

*Connell Wagner Pty Ltd
ABN 54 005 139 873
433 Boundary Street
Spring Hill
Queensland 4004 Australia*

*Telephone: +61 7 3246 1000
Facsimile: +61 7 3246 1001
Email: cwbne@conwag.com
www.conwag.com*

***Lake Ainsworth Crown Reserve Master
Plan
Final Report
Ballina Shire Council***

*14 October 2005
Reference 966600mi
Revision 7*

Document Control

Connell Wagner

Document ID: P:\WP\966600M\REPORTS\FINAL REPORT REV7.DOC

Rev No	Date	Revision Details	Typist	Author	Verifier	Approver
0	2 September 2005	Preliminary Draft Report (Work in Progress)	VNH	TMW		
1	6 September 2005	Preliminary Draft Report	VNH	TMW		
2	19 September 2005	Final Draft Report	VNH	TMW		
3	22 September 2005	Final Draft Report	VNH	TMW		
4	26 September 2005	Final Draft Report	VNH	TMW		
5	1 October 2005	Final Draft Report	VNH	TMW		
6	11 October 2005	Final Draft Report	VNH	TMW		
7	14 October 2005	Final Report	VNH	TMW	LJA	LJA

A person using Connell Wagner documents or data accepts the risk of:

- a) Using the documents or data in electronic form without requesting and checking them for accuracy against the original hard copy version; and
- b) Using the documents or data for any purpose not agreed to in writing by Connell Wagner.

Table of Contents

<i>Section</i>		<i>Page</i>
1	<i>Introduction</i>	1
1.1	Background	1
1.2	Site Description	1
1.3	Geographic Scope of Study	2
1.4	Challenges and Objectives	2
1.5	Usage of Lake Ainsworth	3
1.6	Master Plan Process	5
2	<i>Consultation</i>	6
2.1	Consultation and Participation Overview	6
2.2	Consultation Plan	6
2.3	Stakeholder Identification	6
2.4	Workshop 1	7
2.5	Workshop 2	10
2.6	Newsletters	14
2.7	Newspaper Media Advertisements/Media Statements	14
2.8	Public Displays	15
2.9	Project Dedicated Web Page	15
2.10	Other Meetings and Discussions	15
2.11	Formal Submissions	15
2.12	Consultation Issues and Concerns - Summary	16
3	<i>Master Planning Framework</i>	17
3.1	Introduction	17
3.2	Opportunities and Constraints Map	17
3.3	Rationale	18
3.4	Planning Objectives	19
3.5	Water Quality	19
3.6	Traffic and Parking	20
4	<i>Planning Structure</i>	26
4.1	Master Plan Structure	26
4.2	Master Plan Documents	26
4.3	Traffic and Parking Context	26
5	<i>Eastern Foreshore Dune Precinct</i>	28
5.1	Current Situation	28
5.2	Master Planning Initiatives	30
5.3	Water Quality Initiatives	31
5.4	Traffic and Parking Initiatives	31
6	<i>Southern Foreshore Community Park Precinct</i>	33
6.1	Current Situation	33
6.2	Master Planning Initiatives	34
6.3	Water Quality Initiatives	35
6.4	Traffic and Parking Initiatives	35
7	<i>Caravan Park Precinct</i>	39
7.1	Current Situation	39
7.2	Master Planning Initiatives	41
7.3	Water Quality Initiatives	42
7.4	Traffic and Parking Initiatives	43

7.5	Financial Analysis of Future Situation with Master Plan Road Access Options	45
8	Coastal Heath Precinct	48
8.1	Current Situation	48
8.2	Master Planning Initiatives	48
8.3	Water Quality Initiatives	50
8.4	Traffic and Parking Initiatives	50
9	Policy and Planning Conformity	51
9.1	Policy and Planning Context	51
9.2	Management Plan Policy Alignment	51
9.3	Management Plan's Actions	53
9.4	Conclusion	57

Appendix A

Workshop 1

Appendix B

Workshop 2

Appendix C

Newsletters

Appendix D

Media Documents

Appendix E

Internet Documents

1 Introduction

1.1 Background

The project team of Connell Wagner and HASSELL has prepared the Lake Ainsworth Crown Reserve Master Plan and the following study report. The Master Plan is a guide for planning action only and is not intended to provide the detail commonly associated with the design phase work.

In 2002 Ballina Shire Council ("Council") adopted the Lake Ainsworth Management Plan ("Management Plan"). It identified a number of key issues relating to Lake Ainsworth as well as recommending a number of strategies and associated actions that would protect and, where possible, improve the lake environment and its surrounds. However a number of the strategies identified in the Management Plan required more detailed planning and investigation.

At the same time, Council expressed an interest to improve the Lake Ainsworth Caravan Park. The Lake Ainsworth Caravan Park Redevelopment Strategy was prepared and placed on public display in April 2004. The proposed strategy attracted a high level of interest from the community and raised a number of specific issues relating to car parking, traffic congestion, open space and the possibility of over-development of the caravan park.

Council has also recently completed a Plan of Management for the Ballina Coastal Reserve system that relates to the Lake Ainsworth Crown Reserve Master Plan study area.

The Lake Ainsworth Crown Reserve Master Plan which is the subject of this report is part of the continuation of planning and strategy development for Lake Ainsworth. The study has built on existing information and action, and has also considered the issues raised by the community to further shape the future of the lake and its surrounds.

1.2 Site Description

Lake Ainsworth is a major freshwater lake at the northern end of Lennox Head. The catchment for Lake Ainsworth falls within the responsibility of Ballina Shire Council. The lake has an area of 12.4 hectares and is covered by two Crown Reserves namely:

- Crown Reserve 82783 for Public Recreation. This Reserve was notified on 9 September 1960 and is described as Lot 62 DP 755725, Lots 7001 and 7002 DP 1052251 and Lot 7006 DP 1062252 Parish Newrybar, County Rous comprising area of 15.66 hectares. This Reserve accounts for the southern part of Lake Ainsworth including the Lake Ainsworth Caravan Park and other recreational land uses.
- Crown Reserve 84109 for National Fitness and Physical Education. This Reserve was notified on 14 December 1962 and is described as Lot 140 DP 755725 Parish Newrybar, County Rous. The Reserve accounts for the northern portion of the lake including Lake Ainsworth Sport and Recreation Centre ("Sport and Recreation Centre") as it is locally known and Camp Drewe.

The lake has recreational, environmental, economic, educational and cultural heritage attributes that are significant in the local and regional setting including:

- The lake is an important natural area in an otherwise urban environment;
- The lake is a popular active and passive recreational resource;
- There are a number of local businesses that rely directly and indirectly on the lake area for their income;
- The lake is valued as an important educational resource for the region;
- The lake is one of the largest dunal lakes on the north coast and the lake and environs contain a remarkable diversity of native biota; and
- The lake is a significant tourist destination on the North Coast of New South Wales.

These attributes are very relevant to the development of the Master Plan and have been considered in preparing the plan.

1.3 Geographic Scope of Study

In early 2005 Council commissioned Connell Wagner and HASSELL to undertake the master planning process for the Lake Ainsworth Crown Reserve (Reserve No. 82783). This Crown Reserve covers the southern part of Lake Ainsworth to the Ross Street road reserve. The Lake Ainsworth Caravan Park currently operates within this Crown Reserve. Council is the Trustee for the Lake Ainsworth Crown Reserve.



Map 1: Lake Ainsworth Crown Reserve

The Crown Reserve (Reserve No. 84109) that covers the northern section of the lake and the Lake Ainsworth Sport and Recreation Centre is not included in the scope of the master planning process for the reason that this area is not under the administration of Ballina Shire Council. There is no Trust established to manage this Reserve. The Sport and Recreation Centre is administered by the New South Wales Department of Tourism, Sport and Recreation.

1.4 Challenges and Objectives

The Master Plan has addressed several challenges that have been identified in previous work and, in particular, the Management Plan.

The key challenges relating to Lake Ainsworth include:

- The availability of community facilities, public open space and recreational facilities to meet the growing needs of Lennox Head and the wider community, including visitors;
- The health of the environment and the lake;
- The capacity of infrastructure to meet the needs of the growing population; and
- The maintenance and enhancement of the coastal dune system.

While it is acknowledged that most of the above key challenges transcend the Lake Ainsworth Crown Reserve and encompass the broader catchment and/or surrounding land uses, Council specified the following five matters, as a minimum, for the Master Plan to address:

- “A traffic and parking plan for the road network in the lake precinct. This plan will identify preferred parking and traffic solutions for the precinct. The traffic plan must also address the impact of any proposals on adjoining road systems;
- An assessment as to the optimum mixture of land to be allocated as a caravan park and open space and the nature and use of the open space;
- Infrastructure such as cycleways and playground equipment;
- Preferred caravan park boundaries for Lake Ainsworth Caravan Park. This is to include consideration of the possible long term closure of the caravan park. Any decision on the park boundaries must also consider the financial viability of the caravan park; and
- Principles, such as water sensitive urban design, that are to be applied in the implementation of future improvements to the Lake Ainsworth Caravan Park.”

1.5 Usage of Lake Ainsworth

The lake and its immediate surrounds provides for a large range of sporting and recreational activities including swimming, watersports, picnicking, jogging, walking, cycling, sunbathing and bird watching.



Photo 1: Lake Ainsworth Water Activities

The Management Plan identified the following data from secondary sources that is now rather dated but nevertheless provides an indication of visitation and use of the lake:

- The lake and its foreshore’s social carrying capacity for swimming and other recreational activity is estimated to be about 560 people (Jones 1988) at any one time while at peak times the numbers reach double this figure with issues of overcrowding and other associated problems (Management Plan 2002). The social carrying capacity estimated by Jones is not synonymous with the environmental carrying capacity of the lake for which there is no known data. It should also be noted that this estimate focussed on the activity in the lake and on the immediate foreshore, generally according to the area of public space presently available.
- The number of cars that visited to the lake in 1996 was estimated by Council to be 400 cars per day while in the peak holiday periods there were significant increases to approximately 1,000 cars per day (Management Plan 2002).

The Lake Ainsworth Processes Study also identified additional recreation and traffic data that impacted on the lake, namely:

- during March and April 1996 the average number of vehicle visitations on a weekday, Saturday and Sunday were 397 vehicles, 566 vehicles and 835 vehicles respectively;
- the estimated number of visitors on an average Sunday in the same March and April 1996 period was over 3,100 persons with up to 1,500 persons using the lake at any one time;

- Lake Ainsworth caravan park accommodates approximately 1,200 persons;
- overcrowding of the southern and eastern sides of the lake during peak period,; and
- traffic congestion and inadequate parking during peak periods.

The caravan park can generally accommodate around 1,200 people with estimated numbers up to 2,000 being recorded in the peak Christmas holiday period. While outside the scope of the study, the Sport and Recreation Centre also generates visitations all year round and can accommodate approximately 210 people at any one time.

In the absence of any more timely and recent traffic data, it is assumed that the cars visiting the area per day would still be in the order of 400 to 500 per weekday and 600 to 900 on weekend days outside peak holiday periods and monthly market day. With the increasing popularity of Lennox Head over the past decade as a tourist destination, it is suggested that the peak holiday periods of Christmas/New Year and Easter would now be double the 1,000 cars in 1996. These traffic numbers do not necessarily translate into vehicle occupants physically using the lake and its recreational surrounds. Not all these vehicles would stop and park because of car parking availability and related congestion in the peak. This estimate would exclude caravan park visitors (allowed one vehicle per site) and the overflow vehicles that occupy parking spots permanently along Ross St and any other available spaces during the tourist peaks.



Photo 2: Parking adjacent to Lake Ainsworth, 3 January 2005

The above social carrying capacity data, caravan park occupancy and traffic estimates should be carefully considered when identifying the possible consequential impacts on the lake. The lake's social carrying capacity estimate of 560 persons relates to the use of the lake at any one point in time during the day and generally usage of the lake whether it be from local residents, caravan park users or other visitors is spread over the day. Overcrowding in terms of usage of the lake and its surrounds would characterise the peak holiday periods and to a lesser extent on summer weekends when the caravan park and visitor demand is at its highest.

The carrying capacity of the lake and surrounds to support the recreational activities is a key issue of importance to the master planning process. The issue is difficult to scope because of the visitations to the Surf Club's patrolled beach, the caravan park, the sport and recreational camps on the western and northern eastern side of the lake and the monthly markets. Seasonality and major events such as the monthly markets also significantly impact on visitations.

Based on the consideration of available data and community issues, it was deemed appropriate that the Master Plan maintains and provides for a similar level of lake usage that is occurring now in 2005 subject to the implementation of the range of measures as set out in the Master Plan. In essence, the Master Plan seeks to maintain the status quo in terms of the number of persons accessing the lake,

but establishes an improved use of space and management regime designed to balance the environmental, recreational and economic values of the Lake Ainsworth area. With respect to this approach, it is important to note that there will still be periods of particularly high lake use during the holiday peak periods.

1.6 Master Plan Process

The master planning process has recognised the need to balance the interests of both the community (including State Government stakeholders) and Council in its role as Trustee for the Crown Reserve by engaging in consultation throughout the master planning process.

Community and stakeholder consultation has been a prominent feature of the master planning process. Community and stakeholders have been engaged in formalised workshops and by media advertisements, newsletter and public display at key stages of the master planning process.

Two workshops have been held with key stakeholders. The first workshop was conducted prior to drafting the first version of the plan to better understand the range of stakeholders' issues and views regarding the plan's content. The second workshop was held following the drafting of the Master Plan to gauge stakeholders' acceptance, or otherwise, of planning initiatives. The Master Plan was also presented to the general community and elected Councillors prior to the development of the Master Plan that is the subject of this report.

The following figure identifies the key stages in the preparation of the Master Plan.



2 Consultation

2.1 Consultation and Participation Overview

A critical part of the process to prepare a Master Plan for the Lake Ainsworth Crown Reserve was the consultation with the community and government agencies. Consultation included the development of a consultation plan, two workshops with key stakeholders, preparation and dissemination of a newsletter, provision of a web page with detailed information as well as a public display and consulting with the wider community on the initial Master Plan.

The following section provides an overview of the consultation process and its key outcomes.

2.2 Consultation Plan

The development of a consultation plan was seen as an integral part to the Lake Ainsworth Crown Reserve Master Plan Study. The consultation plan contributed significantly to the outcomes of the project by encouraging a wide range of stakeholders and community members to participate in the master planning process as well as keeping the community informed of the project's progress.

The consultation plan sought to fulfil the following objectives:

- Assist in the early identification with Council of key stakeholders, potential issues and strategies for managing these issues;
- Inform and involve the community and key stakeholders throughout all stages of the project using awareness raising activities, information sessions and workshops;
- Ensure issues particularly relating to social, economic and physical attributes of the Crown Reserve raised by the community and stakeholders are considered; and
- Provide mechanisms for community and stakeholder views to be incorporated into the master planning process.

The approach that was implemented was based on achieving key milestones and a number of activities were undertaken concurrently to ensure timeframes were met and appropriate linkages between activities were developed. **Appendices A to E** provide details of workshop agendas, attendees, issues raised at workshops, newsletters and other consultation resources and documents that were employed during the consultation timeframe.

2.3 Stakeholder Identification

A stakeholder list was compiled at the commencement of the Master Plan study and consisted of some 19 stakeholder contacts. A review and refinement process was undertaken to ensure the focus would encourage greater participation from a wider cross section of groups.

The wider cross section of groups consisted of:

- local and statutory government authorities;
- business and industry;
- residents / property owners;
- caravan park users;
- community associations;
- environmental groups; and
- sporting / recreational groups.

Some 34 invitations were sent to representatives of key stakeholder groups to participate in the workshop. Invitations were also sent to elected Councillors providing information about the Master Plan process and encouraging them to come along and observe stakeholder participation at the workshop.

2.4 Workshop 1

2.4.1 Aims

The first workshop was held at the Sport and Recreation Centre at Lennox Head on Thursday 5 May 2005. The overall aims of Workshop 1 were:

- To provide an opportunity for a wide range of stakeholders to provide input into the development of the Master Plan;
- To identify the concerns and issues facing Lake Ainsworth Crown Reserve;
- To understand the type and range of options and proposals that the Master Plan should consider;
- To present stakeholders with information about the Master Planning study and process to increase awareness and understanding; and
- Provide an opportunity for all key stakeholders to meet with the study team face-to-face to discuss and debate issues relating to the Lake Ainsworth Crown Reserve.

A copy of the Workshop Agenda is provided at **Appendix A1**. The total number of attendees at the workshop was 29. Details of attendees who signed the attendance sheet are provided in **Appendix A2**.

2.4.2 Workshop 1 Issues

The Department of Lands provided a short address regarding Crown Reserve tenure, geographic coverage and land usage that stimulated question and discussion from participants. Questions raised by the participants sought clarification on the study area and the lands that it will include along with understanding the extent of the reserve lands and their property boundaries, relating to Lake Ainsworth Crown Reserve, the coastal reserve and the road reserve. The questions were generally directed to and answered by the Department of Lands with input from the Study Team.

