

**The Central  
Queensland  
Outdoor Recreation  
Demand Study**

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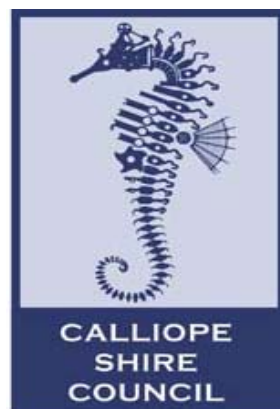
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# A STATE AND LOCAL GOVERNMENT INITIATIVE



## Queensland Government

**Sport and Recreation  
Natural Resources**



*Community, Environment  
& Industry in Partnership*



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# 1 Acknowledgments

The Central Queensland (CQ) Outdoor Recreation Demand Study was a joint initiative of several local and state government agencies. These agencies formed a consortium to finance and provide expertise for the Study. Contributing agencies included:

- Banana Shire Council
- Calliope Shire Council
- Duaringa Shire Council
- Gladstone City Council
- Livingstone Shire Council
- Miriam Vale Shire Council
- Mount Morgan Shire Council
- Rockhampton City Council (Planning Services Unit)
- Department of Natural Resources (Forest Resources)
- Department of Communication and Information, Local Government, Planning, and Sport

To manage the Study and provide guidance to the consultant, a Steering Committee of representatives of some of the above agencies was formed. Over the duration of the Study, membership of the Steering Committee changed in response to the roles and responsibilities of the individuals concerned. The members of the Steering Committee were:

Name	Agency/Organisation
Jason Jacobi Crystal Mc Gregor	Calliope Shire Council
Brendan Mohr	Gladstone City Council
Mark Windress	Livingstone Shire Council
Leo Jensen David Kelly	Rockhampton City Council
Matthew Ferguson Brett Waring	Department of Natural Resources: Forest Resources
Neil Kershaw	Queensland Parks and Wildlife Service
Tim Draper	Department of Communication and Information, Local Government , Planning and Sport: Planning Division
Steve Dendle Lyndal Hansen Dave Batt	Department of Communication and Information, Local Government , Planning and Sport: Sport and Recreation Queensland

As a result of this cross-agency cooperation, funds and expertise from several agencies could be combined to undertake applied research that no single agency could afford. This cooperative consortium approach to outdoor recreation research, planning and management reflects the reality that no single state or local government agency has the resources or the mandate to meet all outdoor recreation demands or solve all outdoor recreation related issues. Multi-agency cooperation is essential to meeting community needs for outdoor recreation and managing the public sector estate on which most of these demands are met.

The Steering Committee would like to thank all respondents to the survey for their contribution to the project.

In addition, the committee would like to thank Earthfocus, South Australia for their kindness in allowing the reproduction of two of their “Photopost” postcard images located in Appendix 2 (Landscape Photos 23 & 25).



## **2 Executive Summary**

People participate in a wide variety of outdoor recreation activities. They undertake these activities in a wide range of settings. Sometimes people just want to practice particular skills or to use particular types of equipment. The same individuals may sometimes use the same outdoor recreation skills and equipment to experience particular environments or cultures. Sometimes, they may participate in competitive events. In summary, there is diversity in activities, setting preferences, equipment, expectations, and motivations among other factors. Attempting to satisfy this diversity in demand is the great challenge for outdoor recreation planning and management.

The broad aim of the CQ Outdoor Recreation Demand Study was to provide some basic statistics on the current and latent demand for particular combinations of outdoor recreation activity and landscape setting from the residents of the region. This information will be used to inform outdoor recreation planning and management, and financial investment in outdoor recreation infrastructure and services. Visitors to the region were not targeted in the Study because they require different sampling techniques. However, it is acknowledged that information about the outdoor recreation demands of tourists/non-residents is also important. This information will be collected through other research.

Specifically, the CQ Outdoor Recreation Demand Study was designed to investigate factors such as: the type of outdoor recreation activity, activity settings, current demand, latent demand, barriers to participation in outdoor recreation activities and the motivations of people who choose to undertake particular activities in particular settings.

In 1999, a total of 2500 residents from the Banana, Calliope, Duarina, Fitzroy, Gladstone, Livingstone, Miriam Vale, Mount Morgan, and Rockhampton Local Government Authorities participated in a telephone survey. For analysis purposes the LGA's were combined to create two sub-regions – North and South.

The survey focused on 12 specific outdoor recreation activities, the types of places (or settings) in which those activities were undertaken (characterised as totally natural, very natural or somewhat natural landscapes); and the participant's motivations (characterised as leisurely, goal focussed or competitively) for undertaking a specific activity within a chosen setting.

The results indicate that some respondents may have misinterpreted or inconsistently applied the definitions of the landscape settings provided in the survey. The Steering Committee has recommended that follow up research be conducted to clarify the respondent's understanding of landscape setting definitions.

Data on current and latent demands for outdoor recreation from this research are valid at regional and sub-regional scales for the demographic groups indicated in the results. However, the data are not valid if applied to the outdoor recreation demands of individuals, or residents of specific streets, suburbs, shires or cities. Because of survey design and sample size, the data on outdoor recreation in central Queensland is most robust, reliable, valid and representative when applied to the CQ Outdoor Recreation Demand Study as a whole.

Selected results are presented in Sections 2.1 to 2.5. A full summary table is located in Appendix 4. The data is also shown as flow charts that relate survey questions to particular statistics in Appendix 1

## Activity Participation Over the Past 12 Months

As depicted in the table below, the most popular activity undertaken by the respondents was picnicking (62%). Other popular activities were walking or nature study (54%), swimming (47%), and driving two-wheel drive (2WD) vehicles on unsealed roads (46%) (*refer to Section 6.2 for further information*).

**Table 1 Incidence of Participation at Least Once in the Past 12 months**

<b>Outdoor Recreation Activities</b>	<b>% of 2500 respondents who participated at least once in the year prior to the survey</b>	<b>% applied to the CQ population (120,652)</b>
Picnicking	62%	74,603
Walking or nature study (eg bird watching etc)	54%	64,768
Swimming (excluding in constructed pools)	47%	57,103
Driving in 2WD vehicles on unsealed roads	46%	55,016
Driving 4WD vehicles on tracks or unsealed roads	37%	45,011
Camping	36%	43,352
Riding on a motorised watercraft (eg motor boat, jet ski)	31%	37,785
Bicycle riding	20%	24,275
Riding non-motorised watercraft (eg canoe, sailing, kayaking)	18%	22,279
Driving other vehicles on tracks or unsealed roads (eg motor bike, trike)	13%	16,129
Horse riding	11%	13,751
Abseiling or rock climbing	6%	7,511

Significant differences in participation rates between North and South regions of Central Queensland were recorded for camping (North – 34%, South – 40%), driving 4WD vehicles on tracks or unsealed roads (North - 35%, South – 41%) and driving other vehicles (other than 4WD or 2WD) on tracks or unsealed roads (North – 11%, South – 17%).

The main issues preventing current participants from participating in activities more often, and non-participants from participating at all were: “No time, too busy”, “No equipment”, “Can’t afford it”, and “Nowhere to do this” (*refer to Section 6.9 and 7.2 for further information*).

## Frequency of Participation Over the Past 12 Months

The mean (or average) and median (or the middle number of any group of numbers) participation frequencies (*refer to Appendix 6 for definitions*), differ greatly for a number of activities such as: walking/nature study [mean=72.5, median=11.7] and bicycle riding [mean=60.0, median=19.5].

This difference is caused by a relatively small number of people who participate in an activity on a very regular basis (eg. people who walk every day). Given this, the **median** number best represents the frequency with which activities are generally undertaken by the CQ population (*refer to Figure 4, Section 6.5 and Appendix 6 for definitions of terms*).

Bicycle riding (median=19.5) and walking/nature study (median=11.7) were the activities with the highest median frequency for participation. Taking into account the proportion of the population undertaking specific activities and their frequency of participation, the activities most commonly undertaken by the population are walking/nature study (n=65,000; median=11.7), bicycle riding

(n=24,000; median=19.5), and swimming (n=57,000, median=9.2) (refer to Section 6.5 for further information).

## **2.3 Current and/or Preferred Landscape Setting**

While the results indicate that there may have been some respondents who did not understand the definitions of the landscape settings used in the survey, the following broad inferences can be made:

- Landscapes most used for current participation

When participating in all but four outdoor recreation activities, somewhat natural landscapes were the recreation settings most frequently used. For camping, driving two-wheel drive vehicles, driving four wheel drive vehicles and driving other vehicles, **very natural landscapes** were used most frequently. (*Refer to Section 6.6*) This result probably reflects the types of landscapes currently available to outdoor recreation participants.

- Preferred landscapes for increased participation

For increased participation in all outdoor recreation activities except driving/riding other motorised vehicles, survey respondents indicated a statistically significant preference for more natural settings than they currently use. (*Refer to Section 6.10*)

- Landscapes preferred by current non-participants

Survey respondents who do not currently participate in some or all outdoor recreation activities, expressed a preference for more natural settings than those used for current participation. (*Refer to Section 7.3*)

The qualitative research conducted as part of the 1997 South East Queensland Outdoor Recreation Study (See section 8.0) strongly suggests that the respondents from that survey understood and accepted that there is a range of landscapes from totally wild-natural-remote to urban-built-developed, and that particular types of landscape are necessary for particular outdoor recreation experiences (*Refer to section 2.5*).

However, further research is necessary to confirm whether respondents consistently applied the landscape definitions when considering their answers to survey questions.

## **2.4 Current and/or Likely Motivations**

Most participants undertake outdoor recreation activities for leisure related reasons. More than eight in ten respondents participated in swimming (95%), riding on a motorised (95%) or non-motorised watercraft (87%), driving 2WD (87%), 4WD (88%), and other vehicles (87%) on tracks, and abseiling or rock climbing (82%) for leisure reasons (*refer to Section 6.7*).

Bicycle riding (27%) and abseiling or rock climbing (16%) were activities with the highest level of goal focussed (fitness, conquering or challenging nature, testing equipment, practicing techniques) participation (*refer to Section 6.7*).

Competition related reasons (eg. maximum distance, minimum time, formal organised competition) were the least common motivation for participation in all activities except horse riding (10%). (*Refer to Section 6.7*). Five percent or less of respondents nominated competition as their main motive for participation.

There were no significant differences between participant's current motivation for undertaking an activity and their likely motivation for undertaking the same activity more often (*refer to Sections 6.7 and 6.11*).

## **2.5 Qualitative Workshop Findings**

Qualitative workshops held as part of the 1997 South East Queensland Outdoor Recreation Study suggested that most people understand the concept of a range of landscapes from a 'totally natural' to 'totally unnatural' and that these landscapes represent a series of distinctly different places in which to recreate. Workshop participants were able to distinguish degrees of “naturalness” when presented with photographs of a range of landscapes. Some specific setting attributes such as land clearing and exotic plant species caused some variation in interpretation of the landscape photographs (*Refer to Section 8.1.2*).

The results of the landscape classification components of the qualitative workshops from the 1997 South East Queensland Outdoor Recreation Demand Study are judged to be as applicable to the central Queensland survey population as they were to the south east Queensland survey population. Consequently, similar qualitative workshops were not held for the central Queensland study.

The majority of participants in the qualitative workshops from the 1997 South East Queensland Outdoor Recreation Demand Study thought that the motivation scale used in that study referred to a combination of goal related characteristics and the level of physical exertion expended during an activity. This use of the term 'actively' as a motivation descriptor was thought to be the primary cause of confusion (*Refer to Section 8.2*). To avoid this confusion, “goal focused” was substituted for “actively” in the Central Queensland Outdoor Recreation Demand Study.

**Note:** The flow charts located in Appendix 1 relate particular statistics to the sequence of questions used in the telephone interviews. The current and latent participation summary tables located in Appendix 4 and present a full set of the Study's results.

## **3 Recommendations and Implications**

### **3.1 Recommendations for Further Outdoor Recreation Related Research**

Key recommendations arising from the Central Queensland Outdoor Recreation Demand Study are as follows:

- That the demand for outdoor recreation by residents of central Queensland be surveyed on a regular basis (eg every 3 - 5 years) using a comparable method to allow for trends in outdoor recreation to be identified and analysed.
- That future research regarding outdoor recreation on publicly owned lands in central Queensland, be conducted as joint projects between the relevant local and state government agencies.
- That the statistics arising from the CQ Outdoor Recreation Demand Study be used to understand the general regional and sub-regional demands for outdoor recreation of residents over 15 years of age. These data do not represent the outdoor recreation demands of individuals, or residents of specific streets, suburbs, shires or cities. The data on outdoor recreation demand in central Queensland is most robust, reliable, valid and representative when applied to the Central Queensland Outdoor Recreation Demand Study area as a whole.
- That further research be conducted to gain a more rigorous understanding of outdoor recreation within central Queensland, so that outdoor recreation services can be more efficient and effective and so that the quality, quantity and diversity of specific combinations of outdoor recreation activities and settings can be optimised. Further research needed to build the data sets necessary to inform both public and private sector investment in outdoor recreation infrastructure and services includes:
  - An inventory of outdoor recreation activity sites on publicly owned lands in central Queensland.
  - An assessment of the volume of recreation use and impacts on publicly owned lands in central Queensland.
  - A landscape class analysis of the area covered in the CQ Outdoor Recreation Demand Study.
  - An assessment of “setting-appropriate” activities and appropriate carrying capacities for specific recreation activities in particular landscape classes.
  - An assessment of inherent site quality of particular activity-sites.
  - Surveys of the demographic characteristics of actual and potential outdoor recreation participants.
  - Research on the general public understanding of the concepts of landscapes used in this study and of consequential matters.
  - A survey of the expectations of outdoor recreation participants (eg setting characteristics, natural features, other activities, regulatory regime, skill levels, etc).
  - Survey the demand for outdoor recreation by people under 15 years old.

### **3.2 *Implications for Outdoor Recreation Planning and Management***

Members of the steering committee have compiled this section. The comments provided are an initial analysis of some of the implications of the survey data for outdoor recreation in central Queensland. This section is intended for discussion purposes only and does not obligate any agency or individual to undertake the actions or comments mentioned.

## PICNICKING

<b>CURRENT SITUATION</b>	<b>CONSEQUENCES IF NOTHING IS DONE</b>	<b>COMMENTS, IMPLICATIONS AND <i>ACTIONS</i></b>
<p>Picnicking is a popular activity, particularly with people in the 25 – 39 age group.</p> <p>Most respondents in the future would prefer to picnic in more natural settings than those currently used.</p> <p>Participation rates are highest in the southern part of the surveyed area.</p>	<p>Natural areas/settings may be subject to increased use.</p> <p>Ultimately this could potentially lead to the deterioration of natural settings.</p> <p>Failure to provide picnic sites in relatively natural settings close to where people live may lead to unmet demand and user dissatisfaction.</p>	<p>Picnicking probably reflects an easily accessible activity for young families.</p> <p>It is unknown whether the number of available picnic areas meets the current demand.</p> <p>Experience shows that most people are not prepared to travel for more than 3 hours for a picnic.</p> <p>Ensure that a diversity of picnic sites are available, from urban to natural settings.</p> <p><i>Identify potential natural settings suitable for picnicking within close proximity to urban centres.</i></p> <p><i>Manage existing picnic sites, especially very natural and totally natural areas to maintain the setting quality.</i></p>

## WALKING/ NATURE STUDY

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS AND <i>ACTIONS</i>
<p>Large number of walks undertaken, with a significant future preference for more natural settings than those currently being used.</p> <p>Strong participation by older age groups (possibly in somewhat natural near urban settings such as beaches etc.).</p> <p>Lack of time prevents people from participating more often.</p> <p>Health reasons were stated as a major reason for non-participation.</p>	<p>Increased pressure on existing walks resulting in a reduction in user satisfaction.</p>	<p>Due to demand from older age groups, track standard, quality, grade and degree of difficulty will be important.</p> <p>Lack of data on motivation for people undertaking walking/nature. Develop strategies for provision and management of walking trails (systems) in “natural settings” near to where people live.</p> <p>Recreation corridors should be recognised in Planning Schemes, which may provide legal public recreation corridors through the landscape. The compatibility of adjoining land uses and activities in the same corridor will need to be considered.</p> <p>Consideration should be given to the location alignment and design of these trails in regard to their principal function or role as either a transportation corridor or leisurely walking trails or both. Further consideration should be given to dual-purpose use of walking trails.</p> <p><i>Identify remote routes and promote low impact walking practices for experienced walkers.</i></p> <p><i>Prioritise the creation and development of “setting appropriate” walking trail systems in natural areas within close proximity to urban centres and utilising, where appropriate, beaches, headlands and major watercourses.</i></p>



## SWIMMING

<b>CURRENT SITUATION</b>	<b>CONSEQUENCES IF NOTHING IS DONE</b>	<b>COMMENTS, IMPLICATIONS AND <i>ACTIONS</i></b>
<p>Swimming is a popular activity, with participation rates decreasing with age.</p> <p>“Nowhere to do this” was identified by a proportion of both current swimmers and non- swimmers as a reason for not participating.</p> <p>Respondents stated that they would prefer to use more natural settings in the future.</p>	<p>Existing swimming sites may become over utilised leading to incremental changes in setting and ultimately site degradation, water quality and health issues.</p>	<p>Limiting access to very natural swimming sites may assist to protect site quality.</p> <p><i>Identify existing water bodies, which currently provide swimming opportunity, particularly in close proximity to urban areas.</i></p> <p><i>Investigate issues such as public access and develop appropriate management strategies considering health, safety, and the maintenance of setting quality.</i></p>

### DRIVING 2WD

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS AND <i>ACTIONS</i>
<p>Most respondents for future use prefer more natural settings than those currently used for 2WD driving.</p> <p>This is principally a leisure activity undertaken by all age groups.</p>	<p>If rural/gravel roads are not identified, protected and managed, 2WD opportunities on this road network will be lost</p>	<p>This activity is well catered for on the rural/gravel road network.</p> <p><i>Investigate tourist drives that provide a diversity of setting experiences, which will not detract from the setting quality of a particular route.</i></p> <p><i>Address the potential conflict of interest between recreational 2WD users and residents/ landholders using the same roads.</i></p>

## DRIVING 4WD

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS AND <i>ACTIONS</i>
<p>High percentage of current use in very natural settings.</p> <p>Possible misunderstanding of setting definitions by respondents</p> <p>Higher participation in south area of surveyed region.</p> <p>Strong participation by all age groups.</p> <p>Higher percentages of males participate.</p> <p>No equipment was stated as a constraint for non-participation.</p> <p>Current non-participants would prefer very natural settings if they could go 4 wheel driving.</p>	<p>Degradation of the environment may occur due to over use of designated 4WD locations or by driving in inappropriate and unauthorised areas.</p>	<p>Further research required clarifying settings, in particular 4wd in totally natural settings.</p> <p>Driving on beaches may be a key demand area and will need to be confirmed. Some demand may be able to be diverted to alternative inland destinations.</p> <p>There may be a market opportunity for private investment (requires further investigation).</p> <p><i>Investigate which sites are “key” natural setting destinations for 4wd activity; where people are travelling from; how often they are being used; and other activities that are being conducted in association with 4WD driving.</i></p> <p><i>Promote low impact 4wd driving and beach driving techniques.</i></p> <p><i>Monitor vehicle numbers and impacts.</i></p> <p><i>Develop strategies for management of 4wd on public lands and provision of infrastructure to maintain quality and diversity of setting(eg erosion control) and standard of access to setting.</i></p> <p><i>Ensure 4wd drive hire users have access to relevant information (eg destination, safety and regulatory codes).</i></p>

## DRIVING OTHER VEHICLES

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS, <i>ACTIONS</i>
<p>Possible misunderstanding of setting definition.</p> <p>Small proportion has either “nowhere to do this” or “no facilities”.</p> <p>Having no equipment was stated as a barrier to participation.</p> <p>Higher proportion of males participate in these activities</p> <p>Most frequent users are 15-17 year olds.</p>	<p>If appropriate sites aren’t designated for these vehicles, conflicts with other activities may occur.</p>	<p><i>Conduct follow up research to clarify motivations of users.</i></p> <p><i>Identify and protect potential trail bike sites in planning schemes in near urban bushlands.</i></p> <p><i>Identify and manage recreation corridors for the safe and sustainable use of this activity. Involve key stakeholders in management decisions.</i></p> <p><i>A minimal impact education campaign is required for this activity in natural areas.</i></p>

## CAMPING

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS AND <i>ACTIONS</i>
<p>Location and setting played a fundamental part on nearly all camping in the outdoors.</p> <p>A significant proportion of current participants would prefer to go camping in more natural settings in the future than those they currently use.</p> <p>A higher percentage of males participate.</p> <p>A lack of time prevented people participating more often, with a small proportion stating that there was nowhere to go camping.</p> <p>Higher participation rate in southern part of survey area.</p> <p>Strong participation by all age groups.</p>	<p>Reduction in user satisfaction.</p> <p>Unauthorised camping would increase.</p> <p>Increased pressure on existing camp sites with the possibility of undesignated camping sites forming.</p>	<p>Lack of data available regarding how people prefer to access camping areas.</p> <p><i>A minimal impact education campaign is required for camping in natural areas.</i></p> <p><i>Identify current camping sites in “totally, very natural or somewhat natural settings” and investigate the impacts of visitor use with the intent of developing a strategic approach to regional resource allocation and site management.</i></p> <p><i>Need to identify access types for camping. Access type must be consistent with the setting rather than with the mode of transport. (ie Primitive – “walk in”</i></p>

