, 3896, 3898, 3900, 3902, 3903, 3904, 3909, 3910, 3911, 3912, 3913, 3915, 3916, 3918, 3919, 3921, 3922, 3923, 3925, 3926, 3927, 3928, 3929, 3930, 3931, 3933, 3934, 3936, 3937, 3938, 3939, 3940, 3941, 3942, 3943, 3944, 3945, 3950, 3951, 3953, 3954, 3956, 3957, 3958, 3959, 3960, 3962, 3966, 3971, 3975, 3976, 3977, 3978, 3979, 3980, 3981, 3984, 3987, 3988, 3991, 3992, 3995, 3996

Source Australia Post November 2017

Appendix B: Favourite fishing waters

Table B1: Inland waters	Favourite location	2nd favourite location	3rd favourite location	Total %
Murray River (NSW)	14.0	8.1	5.1	27.2
Lake Eildon	11.9	7.9	4.9	24.7
Goulburn River	7.2	6.6	3.8	17.6
Yarra River	4.6	3.6	2.7	10.8
Lake Eppalock	3.0	3.3	2.3	8.6
Lake Mulwala (NSW)	2.2	2.1	1.7	6.0
Blue Rock Lake	2.5	2.0	1.4	6.0
Ovens River	2.6	2.0	1.4	6.0
Mitchell River	3.0	1.7	1.0	5.8
Lake Purrumbete	1.7	1.7	1.1	4.5
Howqua River	1.6	1.5	1.4	4.4
Lake Bullen Merri	1.4	1.5	1.2	4.1
Loddon River	1.4	1.4	1.1	3.9
Lake Hume	1.3	1.5	1.0	3.8
Lake Wendouree	1.3	1.4	1.0	3.8
Glenelg River	1.5	1.2	0.8	3.5
Devilbend Reservoir	1.5	1.3	0.7	3.5
Jamieson River	0.9	1.2	1.3	3.3
Rocklands Reservoir	1.4	1.1	0.8	3.2
Cairn Curran Reservoir	0.9	1.2	1.1	3.2
Thomson River	0.9	1.3	0.9	3.0
King River	0.9	1.1	0.8	2.7
Lake Nagambie/Goulburn Weir	0.9	1.0	0.8	2.7
Lake Fyans	0.9	1.1	0.7	2.7
Toolondo Reservoir	0.9	0.9	0.7	2.4
Lake Glenmaggie	0.8	0.7	0.6	2.2
Lower Goulburn River	0.7	0.8	0.7	2.2
Gunbower Creek	0.7	0.7	0.6	2.0
Wimmera River	0.7	0.6	0.5	1.9
Buckland River	0.4	0.5	0.4	1.4
Traralgon Creek	0.3	0.5	0.4	1.2
Gellibrand River	0.6	0.4	0.3	1.2
Hepburn Lagoon	0.3	0.3	0.4	1.0
Wartook Lake	0.3	0.2	0.3	0.8
Kangaroo Lake	0.2	0.3	0.2	0.8
Bellfield Reservoir	0.2	0.2	0.3	0.7
Charm Lake	0.1	0.3	0.2	0.6
Lindsay River/Mullaroo Creek	0.1	0.1	0.0	0.2

Table B1: Inland waters	Favourite location	2nd favourite location	3rd favourite location	Total %
Other	18.3	16.2	11.6	46.0
None	0.0	20.8	22.1	42.9
Not applicable / No answer / Prefer not to say	6.0	0.0	21.6	27.6

Table B2: Marine / /estuarine fishing waters	Favourite location	2nd favourite location	3rd favourite location	Total %
Port Phillip Bay^	31.9	14.6	5.7	52.2
Western Port	13.2	10.2	4.7	28.1
Gippsland Lakes	4.2	4.2	3.0	11.5
Phillip Island	3.2	3.8	3.3	10.3
Port Phillip Bay heads	3.3	3.7	2.5	9.5
Lakes Entrance coastal	3.0	3.0	2.5	8.6
Barwon River estuary	3.3	3.2	1.8	8.2
Portland	2.7	2.9	2.1	7.6
Apollo Bay	2.7	2.7	2.1	7.5
Lake Tyers	2.6	2.4	1.9	6.9
Warrnambool / Port Fairy	2.5	2.1	1.7	6.4
Mallacoota Inlet	2.8	1.7	1.3	5.8
Wilsons Promontory	2.0	1.8	1.5	5.4
Torquay / Pt Roadknight	1.5	1.5	1.5	4.5
Corner Inlet	1.8	1.1	1.0	3.9
Venus Bay	1.4	1.2	1.1	3.8
Tambo River	1.0	1.2	1.5	3.7
Bemm River	1.1	1.2	1.0	3.4
Glenelg River	1.1	1.0	.7	2.8
Hopkins River	.9	.9	.6	2.4
Mallacoota Coastal	.7	.7	.6	2.0
Mitchell River	.4	.8	.8	2.0
Aire River	.5	.6	.5	1.6
Nicholson River	.3	.6	.6	1.5
Port Campbell	.4	.5	.4	1.4
Curdies River	.3	.3	.3	0.9
Discovery Bay	.1	.1	.1	0.2
Other	7.8	6.1	4.5	18.4
Prefer not to say / None	3.2	25.7	0.0	28.9
Not applicable / No answer	0.0	.1	24.9	50.7

^Anywhere except the heads

Appendix C: Questionnaire

Victorian Fisheries Survey

Thanks in advance for taking time to give the Victorian Fisheries Authority feedback about recreational fishing in Victoria.

Please answer by **23 April 2018**.

Hints for answering

- Use the Next icon at the bottom of each page to save your answers and move to the next page.
- Use the Previous icon to move backwards in the survey —not your browser back button. This will take you out of the survey.
- Use the Return Later icon at the bottom of a page to save where you are up to and return to complete the survey at another time.
- On the last page, use the Finalise icon to submit your answers. Finalising your survey will de-active your survey link.
- After 60 minutes of navigation inactivity your browser will time out. Please save your answers as you go by clicking the next or previous icons.