Participants suggested that the current scope of the Master Plan study area was limiting and needed to be more inclusive of and better integrated with the surrounding reserve lands. There was interest from participants that the Master Plan study area should include the surrounding reserve lands particularly to the north of Lake Ainsworth.

Council later considered the issue of extending the geographic scope of the Master Plan to include the northern Sport and Recreation Centre Crown Reserve No.84109. Council subsequently confirmed that the study area for the master planning process would be confined to the Lake Ainsworth Crown Reserve 82783 on the basis that this area is managed by Council as the Reserve Trustee. The matter of the geographic scope of the study area is also addressed in Section 1.3.

Workshop 1 also consisted of discussions between participants to identify key issues concerning the Lake Ainsworth Crown Reserve. Where there was no common ground between participants in the workshop and/or a difference of opinion within the small group, the issue was documented and the disagreement recorded. All groups reported back to the plenary with their lists and highlighted any areas of agreement and disagreement. A summation of the small group responses was listed and documented openly to the full workshop group.

The following table highlights the range of issues raised and the possible solutions that were put forward by the workshop participants for consideration in the master planning process. These issues have been consolidated for reporting purposes. A full list of issues by each assembled small group at the workshop is provided in **Appendix A3**.

Table 2.1 Workshop 1: Summary of Issues Raised and Possible Solutions

No.	Issues	Main Concerns	Possible Master Planning Options / Solutions	Differences of Opinion
1.	Water Quality of Lake Ainsworth	Aeration system	Extend aeration system	
		Storm water, run off and drainage	Improve road and drainage	
			Filtration of stormwater	
			Upgrade water taps feed into storm water drainage system	
		Removal of aquatic weeds	Vegetation - removal of weeds - add reeds	
		Impact of visitors on the lake	Provision of showers	
			Banning on sunscreen	
			Provision of facilities to protect the Lake and the beach access area	
Monitor water quality	Progress report on the Plan of Management			
2.	Roads	Road around the Lake (east)	Realignment and parking between the road and the lake or support for no realignment but preference to close the Eastern Road	Preference to close the Eastern Road, but divided opinion on new alternative access options to link to Western Rd and on to Sport and Recreation Centre and beach.
		Road around the Lake (west)	Road to be closed between the southern end of the lake and caravan park and relocate access to the western side of the caravan park	Difference of opinion regarding new road access alignment to Western Road
		Safety of roads	Provisions to protect pedestrians and avoid conflicts with vehicles	
		Parking	Provision of a passenger drop off point near the Lakeside	
		4 WD access	Provide 4 WD access to the north of the Sport and Recreation Centre with access via the Western Road	
		Better accessibility to Camp Drewe	Provision of access to Camp Drewe via the Ballina Byron Road and with the closure of all other roads	

No.	Issues	Main Concerns	Possible Master Planning Options / Solutions	Differences of Opinion
3.	Caravan Park Area	Location and current / future use of the caravan park	Move caravan park to the west	Difference of opinion on the importance of the caravan park to the local economy versus the acknowledged perception of environmental damage caused by the number of people visiting the caravan park
			Increase the open space	
			Do not increase the current size of the caravan park	
			Do not consider cabins next to the foreshore and do not consider five star cabin accommodation	
			Affordable camping for all with no permanent residents in caravan park	
4.	Markets		Relocate the markets to Williams Reserve or to the Viillage Centre.	Difference of opinion on leaving markets in the current location or for relocation to the Main Street (using Park Lane as a detour) or Williams Reserve
5.	Sustainability	Caravan Park and its Sustainability	Phase out the Caravan Park if it is not sustainable	
6.	Public Space / Open Space Strategy	Equitable Access	Provision of a boardwalk to cater for both able and disabled access	
			Develop strategy for Lennox Head community	
		Return eastern portion of land to the caravan park	Expand the open space	
7.	Information	Education	Provision of signage to educate people about the lake	
8.	Integrated Management		Focus on the ecological health of the lake and sustainable assessment	
9.	Ocean Breakthrough		Closure of the current 4 WD access to beach	
			Protection of the dunal vegetation	
			Master Plan should integrate with the future strategy of the Coastline Strategic Plan	

No.	Issues	Main Concerns	Possible Master Planning Options / Solutions	Differences of Opinion
10.	Flooding		Provision of new facilities should be designed to address water levels	
11.	Facilities	Foreshore	Provision of new facilities should focus on passive activity	
		Underground Power	Provision of underground power	
12.	Vegetation / Fauna and Flora		Support existing dune care	
			Support for funding and resources	
13.	Parking		Caravan park should provide internal parking	
14.	Funding		Appropriation of funds for environment works	
			Explore other money making eco-tourism ventures	
15.	Risk Management		Structured planning with focus on elements such as liability, financial issues and the cost of doing nothing.	

2.5 Workshop 2

2.5.1 Aims

The second workshop was held at the Sport and Recreation Centre at Lennox Head on Friday 22 July 2005 and the public display of the initial Master Plan was held at the Lennox Head Village Centre between 9:00 am and 1:00 pm on Saturday 23 July 2005.

The overall aims of Workshop 2 were to:

- Present stakeholders with information about the content of the first draft of the Master Plan ;
- Provide an opportunity for stakeholders to review the first draft of the Master Plan, collectively and individually discuss its content, and provide feedback to the Study Team; and
- Gauge support or otherwise for the initiatives put forward in the first draft of the Master Plan.

The Workshop 2 agenda is provided in **Appendix B1**.

There were 22 people who signed the attendance sheet at the workshop, but there were additional stakeholders present at the workshop. See **Appendix B2** for list of Workshop 2 attendees who signed the attendance sheet.

Participants were asked to direct questions and general discussion at the end of each of the 4 key precinct areas presented by the study team. All comments were recorded in front of the workshop participants and were documented openly to the group.

2.5.2 Workshop 2 Issues

Similarly to Workshop 1, questions were once again raised by the participants seeking clarification on the study area and the boundaries and ownership of lands that it includes. The

Study Team along with Ballina Shire Council advised that the Master Plan study area is the Crown Reserve parcel of land with Council as Trustee. General consensus from stakeholders was that the study area should include the surrounding reserve lands currently held by the State Government and Ballina Shire Council. Participants believed that the current scope of the Master Plan study area was limiting and needed to be more inclusive of and better integrated with the surrounding reserve lands (see also section 1.3).

The following Table 2.2 highlights the issues and possible solutions raised in Workshop 2 to be considered in the development of the Master Plan.

Table 2.2 Workshop 2: Summary of Participants' Comments

No.	Comments/Issues	Main Concerns	Possible Master Planning Options / Solutions	Differences of Opinion
Eastern Foreshore Dune Precinct				
1.	Access	Disabled access and distance to walk from car parking areas to lake and recreational facilities.	Support for shared path (cycle/pedestrian) Support for emergency vehicle/limited vehicle access and ensure these organisations are consulted (eg Emergency services, Waste Removal and all other service providers) particularly regarding design.	
2.	Boardwalk	Safety – concern regarding potential for diving into the lake from the boardwalk. Height of boardwalk and management of key activity areas (eg hardstand/platform). Conflicts with wear and tear of vegetation in high use areas.	No need for too many sheltered areas as there are plenty of shade trees but over use will cause erosion (eg exposure of the tree roots).	
3.	Storm Water Management	Impacts of water run off from roads and caravan park on the health of the lake. Treatment measures are dependent on the land area/catchment and the level of detailed design.		
4.	Road	Understanding of the connection between roads and the lake's Sustainability (eg vehicle use/access and impacts). Concern access to Sport and Recreation Centre will be impeded. Safety of children. Location of passive recreation for the elderly is too far away (eg to park and walk).	Support for vehicle traffic and access monitoring.	

No.	Comments/Issues	Main Concerns	Possible Master Planning Options / Solutions	Differences of Opinion
Southern Foreshore Community Park Precinct				
5.	Caravan Park	<p>Fencing to be provided and boundary of caravan park to be clarified.</p> <p>Internal and external boundaries of the caravan park.</p> <p>Access point/ "in and out" points of caravan park.</p> <p>Master Plan to include a 'footprint'.</p> <p>Need to identify caravan park operation/design (note this is Ballina Shire Council's agenda over next 5 years).</p> <p>Pine trees to remain as an entry statement.</p>		<p>Fencing of caravan park considered by some not to be necessary.</p> <p>Differing opinions on Pine trees – some believe trees to be a nuisance.</p>
6.	Car parking	<p>Ross Street parking – there is no room on street (width restrictions).</p> <p>Example – Byron Bay Clarks Beach.</p> <p>Not adequately addressed.</p> <p>Disability parking should be closer to facilities and the lake.</p>	<p>Consider measures concerning parking issues particularly in peak times.</p> <p>Consider Ballina Shire Council contribute land outside the study area to meet parking needs.</p>	<p>Mixed group feeling on provision of land for car parking particular with focus on catering for peak and/or non peak times.</p>
7.	Erosion/ Vegetation Management	<p>Key defined areas including areas on the lake verge.</p> <p>Equitable access to key areas to be formalised.</p>		
8.	Accessibility to the Lake	<p>Boating on the lake will be impeded (eg access points on lake and moorings in proposed vegetated areas of Master Plan).</p> <p>Parking access to the foreshore of the lake (note: sail craft and paddle skis currently enter off Eastern Rd and Southern Rd).</p> <p>No patrols of lake – a safety issue particularly with conflicts in designated areas.</p>	<p>Consider the potential for sail craft access in other precincts.</p>	

No.	Comments/Issues	Main Concerns	Possible Master Planning Options / Solutions	Differences of Opinion
Caravan Park Precinct				
9.	Road	<p>Legal road access in study area clarified – however need to ensure BSC and the State Government are communicating with each other on these issues.</p> <p>Why was the western area considered– it is Crown Reserve and has fire breaks. Why not consider a number options to the north of the site.</p> <p>Camp Drewe impacts on road and safety.</p> <p>Impacts on fauna and flora (western access road may mean fauna tolls).</p>	<p>Further consideration of conflicts.</p> <p>Consider all other roads particularly in Lennox Head Village.</p> <p>Consideration of the Lake Processes Study (ensuring lands are protected).</p> <p>Consider treatment of water to be located on west side where there is more room (eg swales, sediment removal).</p> <p>Other Considerations:</p> <p>Western Road alternative to consider discussions with Government and Jali Land owners as well as environment issues.</p> <p>Ensure that the problem of the road moving to the west is not just relocating the problem to an alternative area.</p> <p>Consider the previous road reserve access was stopped in order to regenerate the surrounding lands on the western side.</p> <p>Consider options to the north and/or west of the study area (referred to as east west connector road option).</p> <p>Consider the internal road network of the study area (near the caravan park) and reduce the road fronting the lake and relocate it further south (referred to as possible Southern Rd realignment option).</p>	<p>Mixed opinions and responses for Option 1 and Option 2 with support or otherwise being generally dependent on whether a caravan park user or a neighbouring local resident.</p> <p>Generally the attendees as a group supported the investigation of the east west connector road option connecting the Ballina Byron Rd to the Western Rd.</p>
10.	Safety	Conflicts with children and vehicles.		

No.	Comments/Issues	Main Concerns	Possible Master Planning Options / Solutions	Differences of Opinion
Coastal Heath Precinct				
11.	Protection of Areas	Protection of the coast precincts and future planning of the 'Great Northern Cycle Way' – to be proposed to be located close to the foreshore/coastline. Damage to trails (ensure they will continue to recover).	Support for a "managed" walking trail – ensure more consultation with Sport and Recreation Centre and Management. Ensure Lake Ainsworth Management Plan is adhered to by focussing on location of reed beds to the western side of the lake (note small patches of reeds are surviving in areas). Also focus on the removal of weeds and replanting of endemic species to the lake.	
12.	Access	Boat Access. Vehicle/User Access.	Support for better designated access points. Support for a drop off zone.	
13.	Water Quality	Ensure water quality features/treatments and their designs are considered carefully.	Support for further consideration of such treatments as swales, pits, wetlands.	

2.6 Newsletters

One newsletter has been prepared and distributed during the Master Plan process. A second newsletter will form part of the public exhibition process for the Master Plan. The newsletters are the primary source of information about the study and its progress.

The first newsletter provided information about the Master Plan, how to communicate with the study team and provide comments as well as how to keep up to date on the Master Plan's progress. Copies were distributed to identified stakeholders, adjoining residential property owners and long term caravan park users. In addition copies of the newsletter were also made available at key activity centres such as the local library, local businesses and Council in Ballina as well as being available to be downloaded from Council's website (refer to **Appendix C1** for a copy of Newsletter 1).

The second newsletter will be distributed to stakeholders and the wider community as part of the next stage of "formal consultation" on the Master Plan.

2.7 Newspaper Media Advertisements/Media Statements

Newspaper media advertisements were placed in the Northern Star and the Ballina Shire Advocate on five occasions to inform the wider community about the Master Plan and its process, a public display and how to provide comments and keep up to date on the study's progress.

The first newspaper advertisements were released and placed with the Ballina Shire Advocate on Thursday 21 May 2005 and also the Northern Star on Saturday 26 May 2005. These advertisements advised the commencement of the Master Plan for Lake Ainsworth Crown Reserve, the upcoming activities to occur in the coming months as well as contact details of the Study Team. These advertisements coincided with the distribution of the first newsletter.

The second series of newspaper advertisements were released prior to the public display on Thursday 14 July, Saturday 16 July and Thursday 21 July 2005, informing the community of the date, time and venue of the staffed public display. Refer to **Appendix D1** for a copy of the newspaper advertisements.

Monitoring of the media was also carried out and articles were published in the Lennox Wave in June 2005, September 2005 and October 2005, and the Ballina Shire Advocate on 28 July 2005. Refer to **Appendix D2** for copies of the media articles.

2.8 Public Displays

A public display was held at the Lennox Head Village Centre on Saturday 23 July 2005 from 9 am until 1 pm. The display was staffed by two representatives from Council and one representative from Connell Wagner. Provision was made for the community to provide feedback on the day by filling out a submission form and placing it in the submissions box provided. Three (3) submissions were received on the day while the many requested to take a form away with them allowing a little more time for further consideration of the Master Plan prior to formally responding with written comments.

There was a high level of community interest in the display. Generally the community were interested in understanding what the Master Plan proposed and how they could provide feedback. There was mixed opinion on the Master Plan, with most contention surrounding the options considered for the roads. In addition there was mixed opinion regarding car parking and whether the plan will be catering for peak and non peak times level of access to the lake and its facilities for all (particularly the mobile impaired and elderly) general support for the caravan park to remain and for appropriate measures/treatments for the lake and its environs.

2.9 Project Dedicated Web Page

A project dedicated web page via Council's Internet Web Site was developed and provided up to date information about the Master Plan. A copy of the first newsletter was available to be down loaded from this site. The web page included:

- An overview of the Master Plan and its process;
- Public display details;
- Information on how to contact the study team; and
- How to provide comments on the Master Plan.

Updated web page material was provided to Council for up loading onto their site. Refer to **Appendix E** for copies of the web page material.

2.10 Other Meetings and Discussions

The elected Council was briefed on the Master Plan following the second consultation phase. The briefing provided an opportunity for information sharing and discussion of key issues to assist in the refinement of the Master Plan. Councillors were also invited to attend and observe at the stakeholders' workshops.

In addition, a number of individual meetings were held between Council and stakeholders including the Department of Lands, the Department of Tourism, Sport and Recreation and various members of the community on an "as needs" basis.

2.11 Formal Submissions

The Study Team has been successful in involving key stakeholders and the broader community throughout the consultation process, eliciting their opinions and recording their input for use in the development of the Master Plan. The Study Team has considered all written comments/submissions put forward by stakeholders and the community. All submissions received by the Study Team have been recorded in a Stakeholder Database.

A total of 167 written submissions were received at various stages during the master planning process to the time of finalising this report. The written submissions comprise of:

- 11 e-mails; and
- 156 letters.

In addition Council has administered 11 telephone calls where discussions have been recorded and also taken into consideration as part of the master planning process.

2.12 Consultation Issues and Concerns - Summary

Stakeholder input during the development of the Master Plan was encouraged and facilitated by the consultation process. Important information, concerns and issues from stakeholders and the wider community obtained through various consultation activities including the newsletter, public display, e-mail and general inquiries received by telephone have assisted the study team in developing the final Master Plan for Lake Ainsworth Crown Reserve. Key issues raised by stakeholders and the community included:

- The caravan park and its valuable contribution to Lennox Head and its community;
- Pedestrian and child safety, particularly conflicts with vehicular movements along roads within and surrounding the Crown Reserve;
- The health and protection of the lake and its surrounds, particularly the water quality of the lake;
- Traffic and parking plan/strategy for the lake and a broader plan for Lennox Head;
- The markets to be retained as a community activity;
- The location of the alternative road options as well as the need to consider the possibility of a east west connector road linking the Western Rd to the Ballina Byron Rd;
- Public access to the lake;
- Impacts on neighbouring residents to caravan park of possible increased noise generating from the caravan park and possible alternative road location; and
- Improved accessibility (eg paths and boardwalk) to the lake and its surrounds and its possible contribution to the lake's further degradation if not managed and monitored appropriately.

