



**GREAT LAKE TAUPŌ**  
Taupō District Council

# South Western Bay Settlements Reserve Management Plan



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## **PART 1 INTRODUCTION**

Lake Taupō, the catchment for the central volcanic plateau, is the largest freshwater lake in the Southern Hemisphere. Nestled around the lake are many beautiful settlements which offer homes, holidays and recreational opportunities for people of the Taupō District, New Zealand and the world.

Hidden within the south western bays of Lake Taupō, Pukawa, Omori, Kuratau and Whareroa boast some of the most spectacular north-east facing landscapes with lake views in the Taupō District. These settlements are popular tourist and holiday spots for New Zealanders and overseas visitors, offering panoramic views of the lake and providing access to the some of the best fresh water recreational opportunities in the world.

For the locals and visitors to this area the reserve network is central to the tranquil, green, hideaway atmosphere that is apparent to anyone arriving within one of these settlements. For the permanent residents the reserves contribute significantly to the quality of life, especially given that they are some of the few public facilities provided within the settlements. During the summer and long weekends the reserves become beacons of recreational pursuits; both associated with and separate from the lake.

Many of the smaller reserves which wrap around the lakeshore or meander through the settlements are owned and managed by Taupō District Council. However there are a number of larger reserves which are owned and managed by the Department of Conservation. Many of these reserves connect to each other and therefore provide continuous links both recreationally and ecologically. Together these reserves represent much of what gives these settlements their character and their management needs to recognise their recreational, amenity, ecological, historical and cultural values.

### **PURPOSE OF THIS RESERVE MANAGEMENT PLAN**

The Reserves Act 1977 requires the development of management plans for all reserves. The exception to this is local and government purpose reserves, however due to the value that many of the local purpose reserves have to the community it is useful to also include these within the relevant reserve management plan.

Reserve management plans outline Council's general intentions and provide direction for the use, maintenance, protection and development of its reserves. They seek to balance the protection of natural resources and cultural values with the provision of recreational opportunities that are relevant to the needs of users, within the limits of the resources available.

The process of preparing a management plan provides the public with opportunities to contribute in the development of the plan. The consultation process of developing a reserve management plan is particularly important as it is the users of the reserve who will be affected by decision making guided by reserve management plan policy. Public involvement provides Council with an understanding of relevant local issues and reserve values from people who are familiar with and use the reserves. The process is outlined in Appendix 1.

This management plan is the first management plan to be developed to manage Council reserves in the south western bay settlements area, although there was a Taumarunui County Council plan in place for Pukawa Bay at the time of amalgamation in 1989. This reserve management plan will become the key document used to make decisions on the management of the reserves.

The management plan, once adopted, will be kept under continuous review so that it adapts to changing circumstances, or in accordance with increased knowledge.

## **STATUTORY REQUIREMENTS AND POLICY CONTEXT**

Reserve management planning is guided by several pieces of legislation and by the broader aims, objectives and policies of Council, including those developed in the District Plan and Long-Term Plan. Various non-statutory planning documents relevant to reserves management also provide direction for the objectives and policies contained in management plans. These documents have been considered by the community and endorsed by Council. They represent a set of commitments to a number of outcomes. This management plan must have regard to the intentions of these documents.

### **Statutory Requirements**

Key documents related to the statutory framework within which this management plan has been prepared are:

#### ***Reserves Act 1977***

This is the primary legislation for administering reserves. The purpose of this Act is:

- providing for the preservation and management of areas for the benefit and enjoyment of the public
- ensuring, as far as possible, the survival of all indigenous species of flora and fauna
- ensuring, as far as possible, the preservation of access for the public
- providing for the preservation of representative samples of all classes of natural ecosystems and landscape
- promoting the protection of the natural character of the coastal environment and the margins of lakes and rivers.

In practice, the Reserves Act provides key statutory processes for developing and amending a reserve management plan, granting leases or licences, and other processes involving the management and control of reserves. The Reserves Act also provides statutory powers of enforcement for offences on reserve land.

The Reserves Act gives key statutory powers to the Minister of Conservation, the Administering Body, and the “Commissioner”. Today, many of the powers of the Minister of Conservation have been delegated to the Administering Body which allows Council to manage its reserves autonomously.

#### ***Resource Management Act 1991***

The Resource Management Act 1991 (RMA) is a regulatory tool which applies to the management of land. The Act’s purpose is “to promote the sustainable management of natural and physical resources”.

Section 6 (Matters of National Importance), section 7 (Other Matters) and section 8 (Treaty of Waitangi) set out matters that are of importance to the management of land. Of these, the following are particularly relevant to reserve management:

- preservation of the natural character of the coastal environment, wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development
- protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development
- maintenance and enhancement of public access to and along the coastal marine areas, lakes and rivers

- the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga
- kaitiakitanga
- the ethic of stewardship
- maintenance and enhancement of amenity values
- maintenance and enhancement of the quality of the environment.

### ***Taupō District Plan***

In meeting its responsibilities under the Resource Management Act 1991, Council has prepared a District Plan. This sets out the objectives, policies and rules which control the scale, nature and location of the use and development of land within the Taupō District.

The relationship between the District Plan and the Reserves Act 1977 is complementary. The District Plan recognises the role of management plans under the Reserves Act 1977 in providing effective reserve management.

All of the lakeshore reserves lie wholly or partially within the Foreshore Protection Area. This is a 20-metre-wide strip measured inland from the Nui-a-Tia boundary of Lake Taupō, or 20 metres from the bed of any other identified lake or river. The Foreshore Protection Area is intended to protect the interface between land and water, by preserving the natural character of the District's lakes, rivers and their margins while maintaining public access to these areas. In these areas, land use activities on reserves must comply with the relevant environmental rules and standards.

Within the south western bay settlements there are a number of areas that have been recognised by the District Plan as having important landscape values. The first type is 'outstanding' natural landscapes and features. These are identified in terms of sections 6(a) and (b) of the RMA, and are landscapes that 'stand out' as being exemplary, and of particular remarkable character. These have been categorised together in the District Plan as 'Outstanding Landscape Areas' (OLA). The second type of important landscape area is the 'Amenity' landscapes. These are identified in terms of section 7(c) of the RMA, and have been categorised in the District Plan as "Amenity Landscape Areas" (ALA). These landscape areas may not be quite as exemplary as OLA; however they often contribute to people's appreciation of a location, or provide a 'sense of place' to local communities. There are a number of both OLA and ALA within or adjacent to the south western bay settlements. Lake Taupō itself is also scheduled as an OLA which recognises the very high scenic, community and cultural value placed on the lake.

As well as areas with Landscape values, there are also a number of areas within the south western bay settlements that have been identified as having significant natural values (Significant Natural Areas - SNAs). The ecological significance of these areas means they are either relatively scarce habitat, are representative of natural areas within the District, or comprise habitats for rare or endangered plants or animals. Such areas are valuable to the Community.

### ***Local Government Act 2002***

The Local Government Act 2002 is the legislation under which local authorities operate. The Act enables local decision making by and on behalf of citizens in their local communities to enable democratic local decision-making to meet the current and future needs of its communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a cost effective way.

## ***Regional Policy Statement***

The Waikato Regional Policy Statement provides an overview of resource management issues in the Waikato region. It provides objectives, policies and a range of methods to achieve integrated management of natural and physical resources across resources, jurisdictional boundaries and agency functions, and guides the development of sub-ordinate plans (regional as well as district) and the consideration of resource consents.

This Regional Policy Statement provides a framework for resource use, which enables the regional community to achieve its social, cultural and economic aspirations within the capacity of the environment. Where resource quality is high, it is generally the intention of objectives and policies to retain high resource quality. Where resource quality has been degraded through inappropriate use, the quality of such resources is intended to be improved over time.

## ***Long-Term Plan 2012-2022***

The Taupō District Long-Term Plan is Council's main planning document. The Long-Term Plan (LTP) sets the vision and direction for our district for the next 10 years. It is the strategic planning document for the services, activities and priority projects to be delivered by the council. Under the Local Government Act 2002 the purpose of a long-term plan is to—

- describe the activities of the local authority; and
- describe the community outcomes of the local authority's district or region; and
- provide integrated decision-making and co-ordination of the resources of the local authority; and
- provide a long-term focus for the decisions and activities of the local authority; and
- provide a basis for accountability of the local authority to the community.

## **Policy Context**

Key documents related to the planning context within which this management plan has been prepared are:

### ***Taupō District 2050 - Growth Management Strategy***

Taupō District 2050 outlines where Council would prefer future growth to occur throughout the District, and the nature and scale of such growth. Future growth means greater use of, and increased pressure on, recreational facilities such as reserves.

### ***Asset Management Plan - Parks and Reserves***

The Parks Asset Management Plan shows how Council will manage the maintenance and capital works associated with community assets over time. Assets are the different physical components that together make up a park.

The asset management plan considers, in terms of parks:

- levels of service required
- future demand
- lifecycle management
- financial requirements

- improvements in managing the assets.

Asset management plans respond to, and reflect, the strategic and policy directions set down in reserve management plans. They are a means of implementation of reserve management plan policies through Council operations and investment decisions. The levels of service defined in asset management plans should be consistent with the purpose and intended use of the reserve as provided for in the reserve management plan.

### ***Southern Settlements Structure Plan 2013***

The recently completed Southern Structure Plan identifies the future growth requirements of the southern settlements, including Whareroa, Omori and Kuratau. Pukawa has not been allocated future growth because the existing development is surrounded by reserve land. For Omori and Kuratau future growth areas have been identified behind (away from the lake) existing residential areas. Land has been identified to provide 85 additional sections in Omori and 157 in Kuratau until 2035. A further 332 sections have been identified in Kuratau to meet supply until 2050. In Whareroa land has been identified north of the existing settlement across the Whareroa Stream. This identifies a possible 91 additional lots to meet supply until 2035. These will be developed as driven by demand via a plan change process.

One of the principles of the Structure Plan in relation to the South Western Settlements was that the bush and open space be maintained between the residential areas. This is to ensure that the sense of place and enclosure is maintained. The land identified for development also includes land which is ideal for recreation. New growth will widen the reserve network for the whole community, so that no additional pressure is placed on reserves for passive recreation (such as walking). New growth may create extra demand for the lakeshore reserves. Monitoring of conflict of use will need to occur to ensure this demand can be catered for.

### ***Recreation Strategy 2006***

Strategic direction for Council's involvement in recreation is identified through the Recreation Strategy. The benefits of recreation are widely acknowledged. These range from the more obvious health benefits through to social and economic improvements. □ Individuals who take part in regular physical activity are likely to lead longer, healthier lives. Communities which value recreation and offer a variety of recreation opportunities are likely to value associated positives like teamwork, challenge and volunteering. Reserves contribute significantly to the community's recreational opportunities.

### ***Tree and Vegetation Policy 2014***

The Tree and Vegetation Policy 2014 is an operational document which provides consistency to the decision making for management of vegetation and trees on Council land in the Taupō District. The policy is structured by four main objectives, the provision, management and removal of trees and vegetation and the consideration of relevant information. Trees and vegetation within the south western settlement reserves are directly affected by the policies within this document.

### ***Lake Taupō Erosion and Flood Strategy 2009***

Taupō District Council and Waikato Regional Council, with input from the Tuwharetoa Maori Trust Board, adopted the Lake Taupō Erosion and Flood Strategy in 2009. This strategy identifies and analyses measures to deal with erosion and flood hazards around Lake Taupō.

As part of the process the councils commissioned technical scientific reports to determine the likely causes and the extent of the risks. The strategy sets out roles and responsibilities, recommend actions along with timeframes and costs. The specific policies relevant to the South Western Bay Settlements are discussed in the Key Management Issues section.

### ***2020 Taupō Nui-A-Tia Action Plan***



This project aimed to produce an integrated catchment management plan for Lake Taupō. As part of the project, the Taupō community identified 12 key values to protect the lake. Based on these values, a plan was developed, setting out specific actions for key agencies with responsibility for the lake.

The 2020 Taupō Nui-a-Tia Action Plan identifies management of the foreshore reserves as one of its 12 values. Maintaining public access, opportunities for recreation and good environmental quality are key aspects of foreshore reserves management.

## **ADMINISTRATION OF LAKE TAUPŌ AND ITS ENVIRONS**

This management plan can only address matters specific to the Council reserves. However, Council recognises that many issues are interrelated and that legal boundaries overlap particularly on the lakefront. Where these interconnections are material to this plan they are addressed in the relevant sections.

In terms of lakefront reserve and the intersecting boundaries with the lake and conservation land, the following organisations have separate roles and responsibilities:

- **Taupō District Council** administers many reserves around the lake edge, some owned by Council and others by the Crown. The Council is the lead agency for undertaking foreshore erosion control works.
- The **Department of Conservation** own and manage conservation reserve land around the lake edge. In managing its reserves, DOC's Conservation Management Strategies are the key policy document.
- The Ngati **Tuwharetoa** people were reinstated as the owners of the Taupō lake bed by claim settlement in 1992. This followed on from the Maori Land Amendment and Maori Land Claims Act 1926. The Tuwharetoa Maori Trust Board acts as their Trustee.
- The **Taupō Nui-A-Tia Management Board** helps to administer the bed of Lake Taupō. The board vets all applications for new structures on the lake bed and makes recommendations to the Tuwharetoa Maori Trust Board.
- The **Department of Internal Affairs** manages all of the Crown assets on the bed of Lake Taupō. It also operates the Taupō Harbourmaster's office, which maintains and manages Crown-owned berths and launching facilities around the lake, maintains ski lanes and navigation markers, enforces the Lake Taupō Regulations and Bylaws to control the use of berths and ramps, manages the provision of mooring sites, and is responsible for navigational safety and activity on the lake.
- **Waikato Regional Council** is responsible for the integrated management of natural and physical resources, including control of the use of land to maintain water quality, and maintenance and enhancement of ecosystems in water bodies. This is achieved through methods such as integrated catchment management, sedimentation and erosion control.
- **Mighty River Power** manages the level of Lake Taupō within consented limits to provide seasonal water storage for the balance of the Waikato hydro system downstream of Lake Taupō. They also work closely with Waikato Regional Council to ensure that their management decisions can help to reduce the impact of potential flooding both around the lakeshore and downstream.

## **PART 2    CONTEXT**

### **LOCATION**

The South Western Bay Settlement reserves are located within or near to the settlements of Pukawa, Omori, Kuratau and Whareroa. The area is bounded by the lake to the east and north by road (State Highway's 32 and 41) inland.

The reserves are held under the Reserves Act 1977 and are either owned by Council or owned by the Crown and managed by Council. They have a total area of approximately 170 hectares.

The following maps show the reserves that are covered by the South Western Bay Settlements Reserve Management Plan.

This management plan also covers some access strips which are held by Council as road and not under the Reserves Act 1977.

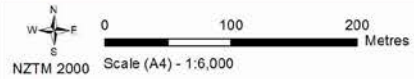
There is no legal requirement for Council to set policy on, or to manage in a particular manner, the land held as road. Both the freehold land and road open spaces, however, contribute to landscape and recreational amenities and should be managed appropriately. This management plan will guide ongoing maintenance and future development of these open spaces.

