

Department of Fisheries Community Survey 2007

by Tara Baharthah



Department of Fisheries
Government of Western Australia



Fish for the future



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ABSTRACT

A telephone survey of the Western Australian public was conducted to assess the level of success of programmes implemented by the Department of Fisheries. The sample comprised of 749 interviews, 444 in the metropolitan area and 305 in regional areas throughout the state. This community survey was used to determine the level of recall and awareness of the Department of Fisheries, the understanding and support of the community for the Department of Fisheries management strategies and examine key aspects of community participation in recreational fishing.

It is estimated that the overall participation rate in 2007 for recreational fishing in Western Australia is 445 000 individuals or 25.8% of the total population. Due to the low survey response rate this estimate of participation rate may not accurately represent the total population. Though there has been some variation in the estimated participation rate over the past 10 years, on average the participation rate has been constant at around 34% of the population.

An overall satisfaction-scoring index has been developed to measure and monitor the satisfaction of recreational fishers in Western Australia. The satisfaction index is a combination of knowledge, management, and confidence. The satisfaction index for recreational fishing was 81.3%.

The satisfaction rating of the broader community is their perceptions of the extent to which the Department of Fisheries is achieving sustainable fisheries management objectives. The Department of Fisheries was given a satisfaction rate of 81.5% across its four service areas by the Western Australian public.

1.0 INTRODUCTION

A community survey of the Western Australian public was conducted to assess the level of success of programs implemented by the Department of Fisheries.

The objectives of the research were to:

- Assess the level of recall and awareness of the Department of Fisheries informational and promotional activities;
- Assess the understanding and support of the community for the Department of Fisheries management strategies across all programmes (Recreational Fisheries, Commercial Fisheries, Fish and Fish Habitat Protection, and Aquaculture and Pearling); and
- Examine key aspects of community fishing such as satisfaction with the quality of recreational fishing and knowledge of the rules that apply.

2.0 METHOD

The survey was conducted by telephone during May 2007. The fieldwork was conducted by SurveyTalk. Telephone numbers were selected randomly from the white pages. Respondents were males and females older than 17 years and residing in Western Australia. The sample comprised:

- 444 Perth metropolitan interviews; and
- 305 regional interviews.

The same questionnaire (Appendix A) was used for all respondents.

All data was entered into a Microsoft Access database. Analysis was performed using Microsoft Excel. Graphs were produced using SigmaPlot.

The survey response rate of completed interviews compared to refusals was 10%. This was significantly lower than the 2006 Community Survey response rate of 18%.

3.0 RESULTS

3.1 Participation rate in recreational fishing

Recreational fishing in Western Australia includes angling, crabbing, prawning, spearfishing, fishing for lobsters, as well as the collection of shellfish such as abalone or aquarium fish. It is estimated that the overall participation rate for recreational fishing in Western Australia is 445,000 individuals or 25.8% of the total population.

The 2007 participation rate for recreational fishing is calculated as follows:

Metropolitan area:

Sample size for males in Perth metropolitan area	=	212
The participation rate for Perth metropolitan males	=	0.259
Sample size for females in Perth metropolitan area	=	232
The participation rate for Perth metropolitan females	=	0.172

Regional areas (non metropolitan areas):

Sample size for males in regional areas	=	138
The participation rate for regional males	=	0.486
Sample size for females in regional areas	=	167
The participation rate for regional females	=	0.246

Assumption: Persons aged from 0 to 4 years do not participate in recreational fishing.

ABS population figures 2001 (Australian Bureau of Statistics 2002):

Number of males in the Perth metropolitan area	=	656,798
Number of females in the Perth metropolitan area	=	683,195
Number of males in regional areas	=	265,470
Number of females in regional areas	=	245,789
Males aged 0 – 4 in Perth metropolitan area	=	43,879
Females aged 0 – 4 in Perth metropolitan area	=	41,504
Males aged 0 – 4 in regional areas	=	19,197
Females aged 0 – 4 in regional areas	=	18,129

Hence the number of persons participating in recreational fishing is calculated as follows:

$$\begin{aligned} &+ 0.259 (656\,798 - 43\,879) \\ &+ 0.172 (683\,195 - 41\,504) \\ &+ 0.486 (265\,470 - 19\,197) \\ &+ 0.246 (245\,789 - 18\,129) \\ &= 445\,108 \end{aligned}$$

The participation rate is calculated as follows:

$$\begin{aligned} &\text{number of persons participating} / \text{population aged 5 years and over} \\ &= 445\,108 / 1\,728\,543 \\ &= 0.258 \end{aligned}$$

Hence the overall participation rate in recreational fishing for residents of Western Australia was 25.8%.

95% Confidence interval for participation rate and number participating

The 95% confidence interval for the participation rate in recreational fishing is between 22.6% and 28.9%. The 95% confidence interval for the number of persons participating in recreational fishing is between 391 051 and 499 165.

Comparison of participation rate with previous years

The estimated participation rate has varied between 26% in 2007 and 46% in 2006 (Table 1). The variation in the estimates of participation rate is likely due to the different way that the data was collected and the participation rate calculated (Figure 1). The low response rate for this year's survey may have resulted in biased estimates for participation and satisfaction. The survey response rate for 2006/07 was 10 percent, significantly lower than for previous years surveys (28 percent in 2005/06 and 41 percent completed interviews 2004/05). Non-response bias occurs where people that respond to the survey have different opinions and activities to those that do not respond. Consequently the opinions of the people that refused to participate in this year's survey are not determined. The trend in recreational fishing participation has, on average, been constant around 34% of the population.

Table 1 Participation rate for recreational fishing

Source	Year	Participation Rate %	Mean No. of days/trips per year
ABS	1987	27	
Patterson Research	1994	35	9.5 trips
Reark Research	1996	51	
Reark Research	1997	36	19 days
Right Marketing	1998	45	25 days
Research Division	1999	34	18 days
Research Division	2000	35	19 days
Research Division	2001	37	16 days
Research Division	2002	34	18 days
Research Division	2003	35	16 days
Research Division	2004	31	13 days
Asset Research	2005	31	6 days
Asset Research	2006	46	18 days
SurveyTalk	2007	26	17 days

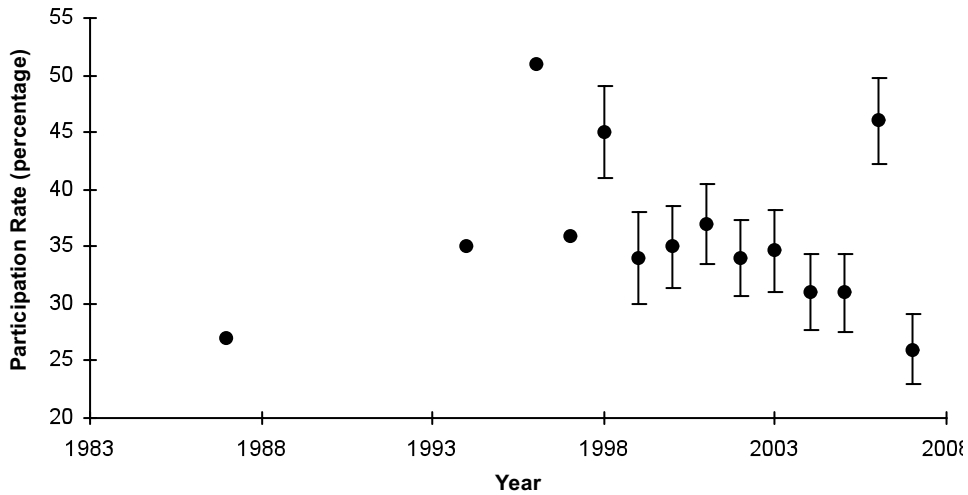


Figure 1 Participation rate for recreational fishing.

Days Fished

The number of days fished by recreational fishers in the last twelve months ranges from one to 209 days. The mean number of days fishing was 17 days and the median seven days. The majority of people in Western Australia fished between one and ten days. However, some fished for considerably more days giving a skewed frequency distribution (Figure 2). The results are often biased due to the inability of respondents to accurately recall past fishing trips over a 12-month period.

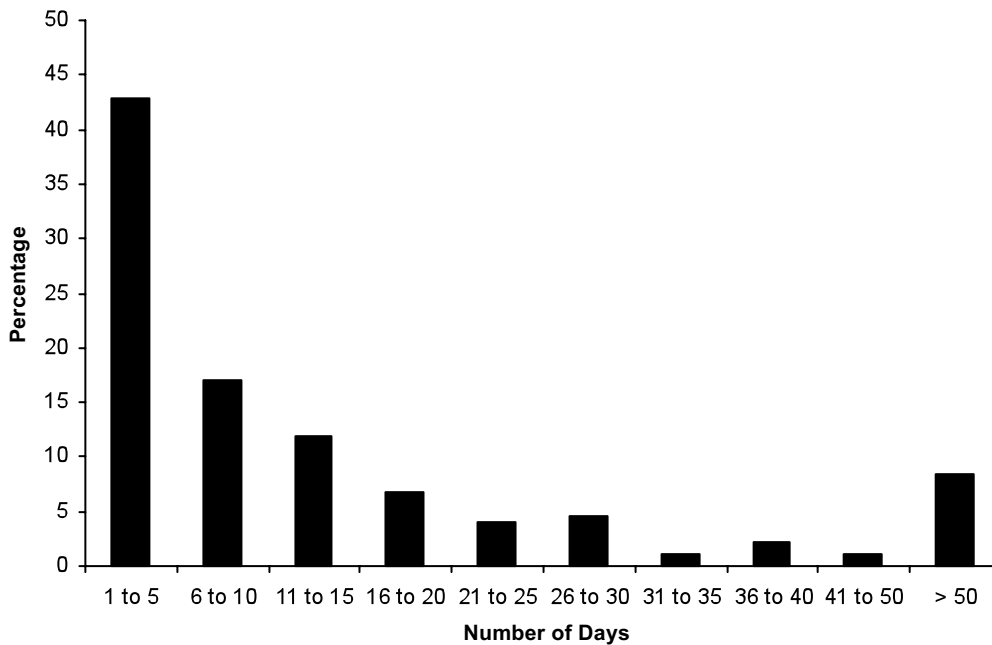


Figure 2 Frequency distribution of number of days fished.

The median number of days fished appears consistent with the years previous to 2004/2005 (Figure 3) however the trend will become apparent in future years when more data is available.

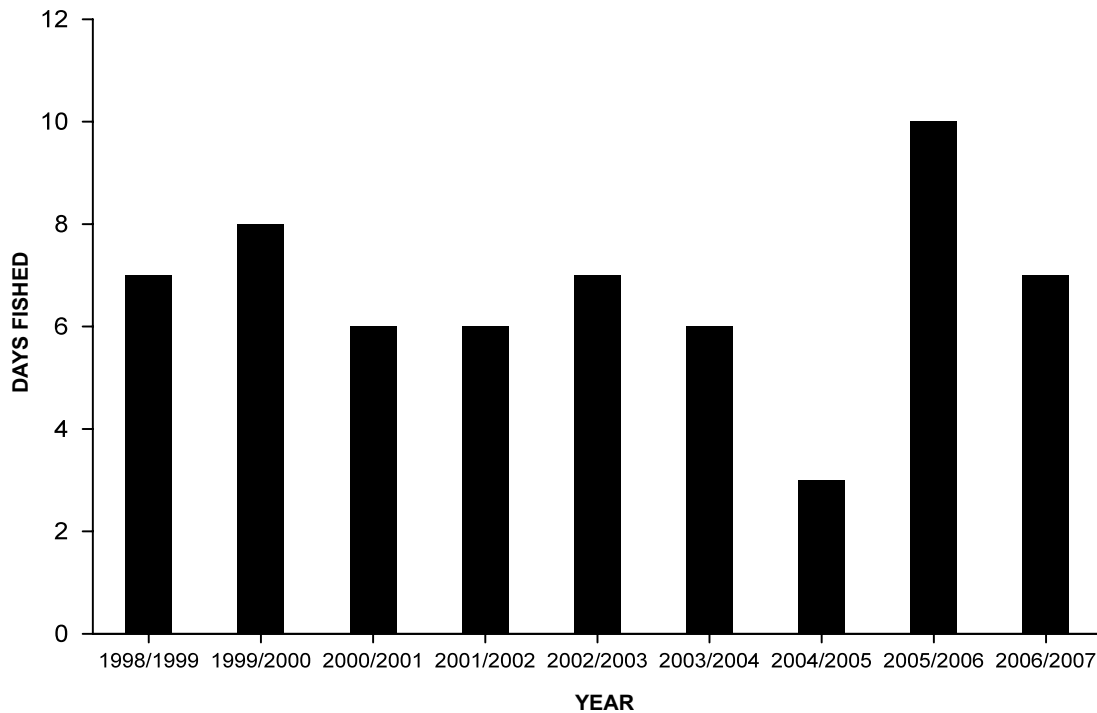


Figure 3 Median number of days fished.

3.2 Satisfaction Index

An overall satisfaction-scoring index has been developed to measure and monitor the satisfaction of recreational fishers in Western Australia.

The satisfaction rate is a combination of *Knowledge*, *Management*, and *Confidence*.

Knowledge = the level of the person's awareness of biology and behaviour of fish and the best way to catch fish.

Management = the level of the person's awareness of rules and regulations.

Confidence = the level of the person's satisfaction with the number, size and variety of fish caught on their last trip and satisfaction with the overall fishing trip.

Satisfaction Index = Mean (*Knowledge* + *Management* + *Confidence*)

= (q9 + q10 (a to c) + q11 (a to e)) / 9

= (0.896 + 0.884 + 0.855 + 0.800 + 0.611 + 0.741 + 0.739 + 0.896 + 0.895)/9

= 0.813

= 81.3%

(Note: can't say/neither responses were excluded from the calculation of the satisfaction index)

Table 2 Satisfaction Index.

	Number of Respondents	Satisfaction %	
Knowledge			
Habitat and behaviour	200	0.800	Knowledgeable
Ways to catch fish	200	0.855	Knowledgeable
Management			
Bag & size limits	199	0.884	Knowledgeable
Awareness of rules & regulations	749	0.896	Knowledgeable
Confidence			
Number of fish caught	203	0.611	Satisfied
Variety of fish caught	197	0.741	Satisfied
Size of fish caught	199	0.739	Satisfied
Environment where fishing	201	0.896	Satisfied
Overall fishing trip	200	0.895	Satisfied
Satisfaction Index		0.813	

The satisfaction index for recreational fishing was 81.3% (Table 2) with a 95% confidence interval between 79.6% and 83.0%. The satisfaction index is significantly higher than the value of 77.0% reported by the 2006 Community Survey (Baharthah, 2006).

3.3 Satisfaction Rate

The satisfaction rating of the broader community is their perceptions of the extent to which the Department of Fisheries is achieving sustainable fisheries management objectives.

$$\begin{aligned}
 \text{Satisfaction Rate} &= \text{Mean (Managing commercial fishing} \\
 &+ \text{Managing recreational fishing} \\
 &+ \text{Protection of fish habitat} \\
 &+ \text{Managing aquaculture and pearling} \\
 &+ \text{Fair allocation of resources between groups)} \\
 &= (q4b + q5b + q6b + q7b + q8) / 5 \\
 &= (0.811 + 0.856 + 0.774 + 0.820 + 0.782) / 5 \\
 &= 0.809 \\
 &= 80.9\%
 \end{aligned}$$

(Note: can't say/neither responses were excluded from the calculation of the satisfaction rate)

The following results are from the 54% of respondents who knew the Department of Fisheries was responsible for one or more of the four sub-programs.