3 Master Planning Framework

3.1 Introduction

The Lake Ainsworth Crown Reserve Master Plan has been prepared on the basis of consultation with Council, stakeholders and the broader community. An iterative master planning process has been followed and is described in Section 2 of this report. The following section details the resulting Lake Ainsworth Crown Reserve Master Plan rationale, objectives and planning initiatives.

3.2 Opportunities and Constraints Map

The opportunities and constraints task map has been prepared in response to the existing conditions and situation with the Crown Reserve study area, as identified in the supporting planning studies, site observation analysis and community/stakeholder analysis at the Workshop 1 stage. At a minimum, the opportunities and constraints map indicates those matters that require consideration and possible resolution across the following general areas:

- Lake Ainsworth as a place of environmental, recreational, and tourism significance;
- Physical conditions including roads, parking, walkways and recreational furniture;
- Feasible uses including footprint of caravan park, land use and open space; and
- Community expectations.

Table 3.1 Opportunities and Constraints Map

Opportunities	Constraints
<ul style="list-style-type: none"> • Lake Ainsworth is a place of exceptional environmental significance and should be conserved and maintained as a healthy lake. • Lake Ainsworth and surrounds has social significance in the context of Lennox Head and northern NSW through its past and present use as a place for public recreation and tourists. • Very strong public interest and sense of community ownership of the lake and its surrounds. • Opportunities to improve/upgrade service utilities such as water and sewer services to protect the lake's water quality. • Need to adopt a flexible approach to address future needs and ensure that planning and development activities are appropriate and compatible to the study area. 	<ul style="list-style-type: none"> • Decisions about prospective works in the study area are constrained by the need to take into account possible adverse impacts on the lake and surrounding land uses. • The provision of additional open space for recreational and leisure activities and additional parking will possibly enhance the popularity and use of the lake resulting in further pressures on the health of the lake and its surrounds. • Perceived high level of concern from some sections of the community over the future direction of the lake and surrounds. • The provision of infrastructure upgrades to enhance the water quality of the lake is primarily limited by the funding available for such work. • The study area has a limited use. If the study area's carrying capacity continues to increase without improved management of the area, there will be inevitably conflicts between users and impacts on the lake.

Opportunities	Constraints
<ul style="list-style-type: none"> • Greater integration of open space with recreational facilities. • Address safety issues such as fencing and landscaping that creates a barrier between open space/recreational areas and roadways and perimeter of caravan park. • Opportunity to modernise and invigorate the lake and surrounds. • Reduction in motor vehicle access that currently contributes to foreshore erosion and major road safety issues. • The establishment of dedicated walkways / cycleways / boardwalks to enhance safety and mobility around the lake. • Better access to the lake for people with disabilities. • Development of guiding planning principles for the caravan park. • Opportunity to highlight water quality, flora and indigenous features within the study area through signage and interpretation display. 	<ul style="list-style-type: none"> • There is limited space for additional recreation facilities particularly to meet periods of peak demand unless the western side of the lake is "opened up". • The provision of fencing and barriers would have to integrate and/or be compatible with the study area. • Carrying capacity of the lake should inform the nature and level of use while conserving the existing fabric and character of Lake Ainsworth. • Possible road closures and the construction of new access roads that may have adverse impacts on local residents, the caravan park and Sport and Recreation Centre. • Greater traffic management including pedestrians and cyclists. • The requirement to locate the disabled drop off area close to the lake and recreational facilities preferably near the disabled amenities block north of the Surf Club. • Development impacts within and surrounding the study area. • Signage would need to complement the natural features of the Crown Reserve and not be intrusive.

3.3 Rationale

The Lake Ainsworth Crown Reserve Master Plan provides for a planning structure and actions to configure the varied precincts and their ecology and land uses that comprise the Reserve into a sustainable single plan. It seeks to create a balance between the lake and its environs and existing and future land and recreational uses with due consideration of community and stakeholder interests.

The main drivers underpinning the rationale for the Master Plan include:

- the need to maintain the lake's water quality all year round to a standard that is suitable for recreational use and that protects the lake's natural values and ecosystems;
- the need to maintain and where possible, enhance the recreational opportunities of the lake and surrounds with regard to the sustainability of the lake, local residents and Crown Reserve users including caravan park visitors;
- the need to improve traffic and parking arrangements including pedestrian and cycleways to facilitate mobility and safety and recreation in the Crown Reserve; and
- the need to adopt a flexible approach to the provision of infrastructure and services that does not comprise the limited carrying capacity of the lake.

3.4 Planning Objectives

The following key planning objectives have been established for the Lake Ainsworth Crown Reserve Master Plan after due consideration of issues and concerns raised during the community and stakeholder consultation discussions with Council officers and elected Councillors, review of endorsed policy and planning documents and direct observation of the study area:

- To enhance the sustainability of Lake Ainsworth with particular emphasis on its water quality and its immediate surrounds;
- To enhance the recreational values and utility of the Lake and its immediate surrounds;
- To enhance the public safety and amenity and to improve pedestrian/cycling access and movement in the study area;
- To balance the mixture of land to be allocated to open space, caravan park and transport infrastructure; and
- To develop a Master Plan consistent with endorsed Ballina Shire Council and New South Wales Government planning documents and policy.

The above planning objectives have been presented to stakeholders and also to Council prior to the preparation of this report. The complexity and interrelationship of issues that underpin the development of planning initiatives to meet these objectives have also been presented and the key issues of water quality, traffic and parking that require resolution are discussed in detail in the following sections.

3.5 Water Quality

3.5.1 Key Planning Issues

Currently, water flow into the lake is largely untreated. The catchment for the lake is approximately defined by the eastern coastal dune, the northern extent of Barrett Drive, the western coastal heath as well as large catchment area to the north of the lake.

In the context of the treatment of overland flows, a large proportion of the catchment is north of the lake and subsequently outside the proposed area of redevelopment as part of the Master Plan works. It is noted that there is a need for a holistic approach to the development of water quality issues to encompass all overland flow into the lake.

Ground water flows also contribute to the lake, however since the removal of the septic tank system from the caravan park, the quality of the ground water has appeared to have improved.

The lake occasionally suffers from algal blooms which appear to be caused by a number of issues including the existing sediment build up at the bottom of the lake. With limited treatment facilities, the current overland flow would appear to still contribute to the sediment and subsequent nutrient levels.

The proposed redevelopment as part of this Master Plan of the southern and eastern section of the lake provides an opportunity to improve the quality of some of the overland flow into Lake Ainsworth. At these sections of the lake, the catchment areas are relatively small and flows not large. However it is possible to provide cost effective systems that will improve the water quality.

There are a number of reports and studies that have been undertaken on Lake Ainsworth to investigate the overall status and health of the lake. These reports are referenced below in the context of proposals for improving the water quality of the flow into the lake.

- Lake Ainsworth Management Plan draws upon the previous research and provides details of issues affecting the lake and possible actions to mitigate the issues;
- Lake Ainsworth Monitoring Study;

- Lake Ainsworth Processes Study provides a detailed review and investigation into the issues affecting the lake and its surrounds; and
- Vegetation Management Plan – West Lake Ainsworth.

Through the development of the above reports, many water quality improvement initiatives have been actioned, including the implementation of an aeration system. The development of the defined area within this Master Plan provides an opportunity to implement further water quality systems which will serve to compliment the previous work and improve the water quality of the lake.

3.5.2 Guiding Principles

The guiding principle for this Master Plan study is to ensure the sustainability of the lake. Therefore the water quality principle and subsequent guidelines and water sensitive treatments follow directly from this principle and should aim to ensure the water quality of the lake is sustainable. That is, any current development around the lake or any future development within the catchment area should provide facilities that allow the lake to function as a recreation facility and a natural asset and not a water storage and treatment basin.

To implement this principle there are primarily two options to provide sustainable flows into the lake. Firstly to treat and store all water entering the lake such that the flow volumes and water quality are equivalent to natural flows. Secondly to divert the flows away from the lake. The first option will be discussed in detail below however the second option requires detailed investigation. The ability for this to be achieved will be dependent on existing downstream infrastructure and we note only certain catchment areas may be feasible for this option.

Therefore the intention of water quality systems in the context of this report will be to retain, filter and treat as much of the overland flow from the catchment defined within the Master Plan prior to entering the lake. The primary objective of treating the flows from the catchments will be to remove pollutants including sediments, nutrients, hydrocarbons and litter.

Again it must be noted that the Master Plan area only represents a small portion of the lake catchment and a holistic approach must be undertaken to the improvement of water quality in the lake. In this regard, the principles that are established as part of this Master Plan could be applied to the wider water quality initiatives within the lake's catchment.

3.6 Traffic and Parking

3.6.1 Key Planning Issues

The major issue with regard to the Master Plan is that the Lake Ainsworth Crown Reserve is adversely affected by significant traffic activity that is generated by the immense popularity of Lennox Head as a tourist destination especially in the peak Summer/Easter holiday periods. The existing road infrastructure and parking arrangements cannot accommodate the traffic activity in these peaks. This has consequential impacts on the environment and amenity of the study area.

3.6.2 Existing Road Network

Eastern Road

The Eastern Rd provides access on a bitumen road to the Sport and Recreation Centre, 4WD access to beach and direct road access to eastern side of Lake Ainsworth. The road has a turnaround and unformed car parking area immediately prior to the entrance to the Sport and Recreation Centre. Unformalised parking along the Eastern Rd occurs parallel/angled to the lake. Three speed humps are located on Eastern Rd to reduce vehicle speed through the strip that is used for recreation including picnicking. The road has no kerbing and channelling and no centre line marking. The Eastern Rd is not a dedicated road reserve, with access along the road

through the Crown Reserve being at the discretion of the Reserve Trustee and the Department of Lands.

This road is heavily used by day visitors in the peak holiday period for casual driving, picnicking and 4WD access to Seven Mile Beach. During these holiday peaks, vehicles park anywhere close to recreational picnic areas and at the northern end of the Eastern Rd where the road accesses Seven Mile Beach. There are about 25 unformed parking spaces for beach and lake users around this access point.



Photo 3: Eastern Rd, 19 January 2005

According to anecdotal evidence from the Department of Tourism, Sport and Recreation staff, the Sport and Recreation Centre has on average around 30 – 40 vehicles visiting the centre on a daily basis including approximately 7 heavy vehicles (ie trucks and buses). The Sport and Recreation Centre would be impacted by any future Eastern Rd closure.

The elimination of vehicle access to the Eastern Rd and associated carparking will remove vehicle/pedestrian conflicts, protect dunes from erosion caused by vehicles and lessen the impacts of vehicle residues on water quality.

The current eastern foreshore is dominated in the peak holiday times by the use of the road that adversely impacts on recreational use and public safety of visitors, casual pedestrians and cyclists. The area has significant open space and recreational potential that is being generally constrained by the Eastern Road and corresponding traffic at peak times and weekends.

Pacific Parade

Pacific Parade is the main road to Lake Ainsworth, the SLSC, the Sport and Recreation Centre, Camp Drewe and Seven Mile Beach from Lennox Head village via the Eastern Rd and Camp Drewe Rd. Most traffic and parking activity is concentrated in the area at the end of Pacific Parade near the SLSC, the caravan park and the lake. The road network at Lake Ainsworth is characterised by heavy traffic activity during the Summer/Easter school holiday peak period (estimated to be up to 2000 cars per day) and weekend/market days and by low-medium traffic activity at off peak and shoulder periods respectively (400-500 cars per day). Two speed humps are located on Pacific Parade north of Ross St. Direct access to the SLSC is from Pacific Parade. Pacific Parade has kerbing and channelling on the western side only and a concrete footpath. There is no centre line marking on the street from the Lennox Head hotel to the SLSC.

The road area around the Pacific Parade and Ross St intersection is heavily congested in the peak holiday period because of the co-location of Lake Ainsworth, the Surf Cub patrolled beach and caravan park related traffic. Ballina Shire Council advises that Pacific Parade technically

ends at the Ross St intersection. For the purpose of this paper it is assumed that Pacific Parade continues to the t-intersection with the Camp Drewe Rd at the southern foreshore of the lake (ie called Southern Rd in this study report).

Ross Street and Surrounding Streets

Ross St has significant traffic activity during holiday peak periods and on summer weekends. Ross St borders the southern boundary of the caravan park and also provides the only entrance to the caravan park. Vehicles and caravans queue on Ross St to enter caravan park. Ross St has no centre line marking and only a short section of kerb and channelling between Pacific Parade and Stewart St, leading to the caravan park entrance. Ross St is heavily used by motor vehicles in peak holiday periods providing access to Gibbon St.

The existing road network and car parking in the Lake Ainsworth Crown Reserve and surrounding area appears to have been developed on an adhoc basis to cater for the increasing popularity of Lake Ainsworth and the adjacent Seven Mile Beach. Nearly all the roads have no centre line marking and kerbing and channelling and the car parking is unformalised and uncontrolled.



Photo 4: **Overflow parking in vacant lot between Ross St and Barrett Dr, 3 January 2005**

The study area is typical of other popular coastal areas that have a major influx of day and overnight tourists during periods of peak holiday activity. This influx places significant strains on all public infrastructure including roads and car parking. Neighbouring roads such as Barrett Drive, Gibbon St and other streets to the north of the Lennox Head village centre endure increases in traffic volume during peak holiday periods. Ballina Shire Council has no specific recent traffic data on the Ross St/Pacific Parade area that can shed light on the extent of traffic activity during these various peak and off peak periods.

Camp Drewe Road (Southern Rd and Western Rd)

For the purposes of this study, the Camp Drewe Rd has been specified as the Southern Rd for that road section that traverses the lake's southern foreshore and as the Western Rd for that section that extends to the north of the caravan park to Camp Drewe.

Southern Rd

The Southern Rd is a sealed road that branches from Pacific Parade at the SLSC and provides the link to the Western Road. The road provides direct access to and parking at the southern end of the lake. Four speed humps are located on this road section where recreational activity is greatest to reduce the speed of vehicles. Unformalised parking occurs on both sides of the



Photo 5: Parking along Southern Rd, 19 January 2005

road during busy periods particularly from overflow car parking at the caravan park. Traffic and car parking has had adverse impacts on the lake and its foreshore and results in vehicle and pedestrian conflicts due to the proximity of the road to the southern part of the lake and the caravan park. The monthly markets are held along the Southern Road. The southern section of road is not a dedicated road reserve and road access is provided at the discretion of the Reserve Trust and the Department of Lands.

Western Rd

The Camp Drewe Rd (Western Rd) is an unsealed road that extends from the Southern Rd around the western side of the Lake to Camp Drewe. The road also provides alternative access to the Sport and Recreation Centre and Seven Mile Beach during irregular periods of flood inundation on the eastern side of the lake. There is no access to the caravan park from the Western Rd. There is no formed road via an east-west connector road between the Camp Drewe Rd and the Ballina Byron Rd. There is no formalised parking along the Western Rd. Cars park along the road during peak holiday time as a result of caravan park car parking restrictions during other times. otherwise the distance to popular lake side recreation spaces and the beach makes car parking along this road section a last resort.

3.6.3 Road Access Options to Western Rd

The Master Plan explores several options for road access to the west of Lake Ainsworth based on consideration of key issues including the health of the lake, public access to the lake's foreshore, road safety, amenity and caravan park operations. The concept of road access to the north via the western side of the lake responds to opportunities to improve the public use of the foreshore and the health of the lake that can be realised by modifying the road access arrangements along the eastern and southern foreshores of the lake.

The following three options linking Ross St/Pacific Parade to the Western Rd have been identified during the course of the master planning process and are considered further in Sections 5 to 8. All of the above have been addressed in terms of their advantages and disadvantages in Section 7 Caravan Park Precinct.

Option 1 (Between the back of Barrett Drive Residences and the Caravan Park)

This option utilises the existing road reserve that extends west of Ross St to the caravan park's southern boundary with a new road reserve to be established immediately behind Barrett Drive extending to fire trail then heading due north to northern boundary of caravan park where road would rejoin the Western Rd.

Option 2 (Middle of Caravan Park)

This option utilises the existing road reserve from the west of Ross St and directly through the middle of caravan park linking to existing Western Rd. This existing road reserve is historically the intended road link to the Western Rd.

Option 3 (New Southern Rd Alignment)

This option enters the Crown Reserve off Pacific Parade, linking with the existing section of the Southern Rd and then the Western Rd.