## MOTORISED WATERCRAFT

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS AND <i>ACTIONS</i>
<p>High participation from the southern part of the survey area</p> <p>“No equipment” is a barrier to participation in this activity.</p> <p>More natural settings than those currently used are preferred for future use.</p>	<p>Lack of appropriate launching sites/safe harbourage, could potentially lead to negative land based impacts and water quality, as a result of overuse.</p> <p>Inability to access equipment, may lead to an unmet demand for this activity.</p> <p>Specialised motorised water activities such as water skiing or jet skiing, could lead to a significant reduction in site quality and increased user conflict, unless appropriate or alternative sites are provided for these activities.</p>	<p>. High participation from the southern part of the survey area may be a result of the number of shires with coastal boundaries, leading to greater accessibility.</p> <p>Balance regulatory regimes and site use impacts to maintain setting quality and diversity.</p> <p><i>Identify locations, which provide boat launching opportunities and public vehicle access within the least natural setting that meet their minimum requirements.</i></p> <p><i>Identify sites that could be dedicated to the provision of facilities/access for active motorised watercraft, such as jet skis and water skiing.</i></p>

## NON-MOTORISED WATERCRAFT

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS AND <i>ACTIONS</i>
<p>Both current participants and non-participants expressed significant preference for more natural settings than those currently used.</p> <p>Strong participation by younger age groups.</p> <p>People who wished to participate more often stated that there were either “no facilities”, “nowhere to do this” or “no equipment”.</p>	<p>The displacement of non-motorised activities could occur.</p>	<p>Limited facilities are available in central Queensland.</p> <p>Consider establishing non-motorised vessel zones in totally natural settings, in dams, estuaries or near coastal waters. The cooperation of Transport Queensland and Local Government Authorities would be required for this to be achieved.</p> <p><i>Identify sites on public tenure suitable for various types of non-motorised watercraft and ensure management of these sites to enable safe public use.</i></p> <p><i>Implement site planning and design measures to ensure the protection of site and water quality.</i></p>

## BICYCLE RIDING

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS AND <i>ACTIONS</i>
<p>Bicycle riding is undertaken by a relatively small number of people but on a frequent basis, particularly in the 15-17 age group.</p> <p>Whilst the majority of respondents participate for leisure, a significant number are goal focussed (ie transport or fitness).</p> <p>Current and preferred landscapes for bicycle riding are in somewhat natural settings.</p> <p>Many participants would like to participate more often, but are too busy.</p> <p>“Nowhere to do this” and “no facilities” were reasons stated for not bike riding by a proportion of respondents.</p>	<p>Conflict between vehicular and bicycle traffic and the popularity of this activity for youth suggests that facility provision is important for ensuring public safety.</p> <p>Unmanaged erosion and land degradation may be a consequence of mountain biking in areas with no properly constructed, designed and maintained trails.</p>	<p>Ensure that cycleways are located within convenient distance from residential areas and utilise where appropriate, natural corridors for linkages.</p> <p>Where appropriate, design cycleways that have a dual function for other activities such as walking.</p> <p><i>Prepare strategic cycleway plans which provide a network of safe, dedicated bicycle routes that cater for bike riding activities for transport, leisure or goal focussed reasons.</i></p> <p><i>Investigate potential mountain bike trails in natural settings on public land.</i></p>



## HORSE RIDING

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS, <i>ACTIONS</i>
<p>Higher proportions of females participate.</p> <p>This activity has the highest proportion of competitive respondents.</p> <p>Small proportion have “nowhere” or “no facilities” to undertake horse riding.</p> <p>A future preference for more natural settings than those currently used was expressed by a significant proportion of respondents.</p> <p>15-17 yr olds are most frequent riders.</p> <p>65+ age group participate frequently.</p>	<p>Areas available for horse riding may be lost due to development of natural areas.</p> <p>If horse riding occurs in areas that have other significant values, unacceptable impacts could result.</p> <p>Conflict with other incompatible activities in the same location eg mountain-biking, walking, trail bike riding etc may occur.</p>	<p>Protect and maintain appropriate horse riding sites that are compatible with other activities.</p> <p><i>Identify and protect suitable areas/trails for horse riding.</i></p>

## ROCKCLIMBING AND ABSEILING

CURRENT SITUATION	CONSEQUENCES IF NOTHING IS DONE	COMMENTS, IMPLICATIONS, <i>ACTIONS</i>
<p>A proportion of non-participants expressed a preference for more natural settings.</p> <p>Abseiling/rockclimbing is a popular activity with younger age groups (15-17).</p> <p>A significant proportion of current participants would like to do more rockclimbing /abseiling.</p> <p>“Lack of facilities” and “nowhere to do this” suggests that sites are limited or public access is restricted.</p>	<p>Increased risk management issues.</p> <p>Degradation of cliff areas and surrounding landscape setting area as a result of overuse and concentrated activity.</p>	<p>A proportion of both current participants and non-participants stated that there was a lack of facilities or nowhere to climb/abseil, suggesting that sites are limited or not known.</p> <p><i>Identify existing and potential sites that offer safe rockclimbing and or abseiling on public land.</i></p> <p><i>Monitor use and impact at key sites and if necessary :</i></p> <ul style="list-style-type: none"> <li>▪ Identify peak groups / bodies and consult to seek advice and educate about Code of Practice, Code of Management, Risk Management etc.</li> <li>▪ Encourage positive Cliffcare / Landcare behaviour via relevant forms of media (print and electronic).</li> <li>▪ Educate State &amp; Local Governments about the positive aspects of this type of recreational activity.</li> </ul>

## **4 Background & Objectives**

### **4.1 Background of the Study**

People participate in a wide variety of outdoor recreation activities including walking, picnicking, sailing, rockclimbing, driving four wheel drives, riding trail bikes, camping, riding in motor boats, swimming, surfing, canoeing and kayaking, snorkelling and SCUBA diving and riding horses. They undertake these activities in a wide variety of settings, from places where there are few people and where nature dominates, through to rural areas where the natural landscape has been at least partially modified, to highly modified open space areas on the margins of urban areas that retain some small remnants of their natural state and where solitude is unlikely.

Sometimes people just want to practice particular skills or to use particular types of equipment. The same individuals may use their outdoor recreation skills and equipment to experience particular environments, cultures or to participate in competitive events.

In summary, there is diversity in activities, in setting preferences, in equipment, in expectations, and in motivations - among other factors. Attempting to satisfy this diversity by providing sufficient high quality places for each combination of outdoor recreation activity and landscape setting to satisfy current and latent demand is the greatest challenge for outdoor recreation planners.

Apart from the 1997 South East Queensland Outdoor Recreation Demand Study, the demand for specific combinations of outdoor recreation activity and landscape setting is generally unknown. We also have little understanding of the regional differences in demand that may allow more precise targeting of outdoor recreation infrastructure and services.

There are some indications that the demand for outdoor recreation throughout Australia is increasing. It appears that Australians of differing age, gender, cultural background, and socio-economic status are participating in a wider range of outdoor recreation activities, and seeking more places in which to do them. This demand for activities, places, experiences and the benefits from participating is putting increasing pressure on our natural resources, and on private landholders and public sector organisations that manage the areas in which outdoor recreation occurs.

In Queensland, as is the case elsewhere in Australia, much of the demand for outdoor recreation is focused on public lands (eg. urban parks, state forests, stock routes, urban bushland, unformed roads, beaches, national parks and the land surrounding major dams) and waters (eg. dams and marine parks).

For public lands, Local and State government agencies are responsible for outdoor recreation policy, planning, management, infrastructure, services and resource allocation. Relevant and reliable data about outdoor recreation demand is important for consideration in outdoor recreation planning and management. However, available data on outdoor recreation demand is poor. Consequently, making decisions on outdoor recreation infrastructure and services and directing resources to the areas of greatest need are often difficult to rationalise and justify.

In response to data deficiencies, the 1997 South East Queensland Outdoor Recreation Demand Study was undertaken. In 1999, a consortium of Local and State Government agencies including Banana Shire Council, Calliope Shire Council, Duaranga Shire Council, Gladstone City Council, Livingstone Shire Council, Miriam Vale Shire Council, Mount Morgan Shire Council, Rockhampton City Council (Planning Services), Department of Natural Resources (Forest Resources), and Department of Communication and Information, Local Government, Planning and Sport (Sport and Recreation Queensland ) undertook to replicate the study in central Queensland.

A number of external consultancy firms were invited to submit tenders for the Study. Subsequently, AC Nielsen was awarded the contract.

## **4.2 Rationale**

Information derived from most existing data (eg. Australian Bureau of Statistics [ABS] and most tourism-related research) is unsatisfactory for most outdoor recreation planning and management purposes. Primarily, this is because few studies in Australia have recognised the relationship between specific outdoor recreation activities and the types of settings or landscapes in which they occur.

Specific combinations of recreation activities and settings (or landscapes) are the fundamental products of recreation services and the fundamental outputs of outdoor recreation planning and management. Client or participant choices, marketing strategies, management inputs, equipment requirements, skill requirements and facility designs, risk management strategies, fitness requirements, client/participant expectations, etc are all based on particular combinations of recreation activity and setting. (*Refer to the definition of recreation opportunities in Appendix 6*).

For example, walking in a suburban park is one type of recreation opportunity. Walking for several days across wild and remote deserts is a different recreation opportunity. Each combination of recreation activity and setting:

- requires different skills and equipment;
- attracts different participants/clients with different expectations;
- provides a different recreation experience; and
- requires different management inputs to maintain quality, safety, sustainability and diversity.

It is important to note that individual people may have radically varying experiences from the same combination of recreation activity and setting. The concept of recreation opportunity does not attempt to predict or direct how particular individuals respond to particular combinations of recreation activity and setting.

All possible combinations of recreation activity and setting usually cannot be provided within a single landholding, a single local government area, or even on the entire estate of a single agency. They can only be provided across a much larger area. Therefore it is necessary to address outdoor recreation planning and management cooperatively at a regional level.

In 1998, the need for collaborative research and planning was identified through the Central Queensland Recreation Planning Forum. This involved recreation planning and management professionals from local government authorities and state government departments in an attempt to more effectively satisfy the current and future outdoor recreation needs of the community.

The Central Queensland Recreation Planning Forum is involved in developing an overall Regional Outdoor Recreation Plan for central Queensland. The first stage is to identify and understand the magnitude and characteristics of outdoor recreation demand. Stage two is to develop an inventory of sites that are currently being utilised or have the potential for outdoor recreation activities. Stage three is to merge this information into a Regional Outdoor Recreation Plan for the intended use of land and natural resource management.

A consortium of eight local government authorities and three state government departments was formed to undertake the first stage of the Regional Outdoor Recreation Plan for central Queensland – the CQ Outdoor Recreation Demand Study .

The CQ Outdoor Recreation Demand Study was designed to investigate current and latent demand for outdoor recreation in the region. The research focuses on the demand for specific combinations of outdoor recreation activity and setting. Motivations for participating and the factors limiting participation are also investigated, as this information helps understand use patterns which provides more precise targeting of outdoor recreation marketing, services, and infrastructure development.

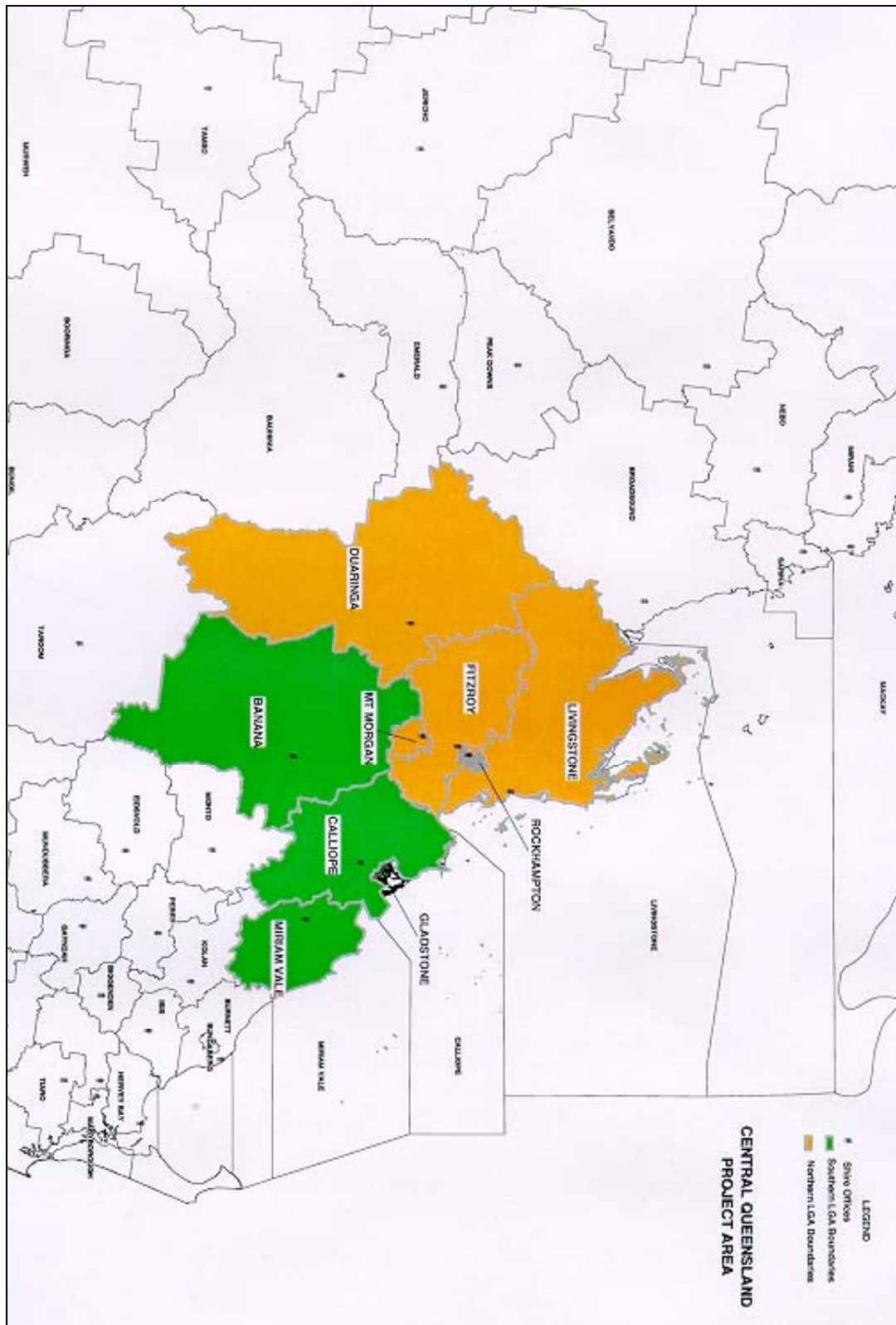
Findings from the Study will be used to plan for, and manage outdoor recreation to ensure that the quality, quantity and diversity of outdoor recreation activities and settings on public land can more effectively and efficiently satisfy community demand.

The sample population for the Central Queensland Outdoor Recreation Demand Study encompassed nine Local Government Areas (LGA's) within the region – including: Banana, Calliope, Duaringa, Fitzroy, Gladstone, Livingstone, Miriam Vale, Mount Morgan and Rockhampton.

For analysis purposes, the LGA's were separated into two sub-regions – North and South. The North sub-region of central Queensland includes the following local government authorities: - Duaringa, Fitzroy, Livingstone, Mount Morgan, and Rockhampton. Banana, Calliope, Gladstone, Miriam Vale, were included in the South sub-region.

The accompanying map (Figure 1) shows the nine LGA's surveyed in the Study.

Figure 1 Local Government Areas Surveyed in the CQ Outdoor Recreation Demand Study



### **4.3 Aims and Objectives of the Study**

The overall aims of the study were to:

- assist with understanding outdoor recreation latent demand and current usage, in terms of specific combinations of outdoor recreation activity, recreation settings (landscapes) and participant motivation,
- provide basic demand data to inform planning for outdoor recreation at regional and sub-regional scales,
- provide basic demand data to inform outdoor recreation management, infrastructure development and service provision decisions; and
- optimise the diversity, quality and quantity of opportunities for outdoor recreation in central Queensland.

Specific objectives were to:

- Estimate the proportion of the total population in central Queensland currently participating in each outdoor recreation activity.
- Estimate the proportion of the total population in central Queensland currently participating in each outdoor recreation activity, in each landscape settings.
- Develop an understanding of the motivations of people who choose to undertake particular activities in particular settings.
- Estimate the proportion of the total population in central Queensland, which would participate in each outdoor recreation activity but are prevented from doing so for some reason.
- Estimate the proportion of the total population in central Queensland, which would participate in each outdoor recreation activity in each of the landscape settings, but are prevented from doing so for some reason.
- Compare the data resulting from the CQ Outdoor Recreation Demand Study with the data resulting from the 1997 South East Queensland Outdoor Recreation Demand Study.

**Note:** When assessing demand, both current and latent demand needs to be considered. That is, how many people currently participate and, how many people would like to participate but are prevented from doing so for some reason. The sum of the current and latent demand equals the total demand for each combination of outdoor recreation activity and setting.

## 5 Methodology

The survey methodology was a telephone interview of members from randomly selected central Queensland households. Trained interviewers rang each randomly selected telephone number and sought to interview a person from the target sample population.

The interview questionnaire used in the South East Queensland Recreation Demand Study was used as the basis for the Central Queensland Study. Some improvements were made based upon the experience gained from the SEQ Study. (Refer to Section 6 and to Appendix 5)

The survey focused on residents of central Queensland. Visitors to the region were not targeted in the Study because they require different sampling techniques. However, it is acknowledged that information about the outdoor recreation demands of tourists/non-residents is also important. This information may be collected through other research.

Within the nine local government authorities (Banana, Calliope, Duaringa, Fitzroy, Gladstone, Livingstone, Miriam Vale, Mount Morgan and Rockhampton) a total of 2,500 interviews were randomly obtained with people aged 15 years and over. At the Central Queensland region level a sample size of 2,500 is accurate to +2.0% at the 95% level of confidence. For example, given the Central Queensland sample size, we are 95% confident that a result of 60% recorded in the survey is actually somewhere between 58.0% and 62.0%. The number of interviews achieved in each sub-region and the associated margin of error for each of these areas is detailed in the table below.

**Table 2 Number of Interviews by Local Government Area (LGA)**

<i>Local Government Area</i>	<i>Interviews</i>	<i>Error</i>
Central Queensland Region	2500	$\pm 2.0\%$ at the 95% level of confidence
Central Queensland – North Region	1567	$\pm 2.5\%$ at the 95% level of confidence
Central Queensland – South Region	933	$\pm 3.2\%$ at the 95% level of confidence

Interviews were conducted between September and October 1999 by telephone, using ACNielsen's Computer Assisted Telephone Interviewing (CATI) facility. Results were post-weighted by age and sex to reflect the overall population of the nine Local Government Areas (LGA's). Interviews on average took 12 minutes to complete.

Respondents were asked a series of questions which aimed to identify the level of current and latent demand for a range of outdoor recreation activities (*see table 3*), the setting in which these activities were undertaken (*see table 4*), and their motivations for undertaking these activities (*see table 5*). A copy of the questionnaire is located in *Appendix 5*.



The outdoor recreation activities focused on in the Study were:

**Table 3 Outdoor Recreation Activities**

1. Picnicking
2. Walking or nature study (eg birdwatching, photography)
3. Camping
4. Bicycle riding
5. Horse riding
6. Swimming, snorkelling and scuba diving (excluding in constructed pools)
7. Driving on unsealed roads in 2WD vehicles
8. Driving on tracks or unsealed roads in 4WD vehicles
9. Driving on tracks or unsealed roads in other vehicles (eg motorbike, trike)
10. Riding on a motorised watercraft (eg motor boat, jet ski)
11. Abseiling or rock climbing
12. Riding on a non-motorised watercraft (eg canoe, sailing, kayaking)

### **Landscape Settings**

Recreation settings are the types of places in which recreation occurs. They are defined by the combination of biophysical, social and managerial attributes of those places (Clarke and Stankey, 1979; Heywood, Christensen and Stankey, 1991; Keen and Crisp, 1990; Loder and Bayly, 1992; Osterzee, 1984; Virden and Knopf, 1989; and Yuan and McEwen 1989).

The biophysical attributes of recreation settings include the:

- terrain;
- plant community;
- animal community;
- animal behaviour;
- smells caused by natural features (eg. flowering plants, rain, drying algae after floods, etc);
- sounds caused by natural features (eg. waterfalls, surf, bird song, wind etc); and
- area of available landscape/seascape.

Social attributes include the:

- total number of people present;
- activities of the people who are present;
- sounds caused by the activities of people;
- smells caused by the activities of people; and
- number of people present in the social group to which a person belongs.

Managerial attributes include the:

- ownership and management arrangements for a site;
- set of regulations/rules/bylaws operating at a site;
- type of access to and within a recreation site;
- number and type of built structures present;
- presence or absence of onsite management and maintenance staff; and
- number and obtrusiveness of signs.