Table 3 Satisfaction Rate.

	Number of respondents	Satisfaction %
Commercial Fisheries	328	0.811
Recreational Fishing	312	0.856
Fish Habitat Protection	292	0.774
Aquaculture & Pearling	206	0.820
Allocation of Resources	303	0.782
Overall Satisfaction Rate		0.809
Satisfaction Rate across four service areas		0.815

The Department of Fisheries was given an overall satisfaction rate of 80.9% by the Western Australian public (Table 3). The 95% confidence interval for the satisfaction rate is between 78.8% and 82.9%.

The Department of Fisheries was given a satisfaction rate of 81.5% across its four service areas of commercial fishing, recreational fishing, fish and fish habitat protection, and aquaculture and pearling. The confidence interval is between 79.2% and 83.8%.

The satisfaction rate is significantly higher than the value of 66.1 percent for 2005/2006 but not significantly different to the value of 83.7 percent for 2004/2005. The trend in satisfaction will become apparent in future years. The relevance of this indicator for external reporting purposes is currently being reviewed.

Overall, in terms of recreational fishing, commercial fishing, aquaculture and fish habitat protection, 81.5% of the community rated the Department of Fisheries' performance as good.

3.4 General fishing background

Question 1

In question 1, respondents were asked, "Thinking back over the last twelve months, have you done any recreational fishing, including angling, crabbing, prawning, spearfishing, collecting abalone or aquarium fish?"

Male respondents in regional areas were most likely to participate in recreational fishing during the last twelve months (Table 4).

Table 4 Participation in recreational fishing.

	Male	Female
Perth metropolitan area	0.259	0.172
Regional areas	0.486	0.246

3.5 Fishing involvement during the last twelve months

Question 2

In question 2, respondents were asked: "In the last 12 months, in what areas have you been fishing? How many days did you go fishing?"

Around 81% of fishers went fishing in the West Coast bioregion, which includes the Perth metropolitan area (Table 5).

Table 5 Fishing effort in Bioregions.

Bioregion	Mean Days Fished	% Participating	Effort (Days)	% Effort
South Coast – Marine	8	37	1,324,000	12
Southern Inland - Freshwater	5	10	221,000	2
West Coast (inc. PMA)	24	81	8,701,000	77
Gascoyne	13	9	553,000	5
Pilbara / Kimberley – Marine	10	8	351,000	3
Pilbara / Kimberley – Freshwater	6	3	61,000	1
Total			11,211,000	100

The Perth Metropolitan area attracted 59% of fishers (Table 6).

Table 6 Fishing effort in West Coast.

Area	Mean Days Fished	% Participating	Effort (Days)	% Effort
Perth Metropolitan Area (PMA) only	36	33	5,201,000	46
West Coast other than PMA only	12	28	1,445,000	13
Both PMA and West Coast	23	20	2,055,000	18
Total		81	8,701,000	77

It is likely that the mean number of days fished has been overstated due to the inability of respondents to accurately recall past fishing trips over a 12-month period.

The fishing effort in days will also be overstated since it is calculated from the mean number of days fished. The percentage effort column provides a more meaningful breakdown of recreational fishing effort by bioregion.

All Areas of the State

The number of days fished by recreational fishers in the last twelve months ranges from one to 209 days. The mean number of days fished was 17 days and the median was seven days. Around 43% of fishers went fishing between one and five days and 17% fished between six and ten days. However, some fished for considerably more days giving a skewed distribution.

3.6 Viewing fish and the marine environment

Question 3

In question 3, respondents were asked: “Also, thinking back over the last twelve months, have you gone snorkelling or diving just to look at fish and the marine environment rather than to capture fish or other animals?”

Around 28.6% of respondents went snorkelling or diving just to view fish and the marine environment (Table 7).

Table 7 Viewing fish and the marine environment.

	Count	%
Yes	214	28.6
No	534	71.3
Can't Say	1	0.1
Total	749	100.0

3.7 Awareness and impression of the Department of Fisheries

Question 4a

In question 4a, respondents were asked: “Who, if anyone, do you think is responsible for managing commercial fishing in Western Australia?”

The Department of Fisheries was recognised by 55.0% as responsible for managing commercial fishing in Western Australia and 21.5% of respondents thought that the state government was responsible (Table 8).

Multiple responses were accepted.

Table 8 Organisations responsible for commercial fishing.

	Count	%
Department of Fisheries	412	55.0
Don't Know	182	24.3
State Government	161	21.5
Other	21	2.8
Local council/shire	14	1.9
CALM	10	1.3
Department of Agriculture	6	0.8
Department for Planning and Infrastructure	3	0.4
Department of Water	3	0.4

Over the past year there has been a slight increase in the proportion of respondents who said that the Department of Fisheries was responsible for the management of commercial fisheries (Figure 4).

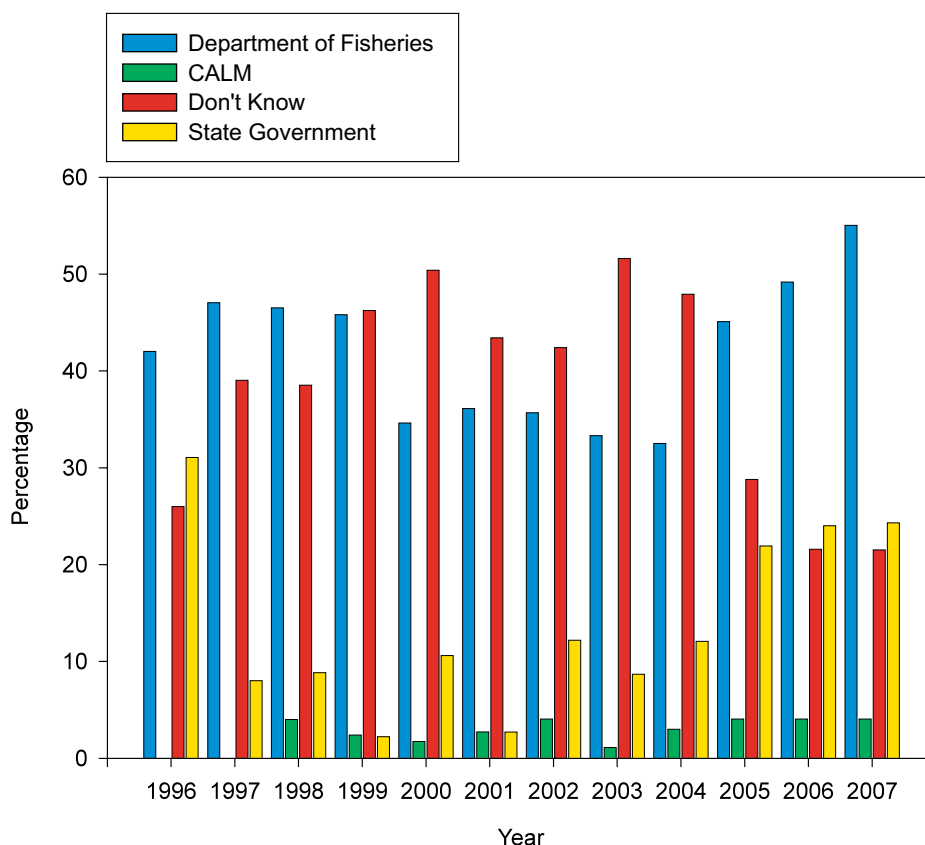


Figure 4 Organisations responsible for commercial fishing.

Question 4b

“There are a number of rules and regulations in place, which limits catch size, allowable fishing days and designated areas to fish.”

In question 4b, respondents were asked: “How would you rate the Department of Fisheries in their management of commercial fisheries?”

Of the respondents that knew that the Department of Fisheries was responsible for the management of commercial fisheries, 64.6% gave a good or very good rating (Table 9).

Table 9 Management of commercial fisheries.

	Count	%
Very Good	67	16.3
Good	199	48.3
Poor	48	11.6
Very Poor	14	3.4
Neither	7	1.7
Can't Say	77	18.7
Total	412	100.0

Over the last year, there was a significant increase ($p < 0.05$) in the proportion of very good responses in the rating of the management of commercial fisheries (Figure 5).

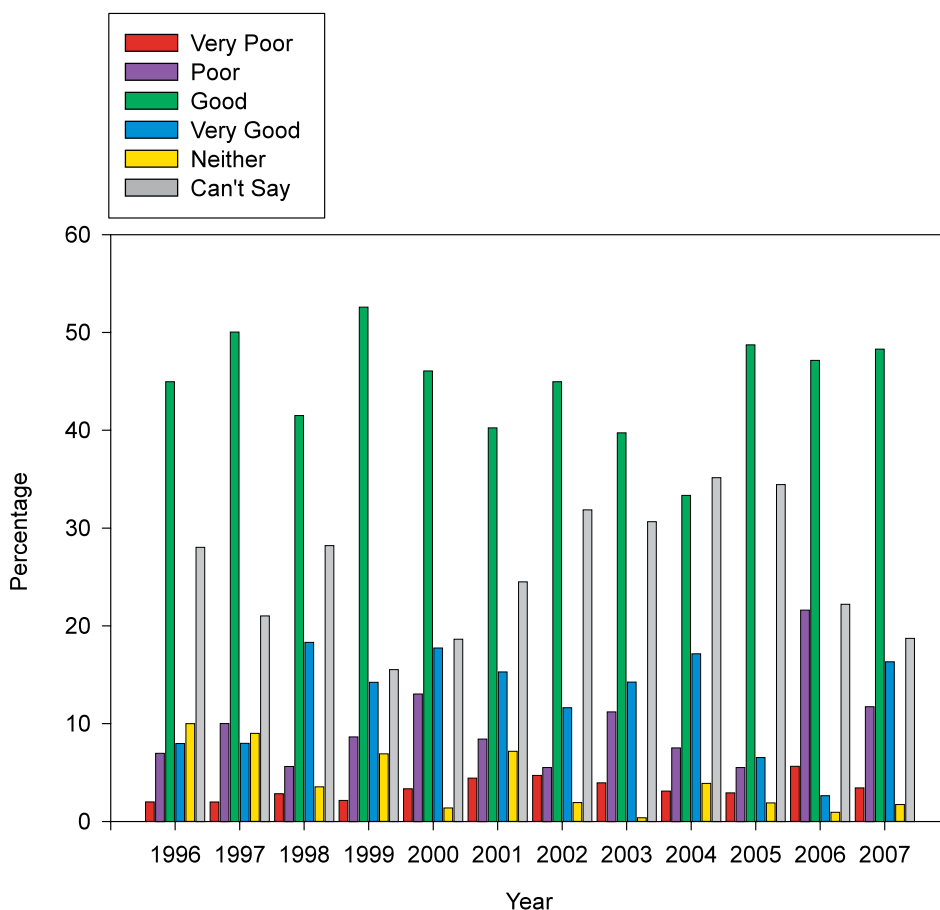


Figure 5 Management of commercial fisheries.

Question 5a

In question 5a, respondents were asked: “Who, if anyone, is responsible for managing recreational fishing in Western Australia?”

The Department of Fisheries was recognised by 48.7% of respondents as responsible for managing recreational fishing in Western Australia and 18.7% of respondents thought that the state government was responsible (Table 10).

Multiple responses were accepted.

Table 10 Organisations responsible for recreational fishing.

	Count	%
Department of Fisheries	365	48.7
Don't Know	218	29.1
State Government	140	18.7
Other	30	4.0
Local council/shire	19	2.5
CALM	8	1.1
DPI	5	0.7
Department of Agriculture	4	0.5
Department of Water	3	0.4

Over the past year there has been an increase in the percentage of persons that did not know who was responsible for managing recreational fishing (Figure 6).

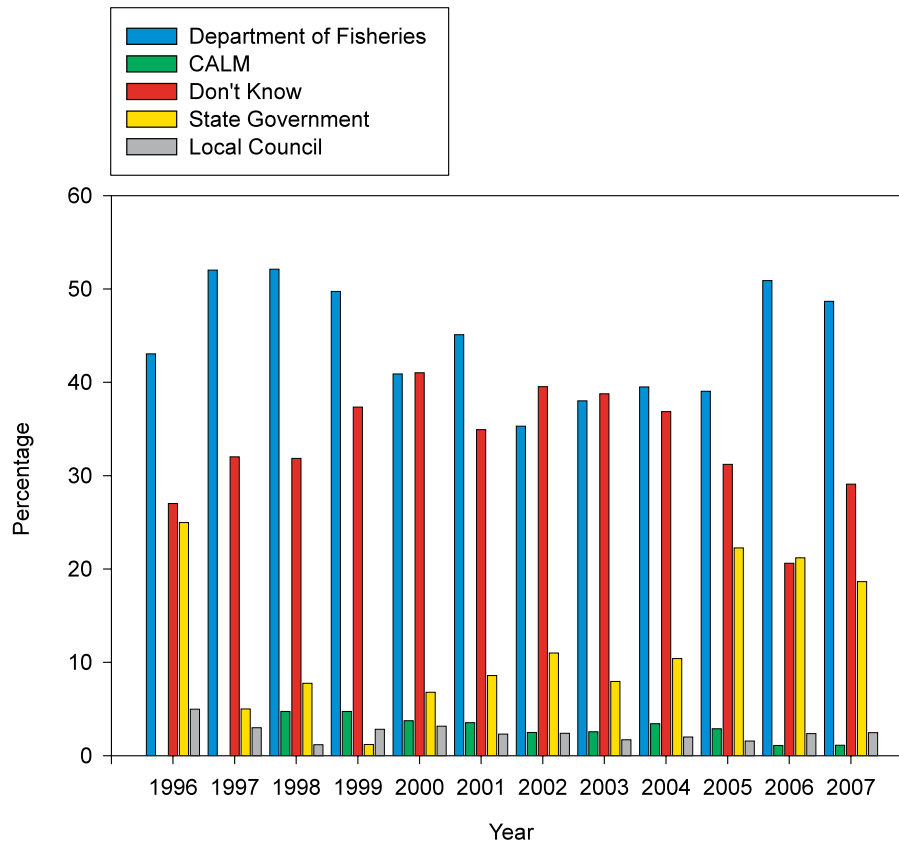


Figure 6 Organisations responsible for recreational fishing.

Question 5b

In question 5b, respondents were asked: “How would you rate the Department of Fisheries in their management of recreational fisheries?”

Of the respondents that knew that the Department of Fisheries was responsible for recreational fishing, 73.2% gave a good or very good rating (Table 11). Around 12.4% of respondents had a poor or very poor opinion of the Department of Fisheries’ performance.

Table 11 Management of recreational fishing.

	Count	%
Very Good	55	15.1
Good	212	58.1
Poor	36	9.9
Very Poor	9	2.5
Neither	5	1.3
Can't Say	48	13.1
Total	365	100.0

Over the last year there has been a significant decrease ($p < 0.05$) in the percentage of respondents that gave the Department of Fisheries a poor rating and an increase in the percentage that gave a very good rating (Figure 7).

