

Overview of River and Catchment Services – Waikato Region



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1 Introduction

1.1 Overview

The Waikato region has more than 16,000 kilometres of rivers and streams. Well-managed streams and rivers benefit our region's environment and economy. Flooding and erosion management play an important role in ensuring the safety of people, property and the environment. The Waikato Regional Council (WRC) is responsible for the overall management of our region's rivers and their catchments, including the effects of rivers, flooding and erosion.

Our streams and rivers have changed dramatically since European settlement. They have been dammed, had water extracted or diverted, waste discharged into them, and exotic plants and animals introduced. Catchments have also been greatly modified. Much of the native vegetation that would have once slowed the flow of water from hillsides and helped to hold the land in place has been cleared for agriculture, forestry and urban development. Modification and development of rivers and catchments have contributed to increased flooding and erosion. These outcomes threaten people and property, access and communication channels, and limit land productivity.

It is important that our waterways and catchments are managed to minimise the adverse effects of erosion and flooding. Active river and catchment management assists to reduce natural risks and maintain stable rivers, streams and drainage systems. Environmental benefits include improvement in water quality (including a reduction in sediment entering waterways) and the protection and enhancement of native vegetation, riparian areas and wetlands.

1.2 Purpose

The purpose of this document is to provide an overview of river and catchment management within the Waikato region.

This document will outline:

- The nature of the region and the key issues we face in the future.
- How river and catchment activities are managed across the region.

- Responsibilities for river and catchment management.
- How river and catchment management relates to other activities.
- The legislative and policy requirements for river and catchment management.
- How links with the community are developed and maintained.

1.3 Relationship of this document to river and catchment zone management plans

This document provides a broad context for River and Catchment Zone Management Plans (ZMP's). ZMP's are the primary tools for implementation of all river and catchment management activities within each zone and include:

- A vision for the zone.
- A strategy to achieve that vision.
- Activities to implement the strategy.
- A set of service levels and performance standards for the activities.

A key component of ZMP's is detail on the long-term management of river and catchment management assets. ZMP's therefore fulfil asset management planning requirements for river and catchment management assets.

The purpose of ZMP's is to:

- Provide a document to convey the long-term strategic direction for river and catchment management within the zone.
- Provide an overview of the zone generally, with specific focus on the work programmes and other activities within the zone.
- Provide a communication tool for staff, Council committees and subcommittees, iwi, and key stakeholders, including the general public.
- Improve understanding of service level standards, options and costs to smooth peak funding demands, while improving customer satisfaction.
- Manage the environmental, service delivery and financial risks of asset failure.

- Identify lifecycle costs to provide agreed level of service over the long term.
- Explain how the long term works programmes have been developed and how they will be funded.
- Provide a management tool that is live and adaptable with regard to the changing needs of river and catchment management assets.

Detailed information on zone management, including the above is available within the ZMP's.

2 The Waikato region

2.1 Overview

The Waikato is the fourth largest region in New Zealand; covering 25,000 square kilometres.

It stretches from the Bombay Hills and Port Waikato in the north down to the Kaimai Ranges and Mt Ruapehu in the south, and from Mokau on the west coast across to the Coromandel Peninsula in the east. The region has 11 territorial authorities - one city (Hamilton) and 10 districts, three of which lie across the regional boundary. The territorial authorities within the region are:

- Hamilton City Council
- Hauraki District Council
- Matamata-Piako District Council
- Otorohanga District Council
- Rotorua District Council
- South Waikato District Council
- Taupo District Council
- Thames/Coromandel District Council
- Waitomo District Council
- Waipa District Council
- Waikato District Council

2.2 The people

In the 2006 Census the population of the Waikato region was 382,716. This represents about 9.5 per cent of New Zealand's total population and a growth of seven per cent since 2001. By 2008, the population had grown to 402,200 - a medium growth rate. This makes it the fourth largest regional population after the Auckland, Canterbury and Wellington regions. Approximately 75 per cent of people in the Waikato region live in urban areas.

Population projections show that the estimated regional population by 2026 will be 426,800.

The median age (half are younger, half are older) for people in the Waikato region was 35.6 years, compared to 35.9 years for New Zealand as a whole. The 2006 Census showed 70 per cent of Waikato people class themselves as European compared to 68 per cent for New Zealand as a whole. The region has a relatively high Maori population – 21 per cent compared to 14 per cent nationally.

The median income (half earn more, half earn less) for people aged 15 years and over was \$24,100, slightly less than the national median of \$24,400 in 2006.



2.3 The economy

The Waikato region produced an estimated nine per cent of New Zealand's gross domestic product (GDP) in the year ended March 2004. The largest industries contributing towards GDP in the Waikato region in 2003/04 were:

- dairy farming
- ownership of owner-occupied dwellings
- business services
- retail trade.

In addition to the above, forestry, mining, energy, construction, tourism, agriculture and horticulture are significant contributors to the regional economy. The Waikato region is a major corridor for the supply of essential services such as electricity supply and distribution, telecommunications networks and gas distribution. The region is also a major road and rail corridor that links Auckland and Tauranga to the rest of the North Island.

In March 2009, the Waikato region's labour force was 70.1 per cent compared to 68.6 per cent for New Zealand as a whole. The unemployment rate was 4.7 per cent, an increase of 1.0 per cent from the previous year.

and 0.2 per cent higher than the national average.

The importance of agriculture to the Waikato region

Farming is at the heart of the Waikato economy, contributing approximately 23 per cent of regional GDP when direct, indirect and flow-on effects are included (based on 2004 figures)¹. More than 25,000 people were employed in farming or supporting industries in 2006 - this was just over 16 per cent of the region's workforce.

Agriculture has flow-on effects through the rest of the economy. As well as farm workers, the industry employs people in processing plants and in agricultural services. Wholesale and retail traders in towns across the region benefit from the farming sector, in terms of flow-on effects through the spending of farmers, farm staff and farm industry workers.

The dairy sector is the major earner within the agricultural sector. When processing of dairy products is included, dairy farming contributes close to \$4.5 billion to the Waikato economy every year². In fact, it has been estimated to bring up to \$1.2 billion to the region every year at top milk pay-out rates³.

The dairy sector is the fourth biggest employer in the Waikato region, employing nearly 11,000 people in 2006. Sheep, beef and mixed livestock farming contributes \$594 million to the Waikato economy every year, employing over 5000 people.

2.4 The environment

The Waikato region hosts a rich array of natural assets and resources, significant to the region's communities and New Zealand as a whole.