Survey assistance

If you have any questions about this survey, please email improving.fishing@vfa.vic.gov.au

If you have any technical difficulties, please contact Australian Survey Research during normal working hours (9am-5pm, Monday to Friday) on 1800 068 489 or fishsurvey@aussurveys.com.

About yourself

Have you previously completed this survey?

○ Yes

○ No

What is your gender?

○ Male

○ Female

○ Other

Which are you a member of?

Select all that apply

☐ Angling or diving club that gets together regularly face to face

☐ Online community

☐ Another type of fishing related group :Please detail_____

☐ None of the above

Which **best** describes you?

○ Fishing is my number one hobby

○ Fishing is one of my top hobbies

○ Fishing is one of many hobbies

○ Fishing is an occasional hobby that I do now and then

○ I used to fish but don't do it at all or rarely now

○ Something else

Your fishing preferences

In the last 12 months, how many days (or part of a day) did you go fishing, spearfishing or diving?

This includes line fishing, yabbying and fishing with hoop or dip nets.

	None	1-5 days	6-14 days	15 or more days
Inland waters	◯	◯	◯	◯
Marine/estuarine waters	◯	◯	◯	◯

Inland fishing waters

In the last 12 months, what was **your favourite** Victorian inland fishing water?
Please select your favourite spot

- ◯ Bellfield Reservoir
- ◯ Blue Rock Lake
- ◯ Buckland River
- ◯ Cairn Curran Reservoir
- ◯ Charm Lake
- ◯ Devilbend Reservoir
- ◯ Gellibrand River
- ◯ Glenelg River
- ◯ Goulburn River
- ◯ Gunbower Creek
- ◯ Hepburn Lagoon
- ◯ Howqua River
- ◯ Jamieson River
- ◯ Kangaroo Lake
- ◯ King River
- ◯ Lake Bullen Merri
- ◯ Lake Eildon
- ◯ Lake Eppalock
- ◯ Lake Fyans
- ◯ Lake Glenmaggie
- ◯ Lake Hume
- ◯ Lake Mulwala (NSW)
- ◯ Lake Nagambie/Goulburn Weir
- ◯ Lake Purrumbete
- ◯ Lake Wendouree
- ◯ Lindsay River/Mullaroo Creek
- ◯ Loddon River
- ◯ Lower Goulburn River
- ◯ Mitchell River
- ◯ Murray River (NSW)
- ◯ Ovens River
- ◯ Rocklands Reservoir
- ◯ Thomson River
- ◯ Toolondo Reservoir
- ◯ Traralgon Creek
- ◯ Wartook Lake
- ◯ Wimmera River
- ◯ Yarra River
- ◯ Other :Please specify_____

○   Prefer not to say

Inland fishing waters 1

In the last 12 months, how many days (or parts of days) did you fish at your favourite Victorian inland fishing water?

○   None

○   1-5 days

○   6-14 days

○   15 or more days

In the last 12 months, how satisfied were you with your fishing experience at your favourite Victorian inland fishing water?

○   Very satisfied

○   Satisfied

○   Sometimes satisfied / sometimes not

○   Dissatisfied

○   Very dissatisfied

Inland fishing waters

In the last 12 months, what was **your second favourite** Victorian inland fishing water?

Please select your 2nd favourite spot

○   None

       List above repeated

Inland fishing waters 2

In the last 12 months, how many days (or parts of days) did you fish at your second favourite Victorian inland fishing water?

○   None

○   1-5 days

○   6-14 days

○   15 or more days

In the last 12 months, how satisfied were you with your fishing experience at your second favourite Victorian inland fishing water?

○   Very satisfied

○   Satisfied

○   Sometimes satisfied / sometimes not

○   Dissatisfied

○   Very dissatisfied

Inland fishing waters

In the last 12 months, what was **your third favourite** Victorian inland fishing water?

Please select your 3rd favourite spot

○   None

       List above repeated

Inland fishing waters 3

In the last 12 months, how many days (or parts of days) did you fish at your third favourite Victorian inland fishing water?

- ○ None
- ○ 1-5 days
- ○ 6-14 days
- ○ 15 or more days

In the last 12 months, how satisfied were you with your fishing experience at your third favourite Victorian inland fishing water?

- ○ Very satisfied
- ○ Satisfied
- ○ Sometimes satisfied / sometimes not
- ○ Dissatisfied
- ○ Very dissatisfied

Inland fish species

What were your favourite fish to catch from Victorian inland waters?

You can select up to 3

- ☐ Murray cod
- ☐ Brown trout
- ☐ Rainbow trout
- ☐ Redfin
- ☐ Golden perch
- ☐ Australian bass
- ☐ Murray spiny freshwater crayfish
- ☐ Silver perch
- ☐ Freshwater catfish
- ☐ River blackfish
- ☐ Common yabby
- ☐ Estuary perch
- ☐ Trout cod
- ☐ Macquarie perch
- ☐ Carp
- ☐ Eel
- ☐ Other :Please specify_____

Marine / estuarine waters

In the last 12 months, what was **your favourite** Victorian marine or estuarine fishing water?

Please select your favourite spot

- ○ Aire River
- ○ Apollo Bay
- ○ Barwon River estuary
- ○ Bemm River
- ○ Corner Inlet
- ○ Curdies River
- ○ Discovery Bay
- ○ Gippsland Lakes
- ○ Glenelg River
- ○ Hopkins River

○ Lake Tyers
○ Lakes Entrance coastal
○ Mallacoota Coastal
○ Mallacoota Inlet
○ Mitchell River
○ Nicholson River
○ Phillip Island
○ Port Campbell
○ Port Phillip Bay (anywhere except the heads)
○ Port Phillip Bay heads
○ Portland
○ Tambo River
○ Torquay / Pt Roadknight
○ Venus Bay
○ Warrnambool / Port Fairy
○ Western Port
○ Wilsons Promontory
○ Other :Please specify_____
○ Prefer not to say

Marine / estuarine waters 1

In the last 12 months, how many days (or parts of days) did you fish at your favourite Victorian marine fishing water?