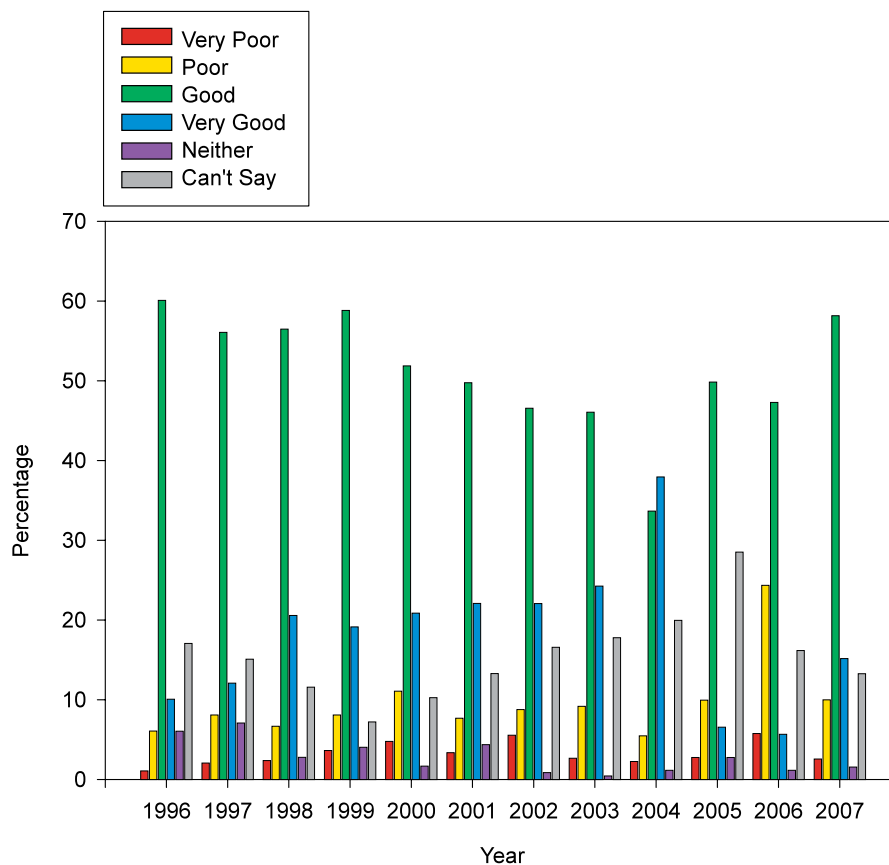


Figure 7 Management of recreational fishing.

Question 6a

In question 6a, respondents were asked: “When you think about the fish habitat in oceans and waterways in Western Australia, that is, where fish live and breed, who do you think, if anyone, is responsible for protecting the fish habitat?”

The Department of Fisheries was recognised by 45.3% of respondents as responsible for protecting the fish habitat (Table 12). A large number of respondents (22.8%) thought that the state government was responsible.

Multiple responses were accepted.

Table 12 Organisations responsible for fish habitat protection.

	Count	%
Department of Fisheries	339	45.3
State Government	171	22.8
Don't Know	164	21.9
CALM	77	10.3
General Public	43	5.7
Local council/shire	40	5.3
Department of Water	27	3.6
Other	25	3.3
Department of Agriculture	22	2.9
DPI	18	2.4

Over the last year there has been a significant change ($p < 0.05$) in the responses about who is responsible for protecting fish habitat protection. The percentage of respondents who said CALM decreased and local council responses increased (Figure 8).

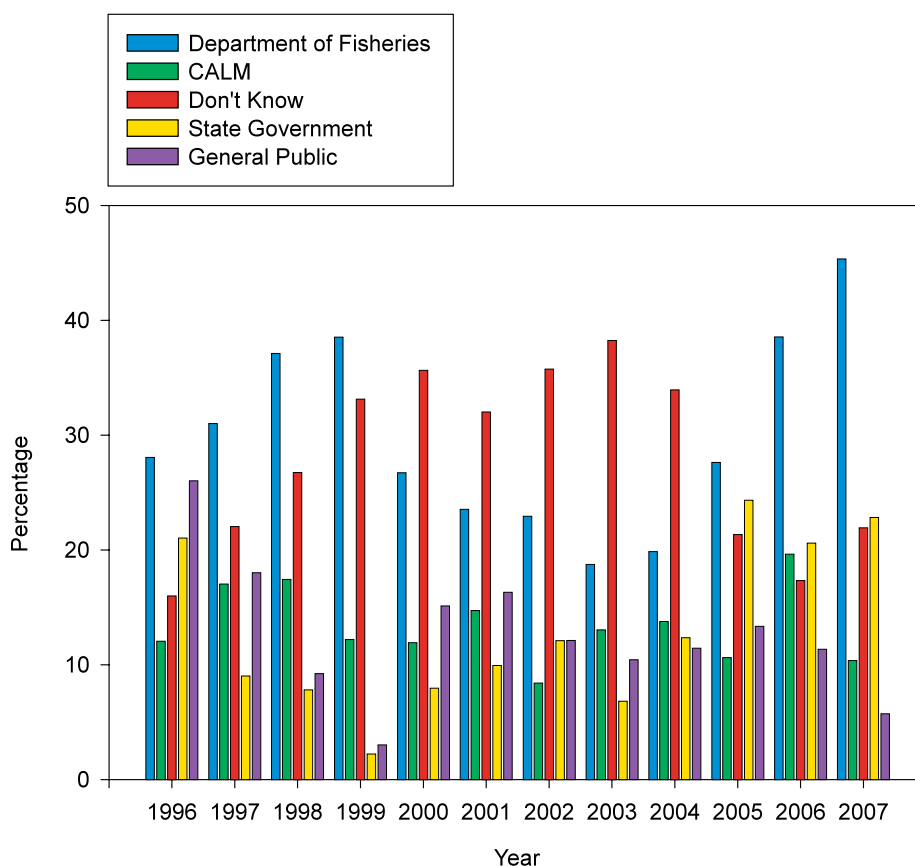


Figure 8 Organisations responsible for fish habitat protection.

Question 6b

In question 6b, respondents were asked: “How would you rate the Department of Fisheries in their conservation and protection of the fish habitat?”

Of the respondents that knew that the Department of Fisheries was responsible for conservation and protection of fish habitat, 66.7% gave a good or very good rating (Table 13). A smaller number of respondents (19.4%) had a poor or very poor opinion of the Department of Fisheries’ performance.

Table 13 Conservation and protection of fish habitat.

	Count	%
Very Good	39	11.5
Good	187	55.2
Poor	53	15.6
Very Poor	13	3.8
Neither	5	1.5
Can't Say	42	12.4
Total	339	100.0

There has been a significant change ($p < 0.05$) in the rating of the conservation and protection of fish habitat by Department of Fisheries over the past year (Figure 9). The proportion of very good responses has increased.

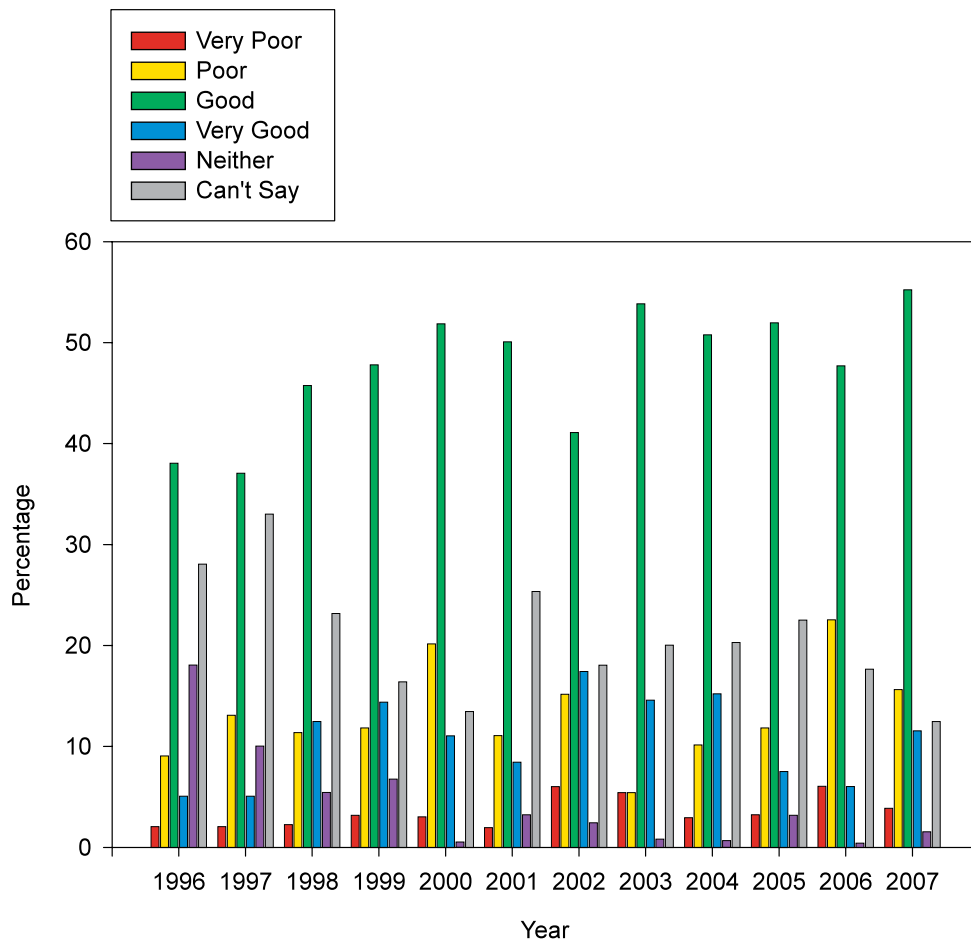


Figure 9 Conservation and protection of fish habitat.

Question 7a

In question 7a, respondents were asked: “When you think about aquaculture, pearling, or fish farming in Western Australia, who do you think, if anyone, is responsible for managing aquaculture?”

Around 37% of respondents recognised that the Department of Fisheries was responsible for the management of aquaculture and pearling (Table 14). A high proportion of respondents (35.2%) did not know who was responsible.

Multiple responses were accepted.

Table 14 Organisations responsible for managing aquaculture.

	Count	%
Department of Fisheries	275	36.8
Don't Know	264	35.2
State Government	133	17.8
Department of Agriculture	44	5.9
CALM	30	4.0
Local council/shire	22	2.9
Private Industry	14	1.9
Other	9	1.2
Department of Water	6	0.8
DPI	5	0.7

Over the last year there has been a significant change ($p < 0.05$) in the responses about who is responsible for managing aquaculture and pearling. The percentage of local council responses increased and the percentage of state government responses decreased (Figure 10).

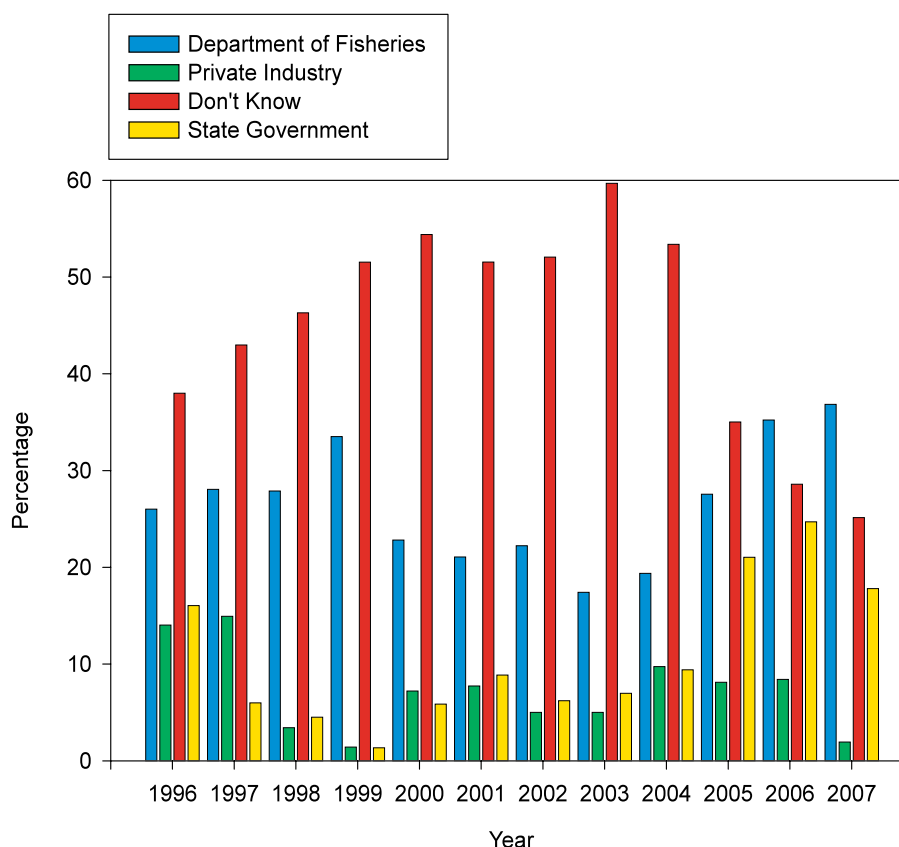


Figure 10 Organisations responsible for managing aquaculture.

Question 7b

“The Department of Fisheries provides information such as advising on technology, identifying suitable sites and conducting and supporting research.”

In question 7b, respondents were asked: “How would you rate the Department of Fisheries in their management and development of aquaculture and pearling?”

Of the respondents that knew that the Department of Fisheries was responsible for the management of aquaculture, 61.3% felt that the Department of Fisheries was doing a good or very good job (Table 15). A smaller percentage (13.4%) had a poor or very poor opinion of the Department of Fisheries' performance.

Table 15 Management and development of aquaculture.

	Count	%
Very Good	33	12.0
Good	136	49.3
Poor	31	11.2
Very Poor	6	2.2
Neither	1	0.3
Don't Know	69	25.0
Total	276	100.0

There has been a significant change ($p < 0.05$) in the rating of the management and development of aquaculture and pearling by Department of Fisheries over the past year (Figure 11). There has been a significant increase in very good responses and a significant decrease in poor responses.

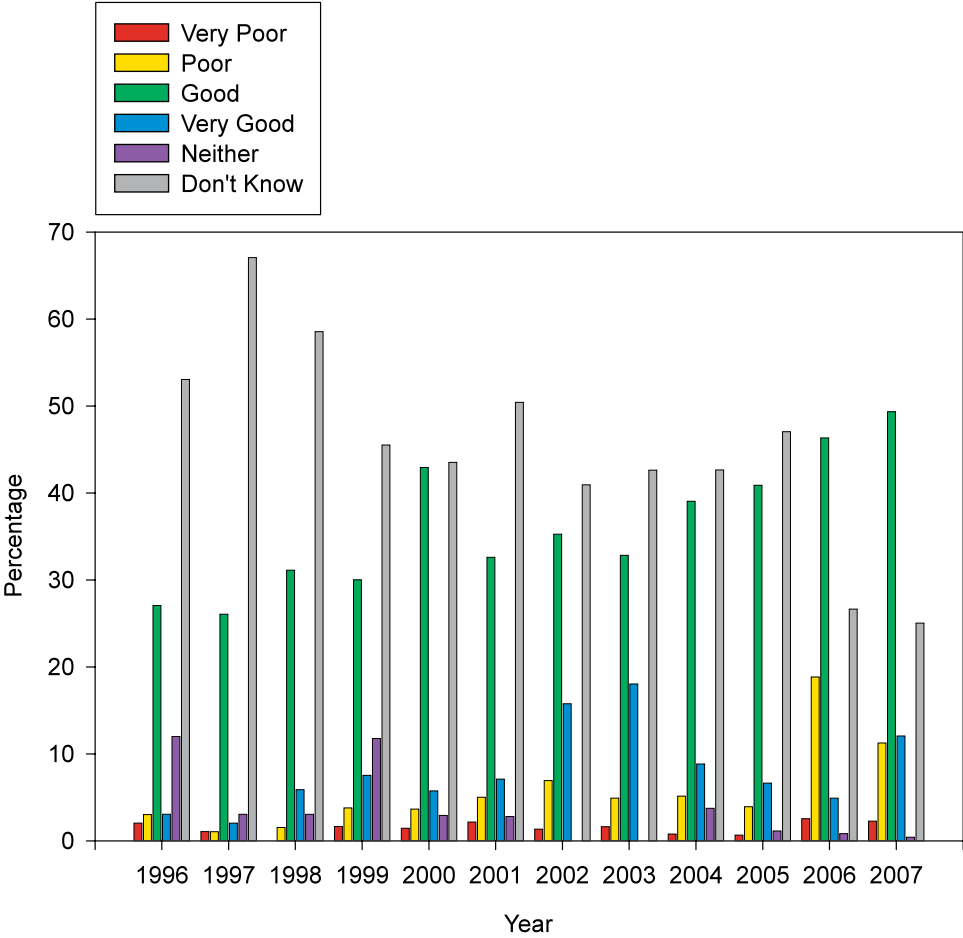


Figure 11 Management and development of aquaculture.

