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Community Survey of Future Values and Aspirations for the Swan and Canning Rivers



Swan River Trust
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Community Survey of Future Values and Aspirations for the Swan and Canning Rivers



**Prepared For:
Swan River Trust**

By:

Research Solutions

January 2007

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1.0 EXECUTIVE SUMMARY

The Swan River Trust (the Trust) is committed to sound and representative community consultation practices and projects to ensure that it has a good understanding of the values and aspirations held by the people of Perth in regard to the Swan and Canning Rivers.

This project is a key component of this commitment, commissioned to specifically consolidate and enhance the Trust's understanding of community attitudes on a range of issues relating to the rivers.

The specific objectives of the project have been to:

- Gain an awareness of the views, aspirations and expectations held by the Perth community in regard to various river values and to determine what trade offs the community would find acceptable between these values.
- To obtain results that are representative and defensible in public arenas as indicators of prevailing community attitudes.
- To provide baseline information for the Trust to use in decision making, to help inform additional stages of the community consultation process and to assist in the development of future targets for each of the river values.

The Trust's river values assessed as part of this project include:

- Ecosystem health and biodiversity
- Recreation
- Landscape
- Culture
- Navigation
- Fishing
- Water supply

The project has consisted of two core components – a set of focus groups held in the initial stages of the project, designed to explore, in depth, river values and aspirations amongst the Perth community, followed by the administration of a telephone survey to a randomly selected representative sample of 400 Perth metropolitan region residents, designed to provide measurable results that can be extrapolated to the entire community.

1.1 Key Findings

1.1.1 Overall, the Swan and Canning Rivers are considered “iconic” – an important community asset that are strongly valued as a key feature of Perth’s recreation, social and cultural landscape.

Overall, the vast majority of respondents (89.8%) agreed or strongly agreed that the rivers are a really important part of Perth’s landscape.

The rivers’ natural areas and overall health take priority in terms of overarching attitudes towards the rivers, with more than 9 in 10 respondents agreeing or strongly agreeing that:

- The natural areas along the river are really important and should be retained (95.6%).
- There should be some type of restriction on motorised boats in narrow sections of the river where the foreshore might erode easily (91.0%).
- It is acceptable for certain parts of the river foreshore to be closed off for the protection and rehabilitation of the natural environment (92.5%).

Recreational opportunities on and around the river are also important and aspirational, with a significant proportion of respondents agreeing/strongly agreeing that the river should:

- **Maintain water quality of a standard for in water recreational activities and fishing:**
 - We should be able to catch fish, prawns and crabs from the river and they should be healthy enough to eat (86.8%).
 - We should be able to swim in the river (83.3%).
- **Have foreshores accessible for recreational pursuits**
 - It is important to have walking and cycle access all the way around the river (76.8%).

1.1.2 The rivers are also strongly regarded as an intergenerational resource - a “treasure” that needs to be passed on to children and grandchildren.

In addition to the strong desire to maintain and recreate in and around the Swan and Canning Rivers now, they are also regarded as a “future” resource - being one that can be “passed on” to children and grandchildren in the future.

Consolidating the initial identification of this theme in the focus group stage of the project, almost all (97.0%) respondents in the telephone survey agreed or strongly agreed that “it is very important that my children can experience the sorts of activities around the river that I did/ would like to have done”.

1.1 Key Findings (continued)

1.1.3 Whilst opinions regarding the rivers' status and importance are strong and consistent, attitudes towards future development along the rivers are much more diverse.

Overall, there was reasonably strong agreement that:

- Commercial development should NOT occur along the upper parts of the Swan and Canning Rivers.
- Residential development should be restricted so that it does not go right down to the water's edge.

Opinions regarding development **like cafes and kiosks** along the foreshore and a **range of events** occurring on or around the river during the year were however, much more diverse.

For small cafes and kiosks, around 1 in 4 respondents either agreed or strongly agreed that more cafes and kiosks should be developed around the river and a similar proportion were strongly opposed to this type of development.

For community events, just over 1 in 2 respondents (54.3%) were in favour of a range of vibrant events occurring on or around the rivers during the year; however, around 1 in 10 (mainly those living within 5kms of the foreshores) were strongly opposed to the idea.

Where additional commercial and/or residential and retail development does occur, however, there is a strong level of support for nodal development (like East Perth) rather than development right along the foreshores.

A total of 71.3% of respondents agreed or strongly agreed that the development of apartments, shops and cafes should be in a small number of locations or nodes along the rivers, like East Perth, rather than spread out all along the foreshores.

"I would view it as a community asset, not an asset of a select portion of the very rich. I think it's rather nice at the moment, it's accessible to everyone"

"East Perth rather than Raffles"

Comments from focus group participants

1.1 Key Findings (continued)

1.1.4 Whilst attitudes towards the rivers are strong and consistent, actual river visitation and use depends on where you live.

Generally the rivers are seen as:

- More of an everyday activity (like the local park) for those people living nearby – 5kms or less from the river foreshores.
- A destination or outing for those people living further away.

Consequently, those people living closer to the rivers tend to use them more frequently and for activities like walking, cycling and sailing.

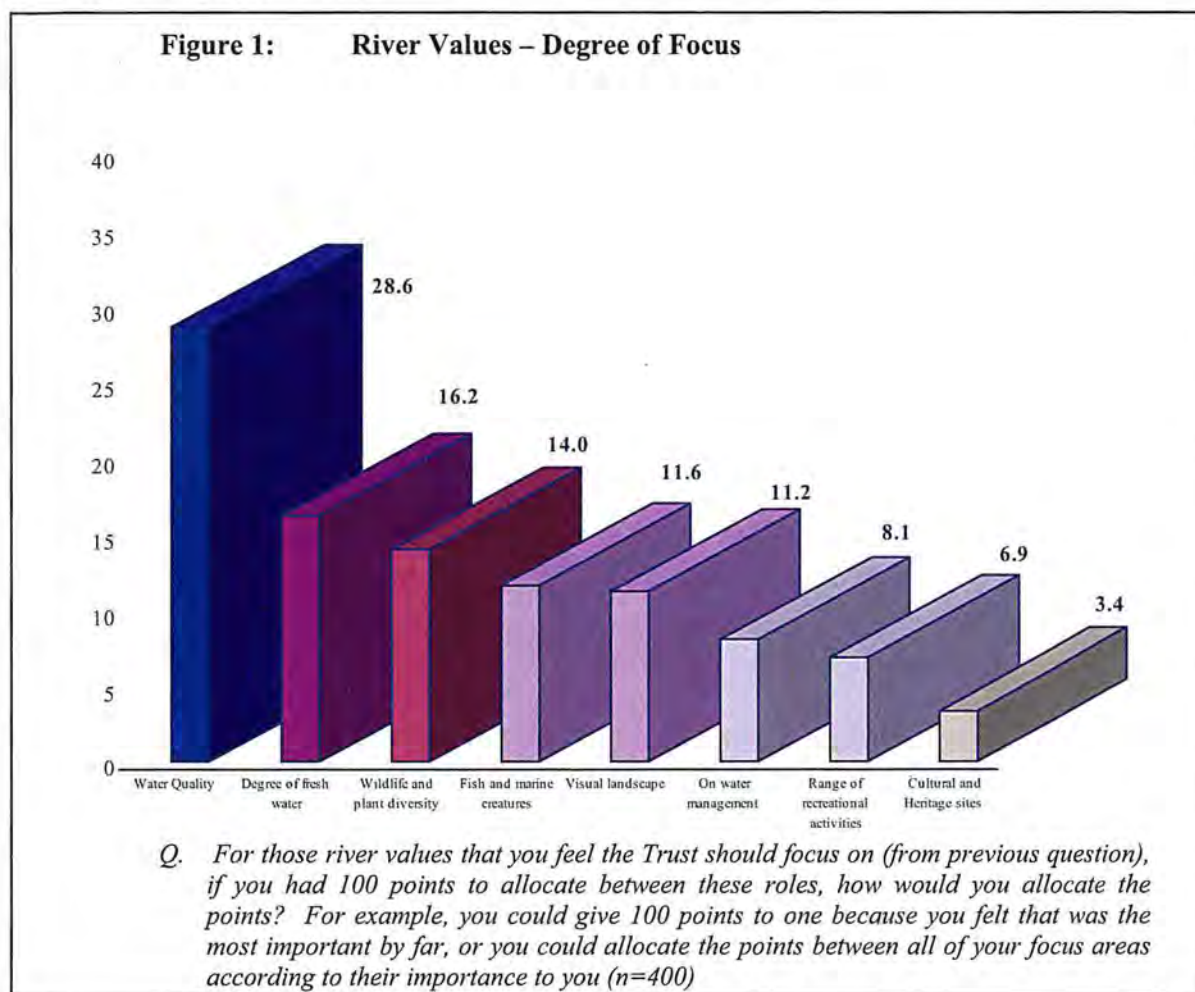
For those living further away, river visitation is generally less frequent and for activities like special events, picnics and BBQs and dining out.

1.1.5 Overall, water quality is THE community priority for the rivers, followed by the preservation of flora and fauna and recreational pursuits.

Consistent with community aspirations for rivers suitable for swimming and fishing, water quality emerged as the strongest perceived priority for the Swan River Trust, ranked significantly higher than each of the other river values assessed (see figure overleaf).

Within the establishment of community priorities for the rivers, respondents were both consistent and environmentally “literate”, with some indication that connections are now being made between water quality and other environmental objectives, including the degree of fresh water in the river and flora and fauna diversity.

1.1 Key Findings (continued)



1.1.6 In terms of water quality outcomes, a standard suitable for year round swimming and fishing is desired – and the need to make some personal sacrifices to achieve this goal is recognised.

Given the increasing profile, discussion and debate concerning river water quality and the issue being significantly broader and more far reaching than the realm or responsibility of the Swan River Trust, it was important that this study include a measure of the level of personal or individual actions that the community would be prepared to take to achieve a certain level of river water quality.

The concept was assessed through a scenario based question, where respondents were asked to consider three different levels of water quality and potential costs to the community and score each in terms of its individual appeal.

1.1 Key Findings (continued)

The scenarios assessed (explained in further detail in Section 5.4) included:

- A situation where **water quality continues to decline** over the next 10 years, meaning that swimming and fishing is quite restricted; however, there is no personal “cost” for residents in the form of the need to use different types of fertilisers or increased government expenditure on the river.
- A **small improvement in river water quality** over the next 10 years, meaning that swimming and fishing restrictions are not as severe, however, there are some personal “costs”, including more expensive “river friendly” fertilisers and increased government expenditure on the river.
- A **significant improvement in river water quality** over the next 10 years, meaning that it is possible to swim and fish in the river for most of the year; however the personal “costs” or sacrifices are higher, with residents most likely needing to reduce the size of the lawn they currently have and pay more for some agricultural products, in addition to increased government expenditure and regulations on the river.

Overall, the third scenario with a significant improvement in water quality over the next 10 years emerged as the option with the strongest level of support, indicative of a degree of commitment to some individual sacrifices or actions in order to achieve the higher level of water quality desired.

This option achieved an active¹ level of support of 40.1%, significantly higher than both the first (4.1%) and second options (25.4%).

1.1.7 After water quality, there is a strong focus on improvements to flora and fauna habitats along the rivers and a willingness to prioritise outcomes in this area in comparison with recreation and cultural and heritage river values.

For a subset of river values, including on water recreation, flora and fauna, recreation activities along the foreshore, and cultural and heritage sites, respondents were asked to show their relative preferences for future expenditure in a budget constrained environment.

¹ The active level of support for each water quality outcome is defined as the actual recorded level of support subject to the application of a statistical model (known as Pope’s model), which accounts for the difference between what people SAY they will do/prefer (their intent) and what they actually do. The model is based on extensive research and evidence in Australia in studies that have tracked, primarily, purchase intent and behaviour

1.1 Key Findings (continued)

As shown in the figure below, almost all respondents chose to invest in improving flora and fauna habits along the rivers (95.8%), in comparison with a smaller percentage (81% and 80%) choosing to invest in improvements to recreation facilities along the foreshores and the management of recreation on the water; only 1 in 2 (51.0%) chose to invest in the protection of cultural and heritage sites along the river.

Figure 2: Second focus is on improvements to flora and fauna

	Remain at current state	Some investment in improvement	Major investment in improvement
Provision of recreation facilities on the foreshores	18%	54%	27%
Management of recreation on water	20%	53%	27%
Range and amount of flora and fauna	4%	54%	41%
Protection of cultural and heritage sites	49%	41%	9%

1.1.8 The “specifics” for flora and fauna include investment in improved or rehabilitated natural environments which is consistent with other results.

As noted, respondents displayed a strong preference for improved flora and fauna outcomes, with the prioritisation of expenditure in this area to achieve an outcome where eroded areas are being replanted, wildlife is often seen and a significant proportion of the urban shoreline has fringing trees or sedges.

Other results across the study also reinforce the priority given to this value including:

- A strong preference for a significant proportion of the rivers to be dedicated to natural environments.
- One of the most preferred visual landscapes is a natural one, with reeds, sedges and marshland.
- One of the preferred recreation sites is quiet natural places without any facilities.

1.1 Key Findings (continued)

1.1.9 In line with the recurring “natural” theme, there is a strong preference for the rivers’ visual landscape to be dominated by natural and recreational environments.

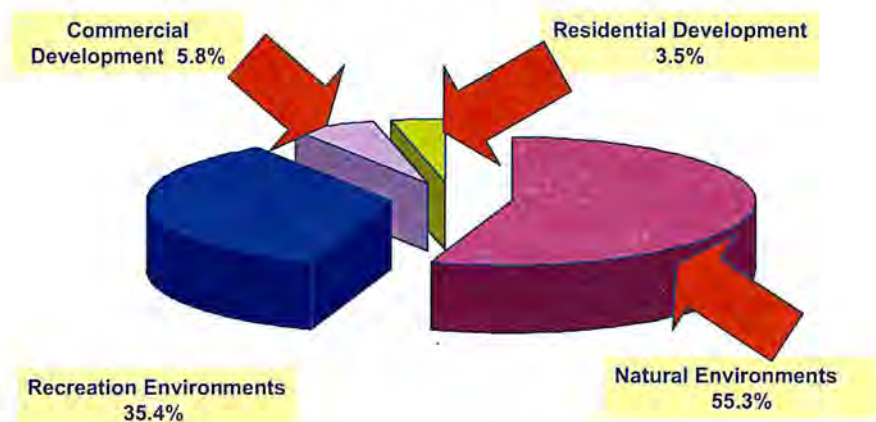
The rivers’ visual landscape emerged as the third priority river value behind water quality and flora and fauna.

The overall type of landscape “mix” desired, as shown in the figure below, is primarily natural and recreational, with much smaller proportions of the river foreshore dedicated to commercial or residential development

This “mix” was assessed via a hypothetical question where respondents were asked to allocate their preferences if an additional kilometre of river space was to become available for potential development in the future.

With this in mind, the proportions of particular types of environments desired does need to be compared to some existing river foreshore benchmarks to see how this result compares to the current “reality”.

Figure 3: Preferences for types of river landscapes



Q The Swan River Trust is keen to understand what the public wants the river foreshore to be like in say 20 years. The river foreshore could be used for:

- *Natural environments where habitat such as reeds, wildlife and birds take priority, and access for people is available but not supported by many formal facilities.*
- *Recreational areas where people and recreation take priority and you can access the foreshore for picnics, playgrounds, walking, etc. as well as having jetties, boat ramps, beaches and a whole range of activities on the river.*
- *Residential development, for example town houses, apartments and houses*
- *Commercial development, for example shops, cafes and offices, like East Perth or South Bank in Melbourne.*

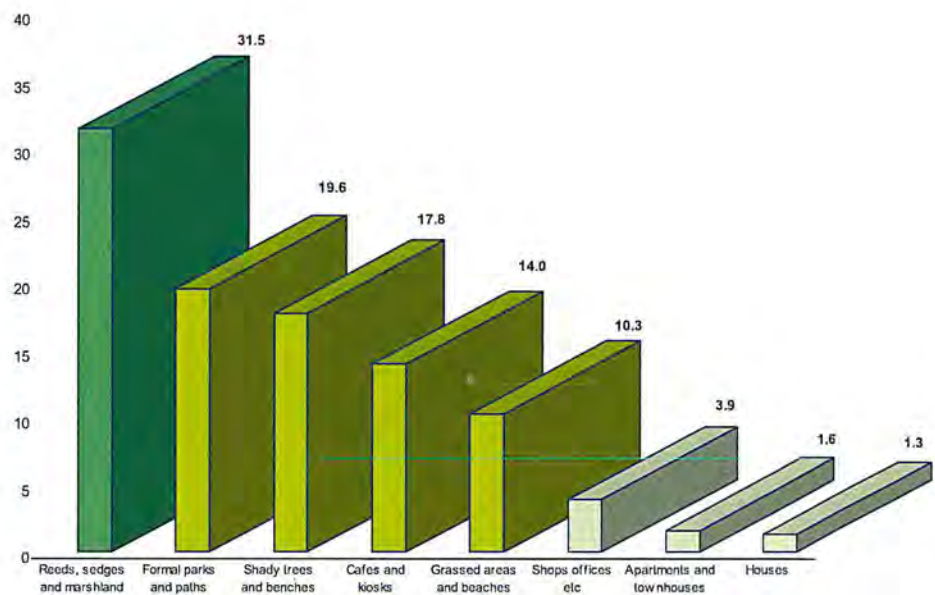
If the Trust had a kilometre of river to develop, how would you like to see it used? You have 100 points to allocate according to your preferences and how much you want used for each purpose. So you can allocate it all to one type of use or divide it up between various types. (n=400)

1.1 Key Findings (continued)

Following on from nominating the particular type of landscape desired, respondents were also asked what priority or preference they would place on certain visual landscape elements.

Results, detailed in the figure below, again reinforce the strong themes of natural surroundings and passive recreational areas along the river foreshores, with only a small proportion of river area allocated to more intensive forms of commercial or retail development.

Figure 4: The desired visual landscape “mix”



*Q Now thinking about the landscape you would like along the river on the foreshore, how attractive are the following and how would you allocate 100 points to them to show your preferences?
You can use your points to show what you would like to see more or less of along the foreshore (n=400)*

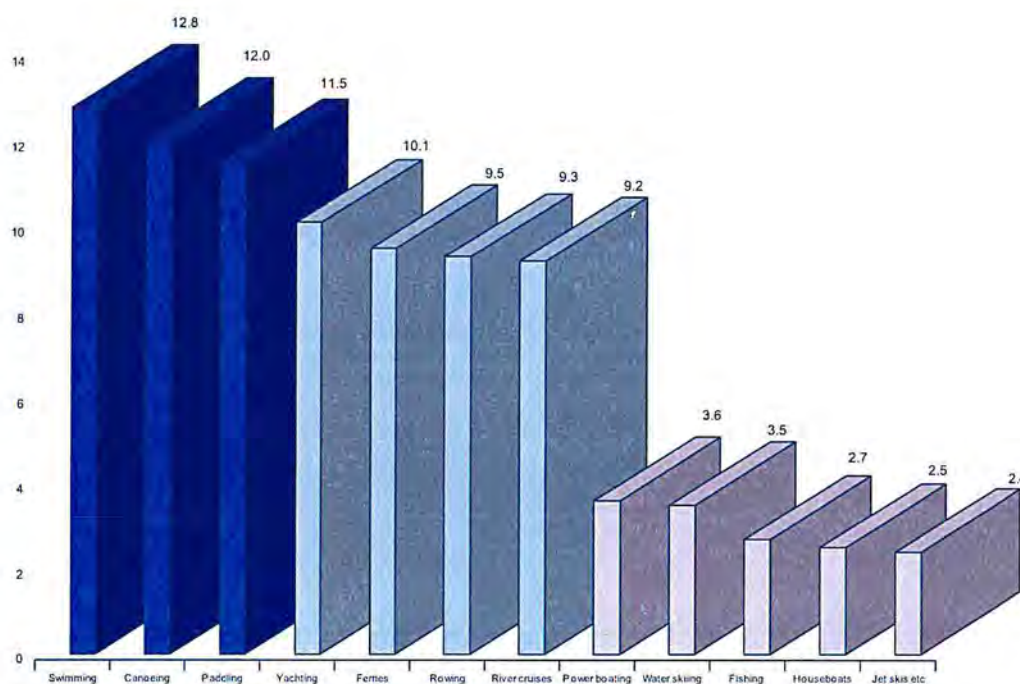
1.1 Key Findings (continued)

1.1.10 For on water activity, additional restrictions to avoid user conflict are a desired goal, along with space for more passive non motorised on water activities, like swimming, canoeing and rowing. Power boating and related activities remain special interest activities, attractive to smaller segments of the community.

As noted, there is a general focus on increased investment in this area to impose some restrictions on river activity by time and place, meaning that certain activities are permitted, for example, in the morning (like rowing), and others (like motor boating) in the afternoon

In terms of individual preferences for on water activity, as shown in the figure below, there is also a strong level of importance placed on passive or non motorised on water activities.

