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1 Introduction

Reserves have a major role in contributing to the maintenance and enhancement of amenity and recreation values in the City by providing attractive open spaces and facilities for the enjoyment of active and passive recreational activities by both residents and visitors.

The purpose of the Otago Harbour Reserves Management Plan is to provide a policy framework for the use, enjoyment, maintenance, protection, and appropriate development of Council reserves and facilities that provide access to, or encourage use of, the harbour. This is to ensure consistency in terms of the management of current reserves and the establishment of future reserves. This management plan applies to all Council reserves and facilities listed below, regardless of classification under the Reserves Act 1977. It has been prepared in accordance with the procedures outlined in Section 41 of that Act.

Identification of Harbour Reserves

Sites identified to be included in the management plan are those where the principal purpose is to provide access to, or encourage use of, the harbour. Harbour reserves or facilities generally have similar characteristics and purpose, and therefore a single generic plan has been prepared to cover such sites.

The sites are either properties managed by the Council and leased or held in fee simple ownership for the purpose of reserves, or reserves which are classified as such under the Reserves Act 1977, or facilities owned by the Council. All reserves listed in this management plan will be managed and developed/enhanced in accordance with the Reserves Act 1977, as it is desirable to achieve the same management and development objectives for all reserves of a similar nature. Any additional reserves identified in the future, which are developed to provide access to, or encourage use of the harbour, will be added to this management plan and will be publicly notified in accordance with the provisions of the Reserve Act 1977.

This management plan contains policies for the following reserves and facilities that are owned or managed by the Council:

Andersons Bay Inlet (bed) Bayfield Jetty and Ramp Broad Bay Recreation Reserve and Jetty Careys Bay Jetty and Ramp Deborah Bay Dinghy Ramp and Marina Glenfalloch Jetty and Car Park Kitchener Street Recreation Reserve Macandrew Bay Recreation Reserve and Boat Ramp Port Chalmers Domain, Jetties, Ramp, and Pontoons (Back Beach) Roseneath Esplanade Reserve Te Rauone Recreation & Esplanade Reserve (Te Rauone Beach Domain) The Green Recreation Reserve (Deborah Bay) Vauxhall Recreation Reserve, and Ramps Wellers Rock Jetty

Scope Of Otago Harbour Reserves Management Plan

This management plan looks at the facilities and reserves under ownership or management of the Council, which are primarily managed for recreation. This plan does not provide policy for wider management or issues of the harbour, as this approach is more appropriate for a strategic document that can consider all aspects of the harbour. The management plan is a land-based plan under the Reserves Act 1977, and cannot address issues related to water, or the bed of the harbour (except Andersons Bay Inlet bed), as these are not within the Council's jurisdiction.

The Otago Boat Harbour Recreation Reserve has temporarily been excluded from this management plan to allow a number of Boat Harbour Recreation Reserve issues, principally around ownership of facilities, to be resolved. Once all outstanding issues have been resolved through a separate process, the Boat Harbour Recreation Reserve sections and specific policies will be processed through the public consultation processes outlined in the Reserves Act 1977, including a public submission period and hearing. At the completion of the consultation process the sections will be inserted into this management plan. The Reserve will be managed in accordance with all aims, objectives, and policies in this current management plan, as well as any additional ones that have been agreed to through the public process.

Areas Not Included In This Management Plan

A number of facilities around the harbour are owned by clubs and organisations that lease sites on reserves for clubhouses. The general situation regarding other club facilities around the harbour is also considered within this plan. This document does not contain policies on how clubs manage their own facilities.

Clubs such as St Leonards and Ravensbourne Yacht Clubs and Portobello Boating Club are not on Council land and have therefore not been specifically included in this management plan.

Reserves owned by the Department of Conservation such as Wellers Rock itself (Historic Reserve), and coastal areas at Aramoana are not included in this plan as they are not under the control of the Council.

The Mole at Aramoana is owned by Port Otago and is, therefore, also not included.

The track and beach access at Yellow Head in Broad Bay is unformed legal road. The area has an Ecological Restoration Plan. If the area is classified as reserve in the future, it may be appropriate for inclusion in the Otago Harbour Reserves Management Plan.

Quarantine Island (also known as St Martins Island and Kamautaurua) and Goat Island (also known as Rangiriri) are not owned or managed by the Council.

The Council manages Pudding Island (Titeremoana). This is a scenic reserve and its management is different to that of the reserves and facilities in this management plan. Pudding Island is highly vegetated, primarily with native species, and has a conservation focus. It will be incorporated into a more appropriate management plan.

2 Management Planning For Reserves

2.1 Aims and Objectives of Reserve Management Plans

The mission of the Council is to "maintain and enhance our Community for the long term well-being of our people and environment through innovative leadership and the provision of cost effective services" (Dunedin City Council Strategic Plan, 1998:8).

Reserve Management Plans assist with achieving the following goals in the Dunedin City Council's Strategic Plan:

- Goal 3. Community: to create and maintain a broad range of recreational, cultural and social opportunities and to support Community initiatives and linkages with other service agencies.
- Goal 4. Environment: to promote a quality environment and sustainable management of our resources by encouraging environmental improvement.
- Goal 5 Participation: to recognise Community aspirations for involvement in local government activities by establishing simple and effective channels for public information and participation.

2.2 Purpose of a Management Plan

Management Plans are required under the Reserves Act 1977 in order that the administrating body can outline its intentions for the use, enjoyment, maintenance, protection and preservation of its reserves. The aim of this legislation is to ensure that reserve management and development is based on sound principles and that, through involvement in the planning process, the needs of the public are clearly identified.

Reserves Management Plans are documents which establish a series of objectives and policies for the management and, where relevant, the development and use of individual reserves. These objectives and policies are designed to resolve any conflict over competing uses and expectations while looking to the long-term needs of both the reserve and the community. They therefore provide guidelines for future decision-making ensuring consistency and balance.

Reserve management plans guide the day to day and long term management of reserves, and may set a context for their future development. A plan's recreational aims and objectives are considered in the context of wider Council recreational strategy and policy. The documents providing this framework include *A Recreation Strategy for Dunedin (1993)* and its successor, the *Sport and Recreation Strategic Plan* (2002), which outline the priorities and guidelines for the provision of recreation services within Dunedin.

The Council has a statutory responsibility to manage reserves on behalf of the community under the Reserves Act 1977, and has been involved in the provision of this service since the 1860s. The Act prescribes a basic reserve management framework, with which this management plan must comply.

The primary purpose of strategic planning for Council's reserves is to ensure environmental and economically sustainable management of reserves and their values for the people of Dunedin and visitors to the City.

A management plan also provides the administering body with efficiency gains in management of the reserve by not requiring public notification or ministerial consent for some routine matters. The ability to forgo some public consultation/approvals recognises that the compatibility of an activity with the overall purpose of a reserve has already been addressed in the management plan

2.3 Management Planning Under The Reserves Act 1977

The Reserves Act 1977 is designed to protect public land, to designate its predominant values and to ensure the land is managed to promote and sustain those predominant values. To promote good management, the Act requires the development of Reserve Management Plans. These plans can vary greatly in their detail, but they must comply with the over-riding principles of the Act (outlined below). The management plan preparation process is also prescribed by the Act.

The Community and Recreation Services Department of the Council has the responsibility to prepare management plans for Dunedin's reserves. These management plans should:

Provide for and ensure the use, enjoyment, maintenance, protection and preservation ... and, ... the development, as appropriate, of the reserve for the purposes for which it is classified.

Reserves Act 1977 41(3)

The majority of reserves in this plan are recreation reserves or local purpose (esplanade) reserves.

The primary purpose of a recreation reserve, under the Act, is to:

Provide areas for the recreation and sporting activities and the physical welfare and enjoyment of the public and for the protection of the natural environment and beauty of the countryside, with emphasis on the retention of open spaces and on outdoor recreational activities, including recreational tracks in the countryside.

Reserves Act 1977 17(1)

Management planning is also a process for determining the management direction that the community and the Council would like to apply to reserves. This includes the identification of the ways in which management direction can be achieved. Management plans should outline Council's general intentions for use, enhancement, and maintenance of its reserves. The aim of the management plan is to ensure that proposals for the reserves meet the purpose of the reserve, and through the public's involvement, ensure their needs are facilitated while managing the resource in a sustainable manner.

2.4 Consultation Processes

The management planning process is summarised below.

The level of consultation specified in the Reserves Act was exceeded with the preparation of this draft plan to ensure the community had substantial opportunity to express its views. Potentially interested parties were contacted and invited to make submissions. Public meetings were held to discuss issues, concerns and ideas. Focus group techniques are used in the public meetings. Four public meetings were held during August 2001 to assist with the preparation of the draft management plan.

Process specified in Reserves Act 1977	Dunedin City Council consultation	
Publicly notify intention to prepare the Management Plan and invite interested persons/organisations to make submissions on the proposed plan within a minimum period of one month.	Council's intention to prepare the management plan was advertised on 30 June 2001 with a one month submission period. Two additional areas, Glenfalloch car park and jetty and the Green Reserve were advertised for inclusion on 29 September 2001.	
The Draft Management Plan is prepared giving consideration to comments received.	Forty seven written submissions were received which have been used to formulate the Draft Otago Harbour Reserves Management Plan.	
The Draft Management Plan is adopted and advertised for submissions for a period of a minimum of two months.	The Draft Management Plan was adopted by CDC on 4 March 2003, and advertised for public submissions for a two month period closing 16 May 2003. 49 submission received.	
Consideration of submissions, objections and holding a Reserves Act Hearing.	Public Hearings were held on 20 and 21 August 2003.	
Appropriate changes are made to the Draft Management Plan.	Amendments were made as a result of public submissions and hearings. Recommended changes approved by CDC on 7 October 2003.	
The final Management Plan is adopted by Council and signed and sealed.		
The final Management Plan is produced and imple- mented, and all those who made submissions are notified that the Plan has been prepared and is available if they require a copy.	October 2003.	
The final Management Plan is kept under continuous review.		

2.5 The Review Of Reserve Management Plans

Site-specific reserve management plans are subject to ongoing review and regular, comprehensive reconsideration at approximately ten-yearly intervals. Public comment will be sought on each management plan as it is reviewed. Where the Reserves Act 1977 enforces provisions specific to any particular reserve, those provisions are noted and where the nature of a reserve or its facilities requires the implementation of additional policies, these are set out in this management plan.

The separate document, *Reserve Management Plan-General Policies*, may be reviewed at the same time and within the same review process as the site-specific management plans or may be subject to a separate review. This means that while the Otago Harbour Reserves Management Plan will be reviewed every ten years, the *Reserve Management Plan–General Policies* is reviewed more frequently. This allows policies common to all reserves to be updated on a regular basis. This creates a more flexible and dynamic management planning approach, which means the way the Council manages its reserves is more relevant to the current issues and needs of the people and groups that use the reserves.

2.6 Consideration Of Other Management Documents

Reserve management planning does not occur in a vacuum. Broader aims, objectives and policies guide it. Some of this guidance originates from the aims and objectives of Council and statutory documents such as the District Plan, Annual Plan, Asset Management Plan, and the Long Term Financial Strategy. Other non-statutory documents such as the Recreation Strategy, Play Policy and Playground Priority Plan, Fees and Charges Policy, and the Track Policy and Strategy, also provide direction for the policies contained in management plans.

The policies of the Dunedin City Council *Reserves Management Plan–General Policies* Section are an integral part of this, and other management plans, and are intended to be read with reference to specific policies in each of these plans.

The Otago Harbour Reserves Management Plan takes precedence where both the *Reserve Management Plan–General Policies* and the Otago Harbour Reserves Management Plan address the same issue. Otherwise both documents are used to guide management of the reserves.

Policies such as the *Track Policy and Strategy 1998* are used as a guide when developing management plans and should generally be consistent with one another.

As management plans are statutory documents they legally have a higher priority than Council policies.

Other relevant documents are considered in more detail below.

Dunedin City Council Track Policy and Strategy

The Dunedin City Council *Track Policy and Strategy 1998* develops a citywide context for the management and development of tracks. As such, it seeks to secure a balanced approach to track development and management, and it considers the Council's tracks in light of those managed by the Department of Conservation and other groups. Any track development within the reserves must take account of the policies developed by the *Track Policy and Strategy 1998*.

A multi-use track is considered to include walking and running, and mountain biking. The document states that:

"Tracks are multi-use facilities unless otherwise identified by a decision by Council or legislated in statute against a particular use" (policy 15.2).

The policy also allows for closure of tracks for exclusive use during special events and takes a positive approach to resolving conflicts of use.

Reserve Management Plan-General Policies

The *Reserve Management Plan–General Policies* document covers all basic issues of the day-to-day administration of reserves in Dunedin. This management plan does not replicate those policies as they are under constant and separate review. If a policy within this document contradicts the General Policy document, the Otago Harbour Reserves Management Plan has precedent.

The following considerations have policies within the *Reserve Management Plan–General Policies* document:

Administration Policies Proposed District Plan Community consultation Tangata Whenua, Mana Whenua and Iwi Enforcement Council as an effected party Trees and tree management Fencing Naming of reserves Fire Control Heritage conservation

Use Policies Use of reserves Promotion of Reserves Exclusive use

Commercial use Encroachments Occupation agreements Network Utility Operators Liquor licences Signs Tracks Car parking Reserve lighting Sportsfield lighting Abandonment Chargeable facilities Use of hazardous substances Refuse and waste disposal Camping Circuses and side-show operators Plaques and commemorative trees Aircraft and helicopter landings Fireworks displays

Development and Change Policies Landscape Buildings and structures (including playgrounds) Play-space development Changes in Recreational facility use.

Transitional Dunedin City District Plan (Dunedin Section); Dunedin City Council Proposed District Plan 1999; Regional Plan: Coast 2001.

The provisions of the Transitional Dunedin City District Plan (Dunedin Section) must be considered until the new Dunedin City Council Proposed District Plan 1999 is operative.

These plans would need to be considered when evaluating some proposed activities or developments on a reserve.

3 Aims, Objectives, and Policies

3.1 Introduction/Explanation of terms

Management Aims

The aims of a management plan should be able to stand the test of time and should require little in the way of amendment even when this plan is reviewed. The aims are related to the classification and purpose of the reserves. They provide a framework within which any future proposals for development/enhancement, or any other form of action which may have an impact on the reserves, can be considered.

Management Objectives

The objectives of a management plan elaborate on the means necessary to achieve the established aims. They should be oriented towards action and provide the basis for developing specific policies on matters that reserve managers will probably need to address.

Management Policies

The policies become the means by which objectives are achieved. Over time, as certain specific objectives are attained or require change, relevant policies will also be amended. The policies in the management plan guide all future aspects of the reserves and provide the framework for continuity of management.