**MAPS OF THE SOUTH WESTERN BAY SETTLEMENT RESERVES**

Map Key	Reserve Name	Location
A	Whareroa Esplanade Reserve	Whareroa
B	Whareroa Esplanade Reserve	Whareroa
C	Whareroa Tennis Courts	Whareroa
D	Piripi Place Utility Reserve	Whareroa
E	Whareroa Stormwater Reserve	Whareroa
F	Whareroa Road Reserve	Whareroa
G	Whareroa Stormwater Reserve	Whareroa
H	Turangitukua Terrace Reserve	Whareroa
I	Whareroa Esplanade Reserve	Whareroa
J	Te Amio Place Reserve	Whareroa
K	Whareroa Recreation Reserve	Whareroa
L	Kuratau Recreation Reserve	Kuratau Junction
M	Kuratau Local Purpose Reserve	Kuratau Junction
N	Kuratau River Esplanade Reserve	Kuratau
O	Riverpark Drive Reserve	Kuratau
P	Riverpark Drive Reserve	Kuratau
Q	Hiuhiuawai Lakeshore Utility Reserve	Kuratau
R	Te Awha Place Utility Reserve	Kuratau
S	Te Awha Place/Te Waaka Terrace Accessway	Kuratau
T	Te Waaka Terrace Recreation Reserve	Kuratau
U	Whiowhio Reserve	Kuratau
V	Horomatangi Place Accessway*	Kuratau
W	Manunui Street/Hihiuawai Street Accessway*	Kuratau
X	Pukawa Lakeshore Recreation Reserve	Kuratau
Y	Parehopu Street Accessway*	Kuratau
Z	Manunui Street/Motutaiko Street Accessway*	Kuratau
AA	Waipapa Street Recreation Reserve	Kuratau
BB	Hinerangi Place Accessway	Kuratau
CC	Waipapa St Accessway*	Kuratau
DD	Pukawa Lakeshore Recreation Reserve	Kuratau
EE	Omori Recreation Reserve	Kuratau
FF	Pihanga Road Community Reserve	Kuratau
GG	Ihaia Road Recreation Reserve	Kuratau
HH	Kuratau Esplanade Reserve	Kuratau
II	Kaimanawa Street Playground Reserve	Omori
JJ	Omori Scenic Reserve Accessway Strips	Omori
KK	Omori Scenic Reserve Accessway Strips	Omori
LL	Kaimanawa Street Accessway - 1	Omori
MM	Omori Scenic Reserve Accessway Strips	Omori
NN	Omori Scenic Reserve Accessway Strips	Omori
OO	Omori Scenic Reserve Accessway Strips	Omori
PP	Ruru Place Accessway	Omori
QQ	Kaimanawa Street Recreation Reserve - 2	Omori
RR	Kaimanawa Street Accessway - 2	Omori
SS	Kaimanawa Street Recreation Reserve - 2	Omori
TT	Omori Pedestrian Accessway	Omori
UU	Kaimanawa Street Recreation Reserve - 1	Omori
VV	Omori Road/Kaimanawa Street Recreation Reserve	Omori
WW	Omori Road/Kaimanawa Street Recreation Reserve	Omori
XX	Kuharua Place/Omori Road Accessway*	Omori
YY	Kamahi Terrace Accessway	Omori
ZZ	Rangikatea Road Local Purpose Reserve	Omori
AAA	Ngapera Way Local Purpose Reserve (Access)	Omori
BBB	Mohi Scenic Reserve	Omori
CCC	Pukawa South Recreation Reserve	Pukawa
DDD	Pukawa Scenic Reserve	Pukawa
EEE	Pukawa Esplanade Reserve	Pukawa
FFF	Pukawa Reservoir Site Reserve	Pukawa
HHH	Oreti Esplanade Reserve	Pukawa
III	State Highway 41 Local Purpose Reserve	Pukawa

\* Accessways, non-reserve land

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Land leased by Taupo District Council  
 Taupo District Council Reserve  
 Department of Conservation Reserve  
 (Boundaries might not align exactly with property boundaries)

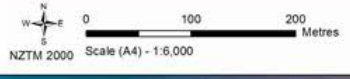
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 Date printed from MXD: never  
 Map: 1317701\_ReservesManagementPlan  
 Author: jkuchlein



**GREAT LAKE TAUPŌ**  
 Taupo District Council

**South Western Bay Settlement Reserves:  
 Whareroa**

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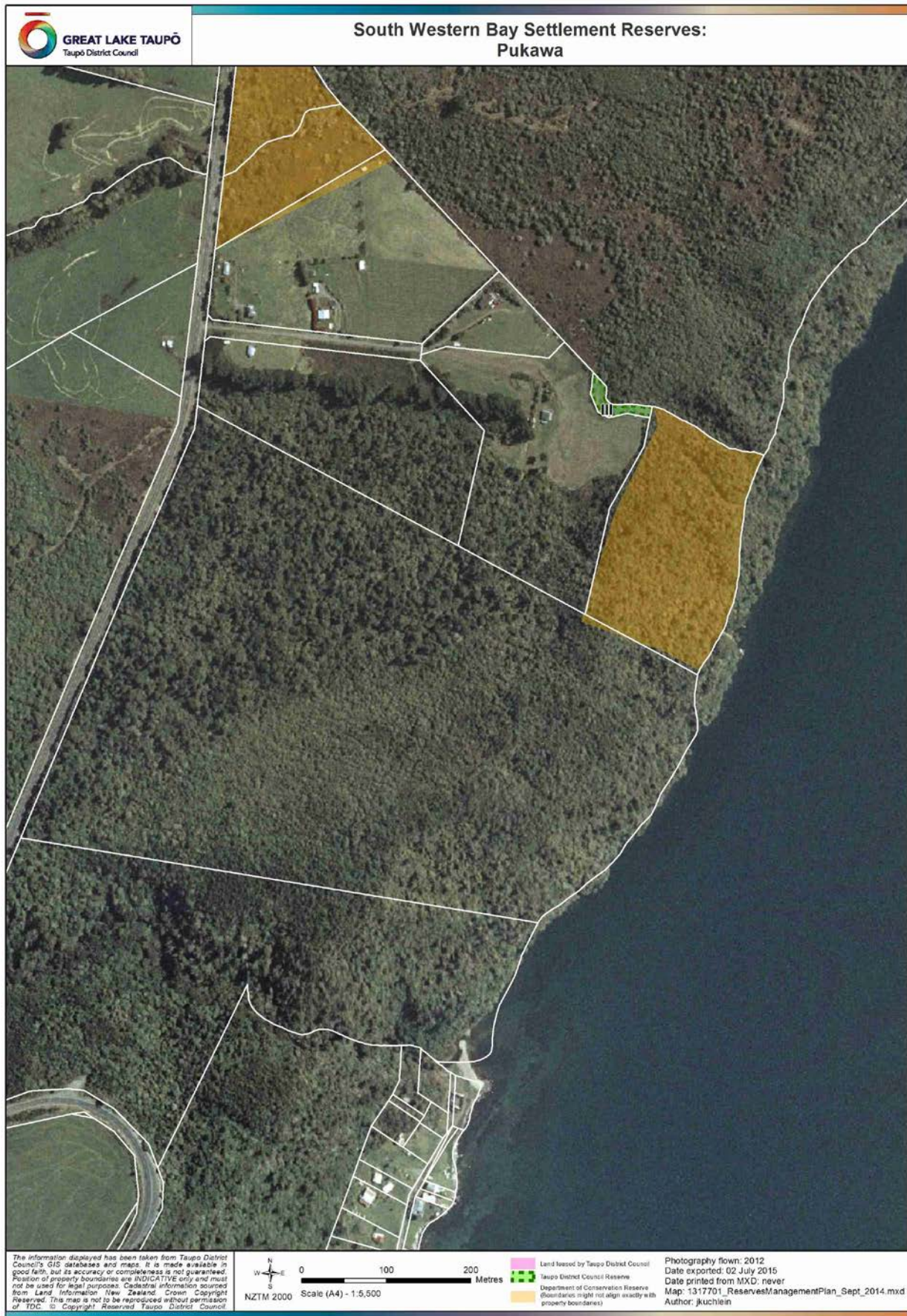
Land leased by Taupo District Council  
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 Date exported: 02 July 2015  
 Date printed from MXD: never  
 Map: 1317701\_ReservesManagementPlan\_Sept\_2014.mxd  
 Author: jkuchlein











## PURPOSE AND CLASSIFICATION OF RESERVES

The details of each one of the South Western Bay Settlement reserves, including its legal description, area classification and any encumbrances are provided in Appendix One.

The Reserves Act 1977 requires that reserves be classified according to their principal or primary purpose. Each classification type has unique management objectives and these must be considered when policy is set. The reserves covered by this management plan are classified as either recreation, local purpose, or scenic reserves.

The purpose of different types of classification are:

Local Purpose Reserves:

*providing and retaining areas for such local purpose or purposes as are specified in any classification of the reserve. (Section 23[1])*

One such local purpose reserve is 'esplanade' as identified in the Resource Management Act 1991. Esplanade reserves or esplanade strips have the purpose of contributing to the protection of conservation values, enabling public access to or along any sea, river, or lake, and enabling public recreational use of the reserve where the use is compatible with the protection of conservation values.

Recreation Reserves:

*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. (Section 17[1])*

Scenic Reserves:

*(a) for the purpose of protecting and preserving in perpetuity for their intrinsic worth and for the benefit, enjoyment, and use of the public, suitable areas possessing such qualities of scenic interest, beauty, or natural features or landscape that their protection and preservation are desirable in the public interest:*

*(b) for the purpose of providing, in appropriate circumstances, suitable areas which by development and the introduction of flora, whether indigenous or exotic, will become of such scenic interest or beauty that their development, protection, and preservation are desirable in the public interest. (Section 19 [1]).*

## HISTORY

### GEOLOGY - *Volcanic beginnings*

Taupō District lies in the Taupō Volcanic Zone which extends from the central plateau mountains, through the volcanic calderas of Lake Taupō and the Rotorua District lakes, out into the Pacific Ocean beyond White Island. Within the zone are five distinct volcanic centres. The local south western bays settlement area lies largely within the Tongariro (andesite) Volcanic Centre south of the Lake, and is dominated locally by Mount Kakaramea's lava and pyroclastics, which extend north to the Kuratau River. The northern end of Lake Taupō is a caldera from the western bays to the Horomatangi Reef (off Waitahanui) and comprises the Taupō (rhyolite) Volcanic Centre. This is a different system of activity known for the Oruanui Eruption which occurred 27,000 years ago. The last Taupō (Hatepe) Eruption is dated as 1800 years ago.

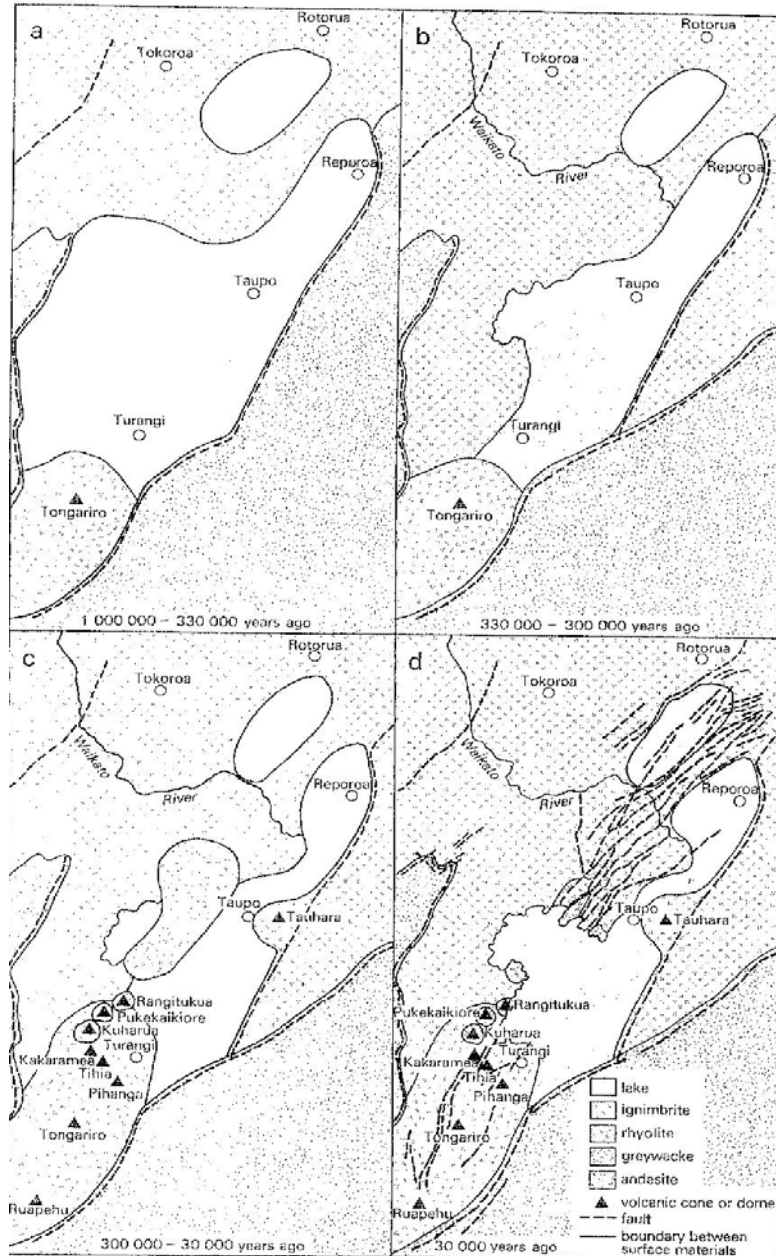
The Taupō (rhyolite) volcanic system is one of the world's super volcanoes. It has produced three of the five largest eruptions in the world in the last million years (Jolly, 2010). There is a third significant volcanic centre in the District, at Maroa, around 30km north of the Lake, parts of which are overlaid with rhyolite activity and also link to the Whakamaru eruptions of around 300ka, which gave rise to the Lake's ignimbrite cliffs.

The immediate backdrop to the south western bay settlements are the Mountains Rangitukua, Pukekaikiore and Kaharua. These volcanic domes have not erupted, but are rhyolite protrusions which have arisen through an older erupted andesite formation which comprises Mounts Kakaramea, Tihia and Pihanga. The underlying formation of these lakeside mountains extends from the Desert Road to the Kuratau River, where its extreme edge underlies the Kuratau Bush Slope (ALA69) and the southern escarpment of the Kuratau River. The totality of these developments is thought to have occurred 300ka to 30ka. However as continuing research by GNS Science, Te Pū Ao and others escalates as to quantity and depth – as it has done in blocks of related subject matter over the last two decades - then ultimately more precise timelines may be determined.

In the interim, Figure 1 that follows has a timeline of 1000ka to 30ka. It is a simplified 1983 diagram of the DSIR (GNS predecessor) but is likely to be refined in due course. It outlines some very complex geological processes as to the probable development of Lake Taupō. It reflects the features and character of the Lake Taupō District today, including the SWBS area, see lower left of panels 'c' and 'd'.

Figure 1

Geological development of Lake Taupō showing possible sequence of development of the lake



Source: DSIR Information Series No 158 (1983) p6

Panel 'a' reflects a large lake designated by researchers as 'Lake Huka' with an estimated surface level of around 360masl, extending beyond both Turangi and Reporoa (completely covering the sites of today's settlements). In the north east there is a second lake under the Horohoro bluffs along the alignment of SH30 Atiamuri to Rotorua. In panel 'b' an uplift of the western bays is reflected. Between the time periods of panels 'b' and 'c', a mountain (or highland) forms in the northern Western Bays area of today. Then the 26.5ka Oruanui eruption occurs and the highland is blown away and Lake Taupō reforms close to today's configuration. At that time the Lake rose around 140 metres to 480/500masl following blockage of the Taupō outlet. The result for the south western bay area was that today's settlements of Pukawa, Omori, Kuratau and Whareroa would have been 140 metres under water - a state that lasted 4000 years. More recently the sites of the settlements areas were up to 34 metres under water following the 232 AD Taupō eruption. Now such lake levels remain etched into the terrain, marked around the Lake by remnants of 'wave action benches'. One 'bench' clearly exists below Te

Waaka Terrace in Kuratau (Wilson, Riggs, Ort, White and Houghton, 1997). Other older foreshore lake levels and 'benchlines' of around 10ka are also seen just west of the Omori Recreation Reserve, and those of 26.5ka can be seen higher up on the maunga (mountain) Pukekaikiore.

## Kaitiakitanga and Taupō District Council Reserves

The majority of Taupō District Council reserves were traditionally utilised and occupied by nga hapū (sub tribes) of Ngati Tuwharetoa. In pre-European times most permanent kainga (settlements) were located around the shores of Taupō Moana (Lake Taupō).

These kainga locations generally made life easier for tangata whenua and served various strategic purposes;

- *Wai Ora* (Fresh water) - Access for drinking and domestic use. This was a fundamental factor for the positioning of kainga.
- *Kai i te awa* (Aquatic foods) - Kai that are found in and around the lake, its water ways and wet lands. The harvest of fresh water species such as; Kokopu, Koaro, Inanga, Koura, etc., were very important as a reliable protein food source.
- *Mahinga kai* (cultivation of crops) - Flood plains and lake foreshore tended to have more fertile soils and better growing conditions for the cultivation of crops. These foreshore locations also gave access to bush areas where there was a plentiful variety of seasonal bird's species. Birds provided a primary protein food source of those times.
- *Haerenga* (travel) - Taupō Moana (Lake Taupō) made transport and trade between hapu and iwi convenient and was very much the preferred mode of transportation. This was via waka (dug out canoe) and later steam vessels. In times of war a Waka Taua (War Canoe) could travel rapidly to reinforce or engage the enemy at any point on the lake.
- *Tauranga waka* (landing place of waka) - These are usually found on any beach associated with a kainga or hunt or mahinga kai areas. Sometime stones and rocks were used to construct landing bays for the waka to be brought up onto the beach in bad weather. Wharewaka (Waka shelters) were build for waka storage and maintenance.
- *Wai ariki* (hot springs) - These locations were prized by hapu and frequented by tangata whenua for domestic, medicinal or spiritual reasons. In many cases these thermal areas were occupied permanently.
- *Sites of cultural significance* - These include; Ana tūturu (caves) and waahi tapu (burial sites, historic battlegrounds, pa sites, places of birth or places of other spiritual rites).
- *Mana whenua* (Territorial rights) - This type of connection to foreshore locations and associated whenua is through conquest and occupation. Whakapapa (genealogy) underpins this relationship. The various hapu of Ngati Tuwharetoa still hold a cultural and spiritual relationship to all of their traditional locations within their rohe (traditional lands of influence) regardless of ownership.
- *Kaitiakitanga* (Stewardship of land / resources) as defined in the Resource Management Act 1991. Tangata whenua still practice this set of principles in relation to their traditional rohe regardless of land ownership. All authorities must take this into account when managing land or resources.