People perceive these attributes through sight, sound and smell to form a comprehensive impression of the places they use for recreation.

These same attributes can be used to describe landscapes in terms of their naturalness. Naturalness can be expressed on a range from completely wild-natural-remote to completely developed-built-modified, depending on the proportion of natural and human modified elements in the landscape.

#### **Range of naturalness of outdoor recreation settings.**

Wild			Developed
natural			built
remote			modified

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*Examples:*

<i>Antarctica</i>	<i>Extensive grazing area</i>	<i>Suburban park</i>	<i>Shopping centre</i>
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As a result, settings can range from very, very natural (eg. most of Antarctica) through partly natural (eg. a rural landscape with some remnant native vegetation left along creeks and ridges) to completely modified (eg. a large modern shopping centre with a closed roof, Muzak, artificial lighting, air conditioning and large crowds). It should be understood that this is a range of *naturalness* rather than *quality*. The more natural settings are not inherently better than the less natural settings. However, they are different.

Separating landscape *naturalness* from landscape *quality* is important. This is because it is equally as possible to have a high quality rural or highly developed-urban setting for an outdoor recreation activity as it is to have a high quality wild-natural-remote setting for an outdoor recreation activity. Similarly, it is as possible to have a poor quality wild-natural-remote setting for an outdoor recreation activity as it is to have a poor quality rural or highly developed-urban setting for an outdoor recreation.

By looking at combinations of recreation activities and landscape settings, more precise and complete understandings of recreation demand and the outcomes or products of recreation planning and management can be developed. (*Refer to Section 4.2*)

The Central Queensland Outdoor Recreation Demand Study focuses on participation in particular outdoor recreation activities in predominantly natural landscape settings.

Outdoor recreation activities that people might do in predominantly non-natural landscapes were not surveyed. That is - those landscapes or settings that are easily accessible by motorised transport; where buildings and other built structures dominate; people are almost always present in large numbers; and nature is only present in highly modified form - were not considered in this Study. The following landscape setting descriptions were used with each of the outdoor recreation activities listed above.

**Table 4 Definitions of Landscape Settings**

Somewhat Natural Landscape	Which is significantly modified natural area; accessible by conventional vehicles or boats; has buildings highly visible; and where other people are present. It may be some distance away from cities, suburbs and cleared farmland.
Very Natural Landscape	Which is a slightly modified natural area; may be difficult to access by motorised vehicles or vessels; has few built structures visible and few other people are present. It may be some distance away from cities, suburbs and cleared farmland.
Totally Natural Landscape	Which is a wild, natural, remote area; has no access by motorised vehicles or vessels; where no built structures are visible and there is little or no evidence of other people. It may be far from cities, suburbs and cleared farmland.

### **Motivations**

The motivations for participating in particular outdoor recreation activities were classified into three groups. These motivation classes are described in table 5.

**Table 5 Motivations**

Leisurely	sightseeing, unwinding, relaxing
Goal focused	fitness, conquering or challenging nature testing equipment, practising techniques
Competitively	maximum distance, minimum time, fastest, most accurate, most difficult

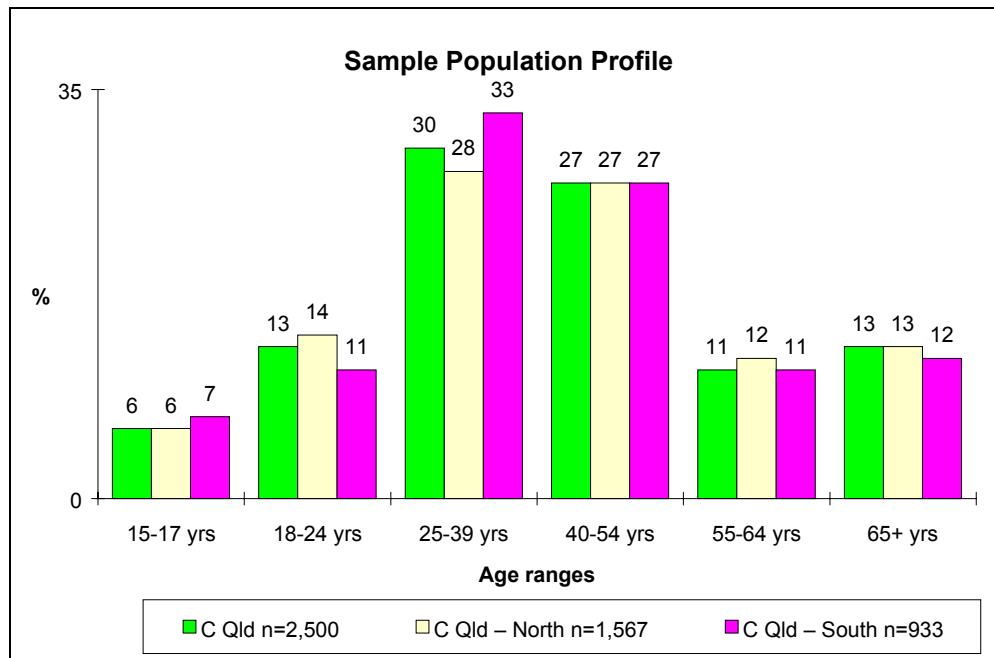
## 6 Quantitative Research Findings: Current Participation

The following section presents the quantitative results from the telephone surveys concerning levels of participation in outdoor activities, the landscapes in which these activities were undertaken and the respondents' motives for undertaking an activity in a chosen setting.

### Sample Population Profile

Q Firstly just to make sure we have a good representation of the population - in which of the following age groups do you fall.

**Figure 2 Sample Population Profile**



Central Queensland region is defined as the combined Banana, Calliope, Duaringa, Fitzroy, Gladstone, Livingstone, Miriam Vale, Mount Morgan and Rockhampton Local Government Areas. (LGA's).

The sample population 15 years and over for the study area (ie the nine local authority areas) was 120,652. The population estimates for each LGA, of people 15 years and over were:

Banana	10,588
Calliope	9,688
Duaringa	5,740
Fitzroy	6,697
Gladstone	20,825
Livingstone	19,880
Miriam Vale	3,237
Mount Morgan	1,796
Rockhampton	42,201

## 6.2 Incidence of Participation Over the Past 12 months

Q1a I am going to read you a list of activities and would like you to tell me whether you have participated in any of them, in any of the Somewhat, Very or Totally settings previously described. This includes club, school or personal recreational activities. Remember, we are interested in the activities that took place in such settings within 4 hours drive from your home.

<activity> Have you participated in this within the past 12 months. Remember the three settings and it would have been within 4 hours drive from home

The most popular activity undertaken by the respondents was picnicking (62%). The next most popular activities were walking or nature study (54%), swimming (47%), and 2WD driving (46%).

**Table 6 Incidence of Participation Over the Past 12 months**

<b>Activities</b>	<b>C Qld #n=2500</b>	<b>C Qld - North n=1567</b>	<b>C Qld - South n=933</b>
Picnicking	62%	60%	65%*
Walking or nature study (eg bird watching etc)	54%	54%	53%
Swimming (excl. in constructed pools)	47%	46%	50%
Driving in 2WD vehicles on unsealed roads	46%	45%	47%
Driving 4WD vehicles on tracks or unsealed roads	37%	35%	41%*
Camping	36%	34%	40%*
Riding on a motorised watercraft (eg motor boat, jet ski)	31%	30%	34%*
Bicycle riding	20%	18%	23%*
Riding non-motorised watercraft (eg canoe, sailing, kayaking)	18%	19%	18%
Driving other vehicles on tracks or unsealed roads (eg motor bike, trike)	13%	11%	17%*
Horse riding	11%	11%	12%
Abseiling or rock climbing	6%	7%	4%

# "n=" denotes number of respondents

\* Denotes statistically significant difference between CQ-North and CQ-South

*Abseiling or rock climbing (6%), horse riding (11%), and driving other vehicles on tracks or unsealed roads (13%)* were activities undertaken by the smallest proportion of respondents.

Participation rates differed between North and South Central Queensland sub-regions with residents in the southern area significantly more likely to undertake *driving other vehicles on tracks or unsealed roads (eg motor bike, trike), Camping, Driving 4WD vehicles on tracks or unsealed roads, Picnicking, and Bicycle riding.*

### 6.3 Incidence of Participation - By Gender

Q1a <activity> Have you participated in this within the past 12 months. Remember the three settings and it would have been within 4 hours drive from home.

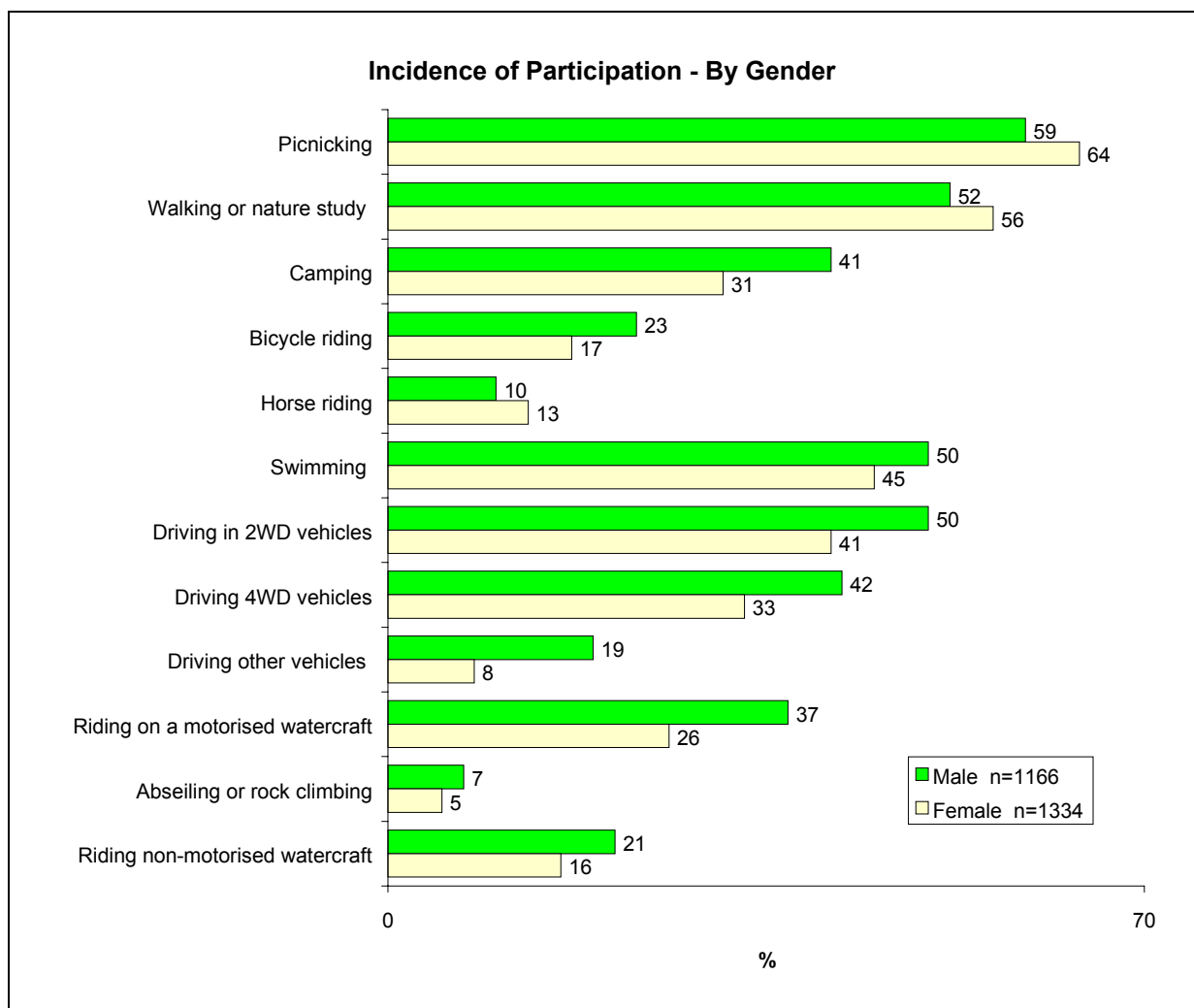
Males were significantly more likely to have participated in:

- camping,
- bicycle riding,
- swimming (excl in constructed pools),
- driving in 2WD vehicles,
- driving in 4WD vehicles,
- driving other vehicles,
- abseiling or rock climbing,
- riding on motorised watercraft,
- riding on non-motorised watercraft.

whereas females were more likely to have participated in:

- picnicking
- walking or nature study
- horse riding.

**Figure 3 Incidence of Participation – By Gender**



\* Denotes statistically significant greater figure

## 6.4 Incidence of Participation - By Age

Q1a <activity> Have you participated in this within the past 12 months. Remember the three settings and it would have been within 4 hours drive from home.

The level of participation in activities differs by respondent age.

People aged 15-17 years were most likely to have undertaken *swimming* (68%), *walking or nature study* (64%), *camping* (57%), *bicycle riding* (55%), and *picnicking* (53%).

18-24 year olds were most likely to have been *picnicking* or *swimming* (60% respectively), *walking/nature study* or *driving in 2WD vehicles on tracks* (each 52%) and *camping* (50%).

People aged between 25 and 39 years were most likely to have been *picnicking* (69%), *swimming* (58%) *walking or on a nature study* (52%), or *driving in a 2WD vehicle on tracks* (51%).

**Table 7 Incidence of Participation – by Age**

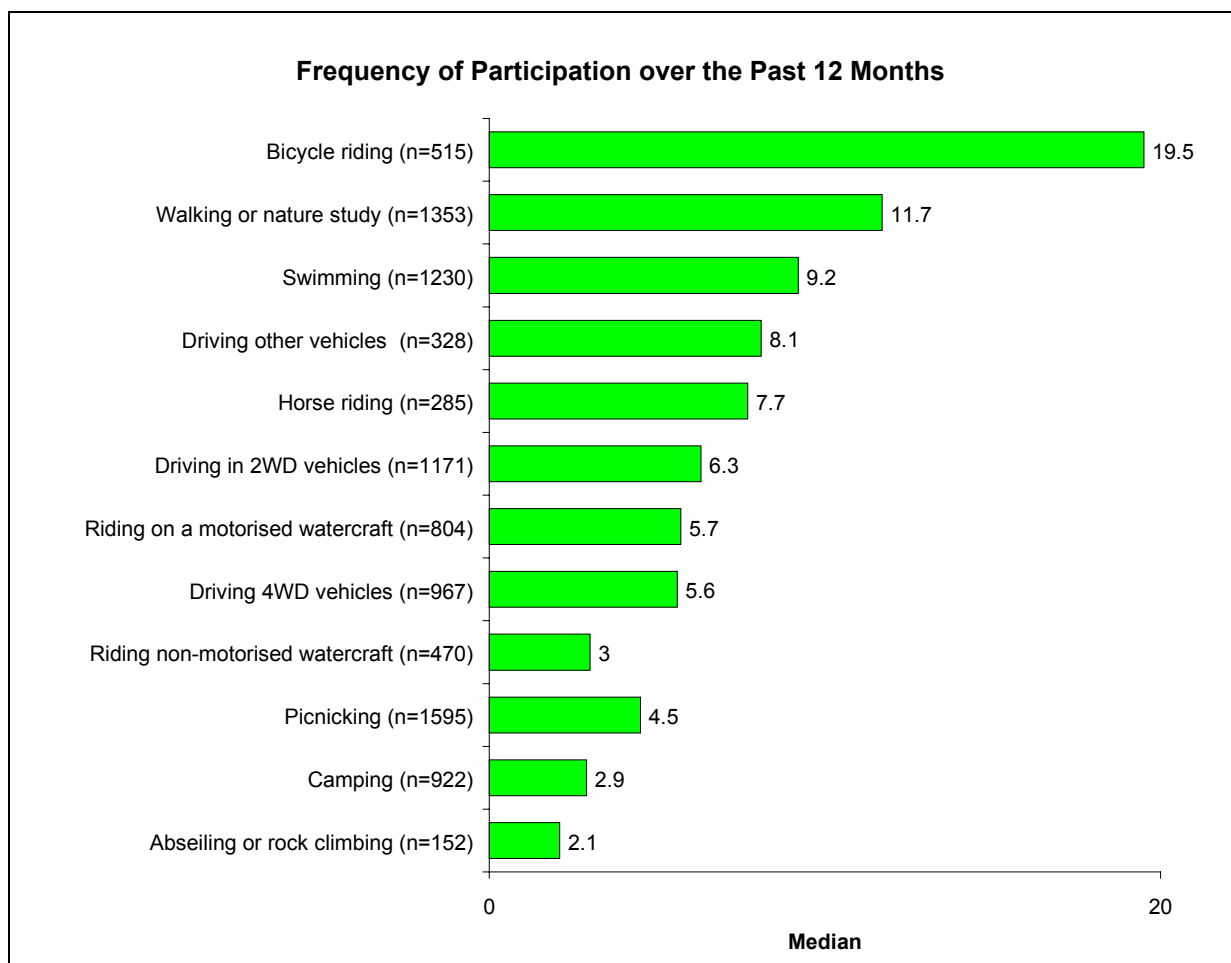
	<b>15-17</b> <i>n=128</i>	<b>18-24</b> <i>n=258</i>	<b>25-39</b> <i>n=924</i>	<b>40-54</b> <i>n=752</i>	<b>55-64</b> <i>n=279</i>	<b>65+</b> <i>n=159</i>
Picnicking	53%	60%	69%	66%	57%	48%
Walking or Nature Study	64%	52%	52%	56%	55%	48%
Camping	57%	50%	43%	34%	20%	13%
Bicycle Riding	55%	26%	24%	17%	9%	4%
Horse Riding	29%	19%	12%	10%	4%	4%
Swimming	68%	60%	58%	47%	29%	17%
Driving in 2 wheel drive vehicles	44%	52%	51%	50%	38%	27%
Driving in 4 wheel drive vehicles	45%	46%	44%	37%	31%	14%
Driving other vehicles	32%	22%	15%	11%	6%	3%
Riding on motorised watercraft	37%	38%	37%	31%	25%	15%
Abseiling or rock climbing	21%	12%	5%	5%	4%	1%
Riding on non motorised watercraft	38%	27%	19%	20%	9%	5%

## 6.5 Frequency of Participation over the Past 12 months

Q2 How often have you participated in <enter activity> the past 12 months?

The average and median for a number of activities differ greatly. For instance the average frequency of participation in the last 12 months of *walking/nature study* was 72.5 while the median was 11.7. The average for *bicycle riding* was 60.0 and the median 19.5. This large difference between averages and median frequency is caused by a relatively small number of people undertaking an activity very frequently. For example, some people go for a walk almost every day of the year. Given this, the **median** number best represents the frequency at which activities are undertaken by the population.

**Figure 4 Frequency of Participation over the Past 12 months**



*Bicycle riding* (median=19.5) and *walking or nature study* (median=11.7) were the activities with the highest median frequency of participation. *Abseiling or rock climbing* (median=2.1), *camping* (median=2.9) and *riding on a non-motorised water craft* (median=3.0) had the lowest median frequency of participation.



Taking into account the proportion of the population undertaking activities and their frequency of participation, the activities most commonly undertaken by the population were *walking or nature study*, *swimming*, and *bicycle riding*.

The least commonly undertaken activities were *horse riding*, *riding on non-motorised water craft*, and *abseiling or rock climbing*.

Bicycle riding was the most frequently undertaken activity for people aged between 15 and 54 years. Walking or nature study was the activity most commonly undertaken by those aged between 55 and 64 years.

**Table 8 Frequency of Participation over the Past 12 months by Age**

<i>Activities</i>	<b>15-17</b> <i>n=68</i>	<b>18-24</b> <i>n=155</i>	<b>25-39</b> <i>n=642</i>	<b>40-54</b> <i>n=495</i>	<b>55-64</b> <i>n=159</i>	<b>65+</b> <i>n=76</i>
Picnicking	2.6	3.7	5.7	4.4	4.8	3.9
Walking or nature study	5.6	9.9	6.4	10.5	99.6	99.9
Camping	2.6	2.8	2.9	3.1	2.8	2.4
Bicycle Riding	51.8	12.4	12.5	11.5	49.7	99.5
Horse riding	4.2	7.2	6.5	10.2	14.9	50
Swimming	9.9	9.5	9.7	6.5	6.3	6.4
Driving 2WD vehicles	7.6	9.5	6.2	7.4	8.1	5.2
Driving 4WD vehicles	3.8	5.1	5.9	5.8	6.1	4.3
Driving other vehicles	25.5	8.5	6.2	6.3	6	10.5
Riding on a motorised watercraft	2.4	4.1	6.1	5.9	5.8	9.6
Abseiling or rock climbing	1.9	2.3	2.4	2	1.9	2
Riding on a non-motorised watercraft	4.2	2.7	2.8	2.6	5.3	2.5

**Note:** Based on Median Participation

## 6.6 Activity Participation - Landscape Setting Where Activities were Undertaken

Q3 Thinking of the 3 settings we described earlier, what proportion of the times you went <enter activity> were in a ....READ OUT

A somewhat natural landscape was the most common location for undertaking bicycle riding (76%), picnicking (52%), and swimming (45%). *Camping* (45%), *driving 4WD vehicles on tracks or unsealed roads* (45%) and *driving other vehicles on tracks or unsealed roads* (40%) were most commonly undertaken in very natural landscapes.