3.8 Allocation of fish resources among the fishing sectors

Question 8

“The Department of Fisheries is responsible for recreational fishing, commercial fishing, aquaculture and protecting the fish habitat.”

In question 8, respondents were asked: “In your opinion, do you think the Department of Fisheries manages the share of fish resources fairly between these sectors?”

A high proportion of respondents (58.1%) thought that the Department of Fisheries allocates resources fairly between its sectors (Table 16). A smaller number of respondents (16.2%) felt that there was not a fair allocation of fish resources.

Table 16 Opinion on allocation of resources.

	Count	%
Yes	237	58.1
No	66	16.2
Can't Say	105	25.7
Total	408	100.0

Over the last year there has been a significant decrease ($p < 0.05$) in the proportion of respondents who thought that the Department of Fisheries does not allocate resources fairly between sectors (Figure 12).

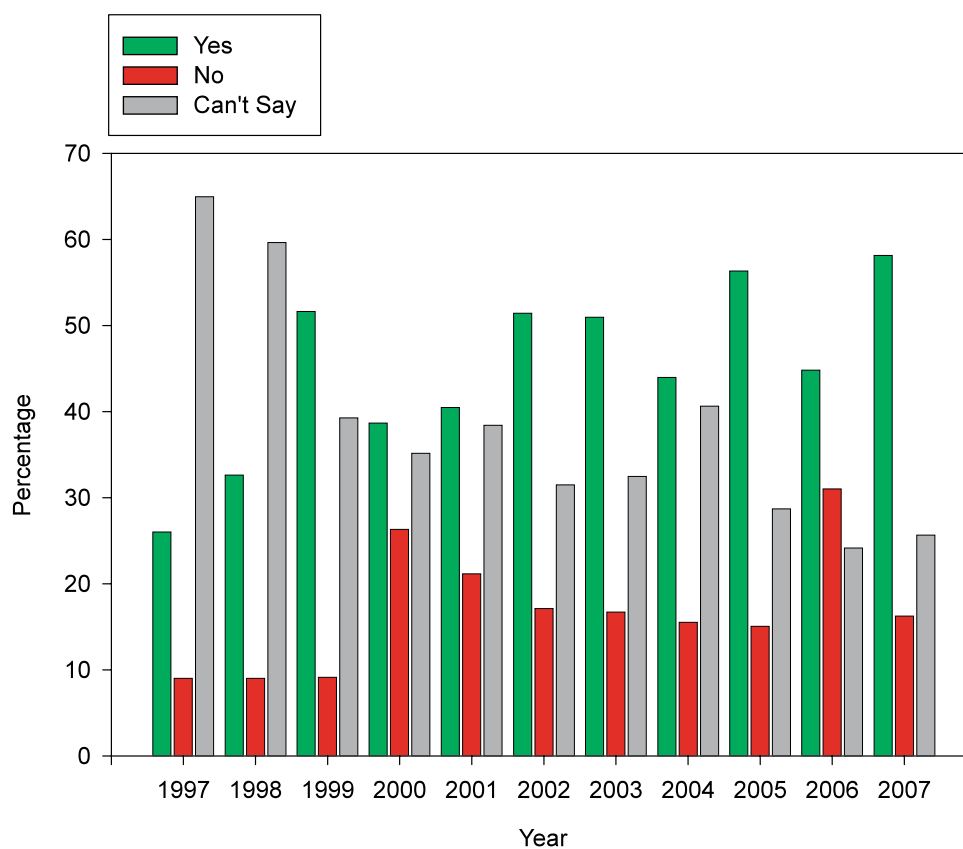


Figure 12 Opinion on allocation of resources.

3.9 Awareness and opinion of fishing regulations

Question 9

In question 9, respondents were asked: “Before today, were you aware that there are recreational fishing rules that apply when fishing in Western Australian waters?”

The majority of respondents (89.6%) were aware that there are recreational fishing rules that apply when fishing in Western Australia (Table 17).

Table 17 Knowledge of recreational fishing rules.

	Count	%
Yes	671	89.6
No	78	10.4
Total	749	100.0

There has been a significant increase ($p < 0.05$) in the proportion of respondents that were not aware that recreational fishing rules apply in Western Australia (Figure 13).

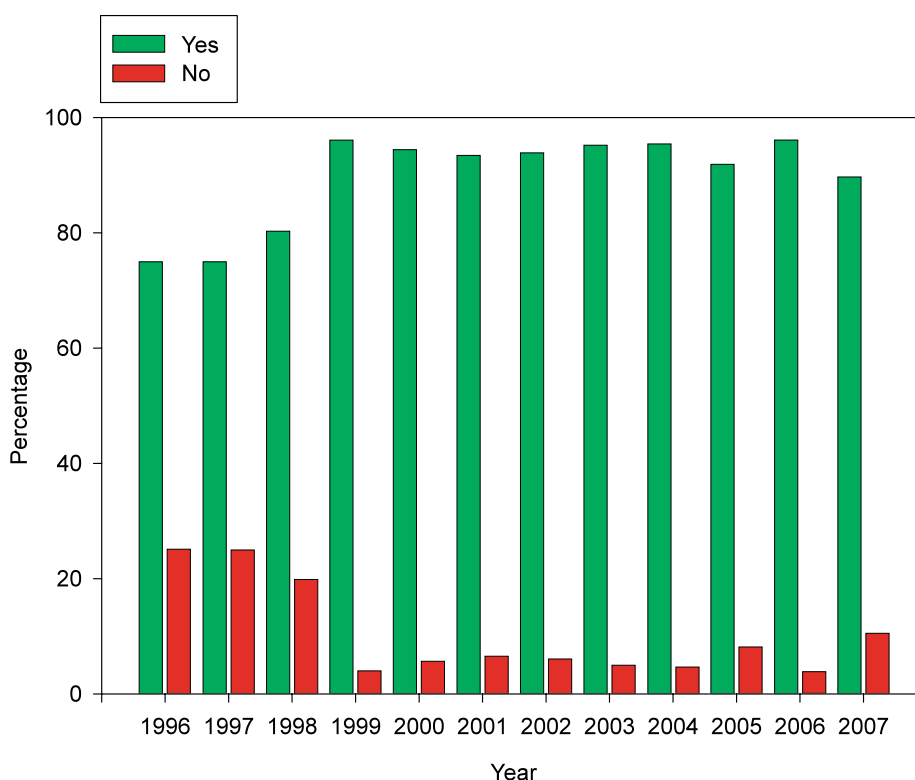


Figure 13 Knowledge of recreational fishing rules.

3.10 Knowledge of recreational fishing regulations

Question 10a

In question 10a, respondents were asked: “Thinking back to the last time you went fishing, how knowledgeable were you of the bag and size limits of fish you were planning to catch?”

Most fishers responded that they were fairly knowledgeable or very knowledgeable (86.7%) about the bag and size limits of the fish they were planning to catch (Table 18).

Table 18 Knowledge of bag and size limits.

	Count	%
Very Knowledgeable	113	55.7
Fairly Knowledgeable	63	31.0
Not Very Knowledgeable	23	11.3
Can't Say	4	2.0
Total	203	100.0

Over the past year, there was a significant decrease ($p < 0.05$) in the proportion of respondents who were not very knowledgeable regarding the bag and size limits of the fish they were planning to catch and a corresponding increase in the proportion of very knowledgeable responses (Figure 14).

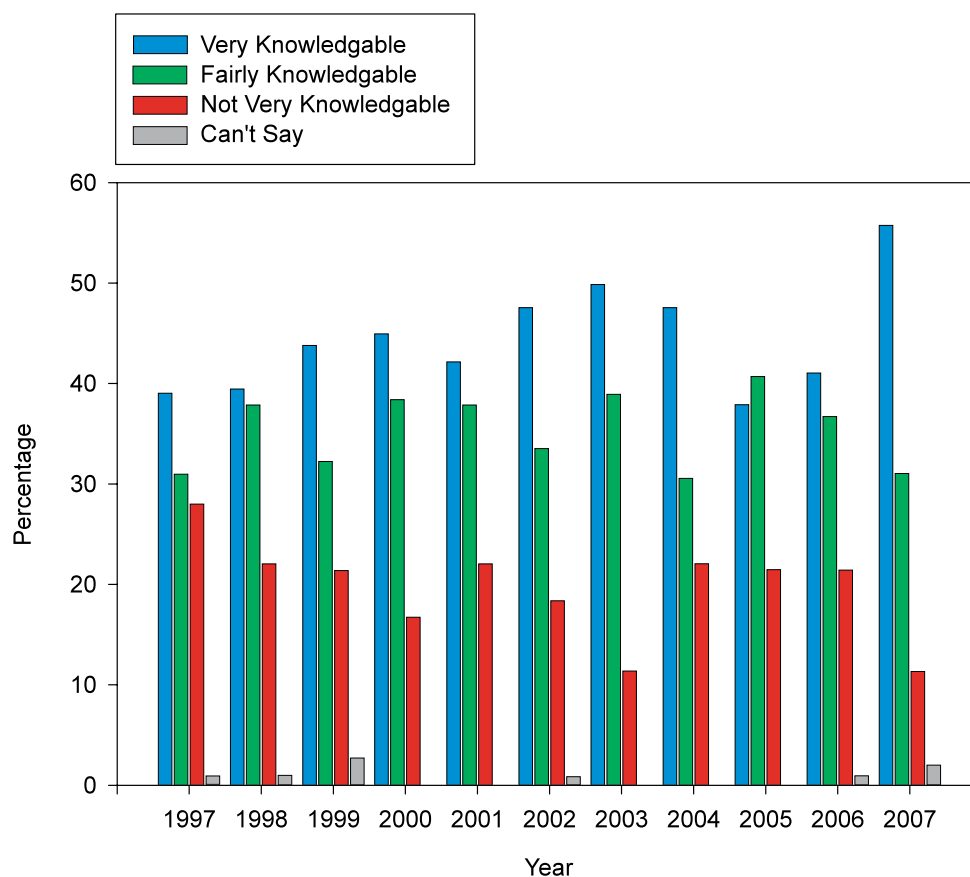


Figure 14 Knowledge of bag and size limits.

Question 10b

In question 10b, respondents were asked: “How knowledgeable were you on the best ways to catch the fish you were after (e.g. method, bait, hooks)?”

Most fishers responded that they were very knowledgeable (48.8%) or fairly knowledgeable (35.4%) about the best ways to catch the fish they were after (Table 19).

Table 19 Knowledge of best ways to catch fish.

	Count	%
Very Knowledgeable	99	48.8
Fairly Knowledgeable	72	35.4
Not Very Knowledgeable	29	14.3
Can't Say	3	1.5
Total	203	100.0

Over the past year, there was a significant decrease ($p < 0.05$) in the proportion of respondents who were not very knowledgeable regarding the best ways to catch fish and a corresponding increase in the proportion of very knowledgeable responses (Figure 15).

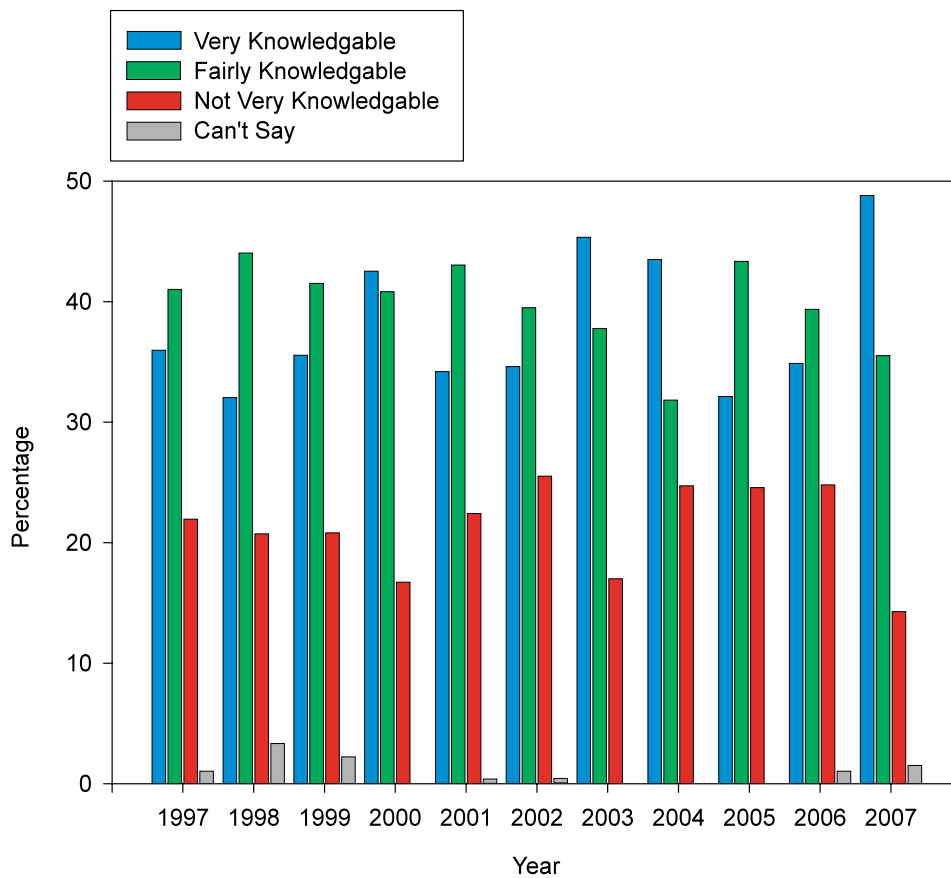


Figure 15 Knowledge of best ways to catch fish.

Question 10c

In question 10c, respondents were asked: “How knowledgeable were you on the habits of the fish you were after (e.g. where found, when feeding)?”

A high proportion of fishers responded that they were fairly knowledgeable (42.9%) about the habits of the fish they were after (Table 20).

Table 20 Knowledge of habits and behaviour of fish.

	Count	%
Very Knowledgeable	73	36.0
Fairly Knowledgeable	87	42.9
Not Very Knowledgeable	40	19.7
Can't Say	3	1.4
Total	203	100.0

Over the past year, there was no significant change in the knowledge of fishers regarding the habits and behaviour of the fish they were after (Figure 16).