Ngati Tuwharetoa were fortunate that the 'New Zealand Wars' of the 1860's did not result in the loss of vast areas of land by Raupatu (government land confiscations). A significant proportion of the district's total land area is still in unbroken Māori title and still under the direct kaitiakitanga and management of the Māori owners. The majority of this land area is the 'Taupō Nui a Tia Block' which includes the lake bed and lakeshore itself.

Alienation of Maori land and in particular the lake foreshore has occurred during the past 150 years. The 'Native Land Court' (now the Māori Land Court) facilitated these land transactions under the government legislation of the time. Land was also lost by various mechanisms including;

- Non-payment of government survey fees
- Non-payment of rates.
- Court Order for the payment of other historic debts
- Acquisitions under the Public Works Act
- Reserves contribution through the 1966 Taupō Reserves Scheme and other land subdivision
- Directly through the sale of land and freeholding to European title as has occurred in the south western bay settlements.

In summary, it is important to acknowledge that many traditional foreshore locations correspond with public reserves that are under the jurisdiction of either Taupō District Council or other agents of the Crown. In managing these areas, any physical remnants of traditional occupation should be identified and protected if known or accidentally discovered. The cultural and spiritual values of the mana whenua hapu must also be considered and taken into account. Further details of some sites of historic significance are attached in Appendix 3.

### **Settlement of the South Western Bays**

In approximately AD 1500 coastal sites around New Zealand were suddenly abandoned by Maori. This change was caused by a great tsunami which destroyed most of the open coastal settlements. Many tribal genealogies start from this time.

Tuwharetoa first entered Taupō, led by Rakiēpoho and others, but they did not immediately settle. They travelled back and forth from Kawerau, between the coast and the great lake as needs dictated (Grace, 1959). It was under Turangitukua (six generations down from Tuwharetoa) that Uri o Tuwharetoa first established themselves in the rohe.

Te Rangiita (son of Tutetawha) was a warrior chief, for whom a south eastern settlement of the Lake is named. He is referenced in the following Waitangi Tribunal Report extract:

*“Manunui-a-Ruakapanga from whom Ngati Manunui takes its name, was the son of Te Rangiita... So the name Ngati Manunui defines a particular section of Ngati Te Rangiita... whose central places of residence were at Te Rapa & Pukawa.... Manunui's wife was Waiparemo, a granddaughter of Turangitukua... through her father Te Rangitautahanga... On their marriage he conferred large tracts of land at Pukawa, together with the atua (tribal god) Rongomai and the war canoe Te Reporepo,”* - thus providing a significant part of Ngati Manunui's heritage, which includes a dual lineage to those of the Te Arawa. (Report of Waitangi Tribunal National Park Hearings, Wai 1130 Te Kāhui Maunga Chapter 2).

The present day settlement of Whareroa lies outside the rohe of Ngati Manunui. It is the domain of a separate and smaller hapu of Tuwharetoa, Ngati Parekaawa, who also have interests and associations at Mokai in the north of the Taupō district.

Subsequently new pages of history are turned with the arrival of the European and glimpses of the past are found in the writings of early European explorers, Government and settler leaders, plus artists, soldiers, traders and local missionaries. Of these missionaries two are Thomas Samuel Grace who established a Church Missionary Society (CMS) mission at Pukawa (1855 to 1863 under protection of Te Heuheu of Tuwharetoa) and H J Fletcher of the Presbyterian Mission in Taupō. Both gentlemen became fluent in Maori and provide good local historical records of note. Sir John Te Herekīkie Grace, a grandson of Thomas Grace and son of Rangiamohia Te Herekīkie, the last of the senior female ariki line of Ngati Tuwharetoa and leader of Ngati Te Ahou of Tokaanu, chronicled some of these records into a comprehensive history of Tuwharetoa (1959).

Another period record, 1830 to 1880 (Ward 1956), confirms about ten Pa sites identified from the Tongariro River mouth (at Tokaanu) to the Karangahape Cliffs, with important pa having been situated at Pukawa, Kuratau, and Whareroa, the sites within today's residential/holiday settlements and the reserves. Further back, within and along the bush lines of the western Hauhungaroa ranges, are other occupation sites previously used for the gathering of kai (food). Sites of historic significance within the reserves are recorded in Appendix Three.

At Waihi, tangata whenua, with encouragement and assistance from a resident Catholic missionary, rapidly developed a flax ropeway, dairy factory and sawmill, including generation of their own electricity off the waterfall at the settlement. By the early 1900s up to eight other sawmills had operated on the heights beyond Pukawa. Given a beckoning vision of farmland 'just over the horizon', the 'green mantle' - including what matai, rimu and other great forest trees remained amongst the Secondary Vegetation on Plateau - was rapidly denuded by Maori and European alike. However cobalt and other trace element deficiencies (a legacy of the explosive and eruptive geological forces of Tongariro and the central plateau's previous one million years), "led to the problem of bush sickness in sheep and cattle before its cause was identified & corrected." 1(Te Ara Encyclopaedia of NZ) "The requirement for cobalt of ruminants grazing pastures on the pumice soils of the Central Plateau was established in the late 1930's and cobalt top dressing ..... became common place from the mid 1950s." (Hawke, Connor, Johnston, Walker & Addison, 1994) Thus came the opening up of the western bays for more intensive farming following World War II.

Historically much of the land had previously been extensively burnt by early Maori for living purposes (bracken and kumara production). Subsequently it was then burnt for potato production when introduced to Maori by the Europeans, but land was often abandoned after 3 years of cropping (Cameron, 1964 and Tonkin, 2007). It was again burnt to develop livestock farming at Omori and Kuratau around 1951. Ultimately soil erosion on open land and stabilisation then became the next problem so the regional Waikato Valley Authority had to develop soil conservation and catchment plans. Then around 50 years later, extensive pasture development and increased stocking had led to problems with lake nutrients – the nitrogen issue. The significant lake water quality issues resulted in the Waikato Regional Council's 'nitrogen cap' regulations known as Variation 5 (2007). Solving such manmade problems has involved difficult and costly steps that compound on a long list of cyclical, ecological and natural changes that have occurred in the District. In brief, the south western bays area has been a difficult area to farm effectively and this situation likely contributed to the later concept of lakeside urban subdivision, for holiday home development.

## **A NEW WAVE OF DEVELOPMENT**

A unique aspect of the area is that Ngati Manunui and Ngati Parekaawa lost control of their ancestral whenua, but when they regained a more formal ownership in European terms, via the proceedings of the Native Land Court Act 1886 and subsequent enactments, they then re-sold to other New Zealanders. Within the SWBS area the tangata whenua, by process of further partition of their land over 70 years and then ultimately by subdivision in European terms, established the modern holiday settlements that exist today.

One or two baches or houses were developed in the late 1940s but it was in the late 1950's that a new wave of change commenced, with the building of the Kuratau Hydro Power Scheme (commissioned 1962) and tangata whenua commencing subdivision of ancestral areas for urban development at Kuratau. One of the first more urban developments was the subdivision that occurred on Omori Road

immediately south of today's boat ramp. In 1966 the former Taupō and Taumarunui Counties successfully established the Lake Taupō foreshores Reserves Scheme. The project forged retention of a residual green belt and gave rise to the DOC controlled Conservation Estate around the immediate shores of the Lake (from Maori land). Residential development escalated and by 1990 when the area came under Taupō District Council control development had well passed the midpoint of today's existing settlements. Now some 1300 allotments exist within the settlements but only around 10% are occupied by permanent residents. The majority of allotments, being 90%, are occupied for holiday home purposes and contribute significantly to the local economy.

The Reserves of this RMP are an integral part of this environment and came into existence by subdivision processes – initially via Taumarunui County Council under the former Town & Country Planning Acts. Since 1989 Taupō District Council has managed the process via the Resource Management Act 1991. However aspects such as scenic qualities of the area were recognised long before, e.g. the bays at Omori and Pukawa were used as the 'landscape' for his classic film of 'Hei Tiki' as the landscape for a story based loosely on the classic book by Frank Acheson, 'Plume of Arawas' - a 1929 fictional tribute to those of the ancestral waka and their contact with the Ngati Hotu – and earlier people of the south western bays.

Likewise, from 1874, long distance overland colonial travellers from Auckland to Wellington had sailed past the same bays in the steamer SS Victoria, the schooner Dauntless, and the steamers Hinemoa, Tauhara and Tongariro which was launched in 1899. The SS Tongariro continued sailing until 1922 when the highway down the eastern shoreline was fully developed. Travellers assembled and disembarked at the old Tokaanu Wharf, and transferred to or from horse coach to meet with a riverboat south on the Whanganui. A river that perhaps also had its origins for a period of time from Lake Taupō through a depression west of Mt Kuharua - far back in the mists of time.

More recently, Ngati Manunui regained management control of its remnant rural lands from the Government – Te Puni Kokiri. Once again they have reasserted themselves agriculturally under the shadow of Mount Kuharua. Today their Waituhi Kuratau Trust is well on the way to becoming the North Island's largest sheep milk producer. Their progress is based on a genetic breeding programme which has converted a straight Romney breed into an East Friesian composite, inclusive of Awassia Poll Dorset ewes. Now with 4500 to 6000 ewes regularly milked, a milk and yoghurt factory has been established, along with a production partnership with the Waiheke Island Cheese Company. Cuisine awards for the 'Hipi' (Maori for sheep) brand natural sheep yoghurt have followed. Overall, truly innovative farming - significant in revitalising the local economy.

## **RESERVE DESCRIPTIONS**

The following descriptions are intended to give an understanding of the South Western Bay Settlements Reserves network. Please note not all reserves are specifically described.

### **Pukawa**

Pukawa is the most southern of the four settlements and is virtually surrounded by reserves (TDC and DOC). To the north and the south there are large DOC scenic reserves (Kopokonui Stream Scenic Reserve and Omori Scenic Reserve). Along the lakeshore there is an almost continuous strip of TDC reserves (Pukawa South Recreation Reserve and Pukawa Esplanade Reserve). These reserves include toilets, parking, a playground and a boat ramp. The Pukawa South Recreation Reserve includes a flat, tree enclosed area which is a designated dog exercise area.

Pukawa Esplanade Reserve has created some concern amongst the community. It was vested with Taumarunui County Council in 1973 as part of the reserve contribution for subdivision. In the adjacent (Maori owned) block there is an urupa. The area (including the esplanade reserve) holds significant

cultural and heritage values to Ngati Manunui. As a result there are cultural sensitivities about how this reserve is used by the public. An initial proposal within the draft version of this Plan to hand back the reserve to Ngati Manunui met significant opposition amongst the community and was therefore removed from the draft. A process to investigate mechanisms to better reflect the historical and cultural values has been added within the implementation plan.

The settlement is flanked to the west by the largest reserve in all the settlements, the 20ha Pukawa Scenic Reserve. Pukawa Scenic Reserve adjoins the above mentioned DOC reserves and also the TDC Mohi Scenic Reserve. It includes a well developed walking track which can be accessed via Hauraki Terrace or Pukawa Road (via the DOC reserve). The Pukawa Scenic Reserve and the Mohi Scenic Reserve form a Significant Natural Area (SNA) (098) based on them containing examples of forest types (matai-podocarp stand) which are now rare in the Taupō Ecological District. There are also two mistletoe species present (one of which is threatened) in healthy population, and an area of wetland shrubland around the oxidation pond.

Through conservation project efforts of the Pukawa Wildlife Management Trust and DOC, the native vegetation on the reserves supports a thriving habitat for many native bird species.

The Oreti Esplanade Reserve is an approximately 2ha lakeshore reserve which is set apart from the other TDC reserves and is located at the end of Mission House Drive (private road). It adjoins the DOC Kopokonui Stream Scenic Reserve, and is part of the same SNA (094). The reserve is accessible via a track from the end of Mission House Drive or from the lakes edge.

### **Omori**

Omori's reserve network is predominantly made up of smaller reserves which provide walking access throughout the settlement. Idas Park includes a playground, and the Kaimanawa Street Recreation Reserve includes a tennis court. The Omori's lakeshore is predominantly steep cliff face and is a DOC Reserve (Omori Scenic Reserve) and also covered by SNA302 and OLA60. OLA60 covers the lakeshore area from Waihi to the Whakaroa Peninsula. It is described as one of the most scenic and undeveloped parts of Lake Taupō, characterised by sheer cliffs, native vegetation and small secluded bays. The Omori Stream gully borders the settlement to the north and this is also a DOC reserve (Omori Conservation Area).

### **Kuratau**

The Kuratau settlement's lakeshore is encircled by a continuous ring of TDC reserves. At the southern end the Kuratau Esplanade Reserve includes a narrow strip of lakeshore but also cliffs and elevated cliff top land. These are split by an area of secondary bush. There is walking access to the lakeshore at the north and south ends of the reserve, and one steep set of steps from the clifftops. The Pihanga Road Community Reserve adjoins the Kuratau Esplanade Reserve but runs perpendicular to the lakeshore and back into the residential area. It contains secondary regenerating bush, and provides access from Pihanga Road to the lakeshore and the esplanade reserve.

The north end of the reserve adjoins the Pukawa Lakeshore Recreation Reserve (so named because it was originally from the Pukawa 4C3 block). It is all lakeside reserve, flat as far as Pihanga Road and beyond that then includes a steeply rising cliff face with a beach at the base of the cliff. Pukawa Lakeshore Recreation contains toilets (at the Kuratau ramp) sealed and grassed parking areas and a tennis court and playground at the northeast end of Parehopu Street. Water ski lanes and a 'swimming only' area are provided. There is a separated dog exercise area and the reserve contains a fresh water pumping station and sewerage infrastructure.

The north end of the Pukawa Lakeshore Recreation Reserve is bordered by the Kuratau River. There is a gap in reserve land adjacent to the river for a small area, then Whiowhio Reserve cuts in from the



river and provides access back to Te Rae Street and the 'unformed' portion of Tukino Road. Whiowhio Reserve is allegedly named after a whistling gentleman who was previously connected with the land. The Reserve, which lies in the Kuratau River flood plain, includes an area of grassland with eucalypt trees, which have been a habitat for native endangered bats, and newly planted kahikatea trees. A metaled parking area, playground, picnic tables, seats and a toilet are provided. On the north side of Kuratau River is the DOC Mt Rangitukua Scenic Reserve.

The Kuratau River Esplanade Reserve runs upstream from Whiowhio Reserve and includes a popular walking track. There is no legal access at its west (upstream) end but an informal track exists across private land to Riverpark Esplanade Reserve. The reserve is part of SNA064 and 232 and comprises of indigenous riparian vegetation interrupted by wetland communities.

Further upstream the Riverpark Drive Reserve continues along the stream and also back to the south to join Te Awha Place and Riverpark Drive. Riverpark Drive Reserve is a grassed esplanade strip with some clumps of trees and Council plantings along the access strip. It also adjoins part of the DOC Rangitukua Scenic Reserve. Walking access continues to the south along the Te Awha Place Utility Reserve and the Te Waaka Terrace Community Reserve.

The Omori Recreation Reserve provides the largest area of flat grass for informal sports and recreation in all the settlements. The approximately 4 ha reserve is situated on the west side of Omori Road. It is adjacent to the TDC Works Depot, a water pumping station and the Omori Kuratau Community Hall (a charitable trust) all situated on freehold Council land. The separated reserve contains a native shrubbery (behind the depot), two tennis courts, a half court basketball area, a petanque ground and a children's playground.