**Table 9 Activity Participation – Landscape Settings where activities were undertaken**

	<b>Somewhat Natural</b>	<b>Very Natural</b>	<b>Totally Natural</b>
Picnicking (n=1595)	52%	36%	12%
Walking or nature study (n=1353)	43%	37%	20%
Camping (n=922)	29%	45%	26%
Bicycle riding (n=515)	76%	19%	5%
Horse riding (n=285)	38%	31%	31%
Swimming (n=1230)	45%	35%	19%
Driving in 2WD vehicles (n=1171)	42%	43%	15%
Driving 4WD vehicles (n=967)	25%	45%	30%
Driving other vehicles (n=328)	30%	40%	30%
Riding on a motorised watercraft (n=804)	36%	34%	30%
Abseiling or rock climbing (n=152)	37%	30%	33%
Riding non-motorised watercraft (n=470)	39%	34%	27%

### Notes:

1. Results represent the proportion of the population undertaking an activity in a specific setting. (one person can undertake an activity in more than 1 setting in a single outing).
2. It is assumed that the people who 4WD in a totally natural setting, drive on beaches or on other such unmade or unformed roads. This assumption will need to be confirmed by further research.

Survey results show 15% of 2WD vehicles occurring in totally natural settings despite the absence of roads or tracks to support such activity. Further research is required to clarify the nature of 2WD activity in totally natural settings.

The activities most commonly undertaken in a totally natural landscape were abseiling or rock climbing (33%), horse riding (31%) driving on tracks or unsealed roads in 4WD vehicles (30%) or other vehicles (30%) and riding on a motorised watercraft. (30%).

## 6.7 Activity Participation by Motivation

Q4 Which of the following best describes the main way in which you participate in this activity in these areas. Was it ... READ OUT

Each interviewee was read a description of the three broad motivations for undertaking an outdoor recreation activity. These were: Leisurely (sightseeing, unwinding, relaxing), Goal-focussed (fitness, conquering or challenging nature, testing equipment, practicing techniques), and Competitively (maximum distance, minimum time, formal organised competition). Respondents were then asked to indicate which descriptor best described their motivation for undertaking each activity.

**Table 10 Activity Participation by Motivation**

	<i>Leisurely</i>	<i>Goal-focussed</i>	<i>Competitively</i>
Bicycle riding (n=515)	72%	27%	1%
Horse riding (n=285)	79%	11%	10%
Swimming (n=1230)	95%	4%	0%
Driving in 2WD vehicles (n=1171)	87%	12%	1%
Driving 4WD vehicles (n=967)	88%	10%	1%
Driving other vehicles (n=328)	87%	9%	4%
Riding on a motorised watercraft (n=804)	95%	4%	1%
Abseiling or rock climbing (n=152)	82%	16%	2%
Riding non-motorised watercraft (n=470)	87%	9%	4%

**Note:** Picnicking, walking or nature study, and camping were excluded from this question because the active and competitive categories were considered irrelevant

*Leisure (sightseeing, unwinding, relaxing)* was the most common motivation for participation in each activity. This motivation was nominated by more than nine in ten who undertook *swimming* (95%), and *riding on motorised watercraft* (95%).

*Bicycle riding* (27%) and *abseiling or rock climbing* (16%) were the most popular activities to pursue *Goal-focussed (fitness, conquering or challenging nature, testing equipment, practicing techniques)*.

*Competitively (maximum distance, minimum time, formal organised competition)* was the least popular motivation, with 5% or less respondents nominating it as their motive for participation across all activities, with the exception of *horse riding* (10%).

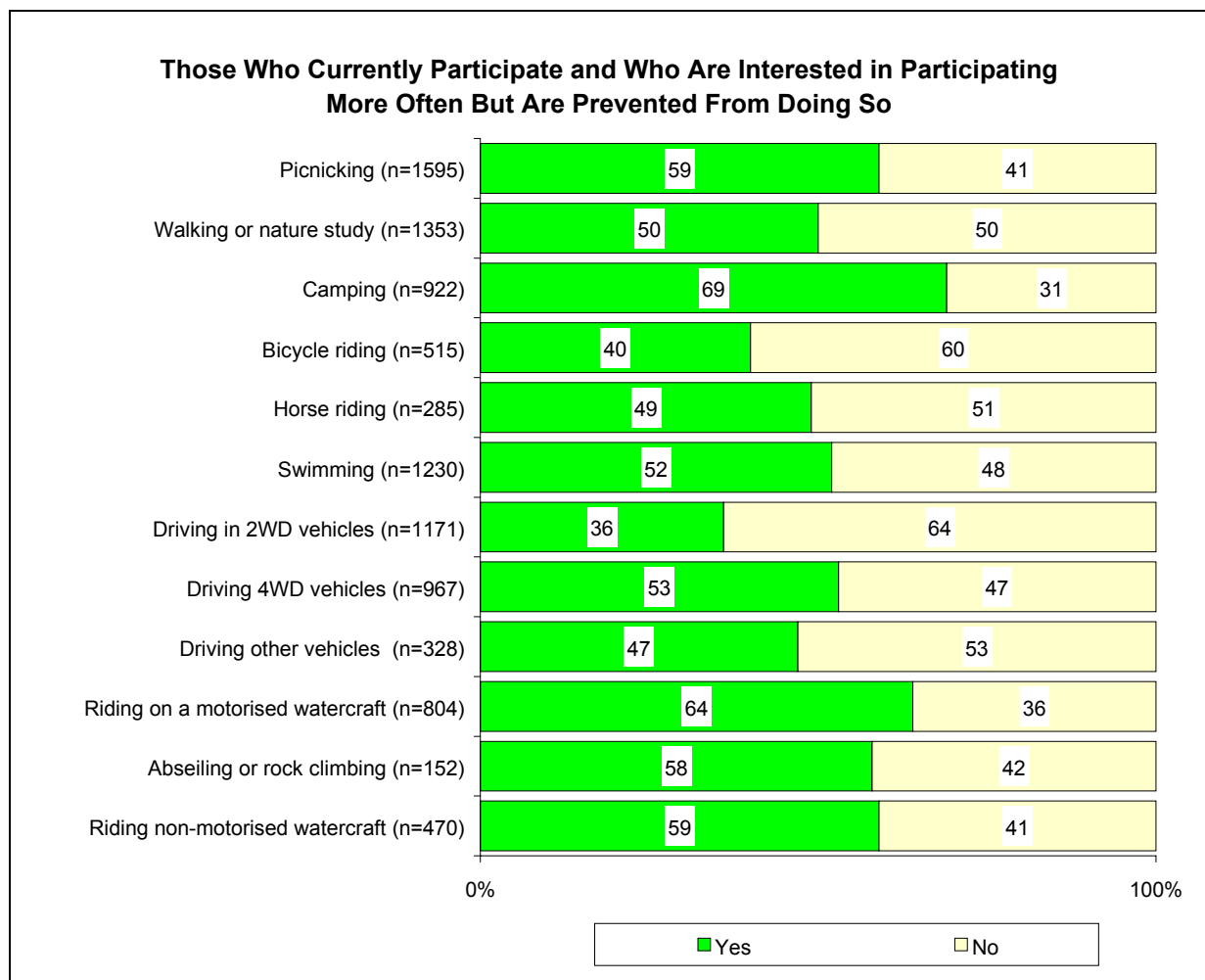
## 6.8 Those Who Currently Participate and Who are Interested in Participating More Often

Q5 Are you interested in participating in <enter activity> more often but are prevented in doing so for some reason?

Those people who currently participate in an activity were asked whether they would like to participate in that activity more often but are somehow prevented. Activities people were most likely to want to do more often included camping (69% agree), riding on motorised watercraft (64% agree), picnicking (59% agree), riding on non-motorised watercraft (59% agree), and abseiling or rock climbing (58% agree).

Conversely, activities in which a significant majority of people currently participating indicated they would not like to participate more often included 2WD on unsealed roads (40% agree) and bicycle riding (40% agree).

**Figure 5 Those Who Currently Participate and Who Are Interested in Participating More Often But Are Prevented From Doing So**



## 6.9 The Main Reasons Preventing People from Participating In a Chosen Activity More Often

Q6 What is the main thing preventing you from <enter activity> more often?

The most common reason provided for not being able to participate in activities more often was because people had "no time or were too busy".

**Table 11 The Main Reasons Preventing People from Participating In a Chosen Activity More Often** (greater than 5% of respondents)

<p><b>"No time, too busy"</b></p>	<p>camping - 75%, picnicking - 72%, walking/nature study - 72%, driving - 2WD 68%, driving - 4WD 67%, swimming - 67% riding on non-motorised watercraft – 62%, bicycling riding - 62%, riding on motorised water craft - 59%, horse riding - 57%, abseiling or rock climbing - 53%, driving other vehicles - 50%</p>
<p><b>"No equipment"</b></p>	<p>driving - other vehicles 24% driving - 4WD 15% riding on motorised watercraft - 13% abseiling or rock climbing - 11% riding on non-motorised watercraft – 12% horse riding - 10% driving 2WD vehicles - 6%</p>
<p><b>"Can't afford it"</b></p>	<p>horse riding - 9%, riding on a motorised water craft - 8%, driving on unsealed roads in 2WD - 7%</p>
<p><b>"Nowhere to do this"</b></p>	<p>bicycle riding –8% horse riding - 7% swimming - 7% abseiling or rock climbing - 6%</p>
<p><b>"No facilities"</b></p>	<p>abseiling or rock climbing - 11% bicycle riding - 7%</p>

For activities such as driving on unsealed roads in 4WD vehicles (15%), or other vehicles (24%), riding motorised (13%) or non-motorised (12%) watercraft, the most common alternative reason for being prevented from participating more often was a lack of equipment.

## 6.10 Preferred Landscape Of those Interested in Participating in an Activity More Often

Q7 Assuming you were able to undertake <enter activity>, which of the following would be your preferred setting for pursuing this activity?

Each person who had indicated that they would like to undertake an activity more often was asked to choose a preferred landscape setting for that increased participation. The results indicate that there would be a common shift from participating in Somewhat Natural landscapes toward Very Natural or Totally Natural Landscapes.

**Table 12 Preferred Landscape Of those Interested in Participating in an Activity More Often**

Activities	CQ Pop'n Part'g	S/what Natural		Very Natural		Totally Natural	
		Cur- rent	Pre- ferred	Cur- rent	Pre- ferred	Cur- rent	Pre- ferred
Picnicking (n=953)	44,000	52%	26%*	36%	47%*	12%	27%*
Walking or nature study (n=718)	33,000	43%	17%*	37%	41%	20%	42%*
Camping (n=647)	30,000	29%	14%*	45%	43%	26%	43%*
Bicycle riding (n=215)	10,000	76%	56%*	19%	36%*	5%	9%*
Horse riding (n=140)	7,000	38%	19%*	31%	27%	31%	54%*
Swimming (n=652)	30,000	45%	26%*	35%	37%	19%	37%*
Driving in 2WD vehicles (n=428)	20,000	42%	27%*	43%	47%	15%	27%*
Driving 4WD vehicles (n=525)	24,000	25%	14%*	45%	41%	30%	45%*
Driving other vehicles (n=150)	8,000	30%	26%	40%	38%	30%	36%
Riding on a motorised watercraft (n=525)	24,000	36%	20%*	34%	32%	30%	49%*
Abseiling or rock climbing (n=86)	4,000	37%	19%*	30%	34%	33%	47%*
Riding on non-motorised watercraft (n=277)	13,000	39%	24%*	34%	36%	27%	40%*

\* Denotes significant difference between current and preferred.

**Note:** Results represent the proportion of the population having undertaken an activity in the described setting, ie one person can undertake an activity in 1,2 or 3 settings in a single outing.

## 6.11 Likely Motivation of those Interested in Participating More Often

Q8 Which do you consider best describes the way in which you would undertake this activity ?

People who had indicated that they would like to undertake a chosen activity more often were asked to describe their likely motivation for increased participation.

**Table 13 Likely Motivation of those Interested in Participating More Often**

Activities	CQ Pop'n Part'g	Leisurely		Goal-focussed		Competitively	
		Curr- ent	Pre- ferred	Curr- ent	Pre- ferred	Curr- ent	Pre- ferred
Bicycle riding (n=215)	10,000	72%	71%	27%	26%	1%	2%
Horse riding (n=140)	7,000	79%	82%	11%	7%	10%	11%
Swimming (n=652)	30,000	95%	94%	4%	6%	0%	0%
Driving in 2WD vehicles (n=428)	20,000	87%	93%*	12%	5%*	1%	3%
Driving 4WD vehicles (n=525)	24,000	88%	92%*	10%	6%*	1%	2%
Driving other vehicles (n=150)	8,000	87%	93%	9%	5%	4%	2%
Riding on a motorised watercraft (n=525)	24,000	95%	94%	4%	5%	1%	1%
Abseiling or rock climbing (n=86)	4,000	82%	85%	16%	13%	2%	1%
Riding on non-motorised watercraft (n=277)	13,000	87%	91%	9%	5%*	4%	4%

\* Denotes significant difference between current and preferred.

**Note:** Picnicking, walking or nature study and camping were excluded from this question because the goal-focussed and competitive categories were considered irrelevant

For each activity most people indicated they would prefer to participate for leisurely reasons.

*Abseiling or rock climbing* (13%), and *bicycle riding* (26%), were the activities most preferred in the Goal-focussed category.

Undertaking an activity competitively (maximum distance, minimum time) was the least popular preferred motivation. However, 11% of people that would prefer to do more *horse riding* indicated they preferred to do so in a competitive form.

## 7 Quantitative Research Findings: Latent Participation

Each interviewee who had not participated in an activity was asked a series of questions regarding: their interest in future participation in activities, issues preventing them from participating, and their preferred landscape and motivation for possible future participation.

### 7.1 Current Non-Participants and their Interest in Undertaking an Activity

Q9 Are you interested in participating in <enter activity> but for some reason have been prevented from doing so?

Each person who had not undertaken an activity was asked whether they were interested in undertaking that activity but had been prevented from doing so.

**Table 14 Current Non-Participants and their Interest in Undertaking an Activity**

<b>Activities</b>	<b>Population interested in participating</b>	<b>Yes</b>	<b>No</b>
Picnicking (n=905)	46,000	36%	64%
Walking or nature study (n=1147)	56,000	38%	62%
Camping (n=1578)	77,000	41%	59%
Bicycle riding (n=1985)	96,000	22%	78%
Horse riding (n=2215)	107,000	21%	79%
Swimming (n=1270)	64,000	34%	66%
Driving in 2WD vehicles (n=1329)	66,000	21%	79%
Driving 4WD vehicles (n=1533)	76,000	36%	64%
Driving other vehicles (n=2172)	105,000	19%	81%
Riding on a motorised watercraft (n=1696)	83,000	37%	63%
Abseiling or rock climbing (n=2348)	113,000	21%	79%
Riding on non-motorised watercraft (n=2030)	98,000	37%	63%

**Note:** Population refers to that part of the total population 15 years and over, residing in the study area that did not participate in an activity in the previous 12 months

In each case, the majority of people who had not participated in an activity in the past 12 months indicated that **they had not been prevented** from undertaking an activity. The activities in which the greatest proportion of non-participants indicated that they had been prevented from undertaking an activity were:

Camping (41%)	Walking or nature study (38%)
Riding on a motorised watercraft (37%)	Riding on non-mot. watercraft (37%)
Picnicking (36%)	Driving 4WD vehicles (36%)



## 7.2 The Main Reasons Preventing Non-Participants From Participating in an Activity At All

Q10 What is the main thing preventing you from participating in <enter activity>?

Having "no time or too busy" was the most common reason preventing non-participants from picnicking (66%), walking or nature study (55%), camping (57%), swimming (46%), driving on unsealed roads in 2WD vehicles (36%), and abseiling or rock climbing (28%).

**Table 15 The Main Reasons Preventing Non-Participants From Participating in an Activity At All**  
(greater than 10% of respondents)

<b>"No time, too busy"</b>	Picnicking 66% walking/nature study 55% camping 57% swimming 46% driving – 2WD 36% bicycle riding 31% riding on non-motorised watercraft 30% abseiling or rock climbing 28% horse riding 28% riding on motorised watercraft 22% driving – other vehicles 20% driving – 4WD 19%
<b>"No equipment"</b>	driving - 4WD 68% driving - other vehicles 58% riding on motorised watercraft 50% riding on non-motorised watercraft 40% bicycle riding 36% horse riding 34% driving - 2WD 29% camping 11%
<b>"Health reasons"</b>	walking/nature study 14%
<b>"No facilities"</b>	abseiling or rock climbing 17%
<b>"Nowhere to do this"</b>	abseiling or rock climbing 20% swimming 13%

Similar proportions of respondents nominated "no time, too busy" and "no equipment" as the main reasons for not undertaking bicycle riding (31% compared to 36%), horse riding (28% compared to 34%), or driving on unsealed roads in 2WD vehicles (36% compared to 29%).

"No equipment" was the most frequent reason for not undertaking bicycle riding (36%), horse riding (34%), driving 4WD (68%) or other vehicles (58%) on unsealed tracks, and riding on a motorised watercraft (50%) or non-motorised watercraft (40%).

### 7.3 The Preferred Landscape Setting of Non-Participants Interested in Participating At All

Q11 Assuming you were able to undertake <ENTER ACTIVITY>, which of the following would be your preferred setting for pursuing this activity?

Each interviewee who had not undertaken an activity in the past 12 months, but indicated they were interested in doing so, nominated their preferred landscape in which to undertake an activity.

**Table 15 The Preferred Landscape of Non-Participants Interested in Participating At All**

	<i>Population Interested in Participating</i>	<i>Somewhat Natural</i>	<i>Very Natural</i>	<i>Totally Natural</i>
Picnicking (n=346)	17,000	34%	31%	35%
Walking or nature study (n=438)	21,000	23%	38%	39%
Camping (n=694)	32,000	21%	40%	39%
Bicycle riding (n=458)	21,000	61%	27%	11%
Horse riding (n=482)	22,000	23%	31%	46%
Swimming (n=455)	22,000	35%	28%	37%
Driving in 2WD vehicles (n=283)	14,000	35%	40%	25%
Driving 4WD vehicles (n=592)	28,000	14%	41%	45%
Driving other vehicles (n=413)	20,000	29%	35%	36%
Riding on a motorised watercraft (n=652)	31,000	37%	36%	27%
Abseiling or rock climbing (n=491)	24,000	28%	33%	40%
Riding on non-motorised watercraft (n=787)	36,000	27%	36%	37%

**Note:** Population refers to that part of the total population 15 years and over, residing in the study area that did not participate in an activity in the previous 12 months but who were interested in undertaking that activity.

A somewhat natural landscape was the preferred landscape for non-participants who would like to participate in bicycle riding (61%). Totally natural landscapes were preferred by people wishing to undertake horse riding (46%), and abseiling/rock climbing (40%).

Current non-participants preferred either very natural or totally natural settings in which to undertake walking or nature study (38% and 39%), camping (40% and 39%), driving 4WD vehicles (41% and 45%) and other vehicles (35% and 36%) and riding non-motorised water craft (36% and 37%).

Landscape preferences were more evenly distributed amongst those who would like to pursue picnicking and walking or nature studies.

## 7.4 Likely Motivation of Current Non-Participants Interested in Participating At All

Current non-participants who had indicated they were prevented from participating in an activity more often were asked about their motivation for increasing their participation.

Q12 Which one of the following 3 descriptions do you consider best describes the way in which you would undertake this activity ... READ OUT

**Table 16 Likely Motivation of Current Non-Participants in Participating at All**

	<i>Population Interested in Participating</i>	<i>Leisurely</i>	<i>Goal-focussed</i>	<i>Competitively</i>
Bicycle riding (n=458)	21,000	87%	12%	1%
Horse riding (n=482)	22,000	92%	7%	1%
Swimming (n=455)	22,000	95%	5%	0%
Driving in 2WD vehicles (n=283)	14,000	93%	4%	3%
Driving 4WD vehicles (n=592)	28,000	95%	4%	1%
Driving other vehicles (n=413)	20,000	91%	7%	2%
Riding on a motorised watercraft (n=652)	31,000	95%	5%	0%
Abseiling or rock climbing (n=491)	24,000	87%	11%	2%
Riding on a non-motorised watercraft (n=787)	36,000	95%	4%	1%

**Note:** Picnicking, walking or nature study and camping were excluded from this question because the goal-focussed and competitive categories were considered irrelevant.

For each activity, most people indicated that they would prefer to participate for leisurely reasons, rather than Goal-focussed or competitive reasons.

Bicycle riding (12%), and abseiling or rock climbing (11%), were activities with the highest preference for undertaking activities Goal-focussed.

Competitively was nominated by fewer than 3% of people as a preferred motive for any activity.

## 8 Qualitative Workshop Findings

Results from the quantitative component of the 1997 South East Queensland research generated some areas of concern for the Steering Committee. These results appeared to indicate a difference between the Steering Committee's and the sample population's interpretations of landscape settings and motivations which were provided during the initial telephone interview.

For example, the proportion of people undertaking activities in totally natural settings (described as “a landscape far from suburbs and cleared farmland, which has no access by vehicles or vessels, there are no built structures visible and little or no evidence of other people”) was greater than anticipated.