It has more than 100 lakes, 20 rivers and 1,420 streams, including the largest lake and longest river in New Zealand – Lake Taupo and the Waikato River. It also has 1,150 kilometres of coastline, including iconic west coast and Coromandel beaches.

The Waikato is home to more than 80 per cent of New Zealand's geothermal systems. Three out of six of the country's internationally

important wetlands (recognised under the Ramsar Convention) are also found here. The Waikato is the most important mineral producing area in the country, providing coal, aggregate, iron sand, gold, silver and limestone.

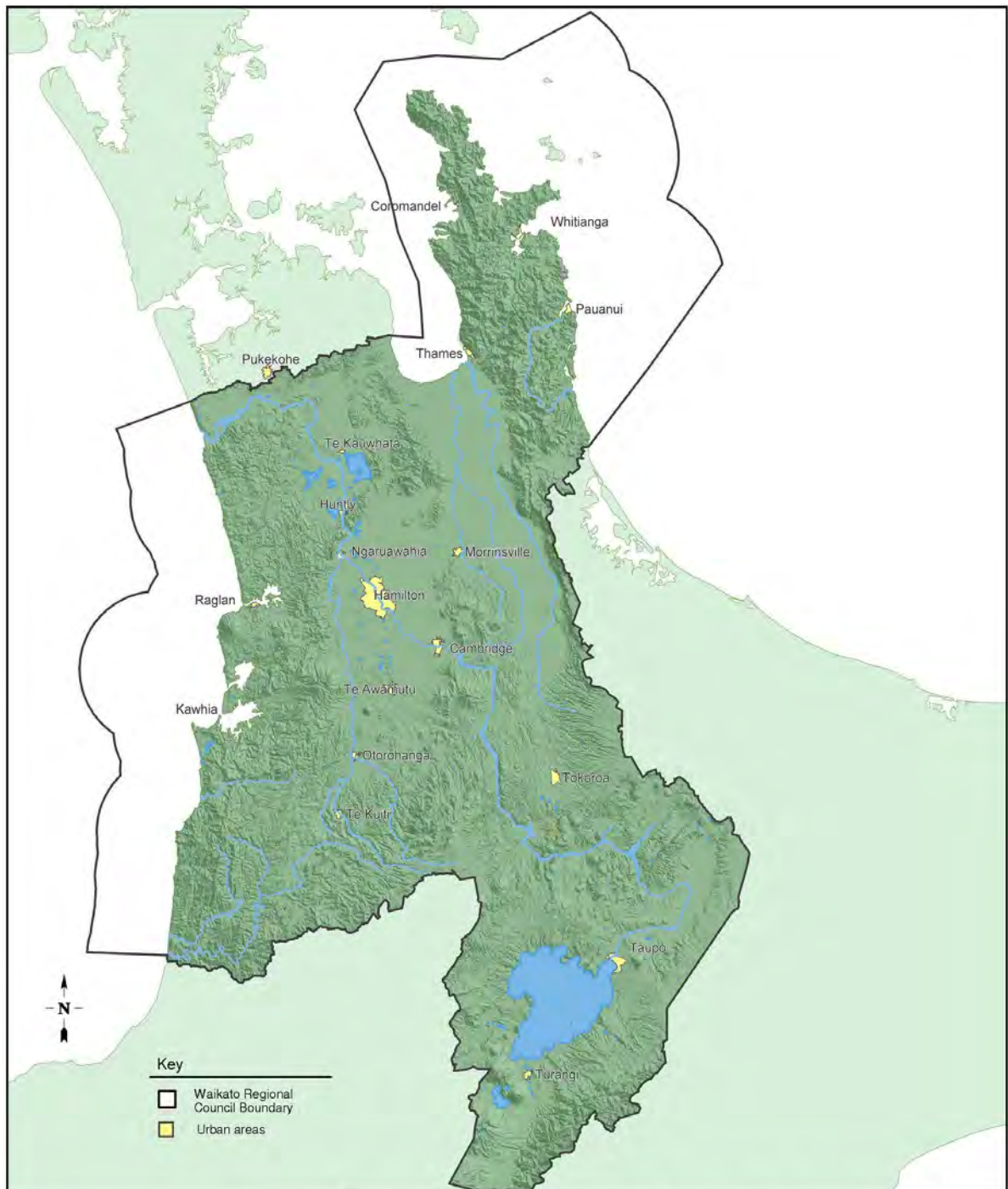
The Waikato region has a mild climate with moderate annual rainfall, which ensures excellent growing conditions year round. The temperature averages 13.5 degrees Celsius in July and 24.2 degrees Celsius in February. The comparatively mild, moist climate and varied topography (from dune to wetland to alpine) has encouraged a richness and diversity of native plant and animal life that is greater than most parts of New Zealand.


¹ Market Economics 2006. Waikato Region Economy Environment Futures Report. Environment Waikato Technical Report 2006/51.

² Hughs, W. 2007. Regional Economic Bulletin, July 2007. Research/ Massey University. Palmerston North.

³ Calculated using Livestock Improvement production figures and milk pay-out rates.

Figure 1 Map of the Waikato region



<p>Waikato Regional Council Boundary</p>		<p>0 5 10 15 20 25 Kilometers</p>	<p>Scale 1 : 1,500,000 at A4</p>	<p>A4</p>
<p>Created by: Gareth Langdon Status: Draft</p> <p>Projection: NZTM Request No.: 19877</p> <p>Date: 22 July 2010 File name: 19877_Zone_Overview_Maps.gws</p>	<p>"Sourced from NZTopo Database. Crown Copyright Reserved" "Digital Elevation Model layers derived by Waikato Regional Council. Topographic information derived from Land Information New Zealand's data. COPYRIGHT RESERVED." "Digital Boundary Data sourced from Statistics New Zealand" "Urban Footprints Layer derived by Waikato Regional Council. COPYRIGHT RESERVED."</p>			

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3 River and catchment management

3.1 What is river and catchment management?

River and catchment management describes the range of physical works, services and advice provided to landowners by Council. The aims of river and catchment management activities are to:

- Manage issues in a 'whole of catchment' way.
- Manage hazards and effects associated with soil erosion and flooding.
- Reduce sediment entering waterways.
- Improve water quality.
- Improve river stability.
- Improve river environments by creating better habitats for a wider variety of plants and animals.

In each of the eight management zones across the region river and catchment management activities include:

Catchment oversight

This involves the overall management and coordination of the zone activities and programmes.

These programmes are discussed with zone catchment liaison subcommittees and reported to the community and the Council.