Figure 5: On water recreation activities



Q This section is about the relative priority of different forms of recreation on the river. If you had 100 points, how would you allocate them between the following recreational activities in terms of their relative importance to you. ie, what would be your personal preferred activities?(n=400)

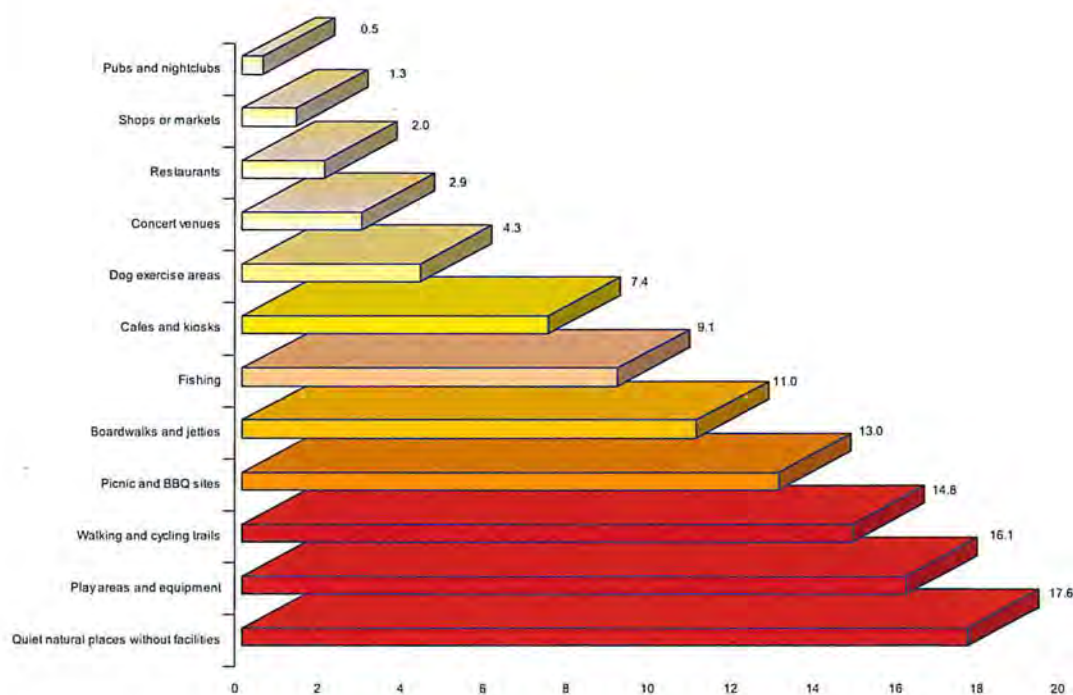
1.1 Key Findings (continued)

1.1.11 On the river foreshores there is also a strong preference for passive recreational facilities and infrastructure, including natural areas without facilities, children's play areas and equipment and walking and cycle trails along the foreshores.

Along with a strong desire for additional investment in recreational facilities so that MOST types are available at several sites along the rivers, the theme of natural and passive areas also emerged from results in this area with (as shown in the figure below):

- The strongest preference for quiet natural areas without any facilities, shady benches, play areas and playground equipment and walking and cycling trails
- Supporting infrastructure for recreation, including picnic and BBQ sites, boardwalks and jetties, fishing areas, etc.
- A smaller proportion of the foreshores being allocated to more intensive infrastructure like concert venues, upmarket restaurants, pubs and nightclubs, etc.

Figure 6: Passive recreational activities



Q Now thinking specifically about recreational activities on the foreshore, taking 100 points again, how you allocate these points to demonstrate your preferences for how much of the foreshore (if any) should be set aside for each activity -described below. (*Interviewer Note: If respondent does not want a particular activity give it 0 points*) (n=400)

1.1 Key Findings (continued)

1.1.12 For cultural and heritage sites, the focus is on maintenance of where we are now.

As noted, the protection and enhancement of cultural and heritage sites along the rivers is not currently a community priority, with respondents displaying a distinct preference for maintenance of the current situation – a small number of cultural and heritage sites are protected with minimum maintenance or signage.

1.2 Strategic Conclusions

Overall, this study has provided some valuable insights regarding the attitudes and aspirations of the Perth community in relation to the Swan and Canning Rivers.

The iconic status of the rivers has been confirmed, firmly establishing the rivers' importance as a key element of Perth's social, recreational and cultural landscape.

People want to:

- Retain maximum levels of public accessibility to the foreshore.
- Enjoy the recreational opportunities provided by the rivers now.
- Pass the rivers "on" to their children and grandchildren in an improved state.

In line with recreational aspirations and the rivers being viewed as an intergenerational resource, river health and regeneration are a key community priority, particularly in the areas of water quality and native habitats.

There is also some recognition that the future of the rivers is a broad community issue that will require, particularly in the area of water quality, a level of personal commitment to achieve the aspired future – a river that is safe to swim and fish in all the year round.

Consistent with the dual themes of the natural environment and public access (both now and in the future), there is a strong desire for a significant proportion of the rivers and the river foreshores to be dedicated to natural environments and passive recreational activities like children's playgrounds, shady quiet areas, walking and cycling trails, rowing, swimming and sailing or kayaking/canoeing.

1.2 Strategic Conclusions (continued)

Opinions regarding further residential and commercial development along the rivers are much more diverse, however there is a strong level of agreement that future development should:

- Incorporate the retention of public access to the foreshore.
- Be restricted to the lower reaches of the rivers.
- Occur in nodes or at particular sites (like East Perth) rather than right along the foreshores.

Overall, the broad themes and aspirations of the community for the future of the rivers, as well as more detailed information regarding community preferences for particular types of visual landscapes and activities identified in this report, should assist the Trust to move forward, providing input for the development of river value targets and implementation strategies in the future, as well as valuable baseline data to move into the community consultation phase of the river values project.

Whilst the results from this study do provide the Trust with a sound base, it should, however, be noted that this project is one of the first to be undertaken by the Trust in this area.

As such, it will need to be supplemented, over time, with more detailed research to better understand how community “philosophy” translates in particular to attitudes towards specific developments proposed along the rivers and the development and implementation of specific river policies.

2.0 INTRODUCTION

Established in 1989 under the *Swan River Trust Act 1988*, the Swan River Trust (the "Trust") is a WA State Government agency responsible to the Minister for the Environment.

The Trust:

- Manages and protects the river system and works with State and Local government and other bodies to provide facilities around the rivers.
- Advises the Minister for the Environment on development proposals within the Trust's Management Area.
- Controls and prevents pollution of the rivers and keeps them clear of rubbish.
- Advises on and controls the erosion of riverbanks.
- Provides advice to Local Governments and the Western Australian Planning Commission on town planning issues affecting the rivers.
- Promotes community awareness of issues affecting the health of the river system and increases community involvement in river protection and restoration.

With this overall charter, the Trust is committed to sound and representative community consultation practices and projects to ensure that it has a good understanding of the values and aspirations held by the people of Perth in regard to the Swan and Canning Rivers.

This project is a key component of this ongoing community consultation process, commissioned by the Trust specifically to consolidate and enhance its understanding of community attitudes on a range of issues relating to the rivers.

2.1 Objectives

The specific objectives of the project have been to:

- Gain an awareness of the views, aspirations and expectations held by the Perth community in regard to various river values and to determine what trade offs the community would find acceptable between these values.
- To obtain results that are representative and defensible in public arenas as indicators of the prevailing community attitudes.
- To provide baseline information for the Trust to use in decision making, to help inform additional stages of the community consultation process and to assist in the development of future targets for each of the river values.

2.1 Objectives (continued)

The Trust's river values assessed as part of this project include:

- Ecosystem health and biodiversity
- Recreation
- Landscape
- Culture
- Navigation
- Fishing
- Water supply

The management area of the Trust as it applies to the Swan and Canning Rivers for this project is defined by the parks and reserves alongside the Swan and Canning Rivers, and, in terms of length:

- The boundary with the Fremantle Port
- The Avon River to the confluence with Moondyne Brook
- The Helena River to the lower diversion dam
- The Southern River to Allen Road crossing
- Canning River to its confluence with Stinton Creek

2.2 Study Method

In order to fully meet the objectives of the project, a research approach involving two key stages has been implemented:

1. **Qualitative or exploratory research** – involving the conduct of three focus groups in the initial stage of the project, designed to fully explore river values and aspirations amongst the Perth community, to add increased depth to the Trust's understanding of attitudes towards the river and to assist in the design of the questionnaire administered in Stage Two (below).
2. **Survey research** – involving the development and administration of a telephone survey to a randomly selected representative sample of 400 Perth metropolitan region residents, designed to provide the Trust with measurable results across the area to meet the objectives of the study.

With this in mind, two reports have been provided to the Trust as outputs from this project.

The first (a Powerpoint presentation style report) details the results of the qualitative research. It has been provided to the Trust under separate cover, however is also appended to this report (Appendix 2) for additional information and is referred to throughout this report where relevant.

2.2 Study Method (continued)

This report, the second and final output, focuses on the results from the survey component of the study, however, also aims to pull all of the findings and conclusions together with a set of strategic recommendations for the Trust to consider, designed to provide input and information for the next stage of the community consultation process and the target setting process associated with the river values assessed.

2.2.1 Scoping Meeting

The study commenced with a scoping meeting to refine the brief. The scoping meeting was held between Trust staff managing the project and representatives from Research Solutions.

The meeting covered the following areas:

1. Clarification of the objectives of the project and the best way to achieve them.
2. Expectations from the Trust in respect to the outcomes of the project.
3. A detailed understanding of how information would be used and the level of detail required in the study.
4. Confirmation of the timing plan for the project.

2.2.2 Qualitative Research – Focus Groups

Full details regarding focus group design, recruitment and conduct is included in the report completed under separate cover, included as Appendix 2 to this report.

2.2.3 Survey Research – Telephone Survey

2.2.3.1 Questionnaire Design

Following detailed consideration of the results from the qualitative research stage of the project, a questionnaire to meet the needs of this study was developed and refined by Research Solutions in consultation with representatives from the Trust.

In accordance with the provisions of AS 4752 – Market and Social Research (under which Research Solutions is accredited), the final questionnaire was authorised by the Trust prior to the commencement of interviewing.

A complete copy of the questionnaire used is included as Appendix 1 to this report.

2.2 Study Method (continued)

2.2.3.2 Pilot Study

The draft questionnaire was piloted on a small sample of respondents in the period from Thursday 9 November to Wednesday 15 November 2006.

No significant changes were required as a result of the pilot and consequently the study proceeded to the sampling and data collection phase as detailed below.

2.2.4 Sampling and Data Collection

A total of 400 respondents were surveyed by telephone in the period from Thursday 9 November to Thursday 21 December 2006 (respondents from the pilot study were included in the overall sample).

Given that the questionnaire included some detailed questions that required some consideration of options by respondents, the approach taken to survey administration consisted of three stages whereby:

- Potential respondents were contacted by telephone and recruited for participation in the study.
- If agreeing to participate, each potential respondent was mailed a portion of the questionnaire to read prior to the completion of a telephone interview.
- The respondent was then re-contacted by telephone to complete the interview.

All pre-interview recruitment and interviewing took place from 4.30pm to 8pm weekdays, 9.30am to 6pm on Saturdays and 10am to 6pm on Sundays, unless by specific prior appointment requested by the respondent.

The questionnaire had an administration time of approximately 20 minutes and each respondent was entered into the draw to win one of three \$100 Coles Myer Gift vouchers in appreciation of their participation in the study.

In order to ensure that the sample was as representative of the Perth metropolitan population as possible, a stratified random selection process was undertaken, whereby "quotas" were set to guide data collection, based on age, gender and the distance people lived from the Swan and Canning Rivers.

We have found this approach to be one of the best in achieving a representative sample – if some type of quota based parameters (along with a formalised call back procedure for randomly selected potential respondents) are not placed around the survey selection process there exists the potential to obtain a sample that could be skewed and hence biased, most often towards older residents and females. One of the only options in these circumstances is artificial weighing of the sample, which can sometimes mean, in a worst case scenario, that only a very small number of respondents are representing the views of an entire age cohort or group.

2.2 Study Method (continued)

The stratified random sample obtained for this survey has not required weighting and is broadly representative of the Perth Metropolitan region, in terms of broad age groups, gender and the concentration of the population within certain kilometre radii from the Swan and Canning Rivers.

All potential respondents were contacted randomly from the electronic White Pages and all interviewing was undertaken from a central telephone room, adhering to strict quality control procedures set down by Interviewer Quality Control Australia.

At least 10% of all completed interviews were validated during the data collection process to ensure accuracy and reliability of the collected data. Due to the fact that they may have a more detailed knowledge of the river than the average resident and hence have the potential to bias survey results, people who were employed by the Department of the Environment, the Swan River Trust, a local government area bordering the Swan or Canning Rivers or who worked in communications, advertising, the media or market research were excluded from the study.

All households within each stratified group (noted above) had an equal chance of being contacted and asked to participate in the research. When a telephone number was not answered, up to six further attempts were made to contact the household at intervals at least four hours apart and on different days. Following this callback procedure, if a potential respondent could not be contacted a new number was then randomly selected for participation in the survey. This process was undertaken until the final sample was achieved.

The total sample size of 400 produces a sampling error of $\pm 4.9\%$ at the 95% level of confidence. This is to say, that if a census was undertaken of all residents in the study area, we would be 95% confident that the results obtained would be within $\pm 4.9\%$ of those obtained from this research.

The survey response rate, in two stages (initial recruitment of respondents and completion of the telephone assisted interview) is detailed below.²

Response Rate – Initial recruitment phase

• Successful recruitment (519 potential respondents recruited)	20.7%
• Not available/away for duration of study	9.3%
• Refusals	65.2%
• Not contactable after more than 6 call-backs	0.7%
• Language/behavioural issues	4.2%
	100.0%

² Encouragingly, the response rate for the initial recruitment phase of the study is significantly higher than the current market research industry standard (around 15%) and is felt to be attributable to both the methodology employed (call to recruit, followed by a telephone assisted interview) for the study and the topic being of broad scale general interest across the Perth metropolitan area.

2.2 Study Method (continued)

Response Rate – Telephone assisted interview

• Completed interviews	83.9%
• Not available	3.8%
• Refusals	6.5%
• Not contactable after more than 6 callbacks	1.7%
• Called at conclusion of survey period	4.2%
	100.0%

A complete sample profile is provided in the following table.

	n=400 (%)
Gender:	
Male	45.3
Female	54.7
Age Groups:	
18-24 years	7.3
25-35 years	21.5
36-44 years	16.5
45-50 years	16.8
51 to 59 years	18.0
60 years and over	20.0
Life Cycle stage:	
Single people (no children)	13.8
Single people (with children)	3.0
Younger couple	8.0
Young family (children under 6 years)	15.5
Middle family (children 6 to 15 years)	14.8
Mature family (children over 15 and at home)	17.0
Later family (all children have left home)	25.0
Older couple (no children)	3.0
Distance reside from the Swan or Canning Rivers	
5kms or less	39.0
6 to 20 kms	35.0
More than 20 kms	26.0

2.2 Study Method (continued)

2.2.5 Statistical Analysis

The collected data was checked, coded and validated prior to being entered into SPSS for statistical analysis. Once entered, the data was processed through a number of statistical techniques in order to satisfy the research objectives, including frequency counts, cross tabulation analysis, mean and standard deviation, and tests of statistical significance. Unless stated otherwise, all percentages referred to in this report have been rounded to one decimal place to increase report readability and ease of use.

All “differences” recorded in this report (by, for example, age, gender or between results) are only reported when there is what is known as a **statistically significant difference**. This means that a statistical test has been undertaken on the data to see how likely the percentage difference between results would be if we had undertaken a census (so interviewed everybody) rather than a sample across the Perth metropolitan community. After this testing, we only report those differences in results that would also be recorded (95 times out of 100) if we interviewed everyone in the Perth metropolitan community, rather than just a sample of 400 respondents.

Further, more detailed information in regard to the survey methodology outlined in this section of the report is also included, in accordance with the provisions of AS 4752 – Market and Social Research, in Appendix 1 to this report.

3.0 RIVER USE PROFILE

Summary

Whilst the iconic value and importance of the rivers to the Perth community is firmly established throughout this report, actual visitation levels are quite varied, with around 1 in 2 respondents visiting the river no more than once a month or twelve times per year.

River visitation levels are, as to be expected, primarily driven by proximity, with those respondents residing within five kilometres of the river much more likely to visit on a regular basis, in comparison with those who reside more than five kilometres away from the foreshores.

This result points to a logical proximity relationship associated with river use— once residences move beyond a close drive or walking proximity, river use declines dramatically and may become more of a destination type experience (for a day trip or special event) rather than an everyday activity.

River uses are predominantly foreshore based, with recreation and social activities including walking and attending picnics or BBQs two of the principal reasons for visiting the foreshores.

Other prominent activities include driving past or along the rivers and cycling, followed by the first water activity – fishing, foreshore based events, children’s activities, motor boat cruising and dining out overlooking the river waters.

Supporting visitation results, respondents living within a 5 km radius of the river generally visit for more everyday exercise and activities like walking or cycling, whilst those residing further away are more likely to visit for special events (particularly those who live more than 20 kms from the rivers), picnics or barbeques or dining out.

3.1 River Visitation

In order to measure existing river visitation levels, respondents were asked to indicate how many times they had been down to the Swan and Canning Rivers over the preceding 12 months (i.e. Since November/December 2005).

Overall river visitation levels are reasonably mixed, with the slight majority (52.8%) of respondents visiting the rivers either once a month or less often.

Analysis of visitation levels by area of residence (measured by distance from the river) does, however, provide a better understanding of visitation patterns.

As to be expected, respondents living within 5 kms of the rivers visit much more regularly, with almost 1 in 2 (44.2%) going down to the rivers once a week or more often.

Conversely, around 2 in 3 respondents who live more than 5 kms from the rivers visit once a month or less often.

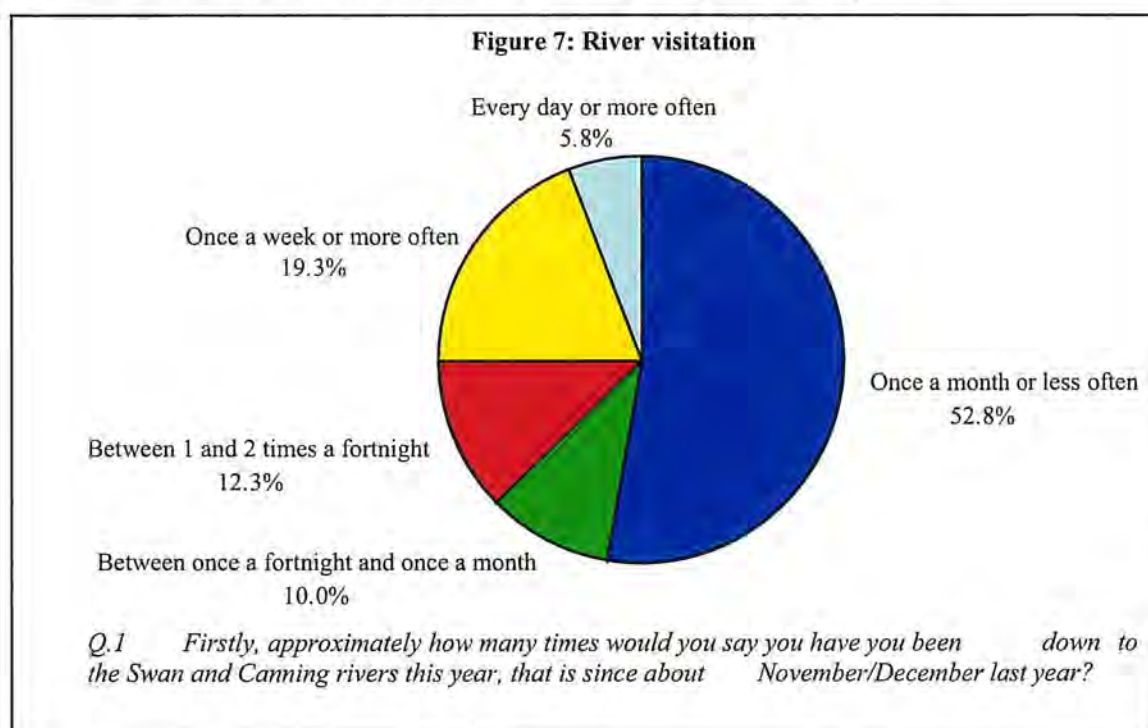
These results point to a logical proximity relationship associated with river use and are also perhaps indicative of a geographical or radial boundary associated with river use – once residences move beyond a close drive or walking proximity of the river, use declines dramatically and may become more of a destination type experience (for a day trip or special event) rather than an everyday activity.

This finding is further supported with river use results, detailed in Section 3.2 of this report.

Whilst the relationship is not as strong, there is also some indication that river use tends to increase with advancing years, with around a third (30.1%) of respondents over 60 years of age, visiting the river once a week or more often, in comparison, for example, with only 17.2% of 18 to 24 year old respondents doing the same.

3.1 River Visitation (continued)

River visitation levels did not, however, differ by the gender of respondents.



3.2 River Uses

On average, people go down to the rivers to perform 2 or 3 different types of activities, mainly dominated by social and recreational pursuits.