All general management policies for reserves are described in a separate document, *Reserves Management Plan–General Policies*. The *Reserve Management Plan–General Policies* apply to the management of all reserves in the Otago Harbour Reserves Management Plan, unless specifically over-ridden by policies in this document. The reader should refer to the *Reserve Management Plan–General Policies* document as if it was a physical part of this plan but note that the *Reserve Management Plan–General Policies* are frequently reviewed to ensure continual relevance.

The aims, objectives and policies are in *no* order of priority.

3.2 Administration

Aim

1. All reserves are managed in accordance with all relevant legislation, relevant Council policy, and statutory instruments.

Comments

The Otago Harbour Reserves Management Plan includes land of varying status. The land is either classified as recreation or local purpose (esplanade) reserve, or is fee simple land. Land status and classification is detailed in Appendix 6.1. Management, use and enhancement of the reserves are subject to the principles and specific provisions of the Reserves Act 1977 relating to the reserve's classification.

The Reserves Act 1977 requires reserves to have management plans. While a number of the areas in this plan are not reserves under this Act, the Council intends to manage them as if they were, so a consistent management approach is taken, and appropriate protection of values occurs.

Areas which are not reserve under the Reserves Act 1977 will be classified as appropriate to provide reserve status and protection under the Act.

The Kitchener Street Recreation Reserve is leased from the Chalmers Property Group and managed as reserve (Appendix 6.3). This area is well used for recreation, therefore it is appropriate for Council to purchase this land if the opportunity arises. This would provide security for the future use of this area. The land along the length of Kitchener Street adjacent to the harbour could be purchased and developed as reserve to provide additional recreation areas and opportunities.

Certain developments and management activities on reserves (e.g. erection of buildings, discharges, etc.) are subject to the provisions of the Resource Management Act 1991, in particular those in the Dunedin City Council Proposed and Transitional District Plans, and the Regional Plan: Coast (Otago Regional Council, 2001). Consents required under the Resource Management Act 1991 and other Acts, are in addition to, not a substitute for, the approval of the Council as reserve administrator and/or land owner.

The Council will liaise with Otago Regional Council over cross-boundary issues. The land boundary between the areas managed by these local authorities is normally the line of Mean High Water Springs. Liaising with the Regional Council allows for the identification and resolution of issues which affect both organisations and require a co-ordinated approach. For example, matters relating to sea walls, illegal coastal structures, and structures or buildings extending from a reserve over the sea bed.

Objectives

- 1. To give effect to this plan by ensuring management is in accordance with relevant legislation and policies.
- 2. To liaise with appropriate organisations over cross-boundary and reserve management issues.
- 3. To review this plan on a regular basis.
- 4. To classify land as reserve where required and appropriate.
- 5. Where required, to purchase suitable land adjoining the harbour to enhance the recreation opportunities available to the public.

Policy

- 1. Activities on the reserves shall be consistent with the requirements, objectives, policies or rules set out in any statute, by-law, relevant management plan, or District or Regional plan.
- 2. The Council will liaise with Otago Regional Council or other appropriate organisations over cross boundary issues.
- 3. The plan will be reviewed on a ten yearly basis to ensure objectives and policies are updated in the public interest, and to take account of changing aspirations and requirements.
- 4. Where necessary or appropriate, land will be classified under the Reserves Act 1977.
- 5. Where suitable land adjoining the harbour becomes available, Council may consider the appropriateness of purchasing such land for recreation purposes.

3.3 Protection of Reserve Values Aims

1. The natural, cultural and historic resources on the reserves are protected, maintained and enhanced.

Comments

Historical/Cultural Values

It is important to recognise and retain heritage features, which may include historic structures and archaeological sites. This will be reflected in the management of reserves.

The reserves contain a number of historic structures and features associated with Dunedin's early history. Those known are described below.

Historic structures:

Sea walls around the harbour are registered as Category I under the Historic Places Act 1993. This status applies to the entire length of the walls around the harbour.

Known archaeological sites in the general location of reserves include:

Broad Bay-Midden and greenstone artefacts

Deborah Bay-Midden at Rocky Point

Roseneath—Oven site

Specific histories associated with the reserves include:

The Green Reserve—Torpedo Mole (late 19th century).

Te Rauone Beach—early Maori settlement and was also part of a very early farm of GM Thompson.

Wellers Rock-this area was associated with whalers.

Vegetation/Ecological Values

Most of the vegetation on the reserves is for the purpose of landscaping, site enhancement, dune stabilisation, and for general benefits to the land. It is important that such plantings are located to provide shelter, screening, aesthetics, or stability, and enhance the reserve.

Weed and pest management may be necessary to enhance reserve values. Port Chalmers Recreation Reserve is the only reserve managed under this plan with a sizeable area of vegetation, much of which is exotic species. Weed and pest control will be carried out on all reserves as appropriate, but is particularly important for the Port Chalmers Recreation Reserve.

The harbour is a large, productive marine area with significant wildlife values. The historic displacement of habitats on the margins of the harbour is a significant loss to wildlife species that utilise marine resources from a land base. Hence, harbour reserves are often used as roosting areas by waders and other seabirds, and as haul-out areas by seal species.

The primary purpose of these reserves is to facilitate public recreational access to the harbour, and at peak times there may be considerable pedestrian and vehicular traffic. There is potential for conflict to occur between reserve users and wildlife species. Interpretation signage may assist in educating reserve users and minimising adverse effects on the wildlife values of the reserves. Interpretation signage is an important element of visitor management and education, in addition to providing information on conservation and other reserve values, and biosecurity risks.

Objectives

1. To protect, maintain, and enhance the natural, landscape, amenity, ecological, cultural, and historic values of all reserves for the enjoyment of future generations.

Policies

- 1. The 'Tangata Whenua, Mana Whenua and Iwi', 'Trees and tree management', 'Signage' and 'Landscape' sections in the *Reserves Management Plan–General Policies*, apply in conjunction with this Management Plan.
- 2. Where sites of Wahi Tapu (burial places, archaeological sites) and umu-ti ovens existed, action will be taken to prevent damage to these sites during development on reserves.
- 3. All practical steps will be taken to prevent activities in adjoining areas from compromising the values of the reserves.
- 4. Any development that includes planting or earthworks shall be done in a way that maintains and/or enhances the values of the reserve.
- 5. The Council will impose conditions to maintain/ protect reserve values with any permission given in its capacity as landowner and manager or in submissions on applications for Resource Consents on adjoining properties or the harbour.
- 6. Weed and pest control will be carried out as appropriate to protect or enhance reserve values.
- 7. Landscaping or plantings of appropriate species to enhance reserves are permitted subject to the Council permission and conditions. Wherever possible, preference will be given to using local coastal indigenous plant species.
- 8. Adequate open space will be retained during development of reserves to allow passive recreation and provide green space.
- 9. Future development of buildings on reserves must be set back from the water's edge to allow room for a path/cycleway of adequate width to facilitate onshore coaching and passive recreation without conflicts occurring.

10. Signage to promote or protect ecological values, and provide information on coastal processes is permitted. The section on 'Signage' in the *Reserve Management Plan–General Policies* should be read in conjunction with this plan.

3.4 Recreation

Aims

1. Public enjoyment of the reserves is encouraged for activities compatible with the principal or primary purpose and natural character of the reserve.

Comments

Dunedin has a considerable and accessible resource of recreation reserves around the harbour. The reserves in this plan provide opportunities for both formal and informal aquatic recreation, and passive recreation such as sightseeing, family recreation and play.

Opportunities exist for development of tracks or paths along the water's edge, contributing to an overall network of tracks/paths around the harbour. Tracks/ paths can be used for connecting access between areas, passive recreation or for on-shore coaching of aquatic recreation activities, such as rowing.

Objectives

- 1. To provide for formal and informal recreational activities for the benefit and enjoyment of the public, taking into account the ecological sensitivity and natural values of the reserves, and their ability to sustain a particular activity or an increase in use.
- 2. To allow development of new recreational opportunities where they can be sustainably managed, and which are compatible with the principal and primary purpose of the reserve.

Policies

- 1. Aquatic facilities will be designed and developed to best meet the recreational needs of the community.
- 2. Any new track or path development on reserves, which relies on access across private land at any point, may proceed only once formal agreement with the private landowner has been reached.
- 3. Where possible, any new track or path proposed must be wide enough to allow for multiple uses, such as walking, cycling and coaching activities, with minimal conflict.
- 4. Any track proposed for reserves should be considered under the *Track Policy and Strategy*.
- 5. Development and enhancement of reserves will consider current and potential recreation use.

3.5 Aquatic Recreation Facilities (Ramps, Jetties, Wharfs etc.)

Aims

1. Recreational facilities will be provided where appropriate to facilitate public and club access to the harbour.

Comment

It is important for the public to have access to the harbour for recreation activities. The combination of Council and club owned aquatic facilities provides good access to the harbour (Appendix 6.2). Additional facilities to complement others available, or in places where facilities are limited, may be required to facilitate public use, and minimise conflicting use of existing facilities.

Clubs like Macandrew Bay Boating Club, Broad Bay Boating Club, North End Rowing Club, and Otago Yacht Club, lease Council land for their club activities, and have jetties or ramps available for club, and often public, use. Other clubs such as the St Leonards and Ravensbourne Boating Clubs are not associated with Council land, and therefore are not addressed in this plan.

Where appropriate, Council can give conditional support and offer advice and staff assistance to clubs or organisations wanting to construct new facilities on, or attached to, reserves. The need for facilities, and the appropriateness of facilities for the reserve and adjoining sea bed (eg. appropriate for depth of water and size of boats or activities under existing conditions) will be considered. Landscape values, recreation use, and environmental impact will also be considered.

The Annual Plan process is available for clubs and organisations wishing to seek enhancement or development of facilities and reserves. Through this process, organisations can seek the Council's financial commitment for proposals and projects or funding to assist with the upgrade of aquatic facilities that clubs have available for public use.

Land owner (Dunedin City Council) consent is required where facilities or buildings are on Council reserves. In addition, clubs and organisations wishing to construct facilities or buildings on or adjoining reserves must acquire appropriate resource and building consents.

Offers from clubs wishing to transfer ownership of their facilities to Council will be considered on a case by case basis. If a club on a Council reserve disbands, and there is a proven need for the aquatic facilities and wide community benefit, Council will consider taking over ownership. However, even if Council decides to take them over, their long-term future will not be guaranteed. If facilities are not deemed useful and an appropriate owner cannot be found to take over the facilities or buildings, the owners will be responsible for their removal.

Objectives

- 1. To ensure adequate aquatic recreation facilities are available around the harbour.
- 2. To ensure the lessee or owner of an unwanted facility or building is responsible for its disposal.
- 3. To ensure Council or club facilities used by the community are maintained to appropriate standards.

Policies

- 1. Clubs or organisations seeking enhancement or development of facilities or reserves will be encouraged to apply for support, grants, or funding through a variety of sources including the Annual Plan process.
- 2. Where appropriate, Council will provide nonfinancial support to clubs or organisations wanting to construct new facilities in association with reserves, where the facilities are appropriate to the purpose and nature of the reserve (and adjacent sea bed), and where there is a need for such facilities.
- 3. Clubs and organisations proposing to construct facilities on, or extending from, reserves must gain appropriate resource and building consents in addition to landowner consent.
- 4. Any permission granted under the Reserves Act 1977 is in addition to any required under the Resource Management Act 1991. All new facilities and services must comply with the requirements of any District or Regional Plan, Building Act 1991 or any relevant statute or by-law.
- 5. Council will consider offers to take over aquatic recreation facilities (e.g. ramps, jetties, wharves) associated with Council reserves on a case-by-case basis. This decision will consider the condition of the facility, the need for facilities at that location and the use by the public.
- 6. The section on 'Abandonment' in the *Reserves Management Plan–General Policies* applies in conjunction with this management plan.
- 7. Disbanded clubs with facilities on reserves will be responsible for the removal of those facilities (including buildings) if they are not transferred to an appropriate owner or Council.
- 8. The taking over of facilities by Council does not guarantee the long-term future of those facilities.

3.6 Animal Control

Aim

1. Animals on reserves are managed to benefit reserve values.

Comments

Dogs are a direct threat to wildlife values of coastal areas. The presence of dogs on reserves may also cause health and safety issues, and negatively impact on the enjoyment of the reserves by other users. Council by-laws determine where dogs are permitted or prohibited and the rules associated with dogs in public places. If changes to by-laws are considered appropriate to assist with management of a reserve or protection of reserve values, action will be taken to explore such options.

Use of harbour reserves by seal species is a predictable component of harbour ecology. Seals may occasionally haul out on reserves, or carcasses may wash ashore. Management of reserves and education of reserve users will aim to reduce any conflicts with these species. The Department of Conservation is responsible for dealing with all indigenous wildlife. Where problems persist, or when dead or injured wildlife are found on the reserves, the Department of Conservation will be contacted to manage the issue in accordance with their protocols.

A flock of geese living in the harbour may occasionally create a nuisance on a reserve if they are in large numbers. Where significant conflicts arise between flocks of geese and reserve users, the birds will be removed.

Noxious animal control will be carried out on reserves where necessary to protect reserve values.

Objectives

- 1. Animal control is carried out as appropriate to protect reserve values.
- 2. Where appropriate the Department of Conservation will be contacted regarding concerns for indigenous wildlife or carcasses on reserves.
- 3. By-law changes will be sought if necessary for reserve management or protection of ecological reserve values, including sea bird and marine mammal values.

Policies

- 1. The 'Dog Control By-law 2002' section of the *Reserve Management Plan–General Policies* (Section 5 of the Dunedin City Consolidated By-law 1991) applies in conjunction with this Management Plan.
- 2. Dogs are permitted on the reserves (except where otherwise indicated) provided they are under

control and all dog droppings are removed by the person having charge of the dog.

- 3. Dogs are prohibited from Macandrew Bay and Broad Bay Recreation Reserves in accordance with the City of Dunedin By-laws.
- 4. The Department of Conservation will be advised and consulted regarding concerns about wildlife, such as seals, on reserves.
- 5. Flocks of geese or other species will be removed from reserves if they compromise the enjoyment of reserve users.
- 6. Where necessary and appropriate, changes to Council By-laws will be sought to protect the ecological values of the reserves, including sea bird and marine mammal values.

3.7 Public Access and Reserve Closure Aim

1. Public access to reserves is permitted and encouraged unless closure is necessary from time to time.

Comments

At various times the Council will need to close some reserves for issues of safety, maintenance, or where activities have damaged the reserve and remedial action is required.

Sections 53 and 54 of the Reserves Act 1977 allow for closure and conditions.

Clubs may have enclosed areas within their lease area that are generally not open to the public for safety or security reasons.