Catchment oversight also includes the maintenance of partnerships and relationships with key stakeholders in the zone.

Information and advice

This activity enables response to enquiries and provision of advice and information on river and catchment management in each zone. It also includes monitoring programmes to assess the environmental changes resulting from the activities undertaken.



Catchment works programmes (maintenance and new works)

Land throughout the Waikato region is susceptible to soil erosion. Services and programmes promoted by Council in relation to the stability and use of land include:

- Liaison with property owners.
- Preparation of land protection plans.
- Management of existing protection schemes/assets.
- Promotion of retirement from grazing and conservation planting of erosion prone land.
- Protection of indigenous vegetation in upper catchment areas.
- Installation of structures to control sediment and water runoff.
- Condition and monitoring programmes.

Catchment new works may involve the design, supervision and completion of soil conservation, erosion control and other catchment management measures. Assets associated with these programmes are usually under the ownership of individual property owners. However, Council usually has a role in their management due to the presence of registered agreements and covenants. All works on private land are subject to negotiation and agreement with the property owner.

Where existing catchment schemes are in place, programmes to maintain and manage these schemes are agreed with the owners. Community feedback indicates high value being placed on ensuring the existing protection measures are maintained to ensure that the benefits they provide continue into the future.

River management

This involves the achievement of:

- Sustainable, stable and healthy rivers.
- Integrated catchment management.
- Management of flood waters.
- Enhancement of the environmental values of river systems.
- Liaison and integration with other Council activities and programmes.

Typical river management works include:

- Controlling bank erosion (by planting and fencing off river banks, construction of rock or other bank revetment works or construction of groynes).
- Removing blockages and obstructions

- River training works (ensuring the flow paths of rivers are stable and optimum channel widths are maintained).
- Gravel and sand management.

Flood protection

This involves:

- Management of flood risks and hazards associated with rivers.
- Specific protection works as agreed with communities.

Council is responsible for the maintenance of a number of major flood schemes throughout the Waikato region. Some schemes are managed in conjunction with district councils.

Typical flood protection works include:

- Stopbanks and floodways
- Pumpstations
- Floodgates
- Detention dams.

3.2 Whole of catchment management

3.2.1 Background

Prior to the formation of the Waikato Regional Council in 1989, both catchment authorities in the Waikato region (Hauraki Catchment Board and Waikato Catchment Board) strongly promoted the catchment based approach. This is demonstrated today by the presence of comprehensive well established catchment schemes based on the major catchments and sub catchments.

The resultant schemes include the Lower Waikato Waipa Control Scheme, Lake Taupo Catchment Scheme, Waihou Valley and Piako River Schemes. The catchment based approach has been progressed further by the Waikato Regional Council since 1989. However, while these earlier programmes were promoted over entire catchments, their primary focus was river and flood protection or soil conservation or a mix of both.

3.2.2 What is whole of catchment management?

In recent years, there has been increasing recognition of the range of issues which need to be connected in order to improve river and catchment management. The following matters have increasingly been recognised:

- Catchment processes are strongly interlinked.

- There may be effects of specific catchment activities upon other activities and values. For example, river and catchment works programmes may impact on cultural, recreational and environmental values.

- The traditional approaches to river and catchment management did not always adequately recognise the inter-relatedness of the environment's components. In fact, problems may be created by managing certain resources in isolation from others.

- Catchments as a whole provide a useful and functional unit for managing natural resources in a holistic way. A catchment area is bounded by natural features from which runoff drains to a common lower point (river, wetland, sea). Areas within that catchment are 'linked' by the flow of water downstream. Linked catchment processes include downstream transport of water, sediments, nutrients, contaminants and seeds from the upper catchment. Water quality and quantity throughout the catchment are influenced by management practices elsewhere in the catchment. Land use practices and vegetative cover influence runoff characteristics and patterns in lower catchment areas. This may have significant effects on the management of flood protection and river management measures in lower catchment reaches.

- Whole of catchment management recognises the importance of understanding the links in catchment processes so that natural resources are managed in sustainable and equitable ways. However, the transition from the traditional approach to the integrated, whole of catchment approach can often be challenging due to the diverse and often incompatible interests, activities and demands upon resources which have previously been addressed independently. A key is to achieve engagement and participation from across all key stakeholder groups.

Council has progressed the 'whole of catchment' approach with the introduction of Project Watershed in 2002 and the Peninsula Project in 2003. These projects sought to provide a more integrated management and funding framework across the entire Waikato River catchment and Coromandel Peninsula respectively. While this was an extension from the earlier approach, the primary focus

remained the delivery of specific services (flood management, river management and soil conservation). Further progress since 2003, as a result of changes to legislation and community demand, have resulted in wider consideration of related catchment activity (including biodiversity, biosecurity, natural hazards and planning) and a broader values base (cultural, environmental, economic and social).

3.2.3 Relationship to integrated catchment management

Increasingly, Council's standard operating practice has been to identify how the range of issues associated with catchment management can be considered in a holistic way. This includes identifying the linkages between the following which is often referred to as Integrated Catchment Management (ICM):

- Treaty settlements and iwi visions and strategy
- River and stream management
- Flood protection
- Land management/soil erosion/soil conservation
- Land use change
- Climate change
- Asset management
- Natural hazards
- Emergency management
- Risk management
- Biosecurity
- Biodiversity and ecological enhancement
- Water quality and quantity
- Sustainable agriculture
- Nutrient management
- Growth and development
- Infrastructural development (transportation networks, electricity generation)
- Regional and district planning

Incorporation of the above issues into river and catchment planning processes - including into the drafting of zone plans, is expected to occur progressively over time.