## **Whareroa**

Whareroa is bordered to the South by DOC Reserve (Rangitukua Scenic Reserve). TDC reserves then snake along the entire lakeshore of the settlement. The Whareroa Esplanade Reserve has an upper grassed terrace in the middle portion and an escarpment to the Lake. The reserve has good views of the lake and access is primarily at north and south ends. The southern end is known by locals as the Kowhai Flats and incorporates a boat ramp and associated parking. In the middle of the lakeshore part of this reserve, the reserve also extends north-west up the side of the Whareroa Stream.

On the south side of the Whareroa Stream the Whareroa Stormwater Reserve runs from the back of the residential area almost to the lakeshore.

Several other ribbon reserves run within the residential part of Whareroa and some provide walking access to other parts of the settlement. These include the Turangitukua Terrace Reserve, Te Amio Place Reserve and the Whareroa Road Reserve. Turangitukua Terrace Reserve adjoins to the DOC Mt Rangitukua Scenic Reserve but the only recreational access into Mt Rangitukua Scenic Reserve is from the Whareroa Esplanade Reserve.

The public tennis courts off Whareroa Road are leased by Council from the Proprietors of Hauhungaroa No. 6, a Maori Incorporation, with a lease expiry date of 1 January 2031.

## **PART 3 SOUTH WESTERN BAY SETTLEMENT RESERVE VALUES**

During development of the reserve management plan the community was asked to identify what they valued about the reserves. These values have been included within this management plan as they provide important context for making future decisions regarding the reserves. Essentially, all decisions

made in relation to changes within reserves should build on these values rather than compromise them. The reserves are highly valued because they provide:

- Green and open space amongst development (roads and buildings)
- Natural beauty
- A range of passive and active recreational opportunities
- Recreational amenities to facilitate enjoyment of the reserves
- Lake viewpoints, and a setting for the views from private dwellings
- Access to the lake and beaches
- Habitats for plants and wildlife (birdlife is especially valued).

## **PART 4 KEY MANAGEMENT ISSUES**

This part of the plan discusses in detail the key issues addressed by the objectives and policies in part 5.

### **LANDSCAPE**

The south western bays settlement area lies on the south western lakeshore of Lake Taupō. It is a varied landscape, providing some dramatic cliffs rising from the water up into a hilly and in some places mountainous backdrop. Along the lakeshore is a mixture of sandy beaches, river flats and rolling hills. The vegetation is predominantly grazed pasture with a mixture of regenerating bush – particularly on the steeper slopes or where the land ownership is either conservation or Maori tenure, as well as exotic plantings and wildling vegetation.

Each of the four residential settlements in the area have a direct relationship to the lake; houses tend to be oriented towards lake views, roads and pathways lead to the lake, and boat access. The surrounding topography, tenure, and vegetation, gives each settlement a slightly different feel and character.

The Pukawa settlement is sited on a hill where mature and native regenerating bush has been retained. The character when viewed from the lake is of a settlement nestled into the bush but still retaining visual contact with the lake. The settlement extends above the lake edge into the hill and appears interwoven with a natural bush setting, so that bush character dominates and the houses appear integrated with the landscape.

Omori and Kuratau are two closely linked settlements and form the largest settlement area on the south western bays. The two settlements have some bush nestled characteristics on the lower areas, but to a much lesser degree than Pukawa. Overall there is a more urban feel with commercial activity – a small shop and petrol station, and community facilities such as a hall and recreation reserves containing playgrounds. The hill based houses are oriented to lake views; generally with sparse surrounding vegetation. Kuratau in the upper slopes has more of a grazed rural pasture character, with larger lifestyle properties and housing. The mountain Pukekaikiore provides a backdrop to both settlements and is mostly grazed pasture. The houses in these two settlements tend to dominate the landscape.

Whareroa is a small settlement, based to the northern side of a large land mass – Rangitukua. The settlement is more urban in character with mown berms, street lights and less planting than Pukawa. The settlement sits reasonably high on the hill side, but the dominating Rangitukua to the south reduces the visual scale of the settlement on the hillside. The settlement currently extends to the Whareroa Stream, with the northern side as yet undeveloped but marked for future growth. Whareroa has more of

a holiday home character than Omori-Kuratau; with a lack of commercial activity. Overall the settlement has a moderate dominance in the landscape.

### ***Erosion - Natural and human impacts***

The greatest impacts on the lakeshore today are erosion from natural and human effects. The complex processes and factors contributing to erosion vary from site to site. They include natural factors such as geology, wind and waves, sediment inputs and tectonics, and human factors such as development, structures, interruption of sediment supplies, management of lake levels, removal of vegetation and land use.

Understanding influences on the lake is important for future planning and management of development along the lakeshore.

The Lake Taupō Erosion Study (which forms part of the Lake Taupō Erosion and Flood Strategy 2009) identifies erosion risk areas and provides recommendations for erosion management. The foreshore of the South Western Bay Settlements area is highlighted as a risk area, with parts of Kuratau and Whareroa identified as having a high erosion hazard level. In both areas the key asset identified as at risk is the reserve area (rather than residential properties).

As part of the Action Plan ongoing beach profile monitoring at Kuratau and Whareroa is carried out on an annual basis.

A commitment has been made to maintain access to the Kuratau beach. There is also infrastructure which requires protection within the Lakeshore Recreation Reserve. A variety of methods, such as beach replenishment, planting, natural regeneration and potentially hard structures will continue to be options which are considered to ensure maintenance of the beach and protection of key infrastructure. The community needs to maintain an expectation that plans may change with time as the monitoring provides us with more information and understanding. Ongoing management of river bank erosion at the Kuratau River may also be necessary and will occur as required.

At Whareroa soft solutions (planting/recontouring) will be applied as necessary depending on results of ongoing monitoring.

There has been success with managing erosion at various locations around Lake Taupō foreshore areas by reducing maintenance and mowing and allowing regeneration of vegetation. This approach has caused concern with some reserve users as it is perceived that reserves are getting overgrown and untidy. This is exacerbated by the fact that often “weeds” regenerate first. Although this approach may involve weeds and a less manicured appearance this may be the most sustainable way to addressing erosion in some areas. This approach may be used in the South Western Bay Settlements and there may need to be a shift in the perception of the relationship between maintenance and erosion amongst the community.

Taupō District Council and Waikato Regional Council have jointly developed the Lake Taupō Erosion and Flood Strategy which sets out a combined approach to addressing erosion issues. That strategy includes direction on monitoring, physical works, timeframes and funding. Council's Long-term Plan identifies Council's intended commitment to undertake works related to managing erosion. The Long-term Plan then directs the work programme set out within the Asset Management Plan for parks and reserves.

## **LAKE TAUPŌ WATER QUALITY**

Lake Taupō is one of the cleanest lakes in the country and the Taupō community has given a clear signal that the water quality must be maintained through the Protecting Lake Taupō strategy. This was developed by the Waikato Regional Council but in conjunction with a number of agencies including the

Taupō District Council, central government and the Tuwharetoa Maori Trust Board. The Lake Taupō Protection Trust now manages a public fund to help reduce manageable nitrogen.

Although the south western settlement lakeshore reserves are proportionally a very small area of the lake margin, measures can still be taken to reduce the impact of discharges into the lake from these reserves and the surrounding residential areas. Reducing and slowing down the discharge of storm water, improving riparian planting and minimising the amount of impermeable surfaces are actions that can be taken. Education and working with the harbour master, Department of Conservation and Ministry of Primary Industries to reduce the risk of weed introduction and discharges from boats are further measures which may be considered.

## **VEGETATION AND WILDLIFE**

Due to the type of reserves that Taupō District Council provides (predominantly a recreational focus) many of the reserves are grassed spaces with pockets or areas of scrub and regenerating bush and specimen trees. Although the habitat and scenic value may not be the primary value of some of the TDC reserves, they still provide important habitats and ecological links to areas with higher scenic value and habitat opportunities. This means that when reclamation or planting of specimen trees occurs in recreational areas, consideration should still be given to the habitat value they provide.

The birdlife was identified by the community during the development of this plan as being highly valued. A planting list has been developed for the reserves (Appendix Two) and bird attracting species have been incorporated to supplement the food and habitat opportunities that are already available for native birds.

There are several TDC reserves within the settlements that have been recognised as significant natural areas (SNAs). Mohi Scenic Reserve and Pukawa Scenic Reserve are two examples of this. These reserves contain examples of rare forest types such as a matai podocarp stand, two mistletoe species (one which is threatened) and also wetland species (raupo, kiokio, sedge, makomako, putaputaweta and pigeonwood). SNAs contribute significantly to the habitat available for birdlife in the Pukawa settlement which boasts thriving populations of all the common New Zealand forest birds. This is immediately evident when visiting the area due to the vociferous birdsong.

The Kuratau river margin is also an SNA (includes parts of Whiowhio and Kuratau River Esplanade Reserve) and vegetation includes kanuka, kowhai, podocarp and broadleaved forest. *Tupeia antarctica*, a nationally uncommon mistletoe is also present on kohuhu in this area.

*Tupeia Antarctica* is mistletoe species that can be found in the south western settlements was categorised in 2012 as “at risk/declining”. It is a parasitic shrub which grows on other trees with white bark. In the south western settlements it is mainly found on kohuhu (*Pittosporum*). The mistletoe will eventually kill the host so this means that to maintain a viable population of the mistletoe, kohuhu (and possibly other suitable host species) may need to be replanted.

## **RECREATION AND USE**

The south western bay settlement reserves are highly valued by both residents and visitors. The 2013 Census records a population of 195 permanent residents in Omori, Pukawa and Kuratau. This has dropped from 219 in the 2006 census, and sits just above the 2001 count of 192. The Whareroa permanent resident count of 36 had remained roughly consistent over these periods. The interesting factor is comparing the resident population with the dwelling counts. In Omori, Pukawa and Kuratau the occupied dwelling count is 123 versus 1017 unoccupied dwellings. In Whareroa there are approximately

127 unoccupied dwellings and 18 occupied. It is holiday residency that drives demand and utilisation of the district reserves, with the population multiplying many times during peak holiday seasons.

Based on trends since 2001 there are low levels of growth expected in the resident population of the south western settlements. Some other stand-out statistics from the 2013 census that need to be noted are:

- The median age of the resident population is 63.2 which may have implications for accessibility of reserves
- The high rate of unoccupied dwellings (between 85-90%) means there will be significant peaks and troughs in demand on reserves.

People who live permanently in the area value the reserves for informal passive recreation. Activities include walking, cycling, dog exercising, picnicking, visiting the beach, relaxing, socialising and viewing the scenery. Reserves are used all year round but summer is the peak time, particularly during the holiday period from late December to mid February. Increasing school holiday usage is also evident, along with winter use due to the proximity of ski fields.

In the summer period the reserves are still used for informal passive recreation, but much of the focus turns to boating and other water-based recreation. A predominant use of the lakeshore reserves relates to the access they provide to the lake for activities such as fishing, swimming, sailing, water skiing, jet skiing, kayaking, canoeing, boating and windsurfing. There is a boat ramp located in each of the settlements and a dual ramp in Omori.

The Southern Settlements Structure Plan provides for around 50% growth over all settlements through to 2050. Increasing use places pressure on the reserves' resources, impacts on their values and can result in conflict between uses. Motorised use including quad bikes, motorbikes, helicopters and drones can cause disturbance for other reserve users and monitoring of these activities is necessary. Available management options include restricting access to sensitive areas, clear signage so it is clear what activities belong where, particularly vehicle access and parking.

### **Leases and licences**

There are no current leases, licences or concession sites within south western bay settlement reserves. However the management plan needs to provide clarity on how future applications will be considered. Factors which are taken into account are public interests, the purpose and use of the reserve, other activities within the reserves, neighbouring properties and the physical attributes of the reserve.

There is potential to allow leases, licences and concessions within the south western bay settlements to further enhance user enjoyment and participation.

### **Events**

Taupō is one of New Zealand's leading event destinations. Although historically there has not been a significant demand for events in the south western bay settlements, once again consideration is needed for what may be appropriate in these areas in the future. Reserves such as Whiowhio reserve have been used for the occasional wedding.

Use of any reserve for an organised event must be booked with Council staff and subject to standard conditions for use of reserve for an event. Conditions cover rubbish, noise, vehicular movement, compliance with by-laws and consent requirement and other conditions considered relevant.

The number of applications for events and short-term activities is increasing. Cumulative effects on the reserves' resources, users and adjoining properties must be considered.

## Dogs

There are several designated areas where dogs are permitted off leads within the South Western Bay settlements. These are:

- Pukawa Lakeshore Recreation Reserve (at Kuratau) from Motutaiko St to Pihanga Road
- Kuratau Esplanade Reserve (in the cliff top area to Ihaia Road) (excluding the beach area and the hill slope to the Omori Boat Ramp)
- Pukawa South Recreation Reserve known as Pukawa Common (excluding the area between roadway and lake)
- The Whareroa local purpose reserve adjacent to Lake Taupō in the area known as Kowhai Flats

There are also several areas where dogs are prohibited either permanently or at peak periods. These are:

- Within all established playground areas at all times
- The lakeshore recreation reserve adjacent to Lake Taupō from Kuratau River mouth to the end of Motutaiko Street from 1 December to 31 March inclusive from the hours of 9am to 7pm inclusive
- Pukawa Esplanade Reserve

Apart from the designated off lead areas and the prohibited areas, dogs must be kept on leads and under control at all times. It is also an offence for the owner of a dog which has fouled to not clean up the faeces and dispose of it appropriately.

## SAFETY AND SECURITY

Council has an obligation to minimise hazards within the reserves. Regular monitoring is undertaken and issues are addressed. The Council also relies on the public to report hazards and they can do so by contacting the Council or lodging the hazard on [Fixmystreet.org.nz](http://Fixmystreet.org.nz).

## ACCESS AND CIRCULATION

In most instances access to the south western bay reserves is easy. Most reserves have access points from adjoining roads, and also smaller connections through the residential areas from roads which do not connect.

One challenge with the lakeshore reserves is that in many places steep cliff faces divide the reserves and so access is either steep or only from each end of the reserve. The steepness of some access ways was raised during pre-consultation. In many cases there is little that can be done with the actual angle of the steps, but improved hand rails and/or non-slip surfaces may need to be considered. In most cases there is an alternative access at another point of the reserve for those who are less able.

An issue has also arisen with the Waipapa Street steps in Kuratau which previously provided access down to the lakeshore. Some time ago these steps collapsed and estimates to fix these steps have been expensive due to the significant geotechnical work which would be required. Due to the cost and limited advantage repairing this access would provide, it is not considered appropriate to replace it at this time. The Council has also considered alternatives such as upgrading nearby access ways or negotiating with private land owners. However neither of these options is considered feasible. The Council will keep the reserve access in case it does become a priority in the future.

When researching the origin of the reserves as part of the classification process it was found that a number of the access ways were vested with Council as road rather than reserve. Rather than go

through the legal process of stopping the road and classifying these areas as reserve, these access ways will be managed as reserve under the reserve management plan. These access ways can be seen in Appendix One.

## **VEHICLE ACCESS AND PARKING**

Vehicle access and parking areas are mainly required on the lakeshore reserves where they are a destination point for boating or other water associated recreation. Often the access and parking is near to other public facilities such as picnic areas, toilets, playgrounds and boat ramps. For other reserves a road frontage with on-street car parking is usually all that is necessary.

The main areas where access and vehicle parking have been formed or is occurring on grass areas are:

- Pukawa
  - Pukawa South Recreation Reserve (off Kaiuru Ave), includes boat ramp, a formed access road and parking on grass.
- Omori
  - Kuratau Esplanade Reserve (off Omori Road), includes boat ramps, a formed road and parking on grass and metal partly on DOC Reserve.
- Kuratau
  - Pukawa Lakeshore Recreation Reserve (off Pihanga Road), includes road to boat ramp, with parking on road and grassed reserve;
  - Pukawa Lakeshore Recreation Reserve (Motutaiko St), formed;
  - Pukawa Lakeshore Recreation Reserve (Parehopu St), formed and on grass;
  - Pukawa Lakeshore Recreation Reserve (Hiuhiuawai St), formed;
  - Whiowhio Reserve, metal access and parking.
- Whareroa
  - Whareroa Esplanade Reserve (Ngati Parekawa Drive) includes boat ramp. The parking is partly on DOC reserve.

The main issue with the parking areas is that they are adequately marked and bordered so that cars and boats do not overflow onto the reserve areas creating conflict with beach users. This also needs to be balanced with the need to access the reserve for maintenance and emergency purposes.

There is also the opportunity to improve the visual integration of the carpark areas with the reserves. This can be done through better planting and use of natural barriers to soften the appearance of the areas.

## **FACILITIES**

Facilities are designed to assist in the enjoyment of the reserves and may include toilets and changing facilities, play equipment, crown owned boating facilities, tennis and other courts and lease and licence related facilities.