Objectives

1. To ensure the public has freedom of entry, access and use of the reserves subject to any necessary conditions, restrictions, or limitations of use.

Policies

- 1. Reserves will be open for public use, except where restrictions and limitations are necessary for the reserve's protection, management, or public safety.
- 2. The sections on 'Occupational Agreements' of the *Reserve Management Plan–General Policies*, and the Council By-laws apply in conjunction with this Management Plan.
- 3. Enclosed leased areas will not generally be available for the public to access for reasons of safety and security.

3.8 Car Parking

Aim

1. Parking is provided in association with reserves and aquatic facilities to allow and encourage their use.

Comments

The provision of parking areas associated with reserves or aquatic facilities is essential for public safety and convenience. Where aquatic facilities are associated with reserves, sufficient parking is generally available on the reserve. Changing circumstances, such as an increase in reserve use, may require further consideration of car parking requirements.

Roadside parking is often not adequate to cope with the number of people using the facilities. Insufficient parking can inhibit the use of facilities. Consideration needs to be given to options for the provision of adequate parking. This is particularly relevant to Carey's Bay, Deborah Bay, and Weller's Rock aquatic facilities, as additional parking options may need to be explored.

Port Otago Limited allows use of, or leases to Council, car parking adjacent to the Back Beach and Carey's Bay aquatic facilities (Appendix 6.3). This assists the Council with providing recreation opportunities around the harbour.

Clubs wishing to develop new buildings or expand facilities on reserves will have to provide parking adequate to service anticipated user requirements. This should be addressed as part of landowner permission sought and resource consent applications.

Objective

- 1. To provide appropriate parking in conjunction with reserves and aquatic facilities.
- 2. To identify reserves and recreation areas requiring additional public parking.

Policies

- 1. The 'Car Parking' section of the *Reserves Management Plan–General Policies* applies in conjunction with this plan.
- 2. If proven to be necessary, consideration will be given to options for providing additional parking at identified reserves or aquatic facilities.
- 3. Where additional land is required to provide parking the Council will take a pro-active approach to explore reasonable options.
- 4. Where necessary, Council will secure occupation arrangements/agreements to provide car parking on private land, such as Port Otago Limited land.
- 5. Organisations will provide adequate parking for users with any new development or extension to facilities.

6. Sealing of public car parks will be programmed in the Dunedin City Council *Parks Asset Management Plan* as required.

3.9 Agreements/Use of Aquatic Facilities Aim

1. Occupation of reserves and commercial use of aquatic facilities is formalised through occupation or use agreements.

Comments

Organisations or individuals with buildings (or part of buildings) or facilities on Council land are required to have occupation agreements, generally in the form of leases.

The Council encourages sharing of facilities to reduce the need for further development of buildings on reserves and for cost sharing between clubs. Where necessary existing occupation agreements will be reviewed to reflect such agreements between clubs.

Clubs or individuals are required to keep buildings on Council land to a safe standard. When buildings become dilapidated, it is essential that they be removed by the owner for safety and aesthetic reasons. This is a requirement of the *Reserves Management Plan–General Policies* and is generally included as a condition of any occupational agreement.

Commercial operators make use of Council's public aquatic facilities for the transferring of customers or launching vessels. It is appropriate for commercial operators to contribute a percentage of the profits gained from the use of Council facilities or reserves for the maintenance of those facilities. 'Use agreements' will indicate conditions of use and the fees associated with use of public facilities and reserves for private gain. Commercial use of reserves or access over reserves increases requirements for car parking, toilet facilities, and rubbish collection, and may adversely impact on other users.

Occupational agreements that exist or are under negotiation are outlined in Appendix 6.4

Objectives

- 1. To confirm the occupation of reserves for approved uses and facilities by the granting of occupation agreements.
- 2. To confirm commercial use of aquatic recreation facilities or reserves through appropriate agreements with such users, for example tour operators.
- 3. To encourage sharing of facilities, and to develop appropriate occupation agreements to reflect this.

Policies

- 1. The sections on 'Occupation Agreements', 'Encroachments', and 'Abandonment', of the *Reserves Management Plan–General Policies* apply in conjunction with this Management Plan.
- 2. Council will negotiate leases (where lease agreements don't exist) with organisations with buildings or part of their buildings on a Council reserve.
- 3. Leases will be reviewed to reflect agreements between clubs sharing facilities.
- 4. Dilapidated buildings (excluding those with Historic Places status) on Council reserves will be removed by the owner (or at the owner's expense).
- 5. Commercial use of aquatic facilities or reserves will be confirmed with formal agreements, including conditions of use and the fees for use.
- 6. The Dunedin City Council's *Fees and Charges Policy* will be read in conjunction with this plan.
- 7. Where occupational agreements or easements are not specified in this plan, public notification is required under the Reserves Act 1977.
- 8. Formal agreements may be lodged with the District Land Registrar.

3.10 Public Toilets and Showers

Aims

1. Public toilet/showers are provided for the benefit of reserve/aquatic facility users at identified key sites.

Comments

Seven of the harbour reserves in this plan have toilets available for public use. Two of these have shower facilities. Provision of showers in conjunction with toilet facilities may be of benefit to recreational users. Other reserves and sites with aquatic facilities around the harbour may require the provision of toilets/ showers, if there is a high demand and proven need for these facilities.

Objective

1. Provision of public toilets and showers in conjunction with reserves or aquatic facilities will be considered in response to a proven demand.

Policies

- 1. Consideration will be given to the construction of toilet/shower facilities where there is a proven need, and where adverse environmental affects can be avoided.
- 2. Where toilet/shower facilities are proven necessary in conjunction with aquatic facilities, appropriate landowner permission and agreements will be sought for toilet installation.

3. Toilet/shower facilities will be designed to be pleasant to use, easy to maintain, and in a style and location that does not detract from the values of the reserve.

3.11 Coastal Conservation

Aim

1. The coastal environment is protected for the physical, cultural and recreational benefits for the community.

Comment

Natural coastal processes have the potential to result in erosion or accretion of beach areas, either as an ongoing process or after major storm events. Erosion to land, including reserves that are bordered by sea walls, also occurs. Action may be required at times to minimise the affects of coastal erosion and ensure coastal stabilisation. The historic displacement of habitats on the margins of the harbour is also a significant loss to the harbour ecology in terms of natural processes, including sediment movement, with dune systems and wetlands being particularly vulnerable.

It is important to remember that erosion and accretion are natural coastal processes and will not always be detrimental to the reserve, therefore, intervention is not always required. Other factors, not within the control of Council, may also be impacting on these processes and on the reserves. Illegally constructed structures within the marine environment can significantly impact on current flows, thereby contributing to erosion.

Break down in the sea wall structure, and irregular or inappropriate maintenance has caused varying levels of degradation of the sea wall and erosion of some reserves. Regular planned maintenance is required to prevent the wall degrading and to minimise erosion.

Where Council has developed artificial beaches, as at Macandrew Bay and Broad Bay Recreation Reserves, sand replenishment will be carried out as required to maintain beach areas for recreation.

Objective

- 1. To protect and enhance sand dunes, sand systems, and the values of the coastal environment while allowing natural processes to occur.
- 2. To provide a balance between recreational access and use, and environmental coastal protection.
- 3. To ensure recreation values and physical access is maintained, but not at the expense of coastal processes.
- 4. To maintain the sand level of artificial beaches to ensure their suitability for recreation use.

Policies

- 1. Council will follow recommendations from Council's Coastal Consultant Report (Todd 2002) and revisions, regarding coastal conservation, protection, enhancement, and monitoring.
- 2. Appropriate vegetation will be planted or retained on reserves where it is beneficial to the sand stabilisation of the reserve. Whenever possible, preference will be given to using local coastal indigenous plant species.
- 3. Council will include the sea walls bordering harbour reserves into the *Parks Asset Management Plan*.
- 4. Through liaison with the Otago Regional Council, Council will seek the removal of illegal structures within the coastal marine environment that contribute to the instability or erosion of reserves.
- 5. Sand will be replenished on artificial and modified beaches as required for the appropriate management of the site.

3.12 Storage and Maintenance of Boats on Reserves

Aims

- 1. Reserves are not used for the storage of marine vessels/boats ("vessels") or other equipment.
- 2. Long-term maintenance of vessels is not carried out on reserves.

Comments

Boat owners may occasionally leave vessels on trailers parked in a reserve car park. In many cases this is not likely to cause major problems. However, these stored vessels may reduce parking available for users, or restrict access to facilities. There are also environmental and public safety issues associated with the long-term storage and maintenance of vessels on reserves. For example, there may be adverse environmental effects from the use of chemical products, such as anti-fouling paints, and the discharge of these into land and water. There are safety concerns with the stability of trailers and other hard-stand support structures for vessels undergoing outside hull maintenance on a reserve. The use of power tools in the open also creates a safety hazard.

The term 'storage' refers to any such vessel, excluding dinghies, left on a reserve for longer than 24 hours. The owner will be responsible for meeting all costs associated with the removal of the vessel from the reserve.

Storage of club vessels within existing buildings is appropriate.

Objectives

1. Private vessel storage is not permitted on reserves.

Policies

- 1. The Council will respond to complaints about private vessels stored on reserves (excluding those permitted by lease or other permission) by taking action to have them removed.
- 2. Costs associated with the removal and storage of offending vessels will be at the owner's expense.
- 3. Storage of vessels within existing buildings is permitted.
- 4. Long-term maintenance of vessels will not be permitted on reserves.

3.13 Dredging and Reclamation

Aims

1. Proposals for dredging and reclamation are evaluated with due consideration of the environmental impacts, values of the site, legal land ownership processes, and with appropriate community consultation.

Comments

Silting is a natural process that occurs when soil and dust are carried down hillsides and into the harbour.

Resource consent for any dredging or reclamation of the sea bed is required from the Otago Regional Council.

Any reclamation or dredging proposal that may impact on a Council reserve or recreational users of the harbour needs to be given appropriate consideration of environmental impacts, sea wall construction and maintenance responsibilities, community needs, impact on recreational activities, landscaping, and legal land ownership processes.

Dredging and reclamation of Andersons Bay Inlet have been mooted as options to overcome a number of the management issues associated with this site. With due consideration to environmental and community aspects, future proposals for dredging will be considered. Reclamation of the inlet that will significantly impact on the recreational values of the site is not appropriate. Dredged material may be high in heavy metals or toxins and it is not appropriate for dumping on reserves or as reclamations for reserves.

Objectives

- 1. Dredged material will not be dumped on the reserves or used in reclaimed areas to be reserves.
- 2. All aspects and impacts will be considered when evaluating dredging or reclamation proposals.

Policies

- 1. Dredging and reclamation proposals will be evaluated with consideration to recreational, environmental and community impacts.
- 2. Appropriate consultation with local iwi and the community will be carried out when considering any proposal for dredging or reclamation.
- 3. Dumping of dredged material on the reserves is not permitted, unless specifically determined appropriate by Council.
- 4. Reclamation of Andersons Bay inlet that will significantly impact on aquatic recreational values is not permitted.

3.14 Specific Management for Te Rauone Recreation and Esplanade Reserves

Aim

1. Te Rauone Recreation and Esplanade Reserves are managed to allow natural processes and enjoyment of amenity open space for passive recreation.

Comment

There are a number of encroachments by neighbouring property owners onto the reserve. Encroachment generally includes removal of indigenous dune binding species and replacement with exotic species, or paths and rocks, placement of structures in the reserve, informal accessways, and dumping of garden waste. Encroachments damage the dune system, compromising the natural character of the dune and decreasing the dune stability. No leases or licences will be granted for such private residential use of reserves.

To ensure the safety of users, public access through the dunes to the beach may need to be closed temporarily or permanently, or be realigned, to take account of erosion and accretion.

Objective

- 1. The Council will manage the Reserve in accordance with the programme recommended by Councils' Coastal Consultant (Todd, 2002) or subsequent reviews.
- 2. To allow natural coastal processes to occur, with intervention only where necessary and appropriate.
- 3. To remove encroachments on the reserve.

Policies

- 1. Policies in the 'Coastal conservation' section of this document will apply.
- 2. The 'Encroachments' section of the *Reserves Management Plan–General Policies* applies in conjunction with this section.
- 3. Changes to the beach access and other reserve

management will reflect Councils' Coastal Consultants' recommendations (Todd 2002).

- 4. Beach access may be closed periodically or permanently, if necessary, for safety or management reasons.
- 5. Property owners will be advised of requirements to remove existing encroachments, and to rebuild and revegetate dunes.

3.15 Specific Management for Port Chalmers Recreation Reserve

Aims

1. The Reserve is managed in accordance with relevant legislation until the legislation is revoked.

Comments

The Port Chalmers Recreation Reserve is subject to Section 45 of the *Reserve and Other Lands Sale*, *Disposal and Enabling and Public Bodies Empowering Act 1901*. This encumbrance is registered on the Certificate of Title and it prevents the leasing or selling of the Reserve.

Research has not provided any details on why a number of leases and licences were granted on the Reserve in apparent contradiction to the restriction. Licences, primarily for boat sheds along Peninsula Beach Road, were originally issued by the Roading Department and have since been transferred to the Community and Recreation Services Department for management. A number of other garden encroachments exist which have been granted licences in the past. Part of the bowling green and swimming pool located between Wickliffe Terrace and Albertson Avenue are also on the Reserve. The Port Chalmers Bowling Club has a lease for their clubrooms. These leases/licences stem from when the Port Chalmers Borough Council administered the Reserve.

Legal opinion confirms that the land cannot be leased or sold unless there is a repeal of Section 45 of the 1901 Act. Therefore, any purported lease granted is ultra vires, that is, outside the power of the law, and the lease granted to the Port Chalmers Bowling Club is illegal. Repeal of the 1901 Act is the only means by which this lease can be made legal. It is also the only means by which any new leases can be granted in the future for any new facilities, or for new uses of any existing facilities should community demands change, or community organisations disband. The licences issued for private boatsheds are illegal and will remain so when the 1901 Act is repealed.

No information has been located indicating the reasoning behind the encumbrance, and it has not been enforced in the past. It would also appear that when the 1901 Act was enacted, other restrictions such as

those now provided by the Reserves Act 1977 may not have been in place. Currently, there are sufficient restrictions contained in the Reserves Act 1977 that the restriction on leasing or sale in the 1901 Act is in practice unnecessary or redundant. Action will therefore be taken to have the encumbrance removed. This will require an Act of Parliament, a process that will take at least two years. Council will initiate action with the aim of having the encumbrance removed from the reserve.