○ None
○ 1-5 days
○ 6-14 days
○ 15 or more days

In the last 12 months, how satisfied were you with your fishing experience at your favourite Victorian marine fishing water
Satisfaction includes the location facilities and access, the overall environment, fish you caught (or didn't) and being with other anglers.

○ Very satisfied
○ Satisfied
○ Sometimes satisfied/ sometimes not
○ Dissatisfied
○ Very dissatisfied

Marine / estuarine waters

In the last 12 months, what was **your 2nd favourite** Victorian marine or estuarine fishing water?
Please select your 2nd favourite spot

○ None
List above repeated

Marine / estuarine waters 2

In the last 12 months, how many days (or parts of days) did you fish at your second favourite Victorian marine fishing water?

○ None

○ 1-5 days

○ 6-14 days

○ 15 or more days

In the last 12 months, how satisfied were you with your fishing experience at your second favourite Victorian marine fishing water?

Satisfaction includes the location facilities and access, the overall environment, fish you caught (or didn't) and being with other anglers.

○ Very satisfied

○ Satisfied

○ Sometimes satisfied/ sometimes not

○ Dissatisfied

○ Very dissatisfied

Marine / estuarine waters

In the last 12 months, what was **your 3rd favourite** Victorian marine or estuarine fishing water?

Please select your 3rd favourite spot

○ None

List above repeated

Marine / estuarine waters 3

In the last 12 months, how many days (or parts of days) did you fish at your third favourite Victorian marine fishing water?

○ None

○ 1-5 days

○ 6-14 days

○ 15 or more days

In the last 12 months, how satisfied were you with your fishing experience at your third favourite Victorian marine fishing water?

Satisfaction includes the location facilities and access, the overall environment, fish you caught (or didn't) and being with other anglers.

○ Very satisfied

○ Satisfied

○ Sometimes satisfied/ sometimes not

○ Dissatisfied

○ Very dissatisfied

Marine / estuarine fish species

What were your favourite fish to catch from Victorian marine/estuarine waters?

You can select up to 3

☐ Abalone

☐ Australian salmon

☐ Black bream

☐ Dusky flathead

☐ Estuary perch

☐ Flathead (other than Dusky)

☐ Garfish

☐ Gummy Shark

- ☐ King George whiting
- ☐ Marlin
- ☐ Pipi
- ☐ Prawn
- ☐ Rock lobster
- ☐ Sand crab
- ☐ Shark (other than gummy/school)
- ☐ Snapper
- ☐ Southern Bluefin tuna
- ☐ Squid
- ☐ Swordfish
- ☐ Wrasse
- ☐ Yellowtail kingfish
- ☐ Other : Please specify_____

Southern Bluefin tuna and Abalone

In the last 12 months, did you fish for Southern Bluefin tuna in Victoria?
- ○ Yes
- ○ No
- ○ Don't remember

In the last 12 months, how many days did you fish for Southern Bluefin tuna?
- ○ 1-5 days
- ○ 6-14 days
- ○ 15 or more days

In the last 12 months, how many Southern Bluefin tuna did you catch?
- ○ None
- ○ 1-3 tuna
- ○ 4 or more

In the last 12 months did you fish for Abalone in Victoria?
- ○ Yes
- ○ No
- ○ Don't remember

Where did you fish for Abalone in Victoria? See below for a map of Victorian Abalone zones
Select all that apply
- ☐ Eastern zone abalone (Coastal waters east of Arch Rock)
- ☐ Central zone abalone (Waters between Arch Rock and Aire River)
- ☐ Western zone abalone (Coastal waters west of Aire River)

Your awareness of improvements

Over the last 12 months while fishing in Victoria, generally what have you noticed about each of the following.

	Got better	Stayed the same	Got worse	Varied by location or time/season	Don't know / unsure
Number of desirable fish	○	○	○	○	○

Range of species	○	○	○	○	○
Fish habitat	○	○	○	○	○
Fish stocking	○	○	○	○	○
River health	○	○	○	○	○

Your priorities to improve recreational fishing

What are the most effective ways that recreational fishing could be improved in Victoria?
Select up to 3

☐ Increasing the number of fish by stocking

☐ Improving fish habitat *such as installing snags instream, increasing reef habitat, restoring bankside vegetation, removing barriers to fish movement*

☐ Having fishing rules *such as bag and size limits, closed seasons, slot limits*

☐ Enforcing fishing rules

☐ Educating people about sustainable recreational fishing practices

☐ Research and monitoring on recreational fish species and fishing

☐ Improving access and facilities *such as fish cleaning tables, boat ramps, fishing platforms and tracks*

☐ Information to help people catch more fish

☐ Recover threatened angling species *such as trout cod, Macquarie perch, catfish*

☐ Other : Please detail_____

☐ Unsure

Our collaboration

How much should the Victorian Fisheries Authority and Victorian natural resource management agencies work together to create better fisheries and habitat in Victoria?

○ Not at all
○ A little
○ A moderate amount
○ A lot
○ A great deal

Which of the following should the Victorian Fisheries Authority collaborate with?
Select all that apply

☐ Department of Land, Water & Planning (manage public land, including next to some rivers, and conduct aquatic research).

☐ Catchment Management Authorities (coordinate land and water improvements on public and private land)

☐ Water Authorities (store and deliver water for irrigation and domestic needs, like Yarra Water and Goulburn Murray Water)

☐ Parks Victoria (manages some boat ramps and Victorian state and national parks)

☐ Victorian Environmental Water Holder (manages environmental water releases to improve river health).

☐ Don't know

Our performance

Since 2014, which of the following actions have improved recreational fishing in Victoria?
Select all that apply

☐ Halting commercial netting in Port Phillip and Corio Bays

☐ Saving Lake Toolondo with more water and trout stocking

☐ Banning netting at the mouths of rivers in the Gippsland Lakes

☐ Establishing better fishing facilities such as fish cleaning tables, boat ramps, fishing platforms and tracks

☐ Increasing fish stocking to 5 million fish per year including trout, Murray cod, golden perch and Australian bass

☐ Implementing a marine species stocking program

☐ Opening recreational trout cod fisheries in Beechworth

☐ Stocking barramundi in Hazelwood Pondage

☐ Delivering 'Stronger Fishing Club' grants

☐ Introducing a minimum legal size for trout

☐ Growing the Victorian Trout Opening Festival

☐ Removing horsepower and boat length restrictions at Blue Rock Lake

☐ Delivering school education and children's fishing programs

☐ Delivering defibrillators for angling clubs

☐ Stocking native fish in Rocklands Reservoir.