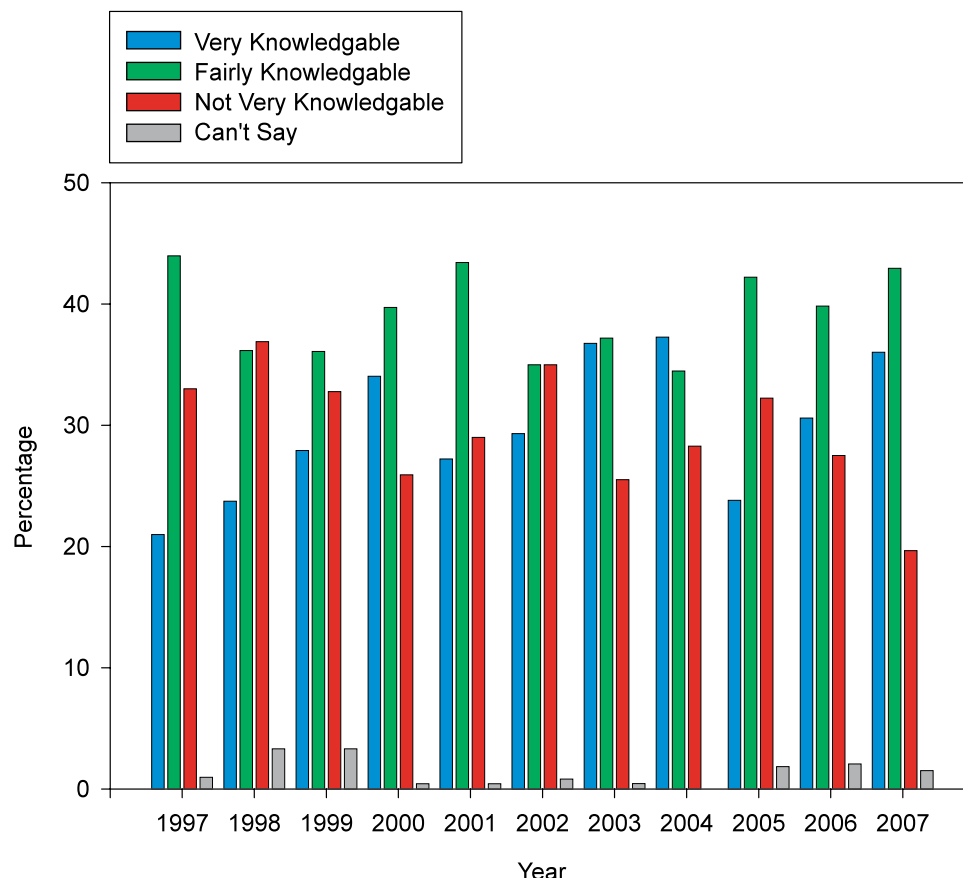


Figure 16 Knowledge of habits and behaviour of fish.

3.11 Satisfaction with most recent fishing trip

Question 11a

In question 11a, respondents were asked: “Thinking back to the last time you went fishing, how satisfied were you with the number of fish you caught?”

A high proportion of respondents (61.1%) were satisfied or very satisfied with the number of fish caught in their last fishing trip (Table 21).

Table 21 Satisfaction with the number of fish caught.

	Count	%
Very Satisfied	41	20.2
Satisfied	83	40.9
Dissatisfied	51	25.1
Very Dissatisfied	21	10.3
Neither	3	1.5
Can't Say	4	2.0
Total	203	100.0

Over the past year there has been no significant change ($p < 0.05$) in the responses with regard to the number of fish caught (Figure 17).

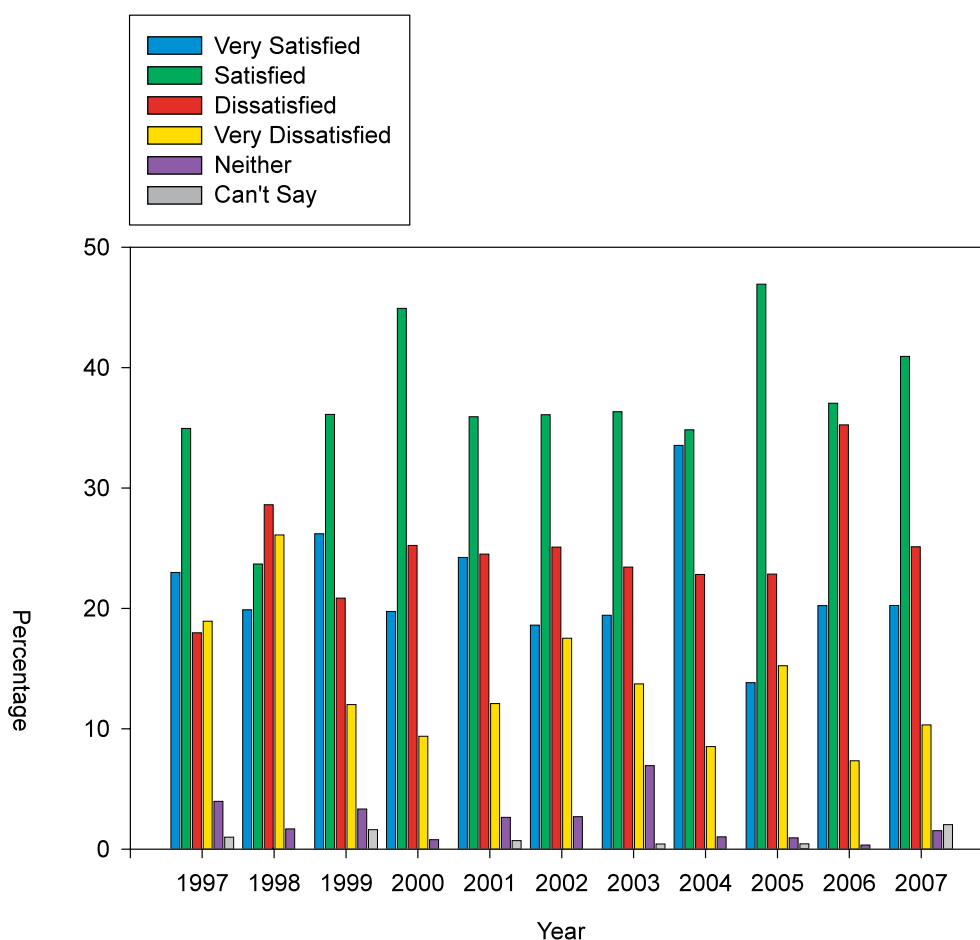


Figure 17 Satisfaction with the number of fish caught.

Question 11b

In question 11b, respondents were asked: “How satisfied were you with the variety of fish caught?”

Most fishers (71.9%) were satisfied or very satisfied with the variety of fish caught (Table 22).

Table 22 Satisfaction with the variety of fish caught.

	Count	%
Very Satisfied	36	17.7
Satisfied	110	54.2
Dissatisfied	33	16.2
Very Dissatisfied	18	8.9
Neither	2	1.0
Can't Say	4	2.0
Total	203	100.0

Over the past year, there was a significant decrease ($p < 0.05$) in the proportion of dissatisfied responses regarding the variety of the fish caught (Figure 18).

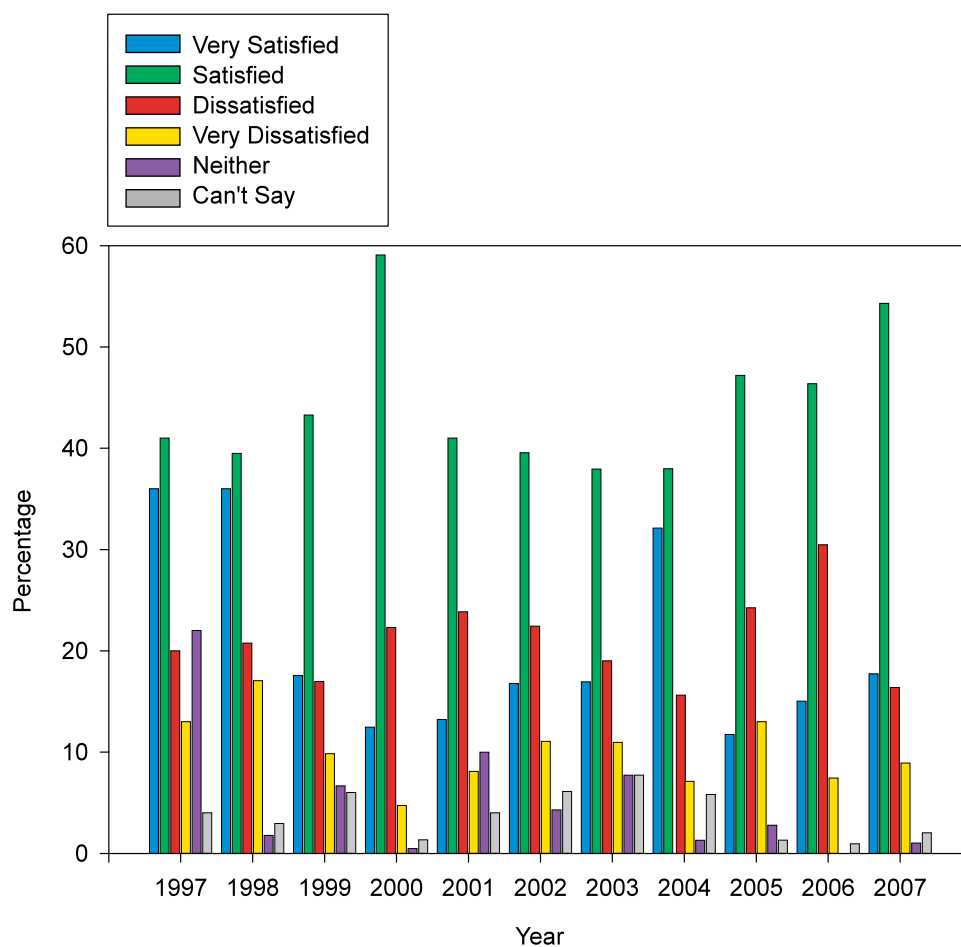


Figure 18 Satisfaction with the variety of fish caught.

Question 11c

In question 11c, respondents were asked: “How satisfied were you with the size of the fish caught?”

Most fishers (72.4%) were satisfied or very satisfied with the size of fish caught (Table 23).

Table 23 Satisfaction with the size of fish caught.

	Count	%
Very Satisfied	44	21.7
Satisfied	103	50.7
Dissatisfied	40	19.7
Very Dissatisfied	12	5.9
Neither	2	1.0
Can't Say	2	1.0
Total	203	100.0

Over the past year there has been no significant change in the satisfaction with the size of fish caught (Figure 19).

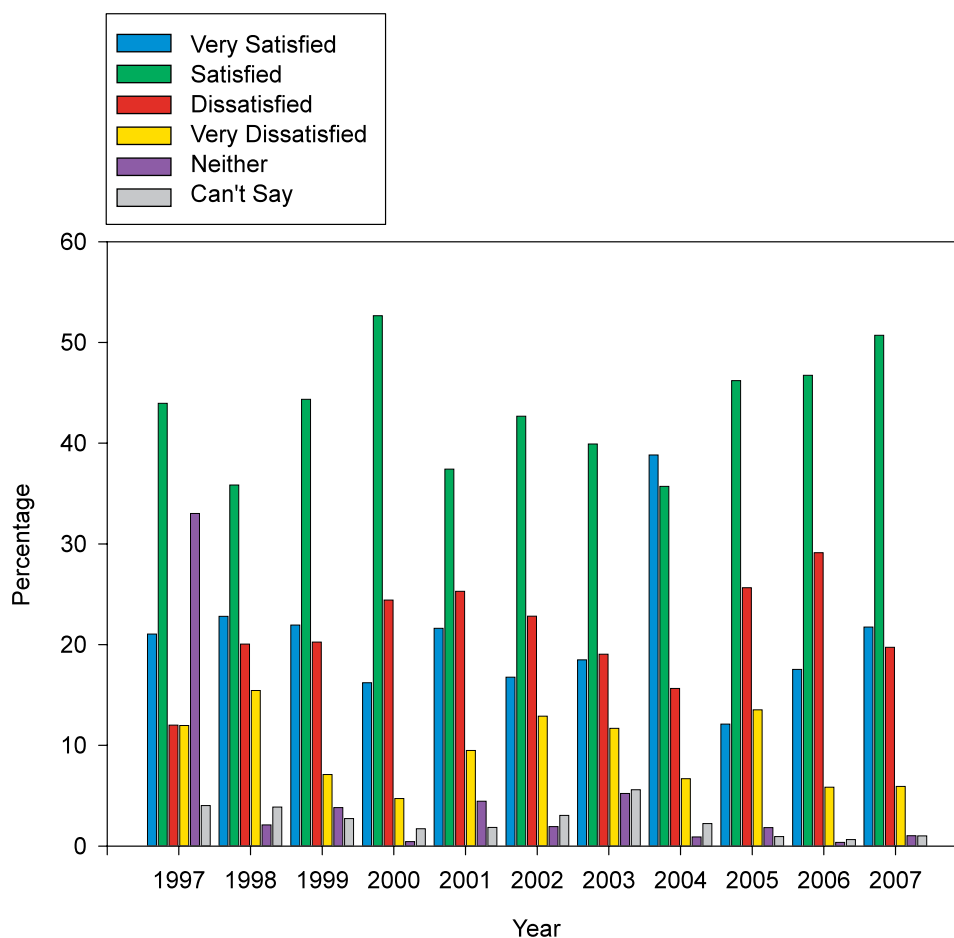


Figure 19 Satisfaction with the size of fish caught.

Question 11d

In question 11d, respondents were asked: “How satisfied were you with the environment where you were fishing?”

Most fishers (88.7%) were satisfied or very satisfied with the environment where they were fishing (Table 24).

Table 24 Satisfaction with the environment where fishing.

	Count	%
Very Satisfied	81	39.9
Satisfied	99	48.8
Dissatisfied	13	6.4
Very Dissatisfied	8	3.9
Can't Say	2	1.0
Total	203	100.0

Over the past year, there was no significant change in the satisfaction with the fishing environment (Figure 20).

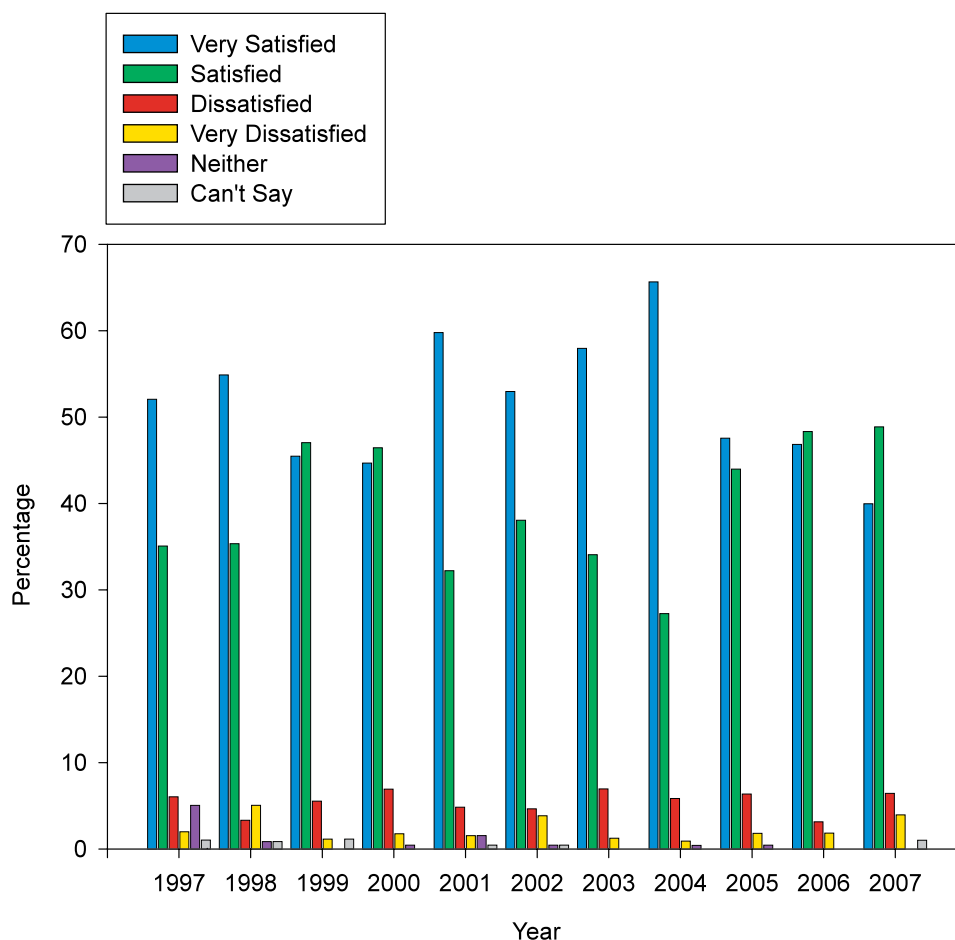


Figure 20 Satisfaction with the environment where fishing.