3.2.4 What it means in practice

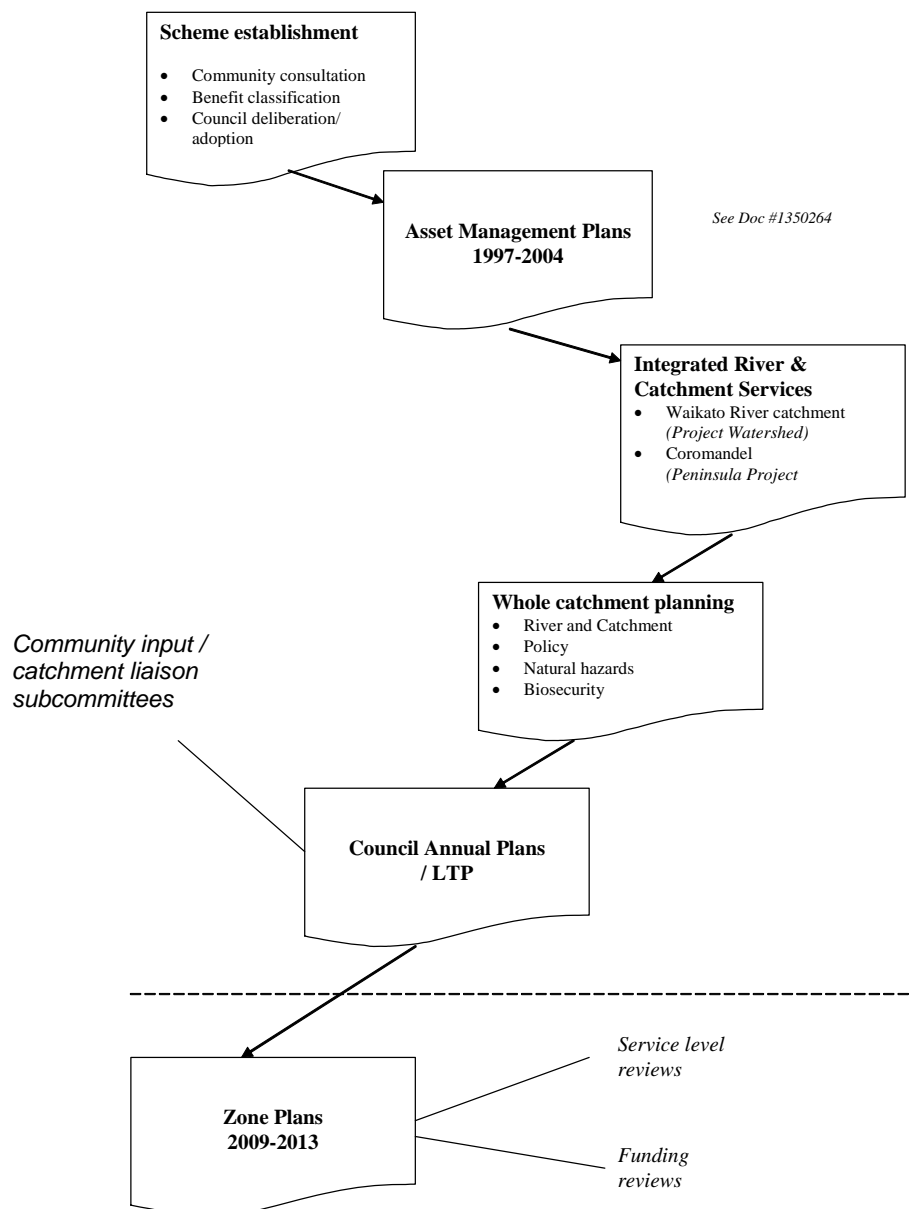
Council's ZMP's identify the range of issues that need to be addressed within specific zones/catchments. They are intended to provide a tool by which more significant integrated 'whole of catchment' management can be achieved.

The 'whole of catchment' approach is to be reflected in the ZMP document by outlining how stakeholders are engaged and consulted with, and how the plans are implemented with community support.

Figure 2 sets out the process undertaken to derive zone plans.



Figure 2 Waikato Regional Council's catchment planning



3.3 River and catchment management in the Waikato region

WRC's other responsibilities within the management of the eight catchment zones include:

3.3.1 Waikato Regional Council

Role

Council's activities provide guidance and support for the sustainable development of the Waikato region, to ensure the region grows and develops in a way that keeps its values safe for future generations. Council also has a broader responsibility in combination with others for the economic, social and cultural well being of the regional community.

- Strategic thinking for the region's future.
- Supporting sustainable economic development.
- Managing the risks posed by our major rivers including the region's major flood control schemes.
- Navigation and safety on our harbours and lakes.
- Plant and animal pest management.

Rationale for the Waikato Regional Council involvement in river and catchment management

The reorganisation of local government in 1989 gave regional councils responsibility for flood protection erosion and soil conservation works previously administered by catchment boards. As a result Council became responsible for major flood protection schemes, and river management and soil conservation works across the region.

Flood protection, river management and soil conservation activities are catchment wide by nature. As a result they often span more than one territorial authority. For this reason, regional council's have usually been deemed the appropriate management agency for these public services. In recent years some district councils have agreed to transfer responsibility for flood protection assets for which they were formerly responsible, to Council because they do not consider flood protection services to be core business, and because of limited specialist expertise within their respective organisations (this has applied more recently to Franklin and Waikato districts).

Privatisation of local schemes is not usually deemed to be practicable because of the dependence of multiple landowners on specific groups of assets. The schemes must therefore be owned, managed and operated as community assets to be effective.

Historically, services tended to focus on specific issues such as flood protection and soil conservation. In recent years Council has adopted a whole of catchment management approach, aiming to integrate management of a range of issues across whole catchments. This is in alignment with the legislation, the wishes and values of the community, and the objectives of the organisation.

The Soil Conservation and Rivers Control Act (1941) empowers Council to manage issues related to flooding and erosion, and the community clearly considers it important that the protection provided by these services across the region continues.

Council's Long Term Plan (LTP) and the Safe and Resilient Communities Outcome

The current LTP covers the period 2009 – 2019 and sets out the community outcomes, the organisation's objectives, programmes and strategies for the 10 year period covered by the plan.



The current LTP expires in June 2012 and development of the 2012 – 2022 LTP has commenced (as at April 2011). Some indication can be given as to the expected framework of this plan based on the Local Government 2010 Amendment Act (also known as TAFM) and, subject to final adoption by Council.

Mission and vision

The Waikato Regional Council adopted its strategic direction for the council triennium on 31 March 2011. This strategy sets out what the Council does, why it is done and the value provided to the community. The vision is:

'Competing globally, caring locally.'

The Council's mission is:

'To provide regional leadership to balance economic and environmental outcomes to enable the social, economic, environmental and cultural wellbeing for current and future generations.'

The organisational mission and vision provide a framework from which to develop zone specific visions. Based on these, zone strategies are developed which are implemented through specific objectives and goals.

3.3.2 Community outcomes

Community outcomes are statements of what the community wants in terms of social, economic, environmental and cultural wellbeing. They are about working to identify and achieve what the whole of our community wants for now and for the future, using our communities' resources efficiently, creating effective relationships and achieving our community vision.

The community outcomes definition under the LGA 2002 Amendment Act 2010 is:

'the outcomes that a local authority aims to achieve in order to promote the social, economic, environmental and cultural well being of its district or region, in the present and for the future.'

