



Lake Alexandra Plan of Management

Micris Management Services



Final – Adopted 13/11/2012

Resolution: MN304/12

Disclaimer

This document may only be used for the purposes for which it was commissioned in accordance with the scope of services described in agreement between Micris Management Services and Wingecarribee Shire Council.

This document relies upon data, surveys and site inspections results taken at or under the particular time and/or conditions specified herein.

Any representation, statement, opinion or advise, expressed or implied in this publication is made in good faith but on the basis that Micris Management Services, its agents and employees are not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement, or advise referred to above.

Changes to available information, legislation and schedules are made on an ongoing basis and readers should obtain up to date information.

Any finding, conclusion or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the client.

Micris Management Services Pty Ltd accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report and its supporting material by any other parties.

Unauthorised use of this report in any format is prohibited.

© Micris Management Services Pty Ltd, 2012

Issue	Date	Description	By	Reviewed By
A	21.08.12	Draft Plan of Management	MD	JP

Lake Alexandra

Plan of Management

August 2012

Prepared by

Micris Management Services Pty Ltd

PO Box 338, Campsie NSW 2096

Phone: (02) 9037 4835

Fax: (02) 9705 7043

Email: info@micris-mgt.com

Web: www.micris-mgt.com

Your submission is now sought for Lake Alexandra Draft Plan of Management

The *Local Government Act 1993, as amended* and the *Local Government Amendment (Community Land Management) Act, 1998* requires a Plan of Management to be prepared for all Public Open Space zoned Community Land. A Plan of Management is a legal document that outlines how Community Land will be managed in the years ahead.

The procedure for the adoption of this Plan of Management, as specified in the Local Government Act, includes:

- After considering all submissions received by it concerning the draft Plan of Management, Council may decide to amend the draft plan or to adopt it without amendment as the Plan of Management for the Community Land concerned.
- If Council decides to amend the draft plan it must either:
 - Publicly exhibit the amended draft plan in accordance with the provisions of the Division relating to the public exhibition of draft plans, or
 - If it is of the opinion that the amendments are not substantial, adopt the amended draft plan without public exhibition as the Plan of Management for the Community Land concerned.
- If Council adopts an amended plan without public exhibition of the amended draft plan, it must give public notice of that adoption and of the terms of the amended Plan of Management, as soon as practicable after the adoption.

Once Council has adopted the plan, no operations may be undertaken within Lake Alexandra except those which are in accordance with the plan. The plan may also apply to any future additions to the Reserve. Where management strategies or works are proposed for any additions that are not consistent with the plan, an amendment to the plan will be required.

Written submissions on this draft Plan of Management for the site are now sought. Submissions should be forwarded to:

Lake Alexandra - Draft Plan of Management

Wingecarribee Shire Council
Civic Centre,
Elizabeth Street,
MOSS VALE NSW 2577

Attention Mark Pepping
Manager Strategic and Community Development

The closing date for comments on this plan is Wednesday 24th October 2012

Foreword

The Local Government Act requires that Council have in place a Plan of Management for all Community Land. Community Land generally includes Parks and Reserves, Bushland and Community Facilities such as Community Centres, where the land is owned by Council or under Council's care and control.

This Plan of Management has been prepared to comply with the Local Government Act 1993, as amended and the Local Government (General) Regulation which commenced on 1st January 1999. This plan has been prepared to reflect the needs of:

- Council as managers of the land;
- All user groups;
- Local residents as users and neighbours of the land;
- Visitors and tourists; and
- The local community as custodians of the community assets.

Community input into the Plans of Management

The Local Government Act 1993 requires that all plans of management be placed on public display for a minimum period of 28 days. A minimum period of 42 days after the draft is placed on exhibition is allowed for written submissions to be made to Council.

Submissions provide an opportunity for the community and other stakeholders, to express opinions, provide information and suggest alternatives to the proposed Management Strategies for Community Land within the Shire. On closure of the period of public comment, and after consideration of submissions received, Council may decide to amend the draft Plan of Management, or adopt it without further amendment. If a Council adopts an amended plan without public exhibition of the amended draft plan, it must give public notice of that adoption and of the terms of the amended Plan of Management, as soon as practicable after the adoption.

Acknowledgements

This draft Plan of Management has been prepared by Micris Management Services Pty Ltd for Wingecarribee Shire Council's Strategic and Community Development Branch.

This draft plan has been prepared following consultation with user groups and key stakeholders.

Numerous individuals and groups have contributed valuable ideas and information in the preparation of this plan and their efforts are gratefully acknowledged. In particular the contribution of those individuals who were involved in the preparation of the draft plan is sincerely appreciated. This includes:

Wingecarribee Shire Council
Mark Pepping, Joshua Patterson, Peter Byrne and Greg Bray

Dr. Leah Day - Historian

EXECUTIVE SUMMARY

Introduction

This Plan of Management provides the framework for managing Lake Alexandra. Designated as a Significant Area by Wingecarribee Shire Council, this Reserve is highly valued by the local community and visitors alike. Lake Alexandra is an outstanding resource of district significance in terms of its scenic, environmental, social, educational, and passive recreational values. It plays a vital role in Wingecarribee's open space system. This draft Plan of Management provides a comprehensive framework for management of all activities within the Lake.

This draft Plan takes a value based approach to land planning and management, identifying the sites key values, role and purpose so that these assets may be protected and enhanced. The site's unique qualities, its environmental sensitivity and susceptibility to changing uses are all defining criteria for the way in which this land must be managed. Issues will come and go but the values which make Lake Alexandra unique are more enduring. However, these values can be easily lost, damaged or diminished so it is important to ensure their protection for the enjoyment of this generation as well as for generations to come. The issues currently or potentially threatening these values are therefore central to the Plan of Management.

Wingecarribee Shire Council's approach in facilitating this process and providing opportunities for consultation has significantly improved understanding of these values and issues amongst stakeholders. The following issues were discussed during consultation:

Access and Parking

- Formalise car parking areas and provide additional parking spaces;
- Segregate vehicles from park users (children), with the exception of emergency vehicles;

Development

- Enhance the identification of the Lake for visitors to the area;
- The Regional Art Gallery be designed and managed to provide a suitable cultural facility that compliments the passive recreational use and the natural view and vistas of the Lake;
- The amphitheatre be designed to enhance the public facilities within the Lake without compromising the function of the open space and the views and visas;
- The wildlife island to be enhanced to provide suitable protection of the local wildlife;
- Establish links with other Reserves and facilities within the local area;
- Provision of a cultural and heritage 'trail' with interpretive signage linked to other local heritage sites (as per Dr. Leah Day proposal);
- Improvements to the park infrastructure based on the Masterplan accompanying this PoM;
- Improved tennis facilities and passive open space;
- Improve the public amenity;

Basis for Management

Reflecting on the reserve values expressed through stakeholder consultation, the draft Plan defines the Parks values, its role and purpose in the context of being a Significant Area and Community Reserve. The following key values were identified as part of the development of this Plan of Management:

- Health Values
- Recreational Values
- Aesthetic Values
- Social Values
- Natural Values
- Historical Values

These values are affected, and in some cases potentially threatened, by a broad range of uses, actions, management practices, development and lease proposals. Some of these threats, opportunities and constraints are current while others may not yet exist. The Plan seeks to address all of these current and potential issues within an appropriate planning framework which will ensure the protection of the Lakes identified values, role and purpose.

The vision statement for Lake Alexandra encapsulates these values, provides guiding principles and addresses the fundamental expectations of the community as follows:

To recognise Lake Alexandra as a “significant place” in Wingecarribee Shire Council’s open space system, ensuring protection and conservation of identified values through appropriate management, in a way which best meets the cultural, environmental, recreational and social needs of the present community and future generations.

Management Principles

In accordance with this vision statement, the Plan has established a set of management principles which will determine the direction Wingecarribee Shire Council as the Land Owners and the Reserve Trust Managers will follow in implementing the specific strategies, and are summarised as follows:

- Recognise, protect and enhance the understanding, protection and restoration of the natural landscape and ecological values of the Lake;
- Permit a wide range of recreational opportunities compatible with the natural/physical, scenic and cultural features of the Reserve, in response to community needs;
- Encourage community “ownership” and use of the Lake;
- Encourage and promote public use by providing a range of high quality, safe, accessible and enjoyable recreational and leisure facilities;

- Adopt Crime Prevention through Environmental Design and Safer by Design principles in managing the Reserve to minimise vandalism and increase personal safety in the Reserve;
- Protect and enhance the visual and social values of the Lake;
- Provide opportunities for informal recreation and social interaction;
- Ensure continued free public access;
- To protect existing landforms such as natural drainage lines, watercourses;
- To encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities;

Action Plan

These management strategies or desired outcomes form the basis by which Lake Alexandra values can be managed and protected on a sustainable basis, whilst meeting the needs of the present community as well as future generations. Performance measures and priorities for action have been assigned accordingly. The masterplan identifies the physical locations and relationships of proposed actions within the Lake.

Table of Contents

EXECUTIVE SUMMARY.....	6
1.0 INTRODUCTION.....	13
1.1 Community Land.....	13
1.2 What is a Plan of Management	13
1.3 Definition of a Plan of Management	14
1.4 Role of a Plan of Management.....	14
1.5 Land to which this Plan of Management Applies	15
1.6 Purpose of this Plan of Management.....	16
1.7 Process of Preparing this Plan of Management.....	16
1.7.1 The Planning Process	16
1.7.2 Local Government Act	17
1.7.3 Methods of Communication	19
1.7.4 Management Issues	19
1.7.4.1 Access and Parking.....	19
1.7.4.2 Development.....	19
1.7.4.4 Safety.....	20
1.8 What is included in this Plan of Management	20
2.0 DESCRIPTION OF LAKE ALEXANDRA	22
2.1 Location and Context.....	22
2.2 Significance of Lake Alexandra.....	24
2.3 Park Name.....	25
2.4 Land Ownership and Management.....	25
2.4.1 Introduction.....	25
2.4.2 Community Land.....	29
2.4.3 Leases and Licences in Lake Alexandra.....	29
2.4.4 Key Stakeholders in Lake Alexandra.....	29
2.4.6 Zoning Plan.....	30
2.5 History	31
2.5.1 A Brief History of Mittagong	31
2.5.2 Lake Alexandra	35
2.7 Physical Characteristics	36
2.7.1 Climate.....	36
2.7.2 Landform and Soil.....	36
2.7.3 Visual Assessment	38
2.8 Access and Circulation	38
2.8.1 Access to the Lake Alexandra	38
2.8.2 Circulation within the Precinct.....	39
2.9 Flora and Fauna.....	41
2.9 Current Facilities	42
2.10 Use of Lake Alexandra.....	48
2.10.1 Introduction.....	48
2.10.2 Informal Activities.....	49
2.10.3 Organised Use.....	49
2.10.4 Site specific and future use	49
2.10.5 Prohibited Uses.....	50

2.11	Consultation summary for additional use & activities.....	50
3.0	LEGISLATIVE AND STATUTORY REQUIREMENTS	51
3.1	Principles of Community Land Management	51
3.2	Council Dealings with Community Land	52
3.3	Leases or Licences on Community Land.....	52
3.3.1	<i>Granting a Lease or Licence Community Land.....</i>	52
3.3.2	<i>Conditions of Granting a Lease or Licence.....</i>	52
3.3.3	<i>Events Exempt from Lease or Licence.....</i>	53
3.4	Strategic Documents used in the Preparation of this Plan	53
3.5	Other Relevant legislation and Policies	53
4.0	LEGISLATION RELATING TO LAKE ALEXANDRA	54
4.1	Councils role in managing Lake Alexandra.....	54
4.2	Categories of Community Land	54
4.2.1	<i>General Community Use.....</i>	54
4.2.2	<i>Park</i>	54
4.2.3	<i>Sportsground.....</i>	54
4.2.4	<i>An Area of Cultural Significance</i>	55
4.2.5	<i>Natural Area</i>	55
4.3	Categorisation of Land within Lake Alexandra	56
4.3.1	<i>Land Categorisation.....</i>	56
4.4	Core Objectives	58
4.4.1	<i>Park objectives.....</i>	58
4.4.2	<i>Sportsground objectives</i>	58
4.4.3	<i>General Community Use objectives</i>	58
4.4.4	<i>Natural Area: Watercourses objectives.....</i>	59
4.5	Express Authorisation of Lease / Licences	59
4.6	Easements	59
4.7	Authorised Development	60
5.0	BASIS FOR MANAGEMENT	61
5.1	Council’s Management Goals	61
5.2	Reserve Values.....	62
5.2.1	<i>Health Values.....</i>	62
5.2.2	<i>Recreational Values</i>	62
5.2.3	<i>Aesthetic Values</i>	63
5.2.4	<i>Social Values.....</i>	63
5.2.5	<i>Natural Values</i>	63
5.2.6	<i>Historical Values.....</i>	63
5.3	Roles of the Area.....	63
5.4	Vision and Objectives for the Precinct	63
5.4.1	<i>Vision for Management</i>	64
5.4.2	<i>Management Principles.....</i>	64
6.0	STRATEGIES AND ACTION PLANS.....	65
6.1	Management.....	66
6.3	Recreation and Use.....	68
6.4	Access and Parking.....	71

7.0	MASTERPLAN	73
8.0	IMPLEMENTATION	76
8.1	Implementation of this Plan of Management.....	76
8.2	Review of this Plan of Management	76
9.0	FUNDING AND GRANT RESOURCES	77
9.1	Introduction.....	77
9.1.1	<i>Council Funding</i>	77
9.1.2	<i>Grant Funding</i>	78
10.0	STATUTORY PROVISIONS	81
10.1	References	89

ATTACHMENT 1**PRELIMINARY ENVIRONMENTAL ASSESSMENT**

LIST OF FIGURES

Figure 1	Plan showing extent of the Lake Alexandra covered by this Plan of Management
Figure 2	Plan of Management process
Figure 3	Location Map of Mittagong within the Southern Highlands
Figure 4	Location & Context of Lake Alexandra
Figure 5	Lake Alexandra covered by Plan of Management
Figure 6	Land Ownership Plan for Lake Alexandra
Figure 7	Zoning Plan for Lake Alexandra and Surrounding Land
Figure 8	Parish Map showing extent of Fitzroy Iron Works Site
Figure 9	Access and Circulation plan within the site
Figure 10	Key Facilities within Lake Alexandra
Figure 11	Lake Alexandra Categorisation Plan
Figure 12	Masterplan
Figure 13	Lake Alexandra Masterplan - Regional Art Gallery Artist's Impression

LIST OF TABLES

Table 1	Stakeholder meetings
Table 2	Structure of Plan of Management
Table 3	Contents of Plan of Management for Community Land
Table 4	Overview of Lake Alexandra
Table 5	Key Stakeholders in Lake Alexandra
Table 6	Lake Alexandra Soil Profile
Table 7	Condition assessment
Table 8	Summary of Survey Results
Table 9	Lease and licences consent levels
Table 10	Proposed action plan for Management
Table 11	Proposed action plan for Recreation and Use
Table 12	Proposed action plan for Access

1.0 INTRODUCTION

1.1 *Community Land*

Local government councils own and manage a variety of land. All the land that councils own or manage, with five exceptions is called ‘public land’ under the Local Government Act, 1993.

The five types of land that are not included in councils’ collection of public land are:

- A public road;
- Land to which the Crown Lands Act 1989 applies;
- A common;
- Land subject to the Trustees of Schools of Arts Enabling Act 1902; and
- A regional park under the National Parks and Wildlife Act 1974.

Public land must be classified as one of two forms of public land, either as ‘community land’, or as ‘operational land’. Operational is land that councils may deal with in a relatively unfettered manner – it can be leased or licensed, managed or even sold without the sorts of restrictions that apply to community land. Operational land is land that council may regard as a temporary asset or as an investment, or intends to use in a way that will significantly restrict the community’s use or access to the land. Council works depots or administrative buildings are good examples of operational land uses.

Community land is land for which councils must prepare a ‘Plan of Management’; to set out the directions and practices council intends to follow to manage the land. Councils may not sell community land, unless it is re-classified as operational land, and councils are not allowed to enter into any leases, or licenses (other than for certain short-term casual uses) unless the Plan of Management authorises the agreement. Councils adopt a community land Plan of Management to give the Plan of Management force under the Local Government Act, 1993.

The Plan of Management also ‘categorises’ the community land to help define the suitable uses and development. Guidelines are provided in the Local Government (General) Regulation, 1999, to help councils categorise the community land, and ‘core objectives’ are provided in the Local Government Act, 1993, to provide the basic planning, development and management framework for council and community use of community land.

1.2 *What is a Plan of Management*

A Plan of Management is a document that identifies issues affecting public open space, and outlines how that open space is intended to be used, improved and managed in the future. A Plan of Management is typically accompanied by a Masterplan that shows proposed on-the-ground changes to that open space.

1.3 Definition of a Plan of Management

The Local Government Act 1993, as amended and the Local Government Amendment (Community Land Management) Act 1998 requires that all public land owned by Council be classified as either community land or operational land. Generally speaking, community land refers to any property which is retained for use by the general public, whilst operational land need not be retained for public use. Local Government must prepare a Plan of Management for all community land, this is to ensure that an endorsed framework guides the operation and development of these community resources.

Plans of Management are public documents, and as such require stakeholders to be involved in their formation. A process of research and community consultation provides opportunities for community participation and involvement, establishing a sense of ownership in stakeholders and contributing to the ongoing success of the plans.

Until a Plan of Management for Community Land is adopted, the nature and use of the land cannot be changed and Council cannot carry out new development or improvements to the land.

Plans of Management assist Council to budget and source funds for the future maintenance, improvement and development of community land. Each plan provides Council with a current survey of its resources, a guideline for expenditure and plans for the development of the site.

This Plan of Management has been prepared in order to achieve a balanced, responsible and sustainable use of the land and to ensure that it addresses the needs of local user groups and the broader community. It identifies appropriate outcomes for the site and provides a way of achieving these outcomes through a series of clear management objectives and supporting strategies and actions.

This Plan of Management supersedes any other Plan of Management prepared for this site.