Question 11e

In question 11e, respondents were asked: “Thinking of the trip overall, how satisfied were you with that fishing trip?”

Most fishers (88.2%) were satisfied or very satisfied with the overall fishing trip (Table 25).

Table 25 Satisfaction with the overall trip.

	Count	%
Very Satisfied	86	42.4
Satisfied	93	45.8
Dissatisfied	19	9.4
Very Dissatisfied	2	1.0
Can't Say	3	1.4
Total	203	100.0

Over the past year, there was no significant change in the satisfaction with the overall trip (Figure 21).

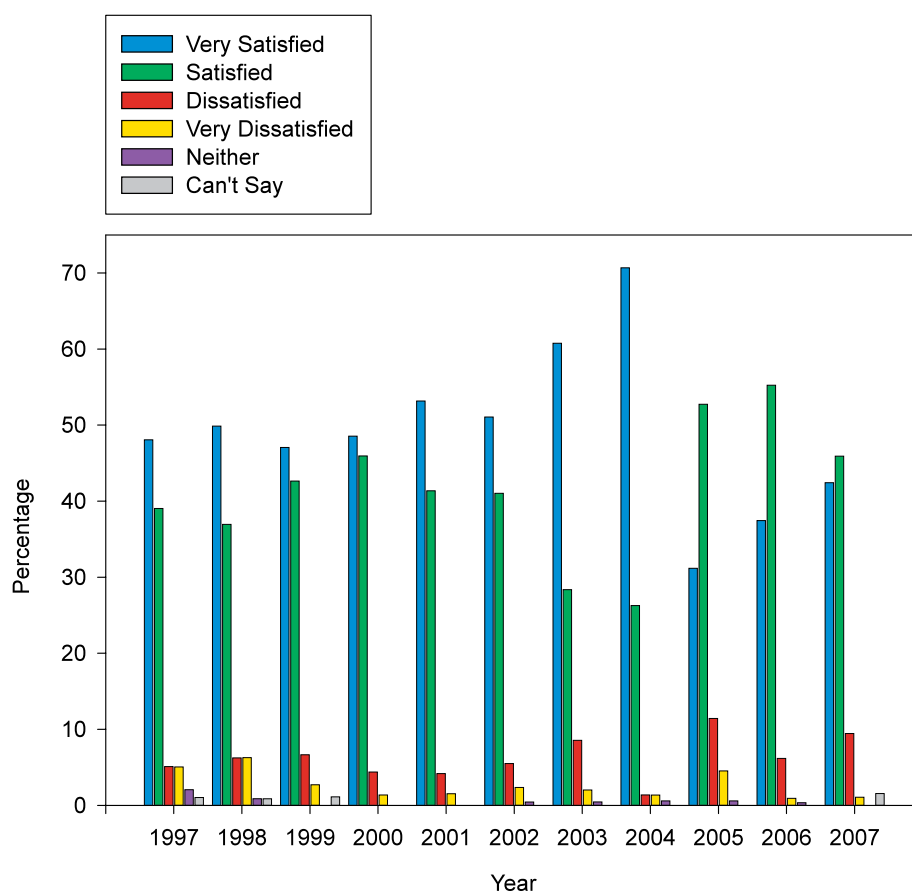


Figure 21 Satisfaction with the overall trip.

3.12 Information about recreational fishing

Question 12a

In question 12a, respondents were asked: “Thinking about fishing regulations and other information to do with recreational fishing in W.A.... where do you find out about things to do with fishing?”

Around 39.9% of fishers used Department of Fisheries brochures and publications to find out about fishing regulations and other information to do with recreational fishing in Western Australia (Table 26).

Multiple responses were accepted.

Table 26 Information about fishing.

	Count	%
Department of Fisheries brochures / publications	81	39.9
Department of Fisheries internet web site	30	14.8
Newspapers	19	9.4
Other fishers	17	8.4
Department of Fisheries shows / displays	16	7.9
Tackle shops	14	6.9
Fishing magazines	11	5.4
None	11	5.4
Department of Fisheries Officers / Researchers / Volunteer Fisheries Liaison Officers	10	4.9
Other	8	3.9
Other fishing web sites	7	3.4
Clubs / associations	5	2.5
Television	3	1.5
Radio	2	1.0

Some detail was collected about the ways fishers gain their information. Unfortunately, this information was very sparse.

Some fishers used the Western Angler magazine, the West Australian, Sunday Times and local newspapers and radio, and fishing television programmes to gain information about recreational fishing.

Question 12b

In question 12b, respondents were asked: “Which of these is the main way you find out about these things?”

Department of Fisheries brochures and publications was the main way that a large number of respondents (38.9%) found out about fishing regulations and other information to do with recreational fishing (Table 27).

Table 27 Main way information about fishing is found.

	Count	%
Department of Fisheries brochures / publications	79	38.9
Department of Fisheries web site	22	10.8
Other	22	10.8
Tackle shops	13	6.4
None	11	5.4
Newspapers	10	4.9
Other fishers	9	4.4
Department of Fisheries shows / displays	8	3.9
Other fishing web sites	7	3.5
Department of Fisheries officers	6	3.0
Clubs / associations	5	2.5
Television	5	2.5
Fishing magazines	4	2.0
Radio	2	1.0
Total	203	100.0

3.13 Contact with the Department of Fisheries

Question 13a

In question 13a, respondents were asked: “During the past twelve months have you contacted the Department of Fisheries for any reason?”

Only 9.8% of respondents had contacted the Department of Fisheries in the past twelve months (Table 28).

Table 28 Contacted the Department of Fisheries.

	Count	%
Yes	73	9.8
No	675	90.1
Don't Know	1	0.1
Total	749	100.0

Over the past year, there has been a significant decrease in the percentage of respondents that could not say whether they had contacted the Department of Fisheries (Figure 22).

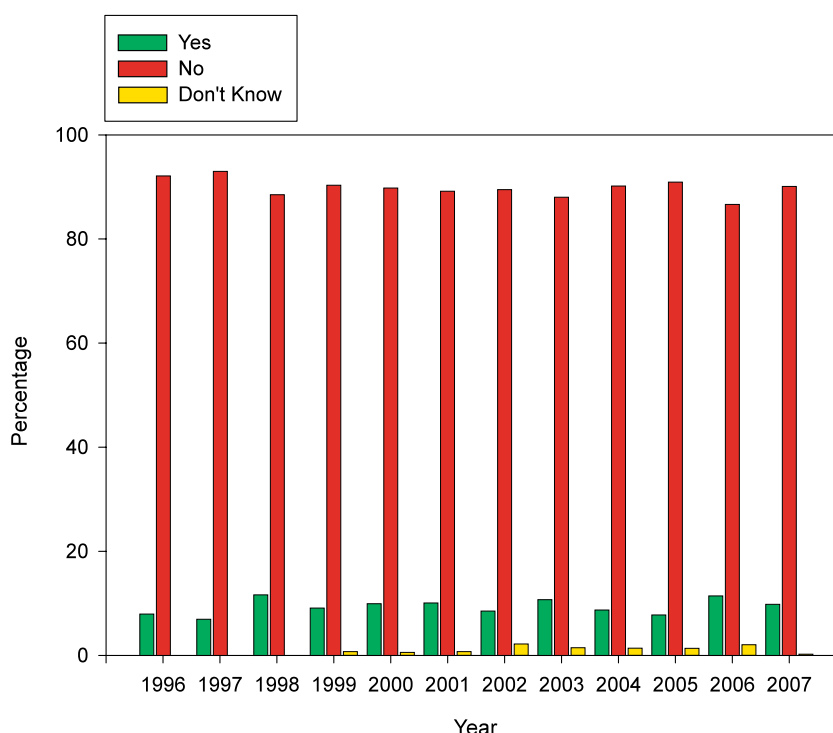


Figure 22 Contacted the Department of Fisheries.

Question 13b

In question 13b, respondents were asked: “How did you make contact with the Department of Fisheries?”

Of the 73 people that contacted the Department of Fisheries in the past twelve months a high proportion of respondents (42.5%) used the telephone (Table 29).

Multiple responses were accepted.

Table 29 Ways contacted the Department of Fisheries.

	Count	%
Telephone	31	42.5
In person	27	37.0
Internet	8	11.0
Can't Say	6	8.2
Mail	5	6.8
Email	2	2.7

There appears to have been a decrease in the proportion of respondents who have contacted the Department of Fisheries by telephone over the past year (Figure 23).

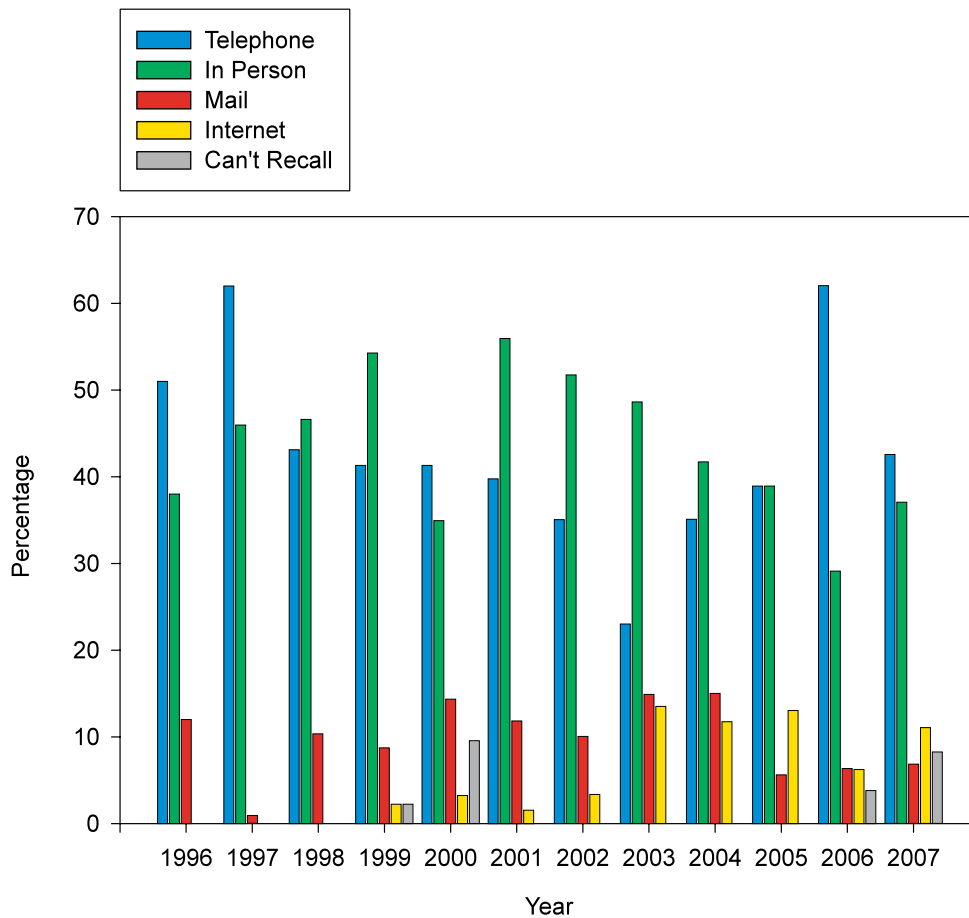


Figure 23 Ways contacted the Department of Fisheries.

Question 13c

In question 13c, respondents were asked: “Considering all aspects of your contact with the Department of Fisheries, overall, how satisfied were you with the level of service you received?”

The majority of respondents that had contacted the Department of Fisheries were satisfied (50.7%) with the level of service they received (Table 30).

Table 30 Satisfaction with level of service.

	Count	%
Very Satisfied	27	37.0
Satisfied	37	50.7
Dissatisfied	4	5.5
Very Dissatisfied	4	5.5
Neither	1	1.3
Total	73	100.0

Over the past year, there has been no significant change in the satisfaction with the level of service received (Figure 24).

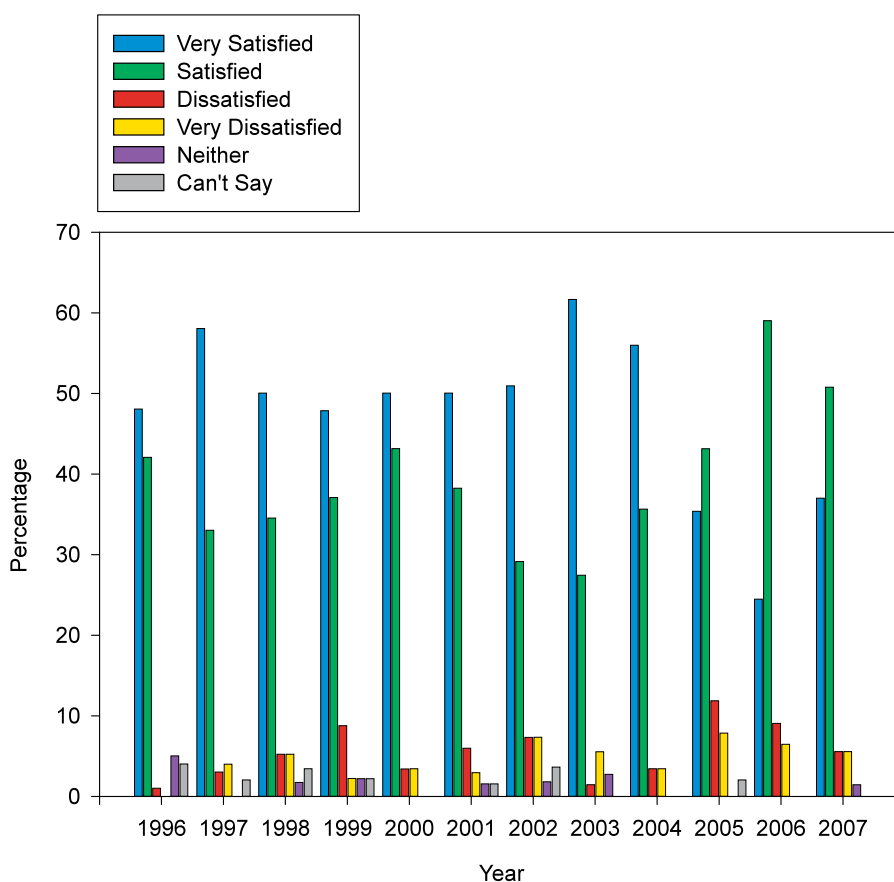


Figure 24 Satisfaction with level of service.