The Port Chalmers Recreation Reserve was classified in 1980 as a recreation reserve under the Reserves Act 1977. The status, protection and management of the Port Chalmers Recreation Reserve for public recreational use under this Act will continue after Section 45 of the Reserves and Other Lands Sale Disposal and Enabling and Public Bodies Empowering Act 1901 is revoked. Leases are normally permitted on recreation reserves under the provisions of Section 54 of the Reserves Act 1977, generally only to voluntary organisations, and for recreational activities/facilities for public enjoyment. Leases for trade or business must also be for reserves users benefit. These provisions would apply to any leases issued once Section 45 of the 1901 Act is repealed. Under Section 53 of the Reserves Act, Council has the power to conduct activities such as providing facilities and amenities, for example, a swimming pool, itself.

The Reserves Act 1977 does allow for the sale of reserve lands through a clearly defined process. Reserves can only be sold or otherwise disposed of after the reservation has been revoked. This process involves a public notification phase that calls for objections to the proposal and requires objectors to be heard by Council. If the Council resolution supports the revocation, approval must then be sought from the Minister of Conservation. If the Minister approves the revocation, and the reserve land was originally derived from the Crown, the land will revert to the Crown for sale or other disposal under the Land Act 1948. The title for the land that comprises the Port Chalmers Recreation Reserve was originally issued by Warrant from the Crown. Therefore, if revocation of the reserve status was approved by both Council and the Minister of Conservation, the land would revert to the Crown for disposal by the Crown. The land is also subject to the Ngai Tahu Claims Settlement Act 1998 which provides for certain land disposals to be offered for purchase or lease to Te Runanga o Ngai Tahu in certain circumstances. This means that Te Runanga o Ngai Tahu may have first right of refusal should the land be offered for sale by the Crown.

With consideration of the policies in this Management Plan, existing leases will continue to be renewed. Further investigations into options to resolve the issue of the boatshed licences will continue in the interim.

Objectives

- 1. New leases will not be granted for the Reserve.
- 2. No areas of the Reserve will be sold.
- 3. Section 45 of the Reserve and Other Lands Sale, Disposal and Enabling and Public Bodies Empowering Act 1901 will be revoked.

Policies

- 1. In accordance with the Act, no new leases will be granted for the Reserve.
- 2. In accordance with the Act, no area of Reserve will be sold.
- 3. Existing leases will be renewed where appropriate.
- 4. The aims, objectives and policies in this section will no longer apply once the encumbrance has been removed from the Reserve.
- 5. Action will be taken to have Section 45 of the Reserves and Other Lands Sale, Disposal and Enabling and Public Bodies Empowering Act 1901 revoked.

4 General Information

This section contains general information about the harbour and issues associated with it. A number of the issues discussed, such as dredging and reclamations, are issues over which the Council has no control or jurisdiction. These issues do not directly relate to the management of the reserves. Such information is provided only to give the wider picture of harbour issues and the inter-related nature of such issues.

4.1 Otago Harbour

The Otago Harbour is a significant natural feature that forms a key focal point for residents and visitors to Dunedin. The growth of the leisure industry and heightened community awareness of the environment and the pleasure to be derived from it has contributed to the increasing importance of the harbour as a recreational resource (Maddren, 1991).

The harbour is important for navigation, recreation, and wildlife. A large proportion of Dunedin residents live around the harbour, overlook it, or include it in their leisure activities (ORC & DCC, 1991b).

4.2 Description

Otago Harbour is the only large (46 km2), non-estuarine inlet on the southeast coast of the South Island. It is about 22 km long. Its mean width is approximately two km, set between volcanic hills. The harbour mouth is only 400 m wide. The harbour's average depth is only 4.5 m at Mean High Water Spring and approximately 28% of its total area are sandflats that

are exposed at low tide. Thus in terms of its size and biogeography it is unique as an example of a sheltered, shallow-water marine inlet in southern cool temperate waters (ORC & DCC, 1991b).

In general terms, the harbour can be divided into two parts, the Upper and the Lower Harbour. The Portobello Peninsula, Quarantine Island and Goat Island represent the dividing line between these two. The Upper Harbour can be further broken down into the Upper Harbour and the Harbour Basin, the latter being that area from around the Ravensbourne wharf to the city (ORC & DCC, 1991d).

4.3 Otago Harbour History

The Otago Harbour and adjacent hills are the remains of a mass of mainly volcanic rocks extruded during the mid-Miocene period. Faulting and warping caused the harbour to be lowered in relation to the surrounding hills. The rise in sea level following the last period of glaciation flooded this valley, creating a harbour bounded by steep slopes.

The land surrounding the harbour has a long history of human occupation, with Maori making use of the harbour since the earliest of times as a food resource, as a means of travel, and as a natural resource to be respected (ORC & DCC, 1992). The Otakou runanga place special importance on the spiritual values of the harbour, and highlight the importance of place names to Maori people. Historic sites are also important to the Otakou runanga (ORC & DCC, 1991a).

The European settlers also realised the importance of the harbour, establishing the city of Dunedin around its margins. The harbour provided a link with the rest of New Zealand, and the outside world, with shipping being one of the main modes of transport. Large areas of land were reclaimed to provide for the needs of the increasing numbers of settlers as Dunedin literally grew up around the harbour edges. Since those early days, the harbour has been an integral part of the City and remains a place of special importance to Dunedin and the region (ORC & DCC, 1992).

4.4 Landscape

Landscape quality is important both to the local economy (tourism) and to the quality of life. The harbour is important to the Dunedin tourism industry, and part of its overall scenic attraction. The main feature of the landscape is the long narrow harbour surrounded by an amphitheatre of hills. A narrow flat separates the harbour from the open ocean to the south west. This landscape has been formed by the drowning of two valleys running out from a central ridge now visible as the islands and peninsulas of the Portobello, Port Chalmers area (ORC & DCC, 1991a). Forests once covered almost all this landscape and remnants of these are still visible. Human activity, however, has changed the natural pattern considerably, through clearing the forests, laying down pasture, building towns and reclaiming land. A legacy of over clearing and poor land management in some areas has resulted in slips and marginal land reverting to gorse and broom – factors which degrade landscape quality (ORC & DCC, 1991a).

4.5 Use Of The Harbour

Access

Visually, the harbour is accessible from numerous vantage points all over Dunedin City. The harbour is a valuable visual asset. The harbour edge is well serviced by a major road around most of its periphery and whilst this brings the harbour closer to the people, in practical terms, access to the water itself is extremely limited.

Much of the western side of the harbour, including the stretch from Portsmouth Drive, is in private ownership. The Port Otago Ltd and Tranz Rail Ltd own a significant part of the shoreline, severely restricting access to the water's edge and for the development of recreational facilities.

Provision of reserves and recreational facilities around the harbour facilitate access and provide wide recreational opportunities.

Recreational Use

In the Lower Harbour, the activities tend to be related to informal active recreational pursuits, such as salmon fishing, yachting, rowing and windsurfing. In the Upper Harbour, the activities include both recreational salmon fishing and larger yachts (ORC & DCC, 1991d).

Rowing and yachting organisations generally have clubhouses located around the harbour. Less formal activities such as windsurfing require access from a number of points, and frequently use Vauxhall, Boat Harbour, and Kitchener Street for launching.

The nature of boating generally has changed over time. At one time boats would tend to be stored in club houses and boat shed;, now an increasing number of boating enthusiast may store boats at home and trail them to the points of interest. This has given rise to a very mobile boating public, whose needs extend to the provision of adequate space for the rigging and preparation of their craft, and the manoeuvring and day parking of vehicles and trailers (Boffa Miskell, 1996).

There is only one powerboat club on the harbour. The club, located at Kitchener Street, has exclusive use of the former hovercraft ramp that is the closest suitable

launch ramp to Dunedin. Some water skiing takes place on the Harbour Basin. Many informal users are fishers (ORC & DCC, 1991d).

Canoe, kayak, and outrigger clubs may have storage facilities adjacent to the harbour or may transport equipment required to various sites.

While the main recreational potential of the Otago Harbour is in water-based sports such as boating, its fringe provides opportunities for other, mainly casual, forms of recreation. Fishing, swimming, walking, driving, picnicking, bird-watching and holidaying come into this category, although none of the activities is exclusively related to the harbour. It is possible to follow most of these activities elsewhere, but the attraction of the waterfront gives the harbour area a special appeal in this respect.

Fishing can be either a land or water-based activity. Land-based fishing is undertaken almost anywhere on the harbour edge, but is most popular around the wharf areas of Dunedin and Port Chalmers (although now restricted), and along the promontories on the Lower Harbour. Many land-based fishers are children. Much of the water-based fishing takes place in the Lower Harbour with the entrance to the harbour being most popular, as this is where most salmon tend to congregate. Many fishers only use the harbour as a safe launch site (usually at Carey's Bay or Back Beach) and conduct their fishing beyond the Heads (ORC & DCC, 1991d).

Facilities

The provision of more, or better, facilities is a topic that consistently arises during consultation about the harbour. The Council owns and maintains many of the facilities around the harbour. These facilities are available for use by clubs and the general public. Clubs also provide some facilities such as ramps, jetties or pontoons around the harbour and may charge a small fee for non-members to use them. In other locations, club facilities may be closed to the general public. Reserves will often have a combination of public and private facilities.

Provision Of On Shore Facilities

Along with the increase in the use of the harbour for recreational purposes, there is the need for more public facilities such as showers and toilets. While many clubhouses provide these facilities to their members, the general public is denied access to them. Council provides toilets at a number of popular locations and shower facilities are occasionally associated with these. Public consultation has identified the wish of groups and the general public for toilet and shower facilities at high use sites around the harbour Another facility considered important is the provision of adequate rigging areas associated with the ramps for yachts and windsurfers. A supply of fresh water is also considered important for the washing down of equipment after use.

During the public consultation phase for this management plan, many harbour users identified the need for more or better ramps to provide access throughout the harbour. In cases where ramps do exist they appear to be of poor design, being too steep or stopping short of the harbour bottom thereby limiting use during low tide.

The history of development along the harbour edge, and the proximity of road and rail corridors, has resulted in very limited available flat land for parking adjacent to existing ramps. The increasing popularity of trailer yachts is exacerbating the already stretched parking facilities. Parking problems and associated traffic congestion from having to park cars and trailers on the road verge can create a serious road hazard.

Water Based Facilities

The location of facilities needs to be distributed to allow access at a variety of locations around both sides of the harbour. This is not only important for recreational access but is also beneficial to marine search and rescue to ensure quick and easy access to incident locations.

Educational Use

Extensive use of the harbour is made by schools for education and recreation courses and field trips. In addition, children often explore the harbour for marine life on their own initiative or with their family.

The University of Otago uses the harbour for both research and public educational purposes. The Portobello Marine Laboratory is used for research, and at the same location the NZ Marine Studies Centre and Aquarium offers educational opportunities for groups and individuals.

4.6 The Economic Value Of The Harbour Port Operations

Simplistically, Dunedin's reason for settlement is its harbour and the working port that the harbour allows. Allowing export of pastoral and forestry products and manufactured goods, Port Otago is vital to the region's economy. For all this benefit there is sometimes a perceived downside. A working port is not necessarily a thing of beauty (although it is always of interest) and it is a major user of shoreline. The Port's operations, by their very nature, have to go on or very near the water. Some areas of the operational port are open to the public for pedestrian access. This allows recreational anglers, and walkers, quality access

at many points. The brochure, 'Recreational Users Guide for Port Otago Limited Wharves' indicates areas accessible for recreational users and rules for use, and is available from Port Otago Limited.

Tourism

Dunedin offers a variety of wildlife experiences for both visitors and locals. Tours are offered for close up viewing of albatross, penguins, seals, and sea lions. The easy access to these animals can result in undesirable interaction or adverse impacts on wildlife or the environment. Appropriate visitor management and education of visitors is essential to protect both visitors and wildlife.

Heritage values, art, culture, and recreational opportunities also attract visitors to Dunedin. The harbour not only provides tourism opportunities but also allows for the movement of cruise liners, which transport significant numbers of visitors to Dunedin.

4.7 Vegetation

Forests once covered almost all of the harbour catchment prior to the 1860's and remnants of these are still visible. By 1866, however, much of the forest on the lower Peninsula slopes, Signal Hill, and the saddles of the lower western hills, had given way to pasture. Human activity has changed the natural pattern considerably, through clearing the forests, laying down pasture, building and reclaiming land (ORC & DCC, 1991a).

Forests are not the only interesting and valuable vegetation type. Once Otago Harbour would have been fringed with scrub and cliff communities, and zones of salt marsh, rushland, and estuarine swamps existed (Allen and Johnson, 1991).

The coastal scrub types are characterised by salt-tolerant shrubs including shore hebe, *Olearia avicenniaefolia* and several *Coprosma* species, this vegetation usually also has flax, frequently tree nettle, mutton bird scrub, and ngaio, and occasionally inaka. Coastal poa tussock and native ice plant often contribute to ground cover. Sites less exposed to salt spray may carry several of the species of dry site scrub (ORC & DCC, 1991b).

4.8 Ecological Values

Dunedin is unique in having a good range of natural wildlife habitats so close to the city. In particular the albatross and seal colonies and the Yellow-eyed penguin (Hoiho) habitats. These values are important not only to the people of Dunedin, but also provide valuable assets for tourism in Dunedin. The opportunities to easily access these species, see them up close in their natural habitats, and often at no cost, is an opportunity not available in many other places in New

Zealand.

The accessibility of these species is not without its pitfalls. Appropriate visitor management and visitor behaviour is important for the continued success of the species and to ensure visitor and wildlife safety.

Seabirds

Otago Harbour provides the only extensive area of sheltered marine water near Dunedin City, and perhaps its most outstanding feature is that it possesses, at its entrance, the only Royal Albatross Colony in the world that is on a mainland and therefore is directly accessible to the public. There is a great diversity of bird life – waterfowl, waders and sea birds – which use Otago Harbour at least during certain seasons. The extensive mudflats within the harbour provide valuable and indispensable feeding grounds for a large number of wading and migratory birds throughout or during part of the year (Recreation and Scenic Amenities Sub-committee, 1973).

Surveys have indicated the most abundant species of birds in all parts of the harbour are the three species of gulls, the South Island pied oystercatcher, mallard ducks, little shags, bar-tailed godwits, black swan and banded dotterel. Special species found in the harbour include shags, Yellow-eyed penguin (Hoiho—*Megadyptes antipodes*), and Blue Penguin (Koroa—*Eudyptula minor*) (ORC & DCC, 1991b).

New Zealand holds the greatest variety of shags in the world and Otago Harbour can boast large numbers of three contrasting species. Two species are very rare on world standards. Otago Harbour and adjacent coastline hold around 20% of the world's totals of Stewart Island shags and spotted shags (ORC & DCC, 1991b).