☐ None of the above

Overall how would you rate the success of the Target One Million investment in relation to the items mentioned in the previous question?

○ Not at all successful

○ Slightly successful

○ Moderately successful

○ Very successful

○ Extremely successful

Communication

Where do you currently get information on recreational fishing in Victoria?

Select all that apply

☐ Facebook

☐ Instagram

☐ Twitter

☐ Snapchat

☐ Youtube

☐ Angling/diving club

☐ Fishing colleagues

☐ Magazines (hard copy) :Please detail_____

☐ Blogs and online magazines

☐ TV fishing shows :Please detail_____

☐ Government websites :Please detail_____

☐ Other :Please detail_____

☐ Nowhere

Where would you like to get information on recreational fishing in Victoria?

Select all that apply

☐ Same as what I do now

☐ Facebook

☐ Instagram

☐ Twitter

☐ Snapchat

☐ Youtube

☐ Angling/diving club

☐ Fishing colleagues

☐ Magazines (hard copy) : Please detail_____

☐ Blogs and online magazines

☐ TV fishing shows : Please detail_____

☐ Government websites : Please detail_____

☐ Other : Please detail_____

☐ Nowhere

Many people living in Victoria have come from other places both within and outside of Australia. Which of the following do you think would encourage these people to fish in Victoria?
Select all that apply

☐ Provide where to fish information in multiple languages including English

☐ Hold free events to promote fishing in Victoria

☐ Make presentations to community groups

☐ VFA staff to attend community group events

☐ Identify ambassadors from community groups

☐ Partner with local angling clubs

☐ Other : Please specify_____

About half of Victoria's population are women but only a small proportion fish recreationally. Which of the following do you think would get more women to fish?
Select all that apply

☐ Hold organised women only events

☐ Have dedicated social media activities for women

☐ Promote fishing in ways that appeal to women

☐ Improve facilities such as toilets close to fishing spots

☐ Offer introductory events for mums and their kids

☐ Identify female fishing ambassadors

☐ Partner with local angling clubs

☐ Other : Please specify_____

A fair day's take

To keep improving fishing in Victoria it's important to have effective regulations. We are interested in your views on what is a fair and reasonable day's take for personal consumption of popular fish. What do you think of the following limits?

Inland waters

		Should be able to keep more	About right	Too many fish	Way too many fish	Don't know
Golden perch	Bag limit : 5	○	○	○	○	○
Murray cod	Bag limit : 1 in rivers 2 in lakes	○	○	○	○	○
Trout	Bag limit : 3 to 5 depending on water	○	○	○	○	○
Australian bass	Bag limit : 5 (Lake Bullen Merri) 2 (all other waters)	○	○	○	○	○

		Should be able to keep more	About right	Too many fish	Way too many fish	Don't know
Estuary perch	Bag limit : 5	○	○	○	○	○
Silver perch	Bag limit : 5 (in certain locations)	○	○	○	○	○
Murray Spiny Freshwater Crayfish	Bag limit : 2	○	○	○	○	○
River blackfish	Bag limit : 5	○	○	○	○	○
Yabbies	Bag limit : 150	○	○	○	○	○

To keep improving fishing in Victoria it's important to have effective regulations. We are interested in your views on what is a fair and reasonable day's take for personal consumption of popular fish. What do you think of the following limits?

Marine/estuarine waters

		Should be able to keep more	About right	Too many fish	Way too many fish	Don't know
Bream	Bag limit : 10	○	○	○	○	○
Flathead (all species except Dusky flathead)	Bag limit : 20	○	○	○	○	○
King George whiting	Bag limit: 20	○	○	○	○	○
Snapper	Bag limit: 10 (3 over 40cm	○	○	○	○	○
Tuna (including southern bluefin)	Bag limit: 2	○	○	○	○	○
Gummy shark	Bag limit: 2	○	○	○	○	○
Rock lobster	Bag limit: 2	○	○	○	○	○
Blacklip abalone	Bag limit:: 5	○	○	○	○	○

Slot limits

Slot limits exist for Dusky flathead and Murray cod. What other species should have a slot limit?
A slot limit means that a fish can only be retained if it measures within a minimum AND a maximum length.

- ☐ Abalone
- ☐ Australian bass
- ☐ Australian salmon
- ☐ Black bream
- ☐ Brown trout
- ☐ Carp
- ☐ Common yabby
- ☐ Eel
- ☐ Estuary perch

- [ ] Flathead (other than Dusky)
- [ ] Freshwater catfish
- [ ] Garfish
- [ ] Golden perch
- [ ] Gummy shark
- [ ] King George whiting
- [ ] Macquarie perch
- [ ] Marlin
- [ ] Pipi
- [ ] Prawn
- [ ] Rainbow trout
- [ ] Redfin
- [ ] River blackfish
- [ ] Rock lobster
- [ ] Sand crab
- [ ] Shark (other than gummy/school)
- [ ] Silver perch
- [ ] Snapper
- [ ] Southern Bluefin tuna
- [ ] Squid
- [ ] Swordfish
- [ ] Trout cod
- [ ] Wrasse
- [ ] Yellowtail kingfish
- [ ] Other : Please specify_____

To help us track and improve the performance of recreational fishing, would you be willing to share your catch and effort information on your favourite fishing waters?

    ◯   Yes

    ◯   No

Please provide your best contact details below so we can send you more information. This can be an email address or mobile number.

Name	_____
Email address	_____
Mobile number	_____

If you have anything else you'd like to tell us about how we can continue to build on the great fishing we have in Victoria, please enter here.