Toilets and changing facilities are generally located in larger more highly used areas, especially in the lakeshore areas. There are toilets located at:

- Omori Boat Ramp

- Kuratau Boat Ramp
- Kuratau River Mouth
- Whareroa Boat Ramp
- Pukawa Boat Ramp
- Whiowhio Reserve

There is also a DoC toilet at the Omori Stream mouth.

Children's play areas are located at a number of locations in the south western bays settlements. In Omori, Pukawa and Kuratau there are six playgrounds which are spread well geographically. It is estimated that 95% of residents in these settlements are within a 10 minute walk of a playground. Whareroa has a leased tennis court and several pieces of play equipment at the entrance to the village. There is no playground equipment at the lakeshore. This hasn't been raised as an issue for the community.

There are four swimming rafts provided by Council (one at each of the settlements) and five tennis courts including:

- Omori [1]
- Kuratau [3]
- Whareroa [1]

Responsibility for the administration of boat ramps and jetties rests with the Taupō Harbourmaster of the Department of Internal Affairs. Council's role is to manage the effects of boating on the land, including provision of areas to provide for parking and ramp access through the lakeshore reserves network. There are currently boat ramps at all of the settlements. The Omori ramp was reconstructed as a multiple ramp in 2013. This has relieved some of the pressure that was on the ramps in Omori and Kuratau. A boardwalk/jetty also exits Council reserve at the Kuratau River Mouth.

The Taupō District Council also owns and manages a range of erosion protection assets around the lakeshore. It is part of the Council's role to manage the construction or implementation of erosion control works on public land and to protect public assets.

Provision of more buildings and structures within the reserves must be carefully assessed and will not generally be encouraged except as provided for in this plan. Council must be sure that additional facilities are necessary for the enjoyment and convenience of users and that these facilities will not detract from the natural character of the reserves.

## **FURNITURE AND SIGNAGE**

As with many reserves around the Taupō District there is a variety of different furniture in the south western bay reserves. The furniture includes seats, picnic tables, benches and rubbish bins. Some of these pieces of furniture have been donated in the past by local organisations and members of the public.

Although there is a range of designs of furniture, it has not been recognised as a priority to upgrade pieces until they are of an age or condition that requires replacement. In many ways the mixture of furniture reflects the relaxed, informal nature of the settlements. The need for and type of replacements will be assessed according to criteria set out in the Asset Management Plan.

A balance of appropriate signage is required for effective management of reserves. Although a proliferation of signage is not ideal, signage is required for directing, educating and informing reserve



users. By providing information on reserve values, and directing people to avoid conflict of uses, signage can assist in the enjoyment and protection of reserves.

In the south western bay settlement reserves signage has generally built up over the years and is inconsistent in design. A new range of reserves signage has recently been introduced. As old signs require replacements they will be upgraded with the new range of reserve signs.

Provision and location of furniture and signage must be carefully assessed to ensure that the reserves remain uncluttered while meeting the needs of users.

## **SERVICES AND UTILITIES**

The lakeshore reserves are an attractive location for the placement of services and utilities for water, wastewater and storm water. An easement is required for these activities.

Although reserves are often an easy option for services, thought needs to be given to the visual and physical impact of the infrastructure. Where possible these effects need to be mitigated, and if there is a practical alternative location for future infrastructure then this should be considered before reserve land.

### ***Water***

Council is responsible for the safe and effective treatment, storage, and distribution of water for the District. There is a water take from Lake Taupō in Kuratau which feeds Omori, Pukawa and Kuratau. Whareroa has a bore water supply. The reserves carry piping from water intake pipes and also house water pump stations.

### ***Wastewater***

Council is responsible for the safe and effective collection, treatment and disposal of wastewater within the District. Both Omori and Whareroa have oxidation ponds to treat the wastewater of the surrounding residential areas. The reserves house a number of wastewater pump stations and associated connections (pipes) to the reticulated system.

### ***Storm water***

In residential areas all around Lake Taupō, gullies have been set aside because they are unsuitable for development and because they provide drainage into the lake. Many are now reserves but still provide the vital role of storm water drainage. In reserves storm water infrastructure can include underground pipes, open drain channels, soak holes and detention structures. The storm water is then expelled into the lake through pipes or swales directing overland flow.

Storm water contamination is reduced through education and filter technology where necessary. Where overland flow occurs, appropriate planting can also assist in slowing and filtering the storm water before it reaches the lake.

## **PART 5 MANAGEMENT OBJECTIVES AND POLICIES**

### **ADMINISTRATION AND MANAGEMENT**

#### ***Objective***

To protect and enhance the natural and cultural values of the South Western Bay Settlement Reserves while developing and managing the reserves as a recreational resource for the enjoyment of users.

### ***Explanation***

Administration and management of the reserves includes long-term planning and day to day maintenance. These roles are primarily established under the Reserves Act 1977. Council must also consider other relevant legislation, the District Plan and bylaws.

### ***Policies***

- (a) Manage the reserves within the provisions of the Reserves Act 1977, Local Government Act 2002, Resource Management Act 1991 and Council by-laws.
- (b) Manage the reserves whilst recognising and giving effect to the status and position of tangata whenua, where appropriate.
- (c) Manage the reserves whilst recognising the quality of the lake water and its importance to freshwater ecology, cultural values, the tourism industry and the recreational use and enjoyment of the reserves.
- (d) Manage the reserves within the provisions of any covenants that they are subject to. This includes Whiowhio Reserve on which covenants prohibit camping, accommodation, commercial or industrial purposes, buildings or motored vehicles, and Omori Recreation Reserve where there are restrictions on buildings, fences and vegetation height (covenants are noted in Appendix one).
- (e) Manage and plan for the effects of erosion, promoting the use of environmentally and socially appropriate solutions that complement the landscape and allow for continued public access where possible.
- (f) Do not undertake or allow works or activities which cause or exacerbate erosion of the south western bay settlement reserves.
- (g) Protect and enhance the natural character, landscape and biodiversity values of the reserves.
- (h) Ensure that maintenance programmes are timed to correspond with holiday periods and weekends.
- (i) Consult with residential land owner/ratepayer associations of each settlement as appropriate.

## **CULTURAL HERITAGE**

### ***Objective***

To recognise and protect cultural and heritage values and sites of historic significance within the south western bay settlement reserves.

### ***Explanation***

Lake Taupō and its margins are of significance to tangata whenua so it follows that the way these areas are managed can impact on these values. Open communication between tangata whenua and the Council is vital to ensure these values are not impacted on.

Sites or areas with characteristics of special value to tangata whenua may not be officially identified. Where there are sites that tangata whenua choose not to identify, Council will determine a way for those sites or areas to be protected. Where sites are identified, Council will consult with tangata whenua to evaluate and protect those sites, which will become part of the reserve management, development and use process.

### ***Policies***

- (a) Recognise and provide for the special cultural and spiritual relationships that tangata whenua have with the lakeshore margins.
- (b) Protect and manage features of cultural and heritage significance to ensure their long-term protection.
- (c) Consult with tangata whenua to decide on the appropriate protection, treatment and management of cultural values, sites and areas.
- (d) Work in partnership with tangata whenua in decision-making and managing significant issues on the reserves, recognising statutory responsibilities.
- (e) Work with the Pukawa Marae (Ngati Manunui) to better recognise historical and cultural values of the Pukawa Esplanade Reserve.
- (f) Ensure that, should any archaeological site, structure or feature be discovered during any reserve development, work ceases immediately, and the Council, tangata whenua and any other appropriate agencies such as the Heritage New Zealand are notified as soon as possible.

## **VEGETATION**

### ***Objective***

To protect, establish and manage vegetation within the south western settlements to maintain and enhance the landscape, amenity, natural character and biodiversity, heritage and recreational values of the area.

### ***Explanation***

Trees and planting contribute significantly to the values of the south western bay settlements. Part of the appeal of these areas is the feeling of being ‘tucked away’ amongst the native bush. This is achieved by a high level of native vegetation, on private property, DOC and TDC reserves.

Throughout pre-consultation on this plan the appropriateness of planting was raised. The trees and planting are highly valued especially for the amenity they provide, their bird attracting and erosion reducing qualities. However trees also have the potential to impact on the lake views and overtake recreational space, which are other important values of the settlements. There have been cases where trees have been illegally trimmed, poisoned or cut down so that they don’t affect private views.

One of the best ways to avoid this conflict over trees and views is to ensure that the species chosen are appropriate for the site and the values held by the community.

During pre-consultation community concerns about diminishing vegetation on Council reserves and the need to proactively encourage diverse native vegetation to support native fauna was also raised.

For these reasons a planting plan has been drafted to accompany this Plan to ensure relevant values are taken into account.

### ***Policies***

- (a) Retain indigenous vegetation to maintain natural character and biodiversity and to reduce erosion of the lakeshore and river stream banks.
- (b) Ensure that trees are provided in accordance ecological advice and/or with the planting list and priorities set within this management plan (Appendix Two).
- (c) Implement the process outlined in the Taupō District Council’s Tree and Vegetation Policy for tree removal and pruning on reserves.

- (d) Plantings will generally be low maintenance, non-invasive, ecologically appropriate and self-sustaining and where appropriate support birdlife by provision of fruit or nectar bearing plants, or to specifically assist in reducing lakeshore, river or stream bank erosion
- (e) Shade trees will be planted in lakeshore reserves and elsewhere as appropriate to provide sun protection for users.
- (f) Encourage and facilitate community involvement in revegetation and restoration programmes.
- (g) New planting will take into account the preservation of the extensive vistas and outstanding landscape views from within the reserves.
- (h) Where appropriate ensure recognition and protection of trees through the provisions of the District Plan.
- (i) Encourage trees to grow true to form.
- (j) Pursue prosecution under the Reserves Act 1977 when vegetation is mistreated and establish replacement planting if appropriate.
- (k) Remove and control invasive weed species as necessary to maintain the reserves natural character, biodiversity, recreation opportunities, using safe proven methods causing least harm to the surrounding environment.
- (l) Retain or progressively replace weed species such as crack willow with ecologically appropriate indigenous alternatives, where they are necessary for erosion protection or where they assist the establishment of replacement plants.
- (m) Replace trees where removed, dead, or nearing the end of their life, where appropriate and in accordance with the planting list at Appendix Two.
- (n) Collaborate with community groups to facilitate planting and maintenance in accordance with the planting plan (Appendix Two) or a qualified ecologist from time to time.
- (o) Where possible and appropriate replant host species for mistletoe (*Tupeia Antarctica*).
- (p) Proactive planting for erosion protection at high risk sites will be undertaken where appropriate.
- (q) In reserves that provide for overland flow paths, where possible undertake appropriate planting to slow down and filter storm water.

## **WILDLIFE**

### ***Objective***

To protect and enhance suitable natural habitats throughout the south western bay settlements in order to attract native wildlife including birds, bats and reptiles.

### ***Explanation***

When visiting the south western settlements the amount of birdlife is extremely evident, particularly in Pukawa which has the highest density of mature native bush. The birdlife contributes significantly to the feeling of being tucked away from the activity of more developed areas and is part of the south western bay settlement's identity. The preservation, creation and enhancement of wildlife habitats should be actively pursued wherever possible.

Long-tailed bats have been recorded in the Kuratau River Esplanade Reserve and Whiowhio reserve (as well as neighbouring land). Long-tailed bats are considered to be "nationally vulnerable" in the North Island of New Zealand. It is therefore important that large roosting trees (such as the eucalyptus

trees on Whiowhio reserve) are retained and the bush along the Kuratau River protected to ensure habitat for roosting and feeding.

The Kuratau River corridor and associated SNA identified land has also been the subject of bird surveys and now also has a community funded pest control programme. The bird surveys identified 15 threatened or at risk species. Green Gecko (Auckland species) have been sighted in Kuratau and in Pukawa. Bush falcon have also been present in the area.

Animal pests can have a detrimental impact on plantings, can increase erosion and bank instability if their populations reach high levels, and can cause problems for reserve users. Pests need to be managed appropriately. There is evidence of possums, mice, rats, rabbits and hedgehogs in the settlements and reserves.

### ***Policies***

- (a) Develop and use plant species list with fruit, berry and nectar producing plants to encourage indigenous species of birds to the reserves.
- (b) Retain eucalyptus trees on Whiowhio reserve as long as they continue to be used by native bats for roosting.
- (c) Using safe, proven methods of control and if possible eradicate animal pests as they become a public nuisance or where they adversely affect any reserve.
- (d) Ensure compliance with relevant Waikato Regional Council pest management strategies.
- (e) Continue to work with and provide support to the Pukawa Wildlife Management Trust, the Omori Kuratau Pest Management Group and other community working groups for pest control and revegetation activities.

## **RECREATION AND USE**

### ***Objective***

To provide for a range of informal and passive recreation opportunities, compatible with reserve values, within the south western bay settlements.

### ***Explanation***

Depending on the time of year, there are different demands and focuses on the reserves of the south western bay settlements. During the cooler months the reserves provide a range of informal opportunities for permanent residents and holiday home visitors. The reserves are used predominantly for exercise and relaxation.

During the summer period the focus shifts to the lake and its recreational opportunities. During this time, when the settlements are at their most populated, there needs to be a careful balance between activities and user demand to minimise potential conflicts of use and to ensure the reserves' natural values are protected.

### ***Policies***

- (a) Promote opportunities for informal passive recreation within the reserves.
- (b) Ensure that recreational activities are compatible with the environment and the values of the reserves.
- (c) Ensure that the provision of recreational activities has minimal impact on the experience of other users.
- (d) Provide barriers, signage and education where required to minimise conflicts of use.

- (e) Motorised forms of recreation are not permitted on the reserves except where access or parking is provided for (with the exception of mobility scooters as appropriate).

## **Commercial Activities, Events, Leases and Licences**

### ***Objective***

To allow for commercial activities, leases and licenses where they enhance public recreational use and enjoyment and do not impact on the natural character of the south western bay settlement reserves.

### ***Explanation***

A balance needs to be maintained when considering commercial activities or events. Reserves are a community resource and activities which solely benefit an individual or business will not be permitted. At times appropriate commercial activities and events can enhance the use and enjoyment of a reserve. They can provide amenities which are not usually available on a reserve which can attract more users or encourage longer visits. On the other hand they can cause conflict of use or impact on the natural character of the reserve. This is a balance which needs to be weighed up during the consideration of applications.

Reserves can be very practical and attractive places to hold events. They can foster community spirit, increase the use of reserves and contribute to the diversity and vibrancy of an area. This needs to be balanced with possible effects on the community. Events can take up space, make noise, increase traffic and leave behind rubbish. If events are permitted these effects need to be anticipated and controlled via conditions on the events permit.

There are typically two types of events, those that are open to the public to take part in if they choose and those that are private (a wedding ceremony for example). Private events will usually be smaller, contained events for a short period of time. These events will not be given exclusive use of a reserve. For example if someone chooses to hold a wedding on a Council reserve, others will still be permitted and welcome to use the reserve at the same time.

### ***Policies***

- (a) Commercial activities and events on reserves in the south western bay settlement are prohibited unless a lease, license or permit is granted.
- (b) Commercial use (including commercial access over a reserve) that conflicts with and/or limits the wider public use and enjoyment of the reserve or affects its amenity will not be permitted.
- (c) Commercial activities will generally be permitted through the granting of a licence for a maximum term of five years, at which point they will be reviewed.
- (d) It is the applicant's responsibility to ensure they fully comply with and receive any necessary consents in relation to the Resource Management, Building, Health and Safety and Employment Acts and other relevant Acts, as well as the District Plan, and complies with any relevant by-laws.
- (e) Ensure that applicants work with the Tuwharetoa Maori Trust Board for approval for lake based commercial activities or events.
- (f) Apply charges in accordance with the Council fees and charges policies or as appropriate for the particular activity.
- (g) Allow no structures within leased and licensed sites unless approval is obtained.