The alternative access arrangements to the Western Rd from Pacific Pde/Ross St in the event that the Eastern Rd is closed to vehicular traffic is one of the key issues that is addressed in this master planning process. In addition to the three road access options that are identified above, longer term options such as possibly linking the Western Rd to the Ballina Byron Rd to the north have been put forward for consideration.

3.6.4 Parking

Extensive car parking in the Lake Ainsworth Crown Reserve and surrounding areas occurs in all the above streets during the peak Summer holidays, weekends and Easter holiday period. Currently there is some nose-in parking provided along the eastern side of Pacific Parade but the area is generally characterised by no formalised car parking. Large numbers of cars park all day in neighbouring streets during the summer holiday peak. The majority of these overnight vehicles are caravan park visitors which has a maximum of one car per site policy. Fencing and solid concrete bollard hats are provided around the caravan park boundaries to prevent inappropriate vehicle access and parking in caravan park grounds. Hence the remaining vehicles overspill into surrounding streets. Market day at Lake Ainsworth is also a major traffic and parking generator with vehicles parking at any available vacant space. No parking control and/or enforcement currently occurs in the area.

The car parking around Lake Ainsworth and surrounds is described below and current car space numbers are considered as maximum; that is, spaces have been calculated based on the assumption that parking is orderly with minimum separation between cars:

Pacific Parade

Unformalised nose-in parking on the eastern side of Pacific Parade from Ross St to Eastern Rd with space available for approximately 24 cars on the southern side of the SLSC and 11 cars on the northern side of the SLSC. At midblock between Ross St and the Southern Rd there is an off-road unformalised car park that can accommodate around 25 cars. Therefore there is provision for around 60 car park spaces on the eastern side of Pacific Parade between Ross St and the end of the Eastern Rd. The western side of Pacific Parade opposite the SLSC has parking space for 5 cars and parallel parking for 20 cars bringing the total number of spaces to approximately 85 car spaces along Pacific Parade north of Ross St.

Ross Street

There is no formalised parking on either side of Ross St. There is sufficient space only between bitumen road and caravan park fence for angle and/or parallel parking only. Currently there are spaces for about 46 vehicles on both sides of Ross St assuming parallel parking and allowing for driveways and current bus stop. The current vacant private land between Gibbon St and Barrett Drive is also heavily used as a makeshift car park during periods of peak holiday activity and/or on monthly market days. Overflow parking from the caravan park occurs along Ross St particularly on the northern side of the road bordering the caravan park.

Eastern Road

There is no formalised parking along this road. Vehicles park anywhere close to recreational picnic areas. Along the Eastern Rd and at the access area to the Seven Mile Beach there are about 25 unformed parking spaces for beach and lake users.

Southern Rd

There is no formalised parking in this popular area. Unformalised parallel parking occurs on the northern and southern side of the Southern Road adjacent to caravan park to cater for caravan park vehicle overflow and casual lake and beach users. There is no designated drop-off area for sailcraft/watersports equipment along this road section. Concrete bollards have been placed on the unformalised northern boundary of the caravan park to keep casual car parking out of the caravan park. Currently there are unformalised parking spaces for about 90 cars on the southern section of road assuming that cars are parked in parallel formation and with minimum back and front separation.

Caravan Park

The caravan park provides car parking space on the basis of one space per each park site. There is no overflow car parking space within the caravan park to accommodate overflow parking that results from a number of families and/or friends using the one caravan park site. The overflow parking has deleterious impacts on the neighbouring streets and also severely restricts the turnover of car parking spaces during the busy peak and Summer weekend periods.

4 Planning Structure

4.1 Master Plan Structure

The essential feature that must be understood is that the Master Plan provides a planning footprint for the future of the Lake Ainsworth Crown Reserve. The Master Plan is a guide for planning action only and is not intended to be part of the design phase work. The detail of implementing the proposed planning initiatives will require more detailed engineering and statutory land use planning input.

The Master Plan Structure Plan delineates the study area into the following planning precincts (see Figure 1 overpage):

- Eastern Foreshore Dune Precinct;
- Southern Foreshore Community Park Precinct;
- Caravan Park Precinct; and
- Coastal Health Precinct.

4.2 Master Plan Documents

The Master Plan identifies the planning initiatives within each of the above precincts that comprise the plan. In this regard, three versions of the Master Plan have been developed to accommodate the requirement to unambiguously display road access options 1, 2 and 3 (see Figures 2, 3 and 4 respectively overpage) linking Pacific Parade / Ross St to Camp Drewe (Western) Rd. Except for the road access options and some minor variations, the content of each of these Master Plan figures is essentially the same. The Master Plan has been cropped by precinct to assist in the description and identification of each initiative in the plan.

4.3 Traffic and Parking Context

The Master Plan's traffic and parking initiatives for each precinct have been prepared following consideration of stakeholders and community responses and discussion with Council regarding the current and future situation.

The master planning for the Lake Ainsworth Crown Reserve recognises traffic and parking activity peaks but seeks to provide initiatives that are more likely to accommodate off peak to shoulder demand that characterises tourist and local use of the Lake Ainsworth Crown Reserve area.

The Lake Ainsworth Crown Reserve Master Plan provides for a number of traffic, parking, cycling and pedestrian initiatives that directly impact on the Crown Reserve and the immediate surrounding area. These initiatives have been incorporated in the Master Plan that has been prepared for Council's consideration.

Essentially the initiatives support the broader planning objectives that underpin the Master Plan particularly with regard to enhancing the sustainability of Lake Ainsworth and at the same time enhancing the public amenity and safety of the existing and future users of recreational open space areas.

The most contentious issue that requires resolution is the planning for an alternative road access from Pacific Parade/Ross St to link with the Camp Drewe/Western Rd if the proposal under the Master Plan to close the Eastern Rd eventuates. Three road access options namely Option 1 (behind Barrett Drive), Option 2 (middle of Caravan Park) and Option 3 (new Southern Rd alignment) have been identified for consideration together with a longer term study to investigate the possibility of connecting the Western Rd to the Ballina Byron Rd.

The high levels of traffic and parking activity during the Summer and Easter peak periods will always be extremely difficult to accommodate in the precinct around Lake Ainsworth and the SLSC. Additional formalised hardstand parking and the provision of an internal caravan park parking area for overflow

caravan park user vehicles could provide for the status quo in terms of available car parking spaces under the Master Plan. Also regulatory parking to ensure that parking is freed up during the day should be also considered and policed by Council in the peak holiday period. The level of traffic and parking activity will continue to grow with the increasing popularity of Lennox Head as a day and overnight tourist destination.

Therefore, the proposed initiatives are directed more to accommodating the low to shoulder period rather than converting any open space and/or vegetated areas to formalised and/or unformalised hardstand car parking. That is, the Master Plan does not seek to utilise the key recreational space to provide additional parking to accommodate peak use levels that occur for a limited number of weeks during the year.

Notwithstanding, Council has an immediate role to provide formalised car parking space along Pacific Parade to assist in alleviating traffic and parking pressures on the Lake Ainsworth Crown Reserve and bordering streets. Similarly pedestrian and cycling should be encouraged by providing shared pathways as part of a network of pathways to and around Lake Ainsworth.

The initiatives also consider the needs of recreational, pedestrian and cycle users. The study area is a very popular walking area for both Lennox Head residents and tourists and the initiatives recognise the need to formalise pedestrian walkways. Cycling is a passive transport activity particularly among the younger demographics and the intent of the Master Plan is to facilitate both cycling and walking activity in shared pathways wherever possible free of vehicular traffic. Similarly, recreational activities are prominent across all age groups in the study area.

The current situation and the implications of traffic and parking issues on each precinct that comprises the Lake Ainsworth Crown Reserve Master Plan are covered in the following sections respectively.

5 Eastern Foreshore Dune Precinct

5.1 Current Situation

5.1.1 Key Features

The Eastern Foreshore Dune Precinct covers the area north of the Pacific Parade to the road closure just beyond Lennox Head Alstonville Surf Life Saving Club and the entrance of the Sport and Recreation Centre. It also takes in the coastal dunal system to the Seven Mile Beach.

The Surf Club and the open space/public amenities block immediately to the north of the Surf Club are not in the Lake Ainsworth Crown Reserve area but have been illustrated in the Master Plan to capitalise on integrating public spaces.

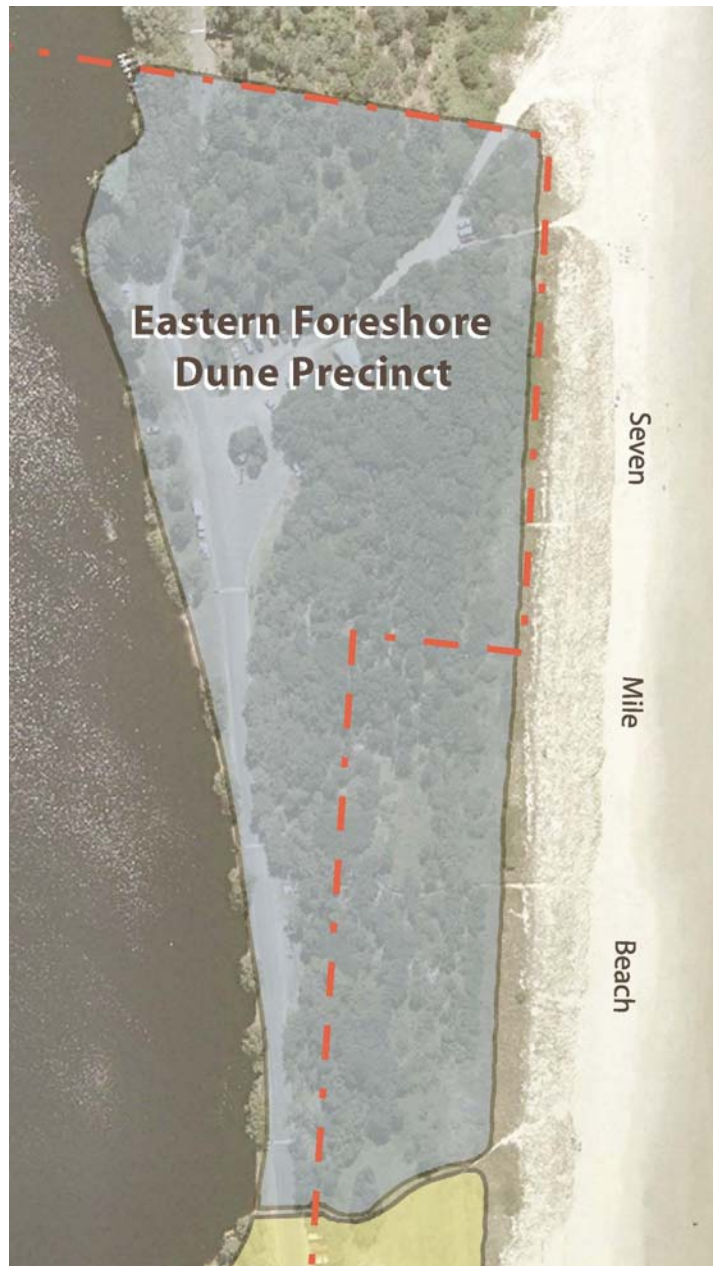


Figure 5: Eastern Foreshore Dune Precinct

The key current features of this area are as follows:

- Provides road access via the Eastern Road to the Sport and Recreation Centre;
- Provides road access to Seven Mile Beach for 4WD vehicles;
- Provides road access and unformed parking spaces to picnic areas and facilities in the eastern foreshore of Lake Ainsworth;
- The above road access and parking has adverse impacts on the water quality of the lake by oil in the vehicles or related residues washing into the lake;
- The shared road also creates pedestrian/vehicle conflicts particularly in the peak period and with children playing along this eastern section of the lake;
- The existing Eastern Road is not a gazetted road reserve and as ongoing use has been allowed by the state government agencies and Council;
- There are designated small sandy beach areas and fenced vegetation on the eastern bank of the lake;
- Picnic facilities are currently located on the eastern side of the road, resulting in children having to cross the road to swim in the lake;
- Picnic facilities and the log fencing of dunal vegetation to the east of the road are considered to be just adequate.

The Management Plan has identified that there has been a long term recession of the dunal system on Seven Mile Beach and this recession over time may result in changes to the dunal system in front of the lake. The breaching of the dunes and the salt water inundation of the lake would drastically affect its ecological balance (Management Plan 2002).

The existing 4WD track between the Eastern Rd and the beach was highlighted in the Management Plan as providing a "weak point in the dunal system and may on a large storm event allow the entry of salt water surge".

It is most probable that 4WD traffic accessing the Seven Mile Beach at this point would continue to increase as Lennox Head/Lake Ainsworth becomes a more popular holiday destination than what it is today. Without appropriate action, this increased 4WD traffic will continue to contribute to dunal erosion particularly the widening of the erosion zone through informal carparking. The issue of alternative 4WD access to Seven Mile Beach is being progressed under a separate parallel process, with a new access point to be provided north of the Sport and Recreation Centre via the western side of Lake Ainsworth.

5.2 Master Planning Initiatives

The following table identifies the major Master Planning initiatives for the Eastern Foreshore Dune Precinct:

Table 5.1 Eastern Foreshore Dune Precinct Planning Initiatives

Eastern Foreshore Dune Precinct		
Initiatives		Drivers
A1	<p>Eastern Road to be closed to all vehicular traffic (aside from emergency and maintenance vehicles).</p> <p>Note: The closure of Eastern Road is contingent on the establishment of new western access road through or around Lake Ainsworth Caravan Park</p>	<p>Improve water quality;</p> <p>Improve foreshore and dunal protection;</p> <p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits.</p>
A2	<p>New access to Sport and Recreation Centre and Seven Mile Beach via Camp Drewe Road</p>	<p>Improve water quality;</p> <p>Improve foreshore and dunal protection;</p> <p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits.</p>
A3	<p>Recreation and open space areas to be established along eastern foreshore</p>	<p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits.</p>
A4	<p>Car parking to be removed from eastern foreshore</p>	<p>Improve water quality;</p> <p>Improve foreshore and dunal protection;</p> <p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits.</p>
A5	<p>Upgrading of recreational furniture and vegetation fencing</p>	<p>Improve foreshore and dunal protection;</p> <p>Enhanced recreational opportunities;</p>
A6	<p>Pedestrian and cycle access with possible design and construction of contoured cycleway to complement open space areas and enhance public safety</p>	<p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits</p>
A7	<p>Aquatic planting in shallow water on eastern foreshore to protect bank and reduce nutrient level</p>	<p>Improve water quality;</p> <p>Foreshore and dunal protection;</p>
A8	<p>Provision for disabled access to lake's edge</p>	<p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits.</p>
A9	<p>Educational signage to be erected to promote qualities and sensitivities of the lake</p>	<p>Improve water quality;</p> <p>Improve community education.</p>
A10	<p>Provision of emergency access along foreshore in conjunction with initiative A6 above.</p>	<p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits.</p>

The major advantages that the above initiatives will have on the Lake Ainsworth Crown Reserve include:

- significant potential to enhance the lake's water quality and foreshore and protect the adjacent dunal system through the closure of the Eastern Rd to motor vehicles; and
- the recreational opportunities of this area of the Crown Reserve will be enhanced through the creation of a vehicle free foreshore open space area including better recreation furniture and infrastructure that will encourage pedestrian, cycling and other passive recreation use.

The specific water quality and traffic/parking advantages resulting from the initiatives are described in the following section.



Photo 6: Parking at end of Eastern Rd near Seven Mile Beach access point, 19 January 2005

5.3 Water Quality Initiatives

The closure of the Eastern Road will remove the flow of traffic and parked vehicles away from the lake edge. Currently, traffic passes and/or parks close to the lake edge providing the ability for pollutants such as petrol and oils to flow into the lake. This along with the dust and other pollutants created by passing traffic will now be removed from the area.

As the strip of land has a minimal catchment area the degree of water quality treatment facilities may only need to be minimal. The construction of swale drains and infiltration trenches along the current road alignment to catch and treat the small overland flows may be sufficient. Larger scale gross pollutant traps and wetlands in this area may not be practical.

Gross pollutants may be an issue in this area with the significant number of picnic tables in the area. Solutions to restrict any pollutant flows could be to move the tables to the other side of the path away from the water edge or provide sufficient bins. In addition, the issue of erosion around the picnic tables may need to be reviewed with alternative treatments investigated.

5.4 Traffic and Parking Initiatives

The proposed traffic and parking initiatives that are identified above namely the closure of the Eastern Rd to vehicular traffic (aside from emergency vehicles and maintenance vehicles), new access road to Camp Drewe, Sport and Recreation Centre and Seven Mile Beach on the western side of lake, the consequential removal of car parking from eastern side of Lake Ainsworth and the establishment of pedestrian and cycleway designed and constructed along Eastern Rd to complement open space areas and also use by emergency and maintenance vehicles have been developed in the context of enhancing water quality, environment, amenity and recreation on the eastern side of the lake and the adjacent dunes.