Similarly, there was some concern that the interviewees interpreted the three motivation descriptions - leisurely, Goal-focussed and competitively - in terms of the level of physical exertion rather than their goal related motives (eg “to escape”, “to get fit”, “for pleasure”), as intended by the steering committee's description.

Given these concerns, the committee decided to initiate several qualitative workshops to explore in more detail people's perceptions of landscape settings and motivations for undertaking outdoor recreation activities. Workshops were held with people who had participated in the telephone survey. A multi-phased workshop design was developed by the Steering Committee to fulfil this objective.

The following section presents a discussion of these workshop's outcomes.

### 8.1 Landscape Photo Classifications

#### 8.1.1 Committee and Respondent Photo Classifications

The first phase of the workshop was designed to gain a more comprehensive understanding of participants' perceptions of landscape “naturalness”, as a means of validating the quantitative study results. Each participant was provided with 25 landscape photographs (refer to Appendix 2 for the landscape photo set), and a labelled work board. Participants were then asked to look at each photo in detail, and arrange them from most to least natural (horizontally) along the board.

Participants were instructed to place photos they perceived as possessing the same degree of “naturalness” underneath one another (vertically), and were asked not to overlap photos, although photos could be placed between numbers (eg a photo classified as 5-6). Each of these stages were demonstrated to participants using blank pieces of paper (Refer to Appendix 6 for further information and diagrams).

Participants were then asked to recall the three landscape settings (somewhat natural, very natural and totally natural), referred to throughout the telephone survey. Each of the landscape settings were verbally re-defined, and a fourth category known as 'X' was introduced. Definitions included:

- A somewhat natural landscape close to suburbs or cleared farmland - which is accessible by conventional vehicles or boats, has buildings highly visible and other people are usually present (coded as 1),

- A very natural landscape away from suburbs and cleared farmland - which may be difficult to access by vehicles or vessels, has few built structures visible and few other people are present (coded as 2),
- A totally natural landscape far from suburbs and cleared farmland - which has no access by vehicles or vessels, there are no built structures visible and little or no evidence of other people (coded as 3),
- X - a landscape which does not fit into any of the other three definitions (ie photos which depict an unnatural setting) (coded as 4)

Participants were requested to use tape and labels provided to distinguish where they perceived the boundaries between each of the three landscape settings was on their photo board. Participants were informed that the tape distinguishing the boundaries between landscape settings did not have to form straight lines. The tape could be used to weave around photos to capture each photo as they saw fit. Each of these stages were demonstrated using tape and blank pieces of paper to represent photos (refer to Appendix 6 for further information and diagrams).

The average classification for each photo was calculated based on results recorded during this stage. These averages were then compared to the committee's classification of each photo. Figure 2 compares the participants' average classification for each landscape photo to the committee's classification of each photo.

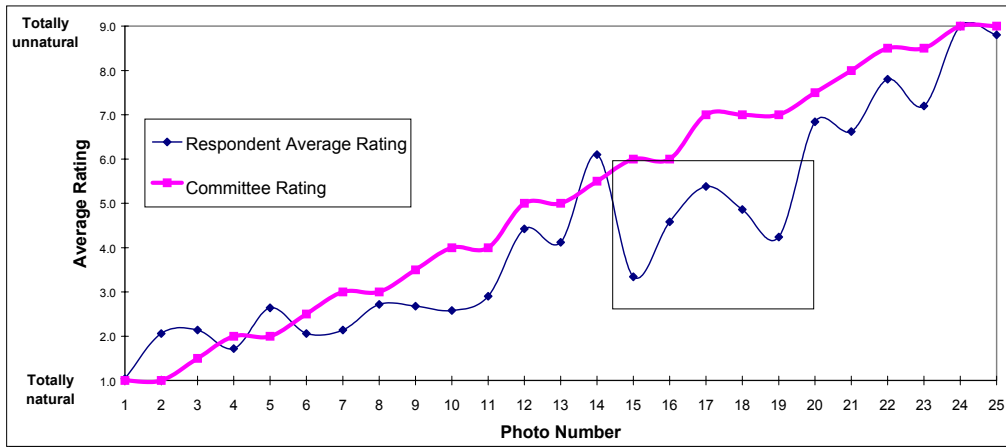
In general, photo classifications by the committee steadily increased as the photo number increased. Although the respondent's curve follows the general trend of the committee's curve, there is more variation in the average ratings by the respondents.

From the graph, it may be seen that respondents did not differentiate greatly between the first 7 photos (average ratings approximately 2). The respondents rated photo's 2, 3 and 5 as less natural than the committee. The respondents rated the majority of the remaining photos lower (more natural) than the committee.

Deviations between the committee's and respondents' average ratings were calculated. Photo 19, had the largest deviation of -2.8 indicating that respondents rated this photo as more natural (score of 4.2) than did the committee (score of 7).

The photo with the second largest deviation was photo 15, (deviation score of -2.7, respondent average score = 3.3, committee score = 6). Photo 18 and photo 17 were considered more natural by respondents than by the committee (deviation scores of -2.1 and -1.6 respectively).

**Figure 6 Landscape Photo Classifications**

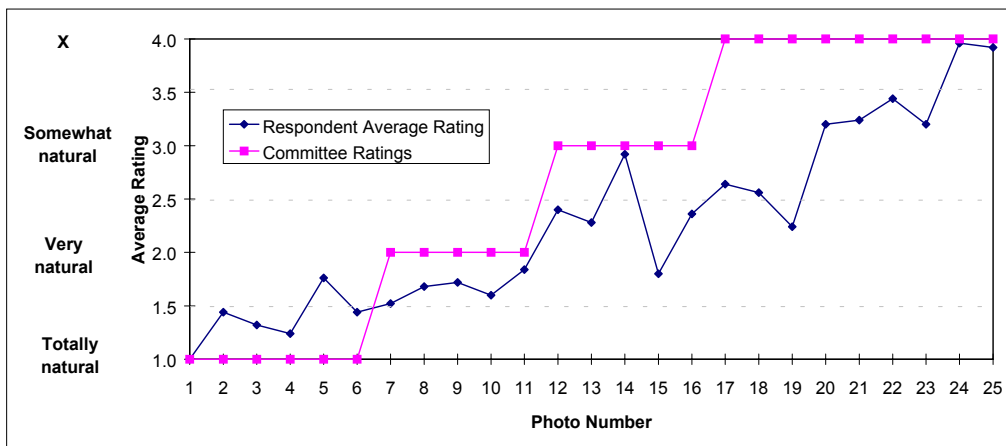


The committee's ratings compared to the respondents (average) ratings of the 25 photos by category are displayed in Figure 3. Committee ratings clearly display the boundaries between the four landscape settings (including 'X'). Although the respondents curve follows the general trend of the committee's curve, respondents ratings deviated substantially from the committees classifications.

Respondents ratings did not deviate greatly between photos classified by the committee as totally or very natural. Respondents rated photos 2 to 6 as less natural than the committee. Respondents rated photo 5 as substantially less natural than did the committee. This may suggest the definitions of totally natural and very natural landscapes clearly conveyed the intended characteristics of both landscapes.

For photos 7 to 23, respondents rated each photo as more natural than did the committee. A large deviation was observed in the committee's 'somewhat natural' category with photo 15 deviating to a score of -1.2. The greatest deviations, however, were noted for category 'X', where respondents rated photos as significantly more natural than the committee. Photo 19 had the largest deviation score of -1. Interestingly, photos 24 and 25 were placed in category 'X' by both the respondents and the committee. This confirmed suspicions that respondents were less able to clearly distinguish the boundaries between somewhat natural landscapes and category X, based on the information provided.

**Figure 7 Landscape Category Classifications**



### 8.1.2 Critical Landscape Features

It should be noted that the committee's selection and classification of each photo in the landscape photo set was based on the social, managerial and physical characteristics identified in each photo, as discussed in the Recreation Opportunity Spectrum (ROS), devised by Clarke and Stankey (refer to Glossary of Terms, Appendix 6). Thus, as committee members had additional information to base decision making on, and have experience and a sound professional knowledge of landscape attributes and their classification, there was no expectation that workshop participants would identify or recognise all characteristics of each photo, as taken into consideration by the committee.

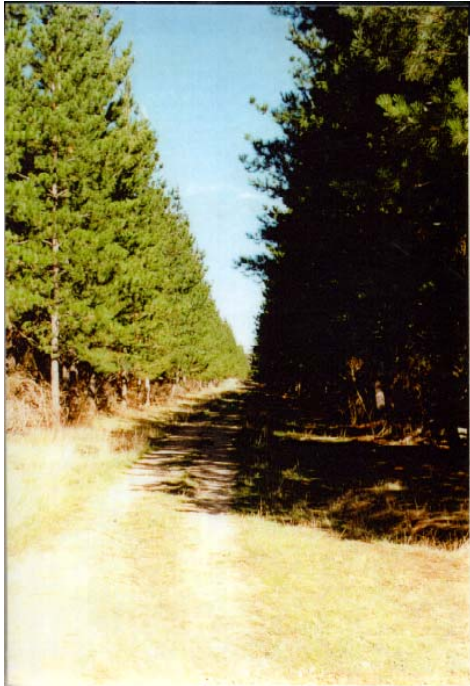
Photos with the largest deviation scores (landscape photos 19, 17, 18 and 15) are displayed and a brief suggestion as to why each may have deviated to such an extent is as follows. The characteristics listed are purely committee assumptions of features that may have generated a divergence between committee and respondent landscape photo classifications.

#### **Landscape Photo 19**



- Areas along the river banks where large amounts of riparian vegetation have been removed, were not considered unnatural by respondents.
- Areas either side of the river which have been cleared for farm land, were not considered unnatural by respondents.

**Landscape Photo 17**



- Pine trees situated in the plantation depicted in this photo, are exotic/introduced species, and were not considered unnatural by respondents.

**Landscape Photo 18**



- The cleared farmland to the left of the gravel road in this photo, was not considered unnatural by respondents.





**Table 17 Regression of Respondent Classifications Against Committee Classifications of Landscape Photos**

<i>Photo</i>	<i>Committee rating</i>	<i>Distribution</i>			<i>R. av 1-9</i>	<i>Prediction</i>	<i>Z test Results</i>
		<i>R. Totally Natural</i>	<i>R. Very Natural</i>	<i>R. Some Natural</i>			
1	1	25	0	0	1	1	NSD
2	1	16	7	2	2.1	3	NSD
3	1.5	18	6	1	2.1	2	NSD
4	2	19	6	0	1.7	2	NSD
5	2	7	17	1	2.6	4	NSD
6	2.5	14	11	0	2.1	2	NSD
7	3	12	13	0	2.1	3	NSD
8	3	10	13	2	2.7	3	NSD
9	3.5	8	16	1	2.7	3	NSD
10	4	10	15	0	2.6	3	NSD
11	4	5	19	1	2.9	4	NSD
12	5	0	15	10	4.4	6	NSD
13	5	0	18	7	4.1	5	NSD
14	5.5	0	3	22	6.1	8	NSD
15	6	12	6	7	3.3	4	SD
16	6	1	15	9	4.6	6	NSD
17	7	0	12	13	5.4	6	NSD
18	7	0	12	13	4.9	6	NSD
19	7	4	12	9	4.2	5	SD
20	7.5	0	1	24	6.8	8	NSD
21	8	0	1	24	6.6	8	NSD
22	8.5	0	0	25	7.8	8	NSD
23	8.5	0	1	24	7.2	8	NSD
24	9	0	0	25	9	8	NSD
25	9	0	0	25	8.8	8	NSD

**Note:** SD denotes - significant difference. NSD denotes -no significant difference

A further test (z test for 2 means) was conducted comparing average respondent photo ratings against committee classifications. This test indicated respondents and committee ratings significantly differed in only two landscape photos, photos 15 and 19.

When a similar test was conducted between respondent and committee mean ratings of each photos landscape category (totally natural, very natural, somewhat natural, X), no significant difference was identified.

## **8.2 Activity Based Photo Set**

Quantitative survey results raised some concerns in relation to the workshop participant's understanding of the motivations discussed during the phone surveys. The committee's intention within the survey was for respondents to think of motivations in terms of goal related motives for undertaking an activity. However, results suggested a proportion of respondents perceived that the three motivations (listed below) referred to the level of physical exertion expended while undertaking an activity.

- 'Leisurely'- sightseeing, unwinding, relaxing,
- 'Actively'- fitness, conquering nature,
- 'Competitively'- maximum distance, minimum time.

To test this notion, a three staged process was undertaken within the qualitative workshop. Within stage 1 workshop participants were asked to examine a set of 14 activity based photos and place them on a photo board according to how they perceived the level of physical exertion being expended by people within the each photo (eg high, moderate or low level of physical exertion). Within the second stage, respondents were split into 2 groups. Each group was provided with an expanded set of activity based photos and were asked to individually select one or two photos which depicted characteristics which most accurately represented their goal related motives for undertaking the activity they pursued most over the previous 12 months.

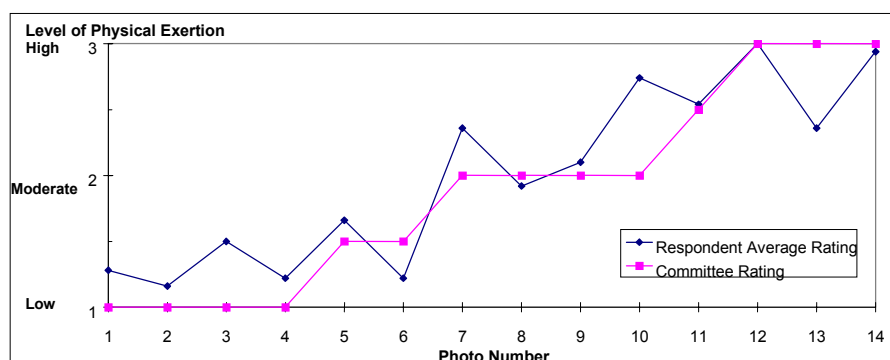
Finally a self completion questionnaire was distributed and respondents were asked to indicate, to the best of their ability, whether when completing the telephone survey they had responded to motivation related questions in terms of the level of physical exertion expended on an activity or in terms of goal related motives for undertaking that activity (refer to Appendix 6 for further information).

### **8.2.1 Level of Physical Exertion**

Respondents were asked to assess a set of 14 activity based photos and indicate whether people in each photo were perceived as demonstrating a low, moderate or high level of physical exertion.

Figure 4 displays the results. For photos 1 to 6, respondents rated the activity based photos as low to moderate level of physical exertion. Photos 7 through to 14, were rated by respondents as depicting a moderate to high level of physical exertion. Deviations between the respondents and committees ratings are most apparent for photos 3, 10 and 13, although there was only a .5 to .6 difference in rating points (see Appendix 3 for the Activity Based Photo Set).

**Figure 8 Activity Based Photo Classifications**



In the activity based photo set, respondents' classifications did not differ significantly from the steering committee's classification.

### 8.2.2 Goal Related Motives

Workshop participants were divided into two small groups and asked to consider their goal related motives for participating in their most commonly undertaken activity in the past 12 months. Participants were then asked to select one or two photos which depicted characteristics which best represented their motives for undertaking their chosen activity. Each participant was then given the opportunity to convey why they chose a certain photo, and to highlight characteristics within each photo which displayed or represented their personal motives for undertaking an activity. The aim of this task was to familiarise participants with the concept of how the motives leisurely, goal-focussed and competitively can be interpreted as goal related motives. It should be noted that the actual photo/s chosen by participants during this activity were irrelevant, it was the keywords and characteristics which participants conveyed that were sought.

Having shown motivations can be considered as a level of physical exertion or as goal related motives, participants were asked to think back to the telephone survey where they were asked to describe the main way in which they participated in certain activities using the following classifications:

- 'Leisurely' - sightseeing, unwinding, relaxing,
- 'Goal-focussed' - fitness, conquering nature,
- 'Competitively' - maximum distance, minimum time.

Workshop participants were then asked to determine which of the following statements best represented their understanding of how they considered motivations during their initial telephone interview.

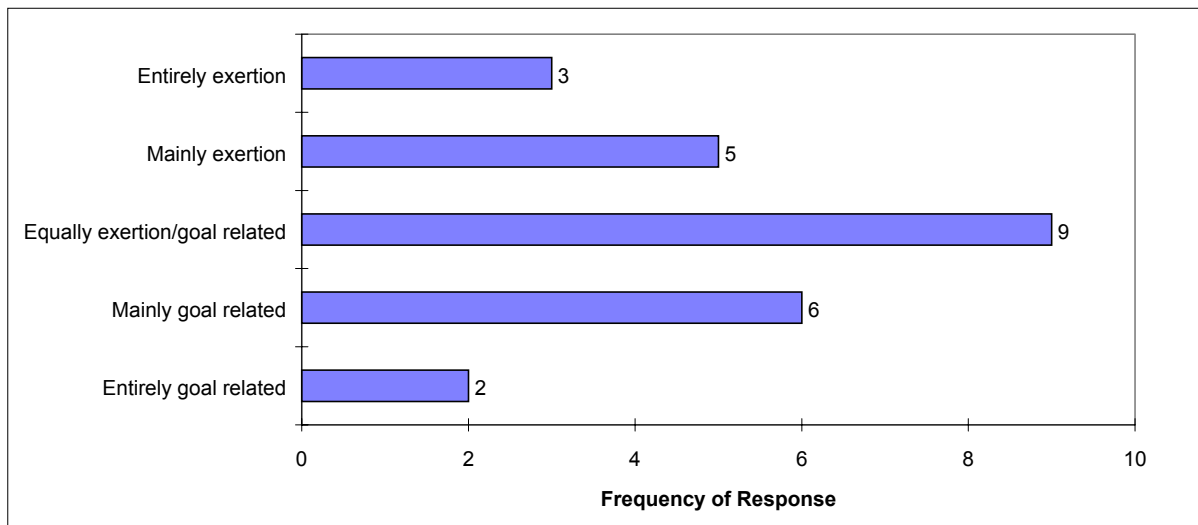
1. I felt that the terms referred entirely about the level of activity (exertion) as we discussed in stage one.
2. I felt that the terms referred mainly to the level of activity (exertion) as we discussed in stage 1, and only partially to the goal related characteristics like those discussed in stage 2.

3. I felt that the terms referred equally to the level of activity (exertion) as discussed in stage 1, and the goal related characteristics like those discussed in stage 2.
4. I felt that the terms referred mainly to the goal related characteristics like those discussed in stage 2, and only partially to the level of activity (exertion) as discussed in stage 1.
5. I felt that the terms referred entirely about the goal related characteristics like those discussed in stage 2.

The frequency distribution of responses to this task indicates that just over one third of workshop participants thought that the term 'motivation' referred equally to the level of physical exertion and goal related motives. Eight of the 25 (32%) participants indicated that they felt motivation referred to either mainly or entirely the level of physical exertion during their initial telephone interview (refer to figure 5).

Similarly, eight in ten respondents indicated that they had considered the term motivation to infer goal related motives for undertaking an activity. Given that the intention of the survey was to examine motivation in goal related terms, this would indicate that caution must be taken when examining motivation related data.