The amendment has shifted the previous 'multi agency community visioning' to a focus upon the specific aims of the respective local authority.



However, the community aspirations developed in consultation with the regional community through the Choosing Futures Waikato (2005) process continue to be relevant in providing guidance in developing the aims of Council (see below).

The Waikato regional community aspirations may be broader than council activities or local issues – they encompass the overall social, economic, environmental and cultural wellbeing of the Waikato region.

Community aspirations for the Waikato region comprise five key themes:

1. **Sustainable environment:** the Waikato region values and protects its diverse, interconnected natural environments.

2. **Quality of life:** the Waikato region is a great place to live, providing the services and opportunities we need to live well.

3. **Sustainable economy:** the Waikato region balances a thriving economy with looking after its people, places and environment.

4. **Culture and identity:** the Waikato region identifies with and values its land, air, rivers and waterways, mountains, flora and fauna, and its people.

5. **Participation and equity:** the Waikato region builds strong informed communities and has a culture that encourages people and communities to play their part.

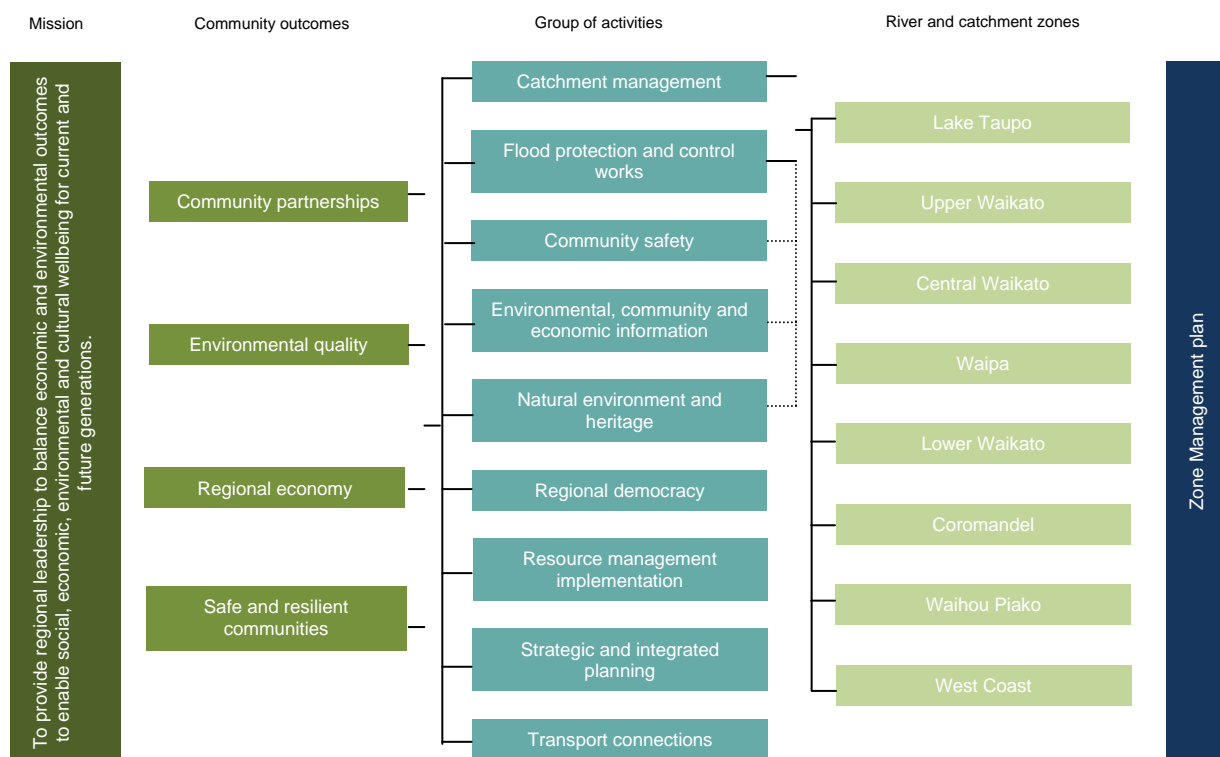
Based on the community aspirations and the need for Council to identify its specific strategies to address the four well beings, (environmental, economic, cultural and social) the outcomes sought by Council are as follows:

- Community partnerships
- Environmental quality
- Regional economy
- Safe and resilient communities.

Groups of Activities (GOA's) have been derived to deliver these outcomes. River and Catchment Services are largely delivered through two principal GOA's - Flood protection and control works and Catchment management.

The links between the outcomes, the GOA's and the zones are outlined in Figure 3.

Figure 3 Relationship of community outcomes to zone management



The contribution of river and catchment activities to community outcomes is outlined in Table 1 below.

Table 1 Zone management contribution to community outcomes

Community outcome	Contribution to community outcome	Objectives
Environmental quality	<p>The iconic landscapes and natural features of our environment define and sustain us. We respect and celebrate them as taonga.</p> <p>Our natural environment is protected and respected. Its ecological balance is restored, its air, soil and water quality are improved, and its native biodiversity is enhanced.</p> <p>Our coastal and waterway environments are restored and preserved, and access to them is maintained.</p> <p>Our region's waterways have consistently high water quality.</p> <p>We use land management practices that protect and sustain our soil and land.</p>	<p>Enhance and protect the environment and biodiversity of catchments while maintaining the benefits of river, catchment and drainage services.</p> <p>Minimise adverse effects associated with providing services.</p> <p>Employ industry best environmental practice principles in undertaking activities required to provide the service.</p> <p>Comply with the requirements of Environment Waikato Environmental Guidelines (Environment Waikato, 2003).</p>