1.4 Role of a Plan of Management

A Plan of Management fulfils a number of functions. It sets out planning and design opportunities and constraints through the categorisation of the community land, the inclusion of core and other objectives, the development of performance targets, and identification of the means of achievement for the targets and the methods of assessment of success in achievement.

The Plan of Management is a council commitment to the use and management of the land. It provides direction for both council and community in the planning and management of the land. The Plan of Management is placed on public exhibition and the community has the opportunity to make submissions and comments on the draft Plan of Management.

This Plan of Management will also enable a masterplan, and proposals for development and conservation of the lands, to be considered by the community, and approved by Wingecarribee Shire Council's adoption of the Plan of Management.

A Plan of Management also authorises certain uses and activities on the community land. When community land is categorised, each category and its objectives will generally define the suitable uses of the land, and any proposed developments and agreements, such as leases and licences need to be consistent with the objectives of the category.

1.5 Land to which this Plan of Management Applies

This Plan of Management applies to Lake Alexandra, which is approximately 6.5 hectares in area. The land within Lake Alexandra is owned by Wingecarribee Shire Council. Lake Alexandra is one of the key leisure facilities within the Shire. Consequently, this Plan of Management has been prepared in accordance with the requirements of the *Local Government Act 1993*.

Key features of Lake Alexandra include:

- Its prominent location within Mittagong;
- Sporting field and amenities building;
- Public Reserve for informal recreation;
- Mature planting in a pleasantly landscaped setting;
- Historical and cultural importance;
- Picnic and BBQ facilities;
- Children’s garden and play area;



Figure 1 – The plan above shows the extent of Lake Alexandra that is covered by this Plan of Management

1.6 Purpose of this Plan of Management

This Plan of Management has been prepared by Wingecarribee Shire Council under the provisions of the Local Government Act 1993, as amended which requires Councils to prepare Plans of Management for all land under Council ownership or control classified as community land.

This Plan of Management aims to provide a clear, concise and practical framework for the management of Lake Alexandra. It aims to be performance oriented in order to contribute towards Council achieving its strategic goals, vision, mission and outcomes. As a means of achieving these aims, the plan uses a values-based approach to land planning and management. This approach facilitates strategies which will protect and enhance values, whilst identifying the issues which may pose a threat to these values. It ensures the longer-term objectives of sustainable management.

The primary purpose of this plan is to provide the community, users and Wingecarribee Shire Council with a clear statement on the future use and management of Lake Alexandra. The efficient and appropriate management of this land is essential if its value to the community is to be maintained and enhanced.

The Plan of Management will be consistent with Council’s other policies and plans, ensuring a strategic vision and approach to open space across the Wingecarribee LGA.

The plan will comply with the Local Government Act 1993, as amended and the Local Government Amendment (Community Land Management) Act 1998 and other relevant legislation in relation to the preparation of Plans of Management.

This Plan of Management will cover the development and management actions of the land for community purposes, over the life of this plan.

1.7 Process of Preparing this Plan of Management

1.7.1 The Planning Process

The planning process for this Plan of Management is based on a number of principles. These are:

- Using community values as a basis for management;
- Adopting a consultative approach, incorporating input from stakeholders; including Council officers, Government Authorities and the local community to ensure the plan reflects the visions and values of all;
- Providing site specific analysis information to add value;
- Providing practical recommendations which are achievable in the short term; and incorporating the Concept Plan.

The process undertaken to prepare this Plan of Management follows the guidelines as set out in “Public Land Management” – Department of Local Government, 2000.

1.7.2 Local Government Act

Division 2 – Use and Management of Community Land; within the Local Government Act 1993 outlines the requirements involved in developing a Draft Plan of Management. Once a Plan of Management is in Draft format, the Plan is placed on public exhibition for a minimum of 28 days, with a further 14 days allowed for written comments.

The development of this Plan of Management for Lake Alexandra may be divided into four phases.

The first phase - understanding the site, this phase includes reviewing the background of the site incorporating all reports, historical information and correspondence relating to the site, a detailed site analysis including a site survey.

The second phase covers all consultation and workshops with all major stakeholders, user groups including any Government Agency with an interest in the site.

The third phase covers the preparation and review of the Plan of Management and Concept Plan.

The final phase covers the exhibition, review of public submissions and Council adoption of the plan.

A detailed process of the steps involved in the development of this Plan of Management is shown in Figure 2.



Photo1 – photo of the Lake taken from the viewing area at the southern end of the site

Photo2 – photo of one of the trails to MT. Alexandra at the northern end of the site.



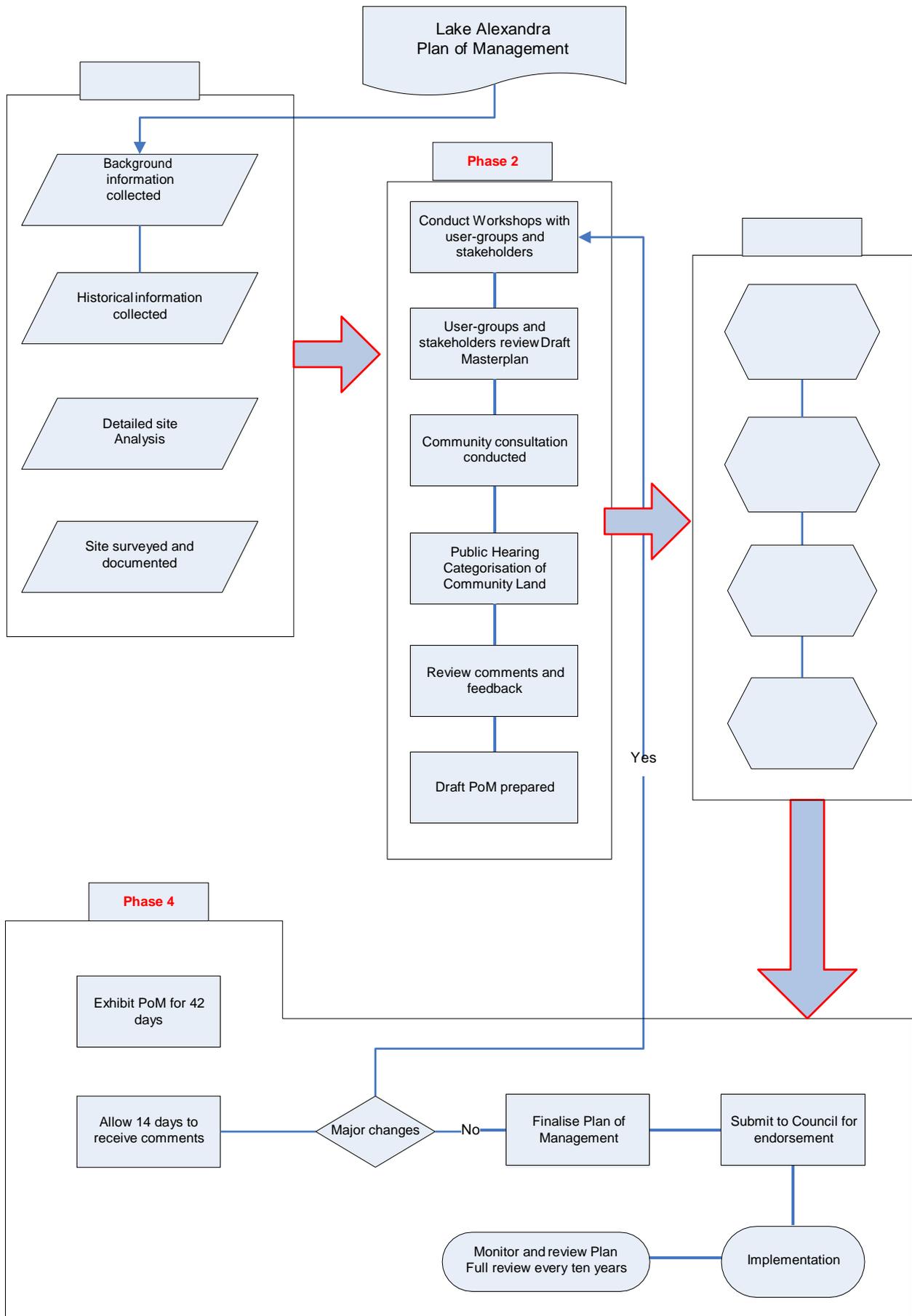


Figure 2 –Plan of Management Process

1.7.3 Methods of Communication

A number of meetings with key stakeholders were conducted. The meetings were designed to allow stakeholders to have an active involvement in the development of the Plan of Management. A list of the meetings held is shown in *Table 1*

Table 1 *Stakeholder meetings*

<i>Meetings</i>	<i>Date</i>
Initial meeting with Council	23 rd May 2012
Council stakeholder meeting	30 th May 2012
On-site meeting with park users	9 th June 2012
On-site meeting with park users	15 th June 2012
On-site meeting with park users	22 nd June 2012
On-site meeting with park users	28 th June 2012
Community workshop	9 th July 2012

1.7.4 Management Issues

Issues have the potential to challenge the core objectives and recreational values that form the basis of how Lake Alexandra should be managed. Based on consultation conducted and feedback received the following issues have been identified.

1.7.4.1 *Access and Parking*

- Formalise car parking areas and provide additional parking spaces;
- Limit vehicle access to car park & access road area only;
- Segregate vehicles from park users (children), with the exception of emergency vehicles;

1.7.4.2 *Development*

- Enhance the identification of the Lake for visitors to the area;
- The Regional Art Gallery be designed and managed to provide a suitable cultural facility that compliments the passive recreational use and the natural view and vistas of the Lake;
- The amphitheatre be designed to enhance the public facilities within the Lake without compromising the function of the open space and the views and vistas;
- The wildlife island to be enhanced to provide suitable protection of the local wildlife;
- Establish links with other Reserves and facilities within the local area;
- Provision of a cultural and heritage ‘trail’ with interpretive signage linked to other local heritage sites (as per Dr. Leah Day proposal);
- Improvements to the park infrastructure based on the Masterplan accompanying this PoM;
- Improved tennis facilities and passive open space;
- Improve the public amenity;

1.7.4.4 Safety

- Conflict between cars and park users;
- Adopt ‘Crime Prevention through Environmental Design’ and ‘Safer by Design’ principles in managing the site to minimise vandalism and increase personal safety of users

1.8 What is included in this Plan of Management

This Plan of management is divided into the following sections, as outlined in Table 2.

Table 2 – Structure of this Plan of Management

Section	What is covered
1. Introduction	Background to the Plan of Management, community consultation, and management issues relating to the site.
2. Description of Lake Alexandra	History, facilities, uses, physical description.
3. Legislative and Statutory Requirements	State Government planning legislation, local planning context.
4. Legislation Relating to Lake Alexandra	Land categorisation, core objectives, leases and licences.
5. Basis for Management	Council’s strategic direction, community values, role of the area, vision for Lake Alexandra, management objectives for Lake Alexandra.
6. Strategies and Action Plans	Strategies and actions to resolve management issues identified.
7. Masterplan	Concept Masterplan developed as a result of community consultation.
8. Implementation	Implementation and monitoring of the Plan of Management
9. Appendix	Funding, statutory provisions

Requirements of the Local Government Act for the contents of a Plan of Management, and where they can be found in this Plan, are listed in Table 3.

Table 3 - Contents of a Plan of Management for community land

Requirement of the Local Government Act	How this plan satisfies the Act
The category of community land	Section 4
The objectives and performance targets of the plan with respect to the land	Section 7
A means for assessing the achievement of the plans objectives and performance targets.	Section 7
A description of the condition of the land, and of any buildings or other improvements on the land as at the date of adoption of the Plan of Management	Section 2

Table 3 - Contents of a Plan of Management for community land (Cont.)

Requirement of the Local Government Act	How this plan satisfies the Act
A description of the use of the land and any such buildings or improvements as at the date of adoption of the Plan of Management.	Section 2
The purposes for which the land, and any such buildings or improvements, will be permitted to be used.	Sections 2, 3
The purposes for which any further development of the land will be permitted, whether under lease or licence or otherwise.	Sections 3, 4
A description of the scale and intensity of any such permitted use or development.	Section 2
The core objectives for management of community land for the category nominated	Section 4
Public hearing in relation to proposed plans of management	Section 4
Leases, licences or other estates in respect of community land.	Section 4
Identify the owner of the land	Section 2
Whether the land is subject to any trust, estate, interest, dedication, condition, restriction or covenant	Section 2
whether the use or management of the land is subject to any condition or restriction imposed by the owner	Section 2



Photo 3 – photo of community workshop at Mittagong RSL Club.



2.0 DESCRIPTION OF LAKE ALEXANDRA

2.1 Location and Context

The Southern Highlands lies to the south west of Sydney on top of the escarpment overlooking the South Coast. It is known for its rich history and picturesque towns, as well as its genteel lifestyle.

Lake Alexandra is located in the township of Mittagong within the Southern Highlands of New South Wales. The Southern Highlands lies within one and a half hour drive of Sydney and Canberra, and two and a half hour from the South Coast (Batemans Bay).

Mittagong is located approximately 3 km southeast of Welby and 4.5 km from Bowral. The Southern Highlands is a rural area mixed with larger towns and small historic villages.

Lake Alexandra is located on Queen Street, Mittagong. It covers an area of approximately 6.5 hectares and is in close proximity to Mittagong Railway Station. Lake Alexandra is bounded by MT. Alexandra to the north, residential properties to the south, residential properties and ST. Michaels Church to the east and residential properties and Mittagong Public School to the west.

The majority of the land surrounding Lake Alexandra is environmental management and low density residential. The catchment area is made up of a variety of different land uses including residential areas, rural areas, business and community land. Figure 3 shows the location of Mittagong within the Southern Highlands while Figure 4 shows the location and context of Lake Alexandra.

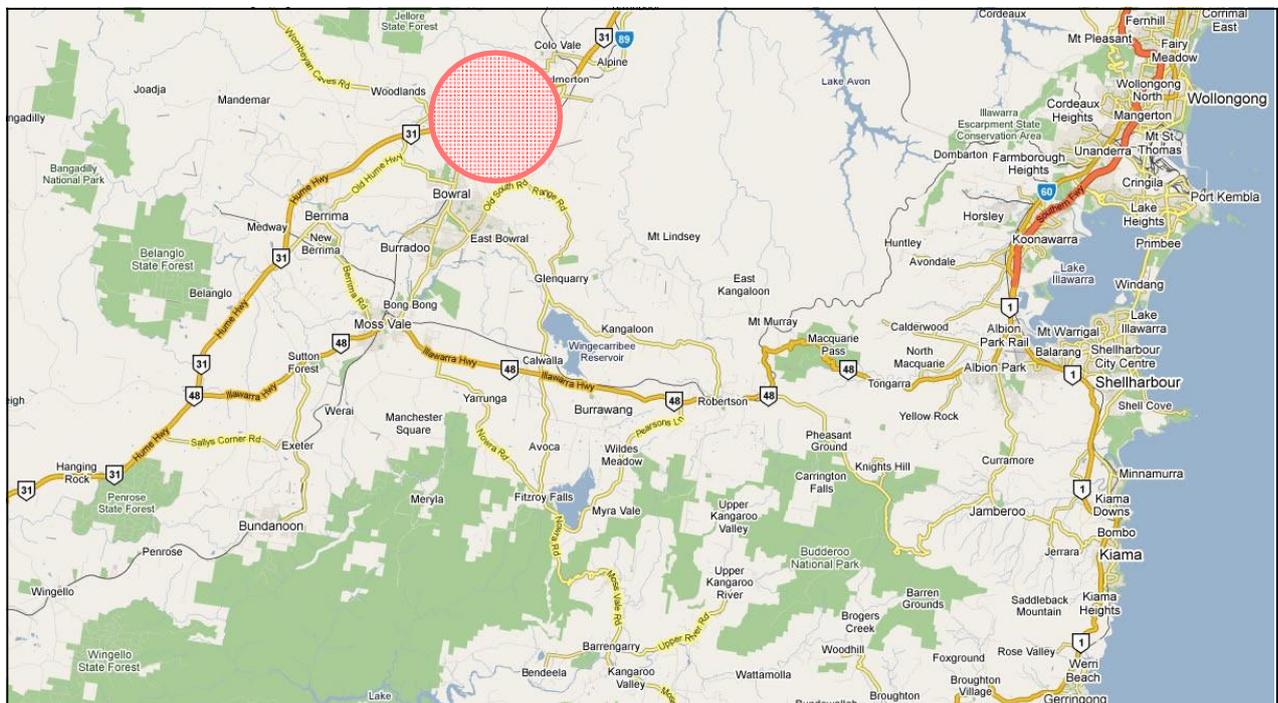


Figure 3 - Location Map of Mittagong within the Southern Highlands



Figure 4 - Location and context of Lake Alexandra

This Plan of Management establishes the long-term management framework to protect and enhance the passive values, flora, fauna and cultural values of the reserve and create quality visitor experiences.

The site covered by this Plan of Management is shown in Figure 5.



Photo 4 – photo taken north western corner looking east.



Figure 5 – Lake Alexandra as covered by this Plan of Management

2.2 Significance of Lake Alexandra

Lake Alexandra contributes substantially to the beauty, character and charm of the local area, and reflects the tranquil surroundings once experienced by the local residents and visitors in times gone by.

Lake Alexandra incorporates part of the original Fitz Roy Iron Works site which was the first iron works in Australia. It was the first iron-making venture established in New South Wales, which had been wholly dependent on imported iron and steel products from England.

Additional to the historical and heritage significance, Lake Alexandra provides passive and structured recreational activities in a historic and natural setting. The reserve provides an opportunity to develop a significant cultural, educational and passive recreational resource.

With the possible development of a Regional Art Gallery, Lake Alexandra has the opportunity to provide cultural, social and passive recreational facilities at a Local, District and Regional level.