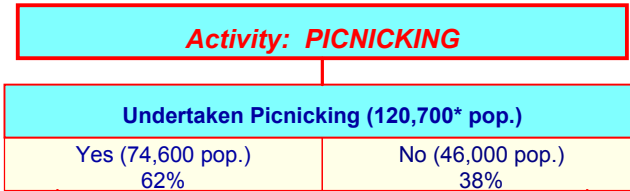
**Figure 5 - Level of Physical Exertion and Goal Related Motives**



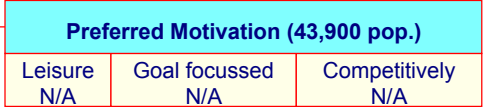
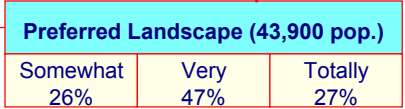
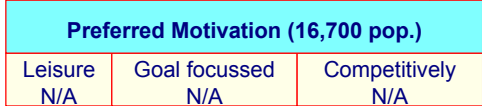
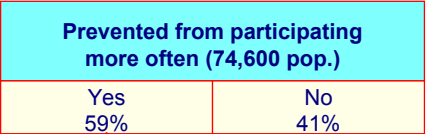
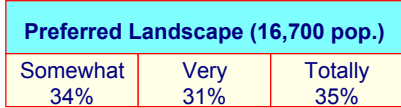
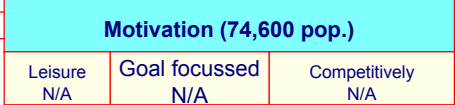
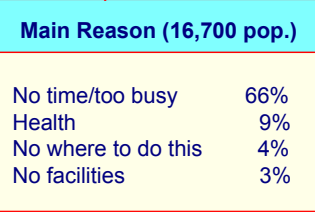
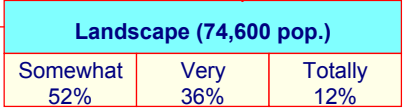
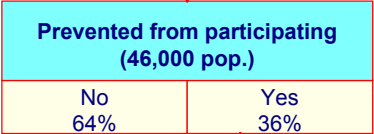
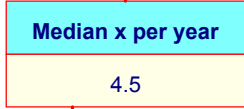
## **APPENDIX 1 Activity Flow Charts**

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<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%



<b>Participation Demographics</b>	
Male 59%	Female 64%
15-17yrs 53%	18-24yrs 60%
25-39yrs 69%	40-54yrs 66%
55-64yrs 57%	65+yrs 48%
North 60%	South 65%



\* Some error due to rounding

Sample Demographics	
n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: WALKING/NATURE STUDY**

<b>Undertaken Walking/Nature Study (120,700* pop.)</b>	
Yes (64,800 pop.) 54%	No (55,900 pop.) 46%

Participation Demographics	
Male 52%	Female 56%
15-17yrs 64%	18-24yrs 52%
25-39yrs 52%	40-54yrs 56%
55-64yrs 55%	65+yrs 48%
North 54%	South 53%

Median x per year
11.7

<b>Prevented from participating (55,900 pop.)</b>	
No 62%	Yes 38%

<b>Landscape (64,800 pop.)</b>		
Somewhat 43%	Very 37%	Totally 20%

<b>Main Reason (21,000 pop.)</b>	
No time/too busy 55%	Health 14%
Nowhere to do this 6%	

<b>Motivation (64,800 pop.)</b>		
Leisure N/A	Goal focussed N/A	Competitively N/A

<b>Preferred Landscape (21,000 pop.)</b>		
Somewhat 23%	Very 38%	Totally 39%

Prevented from participating	
<b>more often (64,800 pop.)</b>	
Yes 50%	No 50%

<b>Preferred Motivation (21,000 pop.)</b>		
Leisure N/A	Goal focussed N/A	Competitively N/A

<b>Main Reason (32,600 pop.)</b>	
No time/too busy 72%	Health 6%
Nowhere to do this 5%	

<b>Preferred Landscape (32,600 pop.)</b>		
Somewhat 17%	Very 41%	Totally 42%

<b>Preferred Motivation (32,600 pop.)</b>		
Leisure N/A	Goal focussed N/A	Competitively N/A

\* Some error due to rounding



Sample Demographics	
n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: CAMPING**

<b>Undertaken Camping (120,700* pop.)</b>	
Yes (43,400 pop.) 36%	No (77,300 pop.) 64%

<b>Participation Demographics</b>	
Male 41%	Female 31%
15-17yrs 57%	18-24yrs 50%
25-39yrs 43%	40-54yrs 34%
55-64yrs 20%	65+yrs 13%
North 34%	South 40%

<b>Median x per year</b>
2.9

<b>Prevented from participating (77,300 pop.)</b>	
No 59%	Yes 41%

<b>Landscape (43,400 pop.)</b>		
Somewhat 29%	Very 45%	Totally 26%

<b>Main Reason (31,900 pop.)</b>	
No time/too busy 57%	
No equipment 11%	
Nowhere to do it 5%	
Health 4%	

<b>Motivation (43,400 pop.)</b>		
Leisure N/A	Goal focussed N/A	Competitively N/A

<b>Prevented from participating more often (43,400 pop.)</b>	
Yes 69%	No 31%

<b>Preferred Landscape (31,900 pop.)</b>		
Somewhat 21%	Very 40%	Totally 39%

<b>Main Reason (30,000 pop.)</b>	
No time/too busy 75%	
Nowhere to do this 4%	
Can't afford 4%	
No equipment 3%	

<b>Preferred Motivation (31,900 pop.)</b>		
Leisure N/A	Goal focussed N/A	Competitively N/A

<b>Preferred Landscape (30,000 pop.)</b>		
Somewhat 14%	Very 43%	Totally 43%

<b>Preferred Motivation (30,000 pop.)</b>		
Leisure N/A	Goal focussed N/A	Competitively N/A

\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: BICYCLE RIDING**

<b>Undertaken Bicycle Riding (120,700* pop.)</b>	
Yes (24,300 pop.) 20%	No (96,400 pop.) 80%

<b>Participation Demographics</b>	
Male 23%	Female 17%
15-17yrs 55%	18-24yrs 26%
25-39yrs 24%	40-54yrs 17%
55-64yrs 9%	65+yrs 4%
North 18%	South 23%

<b>Median x per year</b>
19.5

<b>Prevented from participating (96,400 pop.)</b>	
No 78%	Yes 22%

<b>Landscape (24,300 pop.)</b>		
Somewhat 76%	Very 19%	Totally 5%

<b>Motivation (24,300 pop.)</b>		
Leisure 72%	Goal focussed 27%	Competitively 1%

<b>Main Reason (21,000 pop.)</b>	
No equipment 36%	No time/toobusy 31%
No where to do this 7%	Health 6%
No facilities 6%	

<b>Prevented from participating more often (24,300 pop.)</b>	
Yes 40%	No 60%

<b>Preferred Landscape (21,000 pop.)</b>		
Somewhat 61%	Very 27%	Totally 11%

<b>Main Reason (9,700 pop.)</b>	
No time/too busy 62%	No facilities 7%
No equipment 4%	Nowhere to do this 8%

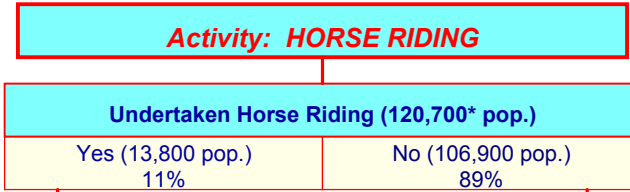
<b>Preferred Motivation (21,000 pop.)</b>		
Leisure 87%	Goal focussed 12%	Competitively 1%

<b>Preferred Landscape (9,700 pop.)</b>		
Somewhat 56%	Very 36%	Totally 9%

<b>Preferred Motivation (9,700 pop.)</b>		
Leisure 71%	Goal focussed 26%	Competitively 2%

\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 49%	Female 51%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%



<b>Participation Demographics</b>	
Male 10%	Female 13%
15-17yrs 29%	18-24yrs 19%
25-39yrs 12%	40-54yrs 10%
55-64yrs 4%	65+yrs 4%
North 11%	South 12%

**Median x per year**

7.7
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**Prevented from participating (106,900 pop.)**

No 79%	Yes 21%
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**Landscape (13,800 pop.)**

Somewhat 38%	Very 31%	Totally 31%
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**Main Reason (22,300 pop.)**

No equipment	34%
No time/too busy	28%
Health	7%
Nowhere to do this	6%
No facilities	6%
Can't afford	5%
Too old	3%

**Motivation (13,800 pop.)**

Leisure 79%	Goal focussed 11%	Competitively 10%
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**Prevented from participating more often (13,800 pop.)**

Yes 49%	No 51%
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**Preferred Landscape (22,300 pop.)**

Somewhat 23%	Very 31%	Totally 46%
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**Main Reason (6,700 pop.)**

No time/too busy	57%
No equipment	10%
Can't afford	9%
Nowhere to do this	7%
No facilities	5%
Health reasons	4%

**Preferred Motivation (22,300 pop.)**

Leisure 92%	Goal focussed 7%	Competitively 1%
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**Preferred Landscape (6,700 pop.)**

Somewhat 19%	Very 27%	Totally 54%
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**Preferred Motivation (6,700 pop.)**

Leisure 82%	Goal focussed 7%	Competitively 11%
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\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 49%	Female 51%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: SWIMMING**

<b>Undertaken Swimming (120,700* pop.)</b>	
Yes (57,100 pop.) 47%	No (63,500 pop.) 53%

<b>Participation Demographics</b>	
Male 50%	Female 45%
15-17yrs 68%	18-24yrs 60%
25-39yrs 58%	40-54yrs 47%
55-64yrs 29%	65+yrs 17%
North 46%	South 50%

<b>Median x per year</b>
9.2

<b>Prevented from participating (63,500 pop.)</b>	
No 66%	Yes 34%

<b>Landscape (57,100 pop.)</b>		
Somewhat 45%	Very 35%	Totally 19%

<b>Main Reason (21,600 pop.)</b>	
No time/too busy	46%
Nowhere to do this	13%
Health	8%
No equipment	6%
No facilities	5%
Can't afford	4%

<b>Motivation (57,100 pop.)</b>		
Leisure 95%	Goal focussed 4%	Competitively 0%

<b>Preferred Landscape (21,600 pop.)</b>		
Somewhat 35%	Very 28%	Totally 37%

<b>Prevented from participating more often (57,100 pop.)</b>	
Yes 52%	No 48%

<b>Preferred Motivation (21,000 pop.)</b>		
Leisure 95%	Goal focussed 5%	Competitively 0%

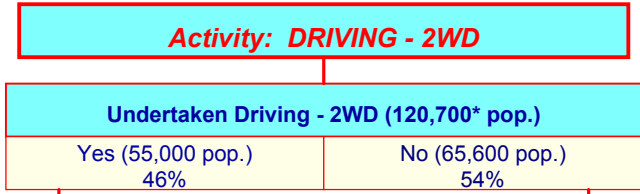
<b>Main Reason (29,900 pop.)</b>	
No time/too busy	67%
Nowhere to do this	7%
Can't afford	5%
No facilities	3%

<b>Preferred Landscape (29,900 pop.)</b>		
Somewhat 26%	Very 37%	Totally 37%

<b>Preferred Motivation (29,900 pop.)</b>		
Leisure 94%	Goal focussed 6%	Competitively 0%

\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%



<b>Participation Demographics</b>	
Male 50%	Female 41%
15-17yrs 44%	18-24yrs 52%
25-39yrs 51%	40-54yrs 50%
55-64yrs 38%	65+yrs 27%
North 45%	South 47%

<b>Median x per year</b>
6.3

<b>Prevented from participating (65,600 pop.)</b>	
No 79%	Yes 21%

<b>Landscape (55,000 pop.)</b>		
Somewhat 42%	Very 43%	Totally 15%

<b>Main Reason (13,600 pop.)</b>	
No time/too busy 36%	No equipment 29%
Nowhere to do this 6%	Health 3%

<b>Motivation (55,000 pop.)</b>		
Leisure 87%	Goal focussed 12%	Competitively 1%

<b>Preferred Landscape (13,600 pop.)</b>		
Somewhat 35%	Very 40%	Totally 25%

<b>Prevented from participating more often (55,000 pop.)</b>	
Yes 36%	No 64%

<b>Preferred Motivation (13,600 pop.)</b>		
Leisure 93%	Goal focussed 4%	Competitively 3%

<b>Main Reason (20,000 pop.)</b>	
No time/too busy 68%	Can't afford 7%
No equipment 6%	Nowhere to do this 3%

<b>Preferred Landscape (20,000 pop.)</b>		
Somewhat 27%	Very 47%	Totally 27%

<b>Preferred Motivation (20,000 pop.)</b>		
Leisure 93%	Goal focussed 5%	Competitively 3%

\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: DRIVING - 4WD**

<b>Undertaken Driving 4WD (120,700* pop.)</b>	
Yes (45,000 pop.) 37%	No (75,600 pop.) 63%

<b>Participation Demographics</b>	
Male 42%	Female 33%
15-17yrs 45%	18-24yrs 46%
25-39yrs 44%	40-54yrs 37%
55-64yrs 31%	65+yrs 14%
North 35%	South 41%

<b>Median x per year</b>
5.6

<b>Prevented from participating (75,600 pop.)</b>	
No 64%	Yes 36%

<b>Landscape (45,000 pop.)</b>		
Somewhat 25%	Very 45%	Totally 30%

<b>Main Reason (27,500 pop.)</b>	
No equipment 68%	No time/too busy 19%

<b>Motivation (45,000 pop.)</b>		
Leisure 88%	Goal focussed 10%	Competitively 1%

<b>Preferred Landscape (27,500 pop.)</b>		
Somewhat 14%	Very 41%	Totally 45%

<b>Prevented from participating more often (45,000 pop.)</b>	
Yes 53%	No 47%

<b>Preferred Motivation (27,500 pop.)</b>		
Leisure 95%	Goal focussed 4%	Competitively 1%

<b>Main Reason (24,000 pop.)</b>	
No time/too busy 67%	No equipment 15%
Can't afford 5%	

<b>Preferred Landscape (24,000 pop.)</b>		
Somewhat 14%	Very 41%	Totally 45%

<b>Preferred Motivation (24,000 pop.)</b>		
Leisure 92%	Goal focussed 6%	Competitively 2%

\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: DRIVING - OTHER VEHICLES**

<b>Undertaken Driving Other Vehicles (120,700* pop.)</b>	
Yes (16,100 pop.) 13%	No (104,500 pop.) 87%

<b>Participation Demographics</b>	
Male 19%	Female 8%
15-17yrs 32%	18-24yrs 22%
25-39yrs 15%	40-54yrs 11%
55-64yrs 6%	65+yrs 3%
North 11%	South 17%

<b>Median x per year</b>
8.1

<b>Prevented from participating (104,500 pop.)</b>	
No 81%	Yes 19%

<b>Landscape (16,100 pop.)</b>		
Somewhat 30%	Very 40%	Totally 30%

<b>Main Reason (19,800 pop.)</b>	
No equipment 58%	No time/too busy 20%
Nowhere to do this 3%	Can't afford 3%

<b>Motivation (16,100 pop.)</b>		
Leisure 87%	Goal focussed 9%	Competitively 4%

<b>Preferred Landscape (19,800 pop.)</b>		
Somewhat 29%	Very 35%	Totally 36%

<b>Prevented from participating more often (16,100 pop.)</b>	
Yes 47%	No 53%

<b>Preferred Motivation (19,800 pop.)</b>		
Leisure 91%	Goal focussed 7%	Competitively 2%

<b>Main Reason (7,500 pop.)</b>	
No time/too busy 50%	No equipment 24%
Nowhere to do this 5%	No facilities 4%
Can't afford 3%	

<b>Preferred Landscape (7,500 pop.)</b>		
Somewhat 26%	Very 38%	Totally 36%

<b>Preferred Motivation (7,500 pop.)</b>		
Leisure 93%	Goal focussed 5%	Competitively 2%

\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: RIDING MOTORISED WATERCRAFT**

<b>Undertaken Riding Motorised Watercraft (120,700* pop.)</b>	
Yes (37,800 pop.) 31%	No (82,900 pop.) 69%

<b>Participation Demographics</b>	
Male 37%	Female 26%
15-17yrs 37%	18-24yrs 38%
25-39yrs 37%	40-54yrs 31%
55-64yrs 25%	65+yrs 15%
North 30%	South 34%

<b>Median x per year</b>
5.7

<b>Prevented from participating (82,900 pop.)</b>	
No 63%	Yes 37%

<b>Landscape (37,800 pop.)</b>		
Somewhat 36%	Very 34%	Totally 30%

<b>Main Reason (30,800 pop.)</b>	
No equipment	50%
No time/too busy	22%
Can't afford	8%
No facilities	5%
Nowhere to do this	5%
Health	3%

<b>Motivation (37,800 pop.)</b>		
Leisure 95%	Goal focussed 4%	Competitively 1%

<b>Prevented from participating more often (37,800 pop.)</b>	
Yes 64%	No 36%

<b>Preferred Landscape 30,800 pop.)</b>		
Somewhat 37%	Very 36%	Totally 27%

<b>Main Reason (24,200 pop.)</b>	
No time/too busy	59%
No equipment	13%
Can't afford	8%
No facilities	3%

<b>Preferred Motivation (30,800 pop.)</b>		
Leisure 95%	Goal focussed 5%	Competitively 0%

<b>Preferred Landscape (24,200 pop.)</b>		
Somewhat 20%	Very 32%	Totally 49%

<b>Preferred Motivation (24,200 pop.)</b>		
Leisure 94%	Goal focussed 5%	Competitively 1%

\* Some error due to rounding



<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: RIDING NON-MOTORISED WATERCRAFT**

<b>Undertaken Riding Non-Motorised Watercraft (120,700* pop.)</b>	
Yes (22,300 pop.) 18%	No (98,400 pop.) 82%

<b>Participation Demographics</b>	
Male 21%	Female 16%
15-17yrs 38%	18-24yrs 27%
25-39yrs 19%	40-54yrs 20%
55-64yrs 9%	65+yrs 5%
North 19%	South 18%

<b>Median x per year</b>
3.0

<b>Prevented from participating (98,400 pop.)</b>	
No 63%	Yes 37%

<b>Landscape (22,300 pop.)</b>		
Somewhat 39%	Very 34%	Totally 27%

<b>Main Reason (36,200 pop.)</b>	
No equipment 40%	No time/too busy 30%
Nowhere to do this 8%	No facilities 6%
Can't afford 4%	Health 3%

<b>Motivation (22,300 pop.)</b>		
Leisure 87%	Goal focussed 9%	Competitively 4%

<b>Preferred Landscape (36,200 pop.)</b>		
Somewhat 27%	Very 36%	Totally 37%

<b>Prevented from participating more often (22,300 pop.)</b>	
Yes 59%	No 41%

<b>Preferred Motivation (36,200 pop.)</b>		
Leisure 95%	Goal focussed 4%	Competitively 1%

<b>Main Reason (13,100 pop.)</b>	
No time/too busy 62%	No equipment 12%
Can't afford 5%	Nowhere to do this 5%
No facilities 3%	

<b>Preferred Landscape (13,100 pop.)</b>		
Somewhat 24%	Very 36%	Totally 40%

<b>Preferred Motivation (13,100 pop.)</b>		
Leisure 91%	Goal focussed 5%	Competitively 4%

\* Some error due to rounding

<b>Sample Demographics</b> n=2500 wt=120,700	
Male 51%	Female 49%
15-17yrs 6%	18-24yrs 13%
25-39yrs 30%	40-54yrs 27%
55-64yrs 11%	65+yrs 13%
North 63%	South 37%

**Activity: ABSEILING OR ROCK CLIMBING**

<b>Undertaken Abseiling or Rock Climbing (120,700* pop.)</b>	
Yes (7,500 pop.) 6%	No (113,100 pop.) 94%

<b>Participation Demographics</b>	
Male 7%	Female 5%
15-17yrs 21%	18-24yrs 12%
25-39yrs 5%	40-54yrs 5%
55-64yrs 4%	65+yrs 1%
North 7%	South 4%

<b>Median x per year</b>
2.1

<b>Prevented from participating (113,100 pop.)</b>	
No 79%	Yes 21%

<b>Landscape (7,500 pop.)</b>		
Somewhat 37%	Very 30%	Totally 33%

<b>Motivation (7,500 pop.)</b>		
Leisure 82%	Goal focussed 16%	Competitively 2%

<b>Main Reason (23,700 pop.)</b>	
No time/too busy 28%	
Nowhere to do this 20%	
No facilities 17%	
No equipment 9%	
Health 4%	
Can't afford 3%	

<b>Prevented from participating more often (7,500 pop.)</b>	
Yes 58%	No 42%

<b>Preferred Landscape (23,700 pop.)</b>		
Somewhat 28%	Very 33%	Totally 40%

<b>Main Reason (4,300 pop.)</b>	
No time/too busy 53%	
No facilities 11%	
No equipment 11%	
Nowhere to do this 6%	
Can't afford 5%	

<b>Preferred Motivation (23,700 pop.)</b>		
Leisure 87%	Goal focussed 11%	Competitively 2%

<b>Preferred Landscape (4,300 pop.)</b>		
Somewhat 19%	Very 34%	Totally 47%

<b>Preferred Motivation (4,300 pop.)</b>		
Leisure 85%	Goal focussed 13%	Competitively 1%

\*Some error due to rounding

## **APPENDIX 2 Landscape Photo Sets**

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## **APPENDIX 3 Activity Based Photo Sets**

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## **APPENDIX 4 Current and Latent Participation Data Summary Tables**

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Note: Totals may add to more than 100% due to people undertaking an activity more than once and in more than one setting.