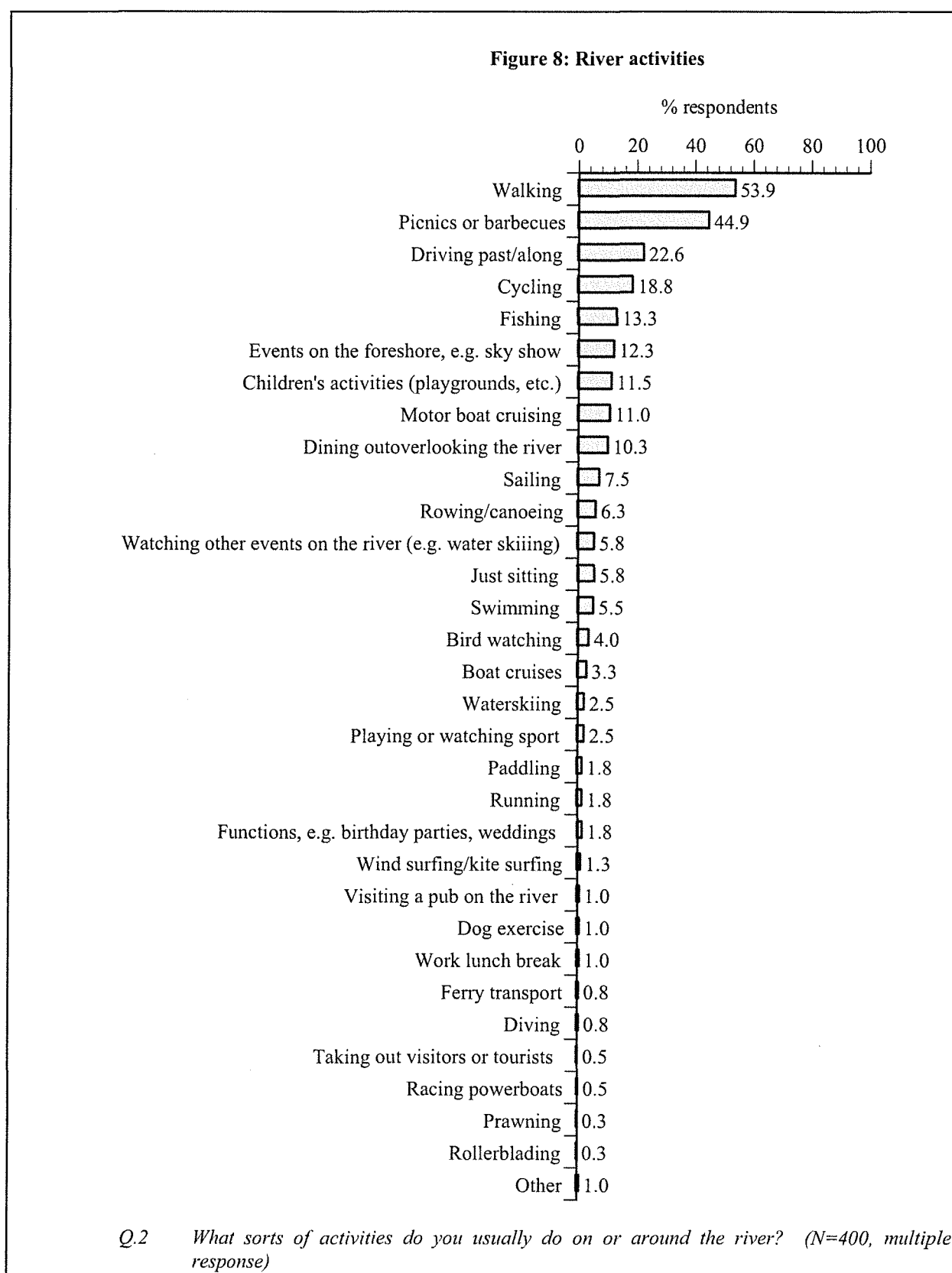
As may be expected, walking and attending picnics and barbeques are the most prominent reasons to go down to the rivers nominated (unprompted) by respondents.

These two prominent activities, nominated by around 1 in 2 respondents, are followed by another group of activities, again with a recreation or social base, and undertaken by between 1 in 10 and 1 in 5 respondents, namely;

- Driving past or along the river 22.6%
- Cycling 18.8%
- Fishing 13.3%
- Events on the river foreshores 12.3%
- Children's activities 11.5%
- Motor boat cruising 11.0%
- Dining out/having coffee overlooking the river 10.3%

Other river activities, undertaken by less than 1 in 10 respondents, include special interest activities (like sailing, diving, racing powerboats, waterskiing, windsurfing, etc.) and other passive recreational activities like watching special interest events, sitting, or bird watching.

3.2 River Uses (continued)



3.2 River Uses (continued)

Supporting the results detailed in Section 3.1 – River Visitation which point to the river being an “everyday” destination for those living close to it and a “destination” for those not, there are some distinct differences in river uses and the types of activities undertaken dependent on how far people live away from the rivers.

Those living within a 5 km radius of the river generally will go down or around the river for more everyday exercise and activities like walking or cycling whilst those residing outside the 5 km radius are more likely to visit the river for special events (particularly those who live more than 20 kms from the rivers) picnics or barbeques or dining out overlooking the rivers.

River Activity	Respondents living 5kms or less from the rivers (n=156)	Respondents living between 6 and 20kms from the rivers (n=140)	Respondents living more than 20kms from the rivers (n=104)
Walking	64.7%	52.1%	39.8%
Picnics or barbeques	39.1%	49.3%	47.6%
Driving past/along	28.8%	17.1%	20.4%
Cycling	25.6%	13.6%	13.6%
Fishing	13.5%	12.9%	13.6%
Children’s activities (playgrounds etc)	12.2%	10.7%	11.7%
Sailing	12.2%	6.4%	1.9%
Motor boat cruising	10.9%	12.9%	8.7%
Dining out/cafes overlooking the river	10.9%	16.4%	1.0%
Swimming	7.1%	4.3%	4.9%
Rowing/Canoeing	7.7%	7.9%	1.9%
Events on the foreshore (eg. Sky show, Xmas carols, concerts)	7.7%	10.7%	21.4%
Just sitting	7.7%	5.7%	2.9%
Bird watching	7.1%	2.1%	1.9%
Watching other events on the river (water skiing, power boat racing)	5.8%	5.0%	6.8%
Running	3.2%	1.4%	0.0%
Playing /watching sport	3.2%	3.6%	0.0%
Boat Cruises	1.9%	3.6%	4.9%
Dog Exercise	2.6%	0.0%	0.0%
Paddling in the river	2.6%	1.4%	1.0%
Windsurfing/ kite surfing	1.9%	0.7%	1.0%
Functions (eg. Birthday parties, weddings)	1.3%	2.9%	1.0%
Racing powerboats	0.6%	0.7%	0.0%
Taking out visitors or tourists	0.6%	0.7%	0.0%
Waterskiing	0.6%	3.6%	3.9%
Work lunch break	0.6%	0.0%	2.9%
Rollerblading	0.6%	0.0%	0.0%
Ferry Transport	0.6%	0.7%	1.0%
Visiting a pub on the river	0.0%	2.1%	1.0%
Diving	0.0%	0.7%	1.9%
Prawning	0.0%	0.7%	0.0%
Other	0.0%	1.4%	1.9%

Question: What sorts of activities do you usually do on or around the river? (do not prompt)

3.2 River Uses (continued)

There were also some traditional differences in river activities by gender and age, with significant differences highlighted in the tables below.

River Activity (Multiple Response, unprompted)	Males (n=181)	Females (n=218)
Walking	47.0%	59.6%
Fishing	21.0%	6.9%
Children's activities (playgrounds etc)	5.0%	17.0%
Dining out/cafes overlooking the river	6.6%	13.3%
Picnics or BBQs	38.1%	50.5%

River Activity (Multiple Response, unprompted)	Under 35 years	35 to 50 years	50 plus years
Walking	46.1%	57.1%	57.0%
Children's activities (playgrounds etc)	13.9%	17.3%	4.6%
Dining out/cafes overlooking the river	3.5%	9.8%	15.9%
Picnics or BBQs	51.3%	48.1%	37.1%
Events on the foreshore (eg. Sky Show, Xmas Carols, concerts)	19.1%	10.5%	8.6%

Question: What sorts of activities do you usually do on or around the river? (do not prompt)

4.0 ATTITUDES TOWARDS THE RIVERS

4.1 Summary

Overall, results in this area reinforce the iconic value of the Swan and Canning Rivers to the Perth community and their importance as part of Perth's landscape.

The strongest theme emerging from the results, which reinforces findings from the focus groups held as first stage of this project and echoed throughout the remainder of this report, concern the rivers' health and the need to retain natural areas.

"[You] hear about the algal blooms a lot more often now and garbage in the river."

"The river looks sluggish and brown."

"Do not go into the water – it's toxic is a regular message (from the Trust)."

Focus group participants, Stage One

Aspirations for river health appear to relate to the rivers providing sufficient water quality to be used for recreational activities like swimming and fishing now, as well as in an intergenerational sense, with a desire for the next generation to also have the opportunity to experience the sorts of activities around the river (like swimming, fishing and crabbing/prawning) that respondents did/ would like to have done.

"The children/grandchildren [should] be able to recreate around and in the Swan River in the same manner as I used to as a child."

Focus group participant, Stage One

Whilst views regarding river health and the need to protect and conserve natural environments, as well as the river's existing and intergenerational recreational value, are very consistent, attitudes towards other forms of development along the river foreshores are much more diverse.

There is a strong level of consensus about what the community would NOT like to see developed – mainly commercial development in the upper reaches of the Swan and Canning Rivers and residential development right down to the foreshore.

However, opinions regarding the river as a destination for community events and the provision of additional infrastructure to support recreational areas (like cafes and kiosks) are divided, with at least 10% (and in the case of café and kiosk development almost a third) of respondents in strong opposition to this type of future development.

4.1 Attitudes Towards the Rivers - Summary (continued)

If commercial and additional residential/retail development **does** occur, however, there is a strong level of support for nodal development (like East Perth) as opposed to development right along the foreshore which may conflict with the goal of protecting and conserving natural environments.

"East Perth rather than Raffles."

"I remember it as a child and don't want it to change."

"I would view it as a community asset, not an asset of a select portion of the very rich. I think it's rather nice at the moment, it's accessible to everyone."

Focus Group Participants, Stage One

4.2 Attitudes Towards the Rivers - Detailed Results

In order to better understand current attitudes towards the river and community aspirations for its future development, respondents were asked to rate a series of 14 statements (developed from the qualitative research undertaken in the first stage of this project) on a seven point scale ranging from 1, which was strongly disagree, through to 7, which was strongly agree.

Overall, and reinforcing the conclusions made from the focus groups held as the first stage of this project, the rivers are strongly valued, representing an important part of Perth's recreational, social and cultural landscape.

The vast majority of respondents (98.8%) agree or strongly agree that the rivers are a really important part of Perth's landscape.

The river's natural areas and overall health appear to take priority in terms of aspirations for the rivers' overall future development, with more than 9 in 10 respondents agreeing or strongly agreeing that:

- The natural areas along the rivers are really important and should be retained (95.6%).
- There should be some type of restrictions on motorised boats in narrow sections of the rivers where the foreshore might erode easily (91.0%).
- It is acceptable for certain parts of the river foreshores being closed off for the protection or rehabilitation of the natural environment (92.5%).

Recreational opportunities for people both on and around the rivers are also important and aspirational, reinforcing comments made in the focus groups by participants that they would like to see the rivers providing the opportunity for swimming, fishing and other recreational pursuits in the future, similar to how it has been as they were growing up.

4.2 Attitudes Towards the Rivers - Detailed Results (continued)

A significant proportion of respondents agree or strongly agree that the rivers should:

- ***Be an intergenerational resource***
 - It is very important that my children can experience the sort of activities around the rivers that I did/ would like to have done (97.0%)
- ***Maintain water quality of a standard suitable for in water recreational activities and fishing***
 - We should be able to catch fish, prawns and crabs from the rivers and they should be healthy enough to eat (86.8%)
 - We should be able to swim in the rivers (83.3%)
- ***Have foreshores accessible for recreational pursuits***
 - It is important to have walking and cycle access all the way around the rivers (76.8%)

In terms of further development for residential, commercial and retail/entertainment purposes along the rivers, attitudes become much more mixed.

Whilst there is a strong feeling that commercial development should not occur along the upper parts of the Swan and Canning Rivers (79.3% agree or strongly agree that commercial development should not occur in these areas) and residential development should be restricted so that it does not go right down to the water's edge (only 3.3% believe that this should occur), opinions regarding whether there should be an increase in the number of cafes and kiosks around the rivers and a larger range of events occurring on or around the rivers during the year are divided.

Around 1 in 4 respondents (25.5%) agree or strongly agree that there should be more small cafes and kiosks, with a similar proportion (31.6%) strongly opposed to this type of development.

There was, however, some degree of consensus in relation to the type of commercial development preferred, with 71.3% of respondents either agreeing or strongly agreeing that the development of apartments, shops and cafes should be in a small number of locations or nodes along the rivers, like East Perth, rather than spread out all along the foreshores. Again, however there were around 1 in 10 respondents (10.8%) in strong disagreement with this type of commercial development.

In relation to river events, opinions were not as strongly divisive, however, just over half (54.3%) of respondents either agreed or strongly agreed that there should be a range of vibrant events occurring on or around the rivers during the year and around 1 in 10 respondents (9.0%) were strongly opposed to the idea.

4.2 Attitudes Towards the Rivers - Detailed Results (continued)

Further, more detailed results for each of the attitudinal statements tested, are provided in the table below.

Statement	% <u>agree</u> / strongly <u>agree</u> (n=400)	% <u>disagree</u> / strongly <u>disagree</u> (n=400)
<i>Overall importance</i>		
I think the rivers are a really important part of the Perth landscape	98.8%	0.8%
I believe it is important that my children and their children can experience the sort of activities around the river that I did/ would like to have done	97.0%	0.8%
<i>Natural environment</i>		
The natural areas along the river are really important to me and should be retained	95.6%	1.0%
I would accept certain parts of the river foreshore being closed off for the protection or rehabilitation of the natural environment	92.5%	2.5%
I feel that there should be some type of restrictions on motorised boats in narrow sections of the river where the foreshore might erode easily	91.0%	1.8%
<i>Recreational opportunities</i>		
I think we should be able to catch fish, prawns and crabs from the river and they should be healthy enough to eat	86.8%	3.3%
I think we should be able to swim in the river	83.3%	2.8%
It is important that we have walking and cycle access all the way around the river	76.8%	6.0%
<i>Development and Events</i>		
I am not in favour of commercial development along the upper parts of the Swan and Canning Rivers	79.3%	8.0%
I would prefer the development of apartments, shops and cafes to be in a small number of location or nodes along the river, like East Perth, rather than spread out all along the foreshore	71.3%	10.8%
There should be a range of vibrant events occurring on an around the river during the year	54.3%	9.0%
I believe that there should be more small cafes and kiosks around the river	25.5%	31.6%
I support increased residential development right down to the water's edge	3.3%	90.6%

4.2 Attitudes Towards the Rivers - Detailed Results (continued)

Generally, **females were more likely than males** to be cautious about further development along the rivers, being more likely to:

- Agree that there should be some type of restrictions on motorised boats in narrow sections of the rivers where the foreshore might erode easily (96.3% of females agreed or strongly agreed with this statement in comparison with 84.5% of males).
- Not be in favour of commercial development along the upper parts of the Swan and Canning Rivers (83.1% of females agreed/strongly agreed in comparison with 74.6% of males).
- Prefer that the development of apartments, shops and cafes to be in a small number of location or nodes, like East Perth, rather than spread out all along the foreshores (76.7% of females agreed or strongly agreed in comparison with 64.6% of males).

Conversely, males were more likely than females to believe that you should be able to swim in the rivers (88.4% of males agreed or strongly agreed in comparison with 79.0% of females).

By age, only one significant difference emerged in results, with those respondents aged between 36 and 50 years more likely to feel that there should be a range of events along the rivers each year (60.9%) in comparison with those 50 years plus (46.7%).

Attitudes towards events along the rivers each year also saw a significant difference emerge depending on where people live, with those respondents living within 5 kms of the rivers generally less likely to agree or strongly agree that there should be a range of events each year (45.5%) in comparison with those respondents living more than 5kms away (62.7%).

5.0 RIVER VALUES - PRIORITY AREAS AND THE ACCEPTABLE BALANCE

5.1 River Values – Priority Areas and the Acceptable Balance - Summary

As noted, the Swan River Trust currently has a number of core river values which form an integral part of its environmental management framework including;

- Ecosystem health and biodiversity
- Recreation
- Landscape
- Culture
- Navigation
- Fishing
- Water supply

As one of the key objectives of this project is to provide the Trust with a level of understanding as to what level of priority and focus the community currently perceives it should place on each of its river values and what trade offs or balance between the values would be acceptable, respondents were asked a suite of questions to provide:

- **A community based priority order** for the river values, as determined by respondent opinions regarding which values the Trust should focus on maintaining and improving in the future.
- **An additional measure of the degree of focus** to be placed on each value.
- **An acceptable trade off scenario** between the core river values of flora and fauna, foreshore recreational areas, cultural and heritage sites and on water recreation activities.
- **A perspective on water quality** – in terms of the degree of personal commitment and “sacrifice” respondents were prepared to make in their own home environment to achieve higher levels of river water quality.

The detailed results for each of these areas are provided in Sections 5.2, 5.3, 5.4 and 5.5 below.

Pulling all of the results in this area together, we see **WATER QUALITY** emerge as **THE** key issue for respondents, consistently rated as the most important river value for the Trust, to which it should afford significant focus.

5.1 River Values - Priority Areas and the Acceptable Balance - Summary (continued)

A priority order for the river values and the perceived level of focus to be provided to each is provided in the table below.

Priority	River Value	Degree of Focus (%)
1	Water Quality - of a standard so it is safe to swim and eat fish	28.6
2	The amount of fresh water in the river to maintain the natural ecosystem	16.2
3	The number and diversity of wildlife and plants and birds along the river	14.0
4	The number and diversity of fish and marine creatures	11.6
4	The visual landscape around the foreshore, ie. Parks, native vegetation, the type and nature of buildings and shops	11.2
6	The management of the number of yachts and motorboats, moorings, facilities and the impact of boats	8.1
6	The range of recreational activities that can be undertaken on and around the river	6.9
7	The number and condition of cultural and heritage sites	3.4

Along with a strong priority and focus desired to improve water quality in the rivers, there also appears to be a degree of commitment to some individual sacrifices or actions in order to achieve the higher level of water quality desired.

This conclusion about individual sacrifices is made based on the results from a scenario based question, where respondents were asked to consider three different levels of water quality and potential costs to the community and score each in terms of its individual appeal.

5.1 River Values - Priority Areas and the Acceptable Balance - Summary (continued)

The scenarios assessed included:

- A situation where **water quality continues to decline** over the next 10 years, meaning that swimming and fishing is quite restricted however there is no personal “cost” for residents, in the form of the need to use different types of fertilisers or increased government expenditure on the rivers.
- A **small improvement in river water quality** over the next 10 years, meaning that swimming and fishing restrictions are not as severe, however there are some personal “costs”, including more expensive “river friendly” fertilisers and increased government expenditure on the rivers.
- A **significant improvement in river water quality** over the next 10 years, meaning that it is possible to swim and fish in the river for most of the year however the personal “costs” or sacrifices are higher, with residents most likely needing to reduce the size of the lawn they currently have and pay more for some agricultural products, in addition to increased government expenditure and regulations on the rivers.

Overall, the third scenario with a significant improvement in water quality over the next 10 years emerged as the option with the strongest level of support.

This option achieved an active³ level of support of 40.1%, significantly higher than both the first (4.1%) and second options (25.4%) assessed.

After water quality, the focus on native habitats and vegetations is strong and encompassed in the next three priority values – water quality, flora and fauna and fish and marine creatures.

This strong focus on flora and fauna has been accompanied by a willingness from respondents to prioritise outcomes in this area in comparison with recreation and cultural and heritage river values.

As shown in figure 9 overleaf, almost all respondents chose to invest (in the special trade off scenario detailed above) in improving flora and fauna habits along the rivers (95.8%), in comparison with a smaller percentage (81% and 80%) of respondents choosing to invest in improvements to recreation facilities along the foreshores and the management of recreation on the water and only 50% choosing to invest in the protection of cultural and heritage sites along the rivers.

³ The active level of support for each water quality outcome is defined as the actual recorded level of support subject to the application of a statistical model (known as Pope’s model), which accounts for the difference between what people SAY they will do/prefer (their intent) and what they actually do. The model is based on extensive research and evidence in Australia in studies that have tracked, primarily, purchase intent and behaviour

5.1 River Values - Priority Areas and the Acceptable Balance - Summary (continued)

Figure 9: Second focus is on improvements to flora and fauna

	Remain at current state	Some investment in improvement	Major investment in improvement
Provision of recreation facilities on the foreshore	18%	54%	27%
Management of recreation on water	20%	53%	27%
Range and amount of flora and fauna	4%	54%	41%
Protection of cultural and heritage sites	49%	41%	9%

In terms of the actual outcomes desired by the majority of respondents for each of the river values above, we have seen the following emerge:

- A significant proportion of respondents (95.8%) being prepared to invest at least 50% of the allocated budget in flora and fauna habitats, to move from the current state, described as where there exists some native vegetation and habitats along the river and occasional wildlife are seen to a situation where there is AT LEAST an increased amount of native vegetation along the rivers in a reasonable condition, meaning that a significant proportion of urban shorelines have fringing trees and/or sedges, most eroded areas are being replanted and wildlife is prevalent.
- The majority of respondents (82.0%) of respondents being prepared to invest at least 20% of the allocated budget to recreation facilities on the foreshores, to move from the current state, where some types of recreation facilities are available at a few key sites along the rivers but some are rundown to an outcome where AT LEAST most types of recreation facilities are available at several sites along the rivers and are reasonably well maintained.
- The majority of respondents (81.0%) being prepared to invest at least 10% of the allocated budget to controls related to on water recreation, to move from the current state, described as where there are some controls on what parts of the rivers certain activities are able to take place in and where water craft can be moored to a situation where there are more restrictions on activities along the rivers by TIME and PLACE, with certain activities permitted, for example, in the morning and others in the afternoon with some on water policing to enforce regulations.
- Almost 1 in 2 respondents (49.3%) not prioritising or investing in improvements to cultural and heritage sites, choosing to maintain the current state, described as where a small number of cultural and heritage sites are protected, with minimum maintenance or signage.