Table 4 – Overview of Lake Alexandra

	Lot 1 DP 1091716	Lot 121 Section L DP 20	Lot 122 Section L DP 1289	Lot 123 Section L DP 20	Lot 124 Section L DP 20	Lot 125 Section L DP 20	Lot 126 Section L DP 20	Lot 1 DP 130513
Features	Lake & Open Space	Open Space	Tennis Courts & Open Space	Tennis Courts & Open Space	Open Space & Playground	Open Space & Playground	Open Space & Playground	Tennis Facility, Open Space & Parking
Area (ha)	2.9 hectares	0.098 hectares	0.098 hectares	0.098 hectares	0.098 hectares	0.098 hectares	0.098 hectares	0.125 hectares
Total Area (ha)	Approx. 6.5 hectares							
Owner	Wingecarribee Shire Council							
Zoning	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation
Categorisation	Natural Area: water Course & Park	Park	Sports ground	Sportsground	General Community Use & Park	General Community Use & Park	General Community Use & Park	General Community Use, Park & Sportsground
Leases	No	No	No	No	No	No	No	No
Licences	No	No	No	No	No	No	No	No
Easements	No	No	No	No	No	No	No	No

Table 4 – Overview of Lake Alexandra (Cont.)

	Lot 82 Section G DP 20	Lot 83 Section G DP 20	Lot 84 Section G DP 20	Lot 76 Section G DP 20	Lot 77 Section G DP 20	Lot 78 Section G DP 20	Lot 3 DP 1132143	Lot 61 Section F DP 1289
Features	Open Space	Open space	Open space					
Area (ha)	0.099 hectares	0.062 hectares	0.099 hectares					
Total Area (ha)	Approx. 6.5 hectares							
Owner	Wingecarribee Shire Council							
Zoning	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation					
Categorisation	Park	General Community Use & Park	Park, General Community Use & Park	Park	General Community Use & Park	General Community Use & Park	General Community Use & Park	Park
Leases	No	No	No	No	No	No	No	No
Licences	No	No	No	No	No	No	No	No
Easements	No	No	No	No	No	No	No	No

Table 4 – Overview of Lake Alexandra (Cont.)

	Lot 62 Section F DP 1289	Lot 67 Section F DP 1289	Lot 68 Section F DP 1289	Lot 2 DP 1132143	Lot 1 DP 1132143	Lot 7 Section A DP 20	Lot 8 Section A DP 20
Features	Open Space	Open Space	Open Space	Open Space	Open Space	Open Space	Open Space
Area (ha)	0.099 hectares	0.099 hectares	0.099 hectares	0.037 hectares	0.079 hectares	0.103 hectares	0.103 hectares
Total Area (ha)	Approx. 6.5 hectares						
Owner	Wingecarribee Shire Council						
Zoning	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation	RE1 - Public Recreation
Categorisation	Park	Park	Park	Park	Park	Park	Park
Leases	No	No	No	No	No	No	No
Licences	No	No	No	No	No	No	No
Easements	No	No	No	No	No	No	No

- The unformed road of Alfred Street and Leopold Lane make up the remainder of Lake Alexandra

2.4.2 Community Land

Lake Alexandra is owned by Wingecarribee Shire Council, and is classified as a Community Land under the Local Government Act 1993. All land classified as community land must be managed in accordance with the Local Government Act 1993. Wingecarribee Shire Council manages Community Land in the Wingecarribee Local Government Area.

2.4.3 Leases and Licences in Lake Alexandra

There are currently no leases or licences within this site.

2.4.4 Key Stakeholders in Lake Alexandra

Table 5 – Key Stakeholders in Lake Alexandra

Organisation	Responsibilities
Wingecarribee Shire Council	Land owner; Management; Consent Authority; Bookings; Maintenance.



Photo 5 – Photo showing ducks in the Lake and bank vegetation treatment.

2.4.6 Zoning Plan

The current Local Environment Plan for Wingecarribee Shire Council is ‘Wingecarribee LEP 2010’ under this LEP the zoning applied to Lake Alexandra is as shown in Figure 7 below.

- RE1 - Public Recreation

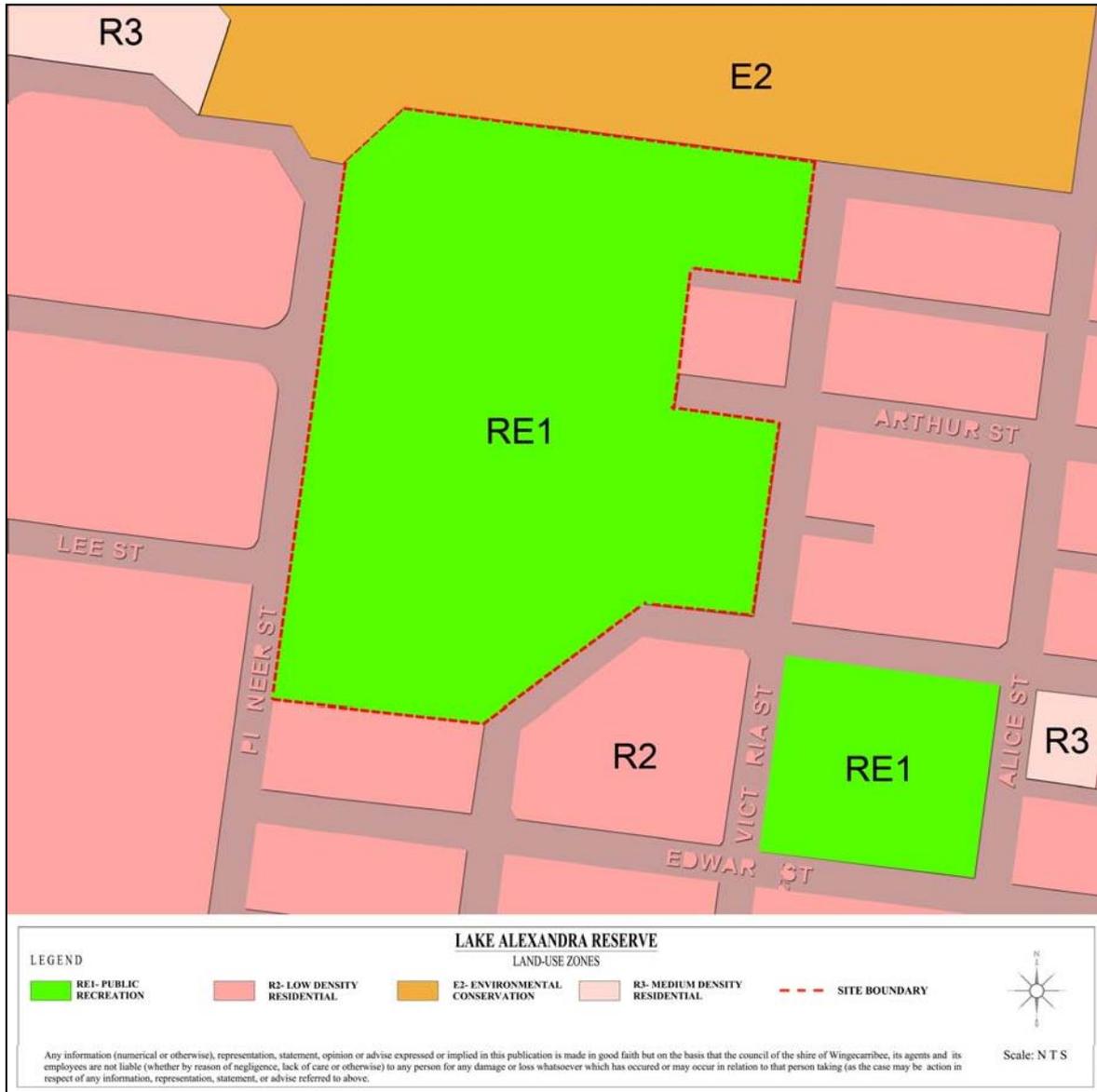


Figure 7 – Zoning Plan for Lake Alexandra and surrounding land

2.5 *History*

2.5.1 *A Brief History of Mittagong*

Settlement in Mittagong developed early in the history of the area. In 1816 Macquarie referred to Mittagong as "Marragan or Minnikin and then James Meehan spelt it Mittagong in March 1818. James Oxley also spelt it this way two years earlier.

In its early application Mittagong referred to the range, which ends in the Gib but in March 1818, Meehan mentioned "Mittagong Flat". A village was formed at the Iron Works called "Nattai" and then known as "New Sheffield".

In 1867 the railway was completed and called "Mittagong". In 1848 Thomas Moore gave evidence before the Select Committee on Railways that the neighborhood of Chalkers Flat was a place where a station could be formed. This area is now known as Lower Mittagong.

William Chalker was the Principal Overseer of Government Stock at the Cow Pastures and for his services received 200 acres of land but he died before the grant was surveyed. This land was later granted to Elizabeth Sheckell, his widow, who remarried after his death.

In 1827 George Cutler built a building to be used as an inn, which was originally granted to Robert Plumb. This land is known as Portion 73, Parish of Mittagong.

Cutler ended up being fined as he anticipated the issue of a license and began selling alcohol. In July 1830 a free license was issued for 1 year and the inn was named The Kangaroo.

For some years Charles Sturt resided on a property on Old South Road. In 1836, Sturt as a dairyman employed the notorious bushranger Martin Cash. He began milking two cows, which later increased to eight. Cash said Sturt was a quiet man and was rarely seen.

On Rowe's Hill in the 1850's the first church was built which was also used as a school. The building was a slab and barks structure, which was replaced by a better building with the foundation stone being, laid on the 28th August 1861. In 1873 services ceased and the building demolished with two of the stones being built into the extensions of St Stephens Church, Mittagong in 1928.

From 1820 to 1835 traffic to the south used the old road that went through Lower Mittagong. When the new line through Berrima opened, the highway over the Mittagong Range and to Bong Bong was deserted. Lower Mittagong was the first pioneer settlement of the district.

In 1869 a visitor to the area describes passing through a number of farms and homesteads with cleared pasture country and fertile lands in a more or less satisfactory state of cultivation.

The Government leased 100 acres in 1895 to supply the cottage homes with wood and vegetables. The Southwood Estate was later leased with these properties covering an area of 540 acres being purchased. Twenty-two men from an asylum cleared and cultivated the land. Some of these men were then employed in boot repairing and making clothes for the Homes.

This property was then used as a home for wayward boys with a building for boys being built in 1906. Since then many more buildings have been erected. A modern school was built in 1959 with 12 houses, which can accommodate 250 boys now standing on the property.

The Marist Brothers with the idea of building a sanatorium purchased Dr Chisholm Ross' Rowes Hill farm with 400 acres. In 1917 The Australian Juniorate of the Order was moved to Lower Mittagong and additions were made to the building in July 1923. In April 1930 new buildings for the Juniorate were opened and blessed.

Major Mitchell's new road was constructed through Mittagong and to cater for travelers Edward Chalker got a license for the King Arms on the 27th June 1836 and then George Cutler got a license "on the new line of road" for the Kangaroo Inn on the 13th August 1836. In 1837 Chalker renewed his license and then on the 26th June 1832 John Chalker got a license for the Woodpack Inn at the Nattai Bridge. William McGrath held the license for the Kangaroo Inn in 1838 but in 1839 the licensee was Ann Cutler and she continued to hold the license, as did John Chalker for the Woodpack Inn. The Kangaroo Inn was situated at the southern end of Mittagong with the Woodpack Inn at the northern end. Ann Cutler employed Alexander Brand in 1845 to build a new inn, which was named the Fitzroy Inn. This building became known as "Oaklands" and still standing and is used as a guesthouse.

A subdivision of land known as "Town of Gainsbrough" had an attempt at being sold in February 1841, and then a subdivision called "Livingstone Township" was also offered for sale but both appeared to have failed. No land was then subdivided until the iron works began with company using some of its land as housing.

In 1865 the iron works were situated on the right hand side going south with the workers housing located on the opposite side. The houses were on the side of a gently sloping hill and were either slab or bark huts.

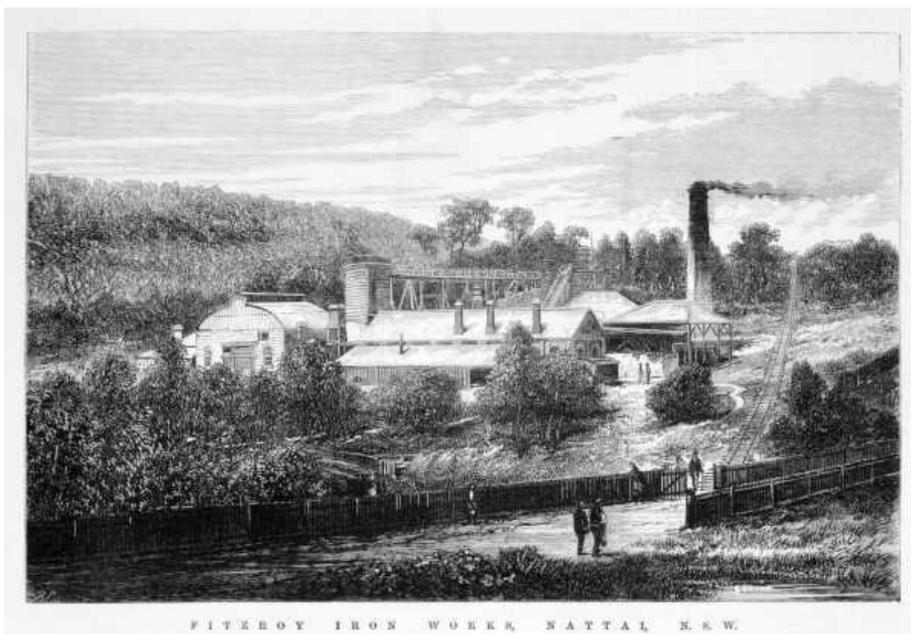


Photo 6- Photo of Fitz Roy Iron Works Nattai NSW (thought to be c1873)

Source: National library of Australia

In August 1861 it was suggested by Surveyor Campbell that a portion of land close to the mine be reserved for village purposes as he thought that in time the position might become the center of a large manufacturing district. The reserve was made in 1862 and named "Village of Fitzroy".

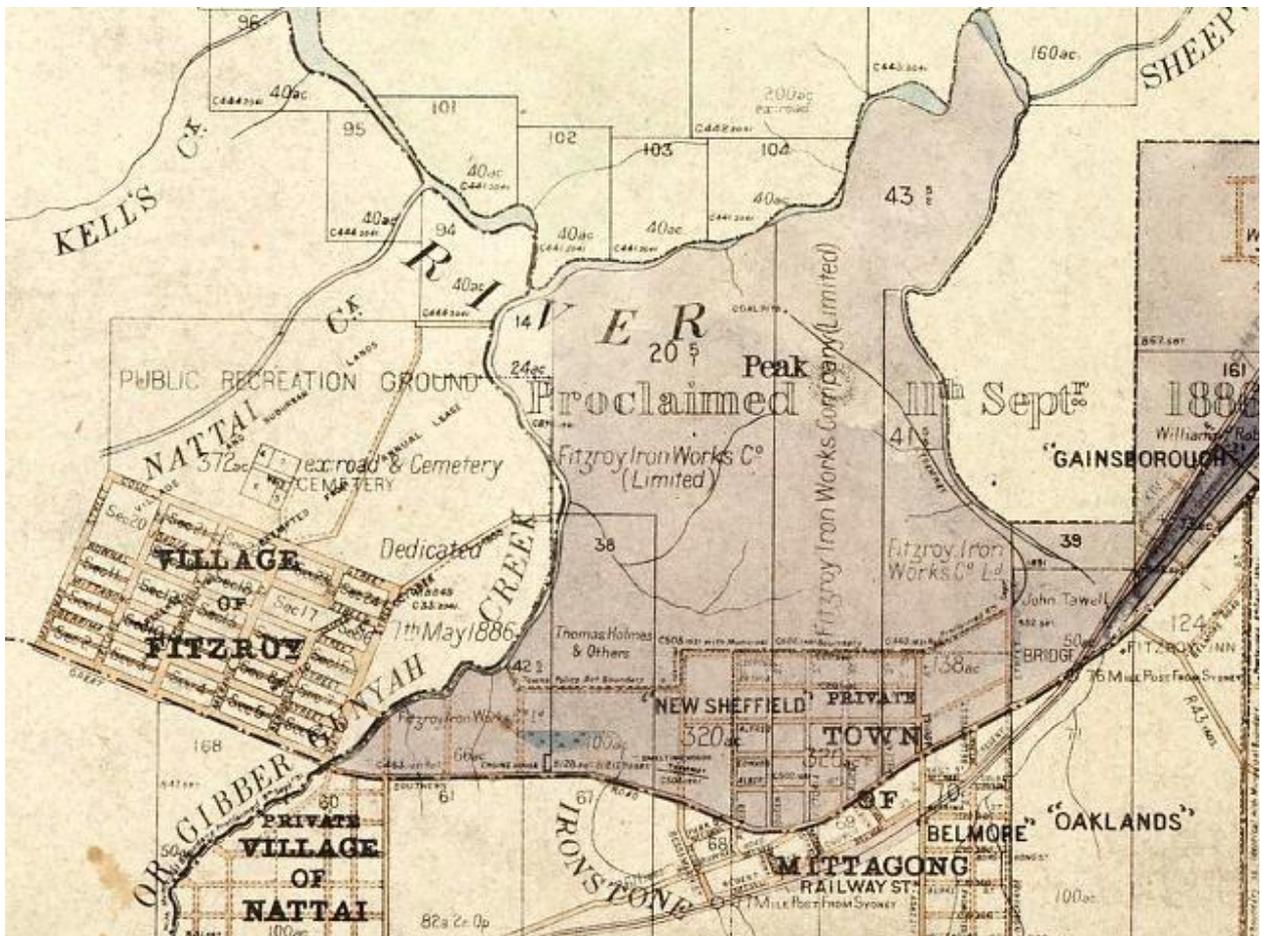


Figure 8 – Parish Map showing extent of Fitzroy Iron Works site
 Source: Department of Lands

In 1863 the Government intended to form a principal station on the southern line near the iron works. A subdivision with 245 blocks in the township of "New Sheffield" was offered for sale in May 1865. Many attended the sale with £3000 worth of land sold.

In January 1866 a news report stated that during the previous months the importance of the "New Sheffield" had increased with many dwellings made out of slab, bark or corrugated iron the township would know have at least two hotels, stores, a Wesleyan Church and some weatherboard cottages. Many structures were erected with not a week passing were a building being started or finished. In March 1867 the station in Mittagong came into use and adjoined the town on a small flat with bush all around it.