Safe and resilient communities	Our communities and government work together so that we are safe, feel safe and crime is reduced.	
	We can participate in recreation and leisure activities that meet our diverse needs and we have opportunities to enjoy the Waikato region's natural places and open spaces in responsible ways.	
Regional economy	<p>We have reliable and efficient well planned infrastructure and services including transport that is safe and interconnected and easy to get to and use.</p> <p>Our economy is built on land based industries and we encourage planning and practices that protect and sustain our productive resources.</p>	<p>To ensure the long-term performance of the services and assets so as to provide effective and sustainable delivery of benefits to the service levels and costs agreed with the community.</p> <p>To ensure adequate provision is made for the eventual replacement of assets.</p> <p>To continually assess the impacts of emerging trends and developments within the zone that may impact on the delivery and nature of the services to be provided.</p> <p>Apply a balanced and multi-faceted approach to the management of flood and erosion risks including:</p> <ul style="list-style-type: none"> • Assessing hazards and risks • Reduction of risk through appropriate land use planning tools • Maintenance of existing protection works and schemes • Construction of new works where these are environmentally and economically sustainable • Provision of timely and accurate flood warnings • Prepare for and respond to hazard events and civil defence emergencies • Assessment of district and regional planning developments and trends
Community partnerships	<p>We are proud of our region's distinctive identity, its Maoritanga, and its rich and diverse natural and cultural heritage.</p> <p>Heritage sites and landscapes of significance to whanau, hapu and iwi are preserved and valued.</p> <p>Maori have the opportunity to participate in community development and decision making at marae, hapu and iwi levels.</p>	<p>To avoid and/or minimise the effects of scheme services on the cultural and spiritual values of tangata whenua.</p> <p>To assess and incorporate developments and implications associated with Treaty settlements and co-management arrangements.</p> <p>To be responsive to customer needs by undertaking ongoing consultation in regard to service levels and work programmes, and by responding promptly and effectively to customer enquiries.</p>

The plans and documents that are closely related to river and catchment management activities are outlined within Table 2.

Table 2 Related plans and documents

Plans/documents	Description	Frequency	Reference
Long-Term Plan (LTP)	The LTP sets out an agreed vision and community outcomes for Council. The framework of this plan is in line with the requirements of the Local Government Act 2002 (LGA 2002). This plan assists in promoting sustainable practices as well as assisting the community to determine over time what 'outcomes' need to be achieved.	Must be produced every three years. Consultation for community outcomes must be undertaken every 6 years.	EW 2009d
Annual Plan	The works identified in the ZMP should automatically become the basis on which future annual plans are prepared (as well as the LTP above).	Must be produced in the intervening years between LTPs. Every third year the annual plan is embedded in the LTP.	EW 2009c
Annual Report	The Annual Report is the mechanism to report back to the community, showing Council's achievement against Annual Plan and LTP targets.	Must be produced every year to report progress.	EW 2009d
Zone Management Plan (ZMP)	The ZMP formally documents strategies and the integrated management philosophy of the zone and includes within it the asset management components of growth, risk, maintenance, renewal and development works and associated budgets. This information automatically feeds into the LTP and Annual Planning processes.	Should be reviewed and aligned every year prior to the Annual Plan process and a major update every three years prior to the LTP process.	
Waikato Regional Policy Statement Waikato Regional Plan Regional Strategies	Promotes the sustainable management of natural and physical resources. Contains objectives, policies and methods for land, air, fresh water, heritage, energy and geothermal resources, the coastal environment, hazardous substances and waste management, natural character and indigenous ecosystems and the built environment.	Produces on a 10 year cycle.	EW 2000

3.4 Catchments and management zones

3.4.1 Catchments within the Waikato region

The Waikato region has four major catchment areas:

1. Coromandel
2. Waihou Piako
3. Waikato River
4. West Coast

These four major catchment areas are shown in Figure 4.

3.4.2 River and catchment management zones

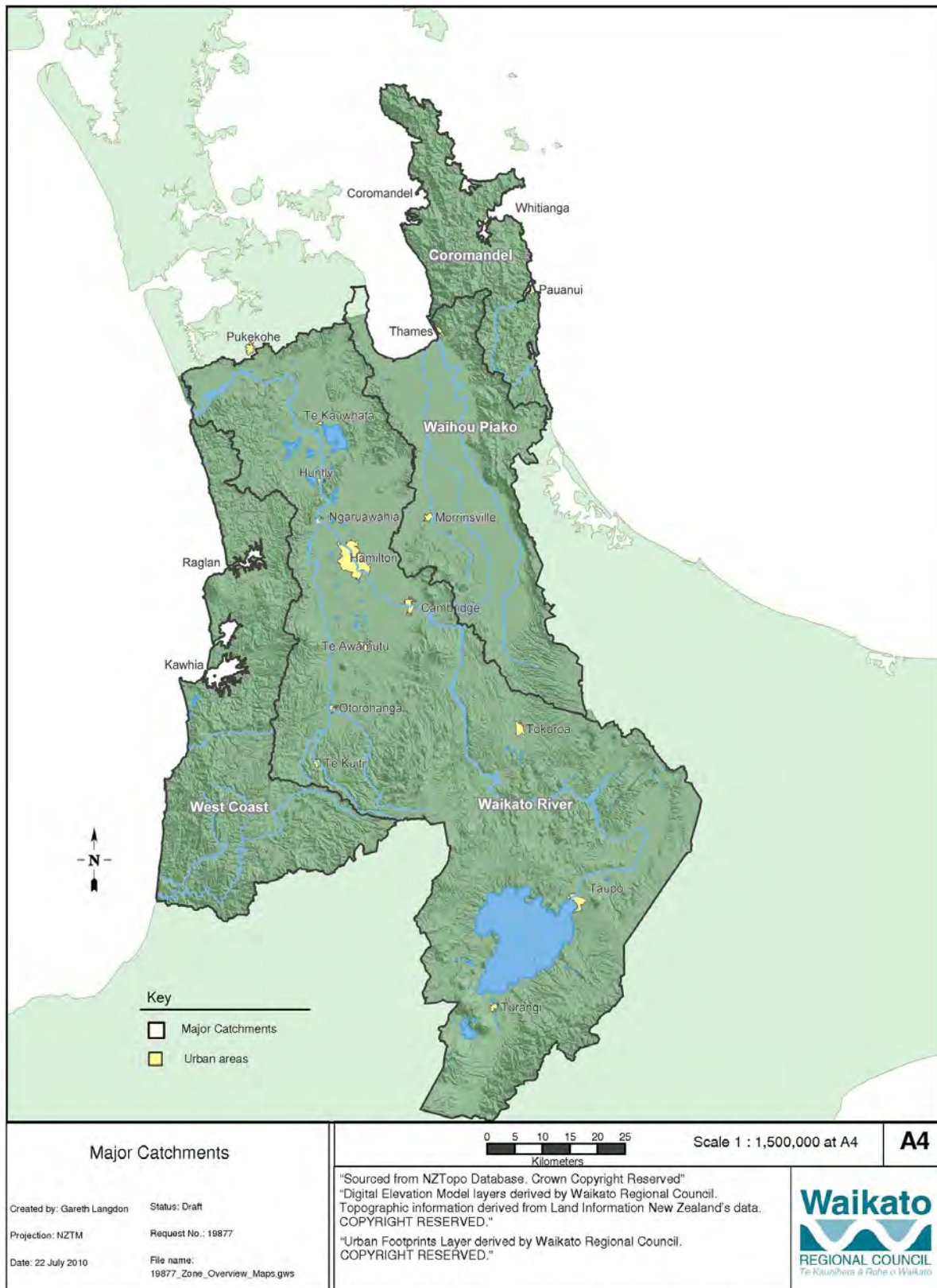
Council provides river and catchment services within eight management zones in the region:

1. Coromandel
2. Waihou-Piako
3. Lake Taupo
4. Waipa
5. Upper Waikato
6. Central Waikato
7. Lower Waikato
8. West Coast

Three of the zones align with major catchments, being Coromandel, Waihou Piako and West Coast. The Waikato River catchment contains five zones being Lake Taupo, Waipa, Upper Waikato, Central Waikato and Lower Waikato.