3.14 Awareness of representatives of the Department of Fisheries

Question 14

In question 14, respondents were asked: “In the last 12 months, have you been approached or contacted by someone from the Department of Fisheries, or representatives of the Department of Fisheries such as Volunteer Fisheries Liaison Officers (VFLO’s)?”

The majority of respondents (95.1%) had not been approached or contacted by anyone from the Department of Fisheries (Table 31).

Multiple responses were accepted.

Table 31 Contacts from the Department of Fisheries.

	Count	%
No / Can't Say	712	95.1
Yes - VFLO's	20	2.7
Yes - Department officers	11	1.5
Yes - Researchers	10	1.3
Yes - Other	7	0.9

Over the past year, there has been a significant ($p < 0.05$) decrease in the proportion of respondents who have been contacted by Department Officers (Figure 25).

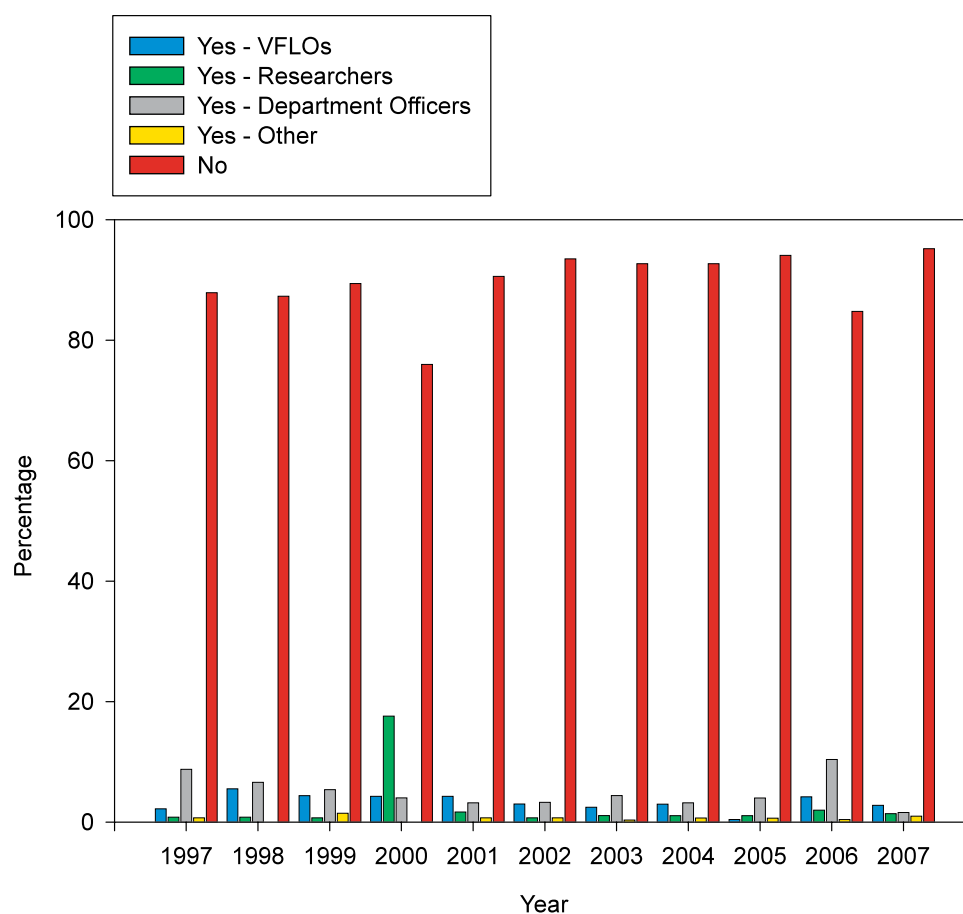


Figure 25 Contacts from the Department of Fisheries.

3.15 Recollection of the Department of Fisheries

Question 15

In question 15, respondents were asked: “Do you recall, over the last twelve months, seeing or hearing anything about the Department of Fisheries in the media?”

Most respondents recalled seeing or hearing of the Department of Fisheries in the media over the past twelve months, mainly from the television (32.0%), and newspapers and magazines (31.8%) (Table 32).

Multiple responses were accepted.

Table 32 Recollection of the Department of Fisheries in the media.

	Count	%
No	293	39.1
Yes – Television	240	32.0
Yes – Newspapers/Magazines	238	31.8
Yes – Radio	94	12.6
Yes – Unsure	37	4.9
Yes – Internet	17	2.3

Over the past year, there has been a significant increase in the proportion of respondents that have not heard about the Department of Fisheries (Figure 26) and a decrease in the proportion of respondents that were unsure whether they had heard about the department in the media.

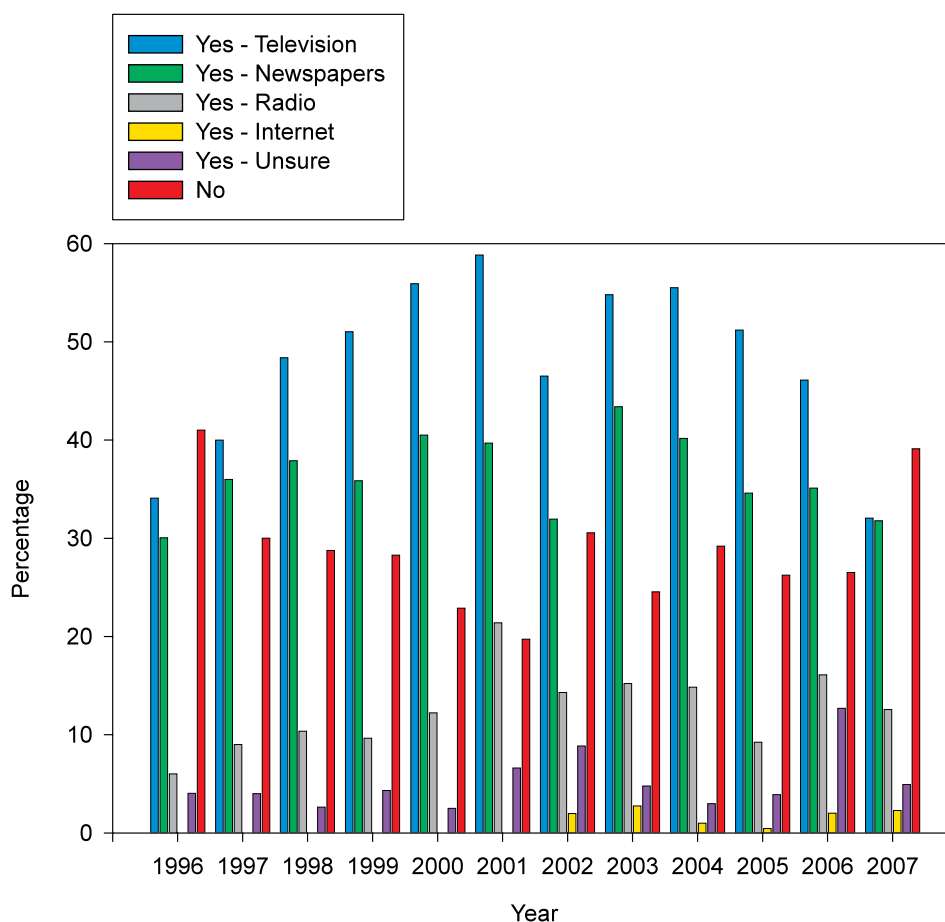


Figure 26 Recollection of the Department of Fisheries in the media.

3.16 Opinion on Aquaculture

Question 16a

In question 16a, respondents were asked: “Aquaculture is the farming of aquatic plants and animals. Do you feel that aquaculture is beneficial to the state?”

The majority of respondents felt that aquaculture was beneficial to the state (84.0%) (Table 33).

Table 33 Benefit of aquaculture to the state.

	Count	%
Yes	629	84.0
No	53	7.1
Can't Say	67	8.9
Total	749	100.0

Over the past year there has been a slight increase in the proportion of respondents who do not consider aquaculture beneficial to the state (Figure 27).

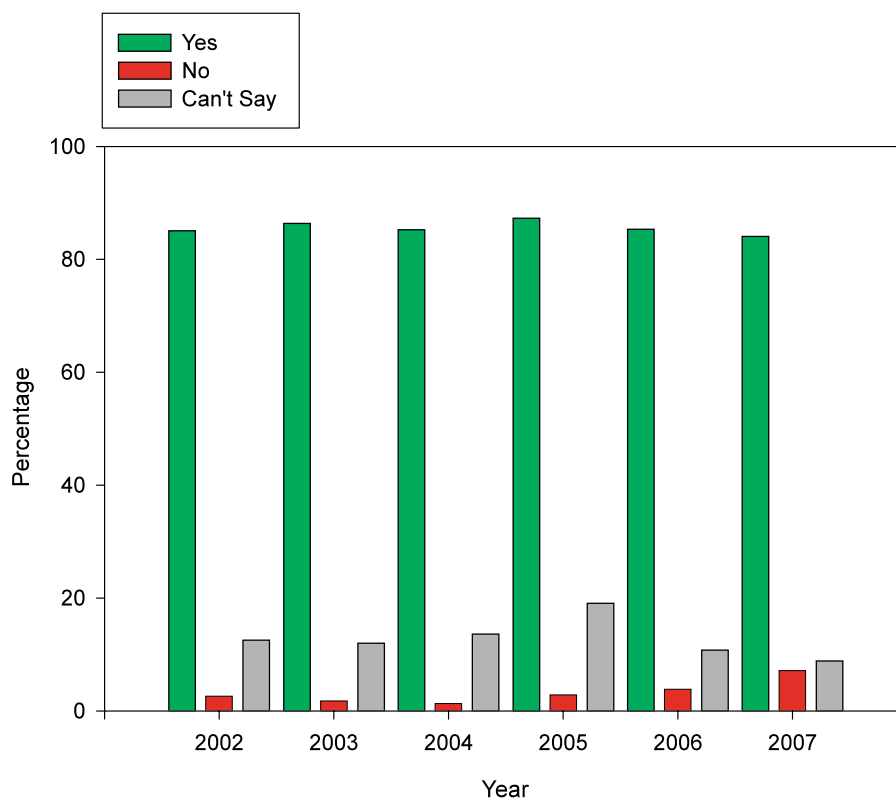


Figure 27 Benefit of aquaculture to the state.

Question 16b

In question 16b, respondents were asked: “What do you think is the main benefit?”

Of the 629 respondents that felt aquaculture was beneficial to the state, the majority thought that the main benefit was that it relieves pressure on wild fish stocks (57.5%) (Table 34).

Table 34 Benefits of aquaculture.

	Count	%
Relieves pressure on wild fish stocks	362	57.5
Provides regional employment and economic development	119	18.9
Provides consumers with greater range and availability of seafood	62	9.9
Provides fresh seafood	52	8.3
Can't Say	29	4.6
Other	5	0.8
Total	629	100.0

Question 16c

In question 16c, respondents were asked: “Do you think that aquaculture has any negative impacts?”

The majority of respondents (68.9%) felt that aquaculture had no negative impacts (Table 35).

Table 35 Negative impact of aquaculture.

	Count	%
Yes	116	15.5
No	516	68.9
Can't Say	117	15.6
Total	749	100.0

Over the past year, there has been a significant increase in the proportion of respondents that felt that aquaculture had no negative impacts and a decrease in the proportion that could not say (Figure 28).

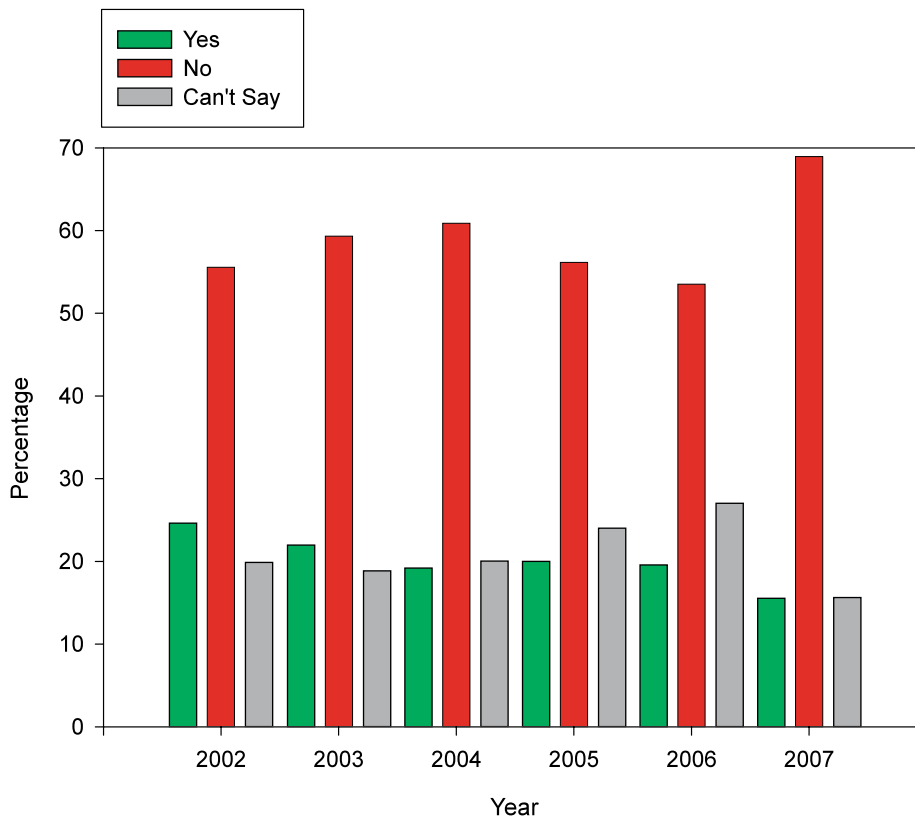


Figure 28 Negative impact of aquaculture.

Question 16d

In question 16d, respondents were asked: “What do you think is the main negative impact?”

Of the 116 respondents that felt that aquaculture had negative impacts, a large proportion considered that pollution (39.7%) and the risk of disease (30.2%) were the main negative impacts of aquaculture (Table 36).

Table 36 Negative impacts of aquaculture.

	Count	%
Pollution	46	39.7
Risk of disease	35	30.2
Competition for space	12	10.3
Can't Say	8	6.9
Other	8	6.9
Economic viability	7	6.0
Total	116	100.0

3.17 Demographics

Question 17

In question 17 respondents were asked: “Firstly, into which of these age groups do you fall?”

The age structure of respondents was significantly different ($p < 0.05$) to the population age structure of Western Australia (Table 37), mostly due to a lower proportion of respondents aged between 20 and 34.

Table 37 Age categories.

	Count	%
18 to 19 years	30	4.0
20 to 24 years	36	4.8
25 to 34 years	74	9.9
35 to 44 years	171	22.8
45 to 54 years	168	22.4
55 to 64 years	134	17.9
65 years & over	123	16.4
Unknown	13	1.8
Total	749	100.0

Question 18

In question 18 respondents were asked: “Which of the following categories best describes what you currently do?”

A large number of respondents (42.9%) were employed in full-time work (Table 38). Some were retired or aged pensioners (20.7%) and others involved in part-time work (16.6%). The activity structure of respondents was significantly different ($p < 0.05$) to the population activity structure of Western Australia, possibly due to the low number of people doing home duties and looking for work and the high number of retired and aged pensioner respondents.

Table 38 Activity structure.