The advantages of implementing these initiatives are:

- Additional recreation and open space to be established/upgraded on the eastern side of lake;
- Vehicle related residues (ie oils etc) from traffic and parking to be eliminated thereby reducing vehicle impacts on lake;
- Amenity of the eastern foreshore will be significantly enhanced;
- Elimination of vehicle/pedestrian conflicts along Eastern Rd; and
- Pedestrian and cycleway to form a major part of pedestrian/cycleway network in Crown Reserve and surrounding area.

The initiatives will also have some disadvantages including:

- The shortest road access to Sport and Recreation Centre from Pacific Parade is denied to the users of the Sport and Recreation Centre;
- Ballina Shire Council will accrue additional capital and operating costs to upgrade and maintain the Western Rd, to provide new road access to Western Rd and to provide new road access to Seven Mile Beach and Sport and Recreation Centre (the above costs will be minimally offset by the requirement not to maintain the Eastern Rd);
- While there will be additional recreational open space along the eastern foreshore, the closest car parking will be adjacent to the SLSC thereby slightly increasing the distance of the walk to access picnic facilities; and
- Any future shared pedestrian and cycle pathway will need to be suitably designed and constructed to accommodate emergency and maintenance vehicles.

6 Southern Foreshore Community Park Precinct

6.1 Current Situation

6.1.1 Key Features

The Southern Foreshore Community Park Precinct covers the area from Pacific Parade to that part of the caravan park immediately to the west of the first amenities block and also all area between the lake and Southern Road and the start of the contiguous heath on the western side of the lake.

The land between the lake and the Southern Road is currently used for recreational purpose and the accessing the lake for swimming. Picnic facilities including a BBQ area are provided in open space opposite the Surf Club.



Figure 6: Southern Foreshore Community Park Precinct

This area is the most congested section of the Crown Reserve because of the visitor attractions of the Surf Club and the patrolled beach, Lake Ainsworth and the caravan park activities.

The monthly markets are also held along the Southern Road. In peak holiday times, car parking occurs on both sides of the Southern Road. Bollards along Southern Road prevent direct access into the caravan park from that road.

Most importantly, the Southern Road currently provides access from Pacific Parade to Camp Drewe via the western Camp Drewe Road.

The Lake Ainsworth Crown Reserve has no formal footpaths and/or cycleways aside from a concrete footpath on the western side of Pacific Parade between Ross St and the Southern Rd intersection.

The cleared open space immediately adjacent to the east of the disabled amenity block north of the SLSC is currently used as a helicopter landing area for aero-medical emergencies.

The precinct's planning initiatives also considers the impacts on the neighbouring street network to the south of the caravan park although these streets are technically outside the Crown Reserve study area.

6.2 Master Planning Initiatives

The following planning initiatives are proposed for the Southern Foreshore Community Park Precinct:

Table 6.1 Southern Foreshore Community Park Precinct Planning Initiatives

Southern Foreshore Community Park Precinct		
Initiatives		Drivers
B1	Eastern side of caravan park adjacent to amenities block to Pacific Parade to be excised from caravan park (according to the applicable road access option adopted)	Improve water quality; Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
B2	Excised land to be primarily converted into open space and some parking	Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
B3	Southern Road currently linking to Camp Drewe Road to the west at Pacific Parade and intersection will be closed to vehicular traffic (see also Caravan Park Precinct)	Improve water quality; Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
B4	Turning circle at end of Pacific Parade at northern end of SLSC including disabled access drop off point.	Improve traffic and parking; Enhanced mobility and safety benefits.
B5	Hardstand/landscaped car parking areas for blocks of 16-20 cars to be provided on western side of Pacific Parade adjacent to SLSC	Improve traffic and parking; Enhanced mobility and safety benefits.
B6	Additional nose in car parking to be provided on eastern side of Pacific Parade	Improve traffic and parking; Enhanced mobility and safety benefits.
B7	Formalised parking controls to be considered	Improve traffic and parking; Enhanced mobility and safety benefits.
B8	Southern Road to be converted to cycle/pedestrian way as part of circular network around Lake	Improve water quality; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
B9	Access road from Pacific Parade (near Norfolk Pines) to provide new entrance to Caravan Park	Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
B10	Enhanced open space and recreation areas on southern foreshores linking to open space area immediately north of SLSC	Improve water quality; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
B11	Children's playground facilities to be installed	Enhanced recreational opportunities.
B12	Education signage to be erected regarding qualities and sensitivities of Lake Ainsworth	Improve water quality; Improve community education

Initiatives		Drivers
B13	Watercraft access to lake to be established on western side of precinct	Enhanced recreational opportunities; Enhanced mobility and safety benefits.
B14	New or retained amenities block (depending on road access option adopted)	Enhanced recreational opportunities; Enhanced mobility and safety benefits

The major advantages of these Master Plan initiatives in the Southern Foreshore Community Park precinct include:

- the potential to enhance the lake's water quality and southern foreshore through the removal (or controlled access) of traffic and parking around this area of the lake;
- the enlargement of this popular section of the lake for community open space and recreational use through the excision of existing caravan park land; and
- the establishment of formalised car parking away from the open space recreational area to minimise pedestrian and vehicle conflicts, and increase the available foreshore area for recreational uses (as opposed to car parking).

The water quality and traffic/parking advantages are addressed specifically below.

6.3 Water Quality Initiatives

The area south of the lake provides the most potential for water quality improvement through the Master Plan development. Currently a large proportion of run-off from the caravan park flows into the lake with little or no water quality treatment. The area drains through approximately three outlets into the lake.

Swale drains and infiltration trenches could be installed along the existing road alignment to provide treatments of overland flow from the south and if required an additional swale could be installed along the caravan park boundary depending the level of flow. This will need be to investigated with particular regard to the peak flows and the peak occupancy of the caravan park considering the increase in pollutants that may occur.

At the outlet into the lake a mini wetland could possibly be installed or if the flows are not sufficient to warrant such system smaller gross pollutant traps, sump pits and trash grates could be installed.

Carparks and roads providing kerbside parking are high source areas for the full range of pollutant types including gross pollutants to fine particulates and hydrocarbons. The design of the new roads and carpark can be developed considering the water quality treatment requirements and incorporate systems such as swale drains and infiltrations trenches to improve run-off quality and treat run-off at road and carpark sites. The development of the roads and carparks may also investigate the possibility of directing the run-off south away from the lake.

6.4 Traffic and Parking Initiatives

6.4.1 Pacific Parade (Between Ross St and Eastern Rd)

The following initiatives have been identified for the above section of Pacific Parade:

- Pacific Parade at northern end of SLSC to become a dead end with turning circle (emergency vehicles and maintenance vehicles to have access along former Eastern Rd and disabled access drop off point located within the turning circle);
- Southern section of Camp Drewe (Western) Rd to be closed off for vehicles traffic (aside from emergency and maintenance vehicles) from the existing T-intersection with Pacific Parade (the extent of closure is based on the road access option adopted);

- New access road to new caravan park entrance off Pacific Parade immediately north of Ross St T-intersection;
- Formalised hardstand car parking areas for about 20-30 cars on the western side of Pacific Parade on former caravan park land, exclusive of existing kerbside parking;
- Although outside the Lake Ainsworth Crown Reserve, additional formalised hardstand car parking on side of Pacific Parade south of the SLSC including the formalising of existing and future off-street car parks; and
- Retention of footpath on western side of Pacific Parade and constructing of new footpath on eastern side.

The advantages of the implementing the above initiatives are:

- Vehicle access to SLSC, disabled amenity block and helicopter landing area for aero-medical emergencies is maintained;
- Formalised parking on Pacific Parade and off-road car parking areas;
- Greater public amenity and safety through more formalised traffic and parking arrangements;
- Dedicated access entrance road to caravan park thereby eliminating queuing along Ross St.

The disadvantages of implementing the above initiatives are:

- Land on eastern side of Pacific Parade would be required to accommodate additional formalised parking areas;
- Loss of some tent, caravan and cabin sites (these can be moved to other suitable locations in the caravan park).

6.4.2 Southern Section of Camp Drewe Rd (Southern Rd)

The following initiatives have been identified for the Southern Rd:

- Closure of existing road section from the Pacific Parade intersection immediately in front of SLSC to new access road junction to the west of lake;
- Southern Rd section to be converted into a pedestrian/cycleway as part of the pedestrian/cycleway network around Lake Ainsworth; and.
- The above possible closure of the road along the southern foreshore depends on the road access option to be adopted.

The advantages of implementing the above initiatives are:

- Removal of vehicular traffic and car parking from the southern section of the lake thereby reducing environmental impacts and enhancing water quality;
- Enhanced recreational open space areas on the southern foreshores;
- Enhanced public safety removing the potential for vehicle and pedestrian/recreational user conflicts;
- Provision of pedestrian/cycleway;
- Better pedestrian linkages/interface to SLSC.

The disadvantages of implementing the above initiatives are:

- Closure of southern road section necessitates the finding a new road access through or around the caravan park to the Western Rd;
- Removal of existing informal car parking results in a slightly longer walking distance to the southern foreshore from designated car park areas on Pacific Parade.

6.4.3 Ross St

The following initiatives have been identified for Ross St:

- Parallel parking to be retained on southern side of Ross St but formalised;
- Modification of the existing park entrance

- Possible shifting of caravan park fence along northern side of Ross St to provide for nose-in parking that will result in approximately 18 additional car spaces on that side of the street if western end of Ross St is not used as a link to the Western Rd under road access options 1 and 2 (the number of additional car spaces will depend on the adopted road access option) ;
- Kerbing and channelling of Ross St;
- Line marking of Ross St to cater for traffic flows; and
- Use of Ross St as main link to Pacific Parade for Road Access Option 1 and 2.

The advantages of implementing the above initiatives are:

- Vehicle and caravan queuing via Ross St is removed;
- More car parking space is provided along Ross St to cater for caravan overflow traffic and casual beach/lake users;
- Line marking and formalised car parking should facilitate traffic movement along Ross St;
- Some traffic taken away from congested area in front of the Surf Club if Road Access Options 1 or 2 are implemented.



Photo 7: Looking east down Ross St, 19 January 2005

The disadvantages of implementing the above initiatives are:

- More parked cars in Ross St particularly during peak holiday periods;
- More traffic along Ross St and Gibbon St if Road Access Option 1 or 2 are implemented.

6.4.4 Current and Future Parking Allocation

In considering the parking levels, it is important to balance the improved foreshore space and the improved health of the lake being sought by the Master Plan.

If the Eastern Rd and Southern Rd are closed to car parking and existing car parking is supplemented by new hardstand and/or formalised car parking, then the net car parking will reduce from a “**current maximum**” 245 car spaces to 204 car park spaces. The maximum number of car spaces assumes that cars are parked in an optimum orderly fashion and as close as possible. Generally current peak period car parking in unformalised areas such as along the Eastern Rd and Southern Rd has some order but would be considered less than optimum resulting in an estimated 20 per cent of available unformalised car parking spaces not being utilised efficiently. This would result in the “**current likely**” number of car parking spaces available being approximately 196; that is, an estimated 8 car parking spaces less than under the “**future**” situation with the master planning initiatives.

In addition, peak holiday periods result in significant overflow car parking from the caravan park each night in surrounding streets. The problem with these overflow vehicles is that in many cases they are not moved regularly and hence do not provide any opportunities for multiple use during the day.

An option to further improve car parking arrangements and to reduce pressures on the neighbouring streets would be to establish long term paid car park within the caravan park at the lesser used areas to the north west of the site to cater for this overflow demand. The provision of car parking within the caravan park could accommodate up to 50 cars and free up car parking spaces elsewhere in the surrounding streets.

The following table provides data on the current and future parking situation.

Table 6.2 Current and Future Parking

Road	Current Maximum	Current Likely	Future
<i>Pacific Parade (between Ross St intersection and Camp Drewe Rd intersection just north of the SLSC)</i>			
Eastern Side	60	48	50
Western Side	25	20	40
<i>Ross St</i>			
Both Sides	45	36	64
<i>Eastern Rd</i>			
Both Sides	25	20	0
<i>Southern Rd</i>			
Both Sides	90	72	0
<i>Caravan Park</i>			
Internal Overflow Car Park	0	0	50
Total	245	196	204

Therefore, the future parking situation should be addressed on a number of fronts including the provision of new designated parking areas, caravan park fencing to be adjusted, overflow parking for caravan park users and greater regulation and policing. Also the reduction in caravan park sites under all road options may lessen the overflow car parking in the peak. While the above table suggests that there will be less car parking spaces when current maximum and future maximum arrangements are compared, the reality could be quite different with greater turnover of car spaces during the day. Most importantly, the removal of most of the overflow car parking that results from the caravan park in the peak would free up considerable parking opportunities both inside the study area and the surrounding streets during peak holiday periods. Additional formalised and regulated parking that is outside the scope of the study area should also be considered along Pacific Parade towards the Lennox Head village to remove traffic and parking pressures on the Lake Ainsworth and Surf Club area.

7 Caravan Park Precinct

7.1 Current Situation

7.1.1 Key Features

The Lake Ainsworth Caravan Park is located on the southern section of the Lake Ainsworth Crown Reserve 82783 and is fully in scope of the Master Plan. Key data associated with the caravan park includes:

Land Status	Lake Ainsworth Crown Reserve R82783	
Zoning	7(f) Environmental Protection Coastal Land under Ballina LEP	
Area	5.4 hectares	
Sites/Cabins	Long term sites	4
	Short term sites	167
	Camp sites	122
	Cabins	13
	Total	306

The study brief requires that the Master Plan address the following:

- The optimum mixture of land to be allocated as a caravan park and as open space and the nature and use of the open space;
- Preferred caravan park boundaries for Lake Ainsworth Caravan Park with regard to the consideration of long term closure of the caravan park and the financial viability of the caravan park; and
- Principles such as water sensitive urban designs that are applied in the implementation of future improvements to the Lake Ainsworth Caravan Park.



Figure 7: Caravan Park Precinct

7.1.2 Legislative Basis

Council's input in relation to the first two issues, namely the optimum mixture of land and the preferred caravan park boundaries, is limited by legislation. While Ballina Shire Council is the Trustee manager of the Lake Ainsworth Crown Reserve 82783, the ultimate responsibility for agreeing to a fundamental change in land use and boundaries for the Crown estate falls to the New South Wales Minister for Lands under the Crown Lands Act 1989.

The Crown Lands Act provides for the equitable sharing of Crown Land resources in accordance with the principles of environmental protection, conservation and ecological sustainability, public use and enjoyment as well as the encouragement of multiple use.

The full principles of Crown land management are namely:

- Environmental protection principles be observed in relation to the management and administration of Crown land;
- The natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible;
- Public use and enjoyment of appropriate Crown land be encouraged;
- Where appropriate, multiple use of Crown land be encouraged;
- Where appropriate, Crown land should be used and managed in such a way that both the land and its resources are sustained in perpetuity; and
- Crown land be occupied, used, sold, leased, licensed or otherwise dealt with in the best interests of the State consistent with the above principles.

This Act controls the protection of public land for both the Lake and the caravan park components of the Lake Ainsworth Crown Reserve.

Furthermore, the Department of Lands has stated policy objectives for caravan parks on Crown land under the Crown Lands Caravan Parks Policy. These objectives are as follows:

- to develop a caravan park and camping ground system on Crown land which meets the needs of the community and provides a range of facilities for short term use, long term use and camping;
- to manage caravan parks on Crown land in an environmentally acceptable manner, to provide for the protection of important scenic, natural and cultural resources consistent with the objects and principles of the Crown Lands Act 1989;
- to ensure that caravan parks and camping grounds on Crown land are managed in a way that provides appropriately for the recreational and social needs of the community; and
- to encourage the entrepreneurial management of caravan parks on Crown lands in order to provide the community with an appropriate standard of facility and the government with an optimum financial return for the land it provides.

In this regard, the Department of Lands has made its policy position regarding the future of the caravan park clear in its submission to the Master Plan.

The Department of Lands has stated that the Master Plan needs to recognise and understand the strategic significance of the Lake Ainsworth Caravan Park in terms of the New South Wales Crown estate.

In this regard, the Department of Lands recognises the variety of land uses in the Crown Reserve; that is, accommodation, recreation and environmental, that a satisfactory balance of uses can be achieved whilst maintaining a viable caravan park in the reserve.

7.2 Master Planning Initiatives

The Caravan Park Precinct planning issues, particularly the need for an alternative road link from Pacific Parade or Ross St to the Camp Drewe (Western) Rd if the Southern Rd and Eastern Rd are closed to vehicular traffic, have been the most contentious during the stakeholder and community consultation phases.