- (h) Generally decline applications for commercial motorised activities such as jet ski tours, where the activity conflicts with the public's enjoyment of the reserve.
- (i) Assess applications for organised events and temporary activities in relation to the following criteria:
- compatibility with the purpose of the reserve
  - impact on other reserve users and neighbours
  - the need for the proposed activity to be located within the reserve
  - impact on the reserve's values
  - protection of the informal recreational qualities of the reserve
  - public interest and value
  - compatibility with other activities along the lakeshore and surrounding area
  - compatibility with Council policies and bylaws
  - The extent to which the proposed activity will assist the public use and enjoyment of the reserve
  - The need for permanent structures that could detract from the character of the reserve; and
  - Whether the activity involves motorised and/or noisy equipment.
- (j) Assess compliance with permit conditions and if not met, modify conditions on similar future permits or do not grant permits to past non-complying applicants.
- (k) Secure the payment of a bond and fee, if required, in accordance with Council policy.
- (l) Generally prohibit commercial promotion and retailing on the reserves unless it is directly associated with and ancillary to an approved event, when it may be permitted at Council's discretion.
- (m) Retain the right to limit capacity and activities to ensure that adverse environmental and safety issues do not outweigh the recreational, social and economic benefits of the event.
- (n) Notify the local community of the event through appropriate methods available at the time.
- (o) Applicants for a lease, licence or permit need to include the following information:
- The area within which the activity is to be carried out
  - The times (over the year and during the day) during which the activity will operate
  - The nature of the activities the operator will provide; and
  - Any signage, structures or vehicles involved in the activity.
- (p) Lease or Licence fees will be charged in accordance with Council's fees and charge policies or as appropriate for the particular activity.
- (q) Communicate the granting of a lease, licence or permit to the local community via appropriate methods available at the time.

## **Camping on reserves**

### **Objective**

Prohibit camping and overnight stays in the south western bay settlement reserves unless in an area specifically set aside for such use.

### ***Explanation***

Freedom camping is a key issue for the community of the south western bay settlements. Although appropriate freedom camping can promote use of reserves and increase security, many people feel it is an inappropriate private use of public space.

The Reserves Act 1977 prohibits camping on reserves unless specifically set aside for such a use. Due to the small size of many of the Taupō District Council reserves in this area and the strong community feeling that campervans inhibit their use of the reserves, it is not considered appropriate or necessary to allow for year round overnight camping in the south western settlements.

The question of overnight campervan rallies on Omori Recreation Reserve was also raised during consultation on this management plan. A considerable amount of tension has been caused within the community around the proposal of this type of event. There is the view that the dominance of the vehicles and the act of sleeping on the reserve excludes the wider public from enjoying the values of the reserve. In light of this and alternative private options for campervan rallies it is not seen as appropriate to allow for campervan rallies on Omori Recreation Reserve.

### ***Policy***

- (a) Prohibit the use of tents, campervans or other mobile accommodation and the use of any vehicle for sleeping and overnight stays on Taupō District Council reserves in the south western bay settlements area.

## **Dogs**

### ***Objective***

To manage dogs within south western bay settlement reserves in accordance with the Dog Control Act 1996 and Council's Dog Control Policy and By-law.

### ***Explanation***

The Taupō District Council aims to provide for the exercise and recreational needs of dogs and their owners, while minimising nuisance and danger to other members of the public. In order to meet this balance the council provides for dog exercise in designated areas. In these areas dogs can be let off the leash, but still must remain under control. There are also prohibited areas where dogs are not permitted at all, or during the summer period. In all other public areas dogs must be kept on a leash at all times (this includes roads, footpaths and reserves).

### ***Policies***

- (a) Ensure that dogs are kept on a leash at all times unless they are in a designated dog exercise area.
- (b) Prohibit dogs from entering children's play areas.
- (c) Encourage persons responsible to clean up after their dogs.
- (d) Provide signs showing restricted areas and where dogs can be exercised, and to inform owners of their responsibilities
- (e) Routine (non-callout) patrols by compliance officers will occur to the south western bay settlements when practical, especially during the peak holiday period.
- (f) Prosecute repeating offenders for breaches of the Control of Dogs Bylaw.
- (g) Provide community education via media, Council mail outs and through community organisations as appropriate.



## **ACCESS AND CIRCULATION**

### ***Objective***

To provide an efficient and safe access network within the south western bay settlement reserves, which lead where possible to destinations such as the lakeshore or other reserves.

### ***Explanation***

Within the south western bay settlements good access in the reserves has two main functions. Firstly for recreational purposes (i.e. walking or running) and secondly for gaining access to destinations such as the lakeshore. These are important considerations for these holiday settlements given that there are less recreational opportunities for permanent residents in the south western bays settlements than in larger settlements, and also for holiday makers who seek out passive recreational opportunities while taking time out from busy lives.

The landscape of the south western bay reserve settlements is dominated by substantial cliff faces at the lakeshore. This can create access issues as a number of the lakeshore reserves are dissected by these cliffs. Access down to the lakeshore from the elevated parts of the reserves is provided in multiple places. Some of these access points are steep and have the potential to be undermined by slippages. In these cases public safety will be put before access objectives. Where access is provided in these steep areas it is not always possible to ensure that it is suitable for all ages and abilities. There will be some tracks within the network where users will need to be fit and able in order to use them.

### ***Policies***

- (a) Maintain access to, between and within the south western bay reserves for all ages and abilities, where safe and practical.
- (b) Provide for a level and standard of access that is appropriate to the level and nature of public use.
- (c) Design walkways to a standard that complements the reserve environment and ecological and cultural heritage values, considering safety and ongoing maintenance.
- (d) Ensure all walkways and cycle routes are well maintained to allow easy access and use.

## **VEHICLE ACCESS AND PARKING**

### ***Objective***

To maintain and manage adequate vehicle access and parking to meet the needs of users of the south western bay settlement reserves, while protecting the reserves' natural character and amenity values.

### ***Explanation***

Vehicle access to reserves is an important way of allowing users to enjoy the facilities. This is especially the case during the summer period where vehicular access allows for the use of boats and other water based recreation. This can create conflict however, especially when there is greater demand on the facilities, as vehicles take up valuable open space and can affect the amenity values of the reserve.

The key to the management of vehicle access and parking is defining the areas where it is appropriate for vehicles to access and park. Where vehicles start to impact on the use by other reserve users often the best way to prevent this is through physical barriers.

Council does not support expansion of formed parking areas throughout the south western bay settlement reserves.

### ***Policies***

- (a) Provide adequate parking for vehicles, to a level which is adequate for servicing the usual activities carried out within the reserves.
- (b) Undertake amenity planting within and around parking areas and vehicle access roads, where there are adverse visual effects and to provide shade.
- (c) Maintain access roads and parking to a standard suitable to allow public access to the reserves and to meet general levels of demand.
- (d) Use vehicle barriers, where necessary, to restrict vehicles to the access roads and parking areas.
- (e) Designate areas for overflow parking at peak times and on special occasions.
- (f) Provide parking for disabled users where appropriate.
- (g) If necessary provide parking spaces for authorised commercial activities.
- (h) Prohibit the use of reserves to gain vehicle access to adjoining properties, except where authorised for temporary purposes or where there is no alternative and the purpose of the reserve is not compromised.

## **FACILITIES**

### ***Objective***

To provide and maintain appropriate facilities which contribute to the enjoyment of users of the south western bay settlements, while ensuring that the facilities are designed and located to complement natural character and cultural heritage values of the reserves.

### ***Explanation***

Good quality facilities can contribute to the experience of users of the reserves, and encourage users to stay longer. However these facilities should not come at the cost of the visual or natural values of the reserves. The south western bay settlements are well provided for in relation to toilets, changing facilities, playgrounds, tennis courts and furniture. The focus in the south western bay settlements is on maintaining these facilities.

New facilities will generally not be permitted unless they are in the public interest, will improve the functioning of the reserve and do not compromise the values of the reserve.

### ***Policies***

- (a) Ensure that all facilities are maintained to a suitable standard for the level of use they receive.
- (b) Ensure that facilities meet the needs of users and remain relevant to the lakeshore reserves, and allow for the removal of any that are deemed redundant.
- (c) Maintain public toilets (and changing facilities where needed) in key reserves including near boat launching ramps and at the Kuratau River Mouth.
- (d) Maintain safe playgrounds at appropriate locations to serve the needs of users and the local community.
- (e) Work closely with the harbourmaster to advocate for adequate and appropriate boating facilities.

## **FURNITURE**

### ***Objective***

To provide furniture which caters for the reasonable comfort and convenience of reserve users, ensuring that pieces are fitting to the relaxed and informal character of the reserves.

### ***Explanation***

Furniture allows opportunities for rest, picnicking and viewing. A balance in the number of pieces of furniture should be achieved to allow for users comfort and convenience without leading to proliferation.

While furniture needs to be functional, it should also reflect the reserve's character and identity. The south western settlements and the reserves within the settlements have a predominantly relaxed and holiday feel. Many of the reserves are natural and informal in their character. The furniture should reflect this quality.

The current furniture within the reserves is quite a mixture. This adds to the holiday, "bachy" feel of the settlements and should be maintained.

### ***Policies***

- (a) Maintain and encourage the informal mixture of furniture types with the reserves.
- (b) Provide furniture in appropriate locations to enhance the enjoyment of the reserves without impacting on natural character and cultural values.
- (c) Balance the number of pieces of furniture to ensure users comfort and convenience without impacting on the natural character or landscape values of the reserve.

## **SIGNAGE**

### ***Objective***

To increase visitor enjoyment, understanding of reserve values, flora and fauna and to reduce conflict of uses through the provision of appropriate signage.

### ***Explanation***

Signage is necessary to identify reserves, to assist access within reserves, to provide for the appropriate use of reserves and safety of reserve users. Signs also bring the values of an area to the visitor's attention. However, signs can individually or cumulatively detract from the amenity of a reserve. They need to be designed, located and maintained to avoid visual clutter and the degradation of reserve values.

### ***Policies***

- (a) Ensure that signs on the reserves are well maintained.
- (b) Provide interpretive signage to build public awareness of the special attributes of the reserves and surrounding landscape.
- (c) Work with the Harbour Master to advocate for signage to help reduce conflict of uses, especially in areas where boats and swimmers can conflict and create safety issues.
- (d) Provide the minimum amount of signage necessary to meet the information needs of users, to avoid visual impact on natural values.
- (e) Where possible, work collaboratively with other organisations to minimise the number of signs.
- (f) Prohibit advertising signs on the reserves.

## **INFRASTRUCTURE AND UTILITIES**

### ***Objective***

Utilities and infrastructure should be located outside of reserves where practical. Where it is not feasible then utilities and infrastructure should be located and designed in a way that has minimum impact on the amenity values of the reserve.

### ***Explanation***

Although not ideal, reserves are at times the only practical location available to locate utilities and services. Alternatives should be sought prior to location on a reserve, but if the reserve is the only option consideration must be given to design, colour scheme, location and co-location with other existing services. If thorough consideration is given to these factors the effect on the reserves amenity should be minimal.

### ***Policies***

- (a) Consideration must be given to alternative locations before locating utilities and infrastructure on reserves.
- (b) Any new utilities and infrastructure must have minimal effect on the reserve and careful consideration of design, location, colour and co-location needs to occur.
- (c) Redundant infrastructure and services will be removed from reserves as soon as practical.

## **ENCROACHMENTS**

### ***Objective***

Manage reserves to prevent and deter encroachments.

### ***Explanation***

Encroachments onto reserves is an issue in the south western bay settlements, particularly where the reserve borders private properties. An encroachment is where a person takes over part of reserve land for a private use or structure. Encroachments can be difficult to manage as over time the public and the offender build up a perception that the land is private. Encroaching onto reserve is an offence under the Reserves Act 1977.

### ***Policies***

- (a) Assess encroachments in accordance with Council's encroachment on reserves policy.
- (b) Where there is doubt or conflict of enforcement of encroachment policy, seek a direction from Council or the appropriate sub-committee of Council.
- (c) Use reserve boundary markers and planting to discourage encroachments.
- (d) Prosecute offenders for breaches under the Reserves Act 1977.

## **COMMEMORATIONS AND GIFTS**

### ***Objective***

To allow for commemorative memorials in the south western bay settlements parks and reserves where they are complimentary to the environment and the reserve's Asset Management Plan, while not compromising cultural values or "individualising" public spaces.

### ***Explanation***

Commemorative memorials are requested by community members to celebrate the lasting legacy of deaths, births, special events and associations between people and places. They can also help the revegetation and enhancement of our parks and reserves throughout the district. However this needs to be balanced with the values of the wider public and the personal and cultural sensitivities surrounding this issue.

***Policies***

- (a) Assess applications for commemorative memorials as per the Council's Commemorative Memorial Policy 2015.

## PART 6 IMPLEMENTATION PLAN

It is anticipated that this part of the plan will be informally reviewed with the community prior to each 3 yearly review of the Long-Term Plan. The reviews will be conducted with representatives of the established community organisations and any other interested community members of the south western bay settlements.

<b>Project</b>	<b>Description</b>	<b>Priority</b>	<b>Responsibility</b>
Pukawa Boat Ramp Access Road	Monitor condition of road, however at this point due to level and type of use, renewing this road is not a priority.	Ongoing	Roading
Signage at Pukawa Beach	Separate swimming and boating at Pukawa Beach. Carry out a review of signage and barriers at boat ramp. Signage needs to be clear on parking, camping and dogs.	High	Turangi Operations to work with the Harbour Master (for on lake signage)
Signage at Omori Boat ramp	Carry out a review of signage and barriers. Signage needs to be clear on parking, camping and dogs.	Medium	Turangi Operations
Pukawa South Recreation Reserve drain	Continue to monitor health and safety.	Ongoing	Turangi Operations
Stent Way Steps	Investigate safety issues and continue to provide access.	Medium	Turangi Operations
Pukawa Esplanade Reserve	Reserve to remain in Taupō District Council ownership. Investigate mechanisms to better reflect historical and cultural values of this reserve. Look to build better relationships between Ngati Manunui, Pukawa Property Owners Association and the Council.	Medium	Land Management Officer, Strategic Relationships Manager.

Whiowhio Reserve	Replant bat friendly roosting trees if current Gum trees are for any reason under threat (and proven that the current Gums are bat roosts).	Low	Turangi Operations
Kuratau Recreation Reserve	Review long term options including formalising grazing licence and/or use for events.	Low	Land Management Officer
Oreti Esplanade Reserve	Investigate access and establishment of a track link to the adjoining DoC reserve.  Correct TDC District Plan notation (as Scenic Reserve).	Low  Low	Turangi Operations  Policy Team

## APPENDIX ONE – RESERVE INDEX

Location	Name	Area (ha)	Classification	Legal Description	Interests	Map Key
Kuratau	<b>Hinerangi Place Accessway</b>	0.0307	Local Purpose (accessway)	Lot 206 DP 63683 (CT 670602)		BB
Kuratau	<b>Hiihiuawai Lakeshore Utility Reserve</b>	0.1830	Local Purpose (utility)	Lot 42 DP 25715 (CT 20A/689)		Q
Kuratau	<b>Horomatangi Place Accessway</b>	0.0412	non reserve accessway (road)	Lot 40 DP 25715 (0.0144 ha) Lot 39 DP 25715 (0.0268 ha)		V
Kuratau	<b>Ihaia Road Reserve</b>	0.1860	Recreation <i>In7432, Gaz 2014</i>	Lot 201 DP 58088 (CT 663650)		GG
Kuratau	<b>Kuratau Esplanade Reserve</b>	0.3953	Local Purpose (esplanade): <i>In7432, Gaz 2014</i>  Local Purpose (community): <i>In7432, Gaz 2014</i>	Lot 203 DP 63682 (CT 670604) (0.1446 ha) Lot 203 DP 63683 (CT 670604) (0.1017 ha) Pt Pukawa D3 ML 5300 (CT WN54C/536) (3.5984 ha)  Lot 205 DP 63682 (CT 670605) (0.1085 ha)		HH
Kuratau	<b>Kuratau Local Purpose Reserve</b>	0.0339	Local Purpose (esplanade)	Lot 2 DP 27809 BLK I PUKETI SD (formerly part CT 304/125)		M
Kuratau	<b>Kuratau Recreation Reserve</b>	0.6101	Recreation	Lot 3 DP 27809 BLK I PUKETI SD (formerly part CT 304/125)		L