Otago Peninsula is the mainland stronghold of Yellow-eyed penguin. Long-term decrease in numbers has been attributed primarily to loss of breeding habitat through land clearance and predation of chicks by introduced mammals. Also, dogs kill both adult birds and chicks if they encounter the penguins ashore. Unrestricted public access to breeding areas can be disruptive (ORC & DCC, 1991b). The Blue Penguin is found throughout coastal Otago, the West Coast of the South Island, and around Stewart Island. A few nest in the Otago Harbour from Harington Point to Taiaroa Head within appropriate habitat sites.

Marine Mammals

Fur seals are becoming more conspicuous along accessible sections of shoreline, especially during summer and early autumn. These seals are generally placid and appear unconcerned by the close approach of people (ORC & DCC, 1991b). In contrast, hauled-out

Hooker's sea lions may rear up and roar, and charge, if people approach too closely. This behaviour is predictable and reactive rather than aggressive. Elephant seals and leopard seals should also be treated with caution. Leopard seals in particular are not normally afraid of people and when approached are as likely to attack as retreat. Individuals of these two Antarctic and Sub-Antarctic species occasionally appear in lower Otago Harbour and come ashore on sandy beaches (ORC & DCC, 1991b).

Common dolphins occasionally enter Otago Harbour in pods of 10-30 animals. They stay in the harbour up to a day or so and can travel as far as the inner harbour basin. Dusky dolphins occasionally enter Otago Harbour, probably in pods of two to five animals. They may remain in the harbour for several days at a time (ORC & DCC, 1991b).

Entomological Values (Insects)

The conservation values of the Portobello-Vauxhall coastal rock pools are high. Studies indicate a rich total invertebrate fauna present in areas of the harbour. Existing threats are human disturbance, pollution (affecting water quality) and structure construction (concrete, etc), road upgrading, reclamation and the subsequent habitat loss that these threats will bring (ORC & DCC, 1991b).

4.9 Environmental Issues

The environment is acknowledged as being important factor for the enjoyment of recreational activities. The value of the quality of the environment is plainly appreciated by the community at large. While the primary focus of attention has been upon human use of water and land for recreational purposes, its quality for the sustenance of wildlife and the biomass upon which we are all dependant has been identified (ORC & DCC, 1991e). Dunedin is unique in having an important tourist attraction based on its wildlife. To ensure that this resource is protected, the environment must be maintained at an acceptable level.

Siltation/Dredging

Siltation of the harbour is considered a major environmental concern, particularly by certain user groups. It is contended that siltation is caused chiefly by the denudation of vegetation of the hills surrounding the harbour – a process which has been taking place since the arrival of the European settlers. Streams feeding into the harbour carry significant quantities of suspended sediment which, when it enters the calmer and denser waters of the harbour, eventually settles out, necessitating frequent dredging operations in the main channel (ORC & DCC, 1991d).

Siltation of the harbour is an on-going problem requiring frequent dredging of the channel. Dredging of a type which creates high volumes of silt cuts down both the light available to photosynthesising organisms in the plankton and chokes the filter-feeding invertebrates on the harbour floor (ORC & DCC, 1991b).

Reclamation

Progressive reclamation of land has been important in shaping today's harbour landscapes. This has been in response to the need for flat land for industry, port activities, transportation links or recreation. Extensive reclamation was carried out in the harbour during the period 1870-1920 (ORC & DCC, 1991a). Reclamation has continued since that time. The most recent reclamation in 1999 extended the previous Vauxhall reclamation.

Sea Walls

The dry stone revetment lining most of the harbour shoreline is the largest single stone-built object in Dunedin. About 34 kilometres is under Council management, supporting either roads or reserves, and 8.5 kilometres supports railway causeways.

The walls are considered archaeological sites and the Historic Places Trust have placed an 'I' classification on the walls.

The road walls on the eastern side of the harbour from Vauxhall to Harington Point were built between 1865-1880. The road walls near St Leonards and at Blanket Bay are the old railway walls built before 1872. The road walls from Port Chalmers to Aramoana and the railway causeways were built and rebuilt from 1872 through to the 1940s mostly by Taranaki Maori prisoners (ORC & DCC, 1991a).

The walls are subject to a very aggressive environment of salt, wind and wave action. Once that outside layer of stones is damaged the walls absorb wave energy, and erode relatively quickly resulting in the wall slumping or degrading (City Consultants, 1993).

Biosecurity

As a major sea port, Otago Harbour is a high-risk area for the introduction of marine and other plant and animal pests. Harbour reserves, and aquatic facilities such as jetties, are valuable sites to monitor for the introduction of new, unwanted species, and the spread of established pests such as the seaweed *Undaria pinnatifida*. Providing signage to educate boat-owners and other reserve users about how to identify, and how to avoid spreading, unwanted species, is one way of involving the community in border control and biosecurity issues.

4.10 Responsibilities And Functions

Much of the land covered by this management plan

was created by reclamation, with the exception of Te Rauone Recreation and Esplanade Reserves and the Roseneath Esplanade Reserve. Prior to local government reorganisation and amalgamation, the Otago Harbour Board was a key provider and controller of access to, and management of, land and facilities. The Local Government (Otago Region) Reorganisation Order 1989 plays a major part in defining the roles, responsibilities and terms of the Council.

4.11 Harbour Safety

Otago Harbour is the scene for many varied and important uses. All users of the harbour waters have safety and navigation needs. These needs must be met to ensure the safety of all that use the harbour. In the event of an emergency on the harbour waters, safety craft may need to be launched quickly. An important safety feature of the harbour is therefore the access that is provided for safety craft and areas to safely unload those rescued.

Currently access is limited throughout most of the harbour because of the nature of the existing ramps. The ramp at the Broad Bay Yacht Club is the only one in the upper harbour that can launch a boat in most tides, while the ramps at Careys Bay and Back Beach are the only ones suitable for search and rescue operations in the lower harbour. The other ramps located around the harbour are unsuitable under various tides and conditions.

4.12 Global Warming and Sea Level Rise

The global climate is changing and this will have an effect on the nature and behaviour of the waters of the Otago Harbour. It is predicted that there will be bigger storm surges, slowly rising sea levels, more coastal erosion and flooding, and salt water intrusion into low-lying water supplies (Sinclair, 2001). Structures and developments should be set back from the water's edge to minimise the impacts and effects of storm events and wave action (Healy, 1997).



5 Individual Reserve Sections

5.1 Deborah Bay Dinghy Ramp And Marina, And The Green Reserve

Description

Deborah Bay is located on the north western side of the Otago Harbour, immediately to the north of Careys Bay. The Green Reserve is approximately 500m past Deborah Bay marina toward Aramoana.

History

In 1883 following Russian scares in previous years, torpedo boats were ordered for the four main ports of New Zealand. Appropriate bays were chosen to house the boats and their crews. Land was acquired at Deborah Bay for a jetty, slip, sheds, housing, and other facilities. The Green Reserve and adjacent residential area was the site used for these developments. The boat shed and slipway were never built, with the boat, the *Taiaroa*, being slipped at Careys Bay when required. By 1902 the boat was deemed unnecessary and was taken out of service (Cooke, 2000, and Church, 1994).

Deborah Bay harbours the remains of four vessels, the Don Juan, the California, the Esk and the Thomas and Henry. The Don Juan is popularly believed to be a former Spanish slave ship, but was, in fact, the Daniel Elfstrand Pehrsson, built in Sweden in 1857. Under the name Rosalia, she carried Chinese "coolies" from Macao to Peru, for which she was equipped with shackles and leg irons, and fitted with two cannon on deck to keep order. In 1875, she was arrested in Otago Harbour for evading customs authorities and declared unseaworthy, and was used as a hulk until being beached at Deborah Bay in 1900. Samuel Plimsol mentioned the Don Juan in the British Parliament as a "coffin ship" during the creation of the laws relating to the "Plimsol Line" seen on all ships today (McLean, 1985; Bowman, 1948; Church, 1994).

Landscape

Deborah Bay has a south eastern aspect looking across the widest part of the harbour to Harwood. The bay is confined by the topography with Rocky Point defining its edge in the south and Acheron Point in the north. The bay has panoramic views across the harbour and of recreational boats moored in the bay.

The character of the bay is rural with the majority of built structures confined to the harbour's edge. Built structures are contained within the topography and the historic elements in the bay provide character. The topography encompassing the bay is moderately steep. Land cover is a mix of pasture on the flatter slopes, and pine plantations and native bush on the steeper slopes. The pump station beside the Green Reserve detracts from the aesthetic values of the bay. However, it has been put to use as a backing for an information board.

A historic stone wall forms the edge of the bay with the main road abutting up to the harbour edge in most places.

Cultural Values

Archaeological records indicated a midden site located at Rocky Point.

The stone walls around the edge of the bay were built by government funded labour during the depression and are recorded as a historic site by the Historic Places Trust.

Recreational Use

The Reserve and aquatic facilities provide important access to the water for both passive and active recreation.

There is car parking and a small grass area at the Green Reserve. However, while access to the water at the Green Reserve is limited, people do swim from this area. Deborah Bay is used by children for a variety of water based activities.

A ramp, wharf, 12-berth marina and permanent moorings are available in Deborah Bay. The Council runs the marina as a commercial operation.

A public ramp is used by yacht owners for dinghy access to the water. The ramp is not suitable for the launching of any other craft.

The depth of water in Deborah Bay makes it ideal for use by large yachts.

Deborah Bay has a few private facilities, including a jetty, ramp and large boat winch, located close to the public wharf. Moorings, not connected with the marina, are under the jurisdiction of the Otago Regional Council.

Management Issues and Options

Car Parking

No official parking area exists for people using the recreation facilities. Some parking is available adjacent to the marina at the road edge. This could be slightly increased if better storage was available for dinghies.

The Council may need to consider parking options in the future if there is a proven need, which could include purchasing land to provide parking close to the facilities.

Dinghy Storage

Dinghies are currently stored on the grass area adjacent to the jetty. Providing a lockable storage rack for dinghies would help to tidy up the area, provide security for dingy owners, and increase the area available for parking. Landowner permission would need to be sought, and funding obtained if this was proposed.

Toilets

There is a desire by users to have a public toilet close to the marina. As there is no reserve land associated with the marina, this option can not be considered at this time. In the long term, provision of toilet facilities on reserves or in conjunction with facilities will need to be considered, looking at the wider city and considering public use, community need, cost, and other factors. If a toilet is proposed for non-reserve land, appropriate landowner permission will be required. This site could be considered in this process.

Development / Enhancement

Expansion of the public marina and pontoon area has been suggested. In addition, other enhancements, such as providing electricity to the marina to allow people to use power tools for maintenance, or security systems have been suggested. These and other such proposals can be addressed under the Annual Plan process.







5.2 Careys Bay Jetty And Ramp

Description

Careys Bay is located on the north eastern side of the Otago Harbour, immediately to the north of Port Chalmers.

Landscape

The bay's aspect is to the north east and is enclosed by steep topography rising immediately from the water's edge. Flat land is limited to the road in front of the historic hotel, which is almost entirely occupied by road, having been widened to accommodate angle parking by the foreshore and hotel. Taiaroa Head and the lower harbour can be seen from the foreshore. The Boiler Point container wharf is situated behind the fishing area. At low tide shipwrecks are visible in the bay.

The historic Careys Bay Hotel forms the visual focal point to the residential area of the bay. The hillside residential area is contained within the natural topography, and with the combination of large areas of vegetation, and does not dominate the character of the bay. The historic character of the bay is strong with the hotel, the stone walls at the waterfront and the shipwrecks providing a sense of establishment.

Careys Bay presently has an open character with a strong relationship to the harbour. From all places in the bay views are across the water and to the opposite side of the harbour. Adding to the amenity value of the bay is the diversity of uses and activities which occur, such as, the fishing boats and wharves on the eastern side of the bay. The location of the fishing boats and small sheds offset the scale of the containers. The foreshore is landscaped with native species and a number of seats placed for the views, as well as providing public access to the beach. The Careys Bay Association maintains this landscaped area and the beach area.

The ability to access the water is a strong component of the area's amenity value as well as the ability for the public to access the fishing wharves.

Recreational Use

Careys Bay is serviced for active recreation users with the ramp and a small jetty. A car park belonging to Port Otago Limited is available adjacent to the facilities and there is some roadside parking. Passive users are less well catered for with a limited amount of room available for pedestrians.

A toilet provided by the Port Chalmers Fisherman Co-operative Society, adjacent to the car park, is available for use by the public, in exchange for the Council being responsible for maintenance and cleaning.

Management Issues

Car Park

The car park is small and congestion can occur during times of high use, particularly when boats are being launched or retrieved. This can also occasionally cause traffic hazards or delays if people are manoeuvring their vessels on the roads. Council and Port Otago are negotiating a Council lease of the carpark.

The Council may need to consider parking options in the future if there is a proven need for it.





5.3 Port Chalmers Recreation Reserve (Back Beach)

Description

Port Chalmers Recreation Reserve covers approximately 9ha and includes Back Beach (Tewaitohi) and the adjacent vegetated hillside, the cliff below the road on the Sawyers Bay side of Port Chalmers Peninsula (Monkey Beach), and the land where the Dunedin City Council Community Housing is located. Back Beach is located on the south eastern side of Port Chalmers Peninsula with an easterly aspect.

Landscape

Views from Back Beach are to Goat Island (Rangiriri) and Quarantine Island (Kamautaurua) as well as Portobello and Otago Peninsulas.

Back Beach has a public boat ramp, jetties, and floating pontoons, Sea Scouts' clubhouse and various boat sheds. This area provides good access to the water. There are a number of boats permanently moored in the bay. The beach is a combination of mud and stone, and is separated from the Peninsula Beach Road by an old stone wall.

A narrow gravel road traverses the length of the Reserve along the foreshore. There are a number of small boat sheds along the foreshore. From the road, the topography rises steeply up to the residential houses of Port Chalmers.

The vegetation is a mix of native and exotic species with a large number of exotic trees. Weeds have spread throughout the hillside area adjacent to Back Beach, and animal pests are also a problem in this area. However, there are moderately high botanical and entomological values in the coastal shrublands within this reserve, with plant species such as *Helichrysum lanceolatum*, *Urtica ferox*, and *Muehlenbeckia australis* being important at this site.

The character of the area is generally open with a strong connection to the harbour, islands and Otago Peninsula. The existing Port Otago reclamation and warehouse buildings to the north impact upon the natural attributes of the reserve by reducing the area's visual relationship to the rest of the harbour. Other built structures in the area are of a small scale, which do not detract from its openness, but add to its character as a recreational area.