At Workshop 2, stakeholders were divided on the merits of Road Access Option 1 (Behind Barrett Drive) and 2 (Middle of Caravan Park) (see below) and at the same time strongly advocated the need to investigate a longer term option namely an east west connector road from the Ballina Byron Rd to the Camp Drewe (Western) Rd. As a result of the stakeholder and community concerns with both Option 1 and Option 2, a third option, that is Option 3 (New Southern Rd Alignment), was developed and included in the Master Plan for further consideration.

The master planning initiatives that have been developed for the Caravan Park Precinct and in particular the initiatives involving the three road access options are described below. The advantages and disadvantages of each road access option are covered in greater detail in section 7.4.

Table 7.1 Caravan Park Precinct Planning Initiatives

Caravan Park Precinct		
Initiatives		Drivers
C1	North eastern side of caravan park adjacent to the amenities block to Pacific Parade to be excised from caravan park and converted to open space, parking and a new caravan park entrance.	Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
C2	New caravan park entrance via access road from Pacific Parade.	Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits.
C3(i)	Road Access Option 1 (Behind Barrett Drive): <ul style="list-style-type: none"> Utilises existing road reserve that extends west of Ross St to caravan park southern boundary; A new road reserve would need to be established immediately behind Barrett Drive residences extending west to existing fire trail then heading due north to northern boundary of caravan park where new road would rejoin Camp Drewe (Western) Rd; Around 15 unpowered sites would be lost but the remainder of caravan park would remain intact; 	Improve water quality; Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits through reduction in traffic in Eastern Road and Pacific Parade.
C3(ii)	Road Access Option 2 (Middle of Caravan Park): <ul style="list-style-type: none"> Utilises an existing road reserve from the west of Ross St through the middle of caravan park linking to the existing Camp Drewe (Western) Rd. This road reserve was intended to be the primary link to the Camp Drewe (Western) Rd at its initial gazettal; Approximately 14 unpowered sites would be lost. 	Improve water quality; Improve traffic and parking; Enhanced recreational opportunities; Enhanced mobility and safety benefits through reduction in traffic in Eastern Road and Pacific Parade.

Initiatives		Drivers
C3(iii)	Road Access Option 3 (New Southern Rd Alignment): <ul style="list-style-type: none"> new access road from Pacific Parade as the new caravan park entrance but then linking the existing Southern Rd just to the west of the eastern-most amenities block; The Southern Rd then extends along a similar alignment to that at present to the Camp Drewe (Western) Rd with bollards defining appropriate parking along this road. 	<p>Improve water quality;</p> <p>Improve traffic and parking;</p> <p>Enhanced recreational opportunities;</p> <p>Enhanced mobility and safety benefits.</p>
C4	Provision of overflow parking areas for caravan park users within the caravan park	<p>Improve traffic and parking;</p> <p>Enhanced mobility and safety benefits</p>
C6	Adoption of Master Plan water quality guidelines to steer cost effective capital and maintenance treatments in the reserve.	<p>Improve water quality;</p> <p>Enhanced recreational opportunities;</p>

The Master Planning initiative that is common to all three options will be the excision of existing caravan parkland on the eastern side for a new caravan park entrance, open space and parking uses. It should be noted however, that the configuration of this space varies between Option 1 and 2, and Option 3 road access.

The Caravan Park Precinct Master Plan initiatives also address the key issue of parking by proposing that an overflow car park is considered for park users. Caravan park regulations only provide for one vehicle for each site occupied. The initiative for an overflow car park would free up parking in neighbouring streets particularly during the peak holiday periods.

The Lake Ainsworth Crown Reserve Master Plan is not a detailed planning design for the Lake Ainsworth Caravan Park but instead is a planning tool to guide and integrate planning initiatives within and around the Caravan Park Precinct forming the Master Plan. Issues regarding the mixture and location of cabins to sites and other caravan park reconfiguration matters are outside the scope of the Master Plan.

7.3 Water Quality Initiatives

This section aims to provide initiatives for possible water quality systems in the Caravan Park Precinct that will need further review upon detailed design development. The intention of water quality systems in the context of the caravan park will be to use in transit measures to retain, filter and treat as much of the overland flow from the catchment defined within the Master Plan prior to entering the lake. The primary objective of treating the flows from the catchments will be to remove pollutants including sediments, nutrients, hydrocarbons and litter.

Some catchment flows may be insufficient to allow certain types of treatments due to space and possible cost restrictions, for example substantial wetland treatments. A cost benefit review may suggest simple treatments like swale drains, infiltration trenches and sump pits are more effective than large scale facilities given the volume of flow from the catchments and the land available. For example, the use of swales to promote flow attenuation and water quality improvement requires appropriate design to ensure the swale is not too steep causing localised erosion or too shallow causing excessive duration of ponding. Therefore the exact specifics of size location and type of

treatment facilities has not been provided in this Master Planning study as it will require detailed design analysis of catchment areas and flow volumes to arrive at the required treatment solutions.

Source controls measures should also be considered including community awareness campaigns that are directed towards Crown Reserve users particularly at peak holiday periods, educational signage in prominent areas of the caravan park, installing and regular maintenance/cleaning of litter traps, rectifying high pollutant source areas including litter.

7.4 Traffic and Parking Initiatives

The advantages and disadvantages of each of the three Road Access Options are discussed below. Similarly the need to investigate the east west connector road is covered also in Section 8 Coastal Heath Precinct.

7.4.1 Option 1 (Between the back of Barrett Drive Residences and the Caravan Park)

This option utilises the existing road reserve that extends west of Ross St to the caravan park's southern boundary with a new road reserve to be established immediately behind Barrett Drive houses extending to fire trail then heading due north to northern boundary of caravan park where road would rejoin the Western Rd.

The advantages of implementing Option 1 are:

- Leaves caravan park intact aside from sites losses;
- Provides additional foreshore open space;
- Enhances direct access to Lake for caravan park users;
- Enhances access to bushfires and provides a bushfire buffer;
- Reduces pedestrian/vehicular conflicts and improves road safety;
- Reduces vehicle impact on Lake through closure of Southern Rd.

The disadvantages of implementing Option 1 are:

- New road reserve to be created;
- Amenity impacts (visual, noise etc) on Barrett Drive residences and caravan park users;
- Need for appropriate vegetation buffers between caravan park and neighbouring houses;
- Additional construction costs;
- Approximately 29 sites would be lost in the caravan park excluding the impacts of redevelopment of new caravan park entrance;
- Possible relocation of some cabins in caravan park to accommodate road;
- Road would need to be designed and constructed to a standard to accommodate vehicles up to buses;
- Ross St and Gibbon St would experience more traffic.



Photo 8: Lake Ainsworth Caravan Park

7.4.2 Option 2 (Middle of Caravan Park)

This option utilises the existing road reserve from the west of Ross St and directly through the middle of Caravan Park linking to existing Western Rd. This existing road reserve is the intended road link to the Western Rd.

The advantages of implementing Option 2 are:

- Utilises an existing road reserve;
- Lesser public amenity issues for residents in Barrett Drive when compared to Option 1;
- Provides for additional foreshore open space but less than Option 1;
- Reduces vehicle impacts on Lake but less than Option 1;
- Enhances direct pedestrian access to Lake for caravan park users through closure of Southern Rd;
- Provides access and parking for sailcraft/watercraft activities.

The disadvantages of implementing Option 2 are:

- Dissects caravan park;
- Road safety treatments including speed restrictions and designated pedestrian crossings required for corridor through caravan park;
- Possible restructuring of caravan park to allow for casual caravanning and camping sites only on eastern section;
- Approximately 34 sites would be lost in the caravan park excluding the impacts of the development of the new caravan park entrance;
- Fencing of caravan park to enhance public safety;
- Boom gates and slip lane required for more permanent caravan park users on western section of caravan park;
- Road would need to be constructed to a standard to accommodate vehicles up to buses;
- Ross and Gibbon St would experience more traffic

7.4.3 Option 3 (New Southern Rd Alignment)

This option involves access off Pacific Parade linking to an existing section of the Southern Rd and then onto the Western Rd. This option involves a minor change to the configuration of the southern foreshore precinct compared to Options 1 & 2.

The advantages of implementing Option 3 are:

- No property related impacts;
- Removes caravan park traffic from Ross St and Gibbon St;
- Leaves caravan park no space with loss of sites attributed primarily to the new caravan park entrance only;
- Lesser road construction costs vis-à-vis Option 1 and Option 2;
- Provides for possible controlled access to Western Rd via the new caravan park entrance;
- Provides for disabled access to lake;
- Provides for car/trailer parking for watercraft access to lake;

The disadvantages of implementing Option 3 are

- Unless traffic access is carefully managed, Option 3 is only slightly better than the status quo;
- Does little to relieve traffic congestion in the Pacific Parade/Surf Club area particularly in peak holiday period;
- Retains potential for pedestrian/vehicle conflicts on southern foreshore;

Importantly, this road access option would need to be designed in a manner that is sensitive to the health and amenity of the lake. Consideration should also be given to establishing controlled road access along the Southern Rd linking to the north (ie Camp Drewe and beyond). This option may also

involve the establishment of an access point (likely an exit) point on Ross St to aid in the circulation of caravans and reduce conflicts in the road network, and improve the efficiency of vehicle flows. This matter should be considered in the detailed design for the caravan park site.

7.5 Financial Analysis of Future Situation with Master Plan Road Access Options

The road, parking and public open space initiatives that are proposed under the Lake Ainsworth Crown Reserve Master Plan will have some impacts on the commercial operations of the Lake Ainsworth Caravan Park.

The following section examines the types of holiday accommodation that are offered at the caravan park, possible loss of sites associated with each road access option and an indicative financial analysis of Master Plan initiatives on the operations of the caravan park for each option:

Table 7.2 Schedule of Fees by Accommodation Types

Type	Peak (i)		Shoulder (ii)		Off Peak (iii)	
	Night	Week	Night	Week	Night	Week
	\$	\$	\$	\$	\$	\$
Cabin Ensuite	92	644	82	492	67	402
Cabin W/C	80	560	70	420	60	360
Cabin Basic	75	525	60	360	50	300
Powered Site	28	196	24	144	23	138
Unpowered Site	25	175	21	126	21	126

- (i) Peak NSW and Queensland Christmas and Easter School Holidays.
- (ii) Shoulder NSW and Queensland Spring School Holidays.
- (iii) Off Peak All other periods not listed above.

Ballina Shire Council has provided occupancy rates by accommodation types for 2003/04 and 2004/05 that highlight aside from limited cabin accommodation that there is spare capacity for powered sites and unpowered sites even in the peak months of Christmas holidays (December and January) and Easter (ie March and April). Notwithstanding it is advised that within these months there are periods of full occupancy over the Christmas early New Year weeks and the Easter school holidays.

The Master Plan will have some impacts on the number of stored van, cabins, powered and unpowered sites available for accommodation use on the north eastern side of the caravan park where some existing caravan park land will be taken for open space and a new entrance and also in the vicinity of the roads for access Options 1,2 & 3.

The following number of sites will be impacted for each option.

- Option 1 Road Access (behind Barrett Drive and around western perimeter of caravan park and including new caravan park entrance and more open space):
 - 36 powered sites;
 - 38 unpowered sites
 - 7 cabins and
 - 12 stored vans
- Option 2 Road Access (dissecting the caravan parking utilising existing Road Reserve including new caravan park entrance and more open space):
 - 39 powered sites;
 - 34 unpowered sites;
 - 7 cabins; and
 - 14 stored vans.
- Option 3 Road Access (new Southern Rd alignment including new caravan park entrance and more open space):
 - 36 powered sites;
 - 14 unpowered sites;
 - 7 cabins.

Using occupancy rates for 2003/04 and 2004/05, the peak time for both powered and unpowered sites is January at a high of 77% and 54% respectively. These figures suggest that even in the peak monthly period that there is some spare capacity.

Notwithstanding it is most likely that if the months of December/January was further broken down on a weekly or daily basis for the 3 week period (assume 20 days) immediately after Boxing Day that occupancy rates for powered and unpowered sites would be almost at capacity. A similar conclusion can be made for the 10 day Easter holiday period commencing on Good Friday. Generally a 10 day minimum booking period is only accepted at that time. When combined, 30 days has been used to represent periods of full capacity. It is assumed that on average 4 people will stay at each site during these peak periods. The caravan park would have sufficient sites available (aside from cabins) to meet demand at all other periods.

A final assumption that underpins the financial analysis is that the stored vans and cabins can be relocated elsewhere in the caravan park and the loss will therefore be the powered site. The sites that are used for cabins and stored vans have been added to the powered sites data in the tables below.

Therefore using the above assumptions, the estimated financial impact on the revenues of the Lake Ainsworth Caravan Park by the Master Plan initiatives would be as follows:

Table 7.3 Caravan Park Option 1 (Road Access Option 1 and New Caravan Park Entrance/Open Space in North Eastern Section)

Type	Sites	Days	Daily Fee	Revenue Loss
<i>Road Access Option 1</i> Unpowered Sites	38	30	\$35	\$39,900
Powered Sites	55	30	\$38	\$62,700
TOTAL	93	-	-	\$102,600

Table 7.4 Caravan Park Option 2 (Road Access Option 2 and New Caravan Park Entrance/Open Space in North Eastern Section)

Type	Sites	Days	Daily Fee	Revenue Loss
<i>Road Access Option 2</i> Unpowered Sites	34	30	\$35	\$35,700
Powered Sites	60	30	\$38	\$68,400
TOTAL	94	-	-	\$104,100

Table 7.5 Caravan Park Option 3 (Road Access Option 3 and New Caravan Park Entrance/Open Space in North Eastern Section)

Type	Sites	Days	Daily Fee	Revenue Loss
<i>Road Access Option 3</i> Unpowered Sites	14	30	\$35	\$14,700
Powered Site	43	30	\$38	\$49,020
TOTAL	57	-	-	\$63,720

The tables highlight that the lost revenue in 2004/05 prices resulting from the reduction in available sites emanating from the new caravan park entrance/open space redevelopment in the north eastern section and Road Access Option 1 would be approximately \$102,600 per annum while the new Caravan Park entrance/open space redevelopment and Road Access Option 2 would be approximately \$104,100 per annum. Road Access Option 3 would impact primarily on the north

eastern section of the caravan park where the loss of annual income resulting would be approximately \$63,720, the lowest of the three road access options. It is conceivable that the number of sites lost may be further increased or decreased depending on road and public open space requirements that would be firmed up in the design phase of the project. Hence, the figures provided above are estimates only.

8 Coastal Heath Precinct

8.1 Current Situation

The Coastal Heath Precinct covers the area of the Lake Ainsworth Crown Reserve from the south western corner of the lake to the western and northern boundaries of the Crown Reserve.

The precinct has extensive contiguous areas of low lying heath dominated by coastal banksia. There is evidence of irregular walking trails through the heath on the western side of the lake. However the area is not noticeably used for accessing the lake for swimming and/or watercraft activities. The southern foreshore and eastern foreshore totally dominate user access to the lake because of proximity to caravan park, picnic facilities and parking.



Figure 8: Coastal Heath Precinct

The unsealed Camp Drewe Rd (Western Rd) provides vehicle access to Camp Drewe and an alternative access to the Sport and Recreation Centre and Seven Mile Beach during flooding occurrences. It also provides access to a number of fire trails on Lake Ainsworth's western side that are used for bushfire protection.

Land immediately to the west of the Lake Ainsworth Crown Reserve is owned by Jali LALC (ie DP820031, Lot 146) and also much of this land is classified as State Environmental Planning Policy 14 – Coastal Wetlands.

8.2 Master Planning Initiatives

The following planning initiatives are proposed for the Coastal Heath precinct:

Table 8.1 Coastal Heath Planning Initiatives

Coastal Heath Precinct		
Initiatives		Drivers
D1	Investigate the possibility of new east-west access road from Ballina Byron Rd to Camp Drewe (Western) Rd.	See also initiatives A1; Improve water quality; Improve traffic and parking; Enhanced mobility and safety benefits.
D2	The above investigation should also include the possibility of long term siting the main entrance to the caravan park on the north western side of the caravan park with access from east west connector road and then south along Camp Drewe Rd. This would alleviate congestion in the Pacific Parade/Ross St area resulting from caravan park specific traffic.	Improve traffic and parking; Enhanced mobility and safety benefits.
D3	Camp Drewe (Western) Rd to be upgraded (sealed) to provide access to Sport and Recreation Centre, Camp Drewe and Seven Mile Beach when and if the Eastern Rd is closed to vehicular traffic.	Improve traffic and parking; Enhanced mobility and safety benefit.
D4	Establishment of a cycleway on upgraded Camp Drewe (Western) Rd as part of a possible circular cycleway around the lake.	Enhanced recreational opportunities; Enhanced mobility and safety benefits
D5	Consideration of establishing car/trailer parking for watercrafts accessing the Lake under all Road Access Options. The appropriate siting of this activity may lessen impacts on caravan park and recreation congestion around the southern foreshore of the lake in peak times but may have some environmental impacts on the existing heath.	Enhanced recreational opportunities; Enhanced mobility and safety benefits
D6	Possible boardwalk and viewing platforms forming the western segment of a possible pedestrian pathway around the lake.	Enhanced recreational opportunities; Enhanced mobility and safety benefits
D7	Fencing of sensitive vegetation.	Improve water quality; Foreshore and heath protection.
D8	Educational signage to promote the environmental and cultural heritage aspects of the lake.	Improve water quality; Improve community education; Enhance cultural awareness.