5.2 River Values – Priority Order

In order to provide a community based priority order for the river values, respondents were asked, after reading through each of the river values listed in the questionnaire (posted to all respondents as part of telephone assisted interviewing process) which ones they felt the Swan River Trust should focus on maintaining and improving.

The list of river values provided to respondents included;

- *The visual landscape around the foreshores, i.e. parks, native vegetation, the type and nature of buildings and shops*
- *The water quality in the rivers so it is safe to swim and eat fish*
- *The range of recreational activities that can be undertaken around and on the rivers*
- *The number and condition of cultural and heritage sites*
- *The management of the number of yachts and motorboats, moorings, facilities and the impact of boats*
- *The number of diversity of fish and marine creatures*
- *The number and diversity of wildlife and plants and birds along the rivers*
- *The amount of fresh water in the rivers to maintain the natural ecosystem*

Overall, respondents felt that the Trust should primarily focus on **maintaining and improving the water quality in the rivers so it is safe to swim and eat fish**, with more than 9 in 10 (91.0%) feeling that this should be a priority value or area.

Following this clear leader were two values scored similarly and related to biodiversity and ecosystem health:

- The amount of fresh water in the rivers to maintain the natural ecosystem – 82.0% of respondents felt that the Trust should be focusing on maintaining and improving this area/value.
- The number and diversity of wildlife and plants and birds along the rivers - 81.0% of respondents felt that the Trust should be focusing on maintaining and improving this area/value.

This group of values were followed by:

- The number and diversity of fish and marine creatures – 73.0% of respondents felt that the Trust should be focusing on maintaining and improving this area/value.

5.2 River Values – Priority Order (continued)

Then, at a statistically lower level of importance:

- The visual landscape around the foreshores – 63.0% of respondents felt that the Trust should be focusing on maintaining and improving this area/value.
- The management of the number of yachts and motor boats, moorings, facilities and the impact of boats – 59.0% of respondents felt that the Trust should be focusing on maintaining and improving this area/value.
- The range of recreational activities that can be undertaken around and on the rivers – 59.0% of respondents felt that the Trust should be focusing on maintaining and improving this area/value.

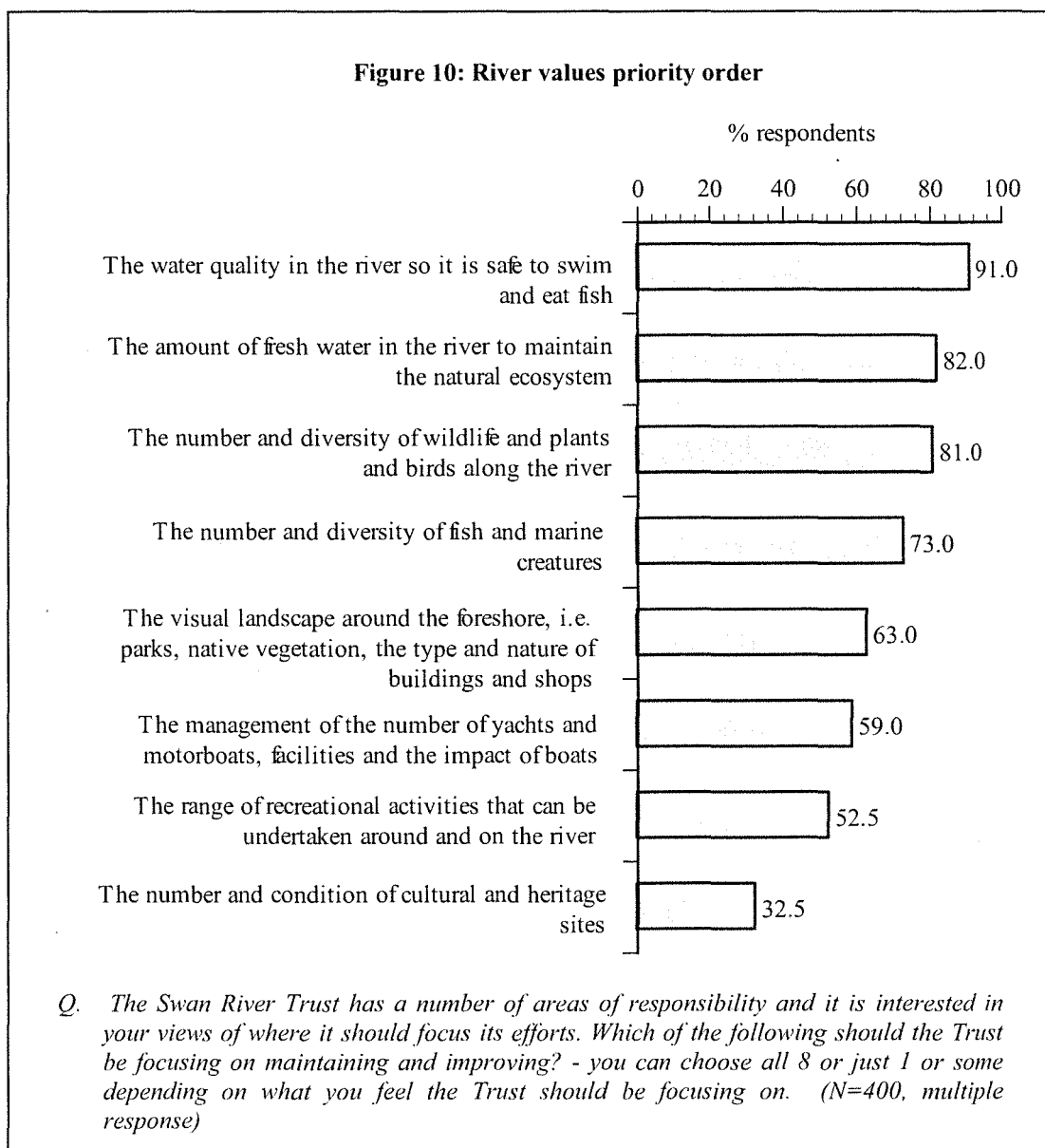
The remaining river value was rated at a statistically lower level of importance:

- The number and condition of cultural and heritage sites – where 32.5% of respondents felt that the Trust should be focusing on maintaining and improving this area.

Results are also displayed graphically, overleaf.

Whilst there were some percentage differences in results by age, gender and the distance respondents lived from the river, it did not lead to a change in the priority order of the values (meaning that each age group and males and females placed the values in a similar order), indicative of a very consistent result across the sample in this area.

5.2 River Values – Priority Order (continued)



5.3 River Values – Degree of Focus

To provide the Trust with some more detailed information regarding the degree of focus respondents perceived should be placed on each river value, survey participants were asked, for the river values they felt the Trust should be focussing on maintaining and improving, to allocate 100 points between the roles.

Before doing so, respondents were provided with some additional information, with interviewers letting them know that, as an example, they could give 100 points to one area/value because they felt it was the most important by far, or that they could allocate the points between all of the focus areas they had selected (up to all 8) according to their perceived levels of importance.

Overall, the point allocation attributed across the river values provides us with a deeper understanding of the focus desired by respondents on each river value or area.

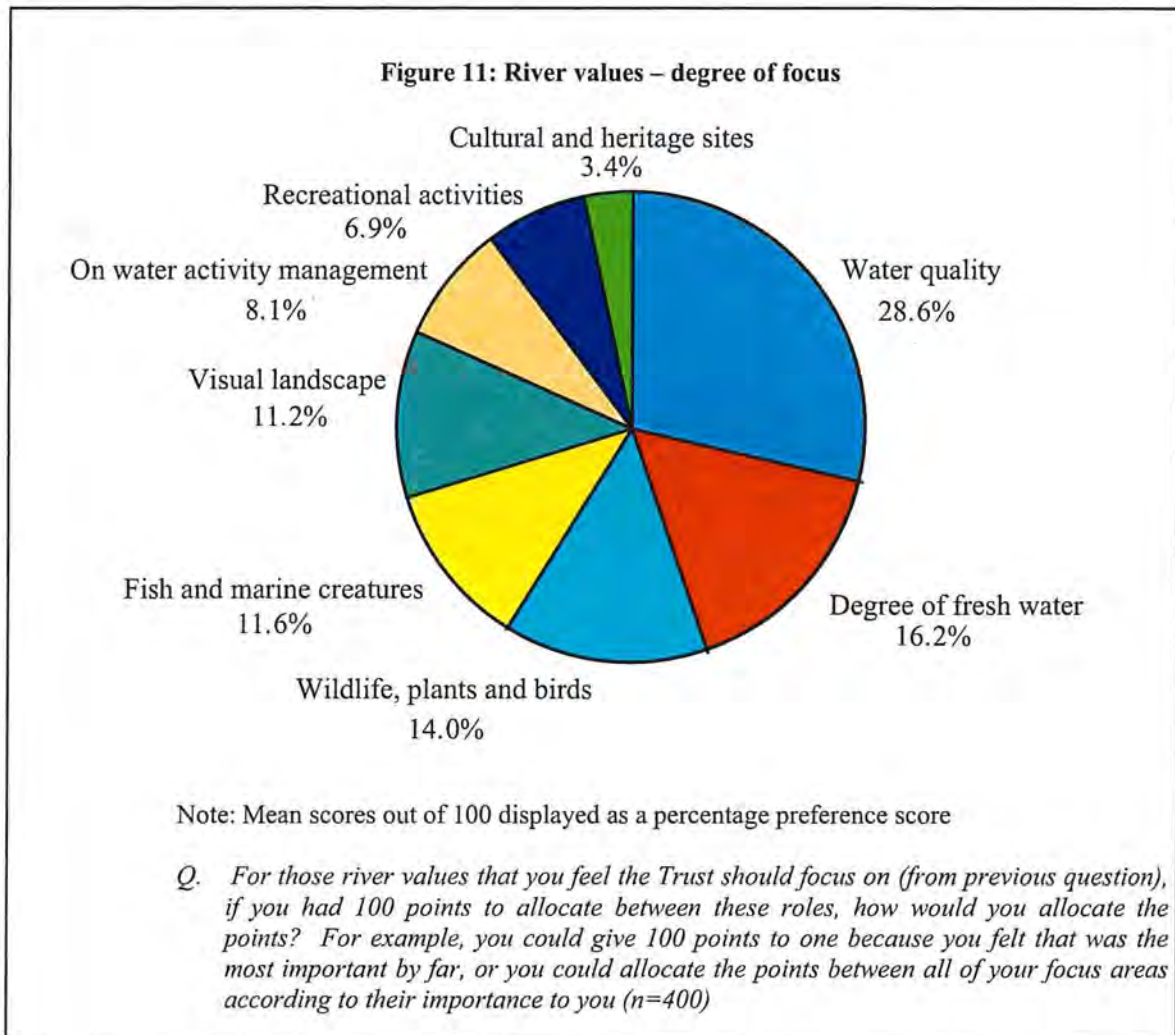
By utilising a constant sum approach and requesting that respondents allocate a maximum of 100 points across the river values assessed, we are able to better understand which river values are the most important to them and which they would be prepared to trade off in a constrained environment.

The constant sum results are displayed, using the average scores out of 100 for each river value/area (expressed as percentages), in figure 11, with more detailed information for each river value in the figures following.

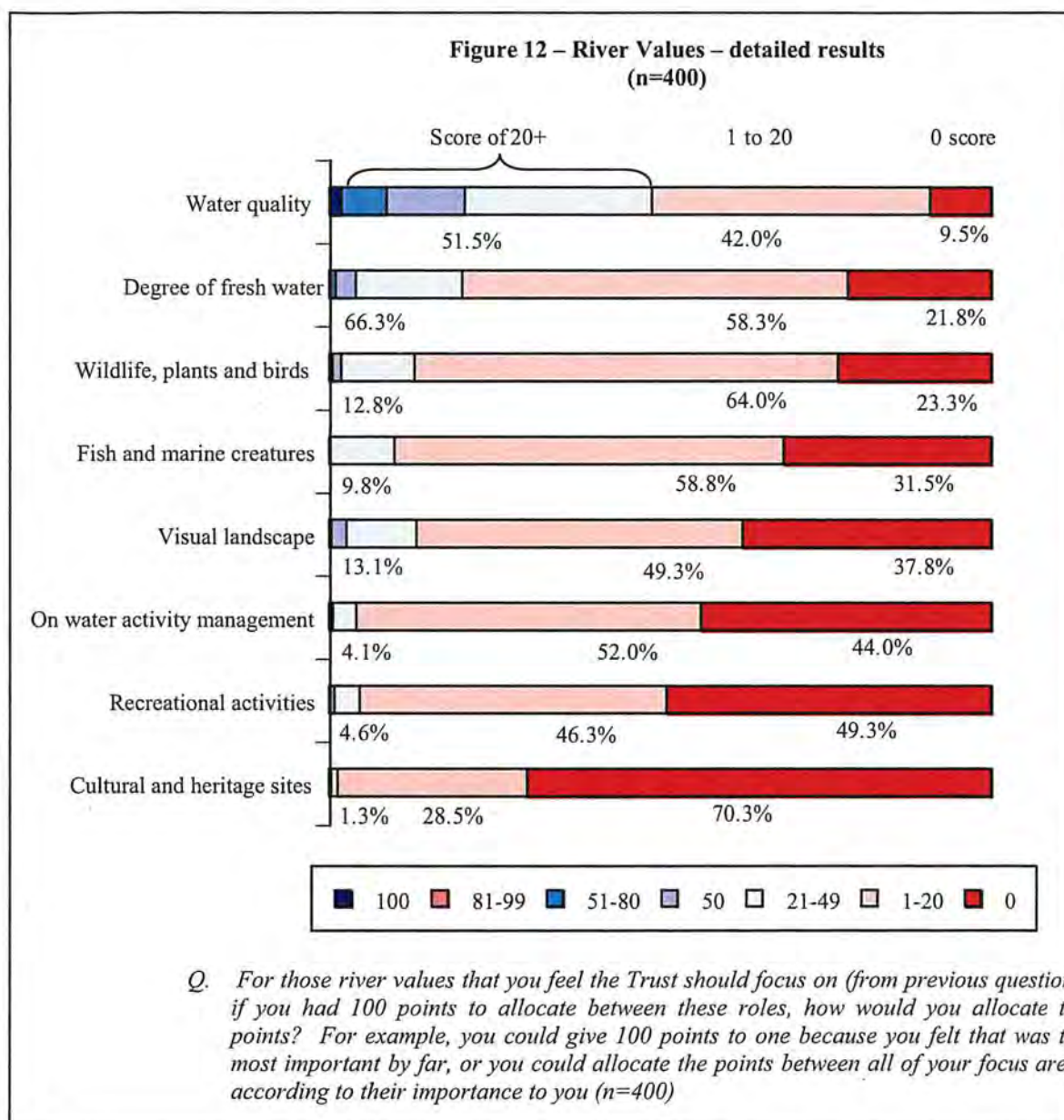
From this figure and further statistical testing, we can draw the following conclusions:

- **Water quality** to a standard where it is safe to swim and eat fish catches is desired as the key focus area for the Trust – with an average focus score almost double that of the next river value – the amount of fresh water in the river.
- **The amount of fresh water entering the river to maintain the natural ecosystem remains a clear second focus area** – with its average focus score significantly higher than the remaining values or areas.
- **The number and diversity of wildlife and plants and birds along the rivers also remains a clear third focus** with its average focus score significantly higher than the remaining values or areas tested.
- **The number and diversity and fish and marine creatures and the visual landscape around the foreshores** both have a statistically similar priority score.
- **On water activity management and recreational activities** along the rivers also has a statistically similar priority score.
- **The maintenance of cultural and heritage sites** is considered to be the lowest priority for the Trust, with an average focus score of less than 5 out of 100.

5.3 River Values – Degree of Focus (continued)



5.3 River Values – Degree of Focus (continued)



The priority order for river values did not change significantly by gender, age group and the distance people live from the river; indicative of a very consistent result across all respondents interviewed.

5.3 River Values – Degree of Focus (continued)

Pulling all of this information together (including Section 4.1) allows for the development of a matrix or table providing the Trust with a clear hierarchy of current community perceptions regarding its role and where it is believed resources need to be directed to achieve community aspirations.

River Value	Priority	Average Focus %
Water quality – safe to swim and eat catches	1	28.6%
Degree of fresh water to maintain ecosystems	2	16.2%
Wildlife, plants and birds	2	14.0%
Fish and marine creatures	3	11.6%
Visual landscape	4	11.2%
On water activity management	4	8.1%
Recreational activities	5	6.9%
Cultural and heritage sites	5	3.4%

Whilst, at first glance, this type of hierarchy appears quite environmentally focussed – rather than on active recreational or social use of the rivers (with recreational activities provided with a lower priority) it needs to be remembered that the outcome expected with a focus on, for example, water quality, is a recreational and social one – with respondents aspiring to water quality that is of a standard where additional recreational and social activities like swimming and fishing are possible.

5.4 River Values – Acceptable trade offs

In addition to the measurement of river values and focus areas overall, survey respondents were also provided with a series of potential river “outcomes” for a number of the value areas, namely; foreshore recreation, on water activities, flora and fauna and cultural and heritage sites

Each of the river outcomes had a cost attached to move to it from the current state (in points) and respondents were then provided with a set number of points (100) to allocate between the outcome, “trading off” to achieve their preferences.

The results, detailed below, add to our understanding of these river values, in terms of what particular outcomes would be chosen in a budget limited situation.

To assist with the interpretation of the results for this section of the report, a copy of the question asked and its accompanying grid, with points attached to each outcome, is reproduced below for reference.

Q.4 The Government has a number of areas of responsibility in regard to the river and it is interested in your views about the relative importance it should place on each of these.

A) The Trust would like to know how you would like to improve the river, so if you had 100 points to spend on extra efforts and resources over the next 10 years, how would you allocate these points to achieve your desired outcomes?

You can use your points to improve any of the areas below – each service improvement has a cost (which is displayed by the points in the boxes) so you need to choose what way you would like to distribute your points.

You cannot choose more than one box from each row, and you do not have to choose a box in each row – if you would like to you can spend all of the 100 points in 1 or 2 rows and leave the rest of the areas as they are.

Please try and get as close to 100 points as you can

5.4 River Values – Acceptable trade offs (continued)


Area of activity	(CURRENT STATE)		
1. Recreation facilities on foreshore, such as picnic areas, BBQs, car parks, shade trees, cycle paths, playgrounds, kiosks, cafes, jetties, toilets, boardwalks.	Some types of recreation facilities are available at a few key sites along the river but some are rundown 0	Most types of recreation facilities are available at several sites along the river, and are reasonably well maintained. 20	All types of recreational facilities are available at many sites along the river and all are well maintained. 40
2. Recreation on water such as water skiing, jet skiing, powerboats, yachts, rowing and swimming	Some controls on what parts of the river certain activities are able to take place in and where water craft can be moored 0	More restrictions on activities along the river by TIME and PLACE, with certain activities permitted, for example, in the morning (eg, rowing) and others in the afternoon (powerboats etc). Some on water policing to enforce regulations 10	Quite formal controls on water activities with time and place zones as well as some “no go” zones for certain types of watercraft or activities so that increased levels of recreation use can be accommodated safely. A stronger on water police presence and significant fines for non-compliance 20
3. Flora and fauna such as native trees and sedges, wildlife and birdlife	Some native vegetation and habitats along the river foreshore with replanting programs active in some areas to prevent further erosion. See occasional swans and birdlife along the river 0	An increased amount of native vegetation along the river in reasonable condition , meaning that a significant proportion of urban shoreline has fringing trees and/or sedges and most eroded areas are being replanted. Birdlife prevalent along and on the river, frogs often heard 50	Native vegetation and habitats in good condition along a large proportion of the river shoreline in urban areas to support the ecosystem – so that you can see and hear frogs and birdlife most of the time, and other native animals can also be seen (eg. sea eagles along the river and in nests) 70
4. Cultural and heritage sites of significance eg. Historical, indigenous and modern culture	A small number of cultural and heritage sites are protected, with minimum maintenance or signage. 0	Around half of the sites are protected and reasonably well maintained, with good signage 20	Most sites near the river are protected and very well maintained and well signposted with walk trails and interpretive signage 40

Overall, the outcome choices or trade offs made by participants generally mirror and are consistent with the priority and focus area results detailed in Sections 4.1 and 4.2, with a similar priority placed on flora and fauna, recreation activities on water and on the foreshores and, finally, cultural and heritage sites.