The prosperity of the town relied on the iron works and when it periodically closed it stagnated.

There was a demand for building sites in the 1880's with the land required not being available. The Mittagong Land Company had acquired 1500 acres of iron works land and in 1883 they subdivided 140 acres. In April 1884 they put the land up for auction and sold 120 acres for £13809. Business site sold from £1/15/- to £10/10/- per foot with housing sites varying from £8/- to £1/6/- per foot. Houses began to be erected later in the year.

In 1890 many splendid buildings were erected and in 1910 the building trade was reported to be busy with cottages being built. In 1921 there was a large building boom with Horton's and WH Jones' new stores built, the Roman Catholic Church was built at a cost of almost £2000 and number of cottages were erected. In 1926 84 building applications were approved with a new convent and wing being added at Frensham.

Source: <http://www.thesouthernhighlands.com.au/towns/mittagong/mittagong-history>



Photo 7- Photo of Frensham School main building from Stanley Street entrance, Mittagong (thought to be c1837)

Source: National Library of Australia

Photo 8- Photo of Railway siding buildings, Old Tooth Maltings. Original NSW Maltings. Ferguson Cres. railway overpass, Mittagong (thought to be c1890)

Source: National Library of Australia

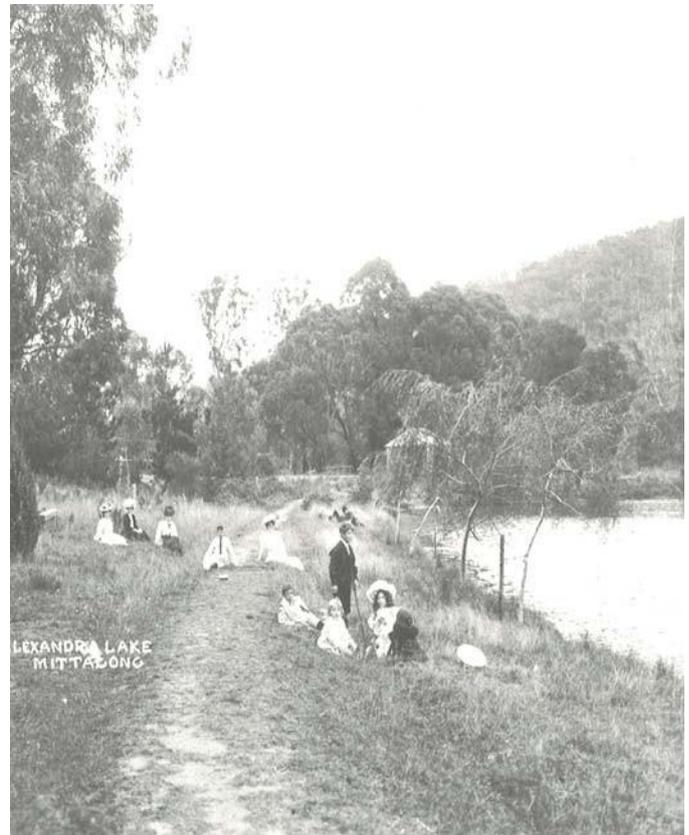


Photo 9- Photo of Old South Road, Mittagong (thought to be c1900)

Source: Powerhouse Museum

2.5.2 Lake Alexandra

Lake Alexandra is located in the area of the New Sheffield Village subdivision that was controlled as part of the 900 acre mining lease from Fitzroy Iron Works Company. In 1876 Fitzroy Bessemer Steel Hematite Iron and Steel Limited built a coal skip line over MT. Alexandra to transport coal and coke to the Iron Works. The construction of the line required building an embankment across the gully which created a Lake, the water supply for the lake was used by the Fitzroy Iron Works for the steam boilers and for cooling the hot air jets (tuyeres) used for the new hot-blast system.



Following the closure of the Iron Works smelting operation in March 1877 the scenic area of the lake became a favourite spot for swimming, boating and public recreation. The lake was also the scene of a number of drowning tragedies due to the water deep and for the period many people were unable to swim.

The site was well known as Lake Alexandra when it was formed in 1876. On the 20 June 1894 Council acquired the disused lake site, a Declaration of Trust was executed between Council and Mittagong Land Company for the site to be used by the Public as a Public Reserve. Alderman John Mealing went on record in the Robertson Advocate to name the site Lake Alexandra on 18 March 1898.



Trees were first planted around Lake Alexandra in the 1890's, cuttings from willow trees were taken from Tooth's Maltings site at Mittagong and replanted around the western side of the lake.

The Lake underwent several improvements throughout the years, in 1957 the lake was cleared of slit and reeds, in 1994 the lake was dredged a second time with the last major upgrade occurring in 2006.

Source: Dr. Leah Day

2.7 *Physical Characteristics*

2.7.1 *Climate*

Under the Modified Köppen classification system provided by the Australian Government Bureau of Meteorology, the climate within the Southern Highlands would be described as no dry season (warm summer) Temperate (a temperate climate has mild to warm summers and cooler winters), BoM (2009).

Taking an approximate average of Mittagong meteorological data, Lake Alexandra would experience:

Mean daily maximum summer temperature of	25°C
Mean daily Minimum winter temperature of	2°C
Mean annual rainfall of approximately	891 mm
Wet days per month	5-6 days
Mean wind speed at 9am of	11 – 12 km/h

Lake Alexandra has moderate year-round temperatures with average maximum summer temperature of 25.5 degrees. The average winter daytime temperature is 12.5 degrees, dropping to an average 2.2 degree at night.

The annual median rainfall was found to be 891mm with the highest rain fall being experienced in March.

2.7.2 *Landform and Soil*

Landform and Topography

The Southern Highlands form part of the Woronora Plateau. In geological terms they form the southern edge of the Hawkesbury sandstone of the Sydney Basin, which in turn is part of the Sydney Gunnedah-Bowen basin.

Underlying geology of the region is the Wiannamatta Group of Triassic sedimentary rocks, predominantly shale overlain by tertiary volcanic basalts. The fringes and surrounds are Hawkesbury sandstone, mostly coarse grained quartz cemented sandstones, which actually underlie the Wiannamatta Group.

Essentially the Wingecarribee region is a plateau. It averages 700m (above sea level) and is largely flat to undulating with some areas steeply dissected by rivers.

The site is dominated by an artificial lake historically constructed within an unnamed tributary of Gibbergunyah Creek to supply water for engines hauling coal to the Fitzroy iron mines. The lake occupies an area of approx. 1.7 ha.

The south-western, southern and eastern areas of the site surrounding the lake have been cleared, developed and landscaped. Scattered remnant Eucalypts are present within a modified landscape of maintained grassland, exotic trees and garden beds.

The north-western portion of the site supports remnant forest vegetation.

Geology and Soil

Environmental factors have a direct influence on soils such as climate (past and present), parent material (lithology), position in landscape (topography) and time. Vegetation types are also a part of this process and form an integral relationship with soil development, accumulation of organic matter and recycling of nutrients.

The predominant soil type present within Lake Alexandra is typically Humose Mesotrophic Brown Kandosol (ASC), Brown Earth (GSG). This type of soil is characterised as rapidly drained soil profile with a moderate erosion hazard.

The soil profile summarised in the table below was taken from data collected by NSW Soil & Land Information System NSW Department of Environment and Climate Change surveyed in November 1998, collected at Mt. Flora south of Iron Mines Oval, along Old Hume Highway (based on the sampling map provided online).

The soil profile for Lake Alexandra is summarised below:

Site Location	Mt. Flora west of homestead Nth Mt. Blatch (south of Iron Mines Oval)
Physiography	mid-slope on hillslope under grassland/herbland on fine-acidic lithology with nil rock outcrop ; Slope 10 % (estimated) , elevation 700 m , local relief low (30-90m), aspect south east , run-on is moderate , run-off is moderate.
Soil Hydrology	profile is highly permeable profile is well drained
Soil Type	Soil Type: Humose Mesotrophic Brown Kandosol (ASC) , Brown Earth (GSG)

Lithology

Solum PM	Fine-acidic
Substrate	Fine-acidic m
Rock Outcrop	Nil

Soil Description

Layer 0	
Layer 1 00.00 - 0.10 m A Horizon	loam with weak pedality (crumb 2 - 5 mm , rough-faced peds), common (10-25/10x10cm) roots (<1mm), field pH is 5.0. Coarse fragments are as parent material, gravel (6-20 mm); smooth gradual (50-100 mm) boundary to...
Layer 2 00.10 - 00.30 m B Horizon	Sandy clay loam with massive structure (earthy), field pH is 5.0. Coarse fragments are as parent material, gravel (6-20 mm); smooth gradual (50-100 mm) boundary to...

Table 6 –Lake Alexandra *Soil Profile*

Source: NSW Soil & Land Information System –NSW Department of Environment and Climate Change)

2.7.3 *Visual Assessment*

Lake Alexandra occupies a prominent position in Mittagong. Due to its location, Lake Alexandra is visible from the surrounding areas, and offers views of high scenic quality in a tranquil setting within an urban environment.

Lake Alexandra is a picturesque passive reserve, characterised by groupings of mature trees in the north western corner of the site, open grassed areas and an artificial formed lake at the centre. The rural landscape and the artificial lake provide a soft framework for passive play, picnic areas and other park uses. The reserve provides an important visual amenity to the surrounding residences and visitors to the reserve.



Photo 10 – Photo showing the south eastern side of the site

2.8 *Access and Circulation*

In accordance with Council's obligation to ensure equality, the site and its facilities will be accessible to all members of the community, regardless of age, sex, socio-economic status or mobility.

2.8.1 *Access to the Lake Alexandra*

The site is easily accessible by foot, bicycle, private and authorised vehicles, buses and emergency medical services can also access the Park easily.

Pedestrian

The site has no formal entrance to this public open space, with a sandstone Park sign located off Queen Street and a standard street sign at the corner of Queen Street and Old Hume Hwy identifying the site.

The site may be accessed virtually from any point, however there are three main pedestrian entry points to the Lake the first is the most common via Queen Street at the southern end of the site, the second park entrance is at the western side of the site off Pioneer Street, and the third entry point to the site is via Arthur and Alfred Streets.

Vehicle

The only vehicle access to the site is off Queen Street via the informal car park for maintenance and emergency purposes.

There are three areas that are used for formal and informal parking, the first is via a informal parking arrangement off Queen Street, the second less frequently used is off Pioneer Street, the most frequently used formal parking is the allocated parking spaces on Arthur Street, and vehicles are constantly found parking on the crest of the north eastern side (known as the common) of the site to take advantage of the views.

There is no direct formal public access to the site, except for the provision of access for maintenance or emergency vehicles.



Photo 11 – informal parking area at the southern end of the site

2.8.2 Circulation within the Precinct

Pedestrian

The existing pedestrian access and movement through the Lake is via the shared concrete cycleway and informal desire lines and walking trails (leading into MT. Alexandra).

2.9 Flora and Fauna

A preliminary environmental assessment of Lake Alexandra was undertaken by G.J. Stone, from Woodlands Environmental Management.

A copy of the preliminary environmental assessment is attached to this Plan of Management; a summary of the conclusions and recommendations from the preliminary environmental assessment is as follows:

Conclusions:

1. No Endangered Ecological Communities are present within the subject site.
2. No Threatened Species of flora were located within the subject site.
3. The development as proposed will not have direct impacts on remnant *Mittagong Sandstone Woodland*.
4. Remnant *Mittagong Sandstone Woodland* within the subject site includes potential habitat for Threatened Species of fauna listed under the *NSW Threatened Species Conservation Act 1995*.
5. As remnant *Mittagong Sandstone Woodland* will not be disturbed by the proposed development, fauna utilising this habitat – including Threatened Species – are unlikely to be impacted.
6. The aquatic environment of Lake Alexandra and the surrounding *Highly disturbed area with no or limited native vegetation* are of low habitat value for native fauna and developments proposed to be undertaken within these areas are unlikely to have any significant impacts on fauna or their habitats.

Recommendations:

1. The proposed development include a management plan for the rehabilitation of remnant *Mittagong Sandstone Woodland* within the subject site, including bush regeneration for the removal of weeds, restoration of the unnamed waterway to the north of Lake Alexandra and the implementation of measures to restrict entry other than by constructed pathways.

2.9 Current Facilities

Lake Alexandra incorporates facilities and features mainly for passive recreation with a small area set aside for active recreation. Around 5% of the Reserve is used for structured recreation. There is limited scope for provision of additional active recreation facilities. Around 30% is taken up by the lake, approximately 35% of the Reserve is used for unstructured recreation and the remaining 30% of the Reserve is bushland and open space.

The existing facilities in Lake Alexandra, and their use and conditions are set out in Table 7.



Photo 12 – Photo showing the boundary fence adjacent to car park



Photo 13 – Photo showing informal car park at the southern end of the site



Photo 14 – Photo showing the recreational path at the northern end of the site



Photo 15 – Photo showing existing ramp at the end of Arthur St



Photo 16 – Photo showing eastern side of the site referred to as the ‘Common’



Photo 17 – Photo showing the Lake taken from the top of the common



Photo 18 – Photo showing existing viewing area on southern end of the site



Photo 19 – Photo showing wildlife refuge



Photo 20 – Photo showing park furniture

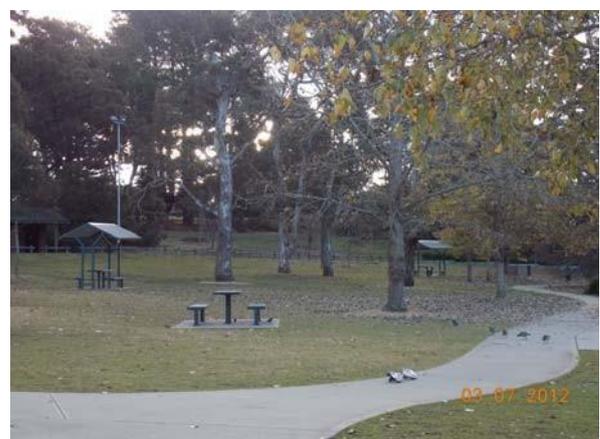


Photo 21 – Photo showing park furniture



Photo 22 –Photo showing children’s playground



Photo 23 –Photo showing picnic shelter



Photo 24 –Photo showing pedestrian bridge



Photo 25 –Photo showing public amenities



Photo 26 –Photo showing tennis court surface



Photo 27 –Photo showing tennis facility

Table 7 Condition assessment

Area Description	Facility	Condition
Timber boundary fence located along sections of the site boundary	Timber boundary fence used as a vehicle and physical barrier adjacent to car park.	Good
Car park – Arthur Street	Sealed car parking spaces on Arthur Street adjacent to the Lake.	Excellent
Car park – off Queen Street	The area off Queen Street is used as an informal car-park.	Poor
Shared Cycleway	A concrete shared cycleway is positioned around the Lake.	Good
Concrete viewing areas	Two concrete viewing areas with stainless steel balustrade located at the southern end of the site.	Excellent
Pedestrian Bridge - 1	Metal framed bridge with timber hand rail and decking located at the southern end of the site.	Good
Pedestrian Bridge - 2	Metal framed bridge with timber hand rail and decking located at the southern end of the site.	Good
Children’s playground	Metal framed bridge with timber decking located at the western side of the site	Excellent
Seat	A playground is located at the southern end of the site adjacent to Queen Street, including a Liberty Swing.	Excellent
Uncovered picnic table	There are eleven seats located throughout the site off the cycleway and around the playground.	Good
Covered picnic table	There are two uncovered metal picnic tables throughout the site.	Excellent
Large picnic area	There are four covered metal picnic tables throughout the site.	Fair
BBQ	There is a large covered masonry picnic shelter with four sets of picnic tables at the western side of the site adjacent to one of the viewing areas.	Good
Amenities	There is one uncovered electric BBQ located in between two picnic shelters located on the western side of the site	Fair
Storage building	There is a masonry public amenities building located on the south- western side of the site.	Good
Park furniture	There is a masonry storage building located on the southern side of the site adjacent to the playground.	Fair
Tennis building	There are bins located throughout the site with a drinking fountain adjacent to the playground	Fair
	A small tennis clubhouse is located on the south-western side of the site in front of the tennis courts.	

Area Description	Facility	Condition
Tennis courts & flood lights	There is a set of two concrete tennis courts with four metal flood light poles holding a single floodlight unit and associated fencing.	Fair
Tennis park furniture	The tennis area has 2 timber and concrete seats and a timber picnic table situated adjacent to the tennis courts	Poor
Lake water feature	There is a small water feature in the centre of the Lake that operates at selected times of the day and week	Good
Park signage	A masonry park sign located at the southern end of the site adjacent to Queen Street	Excellent
Fauna signage	Two signs are located on the western and eastern side of the lake.	Excellent
MT Alexandra signage	Trail identification sign and a trail map located on the north western side of the site	Poor
Ramp & Stairs	A masonry and concrete ramp and stairs located on the north eastern side of the site.	Fair
Shade sail	A shade sail is located over the children’s playground	Good

Note: the above condition assessment is based on observation only and any detailed assessment of the infrastructure such as the bridges should be performed by a qualified Engineer.

Interpretation of building/site condition

- Excellent* *these assets are in ‘as new’ condition and require little maintenance or upgrade.*
- Good* *these assets are well maintained for their age but require on-going maintenance.*
- Fair* *these assets are suitable for their current use but need repairs, renovations or upgrade.*
- Poor* *these assets are in poor condition and require maintenance to make serviceable.*

Figure 10 – Key Facilities within Lake Alexandra



LAKE ALEXANDRA
Site Plan

Project No.: MMS40
Date: 03/08/2012
Scale: NOT TO SCALE

WINGECARRIBEE SHIRE COUNCIL




2.10 Use of Lake Alexandra

2.10.1 Introduction

Lake Alexandra is a multi-purpose reserve incorporating facilities and features for active and passive recreation. Users of Lake Alexandra participate in a variety of informal and organised recreation and social activities.

The ‘Wingecarribee Open Space, Recreation, Cultural and Community Facilities Needs Study’ prepared by Parsons Brinckerhoff in 2004 suggests that Lake Alexandra may be defined as a ‘District Park’. The study describes a District Park as a relatively large park which serves a group of neighbourhoods, with a diversity of recreation facilities which may include some of the following: picnic/socialising facilities, public facilities, walking opportunity, sporting opportunity, public art, heritage items and passive recreation. People will generally travel further to district parks and hence access is generally by car as public transport is limited.