The above initiatives address the key issues of water quality, flora protection and enhanced vehicle and pedestrian/cycling provision. Specifically the water quality and traffic issues will be influenced by the possible selection of one of the three road access options linking the Pacific Parade/Ross St to the northern western side of the caravan park. Similarly the initiative to investigate the possibility of the east west connector road from the Ballina Byron Rd to the Western Rd will also have implications for traffic and general access to the Crown Reserve particularly the Lake Ainsworth Caravan Park.

The water quality and traffic issues are specifically addressed below.

8.3 Water Quality Initiatives

The western section of the caravan park and existing heath whilst further away from the lake edge still contributes water quality of the lake. The designed upgrade of the western road will need to be completed with the water quality treatment systems in mind. The upgraded road can serve as a barrier for any flows from the west that can be captured and treated and therefore provides a good opportunity to implement some systems during its development. This design could include swale drains, infiltration trenches and gross pollutant traps.

8.4 Traffic and Parking Initiatives

The following Initiatives have been identified and are consequential to the closure of the Eastern Rd to vehicular traffic and the possible use of the Western Rd for accessing the Sport and Recreation Centre and Seven Mile Beach:

- Upgrading of Western Rd from gravel to bitumen to provide better access to Camp Drewe, Sport and Recreation Centre and beach;
- Establishment of cycleway on upgraded Western Rd as part of pedestrian/cycleway network around the lake;
- Consideration of an east west connector road from the Ballina-Byron Bay Rd to Western Rd.

The advantages of implementing the above initiatives are:

- Enhanced traffic access on upgraded road assuming direct access from either Option 1, Option 2 or Option 3;
- A stand alone east-west linking road would remove the need to construct a new access road from Ross St.

The disadvantages of implementing the above initiatives are:

- Road closures around lake will result in additional capital and operational costs for upgraded road infrastructure;
- New east-west linking road option to Western Rd would be expensive considering the likely volume of traffic that would use it and would need to address a number of cultural heritage and environmental requirements;
- A stand alone east-west linking road without Option 1, Option 2 or Option 3 would increase the distance and travel time from Lennox Head to the Western Rd.
- Road safety treatments would be required to slow traffic down.

9 Policy and Planning Conformity

9.1 Policy and Planning Context

The Lake Ainsworth Crown Reserve Master Plan addresses a range of matters considered in the Lake Management Plan (Management Plan 2002) providing a more detailed framework for the management of a range of key issues.

The content of the Master Plan conforms, where feasible, to the endorsed policy and planning management actions of the Management Plan. By conforming to the Management Plan, the Master Plan has regard to higher level government policies, strategies and plans including:

- New South Wales Coastal Policy;
- State Rivers and Estuaries Policy; and
- State Environmental Planning Policies.

Lake Ainsworth is classified as a "coastal lake" under State Environmental Planning Policy No. 71 – Coastal Protection. The legislation requires that applications for development be submitted to planning New South Wales for consideration.

The principal documents with direct relevance to Lake Ainsworth are:

- Lake Ainsworth Processes Study;
- Lake Ainsworth Management Study;
- Ballina Coastal Reserve Plan of Management;
- Lake Ainsworth Caravan Park Redevelopment Study; and
- Evaluation of Traffic Access Options at Lake Ainsworth Caravan Park.

In addition, there are many other relevant documents and government legislation that impact on Lake Ainsworth in one way or another and these have been extensively documented in the Management Plan (see Management Plan 2002 p16-17).

9.2 Management Plan Policy Alignment

9.2.1 Management Plan Objectives

The following section is a policy alignment check against each previously endorsed Management Plan objective.

Ballina Shire Council has stipulated at the outset that the Lake Ainsworth Crown Reserve Master Plan "must be consistent with the objectives outlined in the Lake Ainsworth Management Plan". The only exception to this is a possible variation with respect to road access around the western end of the lake. The reasons for this are set out throughout Sections 3 - 8, in addition to the details provided in this section.

The Management Plan has specified the following categories and management objectives that also have been integral and consistent where feasible with the development of the Lake Ainsworth Crown Reserve Master Plan. An assessment of consistency has been provided in the table below.

- The term **Consistent** is used where the Master Planning initiatives in the Lake Ainsworth Crown Reserve Master Plan embraces the intent and is consistent of the Management Plan objective.
- **Partial consistency** is used where the Master Planning initiatives include a variation to the Management Plan.
- **Not applicable** is used where the scope of the Master Plan is not intended to address the intent of the Management Plan objective.

Table 9.1 Management Plan Management Objectives

Category	Management Plan Objective	Consistency
Management Structure	To establish an integrated catchment management structure for the lake that allows for implementation, monitoring and review of the Lake Ainsworth Management Plan	Not applicable. The establishment of a management structure is out of scope of the master planning process. The Master Plan does not prejudice the establishment of an integrated management structure.
Water Quality	To maintain and improve the water quality of the lake to a level appropriate for recreational uses and for the protection of aquatic ecosystems.	Consistent. The Master Plan has a key objective to maintain the standard of the lake's water through implementing water quality guidelines and treatments.
Coastal Dune Stability	To maintain and enhance the coastal dune system to assist the survival of Lake Ainsworth as a freshwater lake and to protect the lakes natural values.	Consistent. Master Plan initiative to remove traffic from Eastern Rd and particularly 4WDs accessing Seven Mile Beach from that road.
Traffic Management	To manage traffic flow and parking to enhance public safety and recreational opportunity, to improve access, reduce erosion and protect ecological values.	Partially Consistent. Master Plan has key objective to improve traffic and parking. A range of road, parking and pedestrian/cycling initiatives are proposed to address this objective. However, some variation to the road access proposed in the Management Plan with a view to improving traffic movement, health, amenity and access consistent with current information and issues.
Recreation	To maintain and enhance the recreational opportunities, while managing the activities so as to minimise any impact on the lake's aesthetics and ecological values.	Consistent. The Master Plan has initiatives that propose to enhance the recreational open space, recreational furniture and pedestrian/cycle opportunities.
Ecology	To conserve and enhance the ecological values of Lake Ainsworth.	Consistent. Master Plan initiatives are based on the fundamental premise of maintaining the Sustainability of the lake and its eco-systems.
Planning and Development	To ensure coordinated management of all land in both the lake's surface and groundwater catchment.	Partially Consistent. The Lake Ainsworth Crown Reserve is only included in the geographic scope of Master Plan.
Erosion and Sedimentation	To maintain and enhance the foreshore and catchment of the lake to protect the lake's aesthetic, ecological and recreational values.	Partially Consistent. The Master Plan only covers some of the lake's foreshores within the lake Ainsworth Crown Reserve and not full lake and/or catchment.
Education	To develop systems and programs to educate and inform the community about the values of the lake and the impacts of human activity, to reduce adverse impacts	Consistent. The Master Plan has an initiative to erect educational signs to inform on water and cultural heritage issues.

Category	Management Plan Objective	Consistency
	and enhance the lake's values.	
Water Level and Flooding	To minimise the impact of natural variations in water level of the lake, both high and low, so as to protect terrestrial and aquatic ecosystems, and to reduce foreshore erosion and disruption to access and recreational use.	Consistent. The balance between Water quality, foreshore protection, access and recreational is integral to the Master Plan objectives and initiatives.
Aboriginal Heritage	To understand, protect and respect the aboriginal heritage value of the lake.	Consistent. The Master Plan initiative recognises cultural heritage and native land issues impacting on the Lake Ainsworth Crown Reserve.

(Source: Management Plan 2002 pp 19-20)

9.3 Management Plan's Actions

In addition to specifying objectives for each of the eleven Management Plan categories, the Management Plan developed a number of management actions for implementation for each Management Plan category.

In the context of Lake Ainsworth Crown Reserve Master Plan, Council has stipulated that there should be alignment between these management actions where applicable and the initiatives/actions proposed under the Master Plan.

The following table lists all the Management Plan management actions by category together with a statement of consistency with the initiatives in the Master Plan. 'Not Applicable' indicates that the Master Plan was not intended to cover the Management Plan's Actions.

Table 9.2 Management Plan's Actions Relationship with Master Plan Initiatives

Management Plan Ref	Management Plan Issue	Management Actions	Consistency with Master Plan Initiatives
Management Structure			
A1	Establishment of a Management Structure	Formulate a Memorandum of Understanding between responsible agencies	Not applicable
A2	Establishment of a Management Structure	Review Memorandum of Understanding and agency performance every two years	Not applicable
A3	Establishment of a Management Structure	Arrange funding for the various management actions	Not applicable
A4	Establishment of a Management Structure	Monitor Performance of Plan	Not applicable
Water Quality			
B1	Algal Blooms	Continue current aeration practices	Not applicable
B2	Algal Blooms	Set up an environmental database to monitor the effectiveness of the aeration system over time	Not applicable
B5	Monitoring	Review current monitoring	Not applicable

Management Plan Ref	Management Plan Issue	Management Actions	Consistency with Master Plan Initiatives
		systems for the lake. Develop new guidelines and monitoring systems specific to Lake Ainsworth	
Costal Dunes			
C1	Establishment of an effective buffer to coastal dunes to protect the lake	Continue current dune rehabilitation management practices	Consistent. Initiative to close Eastern Rd to improve dunal protection
C3	Ensure stability of dunal vegetation	Remove and relocate existing powerlines underground	Consistent. Initiative to close Eastern Rd to improve dunal protection
Traffic Management			
D1	Safety of the visitors to the lake and problems with access to the Sports and Recreation Centre during times of floods	Restrict vehicular access along the eastern road alignment and discourage motorists from entering the Sport and Recreation Centre. Move the majority of the picnic tables and facilities to the western side of the road	Consistent. Range of traffic, parking and road safety initiatives including closure of the Eastern Rd, alternative road access to Western Rd, possible realignment of the Southern Rd, more formalised parking and greater separation of recreational activities from traffic.
D2	Traffic numbers on existing eastern road	Remove or relocate existing 4WD beach access	Consistent. Initiative to close Eastern Rd.
D3	Erosion in areas adjacent to the lake	Prohibit foreshore parking and provide designated parking areas	Consistent. Initiative to close Eastern Rd and possible realignment of the Southern Rd.
D4	Visitor amenity and safety at the lake and surrounds	Close part of the existing road between the lake and the caravan park and create a new road from Ross Street, around the back of the caravan park to connect to the western access road.	Consistent. Range of traffic, parking and road safety initiatives including closure of the Eastern Rd, alternative road access options to Western Rd, possible realignment of the Southern Rd, more formalised parking and greater separation of recreational activities from traffic.
Ecology			
F1	Spread of aquatic weeds	Control the spread of water primrose and other aquatic weeds	Consistent. Master Plan initiatives are based on the fundamental premise of maintaining the Sustainability of the lake and its eco-systems.
F2	Spread of terrestrial weeds	Rehabilitation and restoration of areas infested with terrestrial weeds	Not applicable

Management Plan Ref	Management Plan Issue	Management Actions	Consistency with Master Plan Initiatives
F3	Spread of introduced fauna	Implement action plans to target specific species for their eradication	Not applicable
F4	Implement ENVITE's Vegetation Management Plan	The need for restoration and rehabilitation requires effective guidelines for volunteers and others engaged in the maintenance of Lake Ainsworth	Not applicable
Erosion			
H1	Erosion of the foreshore of the lake and accumulation of sediments in the lake	Implement Traffic Management Plan	Consistent. Initiative to close Eastern Rd and possible realignment of the Southern Rd.
Aboriginal Heritage			
K1	Protection of areas of Aboriginal cultural significance	Ensure areas of Aboriginal cultural significance remain relatively undisturbed through measures acceptable to the Local Aboriginal Land Council	Consistent in principle. The public exhibition of the Master Plan should be used as an opportunity to identify relevant areas of interests
K2	Protection of areas of Aboriginal cultural significance	Liaison between Ballina Shire Council and the Local Aboriginal Land Council regarding culturally significant sites	Consistent in principle. The public exhibition of the Master Plan should be used as an opportunity to identify relevant areas of interests
Water Quality			
B4	Lake and Groundwater Quality	Implement the suite of water quality improvement strategies	Consistent. The Master Plan has a key objective to maintain the standard of the lake's water through implementing water quality guidelines and treatments.
B5	Monitoring	Continue ongoing monitoring	Not applicable
Coastal Dunes			
C2	Need to address long-term recession of dunes	Assess coastal hazards and suitable management strategies	Consistent. Initiative to close Eastern Rd to improve dunal protection
Recreation			
E1	Potential erosion caused by sail craft	Provide a launching area for sailboats and sailboards	Consistent. Designated launching area for watercraft identified but site is dependent on the selection of alternative road access option linking to Western Rd.
E2	Damage to vegetation by wood fires and increasing visitor enjoyment	Upgrade picnic and BBQ facilities	Consistent. Recreational areas to be more clearly defined, provision of recreational furniture and

Management Plan Ref	Management Plan Issue	Management Actions	Consistency with Master Plan Initiatives
			closure of vehicle access to main recreational areas of lake.
E3	Erosion and damage to vegetation by visitors walking in undefined areas	Provide pedestrian access paths and walking tracks	Consistent. Master Plan provides for shared pedestrian and cycle paths and a possible boardwalk on the western side of lake.
E4	Use of area for markets	Allow the Lennox Markets to continue	Consistent. All traffic and parking arrangements allow for the Markets to continue.
E5	Conflict between the different recreational users of the lake	Provide designated swimming and watercraft areas	Consistent. Designated launching area for watercraft identified but site is dependent on the selection of alternative road access option linking to Western Rd. Also, recreational areas to be more clearly defined, provision of recreational furniture and closure of vehicle access to main recreational areas of lake.
Planning and Development			
Erosion			
H2	Erosion of the foreshore of the lake and accumulation of sediments in the lake	Continue and enhance current riparian flora management strategies	Consistent. Initiative to close Eastern Rd and possible realignment of the Southern Rd.
Education			
I1	Visitor awareness of the effects of their actions	Provide an information display board at the south-eastern entrance to the Lake Ainsworth reserve	Consistent. The Master Plan has an initiative to erect educational signs to inform on water quality and other matters.
I2	Conflict between users of the lake in terms of potential collisions between sail craft and swimmers	Erect signage to delineate the areas for swimming and sail craft use	Consistent. Designated launching area for watercraft identified but site is dependent on the selection of alternative road access option linking to Western Rd. The Master Plan also has an initiative to erect educational signs to inform on water and other matters including safety.
Aboriginal Heritage			
K3	Protection of areas of Aboriginal cultural	Erect signage to educate the community about the presence	Consistent. The Master Plan has an initiative to

Management Plan Ref	Management Plan Issue	Management Actions	Consistency with Master Plan Initiatives
	significance	and significance of Aboriginal cultural sites, where deemed appropriate by the Local Aboriginal Land Council	erect educational signs to inform on water and cultural heritage issues.
Water Quality			
B3	Algal blooms	Further investigate other strategies – sediment capping, biomanipulation, sediment removal etc	Not applicable
Planning and Development			
G2	Need for additional space for any future development of the Surf Life Saving Club	Consider the future of the Surf Life Saving Club site to determine whether expansion or relocation is appropriate	Not applicable
Water Level and Flooding			
J1	The need to mitigate the effects of the natural variation of the lake's water level rather than implement a system to control and regulate the water level in the lake	Ensure that littoral and riparian revegetation schemes incorporate species that are tolerant to infrequent but potentially prolonged periods of inundation	Not applicable
J2	The need to mitigate the effects of the natural variation of the lake's water level rather than implement a system to control and regulate the water level in the lake	Placement of new and/or replacement of existing recreational facilities (BBQs, walking paths, etc) beyond levels likely to be inundated for prolonged periods	Consistent. Recreational areas to be more clearly defined, provision of recreational furniture and shared pedestrian and cycle paths and boardwalk.

(Source: Management Plan 2002 pp VII-XII)

The above table highlights that the Lake Ainsworth Crown Reserve has a high degree of relevance to the Management Plan through the establishment of Master Planning initiatives for each precinct. In doing so, the Master Plan builds onto the endorsed Management Plan by providing a desired future structure and statements of planning intent for the Lake Ainsworth Crown Reserve.

9.4 Conclusion

The basis for the development of the Lake Ainsworth Crown Reserve Master Plan has been the need to maintain existing water quality and other environmental standards, and to ensure that the Master Planning initiatives enhance and manage recreational opportunities, amenity, accessibility, mobility and safety without detrimental impacts on the sustainability of the Crown Reserve.