5.4 River Values – Acceptable trade offs (continued)

The results from this question are shown on the grid below.

The grid shows the “optimum” combination, calculated as the greatest (and statistically significant) proportion of respondents who chose a particular outcome for each river value or area, was as follows;

Area of activity	CURRENT STATE		
1. Recreation facilities on foreshore, such as picnic areas, BBQs, car parks, shade trees, cycle paths, playgrounds, kiosks, cafes, jetties, toilets, boardwalks.	Some types of recreation facilities are available at a few key sites along the river but some are rundown 18.0%	Most types of recreation facilities are available at several sites along the river, and are reasonably well maintained. 54.5%	All types of recreational facilities are available at many sites along the river and all are well maintained. 27.5%
2. Recreation on water such as water skiing, jet skiing, powerboats, yachts, rowing and swimming	Some controls on what parts of the river certain activities are able to take place in and where water craft can be moored 20.0%	More restrictions on activities along the river by TIME and PLACE, with certain activities permitted, for example, in the morning (eg, rowing) and others in the afternoon (powerboats etc). Some on water policing to enforce regulations 53.3%	Quite formal controls on water activities with time and place zones as well as some “no go” zones for certain types of watercraft or activities so that increased levels of recreation use can be accommodated safely. A stronger on water police presence and significant fines for non-compliance 26.8%
3. Flora and fauna such as native trees and sedges, wildlife and birdlife	Some native vegetation and habitats along the river foreshore with replanting programs active in some areas to prevent further erosion. See occasional swans and birdlife along the river 4.3%	An increased amount of native vegetation along the river in reasonable condition, meaning that a significant proportion of urban shoreline has fringing trees and/or sedges and most eroded areas are being replanted. Birdlife prevalent along and on the river, frogs often heard 54.8%	Native vegetation and habitats in good condition along a large proportion of the river shoreline in urban areas to support the ecosystem – so that you can see and hear frogs and birdlife most of the time, and other native animals can also be seen (eg. sea eagles along the river and in nests) 41.0%
4. Cultural and heritage sites of significance eg. Historical, indigenous and modern culture	A small number of cultural and heritage sites are protected, with minimum maintenance or signage.  49.3%	Around half of the sites are protected and reasonably well maintained, with good signage 41.5%	Most sites near the river are protected and very well maintained and well signposted with walk trails and interpretive signage 9.3%

5.4 River Values – Acceptable trade offs (continued)

When analysed by age, gender, frequency of river visit and distance respondents live from the river, one difference did emerge, with older participants (those more than 50 years of age) more likely than other age groups to prioritise the provision of more formal controls on water activities with time and place zones as well as some “no go” zones for certain types of activities.

5.5 Water Quality

Given the increasing profile, discussion and debate concerning river water quality over the past few years and responsibility for the issue being significantly broader and more far reaching than the realm of the Swan River Trust, it was important that this study include a measure of the level of personal or individual action that the community would be prepared to take to achieve a certain level of river water quality.

The concept was assessed through a scenario based question, where respondents were asked to consider three different levels of water quality and potential costs to the community and score each of out 100 in terms of its individual appeal.

The three scenarios considered and rated by each respondent are reproduced below for reference – each was rotated during survey administration, meaning that each respondent was presented the question in a random order – rather than via a non-rotated method (A, B and C) which has the potential to bias results.

SCENARIO A

Water quality in the river continues to deteriorate over the next 10 years, meaning that there will be more algal blooms and fish kills each year. The river is of sufficient quality to paddle in the shallow areas for a few months of the year, but swimming is not recommended.

Fishing catches are low and regular eating of fish caught in the river is not recommended.

For you, there are no changes to water restrictions or the type of fertiliser or other chemicals you can put on your garden or that are used for agriculture.

Government expenditure on managing and policing activities which affect the health of the river is low.

How much does this option appeal to you? Please give it a score out of 100

SCORE /100

5.5 Water Quality (continued)

SCENARIO B

Water quality in the river improves somewhat over the next 10 years, meaning that there is some reduction in the number of algal blooms and fish kills. You can also swim or paddle in the river or catch and eat the fish for at least 8 months of the year – it might be limited in the warmer months though.

Only river friendly fertilisers are available and they are more expensive than what you use now but you can probably still maintain the type of lawn and gardens you have now.

Government expenditure is higher due to stronger pollution controls, cleanup of contaminated sites, increased monitoring and providing some assistance to urban and rural industry to implement higher standards of environmental management.

How much does this scenario appeal to you? Please give it a score out of 100

SCORE /100

SCENARIO C

Water quality in the river is significantly improved, meaning that you can paddle and swim throughout the year and catch and eat both fish and other shellfish such as prawns.

Only river friendly fertilisers are available and they are more expensive than what you use now. This, combined with increasing pressure on our water supplies, means you would probably need to reduce the area of lawn you have and there would be more features like native gardens, which use significantly less water and fertiliser.

There may also be increases in the price of some agricultural products as farmers' costs are higher. You would also pay considerably more for residential housing and other types of blocks along or near to the river due to increased restrictions on site works, fill and construction to protect the river from contamination.

Government costs would include further development and enforcement of pollution controls, the payment of significant subsidies to urban and rural industry, and a major program of monitoring and cleanup of contaminated sites affecting the environmental health of the river.

How much does this scenario appeal to you? Please give it a score out of 100

SCORE /100

5.5 Water Quality (continued)

Overall, there does appear to be a reasonably strong level of commitment and desire for individual action to improve river water quality, with Scenario C (the most significant personal cost) achieving the highest mean score of 75.3 out of a possible 100.

It was followed by Scenario B – which received an average score of 61.6 out of a possible 100 and Scenario A, which received an average score of only 11.2 out of 100.

Further more detailed information for each of the scenarios, illustrating the proportion of respondents indicating scores out of 100 in certain “bands” (0, 1-20, 21-49, 50, 51-80, 81-99, 100) is provided below.

These results do reinforce the perceived attractiveness of Scenario C, with more than 1 in 4 respondents (27.3%) providing this option with the highest possible score (100).

Conversely, more than 1 in 2 respondents (56.5%) registered a strong desire for some degree of change in water quality – giving Scenario A (leaving the river “as is”) the lowest possible score (0).

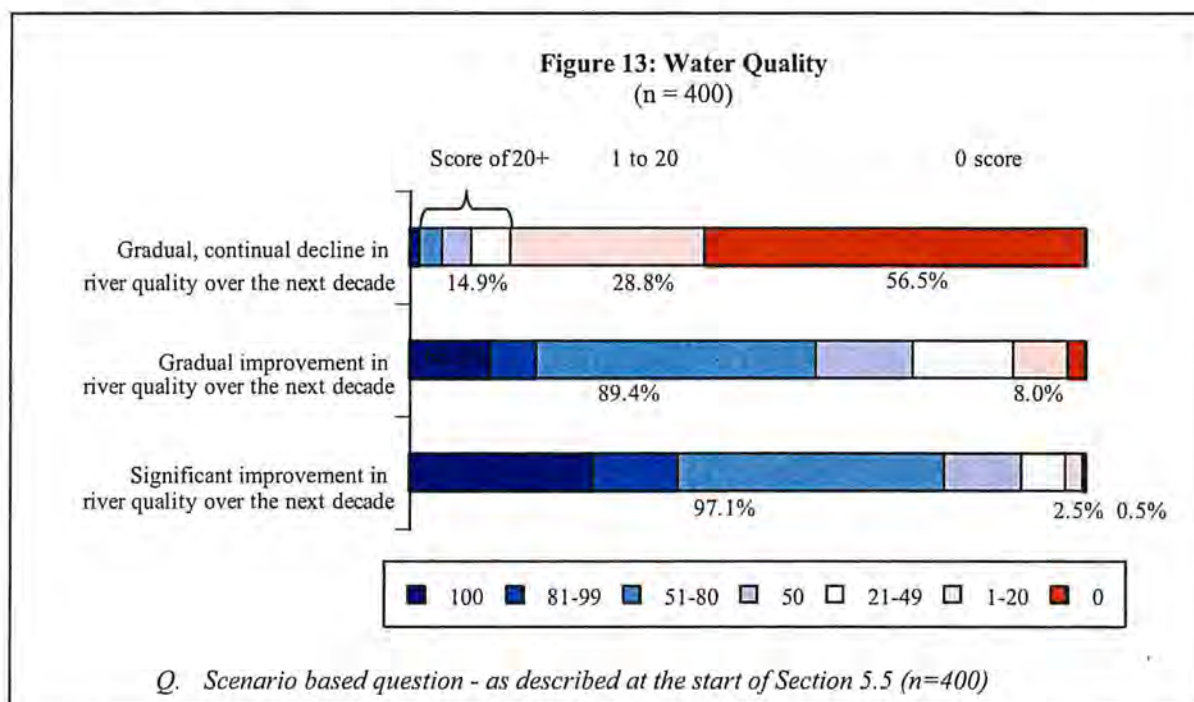
Given that there is often a “gap” between people’s intentions and their actual behaviour, a statistical model known as “*Pope’s Model*” has been applied to the data for this question to provide us with a more realistic indication of the potential level of support for each of the scenarios presented to respondents.

For ease of use we have referred to the Pope Model percentages as the “active” level of support for each scenario, which is as follows;

Scenario	Active level of support
As now – further deterioration in water quality over the next decade	4.1%
Some improvement in water quality over the next decade	25.4%
Significant improvement in water quality over the next decade	40.1%

5.5 Water Quality (continued)

Detailed results for each scenario are provided below.



Whilst there were no significant differences in results by the distance respondents lived from the river, frequency of river use and age did have some impact on findings in this area.

Older respondents (over 50 years) and those visiting the river less often (once a month in comparison with every day) were generally more likely to be somewhat more favourable towards the status quo or Scenario A – gradual river decline over the next 10 years. Whilst this difference is noted, however, the most favourable option for all groups still remained as Scenario C – water quality in the river significantly improved over the next 10 years.

6.0 RIVER ENVIRONMENTS

Summary

This section of the report looks, in more detail, at broader community aspirations for future river development in two key areas:

- The overall visual landscape – in terms of the type of development desired along river foreshores.
- Recreation – both on water and on the foreshores along the rivers.

Firstly, respondents were asked to indicate which particular type of broad river environment (natural, recreational, residential or commercial) they would like to see developed, in a hypothetical scenario where a kilometre of river is available for development.

Following this, and using a similar 100 point format to that used for other sections of the questionnaire, respondents were asked to establish their preferences, from a range of options provided, for recreational activities on the foreshore, forms of recreation on the water and the river landscape.

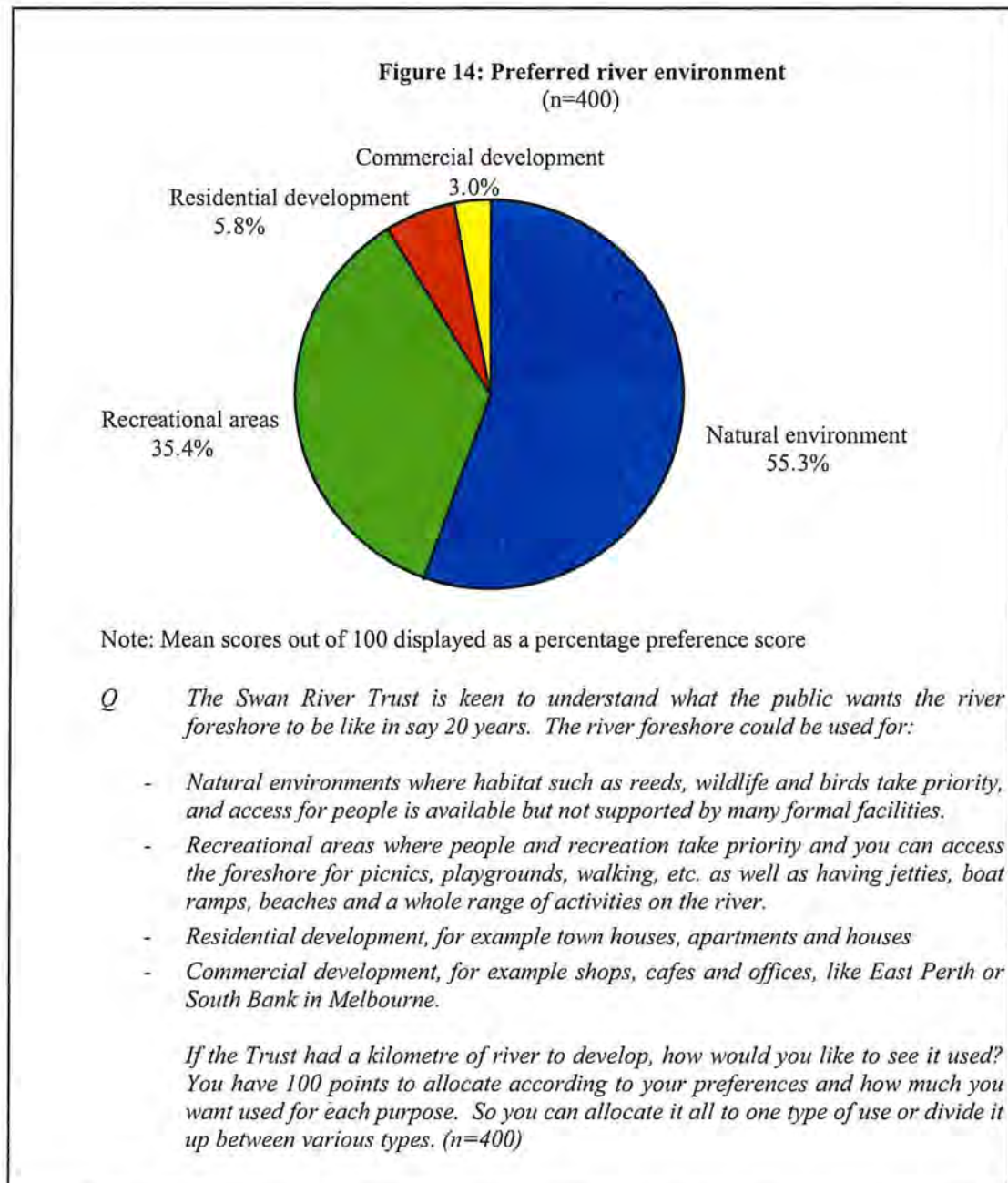
Looking at results for broad **river environments** firstly; following a theme identified throughout this report, we see an overall preference for natural environments emerge, described as areas where habitat such as reeds, wildlife and birds take priority, and access for people is available but not supported by many formal facilities.

Recreational areas follow as the second preferred type of environment, described as areas where people and recreation take priority and you can access the foreshore for picnics, playgrounds, walking etc as well as having jetties, boat ramps, beaches and a whole range of activities on the river.

The remaining two types of environments assessed, **residential** (town houses, apartments and houses) and **commercial development** (shops, cafes and offices) each received a **significantly lower rating or preference** in comparison with both recreational and natural environments.

6.0 River Environments (continued)

The average score provided to each environment (out of 100) when expressed as a percentage provides us with strong visual comparison, displayed in the figure below.



Preferences for types of river environment were consistent across age groups, gender, river visit frequency and distance respondents reside from the rivers, indicative of a really strong and consistent result across the community generally in this area.

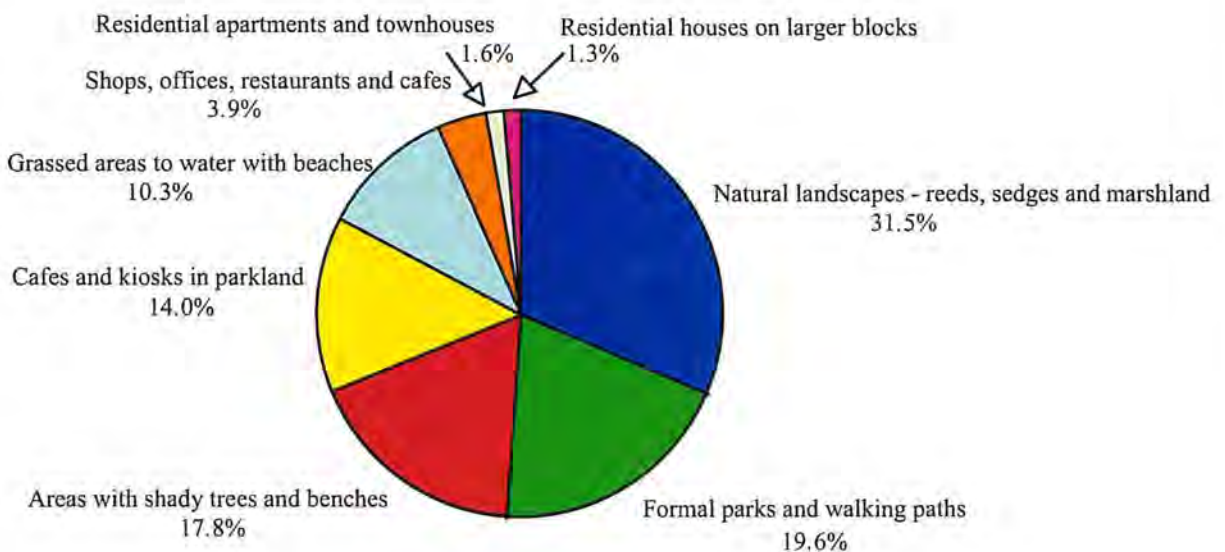
6.0 River Environments (continued)

Specific preferences for the **type of visual landscapes** desired along river foreshores also reinforced the natural and recreational themes, with natural areas including reeds, sedges and marshland the strongest overall preference, followed by a group of recreational landscapes including formal parks and walking paths, quiet areas with shady trees and benches, a limited number of cafes and kiosks set into parkland and mown grassed areas down to the water with beaches.

Extensive commercial and residential development again emerged as a landscape specifically NOT desired, with environments featuring shops, offices, restaurants and cafes, residential apartments or townhouses or residential houses on larger blocks all receiving a significantly lower level of preference amongst respondents in comparison with recreational and natural landscapes.

The figure below illustrates landscape preferences, again with average scores expressed as a percentage to provide a degree of insight as to the “mix” of landscapes desired.

Figure 15: Preferred river environment
(n=400)



Note: Mean scores out of 100 displayed as a percentage preference score

Q Now thinking about the landscape you would like along the river on the foreshore, how attractive are the following and how would you allocate 100 points to them to show your preferences? You can use your points to show what you would like to see more or less of along the foreshore (n=400)

6.0 River Environments (continued)

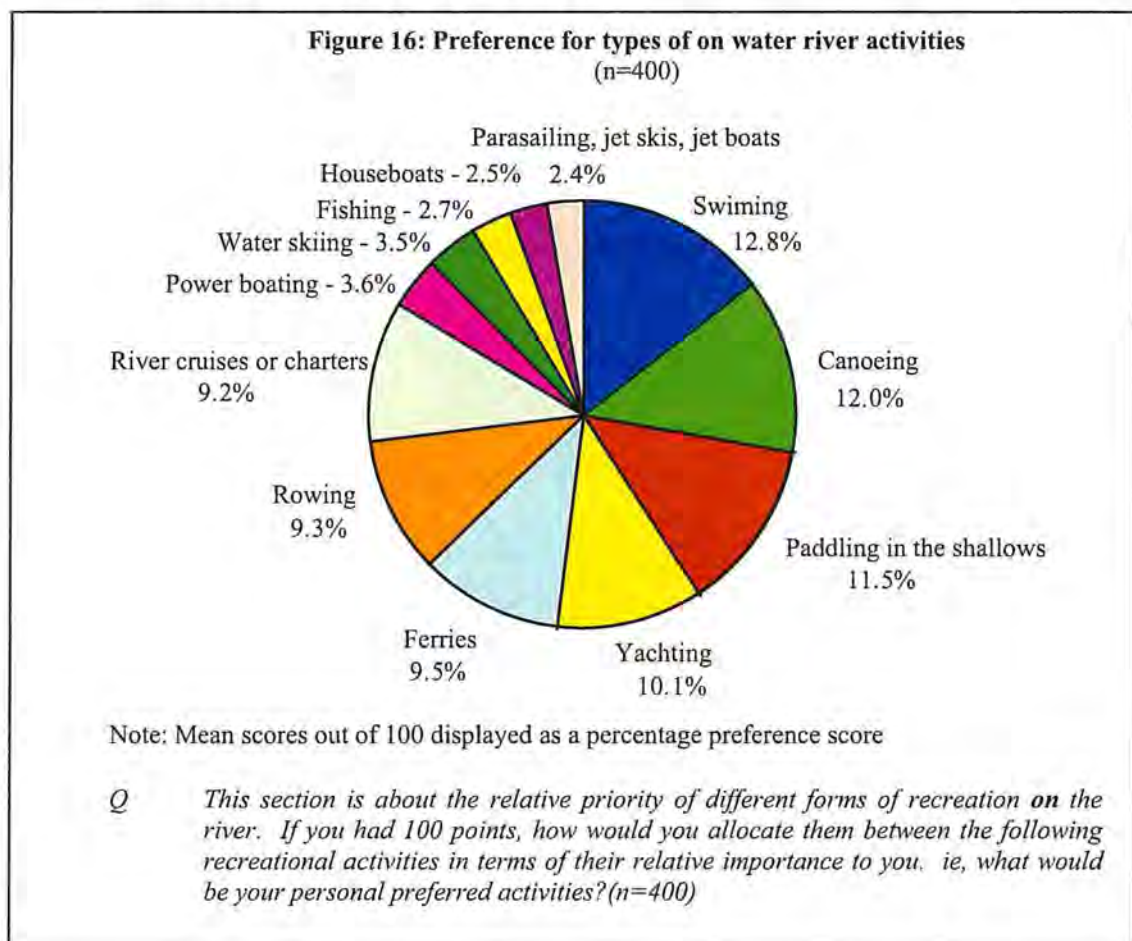
Apart from some minor expected differences across the sample in terms of the types of activities potentially favoured by males versus females and a general inclination towards less residential development from those respondents living closer to the river, results were again generally consistent, reinforcing the importance of natural and recreational landscapes to the community.