Lake Alexandra current and future facilities and activities meet the criteria of a ‘District Park’ and should be managed and maintained to this level of public Open Space.

It is envisaged that the main users of Lake Alexandra will be formal and informal organisations such as social groups, interest groups, organised sporting clubs, social sporting clubs, schools and local residents living within the surrounding area of the site, residents and community groups throughout the Shire and visitors/community groups/sporting clubs from outside of the area (throughout the NSW basin).

The open space and associated facilities will cater for both active and passive recreation. The users of the sporting facilities will only be organised competitors such as schools and sporting clubs for competition and training. The Reserve will also cater for casual or informal users such as ball games, walking, cycling etc.

The reserve also provides opportunities for visitors to enjoy recreational activities in a natural setting. The reserve is popular for wildlife viewing, walking, and nature study.

The provision, accessibility and quality of open space is one factor that guides and influences people’s choice in participating in recreational activities. Lake Alexandra provide active and passive recreational opportunities. Councils aim is to promote a healthy and progressive lifestyle for the community of Wingecarribee by fostering and providing recreational services for the people of the region.

2.10.2 Informal Activities

Informal uses of the Lake include:

- Picnics;
- Walking, jogging;
- Social activities (such as small group functions etc);
- Sitting and relaxing
- Family functions;
- Passive recreation;
- Feeding the Ducks;
- Etc.

2.10.3 Organised Use

Organised sporting uses in Lake Alexandra for which seasonal user agreements are made is Tennis. Sporting groups and local schools participate in organised sport. The courts are available for casual games outside pre-booked times.

Lake Alexandra may be used for a range of activities for which a formal user group application is required. These activities include:

- Community events (such as carols in the Park, formal community celebrations etc.);
- School functions;
- Sporting competitions and events;
- Filming, photography etc.;
- Corporate functions;
- Private functions (such as weddings).

2.10.4 Site specific and future use

Part of the Plan of Management process was the possible inclusion of a Regional Art Gallery the activity associated with the gallery includes:

- Art Gallery
- Office
- Retail shop
- Café/restaurant
- Function rooms
- Meeting rooms

- Lecture rooms
- Art studio
- Exhibition space
- Outdoor education
- Sculpture exhibitions

2.10.5 Prohibited Uses

Prohibited activities in the Park include open fires, camping, flying model aeroplanes, motor bikes, horses, cars, golf practice, off-leash dog exercise and shooting firearms.

2.11 Consultation summary for additional use & activities

The development of this Plan of Management incorporated additional uses and activities that were to be considered. A summary of the consultation results are as follows:

Items to be considered

- A regional art gallery;
- A boat shed;
- Jetties located at the water’s edge;
- Regional play ground;
- Amphitheatre.

Survey results

Table 8 –Summary of Survey Results

Description	Response	Printed survey	On-line survey	Face to face survey	Community consultation	Total
No. of submissions		42	22	55	11	130
Regional Art Gallery	Yes	13 (33%)	10 (77%)	24 (46%)	3 (27%)	50 (43%)
	No	27 (67%)	3 (23%)	28 (54%)	8 (73%)	66 (57%)
Amphitheatre	Yes	19 (50%)	11 (69%)	39 (71%)	3 (33%)	72 (61%)
	No	19 (50%)	5 (31%)	16 (29%)	6 (67%)	46 (39%)
Boat shed	Yes	6 (15%)	3 (19%)	9 (16%)		18 (15%)
	No	34 (85%)	13 (81%)	46 (84%)	11 (100%)	104 (85%)
Jetties	Yes	7 (17%)	5 (31%)	9 (16%)		
	No	34 (83%)	11 (69%)	46 (84%)	10 (100%)	101 (83%)
Regional playground	Yes	18 (55%)	9 (60%)		6 (55%)	33 (56%)
	No	15 (45%)	6 (4%)		5 (45%)	26 (44%)

Items to be incorporated in the Draft Plan of Management to be exhibited for public comment

- A regional art gallery;
- Regional play ground;
- Amphitheatre.

3.0 LEGISLATIVE AND STATUTORY REQUIREMENTS

This Plan of Management consists of Community Land and must therefore satisfy the:

- Local Government Act, 1993, as amended; and
- Local Government Amendment (Community Land Management) Act, 1998.

3.1 Principles of Community Land Management

Under legislative requirements of the Local Government Act 1993, as amended and the Local Government Amendment (Community Land Management) Act, 1998, s36 (a) – (n), Councils must prepare and adopt Plans of Management for all Community Land. A plan may apply to one or more areas of Community Land, providing all the Act's requirements are fulfilled.

The Act states that the Plan must identify the following:

- a The category of land;
- b The objectives and performance targets of the plan with respect to the land;
- c The means by which Council proposes to achieve the plan's objectives and performance targets;
- d The manner in which Council proposes to assess its performance with respect to the plan's objectives and performance targets.

As this is a Plan of Management that applies to just one area of community land it must also:

- a) include a description of:
 - i. The condition of the land, and of any buildings or other improvements as at the date of adoption of the Plan of Management; and
 - ii. The use of the land and any such buildings or improvements as at that date, and
- b) must:
 - i. Specify the purposes for which the land, and any such buildings or improvements, will be permitted to be used, and
 - ii. Specify the purposes for which any further development of the land will be permitted, whether under lease or licence or otherwise, and
 - iii. Describe the scale and intensity of any such permitted use or development.

32 Council Dealings with Community Land

- (a) Council has no power to sell, exchange or otherwise dispose of Community Land, except for the purpose of enabling that land to become, or to be added to, a Crown Reserve or land reserved or dedicated under the National Parks and Wildlife Act 1974;
- (b) Council may grant a lease or license on Community Land, but only in accordance with the Local Government Act 1993, as amended;
- (c) A Council may grant any other estate in Community Land to the extent permitted by the Local Government Act 1993, as amended

33 Leases or Licences on Community Land

3.3.1 Granting a Lease or Licence Community Land

Leases and licenses are a method of formalising the use of Community Land and facilities. Leases or licences can be held by groups such as sporting clubs, schools, commercial organisations or individuals providing facilities and/or services for public use.

The Local Government Act 1993, as amended allows Council to grant leases or licences over all or part of Community Land. The use of land under a lease or licence must be compatible with the Local Environment Plan or Council requirements and provide benefits and services or facilities for the users of the land. Terms and conditions of a lease should reflect the interests of Council and the public and ensure proper management and maintenance.

3.3.2 Conditions of Granting a Lease or Licence

The following conditions must be met when granting a lease or licence over Community Land:

- The lease or licence must not be granted for a period exceeding 30 years;
- A lease or licence for a period greater than five years may only be granted by tender, unless it is granted to a non-profit organisation; and
- The Plan of Management must expressly authorise a lease or licence.

Council must:

- Give public notice of the proposal;
- Exhibit notice of the proposal on the land to which the proposal relates;
- Give notice of the proposal to such persons who appear to own or occupy land adjoining the Community Land; and
- Give notice of the proposal to any other person (owner or occupier of land in the vicinity of the Community Land), if in the opinion of the Council the subject to the proposal is likely to form the primary focus of the person's enjoyment of Community Land.

3.3.3 Events Exempt from Lease or Licence

Casual Uses

Casual uses of a public reserve for events of no more than three consecutive days will not be required to arrange a formal lease or licence with Council, provided that:

- The activity is permissible under the objectives identified for that land category,
- No significant damage to the reserve is anticipated as a result of the proposed activity,
- There is no anticipated disruption to adjacent properties as a result of the activity or event,
- The use or occupation does not involve the erection of any permanent buildings or structures,
- There is no interference with other users,
- Council obtains proof of suitable insurances,
- The organisers, in consultation with Council, make arrangements for the provision of extra toilets, waste collection, traffic management, security, and any other requirements deemed necessary by Council.

34 Strategic Documents used in the Preparation of this Plan

The following Council documents have been used to assist and guide the strategic outcomes of this Plan, ensuring consistency in values, principles and policies:

- Wingecarribee Local Environmental Plan 2010;
- Wingecarribee Open Space, Recreation, Cultural and Community Facilities Needs Study, 2004;
- Wingecarribee Community Strategic Plan 2031+;
- Wingecarribee Shire Council Open Space and Recreation Facilities Section 94 contributions plans 2007;
- Wingecarribee Social Plan 2005 – 2010;
- State of the Environment Report 2008-2009;
- Wingecarribee Biodiversity Strategy 2003

35 Other Relevant legislation and Policies

The Plan must also be in accordance with the provisions contained within relevant legislation and policy guidelines refer to Section 10.0 for a complete listing.

4.0 LEGISLATION RELATING TO LAKE ALEXANDRA

4.1 *Councils role in managing Lake Alexandra*

Lake Alexandra is classified as “Community Land”. All public land must be managed in accordance with the Local Government Act 1993, including the Local Government Amendment (Community Land Management) Act 1998. The Act requires that Councils must classify public land as “operational” or “community” and that Plans of Management must be prepared for Community Land. The ways in which Community Land can be used and managed are strictly governed in accordance with an adopted Plan of Management and any law permitting the use of the land for a specified purpose or otherwise regulating the use of the land.

4.2 *Categories of Community Land*

Community Land must be categorised in accordance with the Local Government Amendment (Community Land Management) Act 1998. A category describes the land and each category has a set of core objectives. All current and intended uses of the land must comply with the core objectives and the objectives are defined and addressed within the Action Plan (Section 6).

The Local Government (General) Regulation 1999 provides guidelines for each of the categories, as described below:

4.2.1 *General Community Use*

Land should be categorised as general community use if the land:

- May be made available for use for any purpose for which Community Land may be used, whether by the public at large or by specific sections of the public; and
- Is not required to be categorised as a natural area, or does not satisfy the guidelines for categorisation as a sportsground, a park or an area of cultural significance.

4.2.2 *Park*

Land that is, or is proposed to be, improved by landscaping, gardens or the provision of non-sporting equipment and facilities for use mainly for recreational, social, educational and cultural pursuits that do not unduly intrude on the peaceful enjoyment of the land by others.

4.2.3 *Sportsground*

Land is used or proposed to be used primarily for active recreation involving organised sports or the playing of outdoor games.

4.2.4 An Area of Cultural Significance

Land should be categorised as an area of cultural significance if the land is:

- An area of Aboriginal significance, because the land:
 - has been declared an Aboriginal place under section 84 of the *National Parks and Wildlife Act 1974*, or
 - whether or not in an undisturbed state, is significant to Aboriginal people in terms of their traditional or contemporary cultures, or
 - is of significance or interest because of Aboriginal associations, or
 - displays physical evidence of Aboriginal occupation (for example, items or artefacts such as stone tools, weapons, engraving sites, sacred trees, sharpening grooves or other deposits, and objects or materials that relate to the settlement of the land or place), or
 - is associated with Aboriginal stories, or
 - contains heritage items dating after European settlement that help to explain the relationship between Aboriginal people and later settlers, or
- An area of aesthetic significance, by virtue of:
 - having strong visual or sensory appeal or cohesion, or
 - including a significant landmark, or
 - having creative or technical qualities, such as architectural excellence, or
- An area of archaeological significance, because the area contains:
 - evidence of past human activity (for example, below-ground features such as building foundations, occupation deposits, features or artefacts or above-ground features such as buildings, works, industrial structures, and relics, whether intact or ruined), or
 - any other deposit, object or material that relates to the settlement of the land, or
- An area of historical significance, because of the importance of an association or position of the land in the evolving pattern of Australian cultural history, or
- An area of technical or research significance, because of the area's contribution to an understanding of Australia's cultural history or environment, or
- An area of social significance, because of the area's association with Aboriginal life after 1788 or the area's association with a contemporary community for social, spiritual or other reasons.

4.2.5 Natural Area

Land which, whether or not in an undisturbed state, possesses a significant geological feature, geomorphological feature, landform, representative system or other natural feature or attribute that would be sufficient to further categorise the land as bushland, wetland, escarpment, watercourse or foreshore. Community Land that has been declared critical habitat or which is directly affected by a recovery plan or threat abatement plan under the Threatened Species Act 1995 or the Fisheries Management Act 1994 must be categorised as a natural area.

Natural Area: Bushland

Land that contains primarily native vegetation and that vegetation is:

- The natural vegetation or a remainder of the natural vegetation of that land; or
- Are still representative of the structure and/or floristics of the natural vegetation in the locality.

Natural area: Wetland

Land that includes marshes, mangroves, backwaters, billabongs, swamps, sedgelands, wet meadows or wet heathlands that form a water body that is inundated cyclically, intermittently or permanently with fresh, brackish or salt water, whether slow moving or stationary.

Natural area: Watercourse

Land described as:

- Any perennial or intermittent stream, flowing in a natural, artificially improved or diverted channel; or
- Associated riparian land or vegetation, including land which is protected under the relevant legislation.

Natural area: Foreshore

Land that is situated on the water's edge and forms a transition zone between the aquatic and terrestrial environment.

Natural area: Escarpment

Land that includes features such as a long cliff-like ridge or rock and includes significant or unusual geological, geomorphological or scenic qualities.

4.3 *Categorisation of Land within Lake Alexandra*

The Local Government Act requires Community Land to be categorised. A combination of categories may be used for one parcel of land. Under Section 36 (4) of the *Local Government Act 1993*, Lake Alexandra is categorised as follows:

- Park
- Sportsground
- General Community Use
- Natural Area: Watercourse

4.3.1 *Land Categorisation*

To comply with Section 40A of the *Local Government Act 1993*, A Public Hearing on the categorisation of the site was held at Mittagong RSL Club on Monday 9th July 2012.

The notice of the Public Hearing was advertised in the Southern Highland News on 20th and 27th June and 4th July 2012. Micris Management Services were commissioned to chair the meeting. A subsequent report was presented to Council to adopt the recommendations.

**Figure 11 – Lake Alexandra
Categorisation plan**



4.4 Core Objectives

The following Section outlines Council's objectives for the future management of Lake Alexandra, these form the basis for the strategies developed in this Plan of Management. These strategies combine the objectives as outlined in the Local Government Act, with those of the Council and the Community.

The Local Government Act (1993) and the Local Government Amendment (Community Land Management) Act 1998 establishes a set of core objectives for each category. These objectives are significant in ensuring any activities and uses of the site are consistent with the desired activities and uses for that category of land. Wingecarribee Shire Council has the responsibility to manage and develop the land in accordance with these core objectives.

4.4.1 Park objectives

The core objectives for management of community land categorised as a park are:

- (a) To encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities, and
- (b) To provide for passive recreational activities or pastimes and for the casual playing of games, and
- (c) To improve the land in such a way as to promote and facilitate its use to achieve the other core objectives for its management.

4.4.2 Sportsground objectives

The core objectives for management of community land categorised as a sportsground are:

- (a) To encourage, promote and facilitate recreational pursuits in the community involving organised and informal sporting activities and games, and;
- (b) To ensure that such activities are managed having regard to any adverse impact on nearby residences.

4.4.3 General Community Use objectives

The core objectives for community land categorised for general community use are:

To promote, encourage and provide for the use of the land, and to provide facilities on the land, to meet the current and future needs of the local community and of the wider public:

- (a) In relation to public recreation and the physical, cultural, social and intellectual welfare or development of individual members of the public, and;
- (b) In relation to purposes for which a lease, licence or other estate may be granted in respect of the land (other than the provision of public utilities and works associated with or ancillary to public utilities).

4.4.4 Natural Area: Watercourses objectives

The core objectives for management of community land categorised as a watercourse are:

- (a) To manage watercourses so as to protect the bio diversity and ecological values of the in-stream environment, particularly in relation to water quality and water flows;
- (b) To manage watercourses so as to protect the riparian environment, particularly in relation to riparian vegetation and habitats and bank stability;
- (c) To restore degraded watercourses, and;
- (d) To promote community education and community access to and use of the watercourse, without compromising the other core objectives of the category.

4.5 Express Authorisation of Lease / Licences

This Plan of Management expressly authorises Council to enter into a lease, licence, Memorandum of Understanding (MoU), s355 committee agreement or other estate with an appropriate organisation of its choice to manage the following facilities of Lake Alexandra.

Table 9 Leases and licences consent levels

Facility	Activity	Purpose	Agreement
Public Open Space incorporating any public infrastructure.	Organised & informal passive activates or other community use	Public recreation and ancillary activities	Lease agreement; MoU; s355 Management committee agreement
Any future community and/or private building such as Regional Art Gallery, Café or alike.	Organised & informal passive activates or other community use	Public recreation and ancillary activities	Lease agreement; MoU; s355 Management committee agreement

4.6 Easements

This Plan of Management expressly authorises the granting of easements over the land that is *not* affected by endangered communities for the purpose of providing pipes, conduit or other connections under the surface of the ground. This is limited to easements that connect premises adjoining Community Land to existing water, sewer, drainage or electricity facility of Council or other public utility provider that is situated on Community Land where there is no reasonable alternative.

The granting of easements above, on or under the surface of Community Land or to land that is not Community Land is not within the authority of this Plan of Management. This includes but is not limited to:

- Piping to a natural watercourse,
- Piping to a facility through Community Land to a facility on land under private ownership,
- Private access, vehicular or pedestrian.

4.7 Authorised Development

In accordance with the Local Government Amendment (Community Land Management) Act 1998 the Plan of Management must expressly authorise any proposed developments on the land. This authorisation in a Plan of Management gives ‘in principle’ support for an activity to proceed to the development assessment stage. This plan does not grant consent. Any proposed developments that are consistent with the plan are still subject to the normal development consent processes of Council.

5.0 BASIS FOR MANAGEMENT

For the effective ongoing management of community land, Council needs to consider its characteristics, current condition and use. This helps identify the community values for the land and management issues that have the potential to impact upon these values. Identification and understanding of these influencing factors will form the basis for Council's future management for Lake Alexandra.