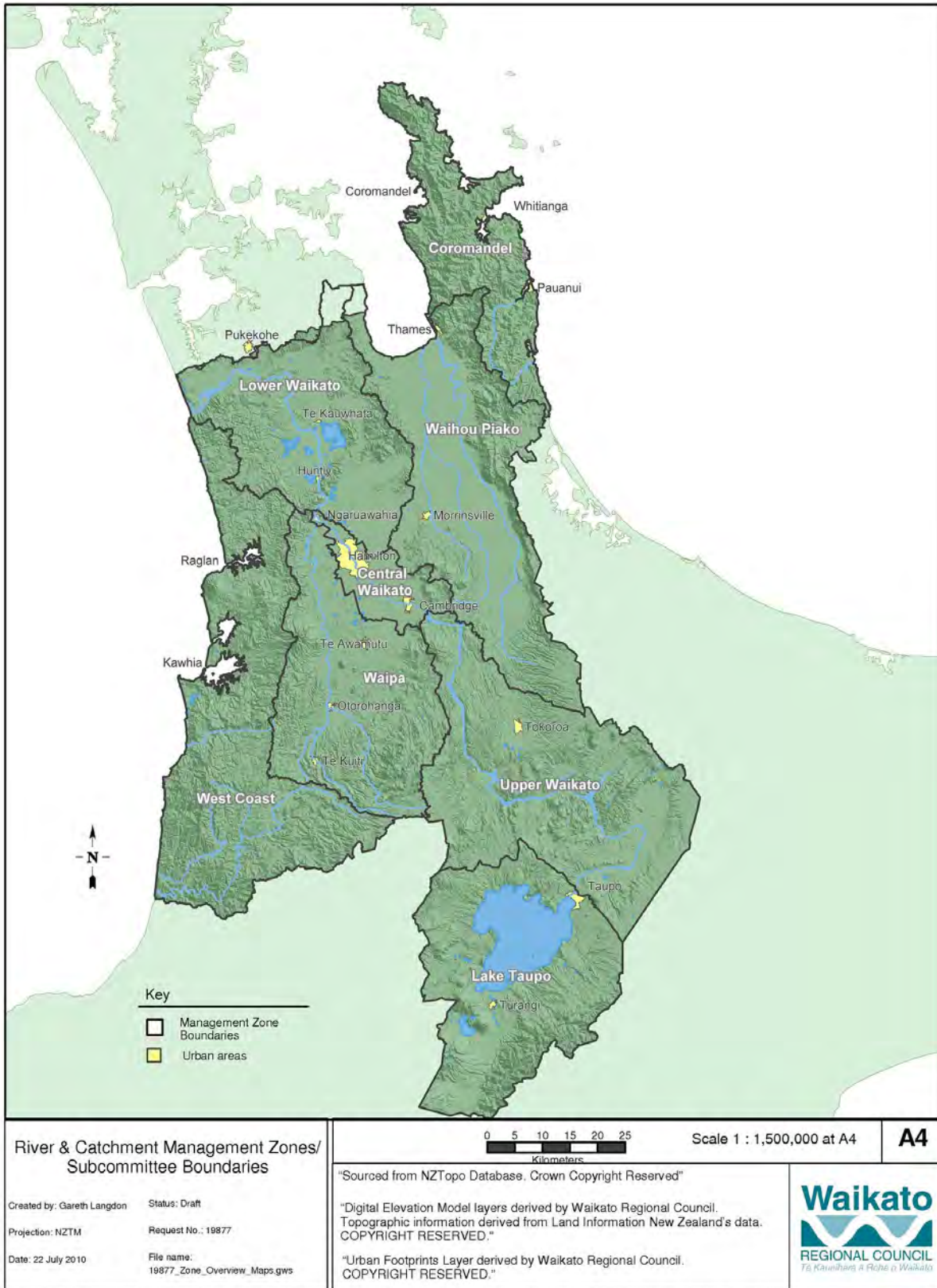
The eight river and catchment management zones are shown in Figure 5 below.

Figure 4 Catchments within the Waikato region



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Figure 5 River and catchment management zones in the Waikato region



3.5 Key partnerships and stakeholders

Council cannot achieve the community outcomes alone. There is a need to work with other councils, community groups, businesses, individual landowners, central government, iwi/hapu and non-governmental organisations. Council has partnerships with the following organisations for the delivery of activities within the zone.

- External environmental agencies.
- Care groups and environmental education groups.
- Central government.
- Iwi.

The key external stakeholders with an interest in river and catchment management activities are:

- The community – citizens and ratepayers receiving direct or indirect benefit from services.
- Zone catchment liaison subcommittees.
- Landowners holding Land Improvement Agreements.
- Territorial authorities.
- Department of Conservation.
- Fish and Game New Zealand.
- Hydro power generators including Mighty River Power and Genesis.
- New Zealand Transport Agency.
- The wider community.

4 Issues and trends

Developments and trends continue across the Waikato region. Many of these are of significance to ongoing river and catchment management in the region.

Issues and trends may be global, national, regional or local in nature. Local issues are outlined in detail within the ZMP's. The global, national and regionally significant issues and trends for river and catchment management are outlined below.

4.1 Climate change

Climate change presents significant implications for the Waikato environment, the regional economy and the safety of our communities. Forecasts have been made as to future impacts of climate change on New Zealand. Forecasts for the Waikato region

indicate that these changes could have an effect upon flood risks and frequency, sea level rise (with subsequent effects on risks and asset management) and river and catchment management levels of service. Climate change is likely to have an impact on asset maintenance costs, and is expected to be an important issue for the future management of river and catchment assets.