_____

_____

Appendix D: Demographic differences

Table D1: View of improvements to fishing in Victoria over the last 12 months

Number of desirable fish Total n=	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
	12408	1226	11135	7060	5346	1743	7615
Got better	14.8	10.9	15.2	15.2	14.2	12.3	15.5
Stayed the same	34.4	27.7	35.2	35.3	33.2	34.8	34.3
Got worse	25.4	32.2	24.6	23.5	27.9	29.4	25.2
Varied by location or time/season	25.4	29.2	25.0	25.9	24.7	23.5	25.0
Range of species Total n=	12038	1162	10830	6924	5112	1687	7394
Got better	13.2	10.8	13.5	14.5	11.4	10.7	13.6
Stayed the same	54.5	45.8	55.5	54.2	55.0	53.6	55.4
Got worse	15.2	21.3	14.5	14.5	16.2	19.6	14.1
Varied by location or time/season	17.1	22.1	16.5	16.8	17.4	16.1	16.9
Fish habitat Total n=	11409	1099	10267	6573	4834	1626	7007
Got better	14.5	9.6	15.1	14.9	14.0	12.1	15.4
Stayed the same	55.0	47.0	55.8	54.8	55.1	53.0	55.8
Got worse	15.9	22.2	15.2	15.7	16.2	19.4	14.8
Varied by location or time/season	14.6	21.2	13.9	14.5	14.7	15.5	14.0
Fish stocking Total n=	8908	881	7996	5407	3499	1336	5304
Got better	28.1	16.7	29.3	28.6	27.2	20.4	30.3
Stayed the same	40.4	37.0	40.8	40.6	40.2	41.4	40.4
Got worse	19.8	28.6	18.9	18.9	21.3	25.2	18.6
Varied by location or time/season	11.7	17.7	11.0	11.9	11.3	13.0	10.7
River health Total n=	10148	1003	9113	6004	4142	1500	6090
Got better	15.3	11.8	15.7	15.5	15.2	14.5	15.5
Stayed the same	52.1	47.8	52.6	52.1	52.2	50.6	52.9
Got worse	18.6	21.9	18.2	18.6	18.6	21.1	18.1
Varied by location or time/season	13.9	18.5	13.4	13.8	14.0	13.9	13.5

Note: Table excludes respondents who answered don't know

Table D2: Effective ways to improve recreational fishing in Victoria

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*14098*	*1526*	*12517*	*8013*	*6082*	*2194*	*8465*
Increasing the number of fish by stocking	36.7	34.1	37.0	38.9	33.6	37.4	34.6
Improving fish habitat	38.8	34.0	39.3	40.7	36.2	38.0	39.5
Having fishing rules	26.8	25.1	27.1	26.3	27.5	25.3	27.9
Enforcing fishing rules	39.0	34.5	39.6	38.1	40.3	33.8	41.8
Educating people about sustainable recreational fishing practices	36.2	43.8	35.2	34.1	38.9	36.0	36.4
Research and monitoring on recreational fish species and fishing	15.7	15.7	15.7	15.5	15.9	15.7	15.2
Improving access and facilities	34.5	32.9	34.6	34.5	34.4	28.5	36.5
Information to help people catch more fish	10.0	13.0	9.6	11.5	7.9	15.0	7.7
Recover threatened angling species	11.9	11.1	12.0	13.0	10.4	13.2	11.3
Other	7.2	6.0	7.4	6.5	8.2	5.8	8.0
Unsure	2.3	4.7	2.1	2.5	2.2	4.6	1.9

Table D4: Level of collaboration between VFA / Victorian natural resource management agencies to create better fisheries and habitat in Victoria

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*14053*	*1525*	*12473*	*7995*	*6055*	*2188*	*8432*
Not at all	2.2	1.0	2.3	1.7	2.9	2.2	2.3
A little	5.0	5.5	5.0	5.5	4.4	5.9	4.9
A moderate amount	21.6	27.2	21.0	24.1	18.3	25.0	19.9
A lot	33.9	31.1	34.2	33.1	35.1	34.0	33.8
A great deal	37.2	35.1	37.4	35.6	39.3	33.0	39.1

Table D5: Departments / organisations VFA should collaborate with

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*14098*	*1529*	*12505*	*8005*	*6081*	*2194*	*8465*
Department of Land, Water & Planning	57.8	60.9	57.4	58.6	56.8	55.2	58.8
Catchment Management Authorities	49.9	51.9	49.6	50.2	49.4	45.6	52.2
Water Authorities	43.8	44.5	43.8	44.0	43.6	40.4	45.7
Parks Victoria	66.6	68.3	66.3	66.7	66.4	60.2	69.2
Victorian Environmental Water Holder	48.1	55.1	47.2	48.4	47.7	46.3	49.6
Don't know	13.4	14.3	13.3	13.3	13.6	16.7	12.2

Table D6: Actions that have improved recreational fishing in Victoria

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*13839*	*1463*	*12323*	*7838*	*5998*	*2138*	*8349*
Halting commercial netting in Port Phillip and Corio Bays	62.0	44.4	64.1	57.5	68.0	53.3	66.6
Introducing a minimum legal size for trout	26.0	31.2	25.4	26.9	24.9	25.7	26.1
Growing the Victorian Trout Opening Festival	8.6	7.3	8.8	9.2	7.9	7.9	9.0
Removing horsepower and boat length restrictions at Blue Rock Lake	8.4	7.5	8.5	8.8	7.9	7.1	9.2
Delivering school education and children's fishing programs	24.3	29.3	23.7	23.4	25.4	22.8	24.8
Delivering defibrillators for angling clubs	8.9	12.2	8.5	8.6	9.4	7.7	9.2
Stocking native fish in Rocklands Reservoir	17.0	16.8	17.0	17.4	16.5	15.0	17.4
Saving Lake Toolondo with more water and trout stocking	20.6	16.2	21.1	18.9	22.8	16.1	22.3
Banning netting at the mouths of rivers in the Gippsland Lakes	43.8	39.8	44.3	39.8	49.1	37.7	47.1
Establishing better fishing facilities	35.2	36.4	35.1	33.9	36.9	30.2	37.1
Increasing fish stocking to 5 million fish per year	49.1	41.4	50.0	48.0	50.5	42.2	51.0
Implementing a marine species stocking program	24.9	21.8	25.2	23.4	26.8	23.2	25.9
Opening recreational trout	9.7	9.3	9.7	9.8	9.6	9.5	9.9