In addition to the community values and management issues associated with Community Land, effective management of Lake Alexandra requires the consideration and incorporation of a multitude of legislative and policy requirements for community land. In managing Lake Alexandra, Council must comply with the core objectives for a Park, Sportsground, General Community Land and Natural Area: Water Course (refer to Section 4.4 - Core Objectives) and as specified in the Act, as well as various Federal, State and local level legislation and policy. The main aspects of this current legislation and policy affecting the management of community land are outlined in Section 10.0 Statutory Provisions.

5.1 Council's Management Goals

Wingecarribee Shire Council recognises that strategic planning provides a management framework to meet the challenges of today and the future. *Wingecarribee Community Strategic Plan 2031+* outlines the Council's and Community's Vision and Mission Statement for the future.

Wingecarribee 2031+ our future our choice is the blueprint for the future of the Southern Highlands. It represents the vision, aspirations, goals, priorities and challenges for our community. The purpose of Wingecarribee 2031+ is to:

- Describe the vision and goals the community has for the shire
- Outline the strategies to achieve this vision and goals
- Provide a long term focus for decision making and resource allocation
- Provide a basis for measuring our progress
- Provide an opportunity for community participation in decision making
- Address social, economic, environmental and civic leadership issues

W2031, as developed by the community, will be maintained and implemented by council on behalf of the Wingecarribee local government area. It is a plan for the future of the shire and will be a guide for other levels of government, private business and non-government agencies.

This plan signifies a change in the way planning by council and the community is developed and implemented. Developing 2031+ has created an opportunity to work together to deliver outcomes that benefit everyone.

*The Community Strategic Plan 2031+ Vision is:
In 2031 we will be.....*

“A healthy and productive community, learning living in harmony, proud of our heritage and nurturing our environment”

This Plan of Management aims to meet these strategic objectives through actions for the future development and management of Lake Alexandra.

5.2 Reserve Values

To effectively manage community land, Council needs to consider the reserve’s values. These values tend to be broad in nature and remain constant for a considerable length of time. Reserve values are of paramount importance and can be defined as “what is important about a place” (Department of Land and Water Conservation & Manidis Roberts Consultants (1996). *Succeeding with Plans of Management*). These values provide a framework to underpin the way in which Council manages Community Land.

This Plan of Management incorporates this values-based approach to ensure best practice management of Community Land.

Based upon previous research, consultation and ongoing interaction with the key stakeholders, the following values have been identified:

5.2.1 Health Values

Recent research shows that many of society’s health related conditions (physical and mental) could be lessened through increasing levels of physical activity and relaxation.

Regular participation in these activities allows individuals to improve their overall health and wellbeing through development of mental alertness, stress management, coordination, balance and other functions. Passive and sporting recreational areas as well as natural areas have enormous restorative powers that have profound positive impacts on human behaviour and function, and assist recovery from mental fatigue and stress.

The landscape setting and the open area within Lake Alexandra provides a sense of spaciousness, openness and freedom of movement to walk, run and exercise, leading to a sense of well-being.

Lake Alexandra will provide relief from the ‘urbanisation’ of modern living. The informal setting and the natural landscape backdrop of Lake Alexandra will evoke a sense of quiet, serenity, peace and tranquillity.

5.2.2 Recreational Values

The community is increasingly realising the health and wellbeing benefits of recreation in enhancing their quality of life. Lake Alexandra will provide many opportunities for passive recreational activities. Variety of passive activities such as photography, painting and picnicking are popular in public open space areas. Many recreational areas link to other areas of open space greatly increasing their recreational value to the community.

5.2.3 Aesthetic Values

Lake Alexandra pleasantly contrasts with the houses, buildings and traffic associated with the urban environment. Trees, shrubs, grass and landscaping are appreciated because they create a visually pleasing environment.

5.2.4 Social Values

The outdoors has long been part of the Australian culture, with open space areas highly valued as social venues. These areas are becoming increasingly important to the community. The open space within Lake Alexandra is valued for its aesthetic and scenic qualities, and for the tranquil space provided to relax and escape the pressures of urban lifestyles.

The community has developed a strong sense of ownership within Lake Alexandra with the desire to protect and enhance its passive recreational values; the site also provides a level of social interaction across all activities.

The passive open space with Lake Alexandra will provides an ideal atmosphere for community interaction and socialising, which increases social capital and improves the health and wellbeing of the community.

5.2.5 Natural Values

Lake Alexandra provides a balance of natural, built and recreational environment and is characteristic of the previous era. Any future development should consider this natural value.

5.2.6 Historical Values

Lake Alexandra is valued as a place containing social links to earlier times. There is a desire to identify and interpret areas of heritage significance.

5.3 Roles of the Area

The main ‘role’ of Lake Alexandra is to provide a valuable resource, serving the recreational needs of both local residents and the regional community; providing refuge for a variety of flora and fauna; whilst contributing to the educational needs of the local school network.

Lake Alexandra significance could be classed as regional or greater. A secondary role of the Reserve is the opportunity for social interaction, particularly for the residents of the Shire.

5.4 Vision and Objectives for the Precinct

A vision and objectives for management have been identified to guide and direct the management of the Lake. These can also be considered as ‘guiding principles’ or ‘desired outcomes’ which define the expectations and directions for decision making in relation to the management and use of Lake Alexandra.

5.4.1 Vision for Management

The vision for Lake Alexandra ‘sits above’ the management objectives, providing the overall direction for the Plan of Management. It defines where Council and the community would like Lake Alexandra to be in the future, and the direction that management activities (through the implementation of the Plan of Management) should take.

Management Vision

To recognise Lake Alexandra as a “significant place” in Wingecarribee Shire Council’s open space system, ensuring protection and conservation of identified values through appropriate management, in a way which best meets the cultural, environmental, recreational and social needs of the present community and future generations.

5.4.2 Management Principles

The following principles establish the direction the Wingecarribee Shire Council as the Land Managers will follow in implementing specific strategies to achieve the vision:

- Recognise, protect and enhance the understanding, protection and restoration of the natural landscape and ecological values of the Lake;
- Permit a wide range of recreational opportunities compatible with the natural/physical, scenic and cultural features of the Reserve, in response to community needs;
- Encourage community “ownership” and use of the Lake;
- Encourage and promote public use by providing a range of high quality, safe, accessible and enjoyable recreational and leisure facilities;
- Adopt Crime Prevention through Environmental Design and Safer by Design principles in managing the Reserve to minimise vandalism and increase personal safety in the Reserve;
- Protect and enhance the visual and social values of the Lake;
- Provide opportunities for informal recreation and social interaction;
- Ensure continued free public access;
- To protect existing landforms such as natural drainage lines, watercourses;
- To encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities;

6.0 STRATEGIES AND ACTION PLANS

The following tables outline the direction for the management and development of the site. The tables have the following objectives:

- To formulate performance targets;
- To ensure consistency with core objectives for community land categories;
- To develop actions that will define the way that Council will achieve its performance targets;
- To provide a means of assessment, which is the way that Council measures its performance; and
- To assign priorities for each of the performance targets.

The responsibilities abbreviations are as follows:

WSC Wingecarribee Shire Council

Within this action plan, each performance target has been given a priority, which can be linked to the following time frame:

- **High** – commenced within the next 3-4 years
- **Medium** – commenced in 4 – 7 years
- **Low** – commenced after 7 + years
- **Ongoing** – Throughout time as the Plan of Management is in operation

It should be recognised however that the commencement and completion of the actions would be dependent on the available resources and funds.

6.1 Management

Table 10 Proposed action plan for management

No.	Performance Target	Means to Achieve (Action)	Priority	Performance Assessment	Responsibility
1	Relevant management units within Council are aware of the Plan of Management and its objectives.	Once approved ensure that all relevant sections of Council are aware of the PoM and their responsibility to conform to the objectives of the plan.	High	All sections of Council, interim and long term lessees that carry out works or occupy facilities in the Lake are aware of the Plan of Management and its requirements.	WSC
2	Improved promotion of the site and facilities available.	Develop a management and marketing strategy for the Lake.	High	Management strategy developed and implemented.	WSC
3		Increase community awareness of the location of the Lake and the recreational opportunities available.	Ongoing	Increase usage and community education.	WSC
4	Development of heritage policies	Develop an Interpretation Strategy and implement the recommended program.	High	Interpretation Strategy completed and the implementation strategy commenced.	WSC
5		Rezone the two public road to RE1 –Community Land that dissects the site at the northern end (Leopold Ln) and south eastern side and incorporate as part of the Lake.	High	Road rezoned and incorporated as part of the Lake.	WSC
6		Submit an application to Geographical Names Board to increase the boundary of Lake Alexandra.	High	Park boundary increased with the Geographical Names Board.	WSC
7	To protect indigenous flora and fauna and their habitat	Develop a management plan for the rehabilitation of remnant Mittagong Sandstone Woodland within the subject site, including bush regeneration for the removal of weeds, restoration of the unnamed waterway to the north of Lake Alexandra and the implementation of measures to restrict entry other than by constructed pathways.	High	Management plan prepared and implemented.	WSC

6.1 Management (Contd.)

Table 10 Proposed action plan for management

No.	Performance Target	Means to Achieve (Action)	Priority	Performance Assessment	Responsibility
8	Use and management of an art gallery	Manage the art gallery to provide opportunities to local artist & to facilitate a high level of use. To encourage, promote and facilitate cultural, social and educational activities.	Ongoing	Ensure all activities occurring within Lake Alexandra are appropriate & lie within the „carrying capacity“ of the facility.	WSC
9		Market and promote the art gallery as a regional facility	Ongoing	Utilise the most suitable and cost effective medium to market and promote the art gallery.	WSC
10	Grant funding	To maximize funding opportunities for the art gallery.	Ongoing	To actively seek and apply for grants for the art gallery.	WSC

6.3 Recreation and Use

Table 11 Proposed action plan for recreation and use

No.	Performance Target	Means to Achieve (Action)	Priority	Performance Assessment	Responsibility
1	Provide passive and active recreational facilities and opportunities which do not adversely impact on its surrounding environment.	All future works to be designed with regard to Crime Prevention Through Environmental Design (CPTED) principles, eg. Maintain sightlines, passive surveillance, signage etc. All future works to be designed with regard to Council's equal access policy. Increase community awareness of the location of the Site and the recreational opportunities available.	High	Any work and/or future plans to comply with Crime Prevention Through Environmental Design (CPTED) principles. All future works assessed with regard to equal access principles. Increased usage and community education.	WSC
2		Provide suitable boundary fence.	High	Fence installed	WSC
3		Install new covered and uncovered picnic facilities as shown on the masterplan.	High	Picnic facilities installed.	WSC
4		Install two new large picnic facilities as shown on the masterplan.	High	Picnic facilities installed.	WSC
5		Install a new BBQ as shown on the masterplan	Low	BBQ facility installed and operational	WSC
6		Design and install a regional playground as shown on the masterplan	Low	Regional playground installed	WSC
7		Demolish existing masonry storage shed		Storage shed demolished and area made good	WSC
8		Design and construct a suitable public amenities including associated infrastructure (ie: retaining wall) and relocate as per the masterplan	Med	Existing amenities demolished and a new facility constructed	WSC

6.3 Recreation and Use (Contd.)

Table 11 Proposed action plan for recreation and use (cont.)

No.	Performance Target	Means to Achieve (Action)	Priority	Performance Assessment	Responsibility
9		Upgrade and improve the tennis building	Low	Tennis building improvements completed	WSC
10		Replace and upgrade the tennis fencing to the courts	Med	Fencing replaced	WSC
11		Resurface the tennis courts	Med	Courts resurfaced	WSC
12		Replace park furniture inside the tennis facility	High	Park furniture replaced	WSC
13		Develop and install a suitable entrance statement to the Lake	High	Entrance statement designed and installed	WSC
14		Design and develop suitable signage for Lake Alexandra including directional signs for street signage.	Medium	Signage developed and installed.	WSC
15		Design and construct an amphitheater as illustrated on the masterplan	Low	Amphitheater constructed	WSC
16	Regional Art Gallery	Develop suitable plans for the regional art gallery to be incorporated at Lake Alexandra as per the Draft Masterplan	High	Management plan prepared and implemented.	WSC
17		Undertake the construction of the regional art gallery as per the masterplan and the developed construction drawings and plans.	Low	Art gallery constructed and operational	WSC
18		Design and develop suitable signage for the art gallery including directional signs for street signage.	Low	Signage developed and installed.	WSC

6.3 Recreation and Use (Contd.)

Table 11 Proposed action plan for recreation and use (cont.)

No.	Performance Target	Means to Achieve (Action)	Priority	Performance Assessment	Responsibility
19	Provide improvement to the Lake	Dredge the bottom of the lake and remove all rubbish from the lake	High	Bottom of lake cleaned	WSC
20		Replace and upgrade the drainage valve to the lake	High	Drainage valve replaced	WSC
21		Design and replace the water fountain with a suitable fountain that compliments the site and does not impact on the wild life.	Low	Lake founded replaced.	WSC
22		Provide vegetation cover and embankment boulders to the wildlife refuge island	Med	Wildlife refuge island vegetation and boulders installed.	WSC
23		Provide boulders as a embankment treatment to the northern end of the lake as required.	Med	Embankment treatment completed	WSC

6.4 Access and Parking

Table 12 Proposed action plan for access and parking

No.	Performance Target	Means to Achieve (Action)	Priority	Performance Assessment	Responsibility
1	Provide improved infrastructure	Provide a RTA approved vehicle barrier to either side of road bridge off queen street.	High	Safety barrier installed	WSC
2		Design and construct a formal car park off Queen Street as per the masterplan	High	Car park completed	WSC
3		Design and install additional car park off Pioneer Street as shown on the Masterplan	Low	Car park completed	WSC
4		Design and install a suitable car park adjacent to the proposed art gallery (car park to be installed only if gallery is to be constructed)	Low	Car park completed	WSC
5		Provide additional car park cut into the bank off Arthur Street adjacent to the proposed gallery as per masterplan	Low	Car park completed	WSC
6	Provide opportunities to encourage sustainable community access and enjoyment.	Promotion of access to Lake Alexandra for all groups within the community	High	Increased number of visitors to lake Alexandra.	WSC

6.4 Access and Parking (Contd.)

Table 12 Proposed action plan for access and parking

No.	Performance Target	Means to Achieve (Action)	Priority	Performance Assessment	Responsibility
7	Public access and use of community land is maintained and provided on a fair and equitable basis	<ul style="list-style-type: none"> a. Provide opportunities for all community groups to be involved in events and activities b. Ensure all permitted organised events comply with Council’s policies and relevant legislation 	High	<p>Increased involvement in events and activities by different community groups</p> <p>All events comply with Council policies and Legislation</p>	WSC
8	Provide opportunities for people with disabilities to access Lake Alexandra	<ul style="list-style-type: none"> a. Identify and provide wheelchair and disability access where it is feasible. b. Incorporate the requirements of Council’s equal access policy into future facility improvements (where applicable) 	Medium	<p>Increase in the number of people with disabilities visiting Lake Alexandra.</p> <p>Future improvements comply with the equal access policy.</p>	WSC

7.0 MASTERPLAN

The masterplan for Lake Alexandra has been developed as a result of extensive community consultation and identifies numerous issues within the Reserve. Refer to Masterplan attached.

Components of the masterplan may not occur for some years depending on funding. This Plan of Management recommends staging of the works; however, the staging is dependent on availability of funding, demand and use of the facilities and review of the needs assessment for the community and user groups of the lake.

Figure 12 – Lake Alexandra Draft Masterplan



Lake Alexandra
 Draft Masterplan
 Project Number- MMS40
 Date- 02/08/2012
 Issue- B




WINGECARRIBEE SHIRE COUNCIL
 Scale : 1:400 @ A1



Figure13 – Lake Alexandra Masterplan
Regional Art Gallery
Artist's Impression



8.0 IMPLEMENTATION

8.1 Implementation of this Plan of Management

Implementation of the Plan will be monitored annually with the preparation of annual performance standards and capital works programs. Performance standards and works programs for administration and upgrading works are revised each year to meet allocated budgets and works priorities determined in Council's Management Plan.

Funding for management of the Reserve will be sought from a range of government, Council, corporate and community sources on an ongoing basis.

8.2 Review of this Plan of Management

This Plan of Management is intended to be reviewed and updated within ten years, (by 2022). It should be updated to reflect changing community and Council priorities and issues, incorporating changes in grants and funding, legislation or Council directions, and to recognise completed actions.

Review of this Plan of Management should also consider outcomes of periodic reviews of Council's strategic and operational plans. The Action Plan tables should be reviewed and revised yearly in accordance with Council's budgets, Capital Works Program and changing priorities.

9.0 FUNDING AND GRANT RESOURCES

9.1 Introduction

There are a number of strategies used by Council to fund the implementation of this Plan of Management. Council generally utilises a number of funding sources to implement the proposed action plan.

9.1.1 Council Funding

General

Funding for construction of new facilities and upgrade of existing facilities is generally via the annual budgeting process, however projects (if the funding criteria is met) may be partly funded through State and Federal Government grant allocations, which may involve matching funding from Council.

Staging of works will need to occur because Council cannot meet the cost of every single item of work proposed at one time, due to other financial commitments throughout the Shire. Actions listed in the action plans have been prioritised, which will assist in developing works programs and annual budgets.

Environmental levy

Funds raised from Council's environmental levy may be used for environmental open space projects.

Partnerships

An opportunity exists to develop partnerships with community groups and interested people in relation to park improvements and ongoing management.

Wingecarribee Shire Council's Section 94 Plan

Council's Section 94 plan for its established areas, allow for Council to collect funds from new developments to be spent on embellishing local and district open space and community facilities.

9.1.2 Grant Funding

A number of Commonwealth and State government grants are available to assist with capital works. While not exhaustive, the following gives an indication of the range of available grant programs through which improvements to the park consistent with its size, catchment and intended uses could be funded.

Commonwealth Government

Regional and Local Community Infrastructure Program – Strategic Projects

Part of the Economic Stimulus Plan, The commonwealth government has commenced a funding initiative for local government to build and renew local infrastructure such as community, centres, park and playgrounds, pool and sports facilities.

Natural Heritage Trust Grants

The commonwealth Government funds environmental and natural resource management programs, and particularly supports projects run in partnership between landholders, community groups and government.