Location	Name	Area (ha)	Classification	Legal Description	Interests	Map Key
Kuratau	<b>Kuratau River Esplanade Reserve</b>	1.3170	Local Purpose (esplanade) <i>In7432, Gaz 2014</i>	Lot 1 DP 69807 (CT 38B/24)		N
Kuratau	<b>Manunui Street / Hiuhiuawai Street Accessway</b>	0.0218	non reserve accessway (road)	Lot 45 DP 27612		W
Kuratau	<b>Manunui Street/ Motutaiko Street Accessway</b>	0.013	non reserve accessway (road)	Lot 44 DP 29793 (0.007ha) Lot 26 DP 27045 (0.006ha)		Z
Kuratau	<b>Omori Recreation Reserve</b>	4.163	Recreation <i>In2744, Gaz 2002 p1217</i>	Lot 3 DP 89781 BLK II PUKETI SD (CT WN57C/33)	Land Covenant in Transfer B832432.2 - 1.5.2001. Land Covenant includes restrictions on fencing, trees, buildings, and subdivision.	EE
Kuratau	<b>Parehopu Street Accessway</b>	0.0149	non reserve accessway (road)	Lot 42 DP 29793		Y
Kuratau	<b>Pihanga Road Community Reserve</b>	1.0567	Local Purpose (community) <i>In7432, Gaz 2014</i>	Lot 202 DP 63682 (CT 670603) (0.5985 ha) Lot 202 DP 63681 (CT 670603) (0.4582 ha)		FF
Kuratau	<b>Pukawa Lakeshore Recreation Reserve</b>	6.2490	Recreation <i>In7432, Gaz 2014</i>	Lot 24 DP 27045 (CT 20B/235) (1.82 ha) Lot 7 DP 23996 (formerly part CT 953/54) (0.7815ha) Lot 43 DP 25715 (CT 20B/236) (1.4796 ha) Lot 41 DP 27612 (CT 20B/237) (1.2899 ha) Lot 12 DP 52468 (formerly part CT C3/788) (0.1331 ha) Lot 43 DP 29793 (CT 20B/239) (0.4224 ha) Pt Pukawa 4C3B ML 5078 (0.322 ha)		X

Location	Name	Area (ha)	Classification	Legal Description	Interests	Map Key
Kuratau	<b>Riverpark Drive Reserve</b>	1.0640	Local Purpose (access): <i>In7432, Gaz 2014</i>  Local Purpose (esplanade): <i>In7432, Gaz 2014</i>	Lot 20 DP 305820 BLK II Puketi SD (CT 23208) (0.2851 ha)  Lot 21 DP 305820 BLK II Puketi SD (CT 23209) (0.5085)  Lot 22 DP 305820 (formerly part CT 34D/676) (0.2701 ha)		P  O  O
Kuratau	<b>Te Awha Place Utility Reserve</b>	0.0382	Local Purpose (utility) <i>In7432, Gaz 2014</i>	Lot 66 DP 327393 (CT 111259) (0.0382 ha)		R
Kuratau	<b>Te Awha Place/Te Waaka Terrace Accessway</b>	0.0283	Local Purpose (access) <i>In7432, Gaz 2014</i>	LOT 60 DP 327393 (CT 111254)		S
Kuratau	<b>Te Waaka Terrace Reserve</b>	1.017	Recreation: <i>In7432, Gaz 2014</i>  Local Purpose (access): <i>In7432, Gaz 2014</i>	Lot 503 DP 70129 (CT 670596) (0.4370 ha) Lot 504 DP 71018 (CT 670596) (0.2113 ha) Lot 54 DP 71543 (CT 670596) (0.1463 ha) Lot 61 DP 327393 (CT 670596) (0.2003 ha)  Lot 65 DP 327393 (CT 111258) (0.0219 ha)		T
Kuratau	<b>Waipapa Street Accessway</b>	0.0045	non reserve accessway (road)	Lot 26 DP 52469		CC
Kuratau	<b>Waipapa Street Recreation Reserve</b>	0.012	Recreation	Lot 27 DP 52469 (formerly part CT C3/788)		AA

Location	Name	Area (ha)	Classification	Legal Description	Interests	Map Key
Kuratau	<b>Whiowhio Reserve</b>	0.0108	Recreation <i>In7081, Gaz 2006 p3466</i>	Lot 33 DP 60587 BLK III PUKETI SD	Subject to land covenants set out in the schedule of the Gazette notice In 7081, 2006 page 3466, which include restrictions on building, use for non recreational purposes, and restriction of motor vehicle access.	U
Omorī	<b>Kaimanawa Street Accessway - 1</b>	0.022	Local Purpose (accessway) <i>In7432, Gaz 2014</i>	Lot 61 DP 66447 (CT 670600)		LL
Omorī	<b>Kaimanawa Street Accessway - 2</b>	0.019	Local Purpose (accessway) <i>In7432, Gaz 2014</i>	Lot 62 DP 66447 (CT 670600)		RR
Omorī	<b>Kaimanawa Street Playground Reserve (Idas Park)</b>	0.118	Recreation <i>In7433, Gaz 2014</i>	Lot 22 DP 66446 (CT 36C/566) (0.0619 ha) Lot 23 DP 66446 (CT 36C/567) (0.0559 ha)	Lot 22 is subject to water rights created by Court Order 705078 and a right of way created by Easement Certificate B065936.8  Lot 23 is subject to water rights created by Court Order 705078.	II
Omorī	<b>Kaimanawa Street Recreation Reserve - 1</b>	0.155	Recreation	Lot 96 DP 47606 (formerly part CT 15B/923 and part CT 15C/604) BLK II PUKETI SD		UU
Omorī	<b>Kaimanawa Street Recreation Reserve - 2</b>	0.171	Recreation	Lot 97 DP 48415 (formerly part CT 18C/1084) (0.1353 ha) Lot 98 DP 48415 (formerly part CT 18C/1084) (0.0356 ha)		QQ SS

Location	Name	Area (ha)	Classification	Legal Description	Interests	Map Key
Omori	<b>Kamahi Terrace Accessway</b>	0.01	Local Purpose (Accessway) <i>In 3915, Gaz 2014 p 1931</i>	Lot 55 DP 42002 BLK II Puketi SD (0.0078 ha) Sec 2 SO 475861 (0.0021 ha)		YY
Omori	<b>Kuharua Place/Omori Road Accessway</b>	0.0131	non reserve accessway (road)	Lot 36 DP 56051		XX
Omori	<b>Mohi Scenic Reserve</b>	2.2768	Scenic <i>In 7432, Gaz 2014</i>	Lot 33 DP 406306 (CT 422163)		BBB
Omori	<b>Ngapera Way Local Purpose Reserve (Access)</b>	0.0389	Local Purpose (access) <i>In 7432, Gaz 2014</i>	Lot 25 DP 406306 (CT 422157)		AAA
Omori	<b>Omori Pedestrian Accessway</b>	0.0171	Local Purpose (pedestrian access)	Lot 106 DP 47606 (formerly part CT 15C/604)		TT
Omori	<b>Omori Road/Kaimanawa Street Recreation Reserve</b>	0.065	Recreation	Lot 95 DP 47606 (formerly part CT 15B/923) (0.0506 ha) Lot 94 DP 47606 (formerly part CT 15B/923) (0.0140 ha)		VV WW
Omori	<b>Omori Scenic Reserve Accessway Strips</b>	0.234	Local Purpose (accessway):  Recreation:  Local Purpose (esplanade):	Lot 66 DP 35226 (formerly part cancelled CT 11B/979) (0.0081ha) Lot 63 DP 35227 (CT 11B/979) (0.0195 ha)  Lot 67 DP 35226 (CT 20B/184) (0.0751ha) Lot 60 DP 35227 (CT 20B/232) (0.1259 ha)  Lot 64 DP 35227 BLK III PUKETI SD (CT WN20B/234) (0.0055 ha)		NN MM KK JJ OO

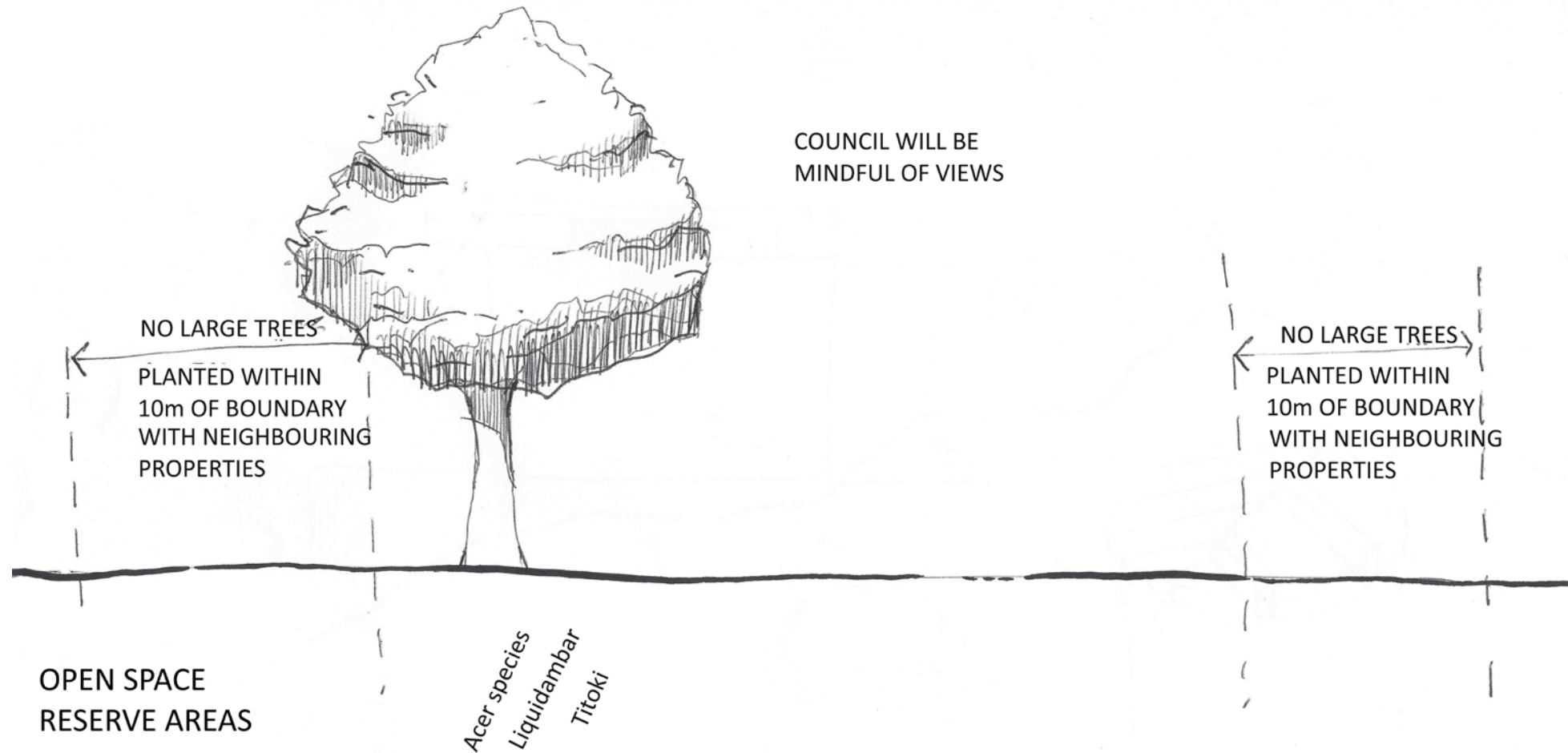
Location	Name	Area (ha)	Classification	Legal Description	Interests	Map Key
Omori	<b>Rangikatea Road Local Purpose Reserve (Accessway)</b>	0.187	Local Purpose (accessway) <i>In7432, Gaz 2014</i>	Lot 29 DP 406306 (CT 422160)		ZZ
Omori	<b>Ruru Place Accessway</b>	0.009	Local Purpose (accessway) <i>In7432, Gaz 2014</i>	Lot 63 DP 66447 (CT 670601)		PP
Oreti	<b>Oreti Esplanade Reserve</b>	1.6220	Local Purpose (esplanade) <i>In7432, Gaz 2014</i>	Lot 4 DP 57457 (CT 670597)		HHH
Pukawa	<b>Pukawa Esplanade Reserve</b>	0.3430	Local Purpose (esplanade)	Lot 58 DP 34608 (formerly part CT 11A/1099)		EEE
Pukawa	<b>Pukawa Reservoir Site</b>	0.024	Local Purpose (water supply) <i>In7432, Gaz 2014</i>	Lot 214 DP 53105 (CT 670599)		FFF
Pukawa	<b>Pukawa Scenic Reserve</b>	20.19	Scenic <i>In7432, Gaz 2014</i>	Lot 219 DP 55146 BLK V PUKETI SD (CT 663649)		DDD
Pukawa	<b>Pukawa South Recreation Reserve</b>	2.5550	Recreation	Lot 56 DP 34607 (CT 20B/240) (2.4002 ha) Lot 57 34608 (formerly part CT 11A/1099) (0.1543 ha)		CCC
Pukawa	<b>State Highway 41 Local Purpose Reserve</b>	0.1303	Local Purpose (community) <i>In7432, Gaz 2014</i>	Lot 3 DP 68033 BLK V PUKETI SD (CT 670598)		III
Whareroa	<b>Piripi Place Utility Reserve</b>	0.1694	Local Purpose (utility) <i>In7432, Gaz 2014</i>	Lot 563 DP 338440 (CT 158220)		D
Whareroa	<b>Te Amio Place Reserve</b>	0.2	Local Purpose (community) <i>In7432, Gaz 2014</i>	Lot 506 DPS 48674 (CT 662240)		J

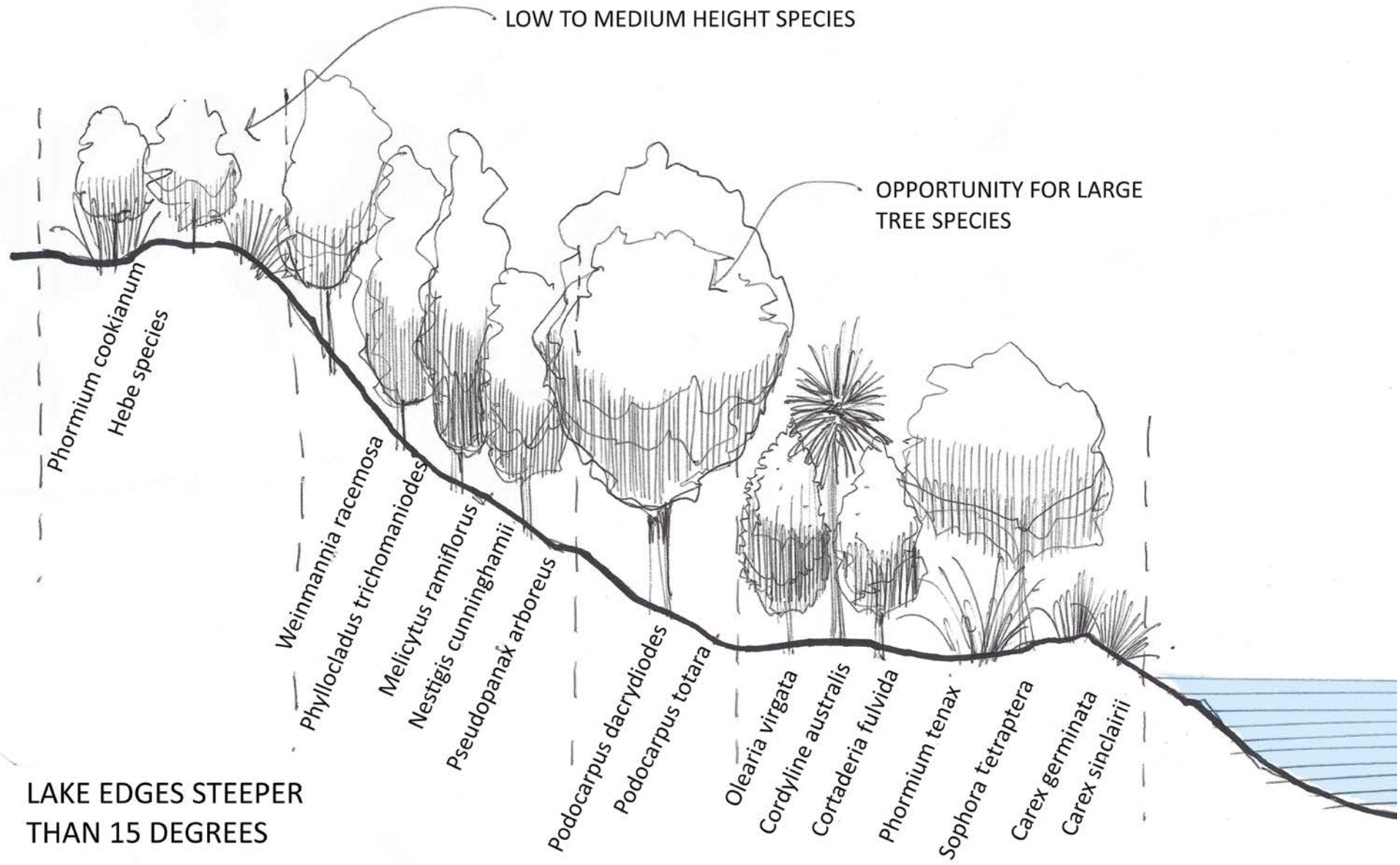
Location	Name	Area (ha)	Classification	Legal Description	Interests	Map Key
Whareroa	<b>Turangitukua Terrace Reserve</b>	1.254	Local Purpose (community) <i>In7432, Gaz 2014</i>	Lot 507 DPS 54517 (CT 662241)		H
Whareroa	<b>Whareroa Esplanade Reserve</b>	8.8720	Local Purpose (esplanade) <i>In7432, Gaz 2014</i>	Lot 501 DPS 46631 (CT 663427) (1.9370 ha) Lot 500 DPS 46631 (CT 663427) (5.2700 ha) Lot 502 DPS 46631 (CT 663427) (1.6300 ha) Lot 550 DP 352110 (CT 663427) (0.1351 ha)		A I B B
Whareroa	<b>Whareroa Recreation Reserve</b>	0.4805	Recreation <i>In952, Gaz 2011, p 367</i> <i>In7431, Gaz 2014</i>	Sec 560 SO 423274 (CT 548409)		K
Whareroa	<b>Whareroa Road Reserve</b>	0.167	Local Purpose (community) <i>In7432, Gaz 2014</i>	Lot 503 DPS 46984 (CT 662239)		F
Whareroa	<b>Whareroa Stormwater Reserve</b>	2.064	Local Purpose (community): <i>In7432, Gaz 2014</i>  Local Purpose (utility): <i>In7432, Gaz 2014</i>	Lot 505 DP 338440 (CT 158217) (0.3884 ha)  Lot 504 DP 352110 (CT 213798) (1.6756 ha)		G E
Whareroa	<b>Whareroa Tennis Courts</b>	11.271	Private freehold land owned by the Proprietors of Hauhungaroa No.6 and leased by the Taupō District Council	Part Lot 1 DPS 56581 (CT SA47A/409)	Lease held by TDC for a term of 21 years expiring on 1 <sup>st</sup> Jan 2031 (TDC A673467)	C