Preferences for **on water recreation activities** were as to be expected (given individual recreational pursuits) reasonably mixed, however overall results did display a greater preference for passive activities like swimming, canoeing and paddling in the shallows, all of which received a similar mean or average score.

These were followed by a **second strata**, which included yachting, ferries, rowing and river cruises and charters.

The third and final strata identified, for which the least degree of preference was shown, included (primarily) more intensive, motorised activities like power boating, water skiing, fishing, houseboats, and parasailing, jet skis or jet boats.

Visually, the various scores or proportion of river felt appropriate for each activity, on average, are included in the figure below.



6.0 River Environments (continued)

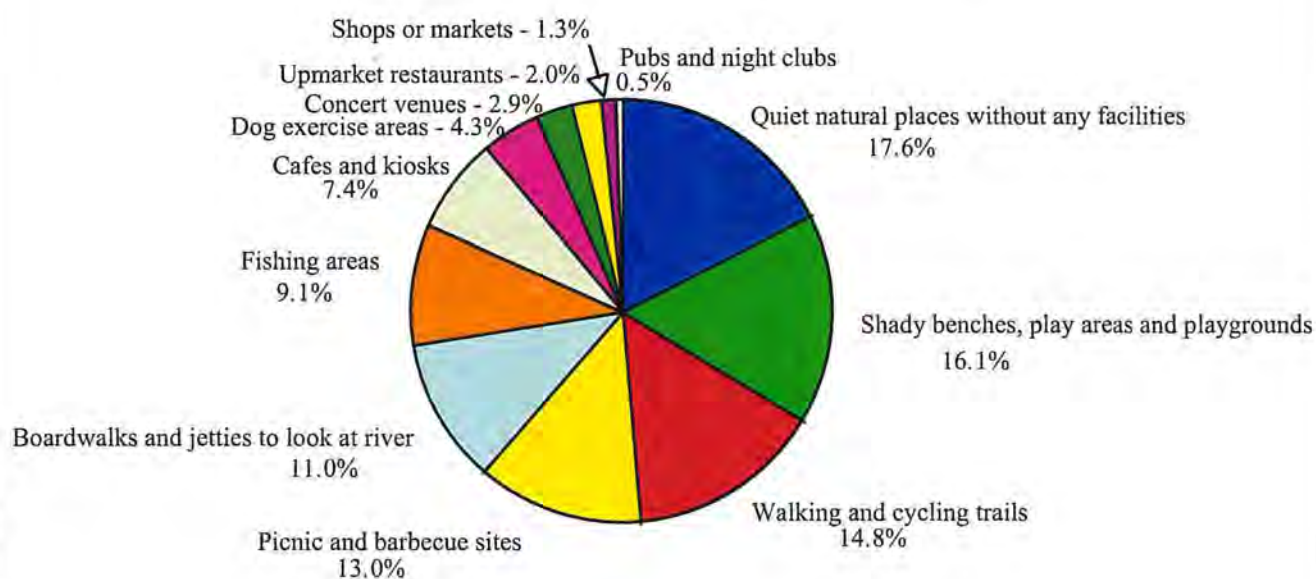
Preferences for **future river foreshore development** also predominantly favoured generally more passive areas without significant commercial infrastructure.

Overall, the **strongest preferences** for foreshore development included **quiet natural places without any facilities, shady benches, play areas and playground equipment, and walking and cycling trails.**

Supporting infrastructure for recreational and social activities followed, with picnic and BBQ sites, followed by boardwalks and jetties, fishing areas and open spaces associated as off leash dog exercise areas.

Least favoured for a significant proportion of the foreshore was more intensive infrastructure, with an overall preference for developments like concert venues, upmarket restaurants, shops or market and pubs and nightclubs to account for a very small part of the total river foreshore areas.

Figure 17: Preference for river foreshore development
(n=400)



Note: Mean scores out of 100 displayed as a percentage preference score

Q - Now thinking specifically about recreational activities on the foreshore, taking 100 points again, how you allocate these points to demonstrate your preferences for how much of the foreshore (if any) should be set aside for each activity -described below. (*Interviewer Note: If respondent does not want a particular activity give it 0 points*) (n=400)

6.1 Types of River Environments

In order to determine overall preferences for particular types of river environments, respondents were asked, in a hypothetical scenario, if the Trust had a kilometre of river to develop, how they would like to see it used.

The river environment options assessed included;

- *Natural environments where habitat such as reeds, wildlife and birds take priority, and access for people is available but not supported by many formal facilities*
- *Recreational areas where people and recreation take priority and you can access the foreshore for picnics, playgrounds, walking etc as well as having jetties, boat ramps, beaches and a whole range of activities on the river*
- *Residential development, for example, town houses, apartments and houses*
- *Commercial development, for example, shops, cafes and offices, like East Perth or South Bank in Melbourne*

Using a similar approach to other questions throughout the survey, respondents were asked to indicate their preferences for particular environments through the allocation of 100 points to be divided between the environments according to their individual preferences

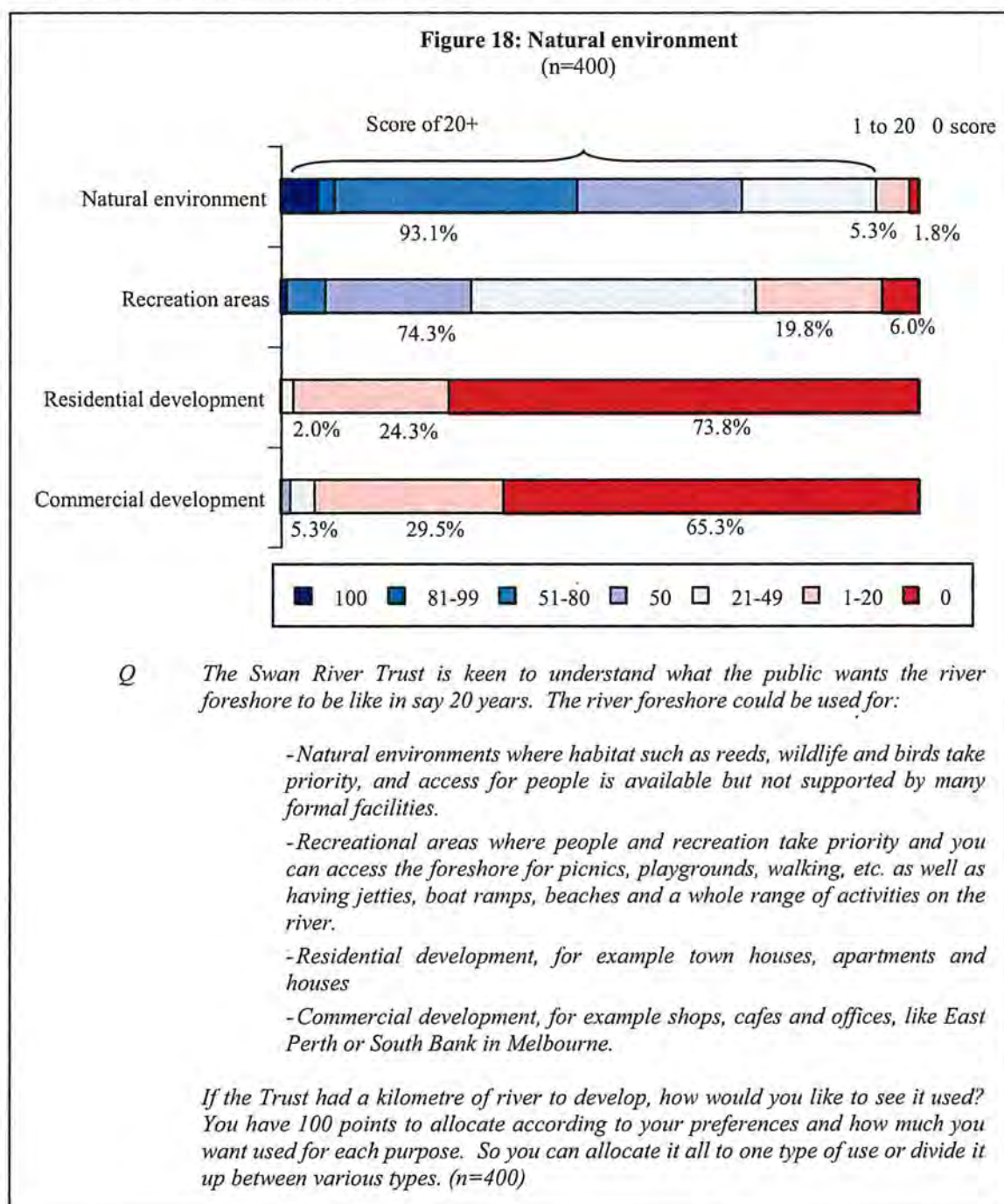
Overall, natural river environments emerge as a distinct preference, achieving a mean score of 55.3 out of a possible 100.

This type of environment is followed by recreational areas, which achieved a significantly lower mean score of 35.4 out of a possible 100.

Residential and commercial river environments, achieving mean scores of 3.5 and 5.8 out of a possible 100 respectively, were generally not favoured by respondents, with more than 2 in 3 (73.8% for residential development and 65.3% for commercial development) not providing these types of river environments with any points as part of their allocation.

Further more detailed information for each of the river environments, illustrating the proportion of respondents indicating scores out of 100 in certain "bands" (0, 1-20, 21-49, 50,51-80, 81-99, 100) is provided overleaf.

6.1 Types of River Environments (continued)



Results were very consistent across age groups, gender, distance respondents live from the river and frequency of river visit.

6.2 Visual Landscapes

As part of the process to better understand the preferences of the community for the visual landscape along the rivers on the foreshore, respondents were asked to again allocate 100 points, showing their preferences between what they would like to see more and less of along the foreshore.

The options provided to respondents in terms of the landscape, amongst which they allocated 100 points, included;

- *Residential apartments and townhouses*
- *Residential houses on larger blocks*
- *Shops, offices, restaurants and cafes on the foreshore, eg. East Perth*
- *Formal parks with walking paths and other facilities like toilets and sporting/play areas, eg. South Perth*
- *Reeds, sedges and marshland to filter the water and keep it healthy*
- *Occasional cafes and kiosks set in parkland along the foreshore*
- *Mown grassed areas down to the water with beaches but few paths or facilities*
- *Quiet areas with just shady trees and benches*

Consistent with results in relation to preferred future river environments, the preferred visual landscape from those assessed was a natural one, with reeds, sedges and marshland achieving the highest average score of 31.5 out of a possible 100.

This type of visual landscape was followed by a mix of recreation landscapes including:

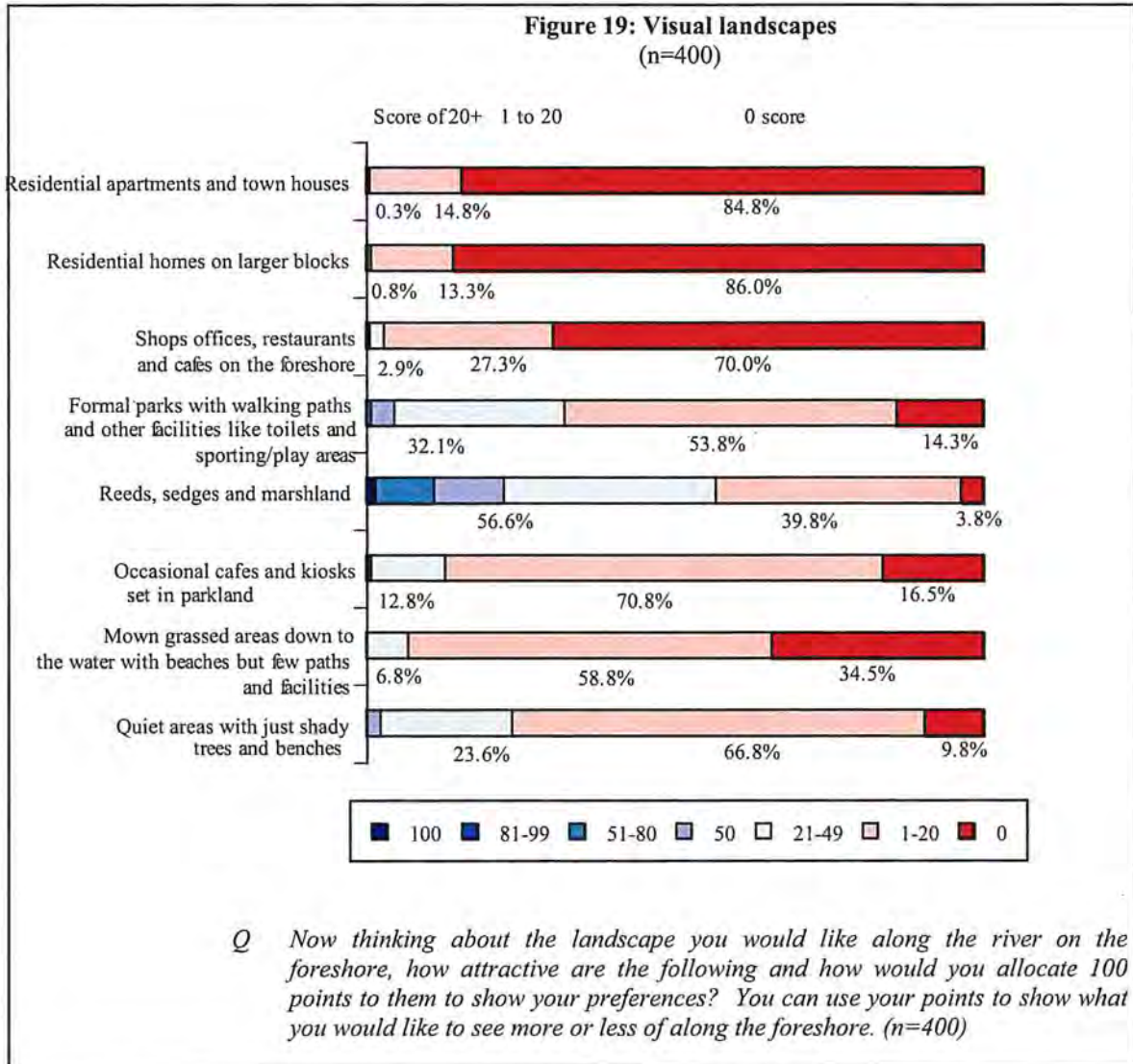
- Formal parks and walking paths and other facilities (average score of 19.6 out of 100).
- Quiet areas with just shady trees and benches (17.8 out of 100).
- Occasional cafes and kiosks set in parkland along the foreshore (14.0 out of 100).
- Mown grassed areas down to the water with beaches but few paths or facilities (10.3 out of 100).

Again, commercial and residential development were not favoured visual landscape options, achieving mean scores significantly lower than natural and recreational areas:

- Shops, offices, restaurants and cafes on the foreshore – average score of 3.9 out of 100, 70.0% of respondents did not allocate this type of landscape any points.
- Residential apartments and town houses – average score of 1.6 out of 100, 84.8% of respondents did not allocate this type of landscape any points.
- Residential houses on larger blocks – average score of 1.3 out of 100, 86.0% of respondents did not allocate this type of landscape any points.

6.2 Visual Landscapes (continued)

Further more detailed information for each of the river visual landscapes assessed, illustrating the proportion of respondents indicating scores out of 100 in certain “bands” (0, 1-20, 21-49, 50, 51-80, 81-99, 100) is provided below.



6.2 Visual Landscapes (continued)

Interestingly, there were some differences in results by gender and by the distance respondents lived from the river, including:

- Males, in comparison with females, were generally more likely to show a preference towards the development of shops, offices restaurants and cafes on the foreshores.
- Conversely, females, in comparison with males, were more likely to show a preference towards the development of occasional cafes and kiosks along the foreshores.
- “Acceptability” of the development of residential apartments and town houses generally increased with the distance respondents lived from the river, with 18.6% of those living within 6 and 20 kms of the river allocating at least some of their 100 points to this area in comparison with only 10.3% of those living within 5kms of the rivers.

6.3 Recreation Activities – On Water

Preferences for recreation activities on the river waters was also assessed via a 100 point allocation process, with respondents allocating their points according to their individual preferences – described as what would be their preferred personal activities

The options provided to respondents for on water activities, amongst which they allocated 100 points, included;

- *Yachting*
- *Parasailing or jet skis or jet boats*
- *Ferries*
- *Water skiing*
- *Power boating*
- *Rowing*
- *Canoeing*
- *River cruises or charters*
- *Swimming*
- *Houseboats*
- *Fishing*
- *Paddling in the shallows*

Results in this area were mixed however appear to generally favour more non-motorised, “passive” on water activities requiring limited amounts of recreational equipment or investment, in comparison with higher speed motorised activities utilising recreation equipment like jet boats, jet skis or motor boats.

The **first strata of preferred activities**, all with similar mean scores significantly higher than those recorded for other areas included:

- Swimming (average score of 12.8 out of a possible 100).
- Canoeing (average score of 12.0 out of a possible 100).
- Paddling in the shallows (average score of 11.5 out of a possible 100).

The **second strata** included, again with similar mean scores, included:

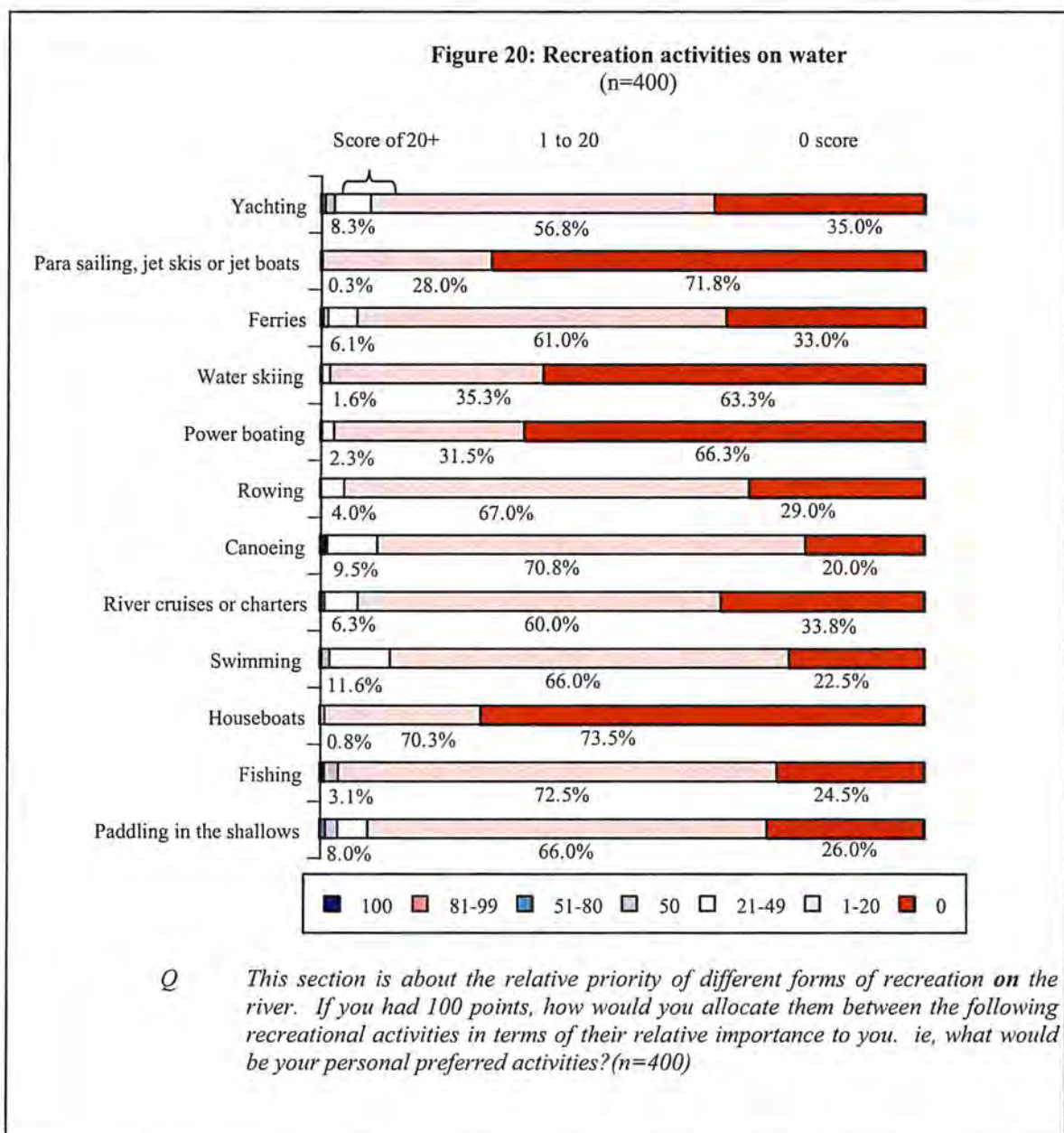
- Yachting (average score of 10.1 out of a possible 100).
- Ferries (average score of 9.5 out of a possible 100).
- Rowing (average score of 9.3 out of a possible 100).
- River cruises or charters (average score of 9.2 out of a possible 100).