Australia Council for the Arts Grants

The Australia Council is an arts advisory and funding body to the Commonwealth Government. It offers a diverse range of grants to individuals and organisations, through which it seeks to promote excellence in the arts and encourage cultural expression. Projects that are successful in achieving grants usually have a strong community focus in their aims and implementation.

Community, Environment, Art and Design Fund (CEAD)

CEAD supporting one off projects between communities, artists and designers in the planning and design of public open space.

Public Art Program

The NSW Government offers financial assistance for arts and cultural activities through Arts NSW. Grants of up to \$4,000 are available to assist in the commissioning of concept proposals by artists. Matching grants of up to \$20,000 are available for commissioning public art.

Water for the Future Funding

Offers grants to help local community organisations to save, recycle or improve the health of their local water resources. Grants are available for projects related to water saving and efficiency, water recycling, and water treatment to improve surface and groundwater health.

State Government

Environmental Trust Grants

The Environmental Trust is a State Government Trust established to support exceptional environmental projects. It is governed by the Environmental Trust Act 1998, and has been formed to provide grants and supervise their expenditure. A particular requirement of the Trust's programs is they encourage community involvement and input, making their purpose twofold - providing both educational and environmental benefits.

The Environmental Education Program

Provides resources to increase environmental awareness amongst individuals, communities and special interest groups.

The Environmental Restoration and Rehabilitation Program

This program funds projects which restore, protect, enhance and prevent further environmental degradation in natural environments. It requires applicants to include community involvement, cost efficiency and involve qualified people to achieve the restoration, and must broadly benefit the environment of NSW.

NSW Department of Sport and Recreation

The Department of Sport and Recreation offers two levels of grants to local Councils – known as

- Capital Assistance Program.
- Regional Sports Facilities Program.
- International Sporting Events Program
- Sports Development Program

These programs provide funding for recreational infrastructure – both indoor and outdoor. In the past it has funded schemes as diverse as floodlighting, turf resurfacing, building upgrades and provision of other such sports facilities.

NSW Community Relations Commission

- Community Development Grants Program

The Development Community Development Grant Program provides funding for long term benefits for the Community. Projects may include the promotion of cultural expression, enhancement of community development or capital based projects, development of community networks and structures and projects addressing critical issues relating to cultural diversity at a local level.

Metropolitan Greenspace Program

Planning NSW provides funding under the Metropolitan Greenspace Program to help Councils plan and develop regionally significant open space areas. Improvements can include paths, interpretive signage, educational programs and natural heritage conservation works, including bush regeneration.

Heritage Incentives Program

The NSW Heritage Office provides funding to assist in the conservation works for items on the State Heritage Register.

Heritage Study and Promotion Program

The NSW Heritage Office provides funding for studies, interpretation and presentation, histories and other projects for heritage items in NSW.

10.0 STATUTORY PROVISIONS

In addition to the legislation and policy outlined within this Plan of Management, there are a number of local, regional, state and national legislative documents, plans and policies that relate to the management and protection of Lake Alexandra. The main aspects of current legislation, plans and policy affecting the management and protection of Lake Alexandra are outlined below:

Commonwealth Legislation

Environment Protection and Biodiversity Conservation Act, 1999 (EPBC)

The EPBC Act introduces an assessment and approvals system for actions that have a significant impact on matters of “national environmental significance” (NES), which include nationally threatened species and ecological communities. The Act has the potential to capture a wide range of activities, including land clearing activities, irrigation developments, water infrastructure projects (e.g. weirs and dams), certain urban developments, mineral exploration activities and many marine activities.

Endangered Ecological Communities in NSW affected by this legislation include Southern Highlands Shale Woodland (found within the Wingecarribee LGA), however the EPBC Act may list ecological communities not listed under the TSC Act.

State Legislation

Local Government Act 1993

The Local Government Act 1993 includes a range of requirements on the management and use of public land. Council owned land must be classified as either community or operational land.

Section 35 of the Act requires that community land is used and managed in accordance with the following:

- The Plan of Management applying to the land
- Any law permitting the use of the land for a specified purpose or otherwise regulating the use of the land
- This Division

Section 38 of the Act requires that Council give public notice of a draft Plan of Management. The plan must be exhibited for at least 28 days with a submission period totally 42 days. Any relevant supplementary material must also be exhibited.

A public hearing is only required if the Plan of Management proposes that community land be re-categorised or categorised for the first time. Section 45 of the Act dictates what dealings a Council can have with community land, as follows:

- i. A Council has no power to sell, exchange or otherwise dispose of community land
- ii. A Council may grant a lease or licence of community land, but only in accordance with this Division

- iii. A Council may grant any other estate in community land to the extent permitted by this Division or under the provisions of another Act

This section does not prevent a Council from selling, exchanging or otherwise disposing of Community Land for the purpose of enabling that land to become, or be added to, a Crown Reserve or to become, or be added to, land that is reserved or dedicated under the National Parks and Wildlife Act 1974.

Sections 46 and 47 of the Act provide clear guidelines for Council with respect to the granting of leases, licences and other estates on community land. This includes permissible uses, means of granting leases, licences and other estates, timeframes and subleases, development and dedication of community land as public road.

The Local Government Act 1993 also considers acts of vandalism in public places (eg. Injuring plants and animals or defacing property) and gives Councils the power to establish and enforce alcohol free zones.

Environmental Planning & Assessment (EP & A) Act 1979

This planning instrument applies to development and use of all land within Wingecarribee LGA. Under this instrument, any use or development proposed for an area must be consistent with the applicable zoning as outlined in this plan for that area.

In relation to Natural Areas, the Environmental Planning and Assessment (EP & A) Act aims to encourage the proper management, development and conservation of natural resources for the purpose of promoting the social and economic welfare of the community and a better environment. It also plans for the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities and their habitats.

Environment Assessments must be carried out for any proposed activity or development. Any change in the use of a land area requires a development application (DA) and environmental assessment of the proposed activity under Part 4 of the EP&A Act forms part of the DA. A review of environmental factors (REF) under Part 5 of the EP&A Act must also be written for those proposed activities that do not require development consent.

Protection of Environment Operations Act 1997

This legislation replaces the Clean Air Act 1961, Clean Waters Act 1970, Pollution Control Act 1970, Noise Control Act 1975, and the Environmental Offences and Penalties Act 1989. It is an offence for a person to discharge pollutants to waters unless they hold an environment protection license.

Catchment Management Authorities Act 2003

This legislation establishes catchment management authorities and has the following objectives:

- to establish authorities for the purpose of devolving operational, investment and decision-making natural resource functions to catchment levels;
- to provide for proper natural resource planning at a catchment level;
- to ensure that decisions about natural resources take into account appropriate catchment issues;
- to require decisions taken at a catchment level to take into account State-wide standards and to involve the Natural Resources Commission in catchment planning where appropriate;
- to involve communities in each catchment in decision making and to make best use of catchment knowledge and expertise;
- to ensure the proper management of natural resources in the social, economic and environmental interests of the State;
- to apply sound scientific knowledge to achieve a fully functioning and productive landscape;
- to provide a framework for financial assistance and incentives to landholders in connection with natural resource management.

Fisheries Management Act 1994

The primary purpose of this Act is to conserve, develop and share the fishery resources of the State for the benefit of present and future generations, with the following objectives:

- to conserve fish stocks and key fish habitats;
- to conserve threatened species, populations and ecological communities of fish and marine vegetation;
- to promote ecologically sustainable development, including the conservation of
- to promote viable commercial fishing and aquaculture industries;
- to promote quality recreational fishing opportunities;
- to appropriately share fisheries resources between the users of those resources;
- to provide social and economic benefits for the wider community of New South Wales.

Noxious Weeds Act 1993

Local Government is responsible for the application of the Noxious Weed Act administered by the Department of Primary Industries. Council is required enforce the control of State and locally declared noxious weeds on both private and public lands, and therefore

- must control declared noxious weeds on Council managed lands;
- must inspect and enforce control of declared noxious weeds on private land
- must be a member of a regional weed committee and produce regional plans to ensure funding from Department of Primary Industries

Rural Fires Act 1997

The objects of this Act are to provide:

- for the prevention, mitigation and suppression of bush and other fires in local government areas (or parts of areas) and other parts of the State constituted as rural fire districts, and
- for the co-ordination of bush fire fighting and bush fire prevention throughout the State, and
- for the protection of persons from injury or death, and property from damage, arising from fires, and
- for the protection of the environment by requiring certain activities referred to in the above paragraphs to be carried out having regard to the principles of ecologically sustainable development

National Parks and Wildlife Act 1974

This Act applies to both community and Crown land, and its protection and conservation principles in this Act are consistent with the core objectives for Natural Areas. It also aims to foster public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation. It provides protection and conservation powers for:

- habitat, ecosystems and ecosystem processes;
- biological diversity at the community, species and genetic levels;
- landforms of significance, including geological features and processes;
- landscapes and natural features of significance including wilderness and wild rivers
- places, objects and features of significance to Aboriginal people;
- places of social value to the people of New South Wales;
- places of historic, architectural or scientific significance

Water Management Act 2001

The purpose of this Act is to provide for the sustainable and integrated management of the water sources for the benefit of both present and future generations. This is achieved through:

- applying the principles of ecologically sustainable development;
- protecting, enhancing and restoring water sources, their associated ecosystems, ecological processes and biological diversity and their water quality;
- recognising and fostering the significant social and economic benefits to the State that result from the sustainable and efficient use of water, including:
 - i. benefits to the environment;
 - ii. benefits to urban communities, agriculture, fisheries, industry and recreation;
 - iii. benefits to culture and heritage;
 - iv. benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water.

- recognising the role of the community, as a partner with government, in resolving issues relating to the management of water sources;
- providing for the orderly, efficient and equitable sharing of water from water sources;
- integrating the management of water sources with the management of other aspects of the environment, including the land, its soil, its native vegetation and its native fauna;
- encouraging the sharing of responsibility for the sustainable and efficient use of water between the Government and water users;
- encouraging best practice in the management and use of water.

Threatened Species Conservation Act, 1995 (TSC Act)

This Act aims to assist with the protection and recovery of threatened native flora and fauna species, populations and communities, as well as their habitats within NSW. It has significant implications for Council in relation to the management of native vegetation.

NSW Biodiversity Strategy 1999

The core objectives of the NSW Biodiversity Strategy are to:

- Ensure the survival and evolutionary development of species, populations and communities of plants, animals and microorganisms native to NSW.
- Strengthen management of biodiversity on a bioregional basis while using existing catchment level networks to focus on specific actions, including the integration of biodiversity conservation and natural resource management, consistent with the principles of ecologically sustainable development.
- Identify, prevent or attack at-source the threats to biodiversity through timely implementation of targeted actions.
- Build on the success of existing initiatives to develop a coordinated and cost-effective biodiversity conservation program involving the community, industry and all levels of government and ensure that the rights, knowledge and values of local and Aboriginal communities are properly recognised and reflected.
- Strengthen actions to inform, motivate and achieve the support of the community including local and Aboriginal communities, industry, State Government agencies and Local Government, in conserving biodiversity.
- Increase our understanding of the ecological systems and processes required to conserve biodiversity through scientific research, survey and monitoring, taking into account the knowledge and values of Aboriginal and local communities.

Local Plans and Policies

Wingecarribee Local Environmental Plan (LEP) 2010

The Wingecarribee Local Environmental Plan (LEP) 2010 provides planning and land use controls to encourage ecologically sustainable development for all land in the LGA. These controls provide for protection and enhancement of the natural environment, particularly remnant bushland. Under this instrument, any use or development proposed for an area must be consistent with the applicable zoning as designated for that area.

Natural Areas are zoned as either:

- RE1 Public Recreation;
- RE2 Private Recreation;
- E1 National Parks and Nature Reserves;
- E2 Environmental Conservation; and
- E3 Environmental Management.

Development in areas with either of these zonings must be in accordance with a Plan of Management adopted under the Local Government Act 1993. However, areas with Environmental Protection Zoning have harsher development controls than Public Recreation Zoning.

Land Zoned RE1 Public Recreation

The objectives for land zoned **RE1** are:

- (a) To enable land to be used for public open space or recreational purposes;
- (b) To provide a range of recreational settings and activities and compatible land uses;
- (c) To protect and enhance the natural environment for recreational purposes; and
- (d) To enable ancillary development that will encourage the enjoyment of land zoned for open space.

Land Zoned RE2 Private Recreation

The objectives for land zoned **RE2** are:

- (a) To enable land to be used for private open space or recreational purposes;
- (b) To provide a range of recreational settings and activities and compatible land uses; and
- (c) To protect and enhance the natural environment for recreational purposes.

Land Zoned E1 National Parks and Nature Reserve

The objectives for land zoned **E1** are:

- (a) To enable the management and appropriate use of land that is reserved under the *National Parks and Wildlife Act 1974* or that is acquired under Part 11 of that Act.
- (b) To enable uses authorised under the *National Parks and Wildlife Act 1974*.
- (c) To identify land that is to be reserved under the *National Parks and Wildlife Act 1974* and to protect the environmental significance of that land.

Land Zoned E2 Environmental Conservation

The objectives for land zoned **E2** are:

- (a) To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- (b) To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

Land Zoned E3 Environmental Management

The objectives for land zoned **E3** are:

- (a) To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values;
- (b) To provide for a limited range of development that does not have an adverse effect on those values;
- (c) To encourage the retention of the remaining evidence of significant historic and social values expressed in existing landscape and land use patterns;
- (d) To minimise the proliferation of buildings and other structures in these sensitive landscape areas;
- (e) To provide for a restricted range of development and land use activities that provide for rural settlement, sustainable agriculture, other types of economic and employment development, recreation and community amenity in identified drinking water catchment areas; and
- (f) To protect significant agricultural resources (soil, water and vegetation) in recognition of their value to Wingecarribee's longer term economic sustainability

Wingecarribee Biodiversity Strategy Phase 1 2003

This Plan of Management is to be implemented in conjunction with the Wingecarribee Biodiversity Strategy Phase 1 2003, which provides guidelines to direct Council's management of biodiversity. The overall aim is to:

'To establish and implement measures to effectively conserve, protect, enhance and rehabilitate the biodiversity with the Shire'.

Wingecarribee Open Space, Recreation, Cultural and Community Facilities Needs - Study 2004 and Wingecarribee Open Space, Recreation, Cultural and Community Facilities Needs - Study and Strategy – Review (November 2009)

The plan provides a framework to guide the planning, development and management of Wingecarribee's open space systems in line with Council's strategic outcomes.

The overall purpose of Open Space, Recreation, Cultural and Community Needs Study is:

- To properly identify the existing and likely future community needs for open space, recreation, cultural and community facilities in Wingecarribee;
- To identify a strategic planning and management direction for an integrated and corporate approach to the provision of recreation, cultural and community activity opportunities, through public facilities and open space; and
- To develop a policy framework for Council to provide quality recreation, cultural and community activity opportunities and environments that meets the needs of the Wingecarribee community.

10.1 References

Wingecarribee Shire Council Open Space and Recreation Facilities Section 94 Contributions plans - 2007

Wingecarribee Social Plan – 2005 – 2010

Wingecarribee Shire Council Parks, Gardens & Reserves Management Plans (July 1995)

Wingecarribee Open Space, Recreation, Cultural and Community Facilities Needs Study, September, 2004

Wingecarribee Open Space, Recreation, Cultural and Community Facilities Needs - Study and Strategy – Review (November 2009)

Wingecarribee Community Strategic Plan 2031+, July 2012

Wingecarribee Local Environmental Plan 2010

State of the Environment Report 2008-2009

Environmental Planning and Assessment Act 1979

Local Government Act 1993, as amended

Local Government Amendment (Community Land Management) Act 1998

Disability Discrimination Act 1992

Recreation and sport planning and design, Jim Daly, 2000

Outdoor Recreation and Open Space, Planning Guidelines for Local Government, prepared by Manidis Roberts Consultants, 1992

Department of Land and Water Conservation & Manidis Roberts Consultants. *Succeeding with Plans of Management*. 1996

Wingecarribee Biodiversity Strategy 2003

NSW Soil & Land Information System –NSW Department of Environment and Climate Change), www.nratlas.nsw.gov.au, July 2012

Australian Soil Resource Information System, www.asris.csiro.au, July 2012.

Australian Government Bureau of Meteorology – www.bom.gov.au, July 2012.

NSW Department of Lands – www.six.nsw.gov.au, July 2012

Geographical Names Board, www.gnb.nsw.gov.au, July 2012

Preliminary environmental assessment of a proposed development at Lake Alexandra Reserve, Mittagong, NSW

Prepared for:

Micris Management Services Pty Ltd
PO Box 338
Campsie NSW 2194

Prepared by:

G.J. Stone
Woodlands Environmental Management
ABN 93 036 995 658
133 Forest Road,
Wingello NSW 2579

Tel: (02) 488 44255

Mob: 0422279946

E-mail: woodlandsevenvironmental@yahoo.com.au

July, 2012

Preliminary environmental assessment of a proposed development at Lake Alexandra Reserve, Mittagong, NSW

Prepared for Micris Management Services Pty Ltd, PO Box 338 Campsie, NSW 2194 by G.J. Stone, Woodlands Environmental Management, 133 Forest Road, Wingello, NSW for

Background

The development of public recreation facilities is proposed within Lake Alexandra Reserve at Mittagong, NSW. A preliminary assessment is required to identify existing or potential environmental constraints within the development area.

Scope of the assessment

This environmental assessment:

1. provides a preliminary description of matters of environmental significance within the area proposed for development such as flora, fauna and their habitats, Endangered Ecological Communities or Threatened Species,
2. identifies relevant environmental laws and policies which need to be addressed in relation to the proposed development and potential impacts on any matters of environmental significance,
3. recommends appropriate requirements and procedures for undertaking a full flora and fauna assessment, and
4. recommends and discusses opportunities to avoid, minimise or mitigate potential environmental impacts

Summary of conclusions and recommendations

It is concluded that:

1. No Endangered Ecological Communities are present within the subject site.
2. No Threatened Species of flora were located within the subject site.
3. The development as proposed will not have direct impacts on remnant *Mittagong Sandstone Woodland*.
4. Remnant *Mittagong Sandstone Woodland* within the subject site includes potential habitat for Threatened Species of fauna listed under the *NSW Threatened Species Conservation Act 1995*.
5. As remnant *Mittagong Sandstone Woodland* will not be disturbed by the proposed development, fauna utilising this habitat – including Threatened Species – are unlikely to be impacted.
6. The aquatic environment of Lake Alexandra and the surrounding *Highly disturbed area with no or limited native vegetation* are of low habitat value for native fauna and developments proposed to be undertaken within these areas are unlikely to have any significant impacts on fauna or their habitats.