CURRENT ACTIVITY PARTICIPATION INCIDENCE																																	
TOTAL POP=120,652		TOTAL							SOMEWHAT NATURAL							VERY NATURAL							TOTALLY NATURAL										
ACTIVITY	% OF POP PARTICIPATING	MEDIAN TIMES PER YEAR	TOTAL VISITATION	MOTIVATION N	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION	PARTICIPATION (% OF TOTAL POP)	S'WHAT NAT. LANDSCAPE (% OF ACTIVITY PARTICIPANTS)	SOMEWHAT NAT. LANDSCAPE (%)	S'WHAT NAT. LANDSCAPE (% OF POP PARTICIPATING)	S'WHAT NAT. TOTAL VISITATION	MOTIVATION N	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION	PARTICIPATION (% OF TOTAL POP)	MOTIVATION N	MOTIVATION N	VERY NAT. LANDSCAPE (% OF ACTIVITY PARTICIPANTS)	VERY NAT. LANDSCAPE (MEAN PROPORTION)	VERY NAT. LANDSCAPE (% OF POP PARTICIPATING)	VERY NAT. TOTAL VISITATION	MOTIVATION N	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION	PARTICIPATION (% OF TOTAL POP)	TOTALLY NAT. LANDSCAPE (% OF ACTIVITY PARTICIPANTS)	TOTALLY NAT. LANDSCAPE (MEAN PROPORTION)	TOTALLY NAT. LANDSCAPE (% OF POP PARTICIPATING)	TOTALLY NAT. TOTAL VISITATION	MOTIVATION N	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION	
PICNICKING	62%	4.5	335,714	Leisure Goal focussed	NA	NA	NA	63%	52%	39%	175,007	Leisure Goal focussed	NA	NA	NA	NA	50%	36%	31%	120,253	Leisure Goal focussed	NA	NA	NA	NA	19%	12%	12%	40,487	Leisure Goal focussed	NA	NA	
	74,603			Competitive	NA	NA	NA	46,627		46,627		Competitive	NA	NA	NA	NA	36,928		36,928		Competitive	NA	NA	NA	NA	14,025		14,025		Competitive	NA	NA	
WALKING OR NATURE STUDY	54%	11.7	757,786	Leisure Goal focussed	NA	NA	NA	52%	43%	28%	326,909	Leisure Goal focussed	NA	NA	NA	NA	50%	37%	27%	280,078	Leisure Goal focussed	NA	NA	NA	NA	28%	20%	15%	150,799	Leisure Goal focussed	NA	NA	
	64,768			Competitive	NA	NA	NA	33,550		33,550		Competitive	NA	NA	NA	NA	32,514		32,514		Competitive	NA	NA	NA	NA	18,006		18,006		Competitive	NA	NA	
CAMPING	36%	2.9	125,721	Leisure Goal focussed	NA	NA	NA	35%	29%	13%	36,547	Leisure Goal focussed	32,892	13,656	90%	11%	10%	1%	45%	19%	56,738	Leisure Goal focussed	51,064	21,108	90%	17%	31%	26%	11%	32,436	Leisure Goal focussed	28,544	11,903
	43,352			Competitive	NA	NA	NA	15,173		15,173		Competitive	3,655	1,517	0%	0%	23,453		23,453		Competitive	0	0	0%	0%	13,526		13,526		Competitive	3,568	1,488	
BICYCLE RIDING	20%	19.5	473,363	Leisure Goal focussed	340,217	17,447	72%	14%	81%	76%	16%	359,424	Leisure Goal focussed	258,785	14,122	72%	12%	26%	19%	5%	90,460	Leisure Goal focussed	65,131	4,474	72%	4%	8%	5%	2%	23,479	Leisure Goal focussed	16,200	1,340
	24,275			Competitive	3,978	204	1%	0%	19,614		19,614	Competitive	7,188	392	2%	0%	6,214		6,214		Competitive	1,809	124	2%	0%	1,942		1,942		Competitive	470	39	
HORSE RIDING	11%	7.7	105,883	Leisure Goal focussed	83,345	10,824	79%	9%	41%	38%	5%	39,981	Leisure Goal focussed	33,184	4,645	83%	4%	40%	31%	5%	33,194	Leisure Goal focussed	26,887	4,411	81%	4%	37%	31%	4%	32,707	Leisure Goal focussed	27,147	4,200
	13,751			Competitive	10,426	1,354	10%	1%	5,597		5,597	Competitive	1,999	280	5%	0%	5,445		5,445		Competitive	1,992	327	6%	0%	5,060		5,060		Competitive	2,290	354	
SWIMMING (EXCL. INGROUND POOL)	47%	9.2	525,348	Leisure Goal focussed	500,002	54,348	95%	45%	51%	45%	24%	238,193	Leisure Goal focussed	223,901	27,429	94%	23%	44%	35%	21%	185,027	Leisure Goal focussed	173,926	23,564	94%	20%	24%	19%	11%	102,128	Leisure Goal focussed	92,936	12,523
	57,103			Competitive	1,987	216	0%	0%	29,180		29,180	Competitive	2,382	292	1%	0%	25,068		25,068		Competitive	1,850	251	1%	0%	13,762		13,762		Competitive	1,021	138	
DRIVING 2WD ON UNSEALED ROADS	46%	6.3	346,601	Leisure Goal focussed	300,649	47,722	87%	40%	50%	42%	23%	146,924	Leisure Goal focussed	133,701	25,032	91%	21%	52%	43%	24%	147,513	Leisure Goal focussed	132,762	25,797	90%	21%	20%	15%	9%	52,163	Leisure Goal focussed	44,861	9,368
	55,016			Competitive	3,131	497	1%	0%	27,508		27,508	Competitive	2,938	550	2%	0%	28,663		28,663		Competitive	2,950	573	2%	0%	10,893		10,893		Competitive	1,565	327	
DRIVING 4WD ON UNSEALED ROADS	37%	5.6	252,062	Leisure Goal focussed	222,897	39,803	88%	33%	33%	25%	12%	63,847	Leisure Goal focussed	56,824	13,180	89%	11%	56%	45%	21%	112,445	Leisure Goal focussed	98,951	22,300	88%	18%	38%	30%	14%	75,770	Leisure Goal focussed	65,162	14,710
	45,011			Competitive	3,136	560	1%	0%	14,809		14,809	Competitive	0	0	0%	0%	25,341		25,341		Competitive	1,124	253	1%	0%	17,104		17,104		Competitive	9,850	2,224	
DRIVING OTHER VEHICLES ON TRACKS	13%	8.1	130,645	Leisure Goal focussed	113,522	14,015	87%	12%	37%	30%	5%	39,233	Leisure Goal focussed	31,386	4,723	80%	4%	50%	40%	7%	52,441	Leisure Goal focussed	40,904	6,253	78%	5%	35%	30%	5%	38,971	Leisure Goal focussed	30,787	4,472
	16,129			Competitive	5,330	658	4%	1%	5,903		5,903	Competitive	1,177	177	3%	0%	8,016		8,016		Competitive	2,098	321	4%	0%	5,661		5,661		Competitive	758	170	
RIDING ON MOTORISED WATERCRAFT	31%	5.7	215,375	Leisure Goal focussed	203,906	35,773	95%	30%	41%	36%	13%	77,212	Leisure Goal focussed	71,807	14,337	93%	12%	41%	34%	13%	73,163	Leisure Goal focussed	67,310	14,148	92%	12%	35%	30%	11%	64,978	Leisure Goal focussed	59,780	12,062
	37,785			Competitive	2,377	417	1%	0%	15,416		15,416	Competitive	772	154	1%	0%	15,378		15,378		Competitive	1,463	308	2%	0%	13,111		13,111		Competitive	1,300	262	
ABSEILING OR ROCK CLIMBING	6%	2.1	15,773	Leisure Goal focussed	12,869	6,128	82%	5%	38%	37%	2%	5,896	Leisure Goal focussed	4,186	2,037	71%	2%	34%	30%	2%	4,677	Leisure Goal focussed	3,320	1,824	71%	2%	35%	33%	2%	5,200	Leisure Goal focussed	3,640	1,835
	7,511			Competitive	342	163	2%	0%	2,869		2,869	Competitive	118	57	2%	0%	2,569		2,569		Competitive	47	26	1%	0%	2,621		2,621		Competitive	52	26	
RIDING NONMOTORISED WATERCRAFT	18%	3.0	66,837	Leisure Goal focussed	58,221	19,407	87%	16%	42%	39%	8%	25,846	Leisure Goal focussed	21,711	7,841	84%	6%	39%	34%	7%	22,738	Leisure Goal focussed	19,100	7,205	84%	6%	32%	27%	6%	18,247	Leisure Goal focussed	14,415	5,544
	22,279			Competitive	2,925	975	4%	1%	9,335		9,335	Competitive	517	187	2%	0%	8,577		8,577		Competitive	455	172	2%	0%	7,018		7,018		Competitive	547	211	
TOTAL* (*motivation no. exclude picnicking & walking)	27.8	3,351,105	Leisure Goal focussed	1,835,626	262,607	86%	12%	1,535,019		1,535,019		Leisure Goal focussed	868,378	146,820	84%	14%	1,178,725		1,178,725		Leisure Goal focussed	679,355	87,059	87%	11%	637,366		637,366		Leisure Goal focussed	383,472	52,273	
			Competitive	33,632			2%	46%				Competitive	17,092		2%		35%				Competitive	13,788		2%		19%			Competitive	9,495			

LATENT ACTIVITY PARTICIPATION INCIDENCE																						
TOTAL POP=120,652		TOTAL						SOMEWHAT NATURAL					VERY NATURAL					TOTALLY NATURAL				
ACTIVITY	% OF POP NOT CURRENTLY PARTICIPATING	% INTERESTED BUT PREVENTED	MEDIAN TIMES PER YEAR	TOTAL VISITATION	MOTIVATION	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION	SOMEWHAT NAT. LANDSCAPE (% OF ACTIVITY PARTICIPANTS)	SOMEWHAT NAT. TOTAL VISITATION	MOTIVATION	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION	VERY NAT. LANDSCAPE (% OF ACTIVITY PARTICIPANTS)	VERY NAT. TOTAL VISITATION	MOTIVATION	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION	TOTALLY NAT. LANDSCAPE (% OF ACTIVITY PARTICIPANTS)	TOTALLY NAT. TOTAL VISITATION	MOTAVATION	DISTRIBUTION OF VISITS BY MOTIVATION	DISTRIBUTION OF POP BY MOTIVATION
PICNICKING					Leisure	NA	NA			Leisure	NA	NA			Leisure	NA	NA			Leisure	NA	NA
	38%	36%	4.5	74273.3712	Goal focussed	NA	NA	34%	25252.9462	Goal focussed	NA	NA	31%	23,025	Goal focussed	NA	NA	35%	25,996	Goal focussed	NA	NA
	45,848	16505.2			Competitive	NA	NA	5,612		Competitive	NA	NA	5,117		Competitive	NA	NA	5,777		Competitive	NA	NA
WALKING OR NATURE STUDY					Leisure	NA	NA			Leisure	NA	NA			Leisure	NA	NA			Leisure	NA	NA
	46%	38%	11.7	246,753	Goal focussed	NA	NA	23%	56,753	Goal focussed	NA	NA	38%	93,766	Goal focussed	NA	NA	39%	96,234	Goal focussed	NA	NA
	55,500	21,090			Competitive	NA	NA	4,851		Competitive	NA	NA	8,014		Competitive	NA	NA	8,225		Competitive	NA	NA
CAMPING					Leisure	NA	NA			Leisure	NA	NA			Leisure	35,145	12,119			Leisure	34,267	11,816
	64%	41%	2.9	91,811	Goal focussed	NA	NA	21%	19,280	Goal focussed	NA	NA	40%	36,725	Goal focussed	1,506	519	39%	35,806	Goal focussed	1,468	506
	77,217	31,659			Competitive	NA	NA	6,648		Competitive	NA	NA	12,664		Competitive	73	25	12,347		Competitive	72	25
BICYCLE RIDING					Leisure	360,248	18,474			Leisure	219,751	11,269			Leisure	89,329	4,581			Leisure	36,393	1,866
	80%	22%	19.5	414,078	Goal focussed	49,689	2,548	61%	252,587	Goal focussed	30,310	1,554	27%	111,801	Goal focussed	20,907	1,072	11%	45,549	Goal focussed	8,518	437
	96,522	21,235			Competitive	4,141	212	12,953		Competitive	2,526	130	5,733		Competitive	1,565	80	2,336		Competitive	638	33
HORSE RIDING					Leisure	159,743	20,746			Leisure	36,741	4,772			Leisure	49,144	6,382			Leisure	72,923	9,470
	89%	21%	7.7	173,634	Goal focussed	12,154	1,578	23%	39,936	Goal focussed	2,796	363	31%	53,827	Goal focussed	4,575	594	46%	79,872	Goal focussed	6,789	882
	107,380	22,550			Competitive	1,736	225	5,186		Competitive	399	52	6,990		Competitive	161	21	10,373		Competitive	240	31
SWIMMING (EXCL. INGROUND POOL)					Leisure	190,021	20,654			Leisure	66,507	7,229			Leisure	51,190	5,564			Leisure	67,643	7,353
	53%	34%	9.2	200,022	Goal focussed	10,001	1,087	35%	70,008	Goal focussed	3,500	380	28%	56,006	Goal focussed	4,256	463	37%	74,008	Goal focussed	5,625	611
	63,946	21,741			Competitive	0	0	7,610		Competitive	0	0	6,088		Competitive	616	67	8,044		Competitive	814	88
DRIVING 2WD ON UNSEALED ROADS					Leisure	80,162	12,724			Leisure	28,057	4,453			Leisure	32,444	5,150			Leisure	20,278	3,219
	54%	21%	6.3	86,196	Goal focussed	3,448	547	35%	30,169	Goal focussed	1,207	192	40%	34,478	Goal focussed	1,517	241	25%	21,549	Goal focussed	948	151
	65,152	13,682			Competitive	2,586	410	4,789		Competitive	905	144	5,473		Competitive	517	82	3,420		Competitive	323	51
DRIVING 4WD ON UNSEALED ROADS					Leisure	145,576	25,996			Leisure	20,381	3,639			Leisure	57,676	10,299			Leisure	63,302	11,304
	63%	36%	5.6	153,238	Goal focussed	6,130	1,095	14%	21,453	Goal focussed	858	153	41%	62,827	Goal focussed	4,084	729	45%	68,957	Goal focussed	4,482	800
	76,011	27,364			Competitive	1,532	274	3,831		Competitive	215	38	11,219		Competitive	1,068	191	12,314		Competitive	1,172	209
DRIVING OTHER VEHICLES ON TRACKS					Leisure	147,006	18,149			Leisure	42,632	5,263			Leisure	48,116	5,940			Leisure	49,491	6,110
	87%	19%	8.1	161,545	Goal focussed	11,308	1,396	29%	46,848	Goal focussed	3,279	405	35%	56,541	Goal focussed	7,859	970	36%	58,156	Goal focussed	8,084	998
	104,967	19,944			Competitive	3,231	399	5,784		Competitive	937	116	6,980		Competitive	565	70	7,180		Competitive	582	72
RIDING ON MOTORISED WATERCRAFT					Leisure	166,795	29,262			Leisure	61,714	10,827			Leisure	59,351	10,412			Leisure	44,513	7,809
	69%	37%	5.7	175,574	Goal focussed	8,779	1,540	37%	64,962	Goal focussed	2,598	456	36%	63,207	Goal focussed	3,476	610	27%	47,405	Goal focussed	2,607	457
	83,250	30,802			Competitive	0	0	11,397		Competitive	650	114	11,089		Competitive	316	55	8,317		Competitive	237	42
ROCK CLIMBING					Leisure	43,513	20,721			Leisure	12,184	5,802			Leisure	13,270	6,319			Leisure	16,085	7,659
	94%	21%	2.1	50,015	Goal focussed	5,502	2,620	28%	14,004	Goal focussed	1,540	734	33%	16,505	Goal focussed	2,954	1,407	40%	20,006	Goal focussed	3,581	1,705
	113,413	23,817			Competitive	1,000	476	6,669		Competitive	280	133	7,860		Competitive	281	134	9,527		Competitive	340	162
RIDING ON NONMOTORISED WATERCRAFT					Leisure	104,327	34,776			Leisure	28,168	9,389			Leisure	36,569	12,190			Leisure	37,585	12,528
	82%	37%	3.0	109,817	Goal focussed	43,927	14,642	27%	29,651	Goal focussed	1,483	494	36%	39,534	Goal focussed	2,846	949	37%	40,632	Goal focussed	2,926	975
	98,935	36,606			Competitive	1,098	366	9,884		Competitive	0	0	13,178		Competitive	119	40	13,544		Competitive	122	41
TOTAL* (*motivation no. exclude picnicking & walking)					Leisure	1,397,390				Leisure	516,134				Leisure	472,234				Leisure	442,480	
			16.1	1,936,956	Goal focussed	150,938			670,904	Goal focussed	47,572			648,241	Goal focussed	53,981			614,169	Goal focussed	45,027	
					Competitive	15,325				Competitive	5,911				Competitive	5,282				Competitive	4,539	

## **APPENDIX 5 Questionnaire**

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**JOB NO.: NG9998**

**FINAL QUESTIONNAIRE**

24 August 1999 1.00pm

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All work conducted on behalf of ACNielsen is confidential. Under the Code of Ethics of the Market Research Society of Australia no information about this project, questionnaire or respondents should be disclosed to any third party.

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*When adding questions just type in text for question, not the Q..., the Style Heading 1 automatically gives it Q and number.*

Good morning/afternoon/evening. My name is <Interviewer's name> from \_\_\_\_\_

Today we are conducting a survey for the Sport and Recreation Division, Department Tourism, Sport & Racing and your Local Council about a range of recreational activities such as picnicking and walking through to 4 wheel driving and boating. The results will be used by your Local and State government to improve outdoor recreation opportunities in your area. Could I speak to the person within your household, 15 years or older who is having the next birthday.

**REINTRODUCE IF NECESSARY**

The survey will take about 10 minutes of your time and all information shall remain confidential.

D1 In which of the following local government areas do you reside? **Read Codes 1 to 9**

- 1 Banana
- 2 Calliope
- 3 Duaringa
- 4 Fitzroy
- 5 Gladstone
- 6 Livingstone
- 7 Miriam Vale
- 8 Mount Morgan
- 9 Rockhampton
- 10 NONE

**TERMINATE**

D2 INTERVIEWER RECORD SEX

- 1. Male
- 2. Female

D3 Firstly just to make sure we have a good representation of the population in which of the following age groups do you fall.

- 1 15 to 17 years
- 2 18 to 24 years
- 3 25 to 39 years
- 4 40 to 54 years
- 5 55 to 64 years
- 6 65 years or more
- 7 Refused

D4 And for an accurate idea of the geographic spread of respondents could you please tell me your postcode

— — — —

This survey is not about activities you might do in Predominantly Non-Natural Landscapes. That is, it is not about those landscapes or settings that are easily accessible by motorised transport; where buildings and other built structures dominate; people are almost always present in large numbers; and nature is only present in highly modified form. It may be located within cities, suburbs or cleared farmland.

The outdoor recreation activities we are talking about today are those that are undertaken in three settings. These settings can be described as:

- A Somewhat Natural Landscape  
Which is significantly modified natural area; accessible by conventional vehicles or boats; has buildings highly visible; and where other people are present. It may be some distance away from cities, suburbs and cleared farmland.
- A Very Natural Landscape  
Which is a slightly modified natural area; may be difficult to access by motorised vehicles or vessels; has few built structures visible and few other people are present. It may be some distance away from cities, suburbs and cleared farmland.
- A Totally Natural Landscape  
Which is a wild, natural, remote area; has no access by motorised vehicles or vessels; where no built structures are visible and there is little or no evidence of other people. It may be far from cities, suburbs and cleared farmland.

Q1a I am going to read you a list of activities and would like you to tell me whether you have participated in any of them, in any of the Somewhat, Very or Totally Natural settings previously described. This includes club, school or personal recreational activities. Remember, we are interested in the activities that took place in the 3 predominantly natural settings within 4 hours drive from home or place of residence.

**<Read Activity>** Have you participated in this within the past 12 months. Remember the three settings and it would have been within 4 hours drive from home. **REPEAT FOR EACH ACTIVITY**

	<b>YES</b>	<b>NO</b>
1. Picnicking	1	2
2. Walking or nature study (eg birdwatching, photography)	1	2
3. Camping	1	2
4. Bicycle riding	1	2
5. Horse riding	1	2
6. Swimming, snorkelling and scuba diving (excluding in constructed pools)		1 2
7. Driving on unsealed roads in 2WD vehicles	1	2
8. Driving on tracks or unsealed roads in 4WD vehicles	1	2
9. Driving on tracks or unsealed roads in other vehicles (eg motorbike, trike)	1	2
10. Riding on a motorised watercraft (eg motor boat, jet ski)	1	2
11. Abseiling or rock climbing	1	2
12. Riding on a non-motorised watercraft (eg canoe, sailing, kayaking)	1	2

- Q1b Is there any other nature based recreational activity you have participated in within the past 12 months that have been within 4 hours drive from home?
- 1 Yes (**specify**)
  - 2 No

**ASK Q 2 TO Q 8 FOR EACH ACTIVITY UNDERTAKEN IN THE PAST 12 MONTHS**

Now just a few questions about those activities you have undertaken.

- Q2 How often have you participated in <enter activity> the past 12 months?  
ENTER NUMBER \_\_\_\_\_

- Q3 Thinking of the 3 predominantly natural settings we described earlier, what proportion of the times you went <enter activity> were in a ...**READ OUT**  
**ENTER PERCENTAGE**
- 1 Somewhat natural landscape .....%
  - 2 Very natural landscape .....%
  - 3 Totally natural landscape .....%
- MUST ADD TO 100%**

**ASK Q 4 FOR Q 1: CODES 4 - 12 ONLY**

- Q4 Which of the following best describes the main way in which you participate in this activity in these areas. Was it .....**READ OUT USE PROMPTS ONCE ONLY**
1. Leisurely (sightseeing, unwinding, relaxing)
  2. Goal focused (fitness, conquering or challenging nature testing equipment, practising techniques)
  3. Competitively (maximum distance, minimum time, formal organised competition)
- Q5 Are you interested in participating in <activity> more often but are prevented in doing so for some reason?
1. Yes **CONTINUE TO Q 6**
  2. No **IF COMPLETED ACTIVITIES UNDERTAKEN GO TO Q9 OTHERWISE RETURN TO Q2**

- Q6 What is the main thing preventing you from <enter activity>, more often? **RECORD FIRST MENTION THAN OTHER MENTIONS**

	<b>First Mention</b>	<b>Other Mentions</b>
1. No time/too busy	1	1
2. Can't afford it	2	2
3. No equipment (eg 4WD)	3	3
4. Too old	4	4
5. Health reasons	5	5
6. Nowhere to do this	6	6
7. No facilities	7	7
8. Other (specify)	8	8
9. Don't know	9	9

Q7 Assuming you were able to undertake <enter activity>, which of the following would be your preferred setting for pursuing this activity?..... **READ OUT**

1. Somewhat natural landscape
2. Very natural landscape
3. Totally natural landscape

**ASK Q 8 FOR Q 1a: CODES 4-12 ONLY**

Q8 Which do you consider best describes the way in which you would undertake this activity.  
**READ OUT**.....