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*13839*	*1463*	*12323*	*7838*	*5998*	*2138*	*8349*
cod fisheries in Beechworth							
Stocking barramundi in Hazelwood Pondage	14.7	13.4	14.9	15.6	13.7	12.5	16.0
Delivering 'Stronger Fishing Club' grants	10.7	10.5	10.6	9.8	11.8	8.3	11.5
None of the above	7.8	11.9	7.3	9.0	6.2	12.0	6.2

Table D7: Level of success of the Target One Million investment in relation to actions to improve recreational fishing in Victoria

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*13682*	*1454*	*12175*	*7809*	*5870*	*2134*	*8211*
Not at all successful	6.2	4.9	6.4	5.6	7.1	7.0	6.3
Slightly successful	22.1	25.3	21.7	22.3	21.8	25.6	21.2
Moderately successful	48.8	52.8	48.4	49.1	48.6	50.7	48.1
Very successful	19.7	15.0	20.3	19.4	20.2	14.3	21.0
Extremely successful	3.1	2.1	3.2	3.6	2.3	2.2	3.3

Table D8: Information channels used on recreational fishing in Victoria

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*14098*	*1526*	*12517*	*8013*	*6082*	*2194*	*8465*
Facebook	40.7	45.4	40.2	49.7	28.8	38.7	39.8
TV fishing shows	32.4	30.0	32.7	29.6	36.2	25.3	35.3
Government websites	18.7	22.1	18.3	18.4	19.2	19.2	18.4
Instagram	4.6	4.0	4.6	6.8	1.6	3.4	4.5
Twitter	1.0	0.7	1.1	1.3	0.7	1.1	1.1
Snapchat	0.7	0.7	0.7	0.9	0.3	0.6	0.6
YouTube	13.8	9.2	14.3	15.2	11.8	14.4	12.9
Angling/diving club	8.1	7.9	8.1	7.1	9.3	5.2	9.3

	Total %	**Gender**		**Age**		**Licence term**	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*14098*	*1526*	*12517*	*8013*	*6082*	*2194*	*8465*
Fishing colleagues	40.8	36.2	41.3	35.9	47.3	34.4	43.1
Magazines (hard copy)	10.5	6.7	10.9	8.5	13.1	6.4	12.3
Blogs and online magazines	14.3	11.7	14.7	15.0	13.4	13.3	14.1
Other	11.0	13.9	10.7	11.3	10.8	10.7	11.2
Nowhere	9.5	11.1	9.3	9.1	10.0	13.1	8.8

Table D9: Preferred information channels on recreational fishing in Victoria

	Total %	**Gender**		**Age**		**Licence term**	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*13896*	*1511*	*12332*	*7902*	*5991*	*2162*	*8334*
Same as what I do now	51.8	54.4	51.4	50.9	52.9	46.9	53.2
Blogs and online magazines	6.8	5.6	6.9	6.9	6.6	7.3	6.4
TV fishing shows	12.6	10.5	12.9	11.5	14.1	10.4	13.5
Government websites	13.2	12.7	13.3	12.4	14.4	14.7	13.5
Facebook	21.7	23.8	21.5	25.9	16.1	23.8	19.8
Instagram	3.2	4.0	3.2	4.7	1.3	4.4	2.9
Twitter	1.4	0.8	1.5	1.7	0.9	2.0	1.3
Snapchat	1.2	0.8	1.3	1.8	0.5	1.9	0.8
You Tube	8.3	6.1	8.5	9.6	6.5	10.7	7.3
Angling/diving club	4.0	3.2	4.0	3.6	4.5	3.5	4.3
Fishing colleagues	10.3	7.4	10.7	8.7	12.5	9.3	10.6
Magazines (hard copy)	3.8	2.8	3.9	3.3	4.5	2.6	4.1
Other	4.9	4.2	5.0	5.2	4.6	4.2	5.2
Nowhere	4.4	5.8	4.3	4.3	4.6	5.9	4.4

Table D10: Ways to encourage people in Victoria to fish

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*13513*	*1490*	*11971*	*7661*	*5849*	*2117*	*8068*
Provide where to fish information in multiple languages including English	46.6	52.5	45.9	45.2	48.3	49.3	45.6
Hold free events to promote fishing in Victoria	44.2	55.4	42.8	47.9	39.4	48.2	42.5
Make presentations to community groups	18.1	19.8	18.0	16.8	19.9	16.5	19.2
VFA staff to attend community group events	15.4	15.8	15.4	14.2	17.1	12.9	16.1
Identify ambassadors from community groups	14.2	14.4	14.2	14.6	13.8	13.3	14.9
Partner with local angling clubs	39.1	42.0	38.8	38.4	40.1	37.2	39.9
Other	7.9	6.4	8.0	7.6	8.2	7.0	8.3

Table D11: Ways to encourage women to fish

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*13721*	*1507*	*12161*	*7818*	*5900*	*2144*	*8223*
Hold organised women only events	19.4	25.9	18.6	20.8	17.5	20.4	18.7
Have dedicated social media activities for women	18.7	26.2	17.7	21.1	15.4	20.1	17.7
Promote fishing in ways that appeal to women	58.6	54.3	59.2	57.1	60.7	57.4	59.0
Improve facilities such as toilets close to fishing spots	60.2	67.4	59.3	60.5	59.7	60.4	60.2
Offer introductory events for mums and their kids	37.1	45.4	36.1	41.6	31.1	40.3	35.7
Identify female fishing ambassadors	26.3	34.0	25.3	28.5	23.4	24.3	27.0
Partner with local angling clubs	22.4	25.9	21.9	20.9	24.4	20.1	23.6
Other	6.1	6.3	6.0	5.7	6.7	5.5	6.4