## APPENDIX TWO – PLANTING PLAN

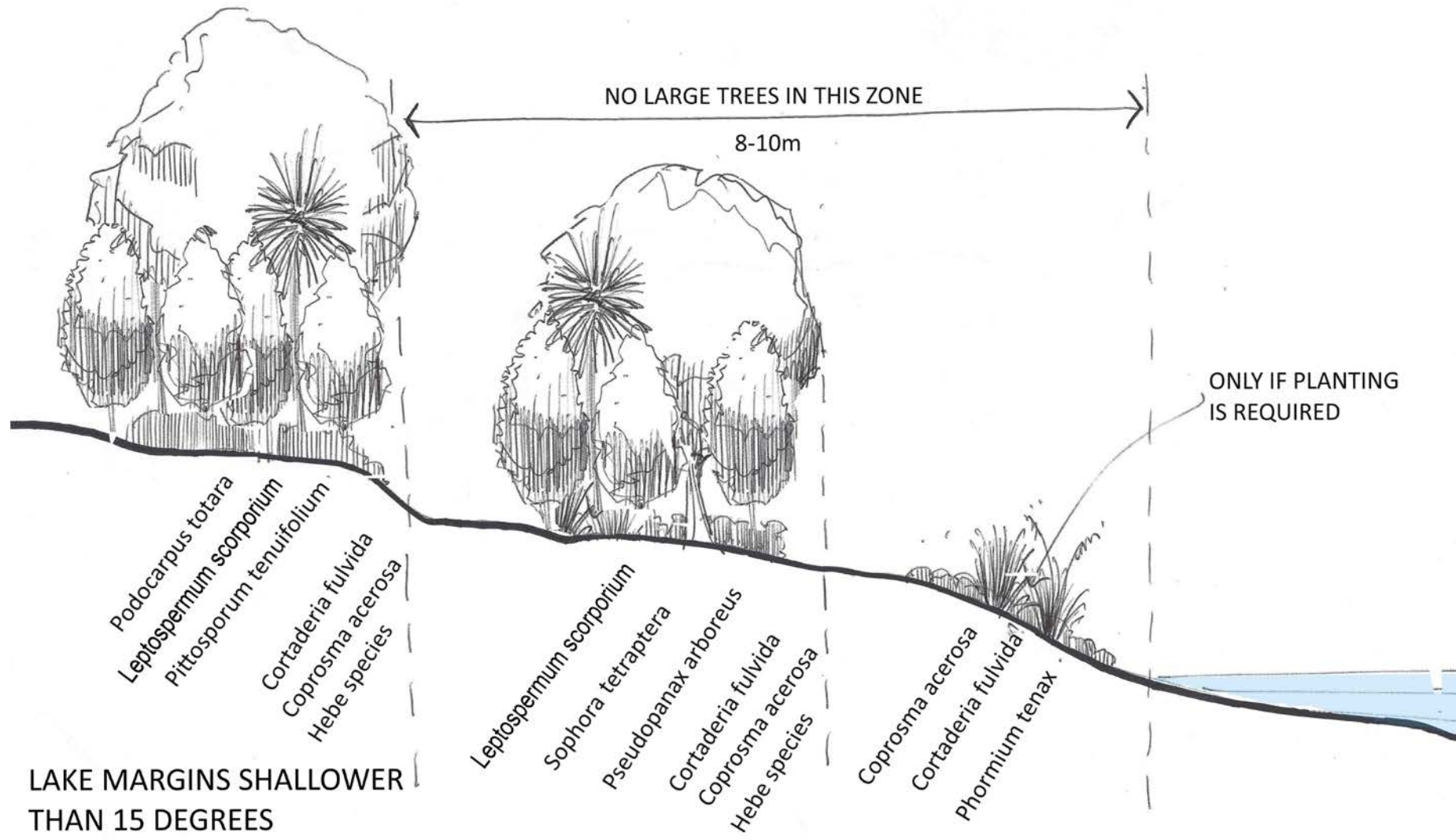
### PLANTING SPECIES LIST

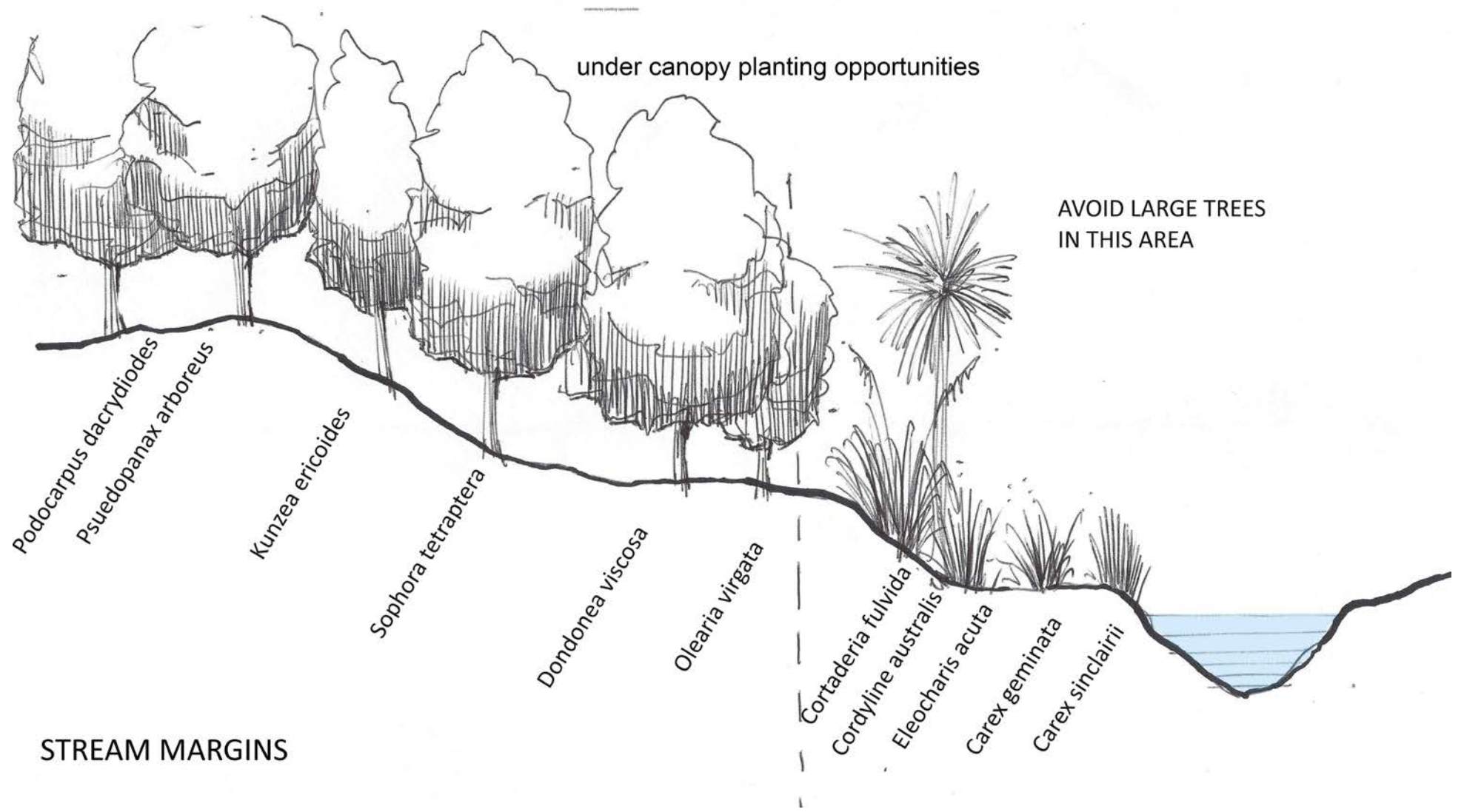
Limited funding for reserve planting is available. Planting is an operational cost therefore any increases have a direct impact on rates. Operational costs are continually under pressure to be maintained or reduced. For this reason the planting plan is included to provide direction for community initiatives which will be supported and where possible contributed to by the Council.











## **Notes to accompany planting cross sections**

These cross sections are indicative to capture the varied topography of the reserves in this area. They are not an exact match for the existing landscape; they serve as a management and planning tool for the future management of these reserve areas.

All planting work carried out is to be in accordance with the TDC tree and vegetation policy.

### **Zone A**

Where the topography is steeper there is an opportunity to increase the vegetation mix and diversity. Native plant species are preferred in these areas to enhance the ecological values and landscape character.

Avoid large tree on steep banks, due to long term erosion risk.

### **Zone B**

The aim is to retain the existing mix of open space and cluster planting of trees in this zone. In recreational reserves cluster planting must consider the open space character so that it:

- Allows for people to use these areas for a range of recreational purposes
- Ensures easy access for maintenance of these areas
- Provides passive surveillance opportunities of public space, a key CIPTED (Crime prevention through environmental design) goal.

Cluster planting should be made up of a combination of fast and slow growing tree species. The fast growing species provide shade, shelter and root protection for the slow growing larger species enabling them to establish and thrive. Cluster planting areas are to be no greater than 5mx5m. No flax to be planted around the perimeter. Maintain the ongoing limbing up of trees to increase visibility through the cluster planting areas to increase the open space character of this area.

### **Zone C**

As above

### **Zone D**

Open space recreational reserve with some specimen trees – any height limits will dictate the species selected. All trees are to be staked and mulched as per TDC development manual.

SOUTH WESTERN BAY SETTLEMENTS RESERVE MANGEMENT PLAN - SPECIES LIST				
NATIVE SPECIES				
Species	Common name	evergreen / deciduous	approximate mature height	approximate mature width
Alectryon excelsus	Titoki	evergreen	9m	5m
Carex geminata	Cutty Grass	evergreen		
Carex secta	Purei	evergreen		
Carex Sinclarii	Purei	evergreen		
Coprosma acerosa	Sand coprosma	evergreen		
Cordyline australis	Cabbage Tree	evergreen		
Cortaderia fulvida	Toetoe	evergreen		
Dodonaea viscosa	Akeake	evergreen	7m	3m
Eleocharis acuta	Hinau	evergreen		
Hebe parviflora	Korokio	evergreen		
Hebe stricta	Koromiko	evergreen		
Kunzea ericioides	Kanuka	evergreen	12m	4m
Leptospermum scoparinum	Manuka	evergreen		
Melicytus ramiflorus	Mahoe	evergreen		
Nestigis cunninghamii	Black maire	evergreen		
Oleria arborescens	Glossy tree daisy	evergreen		
Oleria virgata	Twiggy tree daisy	evergreen		
Phormium cookianum	Mountain flax	evergreen		
Phormium tenax	Harakeke	evergreen		
Phyllocladus trichomanoides	Tanekaha / Celery Pine	evergreen	20m	4m
Pittosporum tenuifolium	Kohuhu	evergreen		
Podocarpus dacrydiodes	Kahikatea	evergreen	65m	7m
Podocarpus Totara	Totara	evergreen	30m	8m
Pseudopanax species	Various	evergreen	12m	4m
Sophora tetraptera	Kowhai	evergreen		
Weinmannia racemosa	Kamaha	evergreen		

TREE SPECIES LIST				
EXOTIC SPECIES - SPECIMEN TREES				
Species name	Common name	evergreen / deciduous	approximate mature height	approximate mature width
Acer palmatum	Japanese maple	deciduous	7m	8m
Eucalyptus leucoxylo 'Rosea'	Winter flowering Gum	evergreen	12m	4m
Liquidambar styraciflua	Liquidambar / Sweetgum	deciduous	25m	10m
Populus nigra 'Italica'	Poplar	deciduous	25m	10m

**Please Note**

This list is subject to change as new information is acquired

TDC is always interested in discussing alternative options to the above list, our main selection criteria for tree species is that the species :

will be hardy enough to cope with this areas climatic conditions;

are not associated with any management issues such as wilding, suckering, poor form etc.

## APPENDIX THREE – SITES OF HISTORIC SIGNIFICANCE

### Whareroa

Reserve A includes a former old settlement or defended kainga which overlooks the lake and the Whareroa Stream. Recorded as a pa site in 1977 during Taumarunui County's administration of the lands on the western side of the lake. Metric number is T18/9 (N102/53).

Reserve I is a long foreshore reserve bordered at the southern end by DoC's Rangitukua Scenic Reserve. The reserve was gazetted in 1906, and is one of the oldest reserves around Lake Taupō.

'Piripekapeka' was the main lake side pa for Ngati-Parekawa before it was attacked by Ngati-Tamatera of Hauraki, led by Hihitaua. This was located in the DoC Rangitukua Scenic Reserve. There is a wide range of historic and archaeological features within this reserve but more recent years have seen planting along the foreshore of hundreds of kowhai trees that now have an understory of mostly blackberry, obscuring some features and restricting access. The sub settlement area on Omori Road arising from Ngati Parekaawa at Omori, is named 'Piripekapeka' in commemoration of this Pa site.

### Omori & Pukawa

The reserves contain well established native trees, with information signs and walking tracks. There is no apparent surface evidence of any early historic remains. Features of historic interest are contained in a Maori reserve on the nearby point immediately south of Pukawa.

On the Pukawa Recreation Reserve CCC there is a site with ovens recorded with the metric site number T18/6 (N102/50). The site was recorded when there was a walking track to the lake, and the area was in broom and scrub. It was originally part of a larger site in 1977 during Taumarunui County's administration of the lands on the western side of the lake. Since that time, improvements made there appear to have completely destroyed the site.

There is access from Omori Road via the Omori Stream mouth to the southern end to the TDC Reserve HH with a walking track across a bridge above the Omori Stream. Here there is a recorded site T18/138 (N102/116), indicated where the bluff above the lake narrows, steeply falling away toward the road. This site was recorded from features seen in an aerial photograph. During inspection, a ditch was measured running at right angle across this spur, starting off above the bluff and falling away on the other side.

Like many of the reserves open land, this ditch cuts through a hard pan formed by an old lake bench. The approximate GPS reading inland is: E1839397 N5690285 and above the lake bank ending E1839478 N5690305 and measuring 82 metres long.

The walking track crosses the ditch then turns near the lake bluff. Much of the area has mixed understory including blackberry encroaching part of the ditch. While recorded as a pa site with the allocated number, the site is considered as being made for the early New Zealand film 'Hei Tiki'. Others have suggested that it was modified for that purpose, but stood on an older site.

### Kuratau

Reserve U (Whiowhio) is on a historic river bed. There are no historic surface features evident. However, 20 metres from near the south west corner of Whiowhio on Maori land, there are two large open pits. The pits appear similar in construction to others made about the mid 19th century and used for food storage. The pits stand on the bank of the old river course.

On the northern headland of the Kuratau river stood The Kuratau Pa (named after a chief of that name). It was a large settlement which existed during the time of the Mission Station established by the Rev. Grace at Pukawa.

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