The master planning process has involved extensive consultation with stakeholders, the broad community and Ballina Shire Council and the resulting planning initiatives have been identified from issues, concerns and responses raised during that process.

The Master Plan has also considered and has been assessed against the Lake Ainsworth Management Plan and, where applicable, other Ballina Shire Council and New South Wales government policy and planning documents.

The challenge throughout the master planning process has been to deliver a Master Plan that has the right balance of the Crown Reserve land allocated to open space, caravan park and transport infrastructure.

The process has highlighted the extent to which changes to road infrastructure will significantly impact on caravan park operations and open space. The advantages that are associated with Road Access Options 1, 2 and 3 linking Pacific Parade/Ross St to the Western Rd in the event that the Eastern Rd is closed to vehicular traffic is the major case in point.

This important matter will need to be resolved following the public exhibition period.

The Master Plan that is the subject of this report is essentially a guide for planning action only and much of the detail of these planning initiatives including road design and any related water sensitive design will be required to be developed during the design phase work associated with implementation.

Appendix A

Workshop 1

A1: Workshop 1 Agenda

A2: Workshop 1 Participants

A3: Workshop 1 Small Group Issues

Appendix A1: Workshop 1 Agenda

AGENDA

Registration	1:30 pm
Welcome and Introduction	1:45 pm
Presentation by the Study Team	2:00 pm
Session 1: Questions and Discussion Small Work Group - Crown Reserve Issues	2:30 pm
Refreshments	3:00 pm
Session 2: Small Work Group - Master Plan Options and Proposals for Study Team to Consider	3:15 pm
Summary of workshop proceedings	4:00 pm
Next steps	4:15 pm
Close	4:30 pm

Appendix A2: Workshop 1 Participants

Number	Attendee	Organisation
1.	Fiona Folan	Ballina Environment Society
2.	Kevin Munro	77 Teven Road, Alstonville
3.	Sandra Munro	77 Teven Road, Altstonville
4.	Malcolm Milner	Lennox Head Land Care
5.	John Morelli	221 Alphadale Road, Lindendale
6.	Marg Cannon	120 Lake Ainsworth Caravan Park
7.	Shirley Murray	98 Lake Ainsworth Caravan Park
8.	Richard Hagley	DIPNR
9.	Jeannette Clark	Adjoining resident
10.	Len Newton	Manager Camp Drew
11.	Kelly Shaw	Park Manager Lake Ainsworth Caravan Park
12.	Mark Shaw	Park Manager Lake Ainsworth Caravan Park
13.	John Tilton	Australian Tourist Park Management
14.	Scott Taylor	Ballina Shire Council
15.	Brian Smith	Lennox Head Residents Association
16.	Michael Pearson	Lennox Head/Alstonville Surf Life Saving Club
17.	Beth Hanson	Lake Ainsworth Community Access Group
18.	Graeme Dicker	Lennox Head Chamber of Commerce
19.	Jillian Pratten	Ballina Shire Council
20.	Paul Busmanis	Ballina Shire Council
21.	Paul Hickey	Ballina Shire Council
22.	Karen Hembrow	Department of Lands
23.	Peter Baumann	Department of Lands
24.	Lyn Scott	Caravan Park Owner
25.	Margaret Howes	Ballina Shire Councillor
26.	Steve Barnier	Ballina Shire Council
27.	Matthew Wood	Ballina Shire Council
28.	Sharron Cadwallader	Ballina Shire Councillor
29.	Vince Kelly	

The above participants signed the attendance record.

Appendix A3: Workshop 1 Small Group Issues

Group Number	Issues	Level of importance Dots	Master Plan Options for consideration	Agreement/Disagreement
Group 1	Water Quality <ul style="list-style-type: none"> - Aquatic Weeds need removal - Stormwater Filters especially campers grey water - Need for education and better infrastructure (eg Showers before entering the lake and ban sunscreen) 	4 Dots	Weed removal in Lake Stormwater – gross pollutant, swales, reed bed, mechanical filtration, maintenance regime Provision of showers and ban sunscreen	
	Signage, Education and Appreciation		Incorporate history, maps and promote awareness through provision of 'Do's and Don'ts'.	
	Public Open Space <ul style="list-style-type: none"> - Recreation: pathways, picnic areas, passive recreation - Car parking: (especially visitors) - Markets relocate to Main Street (medium to long term) - Equitable Access 	4 Dots	Markets to the CBD (following a CBD upgrade) Formalise pathways Boardwalks on the western edge BBQ taps flow into stormwater Return eastern portion of the caravan park to public open space	
	Affordable camping	3 Dots	limit vans, phase out permanent caravan park residents make sustainable for long term viability	Group acknowledges the phasing out of permanent caravan park is a contentious issue
	Traffic Issues <ul style="list-style-type: none"> - Do not encroach further East - 4 WD Access - Equity - Drop off point, no parking on the lake side - Parking: car park, Surf Life Saving Club, Network 	4 Dots	Safety of eastern road – through the development of the western route Provision for parking within the caravan park for visitors Prohibit parking on the grass area on the lakeside	

Group Number	Issues	Level of importance Dots	Master Plan Options for consideration	Agreement/Disagreement
	Coastal Cycleway impact		Consider the feasibility and likely impacts of a coastal cycleway	
Group 2	Lake Body - Algae Blooms		Continue to monitor and research current management practices of the lake	
	Noxious Water Weeds	1 Dot	Allocation of resources and working in conjunction with volunteer groups Seek relevant consent	
	Integrated management of the lake and surrounding area with a focus on sustainable healthy future	1 Dot	Future review of the Lake Ainsworth Management Plan to incorporate a Sustainability assessment	
	Stormwater into lake		Investigate possibility of redirecting entry to lake or cleaning of stormwater, wetlands and proprietary devices.	
	Potential over use for recreation eg. Overcrowding and effects of sunscreen on water quality		Getting the lake are into good condition then it will cope with increase in useage	
	General Issues: Break through in storm event of sea		Closure of 4 WD access and the protection of coastal vegetation; and adopt strategies in the Coastline Management Plan.	
	Traffic flow - Access to the Sport and Recreational Centre - 4 WD access	1 Dot	Consider access via coast road and/or western road 4 WD access will be via the western road when new 4 WD access to the beach is implemented	
	Car parking		Locate car parking away from the lake and sea edges through the use of physical barriers to restrict parking	
	Recreational facilities		Consider passive recreation facilities such as tables, shade, barbeques and play equipment	

Group Number	Issues	Level of importance Dots	Master Plan Options for consideration	Agreement/Disagreement
	Control motorised use		Consider prohibiting vehicles in the future	
	Access points for sail boats and canoes		Designate areas for launching to assist in controlling erosion Policing and education	
	Support control / protection of riparian vegetation	1 Dot	Consider vegetation management plans Financing	
	Landcare/dunecare and revegetation work		Consider weed control and support through heathland protection	
	Location of markets		Consider leaving markets in the current location or for relocate to the Main Street (using Park Lane as a detour) or Williams Reserve	
	Flooding		Design to take into account regular flooding	
	Re-locating southern access road to connect with West Road	1 Dot	Considerations for: - via council road reserve from Gibbon Street - overpass - access via cost road only to Western road	
	Request for a clearer definition on the caravan park boundaries., including the size of the caravan park and upgrading of facilities such as roads and drainage		- Identify the number of sites in the caravan park (existing and for the future) - Ensure caravan park design addresses the upgrading of roads and drainage	
	Phase out of caravan park			Disagreement in group: - as the caravan park provides an income for community businesses - income generated by Council contributes to the maintenance of the reserve Agreement in group: - reduce the number of people and environmental damage

Group Number	Issues	Level of importance Dots	Master Plan Options for consideration	Agreement/Disagreement
	Paths/board walks to access the western side of the lake		Master Plan to incorporate recommendations of the Lake Ainsworth Management Plan which already addresses paths and board walks	
	Exploring opportunities for eco-tourism involving the lake and the heath land		Considerations for generating further income for the town	
	Lack of educational material about the lake and its uses		Incorporate education material eg through relevant and appropriate signage	
	Redevelopment of Sport and Recreational Centre is placing pressure on the lake		Ensure the Sport and Recreational Centre is involved in this process and considers Sustainability and impacts on the lake area	
Group 3	Defining acceptable boundaries for: <ul style="list-style-type: none"> - caravan park - open space areas - environmentally sensitive areas - parking 		A separate feasibility study should be undertaken to consider environmental, financial, social and public amenity and recreational opportunities. Open space areas to consider open space strategies, overcrowding and growth potential.	
	Defining financial viability of caravan park			
	Traffic issues: <ul style="list-style-type: none"> - parking - safety - alternate routes eg Camp Drewe and Sport and Recreation Centre 		Consideration of: <ul style="list-style-type: none"> - council parking restrictions - caravan park users need to park in the caravan park and incorporate extra charges for additional vehicles - alternative routes with access from the coast road including all fishing and 4 WD vehicles 	
	Use of caravan park land as public recreation in non peak periods		Consider the utilisation of the caravan park in peak and non-peak periods	

Group Number	Issues	Level of importance Dots	Master Plan Options for consideration	Agreement/Disagreement
	Environmental issues eg health of the lake		<ul style="list-style-type: none"> - Any redevelopment of the caravan park to comply with environmental issues - Appropriation of reserve fund to environmental works 	
Group 4	Risk Management <ul style="list-style-type: none"> - conflict of vehicle and pedestrian's - traffic flow - parking (both caravan park and day users) 		<ul style="list-style-type: none"> - Risk management assessment and plan - to avoid conflicts with vehicles and pedestrians close the existing Camp Drewe Road and relocate to the west, allowing open space on the foreshore - utilisation of calming devices to assist with traffic flow - caravan park design to provide greater internal parking. Day visitor parking also required to the west of the lake. 	
	Environmental Issues – Water Quality: <ul style="list-style-type: none"> - lake water quality - storm water run off - weed control - balanced planning (natural and constructed environments) 	1 Dot	<ul style="list-style-type: none"> - to improve water quality by planting reeds - development of the caravan park to include the latest environmental technology - provision for buildings to be within a certain distance from the lake 	
	Lack of foreshore facilities		<ul style="list-style-type: none"> - day visitor barbeques, shelters and signage - open an area to the west providing for additional beachfront and lake front areas - rubbish disposal facilities - signage - toilets - disabled access 	

Group Number	Issues	Level of importance Dots	Master Plan Options for consideration	Agreement/Disagreement
	Caravan park		<ul style="list-style-type: none"> - Preserve current scale and bring into line with industry standards including the issues raised above - Improve the caravan park facilities 	
Group 5	Roads: <ul style="list-style-type: none"> - Around lake eg Surfside and Camp Drewe - Parking - Safety - Road signage 		<ul style="list-style-type: none"> - road access to Camp Drewe via Byron Bay Road/Western Road - closure of the lake road to a certain point - Realign Eastern Road (to protect lake) and provide parking 	
	Water Quality and drainage		<ul style="list-style-type: none"> - extend aeration - improve road and storm water drainage in park - encourage reed growth 	
	Caravan Park		<ul style="list-style-type: none"> - possible increase in open space - possible to move park to the west - no cabins next to foreshore - no increase in area of park 	
	Markets		<ul style="list-style-type: none"> - move existing markets 	Moving of markets: positive impact concerning safety and the town; negative use new open space
	Amenities		<ul style="list-style-type: none"> - spend money on improvements 	

Appendix B

Workshop 2

B1: Workshop 2 Agenda

B2: Workshop 2 Participants

Appendix B1: Workshop 2 Agenda

LAKE AINSWORTH CROWN RESERVE MASTER PLAN WORKSHOP 2

Friday 22 July 2005

Lake Ainsworth Sport and Recreation Centre

AGENDA

Registration	12:30 pm
Welcome and Introduction	1:00 pm
Overview of Master Plan Process and Consultation	1:10 pm
Presentation of Master Plan: – Draft Structure Plan – Master Plan by 4 precincts	1:15 pm
Questions and Discussion	3:30 pm
Summary of workshop proceedings	4:00 pm
Next steps	4:15 pm
Close	4:30 pm

Appendix B2: Workshop 2 Participants

Number	Attendee	Organisation
1.	Fiona Folan	Ballina Environment Society
2.	Kevin Munro	77 Teven Road, Alstonville
3.	Sandra Munro	77 Teven Road, Altstonville
4.	Malcolm Milner	Lennox Head Land Care
5.	John Morelli	221 Alphadale Road, Lindendale
6.	Richard Hagley	DIPNR
7.	Jeannette Clark	Adjoining resident
8.	Len Newton	Manager Camp Drew
9.	Steve Billett	Australian Tourist Park Management
10.	Chris Raymond	Australian Tourist Park Management
11.	Paul Hernage	Department of Sport, Recreation and Tourism
12.	Brian Smith	Lennox Head Residents Association
13.	Malcolm Milner	Lennox Head Land Care
14.	Ms Merle Rankin	Lake Ainsworth Community Access Group
15.	Graeme Dicker	Lennox Head Chamber of Commerce
16.	Peter Baumann	Department of Lands
17.	Lyn Scott	Caravan Park Owner
18.	Scott Taylor	Ballina Shire Council
19.	Steve Barnier	Ballina Shire Council
20.	Matthew Wood	Ballina Shire Council
21.	Kate Singleton	Ballina Shire Council
22.	Graham Plumb	Ballina Shire Council

The above participants signed the attendance record.

Appendix C

Newsletters

C1: Newsletter 1

Appendix C

Appendix D

Media Documents

D1: Advertisements

D2: Media Articles

Appendix D 1: Advertisements

Master Plan for Lake Ainsworth Crown Reserve

Ballina Shire Council has engaged Connell Wagner and Hassell to prepare a master plan to guide land use and the future development of the Lake Ainsworth Crown reserve, including the Lake Ainsworth Caravan Park.

In 2002, Council adopted the Lake Ainsworth Management Plan which identified a number of key issues relating to the lake as well as recommended a number of strategies along with associated actions that would protect, and where possible, improve the lake environment and its surrounds. However a number of the strategies identified in the plan required the undertaking of more detailed planning and investigation.

At the same time Council expressed an interest in improving the Lake Ainsworth Caravan Park. A redevelopment strategy for the caravan park was prepared and placed on public display in April 2004. The proposed strategy attracted a high level of interest from the community and raised a number of specific issues relating to the car parking, traffic congestion, open space and the possible over-development of the caravan park.

The Master Plan is part of the continuation of detailed planning and strategy development for Lake Ainsworth. It will consider the issues raised by the community and help shape the future of the lake and its surrounds.

The aim of the master plan is to ensure any redevelopment achieves a balanced outcome for the people who live, work in and visit Lake Ainsworth. To assist us we have recently commissioned Connell Wagner in association with Hassell to undertake master planning and consultation services for this project.

Over the coming months a number of community involvement activities relating to the master plan will occur including the distribution of newsletters and a public display of the draft master plan at local venues.

To find out more about this project or if you wish to provide any comments about the master plan study you can:

Contact Mr Matthew Wood of Ballina Shire Council on telephone 6686 4444

Email us: lakeainsworth@conwag.com

Visit the Website: www.ballina.nsw.gov.au and then search for Lake Ainsworth Master Plan

Write to the Lake Ainsworth Master Plan Project Team

Reply Paid 63652 Spring Hill Qld 4004

Master Plan for Lake Ainsworth Crown Reserve

Ballina Shire Council has engaged Connell Wagner and Hassell to prepare a Master Plan to guide land use and the future development of the Lake Ainsworth Crown Reserve, including the Lake Ainsworth Caravan Park.

Consultation with stakeholder groups was undertaken in May 2005, and submissions from the community were also sought. The feedback provided has enabled the study team to gain a greater appreciation of the issues facing the Lake Ainsworth Crown Reserve, and assisted in the consideration of options for its future use.

Connell Wagner in association with Hassell are now pleased to present a draft Master Plan for Lake Ainsworth Crown Reserve for further consideration by the community. A Display will be held in the Lennox Head Village Centre to provide information and seek further input in relation to the draft Master Plan, prior to its finalisation and formal public exhibition. The study team will be present to outline the draft Master Plan and answer questions.

Display
Outside Lennox Head Newsagency
72 Ballina Street

On Saturday 22 July 2005
Between 9:00 am and 1:00 pm

We are seeking your feedback on the draft Master Plan. Comments regarding the draft Master Plan should be provided by Friday 5 August 2005. There are a number of ways you can provide your views to us:

Write to Lake Ainsworth Master Plan Project Team: Reply Paid 63652 Spring Hill Qld 4004

Email: lakeainsworth@conwag.com

Call Matthew Wood or Kate Singleton of Ballina Shire Council on 6686 4444

Or if you would like more information visit the website: www.ballina.nsw.gov.au and then search for Lake Ainsworth Master Plan.

Appendix E

Internet Documents