It is recommended that:

1. The proposed development include a management plan for the rehabilitation of remnant *Mittagong Sandstone Woodland* within the subject site, including bush regeneration for the removal of weeds, restoration of the unnamed waterway to the

north of Lake Alexandra and the implementation of measures to restrict entry other than by constructed pathways.

Part One: Environmental Assessment

1. Site description

The c. 5.5ha site is dominated by Lake Alexandra – an artificial lake historically constructed within an unnamed tributary of Gibbergunyah Creek to supply water for engines hauling coal to the Fitzroy iron mines. The lake occupies an area of c.1.7ha.

Lake Alexandra Reserve is surrounded by residential areas to the south, east and west and adjoins remnant bushland within Mount Alexandra Reserve to the north

The south-western, southern and eastern areas of the site surrounding the lake have been cleared, developed and landscaped. Scattered remnant Eucalypts are present within a modified landscape of maintained grassland, exotic trees and garden beds.

The north-western portion of the site supports remnant forest vegetation.

2. Flora

2.1 Flora records

2.1.1 Threatened Communities

Ten communities occurring in the Burratorang Sub-region of the Hawkesbury-Nepean CMA are listed by the NSW Department of Environment, Climate Change and Water as Endangered Ecological Communities.

Five communities occurring within 20km of the property are listed by the Department of Sustainability, Environment, Water, Population and Communities as Threatened Ecological Communities within the list of Matters of National Environmental Significance

2.1.2 Flora

The NSW Department of Environment, Climate Change and Water record the presence of thirty-two Threatened Species of flora within the Burratorang Sub-region of the Hawkesbury-Nepean CMA. The NPWS Atlas of NSW Wildlife records four of these species as occurring within a 10km radius of the property.

The Department of Sustainability, Environment, Water, Population and Communities lists three species of flora as Matters of National Environmental Significance within 10km of the property.

2.2 Preliminary field survey

The preliminary field survey was based upon the identification of vegetation structure, dominant species and habitat.

The subject site supports two broad vegetation types:

Mittagong Sandstone Woodland

Highly disturbed area with no or limited native vegetation

2.2.1 Mittagong Sandstone Woodland

The survey recorded an overstorey dominated by *Eucalyptus piperita* ssp. *urceolaris* (Urn-fruited Peppermint) and *E. radiata* subsp. *radiata* (Narrow-leaved Peppermint) with associations of *E. mannifera* (Brittle Gum), *E. sclerophylla* (Scribbly Gum), , *E. globoidea*

(White Stringybark), *E. amplifolia* (Cabbage Gum), *E. sieberi* (Silvertop Ash) and *E. viminalis* (Manna Gum).

The moderately-dense shrubby understorey includes *Acacia mearnsii* (Black Wattle), *A. melanoxylon* (Blackwood), *Banksia spinulosa* (Hairpin Banksia), *Hakea dactyloides* (Finger Hakea), *H. sericea* (Bushy Needlewood), *Pittosporum undulatum* (Sweet Pittosporum), *Bossiaea obcordata* (Heart-leaved Bossiaea), *Leptospermum attenuatum* (Flaky-barked Tea Tree), *Acacia terminalis* (Sunshine Wattle), *Exocarpos cupressiformis* (Native Cherry) and *Cassinia aculeata* (Dogwood).

The moderately-sparse groundcover includes *Lomandra longifolia* (Spiny-headed Mat Rush), *Dampiera purpurea* (Purple Dampiera), *Lomatia illicifolia* (Holly-leaved Lomatia), *Pteridium esculentum* (Bracken Fern), *Goodenia hederacea* (Ivy Goodenia), *Comesperma ericinum* (Pink Matchheads), and *Pimelea linifolia* (Slender Rice Flower).

Exotic species such as *Ligustrum sp.* (Privet), *Agapanthus sp.* (Agapanthus), *Lonicera japonica* (Honeysuckle), *Rubus anglocandicans* (Blackberry), *Hedera helix* (English Ivy) and *Vinca major* (Blue Periwinkle) are present at the margins of the remnants.

2.2.2 Highly disturbed area with no or limited native vegetation

The subject site includes areas historically cleared, developed and maintained for public recreation and amenity. These areas include paved pathways, play equipment, car parks, a toilet block, tennis courts, picnic shelters, landscaped gardens and mown grassland. Exotic trees have been planted at various locations, although scattered remnant *Eucalyptus* species are present.

A complete vegetation survey would record all species present at the site and provide a more detailed description of the structure and floristics of the vegetation.

2.3 Classification

On the basis of the floristics, structure, substrate and geographic location, the remnant vegetation community in the north-western portion of the subject site is identified to be *Sydney Peppermint - Silvertop Ash healthy open forest on sandstone ridges of the upper Blue Mountains, Sydney Basin* (Biometric 2008).

2.4 Condition

2.4.1 Mittagong Sandstone Woodland

The western edges of the remnant *Mittagong Sandstone Woodland* e.g. along Pioneer Street reveals evidence of weed invasion typical of remnant bushland in urban areas. Some weed species such as *Ligustrum sp.* (Privet), *Agapanthus sp.* (Agapanthus), *Lonicera japonica* (Honeysuckle), *Rubus anglocandicans* (Blackberry), *Hedera helix* (English Ivy) and *Vinca major* (Blue Periwinkle) have spread further into the remnant. Some disturbance has been caused by unofficial and official tracks used by pedestrians and bicycles are present within the remnant. The erosion of the unnamed waterway north of the lake has also impacted on vegetation.

The majority of the overstorey trees are mature or at a stage of late maturity.

An assessment of the vegetation at the site against the benchmarks for the community prescribed in OEH's Biometric (2008) is likely to indicate a 'good' condition. A complete vegetation survey would enable an accurate assessment of condition to be made and provide a higher definition vegetation map.

2.5 Potential impacts on flora

The Lake Alexandra Draft Masterplan (Map 2) indicates that all proposed developments will be located within *Highly disturbed area with no or limited native vegetation* and that remnant *Mittagong Sandstone Woodland* will not be directly impacted.

2.6 Conclusion

It is concluded that:

- No Endangered Ecological Communities are present within the subject site.
- No Threatened Species of flora were located within the subject site.
- The development as proposed will not have direct impacts on remnant *Mittagong Sandstone Woodland*.

3. Fauna

3.1 Fauna records

The NSW Department of Environment, Climate Change and Water record the presence of forty Threatened Species of fauna within the Burratorang Sub-region of the Hawkesbury-Nepean CMA. The NPWS Atlas of NSW Wildlife records eight of these species as occurring within a 10km radius of the site.

The Department of Sustainability, Environment, Water, Population and Communities lists one species of fauna as Matters of National Environmental Significance within a 10km radius of the site.

3.2 Preliminary field survey

The preliminary fauna survey was based upon the identification of potential habitats for birds, mammals, reptiles and amphibians and opportunistic sightings of fauna or evidence of the presence of fauna.

The subject site supports three broad habitat types:

Mittagong Sandstone Woodland
Highly disturbed area with no or limited native vegetation
Aquatic – Lake Alexandra

3.2.1 Mittagong Sandstone Woodland

A number of hollows of varying size were observed in mature trees within the remnant vegetation providing potential habitat for birds and bats including some Threatened Species.

The remnant adjoins the southern end of Mount Alexandra Reserve which has wildlife connectivity to the Nattai National Park and the Blue Mountains World Heritage Area.

3.2.2 Highly disturbed area with no or limited native vegetation

The highly disturbed and developed environment to the south-west, south and east of the lake provides little roosting, nesting, breeding or foraging habitat for native fauna. Remnant *Eucalypts* may however provide some habitat value e.g. tree hollows for bats, nesting and roosting for birds.

3.2.3 Aquatic – Lake Alexandra

The highly disturbed aquatic environment of Lake Alexandra provides little shelter, food, nesting or breeding habitat for aquatic fauna. Margins of the lake have been cleared of habitats created by riparian vegetation and fallen timber. Aquatic emergent, floating and edge plants are absent from the water body. The margins of the lake are relatively uniform

providing little variety in water depth. The small island at the southern end of the lake is generally denuded of vegetation.

A complete fauna survey would identify the location of any fauna records, and the extent and location of fauna habitats and key habitat features such as streams, hollow bearing trees and bat roost sites. A survey would also record the presence of species utilising habitats within the subject site.

3.3 Potential presence of fauna

The *Mittagong Sandstone Woodland* habitat present is considered suitable for the following Threatened Species which have been recorded within a 10km radius of the subject site:

Callocephalon fimbriatum (Gang-gang Cockatoo)
Calyptorhynchus lathami (Glossy Black-Cockatoo)
Petroica phoenicea (Flame Robin)
Dasyurus maculatus (Spotted-tailed Quoll)
Phascolarctos cinereus (Koala)
Scoteanax rueppellii (Greater Broad-nosed Bat)

3.4 Potential impacts on fauna and habitat

The Lake Alexandra Draft Masterplan (Map 2) indicates that all proposed developments will be located within *Highly disturbed area with no or limited native vegetation* surrounding Lake Alexandra. This area is considered to be of low habitat value to native fauna and no significant impacts on fauna or habitat is likely as result of the proposed development.

The Lake Alexandra Draft Masterplan (Map 2) indicates that fauna habitats associated with *Mittagong Sandstone Woodland* will not be directly impacted and therefore fauna potentially utilising this area will not be impacted as a result of the proposed development.

3.5 Conclusion

It is concluded that:

- Remnant *Mittagong Sandstone Woodland* within the subject site includes potential habitat for Threatened Species of fauna listed under the *NSW Threatened Species Conservation Act 1995*.
- As remnant *Mittagong Sandstone Woodland* will not be disturbed by the proposed development, fauna utilising this habitat – including Threatened Species – are unlikely to be impacted.
- The aquatic environment of Lake Alexandra and the surrounding *Highly disturbed area with no or limited native vegetation* are of low habitat value for native fauna and developments proposed to be undertaken within these areas are unlikely to have any significant impacts on fauna or their habitats.

4. Statutory requirements

Relevant legislation for the assessment of the proposed development includes:

4.1 Commonwealth legislation

Environment Protection and Biodiversity Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) protects the environment, particularly matters of National Environmental Significance (Protected matters). It streamlines national environmental assessment and approvals process, protects Australian biodiversity and integrates management of important natural and cultural places.

4.2 State legislation

Threatened Species Conservation Act 1995

The *Threatened Species Conservation Act 1995* provides for the protection of all threatened plants and animals native to New South Wales (with the exception of fish and marine plants). The Act contains the lists of species, populations and ecological communities that have been classified as threatened.

Native Vegetation Act 2003

Clearing remnant native vegetation or protected regrowth requires approval under the *Native Vegetation Act 2003* (NV Act) unless the clearing is a permitted activity. Under the *NV Act* the local Catchment Management Authority (CMA) can only approve the clearing of remnant vegetation or protected regrowth when the clearing will improve or maintain environmental outcomes.

Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A) Act established the environmental planning system in NSW. The Act outlines land use planning, development controls and environmental impact assessment framework in NSW. Section 5A of the EP&A Act outlines the seven factors to be considered when determining whether a proposal is likely to have a significant effect on threatened species, populations and ecological communities, or their habitats, and whether a Species Impact Statement is required.

4.3 Wingecarribee Shire Council policies

Relevant policies for the assessment of the proposed development are as follows:

Wingecarribee Shire Council aims 'To establish and implement measures to effectively conserve, protect, enhance and rehabilitate the biodiversity within our shire' (WSC, 2009 p.4).

Council supports a policy of Ecologically Sustainable Development which includes the principle that 'new development must ensure that there is no loss of biological diversity or ecological integrity' (WSC draft DCPs, 2011)

Council also supports a policy to avoid, minimise, or mitigate impacts. Proposals for new developments should therefore be supported by a report of 'all measures proposed to avoid, minimise or mitigate impacts to threatened species detailing how, when and where they will be implemented and their likely effectiveness.' (WSC, 2009 p.47)

Council's assessment of new developments also includes the consideration of any direct, indirect and cumulative impacts associated with the proposal.

4.4 Requirements for environmental assessment

A Flora and Fauna Assessment will be required in compliance with the relevant Commonwealth, State and Local Government legislation, as well as any *State Environmental Planning Policies (SEPPs)*, *Regional Environmental Planning Policies (REPs)*, *Local Environment Plans (LEPs)*, *Development Control Plans (DCPs)* and any policies that Council has in place.

The Flora and Fauna Assessment should be carried out in accordance with Wingecarribee Shire Council's *Flora and Fauna Assessment Guidelines for Development Applications*.

The Flora and Fauna Assessment will be required to identify in detail all potential impacts of the proposed development on Threatened Species.

The Flora and Fauna Assessment should contain an Assessment of Significance (i.e. the Seven Part Test) which is an assessment of impacts on threatened species, populations or endangered ecological communities or their habitats. The Assessment of Significance is prescribed under the *EP & A Act 1979*.

Note that 'if a proposal applies to an area where no Threatened Species, populations, endangered ecological communities or their habitats have been recorded, and it is considered unlikely that they will occur, Council is still required to have formal regard to the Assessment of Significance' (WSC, 2009 p.16).

If the Assessment of Significance reveals that the proposed development is likely to have a significant impact on threatened species, populations, endangered ecological communities, or their habitats, then a Species Impact Statement must be prepared, or the proposal modified to eliminate the impacts.

5. Part One conclusions and recommendations

It is concluded that:

7. No Endangered Ecological Communities are present within the subject site.
8. No Threatened Species of flora were located within the subject site.
9. The development as proposed will not have direct impacts on remnant *Mittagong Sandstone Woodland*.
10. Remnant *Mittagong Sandstone Woodland* within the subject site includes potential habitat for Threatened Species of fauna listed under the *NSW Threatened Species Conservation Act 1995*.
11. As remnant *Mittagong Sandstone Woodland* will not be disturbed by the proposed development, fauna utilising this habitat – including Threatened Species – are unlikely to be impacted.
12. The aquatic environment of Lake Alexandra and the surrounding *Highly disturbed area with no or limited native vegetation* are of low habitat value for native fauna and developments proposed to be undertaken within these areas are unlikely to have any significant impacts on fauna or their habitats.

It is recommended that:

2. The proposed development include a management plan for the rehabilitation of remnant *Mittagong Sandstone Woodland* within the subject site, including bush regeneration for the removal of weeds, restoration of the unnamed waterway to the north of Lake Alexandra and the implementation of measures to restrict entry other than by constructed pathways.

Part Two: Avoid, minimise or mitigate impacts

Both NSW Office of Environment and Heritage and Wingecarribee Shire Council support a policy to avoid, minimise, or mitigate impacts. Proposals for new developments should therefore be supported by a report of 'all measures proposed to avoid, minimise or mitigate impacts to threatened species detailing how, when and where they will be implemented and their likely effectiveness.' (WSC 2009). Opportunities to avoid, minimise or mitigate potential environmental impacts are discussed and recommended below

1. Avoiding impacts

Avoiding impacts may involve relocating the development or changing the proposal design to avoid environmentally sensitive areas (WSC, 2009 p.14).

The development as proposed avoids environmental impacts. The Lake Alexandra Draft Masterplan (Map 2) indicates that all proposed developments will be located within *Highly disturbed area with no or limited native vegetation* surrounding Lake Alexandra. This area is considered to be of low habitat value to native fauna and no significant impacts on fauna or habitat is likely as result of the proposed development.

The Lake Alexandra Draft Masterplan (Map 2) indicates that fauna habitats associated with *Mittagong Sandstone Woodland* will not be directly impacted and therefore fauna potentially utilising this area will not be impacted as a result of the proposed development.

2. Minimising impacts

Where it is not possible to avoid areas of ecological significance, every attempt should be made to minimise identified impacts (WSC, 2009 p.14).

The development as proposed avoids environmental impacts and minimisation is not required.

3. Mitigating impacts

Where it is not possible to avoid areas of ecological significance, every attempt should be made to mitigate identified impacts. Council requires that 'preferably mitigation measures must follow 'best practice' standards' (WSC 2009, p.14)

The development as proposed avoids environmental impacts and minimisation and mitigation is therefore not required.

Prepared by:

Greg Stone

B. App.Sc. (Parks, Recreation and Heritage) (Charles Sturt University), Grad. Cert. Sci. Comm. (Australian National University), Adv.Dip. Land Management (University of Sydney), Ass.Dip. Land Management (University of New England)

Woodlands Environmental Management
July, 2012

References

Eco Logical Australia Pty Ltd (2003) Wingecarribee Biodiversity Study: Vegetation Mapping, Threatened Species, Corridors and Conservation Assessment. Unpublished report prepared for Wingecarribee Shire Council.

Fisher, M., Ryan, K. & Lembit, R. (1995) *The natural vegetation of the Burragorang 1:100 000 map sheet*. Cunninghamia 4(2): 143-215

NSW NPWS (2003) *Saving out threatened native animals and plants: Recovery and threat abatement in action - 2003 update* NSW National Parks and Wildlife Service, Hurstville, NSW

NSW Office of Environment & Heritage (2008) *Biometric Reviewed Interim Vegetation Condition Benchmarks*

NSW Scientific Committee (2001) *Southern Highlands shale woodlands in the Sydney Basin Bioregion - endangered ecological community listing: Final Determination*

Wingecarribee Shire Council (2009) *Flora and Fauna Guidelines for Development Applications*

Atlas of NSW Wildlife <http://wildlifeatlas.nationalparks.nsw.gov.au/wildlifeatlas/watlas.jsp>
(accessed 23rd September 2011)

Map 1: Subject site



Map 2: Lake Alexandra Draft Masterplan



Map 3: Vegetation map



Key
A - Mittagong Sandstone Woodland
B - Highly disturbed area with no or limited native vegetation