Recreation Use

Back Beach is an important area for both passive and active recreation activities. With a number of small boat sheds, a ramp, jetties and pontoons, the area has strong links and access to the water. Traditionally Back Beach has been the focus of many activities relating to aquatic recreation. The close proximity of this site to Dunedin and the safety of the water make Back Beach a popular recreational resource especially for children swimming, fishing, jumping off the wharf, and exploring. The area is also popular for walking due to the general lack of cars travelling along this road.

The popularity of this area can sometimes result in over crowding on the boat ramp. However, the ramp is wide enough to allow three vehicles at a time, if users are considerate of others. Painting lines on the ramp to indicate the three lanes may assist with the efficient use of this facility.

A number of tracks through the Reserve provide a link between Peninsula Beach Road and the housing area on the hillside above the Reserve.

A number of individuals or groups have boat sheds either on the reserve or extending from the Reserve over the water. This allows for easy access and encourages use of the Reserve.

Leases/Licences

In 2001 the Council entered into a lease agreement with Port Otago for the car park area at Back Beach. The rental is a nominal amount in exchange for maintenance of the leased area being undertaken by the Council. The lease allows for the use of the car park for the life of the ramp.

The boat sheds that are located primarily over the water have permits from the Otago Regional Council. Boatsheds on the landward side of the road have licences from the Council.

The Bowling Club has an existing lease with Council. An occupational agreement for the swimming pool is under investigation.

A list of leases/licences on the Reserve are attached as Appendix 6.4.

Restriction on leasing

The Port Chalmers Recreation Reserve is subject to Section 45 of the Reserves and Other Lands Sale Disposal and Enabling and Public Bodies Empowering Act 1901. This encumbrance prevents the leasing or sale of the Reserve and is registered on the Certificate of Title. The Reserve is also classified as a Recreation Reserve under the Reserves Act 1977.

The Port Chalmers Bowling Club has a lease for their clubrooms that originates from when the Port Chalmers Borough Council administered the Reserve. Research has not provided any details on why this lease was granted on the Reserve in apparent contradiction to the restriction, and it has subsequently been identified as being illegal.

Similarly, no information has been located indicating the reasoning behind the encumbrance, and it has not been enforced in the past. Currently, there are sufficient restrictions contained in the Reserves Act 1977 that the restriction on leasing or sale in the 1901 Act is in practice unnecessary or redundant. Action will therefore be taken to have the encumbrance removed. This will require an Act of Parliament, a process that will take at least two years. Council will initiate action with the aim of having the encumbrance removed from the reserve. With consideration of the policies in this Management Plan, existing leases will continue to be renewed. The Reserve will continue to be protected under the Reserves Act 1977. Further information on this is contained in Section 3.15 of the Plan.

In the interim, before the restriction is removed from the Reserve, and considering the need to comply with the 1901 Act and meet the expectations of existing leaseholders, the Council will:

- Not issue any new leases for the Reserve.
- Continue to renew the existing lease subject to management plan policies and conditions of the existing lease.
- Not sell any areas of the Reserve.
- Have documentation prepared to have Section 45 of the Reserves and Other Lands Sale Disposal and Enabling and Public Bodies Empowering Act 1901 repealed.

Management Issues

Boat Sheds

Some of the boat sheds along the landward side of the road are in a state of disrepair, create an untidy look, may be unsafe, and reduce the width of the road. While the Reserve and adjacent harbour area is appropriate for boat sheds, their development and condition needs to be monitored to ensure safety and to retain land for other recreational activities. When these boat sheds become dilapidated, it is appropriate that they be removed for both aesthetic and safety reasons. Future development of sheds should be minimised to ensure open areas are retained for public use. Further investigations will be undertaken by Council to resolve the legality of the existing boatshed licences.

Peninsula Beach Road

Peninsula Beach Road is a narrow gravel road along the foreshore of the Reserve. It is a not a legal road, but is instead a formed public road over reserve land. The road is popular for both walking and scenic drives, but concerns have been raised over vehicle speed and pedestrian safety, and the dumping of rubbish. It has been suggested during public consultation that the road be closed to vehicular traffic and developed into a walking track. There are, however, issues associated with the closure of the road, for example, exclusion of users with limited mobility, perceptions of safety for users, and access for emergency vehicles. Signage should be used to promote the priority of pedestrian users over vehicles along Peninsula Beach Road, in conjunction with retaining the present speed limit of 30 km/hr.

Vegetated Hillside

This area is relatively steep and covered with a mix of exotic, native, and weed species. The network of tracks through the Reserve dissects the vegetation. Weed and pest management through this area would be beneficial to control vegetation and enhance landscape values. Illegal dumping also occurs on the vegetation boundaries. Action may be required to reduce this activity.

Development / Enhancement

Increased landscaping and further development of existing and new picnic sites would enhance the area, encourage passive recreation, and increase the use of shore facilities by water users.





5.4 Roseneath Esplanade Reserve

Description

Located on the southern slope of Roseneath Peninsula, this esplanade reserve is a 20-metre strip of land adjacent to the water edge. The esplanade reserve connects with areas of road reserve providing legal access around the majority of the Roseneath Peninsula.

History

Off Kilgours Point, Roseneath, the 'Pride of the Yarra' steamer and the 'Favourite' paddle steam ship collided during the night on 4 July 1863. The 'Pride of the Yarra' was transporting the Campbell family and their servants, along with many other passengers, from the ship 'Matoaka' which had anchored at Koputai Bay after coming up the Harbour from an overnight anchorage at the Otago Heads. The 'Pride of the Yarra' sank with the loss of thirteen lives (McCluskey, 1995).

Landscape

Located on the southern slope of Roseneath Peninsula, the esplanade reserve is steep. The land falls dramatically down to the water's edge. The area is covered in a mix of exotic weeds, pasture and regenerating native bush.

The Reserve has a high degree of natural quality and a strong connection to the harbour. This is due to the undeveloped nature of the site and the bush coming down to the water's edge.

Cultural Values

Archaeological records indicate a Maori oven (midden) site near the north eastern end of the Reserve.

Recreation Values

The Reserve currently receives little use. There is the potential for the development of a track around the base of the Roseneath Peninsula incorporating the esplanade reserve, and adjoining road reserve.

Development / Enhancement

Improvement of access into the esplanade reserve would increase its recreation value and use. However, it is recommended that any development on the esplanade reserve does not detract from its natural qualities. Further plantings of native species and the removal of exotic weeds would improve its amenity value.

Development of a track may involve a combination of tracked areas and walking on the beach. Links can be easily made to the areas of road reserve which are adjacent to the esplanade reserve, and the formed roads.

A memorial at Kilgours Point (or another appropriate location) on the esplanade reserve recognising the sinking of the 'Pride of the Yarra' could be permitted following the forming of a track.





5.5 Kitchener Street Reserve

Description

Kitchener Street Reserve is located at the head of the harbour on a narrow strip of reclaimed land between Portsmouth Drive and Kitchener Street. Kitchener Street Reserve is located within an industrial area and some commercial activities linked to the harbour are located on the harbour edge.

The area adjacent to Water Cooled Sports is leased from the Chalmers Property Group and managed as a reserve for recreation purposes by the Council's Community and Recreation Services Department, and therefore administered under this management plan.

The area immediately north of Kitchener St containing a slipway, helicopter pad, power boat centre, rowing club and associated facilities, restaurant, and Navy establishment and jetty, is managed by the Council's City Property Department and is therefore not administered under this management plan.

Landscape

The reserve is a flat grassed area with little vegetation. Plantings of pohutukawa trees are located along the water's edge. At the northern tip of the Reserve, access to the water is via a boat ramp, adjacent to the Water Cooled Sports building and car park. The Reserve car park is located at the southern end. There are additional plantings at the southern end.

The surrounding area is light industrial, which effects the visual quality of the area. A small gravel drive provides access through the Reserve, linking Kitchener Street and Portsmouth Drive. The drive provides a buffer between the industrial area and the grassed area of the Reserve.

The open flat nature of the site lacks landscape character, but this will improve as the pohutukawa grow. However, this is likely to take some time, as the growing conditions in the area are harsh. The surrounding buildings, and a lack of vegetation providing screening, result in the area having industrial character. However, the Reserve does have expansive views across the harbour of the peninsula and Andersons Bay.

Recreational Use

The Reserve provides both passive and active recreational opportunities. The Reserve is often used by people who sit in their cars and look out over the water. As it is close to the city it is popular at lunch time. The prime use of the Reserve is as a rigging and launching area for windsurfing and kite surfing. The Council, in conjunction with Water Cooled Sports, provides showers, toilets, and wash-down facilities.

Due to the type of ramp and depth of water in the launch area, this site is not suitable for launching large or motorised craft.

A rowing course is located in this Harbour Basin area.

Leases

The Council leases the Kitchener Street Reserve from the Chalmers Property Group.

Water Cooled Sports Limited lease the footprint of their building and the adjacent car park from the Council.

Management Issues and Options

Dunedin City Proposed District Plan

The land owned and managed by the Council's City Property Department has a number of recreational clubs and activities located on it. During public consultation, concern was expressed by some of those clubs about the security of their leases in this industrial area, and proposed that this area should be managed by the Community and Recreation Services Department. Concern was also expressed that this area and the Reserve, is zoned 'industrial' in the Dunedin City Proposed District Plan and should be zoned 'recreational'. The Dunedin City Proposed District Plan does not recognise reserves through zoning. However, reserves are zoned with the surrounding area. An industrial zoning does not limit recreational activities taking place, nor reduce the security of such activities occurring in this area.

Future Development/Enhancement

This area is seen as having potential for amenity enhancement. Additional plantings to screen the industrial area and create some spatial definition as well as shelter may be appropriate.

Portsmouth Drive has a walkway/cycleway system along its length. Currently that facility finishes at Kitchener St Reserve. The development of a path/ track through the Reserve would continue the linkage around the harbour edge. The development of a continuous path/track external to the Reserve, or linking with roads, could provide a valuable link to the head of the Harbour Basin. There are currently no plans for development of a path within the Reserve, although this development could be given consideration in the future.




5.6 Andersons Bay Inlet And Bayfield Jetty And Ramp

Description

Andersons Bay Inlet is located on Portobello Road between Shore and Marine Streets. Access to the facilities is via Bayfield Park on Shore Street.

Bayfield Park is managed under the Sports Ground Management Plan.

Landscape

The cliffs of Vauxhall, Andersons Bay (Puketahi) and Sunshine border Andersons Bay Inlet providing the area's strong natural character as well as visual containment. Approximately half of the bay was reclaimed forming Bayfield Park. The Portobello Road causeway separates the inlet from the rest of the harbour. The inlet is tidal with water passing through a gap in the causeway.

As the adjoining reserve (Bayfield Park) is sports fields, it is primarily of an open nature. Low plantings surround the inlet. The Bayfield jetty, ramp and car park, are located on the southern edge of the inlet.

The aesthetic values of this area are limited to the natural qualities of the water and surrounding bush clad cliffs. Plantings around the edge of the inlet do not impact on the area's character.

Recreation Uses

The area is an important recreational area for the surrounding suburbs. Access to the water is limited to the ramp and the jetty, as there are sea walls surrounding the inlet edge.

Because it is a safe and sheltered area, the inlet is used by schools, disabled groups and other people learning how to row, canoe, and kayak etc. In addition, water going from the harbour into the inlet is excellent for teaching whitewater kayaking. Walking, including walking dogs, and fishing are also popular activities on the reserve adjacent to the inlet (Boffa Miskell 1997).

Enhancement

Possible enhancement could be additional trees planted on Bayfield Park around the facilities to provide shelter.

Management Issues

Environmental Concerns

Reclamation of the inlet to form Bayfield Park, combined with stormwater discharge issues, silting of the harbour, and the small size of the outlet, have caused problems in the inlet. The reclamation and creation of the causeway have affected tidal flows. Silt carried in storm water and the general build up of silt within The combination of these factors results in rubbish and debris accumulating around the inlet and by the causeway. This build up causes safety concerns for users and makes the area difficult and unpleasant to use. At low tide muddy areas in the inlet have an unpleasant odour.

the harbour has resulted in silt build-up in the inlet.

In the future dredging may be required to deepen the inlet and to ensure the facilities can continue to be used for recreational activities. This may also assist with reducing the odour produced under the current situation. Dredging of the inlet is unlikely to have any lasting benefit unless dredging of the adjacent harbour is carried out at the same time. Failure to do this is likely to result silt moving back into the inlet from the harbour and causing the area to continually silt up.

The bed of the inlet is owned by the Council. Resource consent from the Otago Regional Council is required for any activities related to water bodies. This includes any dredging of the sea bed.

Over the years, the Council has considered a variety of options for reclaiming various amounts of the inlet. However, other than the original reclamation forming Bayfield Park, no further reclamation of the inlet has occurred.

It is possible that reclamation to some degree will be proposed in the future allowing an increase in the area for sports fields, to reshape aspects of the boundary of the inlet to improve the current state of the inlet, or for realignment of the causeway. If this situation arises, appropriate environmental consideration would need to be given to any proposal and appropriate investigations carried out. Community interests will also be considered. Significant reclamation would limit aquatic recreational activities, for which the inlet is important. Total reclamation of the inlet is not envisaged. Reclamation that will significantly impact on aquatic recreational values is not permitted.





5.7 Vauxhall Reserve

Description

The Reserve is located on Portobello Road, immediately past Andersons Bay Inlet.

Landscape

The Vauxhall Reserve is a large reclamation containing boat ramps, a jetty, a pontoon wharf, a large car park, open picnic areas, and part of the Vauxhall Yacht Club. Plantings are located on the edge of the reclamation, providing a buffer between the car park and Portobello Road. A recently reclaimed space provides picnic areas broken up with native shrub plantings.

The area allows good views across the upper harbour to the City and the wharves.

The character of the reserve is suburban with its natural character coming from its close proximity to the water.

Cultural Value

The historic rock wall is a Category I registered historic place.

Recreational Use

The reclamation allows for both passive and active recreational activities. Access to the water and the large car park is ideal for setting up boating equipment. However, access into the reserve by car can be difficult given the lack of visibility and manoeuvrability, especially when approaching from the north. Pedestrian access to the area has improved greatly with the formation of the new reclamation and foot-path/cycle way.

The Council owns the two concrete ramps and provides a public toilet on the Reserve.

Leases

The Vauxhall Yacht Club formed in 1929 and erected the present rooms in 1949-1950. The majority of the Club building extends beyond the mean high water mark and is under the jurisdiction of the Otago Regional Council. However, a small portion of the rear of the building lies on reserve land. Negotiations to formalise a lease for the area of the building occupying the Reserve began in 1994, and have yet to be completed.

In the 1990s, the Vauxhall Yacht Club replaced two existing wooden jetties and a ramp with decking and a floating pontoon. These are available for public use outside of club activities and sailing programmes.