6.3 Recreation Activities – On Water (continued)

The **third strata** included the remaining potential activities:

- Power boating (average score of 3.6 out of a possible 100).
- Water skiing (average score of 3.5 out of a possible 100).
- Fishing (average score of 2.7 out of a possible 100).
- Houseboats (average score of 2.5 out of a possible 100).
- Para sailing or jet skis or jet boats (average score of 2.4 out of a possible 100).

Further more detailed information for each of the on water river activities assessed, illustrating the proportion of respondents indicating scores out of 100 in certain “bands” (0, 1-20, 21-49, 50, 51-80, 81-99, 100) is provided below.



6.3 Recreation Activities – On Water (continued)

As for visual landscapes, there were some differences in results by gender, age and the distance respondents lived from the river, including:

- Females, in comparison with males, were more likely to show a preference for activities including paddling in the shallows and river cruises or charters.
- Generally, younger respondents (under 35 years) were less likely to be in favour of watercraft activities on the river (e.g. powerboats, canoeing, yachting) than older respondents.
- The further respondents lived from the river the more likely they were to show some degree of preference towards activities like para sailing or jet skis or jet boats (most likely related to noise proximity) whilst those living 5kms or less from the rivers were more likely than those residing further away to show a degree of preference for yachting (most likely related to boat ownership).

6.4 Recreation Activities – Foreshore

Preferences for recreation activities on the river foreshore was also assessed via a 100 point allocation process, with respondents allocating their points according to their individual preferences – described as how much of the foreshore (if any) respondents felt should be set aside for each activity

The options provided to respondents for foreshore activities, amongst which they allocated 100 points, included;

- *Shady benches, play areas and playground equipment*
- *Cafes and kiosks*
- *Upmarket restaurants eg. Red Herring, Cocos*
- *Boardwalks and jetties to look at the river*
- *Picnic and BBQ sites eg. South Perth foreshore*
- *Concert venues, eg, Supreme Court Gardens*
- *Pubs and nightclubs*
- *Shops or markets*
- *Fishing*
- *Open areas to exercise dogs off leashes*
- *Walking and cycling trails*
- *Quiet, natural places without any facilities*

Results in this area see, as for on water activities, a preference for generally more passive areas without significant commercial infrastructure.

The **first strata of preferred recreation areas**, all with statistically similar mean scores significantly higher than those recorded for other areas included:

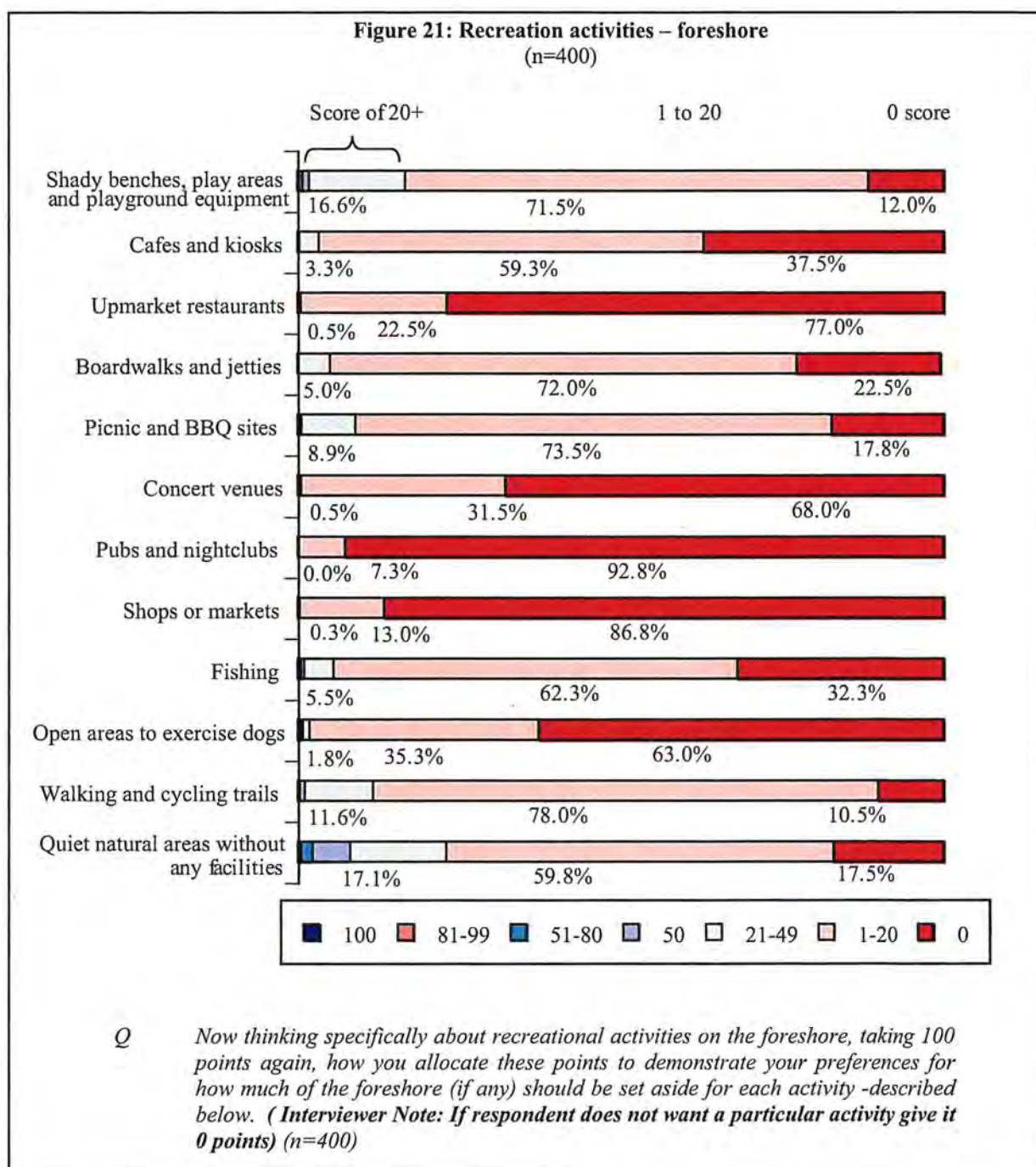
- Quiet natural places without any facilities (average score of 17.6 out of a possible 100).
- Shady benches, play areas and playground equipment (average score of 16.1 out of a possible 100).
- Walking and cycling trails (average score of 14.8 out of a possible 100).

The **second** most preferred area was picnic and BBQ sites (average score of 13.0 out of a possible 100), the **third** boardwalks and jetties to look at the river (average score of 11.0 out of 100), the **fourth** fishing (average score of 9.1 out of a possible 100), the **fifth** cafes and kiosks (average score of 7.4 out of a possible 100) and the **sixth** open area to exercise dogs off leashes (average score of 4.3 out of a possible 100).

6.4 Recreation Activities – Foreshore (continued)

The **four remaining recreational activities or areas** all received quite low average scores, as follows;

- Concert venues (average score of 2.9 out of a possible 100)
- Upmarket restaurants (average score of 2.0 out of a possible 100)
- Shops or markets (average score of 1.3 out of a possible 100)
- Pubs and nightclubs (average score of 0.5 out of a possible 100)



6.4 Recreation Activities – Foreshore (continued)

As for other areas, there were some differences in results by gender, age and the distance respondents lived from the river, including:

- Males, in comparison with females, were more likely to show a preference for activities/infrastructure including pubs and nightclubs and fishing.
- Those respondents aged over 55 years were less likely than respondents in other age categories to feel that use of the river foreshore to provide open areas to exercise dogs was important.
- Dog exercise areas along the foreshore were also more important to those respondents living within 5 kms of the rivers in comparison with those living further away.

7.0 OTHER ISSUES

Summary

Overall, comments made by respondents in this area were reflective of the key themes highlighted throughout this report with issues raised including;

- Water quality/ intergenerational equity.
- Potential sources of water quality contaminants (e.g. fertiliser).
- A stronger on water policing presence.
- More active/stronger controls on power boat and related activities.
- Increased controls/limits on commercial and residential development.

Q.8b Water based Recreation

This section is about the relative priority of different forms of recreation **on** the river. If you had 100 points, how would you allocate them between the following recreational activities in terms of their relative importance to you. ie, what would be your personal preferred activities?

Yachting	[]
Para sailing or jet skis or jetboats	[]
Ferries	[]
Water skiing	[]
Power boating	[]
Rowing	[]
Canoeing	[]
River cruises or charters	[]
Swimming	[]
Houseboats	[]
Fishing	[]
Paddling in the shallows	[]

Total 100 points

Q.9 Now thinking about the landscape you would like along the river on the foreshore, how attractive are the following and how would you allocate 100 points to them to show your preferences? You can use your points to show what you would like to see more or less of along the foreshore.

Residential apartments and town houses	[_____]
Residential houses on larger blocks	[_____]
Shops, offices, restaurants and cafes on the foreshore, e.g. East Perth	[_____]
Formal parks with walking paths and other facilities like toilets and sporting/play areas e.g. South Perth	[_____]
Reeds, sedges and marshland to filter the water and keep it healthy	[_____]
Occasional cafes and kiosks set in parkland on the foreshore	[_____]
Mown grassed areas down to the water with beaches but few paths or facilities	[_____]
Quiet areas with just shady trees and benches	[_____]

Total 100 points

Male 1
 Female 2

**Swan River Trust
 Values Study**

FOLLOW UP TELEPHONE ASSISTED QUESTIONNAIRE

Good morning/afternoon/evening, my name is from West Coast Field Services, an independent research company.

Could I please speak to (insert name from list) REPEAT INTRODUCTION IF NECESSARY

You may remember that we contacted you a few days ago to take part in a study about the Swan and Canning rivers and we sent you out some information.

Did you receive and read the information we sent out?

Yes	1 ASK THEM TO RETRIEVE INFORMATION AND CONTINUE
No	2 RECONFIRM ADDRESS AND LET RESPONDENT KNOW WE WILL RESEND INFORMATION AND MAY CONTACT THEM AGAIN

The study will take 20 minutes and you will go into a draw to win one of three \$100 Myer vouchers.

S.1 To get us started, could I just double check that if you or a member of your family work in:

- | | | |
|--------------------------------------------------|----------|------------------|
| Marketing | 1 | Terminate |
| Advertising/Media (including journalists) | 2 | |
| Market research | 3 | |
| For the Department of Environment | 4 | |
| Swan River Trust | 5 | |
| A local government bordering the river | 6 | |
| None of the above | 7 | |

Q.1 Firstly, approximately how many times would you say you have you been down to the Swan and Canning rivers this year, that is since about November/December last year?

[_____] times

Q.2 What sorts of activities do you usually do on or around the river? (do not prompt)

Walking	1
Cycling	2
Running	3
Sailing	4
Fishing	5
Children's activities (playgrounds, etc.)	6
Dining out overlooking the river	7
Visiting a pub on the river	8
Picnic or barbecues	9
Functions - eg, birthday parties, weddings	10
Boat cruises	11
Events on the foreshore – eg, Sky Show, Xmas Carols, Concerts	12
Motor boat cruising	13
Diving	14
Racing powerboats	15
Watching other events on the river (water skiing, power boat or sail boat racing)	16
Just sitting	17
Swimming	18
Bird watching	19
Waterskiing	20
Windsurfing, kitesurfing	21
Rowing/Canoeing	22
Taking out visitors or tourists	23
Driving past/along	24
Other (specify	97

Q.3 Here are some comments that people have made about the river. I would like to know the extent to which you agree or disagree with them. If agree, is that strongly agree, agree or somewhat agree/if disagree is that strongly disagree, disagree or somewhat disagree?

Strongly agree	=	7	Somewhat disagree	=	3
Agree	=	6	Disagree	=	2
Somewhat agree	=	5	Strongly disagree	=	1
Neither agree nor disagree	=	4			

- I believe it is very important that my children and their children can experience the sort of activities around the river that I did/would like to have done** [_____]
- The natural areas along the river are really important to me and should be retained** [_____]
- I feel that there should be some type of restrictions on motorised boats in narrow sections of the river where the foreshore might erode easily** [_____]
- I support increased residential development right down to the waters edge** [_____]
- I believe that there should be more small cafes and kiosks around the river** [_____]
- It is important that we have walking and cycle access all the way around the river** [_____]
- I am not in favour of commercial development along the upper parts of the Swan and Canning Rivers** [_____]
- I think the river is a really important part of the Perth landscape** [_____]
- I think we should be able to swim in the river** [_____]
- There should be a range of vibrant events occurring on or around the river during the year** [_____]
- I would prefer the development of apartments, shops and cafes to be in a small number of locations or nodes along the river, like East Perth, rather than spread out all along the foreshore** [_____]
- I would accept certain parts of the river foreshore being closed off for the protection or rehabilitation of the natural environment** [_____]
- I think we should be able to catch fish, prawns and crabs from the river and they should be healthy enough to eat**
[_____]

Q.4 The Government has a number of areas of responsibility in regard to the river and it is interested in your views about the relative importance it should place on each of these.

PLEASE REFER TO YOUR INFORMATION – MARKED Q4

A) The Trust would like to know how you would like to improve the river, so if you had 100 points to spend on extra efforts and resources over the next 10 years, how would you allocate these points to achieve your desired outcomes?

You can use your points to improve any of the areas below – each service improvement has a cost (which is displayed by the points in the boxes) so you need to choose what way you would like to distribute your points.

You cannot choose more than one box from each row, and you do not have to choose a box in each row – if you would like to you can spend all of the 100 points in 1 or 2 rows and leave the rest of the areas as they are.

Please try and get as close to 100 points as you can

Area of activity	(CURRENT STATE)		
1. Recreation facilities on foreshore, such as picnic areas, BBQs, car parks, shade trees, cycle paths, playgrounds, kiosks, cafes, jetties, toilets, boardwalks.	Some types of recreation facilities are available at a few key sites along the river but some are rundown 0	Most types of recreation facilities are available at several sites along the river, and are reasonably well maintained. 20	All types of recreational facilities are available at many sites along the river and all are well maintained. 40
2. Recreation on water such as water skiing, jet skiing, powerboats, yachts, rowing and swimming	Some controls on what parts of the river certain activities are able to take place in and where water craft can be moored 0	More restrictions on activities along the river by TIME and PLACE, with certain activities permitted, for example, in the morning (eg,rowing) and others in the afternoon (powerboats etc). Some on water policing to enforce regulations 10	Quite formal controls on water activities with time and place zones as well as some “no go” zones for certain types of watercraft or activities so that increased levels of recreation use can be accommodated safely. A stronger on water police presence and significant fines for non-compliance 20
3. Flora and fauna such as native trees and sedges, wildlife and birdlife	Some native vegetation and habitats along the river foreshore with replanting programs active in some areas to prevent further erosion. See occasional swans and birdlife along the river 0	An increased amount of native vegetation along the river in reasonable condition , meaning that a significant proportion of urban shoreline has fringing trees and/or sedges and most eroded areas are being replanted. Birdlife prevalent along and on the river, frogs often heard 50	Native vegetation and habitats in good condition along a large proportion of the river shoreline in urban areas to support the ecosystem – so that you can see and hear frogs and birdlife most of the time, and other native animals can also be seen (eg,sea eagles along the river and in nests) 70
4. Cultural and heritage sites of significance eg. Historical, indigenous and modern culture	A small number of cultural and heritage sites are protected, with minimum maintenance or signage. 0	Around half of the sites are protected and reasonably well maintained, with good signage 20	Most sites near the river are protected and very well maintained and well signposted with walk trails and interpretive signage 40

Q.5 I now have some scenarios I would like to talk to you about in regard to some possible future options for water quality in the river and what the potential costs of each option may be. Could you please listen carefully to each of the 3 options, which each describe a different level of water quality and cost to the community, and then give each a score out of 100 in terms of its appeal to youATE

SCENARIO A

Water quality in the river continues to deteriorate over the next 10 years, meaning that there will be more algal blooms and fish kills each year. The river is of sufficient quality to paddle in the shallow areas for a few months of the year, but swimming is not recommended.

Fishing catches are low and regular eating of fish caught in the river is not recommended.

For you, there are no changes to water restrictions or the type of fertiliser or other chemicals you can put on your garden or that are used for agriculture.

Government expenditure on managing and policing activities which affect the health of the river is low.

How much does this option appeal to you? Please give it a score out of 100

SCORE | _____ | /100

SCENARIO B

Water quality in the river improves somewhat over the next 10 years, meaning that there is some reduction in the number of algal blooms and fish kills. You can also swim or paddle in the river or catch and eat the fish for at least 8 months of the year – it might be limited in the warmer months though.

Only river friendly fertilisers are available and they are more expensive than what you use now but you can probably still maintain the type of lawn and gardens you have now.

Government expenditure is higher due to stronger pollution controls, cleanup of contaminated sites, increased monitoring and providing some assistance to urban and rural industry to implement higher standards of environmental management.

How much does this scenario appeal to you? Please give it a score out of 100

SCORE | _____ | /100

SCENARIO C

Water quality in the river is significantly improved, meaning that you can paddle and swim throughout the year and catch and eat both fish and other shellfish such as prawns.

Only river friendly fertilisers are available and they are more expensive than what you use now. This, combined with increasing pressure on our water supplies, means you would probably need to reduce the area of lawn you have and there would be more features like native gardens, which use significantly less water and fertiliser.

There may also be increases in the price of some agricultural products as farmers' costs are higher. You would also pay considerably more for residential housing and other types of blocks along or near to the river due to increased restrictions on site works, fill and construction to protect the river from contamination.

Government costs would include further development and enforcement of pollution controls, the payment of significant subsidies to urban and rural industry, and a major program of monitoring and cleanup of contaminated sites affecting the environmental health of the river.

How much does this scenario appeal to you? Please give it a score out of 100

SCORE | _____ | /100

Q.6 PLEASE REFER TO YOUR INFORMATION AGAIN – INTERVIEWER NOTE THAT Q6 TO Q9 THE RESPONDENT HAS ALL OF THE INFORMATION

The Swan River Trust has a number of areas of responsibility and it is interested in your views of where it should focus its efforts.

- a). Which of the following should the Trust be focusing on maintaining and improving? (you can choose all 8 or just 1 or some depending on what you feel the Trust should be focusing on)

(Interviewer note: after respondents give you the areas – probe for; are there any more areas you feel that the Trust should be focussing on?)

- b) For those that you feel the Trust should focus on, if you had 100 points to allocate between these roles, how would you allocate the points? For example, you could give 100 points to one because you felt that was the most important by far, or you could allocate the points between all of your focus areas according to their importance to you

	(a)	(b)
	Maintain and Improve	
The visual landscape around the foreshore, i.e. parks, native vegetation, the type and number of buildings or shops	1	[_____]
The water quality in the river so it is safe to swim and eat fish	2	[_____]
The range of recreational activities that can be undertaken around and on the river	3	[_____]
The number and condition of cultural and heritage sites	4	[_____]
The management of the numbers of yachts and motorboats, moorings, facilities, and the impact of boats	5	[_____]
The number and diversity of fish and marine creatures	6	[_____]
The number and diversity of wildlife and plants and birds along the river	7	[_____]
The amount of fresh water in the river to maintain the natural ecosystem	8	[_____]

Total 100 points

Q.7 ALSO IN THE INFORMATION PROVIDED – MARKED Q7

The Swan River Trust is keen to understand what the public wants the river foreshore to be like in say 20 years. The river foreshore could be used for:

- Natural environments where habitat such as reeds, wildlife and birds take priority, and access for people is available but not supported by many formal facilities.
- Recreational areas where people and recreation take priority and you can access the foreshore for picnics, playgrounds, walking, etc. as well as having jetties, boat ramps, beaches and a whole range of activities on the river.
- Residential development, for example town houses, apartments and houses
- Commercial development, for example shops, cafes and offices, like East Perth or South Bank in Melbourne.

If the Trust had a kilometre of river to develop, how would you like to see it used? You have 100 points to allocate according to your preferences and how much you want used for each purpose. So you can allocate it all to one type of use or divide it up between various types.