	Count	%
Full - time work in a job or business	321	42.9
Part - time or casual work in a job or business	124	16.6
Full - time student	40	5.3
Looking for work	9	1.2
Retired or aged pensioner	155	20.7
Other pensioner	13	1.7
Home duties	78	10.4
Other/Refused	9	1.2
Total	749	100.0

Question 19

In question 19 respondents were asked: “What kind of work do you do?”

There were 445 respondents employed in a full or part-time capacity. Of these, 36.0% were professionals and 14.6% were managers (Table 39). There was a significant difference ($p < 0.05$) between the employment structure of respondents and the population employment structure of Western Australia, mainly due to a higher proportion of professionals and a lower proportion of respondents working clerical, sales and service areas.

Table 39 Type of work.

	Count	%
Managers	65	14.6
Professionals	160	36.0
Technicians and associated professionals	41	9.2
Tradespersons	39	8.8
Production, plant and transport operators	28	6.3
Clerical, sales and service – advanced, intermediate	37	8.3
Clerical, sales and service – elementary	13	2.9
Labourers, process workers, cleaners etc	52	11.7
Unknown	10	2.2
Total	445	100.0

Question 20

In question 20 respondents were asked: “What is the postcode of the suburb/town in which you live?”

Question 21

In question 21, the sex of the respondent was recorded.

4.0 REFERENCES

- Australian Bureau of Statistics (1987). Recreational Fishing Western Australia.
- Australian Bureau of Statistics (1998). Western Australian Year Book.
- Australian Bureau of Statistics (2000). Population by Age and Sex, Western Australia, 30 June 1999.
- Australian Bureau of Statistics. (2002). Census results.
- Patterson Market Research (1994). Consultants report for the Department of Fisheries.
- Reark Research (1996) Community Attitudes Survey. Consultants report for the Department of Fisheries.
- Reark Research (1997) Community Attitudes Survey. Consultants report for the Department of Fisheries.
- Right Marketing (1998) The Department of Fisheries Community Survey 1998. Consultants report for the Department of Fisheries.
- T. Baharthah & N. R. Sumner (1999) Department of Fisheries Community Survey 1999.
- T. Baharthah & N. R. Sumner (2000) Department of Fisheries Community Survey 2000.
- T. Baharthah & N. R. Sumner (2001) Department of Fisheries Community Survey 2001.
- T. Baharthah & N. R. Sumner (2002) Department of Fisheries Community Survey 2002.
- T. Baharthah & N. R. Sumner (2003) Department of Fisheries Community Survey 2003.
- T. Baharthah (2004) Department of Fisheries Community Survey 2004.
- T. Baharthah (2005) Department of Fisheries Community Survey 2005.
- T. Baharthah (2006) Department of Fisheries Community Survey 2006.

5.0 APPENDICES

5.1 Appendix A: Survey Questionnaire Form

Department of Fisheries Community Survey

Good (.....) my name is (.....) from Asset Research. We are currently conducting research into coastal and marine areas in Western Australia.

May I please speak to the person in the household who is older than 17 years of age and whose birthday is closest to today's date.

Q1 Thinking back over the last twelve months, have you done any recreational fishing, including angling, crabbing, prawning, spearfishing, collecting abalone or aquarium fish? [Other Recreational Fishing may include Marron, Netting, Oysters, Rock Lobsters]

YES	<input type="checkbox"/> 1		
NO	<input type="checkbox"/> 2	→	Q3
DON'T KNOW	<input type="checkbox"/> 9	→	Q3

Q2 In the last 12 months, in what areas have you been fishing? How many days did you go fishing?

		Days
South Coast – Marine (east of Augusta to the South Australian border)	<input type="checkbox"/> 1	<input type="text"/>
Southern Inland – Freshwater (Fishing for species such as marron and trout)	<input type="checkbox"/> 2	<input type="text"/>
Perth Metropolitan (Yanchep to Mandurah)	<input type="checkbox"/> 3	<input type="text"/>
West Coast – Augusta to Kalbarri (other than Perth Metropolitan)	<input type="checkbox"/> 4	<input type="text"/>
Gascoyne (north of Kalbarri to south of Onslow)	<input type="checkbox"/> 5	<input type="text"/>
Pilbara / Kimberley – Marine (Onslow to Broome)	<input type="checkbox"/> 6	<input type="text"/>
Pilbara / Kimberley Inland – Freshwater	<input type="checkbox"/> 7	<input type="text"/>
CAN'T SAY	<input type="checkbox"/> 9	

Q3 Also, thinking back over the last twelve months, have you gone snorkelling or diving just to look at fish and the marine environment rather than to capture fish or other animals?

YES	<input type="checkbox"/> 1
NO	<input type="checkbox"/> 2
DON'T KNOW	<input type="checkbox"/> 9

Q4a Who, if anyone, do you think is responsible for managing **commercial** fishing in WA?

DEPARTMENT OF FISHERIES	<input type="checkbox"/> 1	} Q5a
LOCAL COUNCIL/SHIRE	<input type="checkbox"/> 2	
STATE GOVERNMENT	<input type="checkbox"/> 3	
DEPARTMENT OF AGRICULTURE	<input type="checkbox"/> 4	
DEPARTMENT OF CONSERVATION & LAND MANAGEMENT (CALM)	<input type="checkbox"/> 5	
DEPARTMENT FOR PLANNING & INFRASTRUCTURE	<input type="checkbox"/> 6	
DEPARTMENT OF WATER	<input type="checkbox"/> 7	
DON'T KNOW	<input type="checkbox"/> 9	
OTHER _____		

Q4b There are a number of rules and regulations in place, which limits catch size, allowable fishing days and designated areas to fish. How would you rate Department of Fisheries in their management of **commercial** fisheries?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q5a Who, if anyone, is responsible for managing **recreational** fishing in WA?

- DEPARTMENT OF FISHERIES 1
 - LOCAL COUNCIL/SHIRE 2
 - STATE GOVERNMENT 3
 - DEPARTMENT OF AGRICULTURE 4
 - DEPARTMENT OF CONSERVATION & LAND MANAGEMENT (CALM) 5
 - DEPARTMENT FOR PLANNING & INFRASTRUCTURE 6
 - DEPARTMENT OF WATER 7
 - DON'T KNOW 9
 - OTHER _____
- } Q6a

Q5b Limits have been set on size, type of species that can be caught, as well as season limits etc. How would you rate Department of Fisheries in their management of **recreational** fisheries?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q6a When you think about the fish habitat in oceans and waterways in WA, that is, where fish live and breed, who, if anyone, do you think is responsible for protecting the **fish habitat**?

- DEPARTMENT OF FISHERIES 1
 - LOCAL COUNCIL/SHIRE 2
 - STATE GOVERNMENT 3
 - DEPARTMENT OF AGRICULTURE 4
 - DEPARTMENT OF CONSERVATION & LAND MANAGEMENT (CALM) 5
 - DEPARTMENT FOR PLANNING & INFRASTRUCTURE 6
 - DEPARTMENT OF WATER 7
 - DON'T KNOW 9
 - OTHER _____
- } Q7a

Q6b How would you rate the Department of Fisheries in their conservation and protection of the **fish habitat**?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q7a When you think about aquaculture, pearling, or fish farming in WA, who do you think, if anyone, is responsible for managing **aquaculture**?

- | | | |
|---|----------------------------|------|
| DEPARTMENT OF FISHERIES | <input type="checkbox"/> 1 | } Q8 |
| LOCAL COUNCIL/SHIRE | <input type="checkbox"/> 2 | |
| STATE GOVERNMENT | <input type="checkbox"/> 3 | |
| DEPARTMENT OF AGRICULTURE | <input type="checkbox"/> 4 | |
| DEPARTMENT OF CONSERVATION & LAND MANAGEMENT (CALM) | <input type="checkbox"/> 5 | |
| DEPARTMENT FOR PLANNING & INFRASTRUCTURE | <input type="checkbox"/> 6 | |
| DEPARTMENT OF WATER | <input type="checkbox"/> 7 | |
| DON'T KNOW | <input type="checkbox"/> 9 | |
| OTHER _____ | | |

Q7b The Department of Fisheries provides information such as advising on technology, identifying suitable sites and conducting and supporting research. How would you rate the Department of Fisheries in their management and development of **aquaculture** and **pearling**?

- Very poor 1
- Poor 2
- Good 3
- Very good 4
- NEITHER 5
- CAN'T SAY 9

Q8 The Department of Fisheries is responsible for recreational fishing, commercial fishing, aquaculture and protecting the fish habitat. In your opinion, do you think the Department of Fisheries manages the **share of fish resources** fairly between these sectors?

- YES 1
- NO 2
- CAN'T SAY 9

Q9 Before today, were you aware that there are recreational fishing rules that apply when fishing in Western Australian waters?

- YES 1
- NO 2

Sequence Guide

If has been recreational fishing ('1' in Q1a)

→ Q10a

Otherwise

→ Q13a [PAGE 5]

Thinking back to the last time you went fishing, can you tell me how knowledgeable you were on the following:

- Q10a Firstly, the bag and size limits for the fish you were planning to catch?
- Q10b The best ways to catch the fish you were after (eg: method, bait, hooks)?
- Q10c The habits of the fish you were after (eg: where found, when feeding)?

- | | |
|------------------------|---|
| Very knowledgeable | 1 |
| Fairly knowledgeable | 2 |
| Not very knowledgeable | 3 |
| CAN'T SAY | 9 |

Still thinking about the last time you went fishing. How satisfied were you with the following:

- Q11a The number of fish you caught?
- Q11b The variety of fish you caught?
- Q11c The size of the fish you caught?
- Q11d The environment where you were fishing?
- Q11e And thinking of the trip overall, how satisfied were you with that fishing trip?

- | | |
|-------------------|---|
| Very Satisfied | 1 |
| Satisfied | 2 |
| Dissatisfied | 3 |
| Very Dissatisfied | 4 |
| NEITHER | 5 |
| CAN'T SAY | 9 |

Q12a Thinking about fishing regulations and other information to do with recreational fishing in WA ... where do you find out about things to do with fishing? PROBE: Which ones?

- | | |
|--|----|
| DEPARTMENT OF FISHERIES BROCHURES /STICKERS / PUBLICATIONS | 1 |
| DEPARTMENT OF FISHERIES SHOWS / DISPLAYS | 2 |
| DEPARTMENT OF FISHERIES INTERNET WEB SITE | 3 |
| OTHER FISHING WEB SITES _____ | 4 |
| FISHING MAGAZINES _____ | 5 |
| NEWSPAPERS _____ | 6 |
| TELEVISION _____ | 7 |
| RADIO _____ | 8 |
| TACKLE SHOP | 9 |
| CLUBS / ASSOCIATIONS | 10 |
| DEPARTMENT OF FISHERIES OFFICERS / RESEARCHERS
/ VOLUNTEER FISHERIES LIAISON OFFICERS | 11 |
| OTHER FISHERS | 12 |
| NONE | 13 |
| OTHER _____ | |

Q12b Which of these is the main way you find out about these things?

Q13a During the past 12 months have you contacted the Department of Fisheries for any reason?

YES	<input type="checkbox"/> 1	
NO	<input type="checkbox"/> 2	→ Q14
DON'T KNOW	<input type="checkbox"/> 9	→ Q14

Q13b How did you make contact with the Department of Fisheries?

Telephone	<input type="checkbox"/> 1
In person	<input type="checkbox"/> 2
Mail	<input type="checkbox"/> 3
Fax	<input type="checkbox"/> 4
Email	<input type="checkbox"/> 5
Internet	<input type="checkbox"/> 6
DON'T KNOW / CAN'T RECALL	<input type="checkbox"/> 9
OTHER _____	

Q13c Considering all aspects of your contact with the Department of Fisheries, overall, how satisfied were you with the level of service you received?

Very Satisfied	<input type="checkbox"/> 1
Satisfied	<input type="checkbox"/> 2
Dissatisfied	<input type="checkbox"/> 3
Very Dissatisfied	<input type="checkbox"/> 4
NEITHER	<input type="checkbox"/> 5
DON'T KNOW	<input type="checkbox"/> 9
NOT RELEVANT	<input type="checkbox"/> 10

Q14 In the last 12 months, have you been approached or contacted by someone from Department of Fisheries, or representatives of Department of Fisheries such as

YES - VFLO's (Yellow Shirts)	<input type="checkbox"/> 1
YES - Researchers (Red Shirts)	<input type="checkbox"/> 2
YES - Department officers (Uniforms)	<input type="checkbox"/> 3
YES - OTHER _____	
NO / CAN'T SAY	<input type="checkbox"/> 9

Volunteer Fisheries Liaison Officers?

Q15 Do you recall over the last twelve months seeing or hearing anything about the Department of Fisheries in the media?

YES - TV	<input type="checkbox"/> 1
YES - Newspapers/Magazines	<input type="checkbox"/> 2
YES - Radio	<input type="checkbox"/> 3
YES - Internet	<input type="checkbox"/> 4
YES - UNSURE WHERE	<input type="checkbox"/> 5
NO / UNSURE	<input type="checkbox"/> 9

Q16a Aquaculture is the farming of aquatic plants and animals. Do you feel that aquaculture is beneficial to the state?

- YES 1
- NO 2 → Q16c
- DON'T KNOW 9 → Q16c

Q16b What do you think is the main benefit of aquaculture?

- Relieves pressure on wild fish stocks
- Provides fresh seafood
- Provides consumers with greater range and availability of seafood
- Provides regional employment and economic development
- DON'T KNOW
- OTHER _____

- 1
- 2
- 3
- 4
- 9

Q16c Do you feel that aquaculture has any negative impacts to the state?

- YES 1
- NO 2 → Q17
- DON'T KNOW 9 → Q17

Q16d What do you think is the main negative impact?

- Risk of disease 1
- Pollution 2
- Competition for space 3
- Economic viability 4
- DON'T KNOW 9
- OTHER _____

Finally to make sure we've spoken to a cross section of people I would like to ask you some questions about yourself.

Q17 Firstly, into which of these age groups do you fall?

- 18 to 19 years 1
- 20 to 24 years 2
- 25 to 34 years 3
- 35 to 44 years 4
- 45 to 54 years 5
- 55 to 64 years 6
- 65 years & over 7
- REFUSED 8

Q18 Which of the following categories best describes what you currently do?

- Full - time work in a job or business 1
 - Part - time work in a job or business 2
 - Full - time student 3
 - Looking for work 4
 - Retired or aged pensioner 5
 - Other pensioner 6
 - Home duties 7
 - OTHER _____
- } Q20

- Q19 What kind of work do you do?
- | | |
|--|--------------------------|
| Managers | <input type="checkbox"/> |
| Professionals | <input type="checkbox"/> |
| Technicians and associated professionals | <input type="checkbox"/> |
| Tradespersons | <input type="checkbox"/> |
| Production, plant and transport operators | <input type="checkbox"/> |
| Clerical, sales and service - advanced, intermediate | <input type="checkbox"/> |
| Clerical, sales and service - elementary | <input type="checkbox"/> |
| Labourers, process workers, cleaners etc. | <input type="checkbox"/> |
| OTHER _____ | |

Would you mind telling me your first name?
 (Just in case my supervisor wants to check that the work was done properly.)

RECORD NAME ON FORM

Q20 POSTCODE

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Q21 SEX

- | | | |
|--------|--------------------------|-------|
| MALE | <input type="checkbox"/> | |
| FEMALE | <input type="checkbox"/> | ◀ END |

Thank you for your time!

WRITE YOUR INITIALS ON THE TOP LEFT HAND CORNER.