Management Issues

Car Park

The car park is owned and maintained by the Council. In the past problems with roading contractors using the Reserve car park for parking machinery or equipment have occurred. This limits recreational use of the Reserve and can result in increased damage to the car park surfacing. Illegal campervan camping in the car park raises concerns.







5.8 Glenfalloch Jetty

Description

Glenfalloch protrudes from a small reclamation on the harbour side of Portobello Road.

Landscape

The reclamation is framed with pohutukawa trees. This area provides pleasant views back toward the city. Almost the total area of the reclamation is asphalted.

Recreational Use

The jetty is multi-levelled to allow for the transferring of passengers during both high and low tides. As the low tide platform is frequently below water, it becomes slippery and this causes problems. The jetty is occasionally used by commercial operators to drop off or pick up people visiting Glenfalloch restaurant and gardens. It is infrequently used by the general public. The best time to use this facility is one hour either side of the high tide.



5.9 Broad Bay Reserve

Description

Broad Bay beach and recreation facilities are located on Portobello Road within the Broad Bay (Whakaohorahi) Township.

Landscape

The Reserve forms a focal point for the community as well as providing access to the harbour's edge. The Reserve has a northerly aspect with good views of the harbour. This reclaimed area is an expanse of open grass separated from the road by a well-established buffer of native plantings. An artificial sand beach has been formed along a small section of the Reserve, which provides excellent access to the water. A large car park, toilet, building, ramp, and jetty are located at the western end of the reclamation.

This is a very aesthetic area. Well-established native plantings along the edges provide a buffer from the road and are in context with the character of the area. The modified character of the Reserve fits the context of the local residential community.

Recreational Values

The Reserve provides important opportunities for both passive and active recreation activities. The artificial beach provides excellent access to the water for swimming and playing. Large open grass areas provide passive family recreational and picnic facilities.

The Council provides a public jetty from the Reserve.

The Broad Bay Boating Club ramp is available for public use for a small fee. The club experiences some problems with other users who do not realise that the ramp is owned and maintained by the club.

Leases

A small part of the Broad Bay Boating Club's building and their storage container is located on the Reserve. A lease will be negotiated with the club. In addition, the boat club has a ramp adjacent to the building that can be used by the public for a small fee.

Management Issues and Options

Geese

A flock of geese living on the harbour move between the bays. Problems have arisen when large numbers of geese gather on the Reserve. This situation can make use of the area unpleasant and there are risks of conflict between users and geese. Sightings of the geese have been infrequent lately. However, in instances where geese become a major problem, they may need to be removed from the site.

Footpaths/Dogs

Dogs are not permitted on the Reserve in accordance with the Dunedin City By-laws. However, as there is no footpath the Reserve is often used as a safe alternative to walking along the roadside. Therefore many people with dogs pass through the Reserve.

Consideration should be given as to whether dogs should continue to be prohibited from this area, or permitted on a lead, or whether establishment of a footpath may be possible along the roadside.

Development/Enhancement

Low shrub plantings around the grass edge adjacent to the water, may help provide additional shelter from prevailing winds. Plantings on the grass area to provide shade may be beneficial for reserve users.







5.10 Macandrew Bay Reserve

Description

Macandrew Bay Reserve is located on Portobello Road, within the Macandrew Bay (Te Rotopateka) Township.

Landscape

Macandrew Bay Reserve, located on reclaimed land on the harbour side of Portobello Road, forms a focal point for the urban area of Macandrew Bay. The Reserve has two car parks and an artificial sand beach, which provides access to the water. Grass areas surround the beach and a strip of plantings provide a buffer between the Reserve and the main road. Seating and picnic tables are provided for passive recreation.

The aesthetic quality of Macandrew Bay Reserve is high. Most plantings are native which contribute to the area's natural character. Plantings have been used to hide a pumping station located on the Reserve.

The Reserve has an open character with views across the harbour to St Leonards and the City. The bay has a north west aspect.

Recreation Use

The Reserve provides opportunities for passive and active recreation. Accessibility is high and the area is close to the township shops.

The reserve has high use from both the boating fraternity and families picnicking, swimming and playing.

Lease

Macandrew Bay Boating Club lease their building footprint area of the Reserve. The club owns the two jetties and the floating pontoon. These facilities are available for public use. The Council recognises that the club makes its facilities available to the public and occasionally provides financial assistance to help with upgrading the facilities.

Management Issues

Motorised Craft

People occasionally launch small-motorised craft from the beach. This activity has the potential to pose risk or disturbance to other users. The beach area is very popular with children playing and swimming. It is therefore not appropriate to have motorised craft being transported or used in the beach area. A ramp is available adjacent to the Boat Club.

Signage and a policy indicating that this is not permitted would help eliminate this problem.







5.11 Wellers Rock Jetty

Description

Wellers Rock (Umukuri) is located on the Harington Point Road approximately 24 kilometres from Dunedin, between Otakou and Te Rauone. Wellers Rock (actual rock area) is a Historic Reserve named after the Weller brothers and managed by the Department of Conservation. As such, the management of this area does not fall under this management plan.

The jetty is owned by the Council and is located about 500m to the north of Wellers Rock. This management plan addresses management of the jetty.

Landscape

The area provides extensive views in all directions across the harbour. The aesthetic value of the site is high given its lack of development and strong relationship to the harbour.

Recreation Uses

The jetty is well used, especially by commercial tourist operators. Public consultation indicates that use by local residents and children had been high in the past, but had decreased due to the impact of commercial users. Recreation opportunities at Wellers Rock are often in conjunction with Wellers Rock jetty. Wellers Rock is located at the tip of a headland. The strip of land connecting the rock to the road, and the road edge, are used as a car park. Small beaches on either side of the strip of land provide access to the water. Wellers Rock is used for scuba diving, and a natural sand ramp on the beach allows water access for launching boats.

Commercial Use

The jetty is well used by a number of commercial operators. This commercial use can place pressure on the area and facilities.

Management Issues

Parking

There is limited parking at both Wellers Rock and the jetty. There is a general desire from the community for increased parking areas for vehicles and trailers.

Options for parking will be given further consideration where there is a proven need.



5.12 Te Rauone Recreation And Esplanade Reserve (Te Rauone Beach Domain)

Description

Te Rauone Reserve is located on Harington Point Road between Wellers Rock and Taiaroa Head.

Landscape

Te Rauone Reserve lies between the Harington Point and Wellers Rock headlands. The hills behind the bay are generally pasture with intermittent stands of macrocarpa and bush. Residential properties line the road side.

The Reserve is a mixture of exotic and native plantings, open space, and dunes bordering the beach. Large trees in the reserve are limited to Pinus radiata and Eucalyptus. Marram grass and young Ngaio trees dominate the dunes. However, there is a mix of vegetation on the dunes, including Pikao (*Desmoschoenus spiralis*) beside the accessway.

The beach is crescent shaped and stretches between the two headlands, with a north west aspect. At high tide the beach is narrow with only a few metres remaining exposed at the foot of the dune. From the beach, views are across the harbour to Aramoana and the mole, as well as to Port Chalmers.

Cultural Values

Te Rauone (current reserve location) was the site of a large village. As the beach has eroded back since the 19th century, the sand dunes now occupy the early village site. Te Ruatitiko was another important village back from the beach near Te Rauone. The removal of bush cover saw the mass movement of sand that eventually overran the Te Ruatitiko village site (ORC & DCC 1991a).

The 'Regional Plan: Coast For Otago' (Otago Regional Council, 2000) identifies this area as having Kai Tahu cultural and spiritual values. The Kai Tahu ki Otago Natural Resource Management Plan list Iwi site No. J44-A32 as being in the general location of Te Rauone beach.

The beach has Tuaki (cockle) beds that are used for the collection of kai moana by local Runanga.

Recreation Values

The reserve provides important open areas and access to the beach. Areas of grassed open space, interspersed with vegetation, are available for passive recreation activities such as picnicking, walking, and exploring. The beach provides ample opportunities for passive recreation and access to the harbour.

Ecological Values

Yellow-eyed penguins occasionally roost on the beach and dune area. During public consultation, concern was expressed about the potential for dogs to attack penguins, hence dogs should be prohibited on the beach. Dog owners will be encourage to keep dogs on leads, especially at certain times, when birds are most vulnerable.

Te Rauone has significant entomological values, having been identified as a key site for native Lepidoptera (ORC & DCC, 1991b). Of particular local significance is a population of an undescribed copper butterfly that feeds on an extensive area of *Muehlenbeckia australis* in the Reserve.

Management Issues

Erosion

Te Rauone beach is subject to a range of coastal and estuarine processes that have changed as a result of harbour works over the past 100 years. Sand is supplied to Te Rauone beach from the open coast during the flood tide, deposited on the tidal flats due to reduced current velocities and reworked onto the beach by wave action. The beach orientation generally reflects its north west wave direction. The slightly convex shape of the beach is uncharacteristic for pocket beaches. It suggests that either the beach is not in equilibrium, hence erosion of the sand and movement of sand from one end to the other will continue, or the modifications by various harbour works have produced an irregular shoreline configuration (Tonkin & Taylor 1998).

The cause of beach erosion is impact from northerly storms combined with an eastward shift in the harbour mouth channel. From reviewing past surveys and reports, it appears that the shift in the harbour mouth channel did occur in response to harbour works (Tonkin & Taylor 1998).

Johnstone & Henderson (1993) suggest that the onset of instability of the Te Rauone beach appears to have coincided with the construction of the Aramoana Mole, which was started in 1884 and completed to its current dimensions in 1935. With the construction of the Mole, a number of processes changed which could have contributed to this instability. Sand supply to the harbour from Spit Beach, which previously was transported south to the harbour entrance by local near shore littoral currents, was cut off. Hydraulic conditions at the harbour entrance changed rapidly resulting in the southward growth of the Aramoana Spit, forcing the entrance channel eastward.

To prevent further eastward movement of the channel, two clay groynes faced with rock were constructed at Te Rauone between 1905 and 1909, and another two located further west. The purpose of the groynes was to reduce scour on the outside of the channel by deflecting the current back into the main channel. This appeared to have been successful in slowing down the

erosion at the southern end of Te Rauone Reserve, with the Mean High Water Mark (MHWM) retreating only 25-35m between 1904 and 1950 at a rate of 0.5-0.7m/yr. During the same period, the northern end of the reserve accreted, with rates of advance of the MHWM up to 0.6m/yr. This pattern of shoreline behaviour appears to be due to the combined effects of groynes altering wave behaviour and energy levels close to the shore. In addition, northern groynes trapped southward moving material then reworked these on to the shore at the northern end of the reserve. As a result the Te Rauone bay has changed from a concave to a convex shape (Tonkin & Taylor 1998).

However, since 1950, there has been a reversal of the trends of shoreline movement at Te Rauone beach with the southern end accreting, and the central and northern ends eroding. This trend is shown in the movement of the MHWM and the dune vegetation line. The southern end of the reserve has accreted continuously since 1950 at rates of around 1m/yr, while the northern end has eroded continuously (except for in the early 1980's) with a net retreat of the vegetation line between 1958 and 1997 of 10-15m and at a rate of 0.25 to 0.4m/yr (Tonkin & Taylor 1998).

Beyond the northern boundary of the Reserve, residents have placed a number of piece-meal coastal protection works along the foreshore to protect their dwellings. North of these dwellings, a rock wall protects the road to Taiaroa Head (Tonkin & Taylor 1998).

At the time of the Tonkin and Taylor Report in 1998, the dune line at the Reserves' northern boundary was 5-8m inland of the adjacent beachfront retaining wall. Since then, there has been continued accelerated erosion resulting in the adjacent property owner adding to the revetment to prevent it from being outflanked. The area of accelerated erosion now extends approximately 20m into the reserve (Todd, 2002).

The pattern of accelerated erosion at the end of a hard structure is commonly referred to as the 'end wall effects'. At Te Rauone this occurs for two reasons. The first being the lack of supply of sediment from the northern beaches due to the presence of the structures. Secondly, reflection and diffraction of wave energy off the largely impermeable protection structures (Tonkin & Taylor 1998).

Tonkin & Taylor (1998) indicate that if existing coastal processes continue, the following future changes are expected to occur at Te Rauone Reserve:

Southern End: Continued sediment supply from the tidal flats and from the northern beach will result in continued advance of the southern beach until a dynamic equilibrium position is reached. Within this

general accretion trend, there will be episodes of erosion during northerly storms that can directly impact this end of the beach.

Central Section: Continued slow rates of erosion as the beach continues to adjust to a new equilibrium concave shape from the south and new erosion regime from the north.

Northern End: In the short-term, continued accelerated erosion due to 'end wall effects' of coastal protection works and a lack of sediment supply as a result of these works. In the longer term, rates of erosion are likely to reduce.

Toilet Facilities

The Otago Peninsula Lions Club installed the toilet facility on the Reserve in 1979. The toilets are cleaned and checked regularly, and septic tanks emptied by the Council contractors as required. The removal of the toilet when it reaches the end of its useful life is appropriate. With improvements in modern toilet systems, enclosed septic tank toilets are no longer ideal. Replacing the toilets with a more environmentally appropriate, and better system, will be considered with any long-term proposals and consultation.

Local residents have indicated that people camping on the reserve do not use the toilet, and instead foul on the Reserve. Camping is not permitted on reserves. In accordance with the section on 'Camping' in the *Reserves Management Plan–General Policies* the public are encouraged to seek enforcement under the Reserves Act 1977, if they have concerns about illegal camping.

Beach Access

Beach accesses may be periodically or permanently closed if sand erosion makes them unsafe. Any modification to the beach accesses should reflect the recommendations in the Council's coastal consultant's report (Todd, 2002) or their reviews.

Enhancement

Pikao (Desmoschoenus spiralis) plantings on the reserve have established well and assist with the stability of the dunes. Plantings occurred through partnerships and co-operation between the Council, Yelloweyed Penguin Trust, Te Runanga Otakou, Department of Conservation, Conservation Corp and other volunteer groups. Further plantings of Pikao, and other native species, would continue to enhance and benefit the Reserve.

Interpretation signage regarding wildlife and natural beach processes may be appropriate for the reserve and would assist with visitor education.