- | | | |
|----|----------------------------|-----------|
| 1. | As natural environment | [_____] |
| 2. | As recreational area | [_____] |
| 3. | As residential development | [_____] |
| 4. | As commercial development | [_____] |

100 points

Q.8a ALSO IN THE INFORMATION PROVIDED – MARKED Q8A

Now thinking specifically about recreational activities on the foreshore, taking 100 points again, how you allocate these points to demonstrate your preferences for how much of the foreshore (if any) should be set aside for each activity -described below. (**Interviewer Note: If respondent does not want a particular activity give it 0 points**)

- | | |
|-----------------------------------------------------------|-----------|
| Shady benches, play areas and playground equipment | [_____] |
| Cafes and kiosks | [_____] |
| Upmarket restaurants, e.g. Red Herring, Coco's | [_____] |
| Boardwalks and jetties to look at the river | [_____] |
| Picnic and BBQ sites, e.g. South Perth foreshore | [_____] |
| Concert venues, e.g. Supreme Court Gardens | [_____] |
| Pubs and nightclubs | [_____] |
| Shops or markets | [_____] |
| Fishing | [_____] |
| Open areas to exercise dogs off leashes | [_____] |
| Walking and cycling trails | [_____] |
| Quiet, natural places without any facilities | [_____] |

Total 100 points

Q.8b ALSO IN THE INFORMATION PROVIDED – MARKED Q8B

Water based Recreation

This section is about the relative priority of different forms of recreation **on** the river. If you had 100 points, how would you allocate them between the following recreational activities in terms of their relative importance to you. ie, what would be your personal preferred activities?

Yachting	<input type="text"/>
Para sailing or jet skis or jetboats	<input type="text"/>
Ferries	<input type="text"/>
Water skiing	<input type="text"/>
Power boating	<input type="text"/>
Rowing	<input type="text"/>
Canoeing	<input type="text"/>
River cruises or charters	<input type="text"/>
Swimming	<input type="text"/>
Houseboats	<input type="text"/>
Fishing	<input type="text"/>
Paddling in the shallows	<input type="text"/>
	Total 100 points

Q.9 ALSO IN THE INFORMATION PROVIDED – MARKED Q9

Now thinking about the landscape you would like along the river on the foreshore, how attractive are the following and how would you allocate 100 points to them to show your preferences? You can use your points to show what you would like to see more or less of along the foreshore.

Residential apartments and town houses	<input type="text"/>
Residential houses on larger blocks	<input type="text"/>
Shops, offices, restaurants and cafes on the foreshore, e.g. East Perth	<input type="text"/>
Formal parks with walking paths and other facilities like toilets and sporting/play areas e.g. South Perth	<input type="text"/>
Reeds, sedges and marshland to filter the water and keep it healthy	<input type="text"/>
Occasional cafes and kiosks set in parkland on the foreshore	<input type="text"/>
Mown grassed areas down to the water with beaches but few paths or facilities	<input type="text"/>
Quiet areas with just shady trees and benches	<input type="text"/>
	Total 100 points

Q.14 What is your occupation?

Managers and Administrators	1
<i>Professionals</i> 2	
Para professionals	3
Clerks	4
Sales and personal service workers	5
Trades people	6
Plant and machine operators and drivers	7
Labourers and related workers	8
Home duties	9
Students	10
Retired or on a pension	11
Unemployed	12
Refused	13

Q15a. Finally, could I just confirm that you would like to be included in the draw to win one of three \$100 Myer gift vouchers?

Yes 1 - go to Q15b
No 2 - go to close

Q15b And could I just confirm that your telephone number I am calling is and that we can contact you on this number if you win the draw?

Yes
No - alternate number

Thank you for your time. All the information you have given us will remain confidential and we really appreciate your help. Just to remind you, my name is..... from West Coast Field Services. If you have any questions about this research you can telephone our office on (08) 9316 3366.

INTERVIEWER

I hereby declare that I have completed this questionnaire fully in accordance with my instructions and that the interview was conducted according to the ICC/ESOMAR international code.

Name

Signature..... Date

Sampling and Data Collection Specifics

Component	Details
Research Solutions Project Manager:	Tracey Martell
Client Contact:	Deb Rohan
Research Universe	All residents (18+) of the Perth Metropolitan Region (excluding Mandurah)
Data collection method	Telephone recruitment for receipt of information Telephone assisted follow up interview (by appointment)
Sampling Technique (including geographical coverage)	Stratified random sample across the Perth Metropolitan Region, drawn in population based proportions based on distance lived from the rivers (5 kms or less, 6 to 20 kms, more than 20kms)
Sample Size	400
Quotas/weighting details	Quotas applied to survey to achieve broad age group and gender targets.
Sample details	Not applicable
Field Company	West Coast Field Services
Field Company Credentials	IQCA accredited
Validation procedures	At least 10% of all completed interviews validated by Field Company

Briefing Method	In person by Research Solutions representative
Pilot study date/s	9 – 15 November 2006
Changes made as result of pilot	None
Questionnaire length/administration time	20 minutes
Survey dates (including recruitment and follow up telephone assisted interviews)	9 November– 21 December 2006
Times of day interviews took place	Weekdays: 4.30pm to 8pm Weekends: 9.30am – 6pm (Saturday) 10am – 6pm (Sunday) OR By specific appointment with respondent
Incentives provided for respondents	Draw to win one of three \$100 Coles Myer Vouchers Winners selected at random following survey completion and notified by phone and post
Survey Procedure: No of callbacks before number replaced	Up to 6, at least 3-4 hours apart and on different shift days
Response Rate – initial recruitment : <ul style="list-style-type: none"> • Successful recruitment • Not available/away for duration of study • Refusals • Not contactable after more than 6 callbacks • Language/behavioural issues Response Rate – telephone assisted interview <ul style="list-style-type: none"> • Completed interviews • Not available • Refusals • Not contactable after more than 6 callbacks • Called at conclusion of survey period 	20.7% (519) 9.3% 65.2% 0.7% 4.2% 83.9% (400) 3.8% 6.5% 1.7% 4.2%
Response Rate details:	Response rates generally for the industry have been significantly affected due to the recent focus on/increase in activity of telemarketing companies, particularly from international locations.

Validity and Reliability Issues;	Questionnaire passed through checking procedure at Research Solutions (2 person procedure) followed by client review and written authorisation to proceed to pilot study. The pilot study was used to identify any potential question ordering issues/bias, double barreled questions, that question wording could be clearly understood and that questions measured what was required in study objectives.
Overall Sampling Error	± 5.2%
Data coding	<p>Procedure implemented:</p> <ul style="list-style-type: none"> • Review of first 50 questionnaires (or similar) to develop coding sheets based on common responses • Additional codes created when more than 2% of the sample record common response • Approval of coding sheet by Research Solutions Project Manager
Consistency checks	<ul style="list-style-type: none"> • Preliminary data file checked by Project Manager using SPSS; <ul style="list-style-type: none"> ○ Frequency counts ○ Relevant cross tabulations • Data outside the range/duplicates or abnormalities investigated with Field Company prior to coding and analysis
Treatment of missing data	<ul style="list-style-type: none"> • Excluded from analysis and/or noted where relevant • Individual cases with excessive missing data excluded from sample
Data file provided to client	Not requested

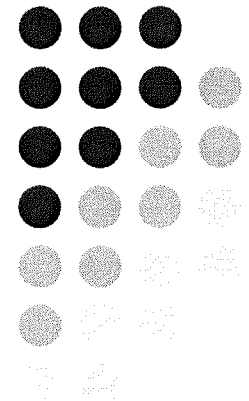
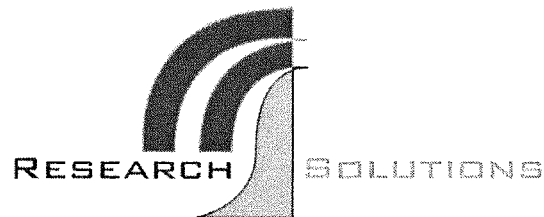
Appendix 2
Qualitative Research
Focus Group Report



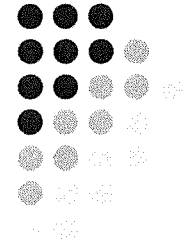
Qualitative Research

River Values

June 2006

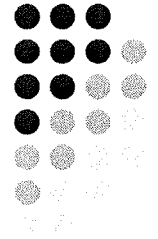


River activities



- Walking
- Cycling
- Running
- Sailing
- Fishing
- Children to play
- Barbecues
- Picnics
- Visiting a pub on the river
- Dining out overlooking the river
- Functions - 50th birthday, wedding receptions
- Boat cruises
- Events – Sky Show, Carols in East Perth

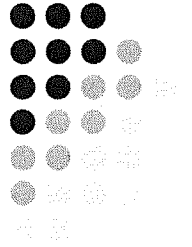
Reasons for visiting – to use the trails/passive activities



- Convenient tracks (walking the dog/walking for pleasure).
- Relaxing and beautiful/for the view.
- Good facilities for children, barbecues, recreation, parks.
- To keep fit/exercise.
- As a destination for family gatherings (organised by others).
- Visitors to see the Perth icon.

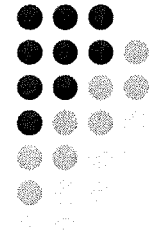
The beach – competition

- To swim.
- Better facilities.
- More activity/things to do/entertainment.
- Closer to home.
- To be seen.



Benefits of the river

- Health related: walking, cycling, running, rowing.
- Family time – picnics, playgrounds, etc.
- Reminiscence of childhood memories.
- Recreation – restaurants, cafes, walking and rewarding.
- Time for reflection (very few).

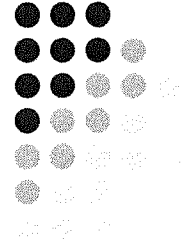


Expectations

“The children/grandchildren will be able to recreate around and in the Swan River in the same manner as I used to as a child.”

The river will be:

1. Safe to swim and fish in (more an indication of water quality than desired activity).
2. Safe to recreate on without being run over.
3. Accessible to walk/ride all the way round and at least as much as now.
4. Residential development will be back from the river with public open space in front (like South Perth).
5. Commercial development will be limited and in nodes.
6. Water quality will decline no further and preferably improve – fish, bird life, dolphins and swans.



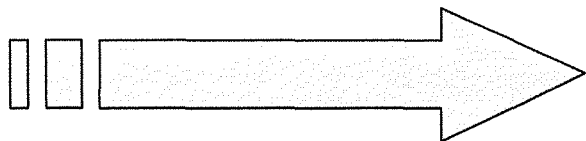
Barriers

- Distance.
- Lack of shade.
- Lack of parking.
- Spills – areas of river closed – perception of unhealthy.
- Lack of entertainment/things to do.

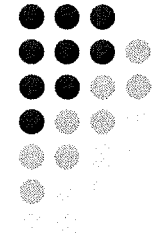
“A boring place to go.”

“A bit dead.”

“Fremantle bustles.”



Lack of engagement.

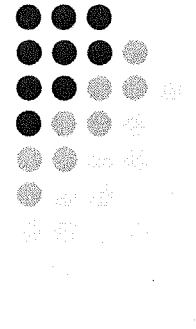


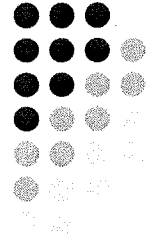
Concerns

1. Declining water quality:
“Hear about the algal blooms a lot more often now and garbage in the river.”
“The river looks sluggish and brown.”
“Do not go into the water – it’s toxic is a regular message (from the Trust).”
2. Access in the future, particularly as the result of residential development.
3. Lack of parking.
4. Lack of shade trees.
5. Lack of facilities – toilets, drinking fountains.
6. Access to boat ramps in the summer (long queues)

Health of the river

- A healthy river is not:
 - Not sluggish and brown.
 - No rubbish on the edge.
 - No brown lines on the banks.
 - No smell.
- Icons on health:
 - Black swans.
 - Pelicans.
 - Dolphins.
 - Fish.
 - Birds other than seagulls.
- Important:
 - Children can paddle in it.
 - Eat the fish they catch.
 - Would be nice to be able to swim.
 - Not toxic if you fall in.





The biggest threat

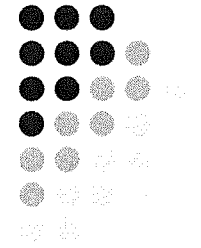
A. The health of the river.

1. Fertiliser run off – algal bloom.
2. Sewage spills.
3. Stormwater washing rubbish into the river.

B. Unrestricted commercial and residential development

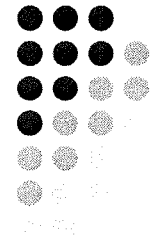
⇒ restricted access.

“I would view it as a community asset, not an asset of a select portion of the very rich. I think it’s rather nice at the moment, it’s accessible to everyone.”



River events

- Great support for events on the river:
 - Sky show.
 - Concerts.
- Demand for more events and entertainment on and around the river:
 - Suggested pontoons for concerts on the river.
 - Greater ferry service in the evening.
 - More events on the river.
 - Light up the foreshore to make evening cruises more interesting.



The mix (1)

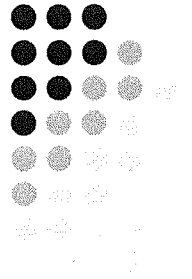
- Families – more passionate and involved with the river:
 - Generally favoured recreational areas (picnics, barbecue, games, playgrounds). Saw increased commercial development eating into these.

“I remember it as a child and don’t want it to change.”
 - Didn’t favour more residential development on the foreshore, particularly high rise and if it restricts access.

“East Perth rather than Raffles.”
 - Commercial development of the derelict areas, e.g. East Perth Power Station.
 - Use commercial development to fund river regeneration.
 - Natural areas – important for rejuvenation but don’t need access as prefer the facilities of the recreation areas.

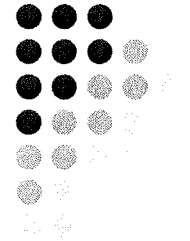
“We need to know it’s there”

The mix (2)



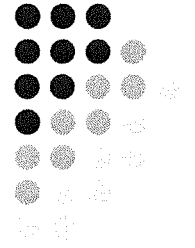
- Young people – more divorced from the river:
 - Supported more commercial development around the river in nodes, particularly for entertainment purposes.
 - Don't favour increased residential development, particularly where access was restricted.
 - Recreational areas were “not really their thing”, though used walking and cycling tracks.
 - Natural areas – many didn't associate with these – “it's not really me”. Others saw the natural areas as a place to relax.

The mix (3)



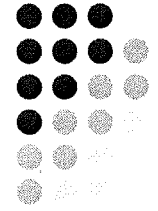
- Empty nesters:
 - Not really engaged with the river, a place they 'used to go' but now their children are grown up they rarely go any more, unless they live on the river.
 - Reluctant to sacrifice recreation areas for commercial or residential development:
 - Preferred green grass and beaches with residential set well back.
 - Suggested development of derelict areas or 'overgrown' areas in Perth water and on to Fremantle.
 - However some favoured mixed development like the young, possibly a South Bank style and saw the river as a great opportunity to create a focus for entertainment.
 - Very much advocated that the river should be for everyone not just the well off.

Commercial and residential development

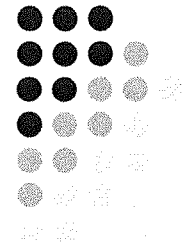


- Felt to be concentrated around East Perth and South Perth.
- Real need for more small cafes set back from the river – *“somewhere to stop for a coffee on the walk”*.
- Young people and empty nesters sought more commercial development for entertainment and the river to engage them more. ‘Dead areas’ (areas that could be used better) suggested were:
 - East Perth Power Station.
 - West of Kwinana Freeway in Como.
 - Riverside Drive (sink the road and create a node of cafes and retail).
 - Adjacent to the Red Herring.
 - Burswood (possibly).

Commercial and residential development (2)

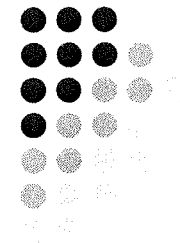


- For young people and some empty nesters it was about entertainment.
- For families and older people it was about a means to pay for improvements to the river.
- Use:
 - Mainly for entertainment, possibly to create 'Northbridge on the river'.
- Concerns:
 - Balance between public open space and development on the river and possible loss of grassed areas.
 - Possible access problems.
 - No more yacht clubs, increase existing pens with more efficient use.



Recreational areas

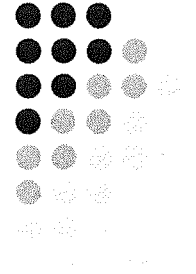
- Active and passive recreation supported as a key function of the river.
- Need more facilities – toilets, shade, water fountains, small cafes.
- People recalled early memories of recreating on the river in childhood – South Perth, Matilda Bay, Crawley, Point Walter.
- Families would be happy to expand this at the expense of commercial and possibly natural habitats (until they understand the reason for natural habitats).
- Concerns:
 - Lack of facilities and overcrowding.
 - Money spent elsewhere when it could go into recreational facilities.
 - Large power boats causing problems for recreational rowers and small dinghies.
 - Whether fish caught in the river are edible.
 - Whether the river was safe to swim in.



Natural environment

- No real understanding of why a natural environment is needed for the health of the river except as a breeding ground for wildlife.
- Once they understood its role:
 - People were happy it existed as they demanded no decline in water quality.
 - Most did not want to go there or need access.
 - Or sought access via walkways.
- There will be some demand for facilities, e.g. lawns, beaches, even toilets, unless they understand the role of sedges and reeds and the fact it will not be a neatly manicured area.
- Restricting access was no problem due to concern for river health:
 - Explain the role it plays.
 - Explain reasons for no access.
- Concerns:
 - River health and impact of reduction in natural environment on this.
 - Impact of power boats, pollution and erosion of banks.
 - Impact of algal bloom.

Vision for the future

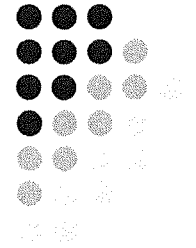


A wide range of views were expressed which need to be tested:

- Desire to hand over a pristine environment to our children which leaves the options open for them, e.g. to swim, to fish, etc.
- A desire for significantly reduced spills and important for strong deterrent to dumping.
- Filter the storm water before entering the river.
- Extend appropriate areas – café, retail, parking, shady trees.
- Healthy, not sluggish river with fish, bird life, pelicans, swans and dolphins.
- Respect for heritage sites but no great investment in them.
- Maps of river walks and activities on the river, publish on the website and through local councils.
- Clean up areas in need such as East Perth Power Station and take advantage of Riverside Drive's location.
- Retain icons such as Matilda Bay and South Perth foreshore.

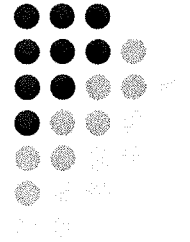
Current values	What's possible	Aspirational values
Landscape - Urban housing - Commercial development	No more housing on foreshore Nodes plus some cafes set back from the river	Need access between development and river, preferably a park. East Perth/South Perth style in derelict areas.
Biodiversity - Fish - Birds (excluding seagulls)	Edible fish, not just blowfish and carp More visible birds & diversity than seagulls	Wide spread fishing in the river Protect existing bird sites and develop more.
Recreation - swimming not attractive - Walking and cycling	Some safe areas to swim (as we did as children) Access to as much as poss	Swimming in certain areas. Access all round the river
Culture	Main sites noted on a map and directions available	Respect but not significant investment
Navigation – motor boats restricted access allowing sail and canoes to be unhindered	Limited additional pens at existing yacht clubs. Canoe/rowing lane in wider parts of the river	Ability to travel safely anywhere on the river.

Questionnaire

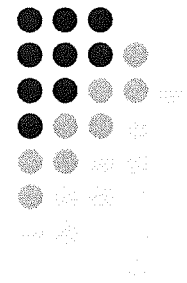


1. Establish river use and activity
2. Attitudinal statements about the river- value
3. Threats and concerns
4. Trade off in the 3 areas
5. Priority to the 3 areas ie constant sum, allocate a percentage or 10 points between them (length or number of locations too hard with out reference points)
6. Which sites to be developed/ changed (list)

Trade-off



- Commercial:
 - Development
 - Nodal
 - Strip
 - Residential
 - 2/3 storey-East Perth
 - High rise
 - No further development
 - Access
 - Public access to certain areas
 - Full access in front of development green area/ pavement
 - Style
 - Cafes and a market
 - Restaurants, cafes, shops
 - Restaurants, cafes and shops + a night club



Commercial Trade off

- Option 1
 - Nodal dev.
 - 2/3 storey residential
 - Full access in to river in front of dev.
 - Restaurants, cafes and shops

- Option 2
 - Strip development
 - No residential
 - Limited access to river
 - Rest. cafes, shops + night club/pub

Qualitative Research Project Specifics

Component	Details
Research Solutions Contact:	Nicky Munro
Client Contact:	Deb Rohan – Swan River Trust
Research Target/s	<ul style="list-style-type: none"> • Perth metropolitan residents • Group 1: Young singles and couples Range of occupations and area of residence Visited the rivers at least once in the last 12 months • Group 2: Older singles and couples No children or children left home Range of occupations and area of residence Visited the rivers at least once in the last 12 months • Group 3: Families with children at home Range of occupations and areas of residence Visited the rivers at least once in the last 12 months
Research Method	3 Focus groups
Field Company for Recruitment	West Coast Field Services (telephone recruitment)
Field Company Credentials	IQCA accredited
Recruitment Briefing Method	<ul style="list-style-type: none"> • Detailed written specifications • Recruitment questionnaire • Daily updates to Project Manager
Group/Interview Dates	<ul style="list-style-type: none"> • 24 and 25 May 2006
Location	<ul style="list-style-type: none"> • Research Solutions • 24/60 Royal Street, East Perth
No of participants	<ul style="list-style-type: none"> • Total = 27
Techniques	<ul style="list-style-type: none"> • Group discussion – according to discussion guide • Participants shown a variety of photographs of river environments (stimuli) – full details of photographs on electronic file and where used shown in discussion guide

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