Table D12: Views on current regulation; A fair and reasonable day's take - Inland

	Total %	Gender		Age		Licence term	
Murray cod (bag limit : 1 in rivers 2 in lakes) Total n=		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
	13875	1505	12317	7940	5932	2171	8316
Should be able to keep more	8.0	9.7	7.8	8.4	7.6	10.4	7.1
About right	72.6	67.4	73.2	71.4	74.1	67.4	73.8
Too many fish	4.2	3.2	4.3	4.5	3.8	3.8	4.2
Way too many fish	1.7	1.0	1.8	2.0	1.3	2.1	1.7
Don't know	13.5	18.7	12.9	13.7	13.2	16.4	13.2
Trout (bag limit : 3 to 5 depending on water) Total n=	13896	1509	12334	7902	5991	2162	8334
Should be able to keep more	10.7	5.9	11.2	10.3	11.1	9.0	10.8
About right	68.3	69.1	68.3	68.0	68.8	67.2	68.2
Too many fish	7.7	7.0	7.8	8.0	7.3	7.4	7.8
Way too many fish	1.3	0.5	1.4	1.3	1.3	1.2	1.4
Don't know	12.1	17.4	11.4	12.5	11.5	15.3	11.8
Australian bass (bag limit : 5 Lake Bullen Merri & 2 all other waters) Total n=	13801	1504	12244	7919	5879	2161	8261
Should be able to keep more	3.1	2.7	3.2	3.4	2.8	4.0	2.7
About right	62.2	61.0	62.4	61.6	63.1	59.7	62.6
Too many fish	11.4	9.3	11.6	11.5	11.2	10.8	11.6
Way too many fish	1.9	0.9	2.0	2.0	1.8	1.8	2.0
Don't know	21.3	26.1	20.8	21.6	21.0	23.6	21.1
Estuary perch (bag limit : 5) Total n=	13784	1499	12232	7899	5882	2160	8252
Should be able to keep more	2.6	1.8	2.7	2.7	2.3	3.0	2.2
About right	56.8	55.0	56.9	55.3	58.8	55.6	56.3
Too many fish	17.6	14.9	17.9	17.8	17.3	16.1	18.3
Way too many fish	2.6	1.6	2.7	2.9	2.3	2.1	2.9
Don't know	20.5	26.7	19.8	21.4	19.3	23.2	20.2

Silver perch (bag limit : 5 in certain locations) Total n=	13784	1499	12232	7899	5882	2160	8252
Should be able to keep more	3.9	2.9	4.0	4.3	3.4	4.6	3.5
About right	56.9	56.4	57.0	56.0	58.3	57.0	56.3
Too many fish	17.2	15.1	17.4	17.3	17.0	15.4	18.2
Way too many fish	2.5	1.2	2.6	2.6	2.4	1.8	2.6
Don't know	19.5	24.3	18.9	19.9	19.0	21.2	19.4
Murray Spiny Freshwater Crayfish (bag limit : 2) Total n=	13896	1501	12221	7902	5991	2162	8334
Should be able to keep more	12.9	10.1	13.2	13.5	12.2	12.5	12.6
About right	60.3	61.0	60.3	59.4	61.6	58.6	60.5
Too many fish	6.2	5.1	6.4	5.9	6.6	5.6	6.5
Way too many fish	2.3	0.9	2.5	2.2	2.4	2.6	2.4
Don't know	18.2	22.9	17.6	18.9	17.2	20.7	18.0
River blackfish (bag limit : 5) Total n=	13751	1498	12200	7897	5851	2147	8243
Should be able to keep more	2.2	1.6	2.2	2.4	1.9	2.9	1.8
About right	50.8	51.9	50.7	50.4	51.3	52.7	49.7
Too many fish	18.2	13.2	18.8	17.3	19.4	14.9	19.5
Way too many fish	4.2	1.5	4.5	4.1	4.3	3.0	4.6
Don't know	24.6	31.7	23.8	25.8	23.1	26.5	24.5
Yabbies (bag limit : 150) Total n=	13825	1500	12272	7915	5907	2157	8287
Should be able to keep more	6.6	4.4	6.8	6.7	6.3	7.4	6.4
About right	47.3	43.9	47.7	47.0	47.6	44.0	47.0
Too many fish	23.9	25.9	23.7	23.8	24.1	23.6	24.7
Way too many fish	9.6	10.2	9.5	9.5	9.7	9.5	9.6
Don't know	12.7	15.6	12.3	13.0	12.3	15.4	12.3

Table D13: Views on current regulation; A fair and reasonable day's take - Marine / Estuarine

		Gender		Age		Licence term	
Bream (bag limit : 10)	Total %	Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	13873	1503	12318	7924	5946	2166	8317
Should be able to keep more	2.7	2.4	2.7	2.9	2.4	3.7	2.3
About right	51.7	48.6	52.0	49.7	54.3	51.1	51.2
Too many fish	30.2	27.9	30.5	30.2	30.3	26.9	31.8
Way too many fish	5.8	4.3	6.0	6.7	4.7	4.5	6.3
Don't know	9.6	16.8	8.8	10.6	8.3	13.8	8.3
Flathead (all species except Dusky flathead) (bag limit :20) Total n=	13941	1508	12380	7941	5997	2168	8371
Should be able to keep more	4.2	4.1	4.2	4.5	3.8	5.4	3.8
About right	49.5	42.3	50.4	48.6	50.8	46.3	50.8
Too many fish	31.8	34.9	31.4	31.1	32.7	30.5	32.1
Way too many fish	8.1	7.9	8.1	8.7	7.3	7.6	8.1
Don't know	6.4	10.7	5.9	7.2	5.4	10.3	5.2
King George whiting (bag limit: 20) Total n=	13875	1505	12317	7940	5932	2171	8316
Should be able to keep more	3.4	3.5	3.4	3.9	2.8	4.2	3.4
About right	52.4	45.9	53.2	51.7	53.2	49.4	52.9
Too many fish	30.6	31.7	30.5	29.4	32.2	28.7	31.4
Way too many fish	6.6	6.8	6.6	6.8	6.3	6.3	6.8
Don't know	7.0	12.0	6.4	8.1	5.5	11.4	5.5
Snapper (bag limit: 10 (3 over 40cm) Total n=	13941	1508	12380	7941	5997	2168	8371
Should be able to keep more	4.9	5.1	4.9	5.8	3.7	6.0	4.6
About right	55.1	51.7	55.5	54.7	55.7	52.2	55.8
Too many fish	27.5	27.1	27.5	25.8	29.7	25.0	28.4
Way too many fish	5.8	5.1	5.9	6.0	5.5	5.8	5.9
Don't know	6.7	11.0	6.2	7.6	5.3	11.1	5.3