6 Appendix

6.1 Reserve Status List

		agement Plan—Rese	1			
Appellation	Status	Encumbrances	Controlled and Managed/ Vested in the DCC/ Fee Simple	Classified	Officially Named	Certificate of Title Reference
Andersons Ba	y Inlet				j.	
Section 12 Block II Andersons Bay Survey District 14.3663 ha	Fee Simple		Council owned - fee simple	N/A	N/A	CT OT11B/1048
Green Recreat	ion Reserve			1		
Section 55, Block I, Lower Harbour West Survey District 0.0523 ha	Recreation Reserve G. 1985 p3056 All GN 640789		Vested by G 1986 p3942 All GN 665627	Recreation Reserve G 1986 p4621 All GN 667352/1	Green Recreation Reserve G 1986 p4621 All GN 667352/1	CT 40978
	Recreation Rese		1	1	1	
Domain Town of Port Chalmers 8.9876ha	Recreation Reserve The Reserves and Other Lands Sale Disposal and Enabling And Public Bodies Empowering Act 1901, Section 45	Not able to sell or lease. Refer to 1901 Act	Vested in the DCC in terms of Section 26A(1) of the Reserves Act 1977. G 1980 p 221 All GN 530060	Recreation Reserve G.1980 p 221 All GN 530060	No	Balance CT OT 129/208
Broad Bay Rec	lamation					
Section 1 & 2, SO 23874 0.3461ha	Fee Simple		Council owned Fee Simple	N/A	N/A	CT 37632
Kitchener Stre	et					
Lot 2 DP 20138 0.5668 ha	Fee Simple estate held by Chalmers Properties Ltd. Leased to The Dunedin City Council.	Subject to Part II of the Port Companies Act 1988, and Right to Drain Sewage and Convey Water cre- ated by Document 680552.6.	Leasehold interest created by Lease 680552.7 which expires in 2006	N/A	N/A	Leasehold Title CIR 32037. Fee simple CT OT11B/642 in the name of Chalmers Properties Ltd
Lot 1 DP 20138 0.1346 ha	Fee Simple estate held by Chalmers Properties Ltd. Leased to The Dunedin City Council.	Appurtenant hereto is the Right to Drain Sewage and Convery Water created by Document 680552.6. The Lease is subject to an area of Railway Siding restricting the Lessees activities as set out in Lease 680552.6	Leasehold interest created by Lease 680552.6 which expires in 2006.	N/A	N/A	Leasehold Title CIR 8074. Fee simple CT OT11B/641 in the name of Chalmers Properties Ltd

Macandrew B			Eincul	NT/A	NT/A	CT 40077
Section 64 SO 22074	Fee Simple		Fee simple	N/A	N/A	CT 40977
0.7300 ha						
-	planade Reserve			,		
Lot 2 DP 23139 1.05ha	Local Purpose Reserve (Esplanade) created on deposit of DP 23139 on 21 July 1993		Vested in the DCC on deposit of DP 23139 on 21 July 1993.	Local Purpose Reserve (Esplanade), Dunedin City Council Resolution of 3 April 2002. Doc. 5295489.1	No	CT OT15B/53
	creation Reserve			1		
Lot 1 DP 6488 4.1885 ha	Recreation Reserve G 1951 p 1735 part GN 6120	Subject to the provisions of the Otago Heads Maori Reserve Road Act 1908 as affected by Section 118 of The Native Purposes Act 1931. Subject to Section 59 Land Act 1948. Subject to Part 9 of the Ngai Tahu Claims Settlement Act 1998.	Vested in the DCC in terms of Section 26A(1) of the Reserves Act 1977 by G. 1986 p 4620 All GN 667351/1	Recreation Reserve G 1986 p4520 All GN 667351/1	Te Rauone Recreation Reserve G 1986 p4520 All GN 667351/1	CT OT 350/227
Te Rauone Esp	olanade Reserve					
Lot 2 DP 18598 0.5050 ha	Local Purpose Reserve (Esplanade) created on deposit of DP 18598 on 18 December 1984		Vested in the DCC on deposit of DP 18598 on 18 December 1984	Local Purpose Reserve (Esplanade) Dunedin City Council Resolution of 23 February 1987. Doc. 5301285.1	No	CT 40236
Vauxhall Re						
Section 14, Block IV, Andersons Bay Survey District. 0.2790 ha	Fee Simple	Subject to Electricity Substation Easement by Transfer 5004072.1	Fee simple	N/A	N/A	CT OT9A/219

6.2 Aquatic Facilities List

Location	Asset Name	Facility owner	Land owner or adjoining land owner	Land Status or adjoining land status	Туре	Street Address	Inventory Number	Available for public use at all times?*
Deborah Bay	Deborah Bay Dinghy Ramp	Dunedin City Council	Dunedin City Council	Road Reserve	Ramp	Aramoana Rd	6474/49/10	Yes
Deborah Bay	Deborah Bay Marina	Dunedin City Council	Dunedin City Council	Road Reserve	Marina	Aramoana Rd	6474/50/10	Yes
Carey's Bay	Carey's Bay Jetty	Dunedin City Council	Port Otago Ltd	Fee Simple	Jetty	Aramoana Rd	6470/48/10	Yes
Carey's Bay	Carey's Bay Ramp	Dunedin City Council	Port Otago Ltd	Fee Simple	Ramp	Aramoana Rd	6470/49/10	Yes
Port Chalmers Recreation Reserve	Back Beach Boat Ramp	Dunedin City Council	Dunedin City Council	Vested recreation reserve	Ramp	Wickliffe Tce	6469/49/10	Yes
Port Chalmers Recreation Reserve	Back Beach Jetty No1	Dunedin City Council	Dunedin City Council		Jetty	Wickliffe Tce	6469/48/11	Yes
Port Chalmers Recreation Reserve	Back Beach Jetty No2	Dunedin City Council	Dunedin City Council		Jetty	Wickliffe Tce	6469/48/13	Yes
Port Chalmers Recreation Reserve	Back Beach Pontoon No1	Dunedin City Council	Dunedin City Council		Pontoon	Wickliffe Tce	6469/48/10	Yes
Port Chalmers Recreation Reserve	Back Beach Pontoon No2	Dunedin City Council	Dunedin City Council		Pontoon	Wickliffe Tce	6469/48/12	Yes
Port Chalmers Recreation Reserve	Port Chalmers Yacht Club Jetty	Port Chalmers Yacht Club	Dunedin City Council	Vested recreation reserve	Jetty	Wickliffe Tce		Yes
Port Chalmers Recreation Reserve	Terra Nova- Monowai Sea Scouts Wooden Ramp	Terra Nova- Monowai Sea Scouts	Dunedin City Council	Vested recreation reserve	Ramp	Wickliffe Tce	N/A	No
St Leonards	St Leonards Yacht Club Wooden Jetty	St Leonards Yacht Club	Tranzrail	Main Trunk Line	Jetty	Ravensbourne Rd	N/A	No
St Leonards	St Leonards Yacht Club Wooden Ramp	St Leonards Yacht Club	Tranzrail	Main Trunk Line	Ramp	Ravensbourne Rd	N/A	No
Ravensbourne	Ravensbourne Yacht Club Jetty	Ravensbourne Yacht Club	Port Otago Ltd	Endowment land	Jetty	Ravensbourne Rd	N/A	No
Ravensbourne	Ravensbourne Yacht Club Ramp	Ravensbourne Yacht Club	Port Otago Ltd	Endowment land	Ramp	Ravensbourne Rd	N/A	No
Harbour Basin	Harbour Basin Jetty/ Pontoon	Port Otago Ltd	Port Otago Ltd	Endowment land	Jetty	Wharf St	N/A	Yes
Harbour Basin	Custom House Quay	Dunedin City Council	Dunedin City Council	Recreation Reserve	Wharf	Wharf St	0982/50/10	Yes

Location	Asset Name	Facility owner	Land owner or adjoining land owner	Land Status or adjoining land status	Туре	Street Address	Inventory Number	Available for public use at all times?*
Harbour Basin	Custom House Quay Pontoon	Dunedin City Council	Dunedin City Council	Recreation Reserve	Pontoon	Wharf St	0982/48/10	Yes
Kitchener St	Otago Rowing Club Ramp	Otago Rowing Club	Port Otago Ltd lessor; Dunedin City Council lessee; Club sub- lessee	Leasehold	Ramp	Kitchener St	N/A	No
Kitchener St	Boating Club Ramp	Otago Boating Club	DCC City Property	Freehold	Ramp	Kitchener St		No
Kitchener St	Sea Scouts Jetty	Navy League of NZ - Otago Branch	DCC City Property	Freehold	Jetty	Kitchener St		No
Kitchener Street Reserve	Kitchener Street Ramp	Dunedin City Council	Port Otago Ltd lessor; Dunedin City Council lessee	Leasehold	Ramp	Kitchener St	0225/49/10	Yes
Bayfield Park Carpark	Bayfield Jetty	Dunedin City Council	Dunedin City Council	Fee Simple	Jetty	Shore St	1080/48/10	Yes
Bayfield Park Carpark	Bayfield Ramp	Dunedin City Council	Dunedin City Council	Fee Simple	Ramp	Shore St	1080/49/10	Yes
Vauxhall Recreation Reserve & adjacent area	Andersons Bay Scout Group Ramp	Dunedin City Council	Dunedin City Council	?	Ramp	Portobello Rd	1445/49/12	Yes
Vauxhall Recreation Reserve & adjacent area	Vauxhall Yacht Club Wooden Decking	Vauxhall Yacht Club	Dunedin City Council	Fee Simple	Decking	Portobello Rd	N/A	Yes
Vauxhall Recreation Reserve & adjacent area	Vauxhall Yacht Club Floating Steel Pontoon	Vauxhall Yacht Club	Dunedin City Council	Fee Simple	Floating Pontoon	Portobello Rd	N/A	Yes
Vauxhall Recreation Reserve & adjacent area	Vauxhall Yacht Club Ramp #1 (northern)	Dunedin City Council	Dunedin City Council	Fee Simple	Ramp	Portobello Rd	1445/49/10	Yes
Vauxhall Recreation Reserve & adjacent area	Vauxhall Yacht Club Ramp #2 (southern)	Dunedin City Council	Dunedin City Council	Fee Simple	Ramp	Portobello Rd	1445/49/11	Yes
Glenfalloch	Glenfalloch Jetty	Dunedin City Council	Dunedin City Council	Fee Simple	Jetty	Portobello Rd	1420/48/10	Yes

Location	Asset Name	Facility owner	Land owner or adjoining land owner	Land Status or adjoining land status	Туре	Street Address	Inventory Number	Available for public use at all times?*
Macandrew Bay Recreation Reserve	Macandrew Bay Beach	Dunedin City Council	Dunedin City Council	Fee Simple	Artificial Beach	Portobello Rd	1280/47/10	Yes
Macandrew Bay Recreation Reserve	Macandrew Bay Ramp	Dunedin City Council	Dunedin City Council	Fee Simple	Ramp	Portobello Rd	1280/49/10	Yes
Macandrew Bay Recreation Reserve next to ramp	Macandrew Bay Yacht Club Jetty #1	Macandrew Bay Yacht Club	Dunedin City Council	Fee Simple	Jetty	Portobello Rd	N/A	Yes
Macandrew Bay Recreation Reserve not immediately adjacent to ramp	Macandrew Bay Yacht Club Jetty #2	Macandrew Bay Yacht Club	Dunedin City Council	Fee Simple	Jetty	Portobello Rd	N/A	Yes
Broad Bay Recreation Reserve	Broad Bay Beach	Dunedin City Council	Dunedin City Council	Fee Simple	Artificial Beach	Portobello Rd	1955/47/10	Yes
Broad Bay Recreation Reserve	Broad Bay Jetty	Dunedin City Council	Dunedin City Council	Fee Simple	Jetty	Portobello Rd	1955/48/10	Yes
Broad Bay Recreation Reserve	Broad Bay Pontoon	Dunedin City Council	Dunedin City Council		Pontoon	Portobello Rd	1955/48/11	Yes
Broad Bay Recreation Reserve	Broad Bay Yacht Club	Broad Bay Yacht Club	Dunedin City Council	Fee Simple	Ramp	Portobello Rd	N/A	No
Portobello	Portobello Beach	Dunedin City Council	Dunedin City Council	Road Reserve	Artificial Beach	Portobello Rd	1964/47/10	Yes
Weller's Rock	Wellers Rock Jetty	Dunedin City Council	Dunedin City Council	Road Reserve	Jetty	Portobello Rd	1415/48/10	Yes

6.3 Leases and Easements held by Council

Reserve	Lessor	Legal Description	Area	Comments	Туре
Kitchener Street Recreation Reserve	Chalmers Property Group	Lot 2 DP 20138 CT 11B/642	0.5668	ROW 680552/8; Leased to JP's Building Supplies and Water-cooled Sports	Open Space (Foreshore)
Kitchener Street Recreation Reserve	Chalmers Property Group	Pt Lot 1 DP 20138			Open Space (Foreshore)
Port Chalmers Recreation Reserve (Back Beach)	Port Otago Ltd	Lot1 DP 24989			Car Park

6.4 List of existing or proposed leases/licences on reserves

Reserve	Occupier	Type of occupation	Building Ownership	Agreement Type	Area m2	Term	Expiry Date
Broad Bay Reclamation	Broad Bay Boat Club	Rigging area	N/A	License		5	Lease to be negotiated
Kitchener Street	Water Cooled Sports	Shop	Lessee	Lease		6	1-Oct-1999
Macandrew Bay Reserve	Macandrew Bay Boating Club	Land	Lessee	Lease	0.0168	14	12-Sep-2015
Port Chalmers Recreation Reserve	AR Leckie and A						
Recreation Reserve	Woolley	Boat Shed	Lessee	Licence	0.0050	Yearly	Yearly
Port Chalmers Recreation Reserve	WEJ Lewis	Boat Shed	Lessee	Licence	0.0050	Yearly	Yearly
Port Chalmers Recreation Reserve	R N Hutton	Boat Shed	Lessee	Licence	0.0050	Yearly	Yearly
Port Chalmers Recreation Reserve	PW Innes	Boat Shed	Lessee	Licence	0.0050	Yearly	Yearly
Port Chalmers Recreation Reserve	BF Law	Boat Shed	Lessee	Licence	0.0050	Yearly	Yearly
Port Chalmers Recreation Reserve	I H McKay	Boat Shed	Lessee	Licence	0.0050	Yearly	Yearly
Port Chalmers Recreation Reserve	DJ Clark	Boat Shed (2)	Lessee	Licence	0.0050	Yearly	Yearly
Port Chalmers Recreation Reserve	Philips, D. and Boreham, P.	Boat Shed	Lessee	Agreement			
Port Chalmers Recreation Reserve	Dunedin City Council, Aquatic Services	Port Chalmers Pool	DCC	Under investiga- tion			
Port Chalmers Recreation Reserve	Port Chalmers Bowling Club	Clubrooms and greens	Lessee	Lease	0.2148	14 yrs	1-Jul-2015
Port Chalmers Recreation Reserve	Port Chalmers Yacht Club	Boat Shed	Lessee	Licence	0.0050	Yearly	Yearly
Vauxhall Reserve	Vauxhall Yacht Club	Clubrooms	Lessee	Lease		14	Lease to be negotiated

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