1. Leisurely
2. Goal Focused
3. Competitively

**IF THEY HAVE UNDERTAKEN ALL ACTIVITIES AT Q 1 GO TO END  
ASK Q9 TO 12 FOR ALL ACTIVITIES NOT UNDERTAKEN AT Q1A**

Now for those activities you have not undertaken...

Q9 Are you interested in participating <enter activity> in any of the following activities but for some reason have been prevented from doing so?

1. Yes **CONTINUE TO Q 10**
2. No **IF COMPLETED ACTIVITIES NOT UNDERTAKEN AT Q 1 GO TO Q 13 – OTHERWISE RETURN TO Q 9 AND ASK ABOUT NEXT ACTIVITY**

Q10 What is the main thing preventing you from participating in <enter activity>?

	<b>First Mention</b>	<b>Other Mentions</b>
1. No time/too busy	1	1
2. Can't afford it	2	2
3. No equipment (eg 4WD)	3	3
4. Too old	4	4
5. Health reasons	5	5
6. Nowhere to do this	6	6
7. No facilities	7	7
8. Other (specify)	8	8
9. Don't know	9	9

Q11 Assuming you were able to undertake <enter activity>, which of the following would be your preferred setting for pursuing this activity? **READ OUT**

1. Somewhat natural landscape
2. Very natural landscape
3. Totally natural landscape

**ASK Q 12 FOR Q 1A: CODES 4 - 12 ONLY**

Q12 Which one of the following three descriptions do you consider best describes the way in which you would undertake this activity?

**READ OUT**.....

1. Leisurely
2. Goal focused
3. Competitively

**GOTO Q9 UNLESS COMPLETED LIST OF ACTIVITIES NOT UNDERTAKEN AT Q1A**

Thank you again, just in case you missed it my name is ..... and I am (calling) from ACNielsen. In case my supervisor needs to check my work, may I please have your first or last name and telephone number.

Respondent Name: \_\_\_\_\_ Telephone \_\_\_\_\_

Time Finish \_\_\_\_\_ Length of Interview \_\_\_\_\_ minutes

<p style="text-align: center;"><b>INTERVIEWER DECLARATION</b></p> <p>I have conducted this interview. It is a full and, to the best of my knowledge, an accurate recording and has been completed in accordance with my interviewing and ICC/ESOMAR guidelines.</p>	<p><b>I.D.</b></p>						
<p>Interviewer:.....</p> <p>Date: ____ / ____ / ____</p>							

## **APPENDIX 6 Glossary of Terms**

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## ***Introduction***

The following definitions are intended to clarify the meaning of key concepts and terms that are used in outdoor recreation planning and management. The definitions have been developed from a wide range of sources including:

- recreation planning and management staff from various Queensland State and Local Government land and/or natural resource management agencies;
- leisure/recreation literature and research;
- various staff within the Queensland Department of Communication and Information, Local Government, Planning and Sport: division of Sport and Recreation Queensland; and
- the national five sector model for the Recreation Industry.

Within the Queensland Department of Communication and Information, Local Government, Planning and Sport: division of Sport and Recreation Queensland, *recreation* and *outdoor recreation* have been defined so that they are clearly separated from sports. This is because:

- 1 sports are supported by separate policies, planning procedures and funding sources within Government;
- 2 the Recreation Industry has adopted a five-sector model that distinguishes between sport and recreation; and
- 3 initiatives that support sport do not necessarily support non-competitive recreation.

However, it is recognised that sport and recreation have much in common and that appropriate development of both will:

- maximise the options for participation;
- maximise the options for satisfying a wide variety of recreation demands; and
- produce the optimum range of benefits for the community.

Please note that these definitions do not constitute the entire body of knowledge necessary for outdoor recreation planning and management and other organisations or individuals may have different interpretations of some of these concepts.

## **Recreation**

Recreation activities are those that:

- people undertake for enjoyment in their own free time; and
- people undertake by voluntarily allocating resources (time, money, equipment); and
- may be an expression of the self-identity of many people; and
- provide for the expression of distinct (recreational) sub-cultures; and
- may be essential to the quality of life of many people; and
- are **not** based on formal competition and/or organised administration; and
- that lack a formal set of rules.

## **Outdoor Recreation:**

Recreation activities that:

- are undertaken outside the confines of buildings (ie. in the outdoors); **and**
- can be undertaken without the existence of any built facility or infrastructure; **and**
- **may** require large areas of land, water and/or air; **and**
- **may** require outdoor areas of predominantly unmodified natural landscape.

Outdoor recreation is a sub-set or a component of recreation.

Outdoor recreation activities include (but are not limited to) non-competitive:

1. abseiling;
2. bicycle riding;
3. bird watching;
4. walking;
5. camping;
6. canoeing/kayaking ;
7. diving - SCUBA and snorkel;
8. recreational fishing;
9. hang gliding;
10. horse trail riding;
11. hunting and shooting with firearms;
12. hunting and shooting with bow and arrow;
14. Off-highway or off-road motorcycle (trail bike), trike and quad riding;
16. off-highway or off-road four wheel driving;
17. jet skiing;
18. power boating;
19. rock climbing;
20. sailboarding;
21. sailing/yachting;
22. surfing;
23. water-skiing.



Note 1: Facilities, site modification or infrastructure may be provided to manage the impacts generated by the activities. However, outdoor recreation activities can be undertaken without facilities, site modification or infrastructure.

Note 2: Activities that involve organised competition based on formal rules are, by definition, sports.

Note 3: Competitive versions of some of the above non-competitive activities exist. While competitive activities have much in common with non-competitive activities, policies, planning outcomes, infrastructure and initiatives that support competitive activities do not necessarily support non-competitive activities. For example, competition often focuses on speed, technical difficulty and increased risk taking – each of which reduces safety margins. Consequently, competition often requires exclusive use of areas that could otherwise be concurrently available for several non-competitive outdoor recreation activities.

For this reason, non-competitive activities require recognition in planning and management and specific outcomes in decision making processes.

### ***Recreation Settings***

Recreation settings are result of the combination of the biophysical, social and managerial attributes of a place in which recreation takes place. Biophysical attributes include the:

- terrain;
- plant community;
- animal community;
- animal behaviour;
- smells caused by natural features (eg. flowering plants, rain, drying algae after floods, etc);
- sounds caused by natural features (eg. waterfalls, surf, bird song, wind etc); and
- area of available landscape/seascape.

Social attributes include the:

- total number of people present;
- activities of the people who are present;
- sounds caused by the activities of people;
- smells caused by the activities of people; and
- number of people present in the social group to which a person belongs.

Managerial attributes include the:

- ownership and management arrangements for a site;
- set of regulations/rules/bylaws operating at a site;
- type of access to and within a recreation site;
- number and type of built structures present;
- presence or absence of onsite rule enforcers; and
- number and obtrusiveness of signs.

People perceive these attributes as *sights*, *sounds* and *smells*.

## ***Open Space***

Open space is any area of land and/or water on which no, or very few, built structures are present, and consequently, which has its surface open to the sky. The surface may be modified from its natural condition but is usually substantially unpaved. Open space could include forests, farming land, beaches, lakes, dams, deserts and urban parks on which no, or few, built structures are present.

Like many other landscape attributes, open space is not an absolute condition. It grades from totally open space (ie no built structures for hundreds of km<sup>2</sup>) to the edges of built-up urban areas - depending on the proportion of the area which is taken up by built structures. The boundary between open space and built areas may be indistinct. Other definitions of open space may be used in local government planning schemes or other land use planning documents.

Open space may have value for one, or more, of the following:

- outdoor recreation;
- sport;
- forestry;
- agricultural or pastoral production;
- nature conservation;
- maintenance of natural ecosystems and/or agricultural systems and the natural processes that sustain them;
- protection and/or management of areas that are significant for environmental, cultural heritage and/or natural resource management;
- management of water catchments;
- maintenance of cultural practices;
- tourism; and
- scenic quality and amenity.

## ***Recreation Opportunities***

Recreation opportunities are particular combinations of recreation activities (eg. swimming) in particular settings (eg in an Olympic pool, in a wild, natural and remote mountain stream, in the surf at a patrolled beach, on a remote coral reef). **Each combination of recreation activity and setting constitutes a different *recreation opportunity*.**

**Recreation opportunities (ie. specific combinations of recreation activities and settings) are the fundamental products of recreation services and the fundamental units of outdoor recreation planning and management.** Client/participant choice, marketing strategies, management inputs, equipment requirements, skill requirements and facility designs, risk management strategies, fitness

requirements, client/participant expectations, etc are all based on particular combinations of recreation activity and setting.

For example, walking in a suburban park is one type of recreation opportunity. Walking for several days across untracked deserts is a different recreation opportunity. Each combination of recreation activity and setting:

- requires different skills and equipment;
- requires a different setting;
- attracts different participants/clients with different expectations;
- provides a different recreation experience; and
- requires different management inputs to maintain quality, safety, sustainability and diversity.

It is important to note that individual people may have radically varying experiences from the same combination of recreation activity and setting. The concept of recreation opportunity does not attempt to predict or direct how particular individuals respond to particular combinations of recreation activity and setting.

The recreation opportunity concept is further explored on the following page by comparing the same recreation activity (in this case SCUBA diving) in three different recreation settings.

Diving on a natural coral reef presents an environment with a wide diversity of terrain, depth, current speed and direction, water temperature and coral/coralline algae and a diverse marine animal community that is an artefact of ecological processes without human intervention. Most, if not all, of these attributes are beyond the immediate control of humans and cannot be predicted with precision. SCUBA diving in a complex ecological community like a coral reef is one type of recreation opportunity.

Artificial reefs are different in form and character from naturally occurring reefs, especially immediately after placement of the structures (eg. sunken ships or old tyres) on which they are based. Consequently, they do not offer exactly the same type of SCUBA diving opportunity as does a naturally occurring coral reef. However, with time and uninterrupted ecological succession, they would approach the same setting as that offered on a natural coral reef.

It is important to recognise that the recreation settings can change and, as a consequence, so do the recreation opportunities that result.

A concrete swimming pool offers a third type of SCUBA diving opportunity that is quite different from the previous two. It lacks the diversity of terrain, depth, ecology, light conditions, substrate and marine animals that is present in the two settings described above. SCUBA divers may use the same equipment (wet suit, fins, face mask, weight belt, SCUBA tank, etc.) in a pool as they would on a coral reef, but the experience they derive is likely to be radically different.

Finally, it should be noted that built facilities **may** be part of recreation opportunities but the concept has a much broader meaning. **It is possible to have a recreation opportunity where there are no built facilities (ie. no buildings, no roads, no toilets, no electricity, no signs, etc).** In fact, some recreation opportunities demand an absence of built facilities.

## ***Recreation Planning***

Recreation planning involves collecting and analysing information on a range of topics including:

- recreation needs;
- existing and proposed recreation settings;
- existing and proposed recreation opportunities;
- existing and proposed recreation facilities;
- existing and proposed recreation programs;
- participation rates in recreation activities;
- the views of interested parties on recreation issues;
- demographic factors affecting any of the above;
- social, biophysical and managerial impacts of recreation.

This information is used to support decisions on the allocation of funds and other resources (eg. staff time, funds and land) to recreation services (including facilities, programs, recreation opportunities and promotional materials) and the development of policy on recreation matters.

## ***Outdoor Recreation Services***

Outdoor recreation services provided by state and/or local government agencies and/or the private sector and/or volunteer based non-government organisations include:

- planning (eg. local government recreation plans for specific areas; the recreation components of open space plans; management plans - which incorporate recreation sub-plans - for National Parks, Marine Parks, State Forests and other public land tenures; site management plans for private lands; etc.);
- basic custodial land management (eg. wildfire suppression, erosion control, weed control, feral animal control and fencing);
- resource management (eg. prescribed burning; management/mitigation of noise, water or air pollution; landscaping; fencing of key cultural heritage sites; management of water supply catchments; rehabilitation of damaged areas; maintenance of biological diversity; protection of rare and threatened species; litter/refuse management; etc);
- risk management (eg. relocation or destruction of dangerous animals; education about dangerous weather or sea conditions; temporary closure of dangerous areas; warning signs; removal of damaged trees, etc);
- design, construction and maintenance of recreation/visitor infrastructure (eg. design, construction, maintenance, repair, cleaning of vehicle roads, walking, bicycle and horse tracks; camping areas; lookouts; picnic areas; car parks; repair of vandalised structures; provision of water, toilets and sewerage; etc);
- enforcement (eg. patrols by enforcement staff, on-the-spot fines, confiscation of equipment, directions to leave an area or to stop doing a particular activity, etc);

- education and interpretation (eg. direction and educational signs, guided walks, guided drives, spotlighting, campfire talks, posters, information sheets, brochures, books, videos, maps, etc);
- outdoor recreation activity programs (eg. organised outdoor recreational walking, swimming instruction, training for participants and officials, etc);
- provision of safety supervision, first aid, and search and rescue (eg. Surf Life Saving, Coast Guard, pool life guards, State Emergency Service, etc);
- organising external suppliers/service providers (eg. food and beverage suppliers, cleaners, entertainers, first aid, etc);
- marketing (eg. promotional events and advertising signs, brochures, books, videos, maps, etc); and
- funding, technical advice, policy advice, organisational development advice and other forms of support to non-government outdoor recreation interest groups.

Some of the activities listed above (eg wildfire suppression) are not usually classified as recreation services. However, all services that might influence the quality, quantity, diversity, safety or sustainability of outdoor recreation opportunities are considered to be relevant.

### ***Ecologically Sustainable Outdoor Recreation***

Ecologically sustainable outdoor recreation is the use of areas/settings for outdoor recreation purposes both:

- within their capacity to sustain natural processes; and
- so that the benefit of the use to the present generation does not diminish the potential to meet the needs and aspirations of future generations.

### ***Nature-based Recreation***

Nature-based recreation is a subset of outdoor recreation. Those outdoor recreation activities that meet the criteria listed below are nature-based. However, **some outdoor recreation activities are not nature-based**. Those outdoor recreation activities that do not satisfy these criteria may still be legitimate and they still require a planning and management response.

Nature-based recreation activities are those that meet the following criteria:

1. Appreciation of nature is the key motivational factor; **and**
2. The activities do not require substantial modification of the natural environment; **and**
3. Natural environments are critical to the participation and satisfaction of the participants; **and**
4. The activities occur in settings where nature and natural processes dominate; **and**
5. The activities occur in natural settings where nature and natural processes are not controllable by participants.

Some components of this definition may require further explanation. "Natural environments" refers to the suite of characteristics which are determined by nature (including climate, terrain, substrate, endemic vegetation, soundscape, the endemic animal community, animal behaviour and water quality and hydrology) of settings or locations.

However, naturalness is not an absolute condition. The naturalness of a particular location can vary over time. Naturalness can be expressed on a range from completely wild-natural-remote to completely developed-built-modified, depending on the proportion of natural and human modified elements in the landscape.

**Figure 1: Range of naturalness of outdoor recreation settings.**

Wild natural remote				Developed built modified
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*Examples:*

<i>Antarctica</i>	<i>Extensive grazing area</i>	<i>Suburban park</i>	<i>Shopping centre</i>
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As a result, settings can range from very, very natural (eg. most of Antarctica) through partly natural (eg. a rural landscape with some remnant native vegetation left along creeks and ridges) to completely modified (eg. a large modern shopping centre with a closed roof, Muzak, artificial lighting, air conditioning and large crowds). It should be understood that this is a range of *naturalness* rather than *quality*. The more natural settings are not inherently better than the less natural settings. However, they are **different**.

**Separating naturalness from quality is important. This is because it is equally as possible to have a high quality rural or highly developed-urban setting for an outdoor recreation activity as it is to have a high quality wild-natural-remote setting for an outdoor recreation activity. Similarly, it is equally as possible to have a poor quality wild-natural-remote setting for an outdoor recreation activity as it is to have a poor quality rural or highly developed-urban setting for an outdoor recreation activity.**

**Outdoor recreation planning and management systems must be able to produce distinct products (ie combinations of activities and settings) that reflect the diversity of demand and the attributes of the resource. "Consumers" (in this case - participants) may then choose the combination of activity and setting that best meets their needs (provided that they have access to appropriate information to support their decision).**

**After determining what type of activity-setting combination a particular activity-setting is, assessing and/or managing the quality of the activity-setting can be considered. Because of the potential variation in naturalness, each setting where an outdoor recreation activity occurs may be different from other settings where the same activity occurs. Assessments of activity-setting quality can be based on relevant criteria that reflect setting naturalness. Outdoor recreation settings**

***that vary in naturalness are different products/objects/entities and each must be managed differently to ensure setting quality.***

"Occurs in" means that any nature-based recreation *activity* requires predominantly natural settings/locations before they can be undertaken. Natural settings are characterised by a combination of biophysical attributes - most of which are neither significantly altered from their natural condition by recent human activity nor controlled by current human activity.

"Dependent upon" means that a particular recreation *experience* can only be attained in settings or locations which are characterised by a combination of biophysical attributes which are neither significantly altered by recent human activity nor controlled by current human activity. In effect, nature-based recreation is dependent upon the existence and availability of recreation settings that are predominantly natural.

For example, to play golf successfully, a golf course is necessary. To build and maintain a golf course, it is necessary to modify the natural environment. With enough time, money and effort, golf courses can be built and maintained almost anywhere - in deserts, on coastal sand dunes, on high plateaux, on coral atolls, etc.

Well maintained and constructed golf courses do not occur naturally. Most of the hazards of playing golf are designed into the courses and can, with high levels of precision, be predicted in advance. In effect, the recreation situation is "controlled" by course design, the rules of the game and any club rules. **Therefore, golf is not nature-based recreation.**

However, walking is nature-based recreation **if** it is undertaken in a setting:

- where the landscape is predominantly natural; **and**
- where the participant cannot control a wide range of natural elements of the setting (eg weather, terrain, tidal fluctuation); **and**
- where the focus of the activity, for most of the time, is for the participant to appreciate the uncontrolled natural elements of the environment.

Walking in this type of setting is usually called bushwalking. To bushwalk successfully, a reasonable area of bushland and an operable leg (or leg equivalent) or two is needed. Relatively undisturbed native forests, woodlands, heaths, beach dune systems, deserts and grasslands - which are essentially natural systems and which cannot be manufactured with their natural diversity of terrain, species and community structure - are generally accepted as "bush".

In addition, there is a degree of *unpredictability* in bushwalking because many of the components of natural bushland (eg. terrain, animal behaviour, presence or absence of various species, weather, climate, etc) cannot be controlled or precisely predicted by humans. Unpredicted events and discoveries to which the bushwalker must react or respond are part of the intrinsic value of the experience of bushwalking.

It is worth noting that particular outdoor recreation activities are not *inherently* nature-based. For example, white water kayaking is often cited as an example of nature-based recreation. However, kayaking in an artificial white water course in which the obstacles are contrived and movable, the water volume is controlled and the focus is on speed and competition is *not* nature-based recreation.

On the other hand, travelling on a wild, natural river where kayaking is used as the means of transport and the focus is on experiencing the natural environment *can* be nature-based recreation.

*The combination of 3 factors – recreation activity, recreator’s intent and recreation setting determines whether or not a given recreation activity is nature-based. A real difference exists between white water kayaking which is nature-based and white water kayaking which is not nature-based - despite the use of the same equipment and skills. The difference results from the recreator’s intent and from the degree of naturalness of the recreation setting.*

It is also worth noting that, under this definition built facilities or structures (eg. resorts, huts, shelter sheds, paved tracks, roads, etc.) cannot be nature-based - even if they are painted green. Infrastructure merely supports the activities. It is not the focus of the activities.

### **Median**

The median is the number in the middle of a set of numbers; that is, half the number have values greater than the median and half have values that are less. If there is an even number of numbers in the set, then we calculate the average of the two numbers in the middle. See the second example following.

#### *Examples*

MEDIAN(1,2,3,4,5) equals 3

MEDIAN(1,2,3,4,5,6) equals 3.5, the average of 3 and 4

### **Mean (Average)**

Returns the average (arithmetic mean) of a series of arguments. The average is calculated by summing arguments and then dividing the sum by the number of arguments.



### *Examples*

Sum of argument 1,3,5,10 = 19

Number of arguments = 4

Average => 19 divided by 4 = 4.75

### ***Multiple Regression***

Uses the “least squares” method to calculate a straight line that best fits your data and returns an array that describes the line. This tool can be used to analyse how a single dependent variable is affected by the values of one or more independent variables. The results can then be used to predict the response to a new data element.

### ***z-Test: Two-Samples For Means***

Performs a two-sample z-test for means with known variances. This tool is used to test hypotheses about the difference between two population means.

## **APPENDIX 7 References**

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