Tuna (including southern bluefin) (bag limit: 2) Total n=	13839	1502	12284	7838	5998	2138	8349
Should be able to keep more	5.7	6.3	5.6	6.8	4.3	8.0	5.3
About right	70.6	67.2	71.0	69.6	72.1	65.3	72.1
Too many fish	7.8	7.7	7.8	7.6	8.2	6.9	8.3
Way too many fish	1.6	1.2	1.7	1.7	1.5	2.0	1.6
Don't know	14.2	17.6	13.8	14.3	14.0	17.8	12.8
Gummy shark (bag limit: 2) Total n=	13721	1507	12161	7818	5900	2144	8223
Should be able to keep more	8.2	7.9	8.2	8.9	7.2	8.1	8.1
About right	72.2	66.8	72.8	71.0	73.7	66.7	73.7
Too many fish	8.2	9.5	8.1	8.3	8.2	8.8	8.4
Way too many fish	1.6	1.9	1.5	1.5	1.6	2.2	1.4
Don't know	9.8	14.0	9.4	10.3	9.2	14.4	8.4
Rock lobster (bag limit: 2) Total n=	13839	1502	12284	7838	5998	2138	8349
Should be able to keep more	9.2	9.4	9.2	9.9	8.3	10.8	8.7
About right	69.1	65.5	69.5	67.6	71.0	62.6	70.7
Too many fish	5.2	6.4	5.0	4.8	5.6	6.4	4.9
Way too many fish	1.1	0.7	1.1	1.0	1.2	1.4	1.1
Don't know	15.5	18.0	15.2	16.7	13.9	18.7	14.6
Blacklip abalone (bag limit: 5) Total n=	13839	1502	12284	7838	5998	2138	8349
Should be able to keep more	6.6	5.5	6.7	7.1	5.9	7.5	6.5
About right	60.4	59.3	60.5	59.4	61.7	55.8	61.6
Too many fish	8.5	9.5	8.4	8.0	9.2	9.9	8.0
Way too many fish	2.3	1.9	2.3	2.3	2.3	3.1	2.3
Don't know	22.2	23.9	22.1	23.2	20.9	23.7	21.7

Table D14: Slot limits - Inland species

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*10785*	*1141*	*9603*	*6027*	*4755*	*1694*	*6453*
Freshwater catfish	8.9	13.4	8.4	8.6	9.3	9.6	8.8
Golden perch	18.6	20.9	18.3	17.8	19.7	18.1	18.9
Macquarie perch	11.5	14.3	11.2	10.3	13.2	11.3	11.9
Australian bass	15.1	17.5	14.8	14.0	16.4	14.5	15.5
Rainbow trout	21.7	30.4	20.7	20.9	22.8	22.8	21.4
Redfin	8.7	15.8	7.8	7.9	9.7	10.9	7.9
River blackfish	12.1	14.2	11.8	10.2	14.5	10.9	12.6
Silver perch	13.5	19.2	12.8	12.5	14.7	14.5	13.1
Trout cod	20.6	22.3	20.4	20.0	21.3	19.7	21.0
Brown trout	20.5	24.8	20.0	18.8	22.6	19.4	20.5
Carp	2.4	5.1	2.1	2.6	2.1	3.4	2.1
Common yabby	8.8	14.5	8.1	7.6	10.2	10.4	8.6
Eel	4.4	8.5	3.9	4.5	4.2	6.3	4.0
Estuary perch	13.5	16.4	13.1	12.3	15.0	11.7	14.1

Table D15: Slot limits - Marine / Estuarine species

	Total %	Gender		Age		Licence term	
		Female %	Male %	Under 50 years %	50 years and over %	Short term %	Long term %
Total n=	*10785*	*1141*	*9603*	*6027*	*4755*	*1694*	*6453*
Abalone	16.2	25.8	15.2	14.4	18.6	20.4	15.5
Flathead (other than Dusky)	25.3	30.9	24.6	22.3	29.1	23.6	26.6
Garfish	7.3	13.2	6.6	6.5	8.4	8.5	7.1
Gummy shark	31.7	34.4	31.3	31.4	32.1	28.9	33.3
King George whiting	24.1	30.3	23.3	20.0	29.2	24.4	24.3
Pipi	8.2	13.3	7.5	7.3	9.3	11.1	7.7
Prawn	7.5	15.3	6.6	6.6	8.7	10.0	7.1
Rock lobster	22.0	30.7	21.0	19.7	24.9	24.3	21.9
Sand crab	9.0	16.8	8.0	8.3	9.8	10.7	8.4
Shark (other than gummy/school)	20.1	28.2	19.1	20.6	19.5	20.8	19.4
Snapper	34.6	36.3	34.5	32.4	37.5	33.4	35.7
Southern Bluefin tuna	22.9	27.8	22.3	22.0	24.1	22.9	23.6
Australian salmon	11.8	22.9	10.5	11.4	12.3	16.7	10.6
Squid	9.4	15.7	8.6	9.3	9.5	11.4	8.8
Swordfish	19.4	24.5	18.7	18.5	20.4	21.1	19.5
Wrasse	5.7	9.8	5.2	5.3	6.3	6.5	5.6
Yellowtail kingfish	18.2	23.3	17.6	17.1	19.6	18.5	18.4
Black bream	20.4	20.1	20.4	19.1	22.0	16.6	21.7