4.2 Growth

The region is subject to significant growth and development pressures and demands. Growth has the potential to increase the level of risk faced by communities from natural hazards and have effects upon land use productivity, resource use, biodiversity and other resources. Growth also increases the demand on existing infrastructure, and increases the need for new infrastructure development.

The region is experiencing growth pressures both from within the region and due to its proximity to Auckland and the Bay of Plenty. It is important that river and catchment activities link to regional growth and development strategies.

4.3 Treaty of Waitangi settlements

Across New Zealand, there are numerous treaty settlements in progress between the Crown and Maori claimant groups to settle historical claims against the Crown. Eight iwi groups have tribal areas (rohe) within the region, and several of these groups are in negotiations with the Crown.

The Waikato-Tainui Deed of Settlement was passed into law in May 2010. The agreement establishes a River Management Authority to oversee governance of the river. These and other co-management arrangements will significantly influence the approach to river and catchment management and over time, must be fully considered within ZMP's.



4.4 Land use change

The region is experiencing three main forms of land use change:

1. Conversion of land from forest use to pasture use.
2. Intensification of land use in the form of a change of farming type – such as conversion of dry stock farming to dairying, higher stocking numbers and greater inputs of fertiliser.
3. Ongoing urban development of rural land.

Environmental effects anticipated from land use changes include a decline in water quality, increased run-off of nutrients and pathogens, and increased soil erosion and flooding. Land use changes have significant impacts on river and catchment management activities.

4.5 Potential local government restructuring

Following the creation of the Auckland super-city, there is currently debate amongst some sectors as to whether local government in the Waikato region should also be re-structured. Reform of local government involving amalgamation of territorial local authorities or establishment of unitary authorities would have implications for how river and catchment management assets are planned, developed and managed across the region.

Changes to governance would have funding implications. Any splitting up of assets could have a detrimental impact on the ability for flood and river schemes to be managed in a co-ordinated, way on a catchment based approach. It is important that river and catchment management issues are well-

understood and form part of the debate about any potential local government restructure.

4.6 Infrastructure development and management

It is important that management of river and catchment assets is consistent with management of other regionally significant infrastructure and energy resources. Such infrastructure may include gas pipelines, strategic telecommunications, the national electricity grid and facilities for electricity generation, the strategic transport network, lifelines infrastructure and key transport facilities.

To ensure this integrated management occurs, it is important for management of river and catchment assets to be linked to the review and development of key regional policies and plans such as the Waikato Regional Policy Statement and Waikato Regional Land Transport Strategy.

4.7 Regional environmental issues

River and catchment management is both impacted by and has impacts upon the following issues and trends:

- Declining water quality in many catchments across the region.
- Accelerated erosion and sedimentation due to vegetation clearance and inappropriate land use.
- Natural hazards including river flood, earthquake, tsunami and volcanic.
- Plant and animal pests that destroy native vegetation and threaten economic production.
- Loss of wetlands due to drainage and conversion to pasture.
- Loss of biodiversity.
- Peat settlement due to drainage.

Many of the above issues will be specific to individual zones. Other related environmental issues and trends include coastal development pressures, soil contamination and declining air quality.

The implications of and response to each of these trends and issues for each zone are outlined within the relevant ZMP.

5 Legislative and policy requirements

5.1 Key statutory requirements

Council has responsibilities for river and catchment management under various statutes – the most important of which are outlined below.

Local Government Act 2002 (LGA)

This Act is based on a sustainable, effective, responsible, responsive and accountable local government being fundamental to achieving the long-term well being of communities. The Act outlines the responsibilities of local government and the decision making process for activities undertaken on behalf of the community, primarily through the adoption of the Long Term Plan (LTP). The LTP identifies all Council activities, including river and catchment services, and prioritises projects for future development based on identified community outcomes.

This Act introduces a whole range of matters that have relevance to the way asset planning and infrastructure services are carried out. Matters that are of importance to rivers and catchment services include:

- The emphasis on sustainability – particularly the social, economic, environmental and cultural well-being of the community.
- The obligation to Maori – particularly relating to consultation and decision-making.
- The emphasis on collaboration and co-operation between councils, government agencies, other organisations and the community.

Local Government Act 1974

Part 29 of this Act applies to any drainage channels and land drainage works under the control of Council, or constructed by Council. The Act allows the Council to maintain and alter any drainage channel or drainage works including altering the course of streams and rivers and altering other infrastructure assets as necessary and appropriate. The Act also gives Council the powers to inspect private dams and other related infrastructure and to remove any obstructions from watercourses.

Local Government (Rating) Act 2002

This Act allows local authorities to set, assess and collect rates to fund activities. Rates must be set in a transparent and consultative manner and ratepayers must be able to easily identify and understand their liability.

Local Government Act 2002 Amendment 2010 (TAFM)

This amendment provides a revised definition of community outcomes being ‘ the outcomes that a local authority aims to achieve in order to promote the social, economic, environmental and cultural well being of its district or region, in the present and in the future’.

Resource Management Act 1991 (RMA)

Under this Act, Council has an obligation, as an authority operating under the Act, to provide for the sustainable management of natural and physical resources in the region. The Act provides a national framework to manage land, air, water and soil resources, the coast, subdivision and the control of pollution, contaminants and hazardous substances.

The Council has two main roles in relation to this Act:

1. Council, as a regulatory authority is tasked with protecting the environment, and specifically the natural resources, whilst still allowing communities to provide for the economic and social wellbeing.
2. In terms of service delivery, the Council has a responsibility to avoid, remedy and mitigate any adverse effects of its river and catchment services activities.

Resource consents are used as a way of managing the potential adverse effects of activities and Council has a role both as a regulator, assessing resource consents, and also as an applicant, applying for resource consents.

Resource Management (Energy and Climate Change) Amendment Act 2004

This amendment to the RMA introduced a number of changes to the principal Act that explicitly require those authorities acting under the Act to consider the efficiency of the end use of energy, the effects of climate change and the benefits derived from the use and development of renewable energy.

Soil Conservation and Rivers Control Act 1941

This Act allowed for the establishment of catchment districts and catchment boards, with the primary aim being to minimise and prevent damage within the district by floods or erosion. The Boards were given the authority to do works that:

- Control the flow of water towards, within and from watercourses.
- Prevent the overflow of banks and reduce damaged cause by such events.
- Reduce erosion by undertaking soil conservation activities.

Catchment boards and drainage boards were responsible for the management of rivers, flood protection and drainage management prior to the establishment of regional councils. The functions provided for under the Act have been transferred to regional councils.

Council therefore has the responsibility of managing river and catchment systems and is empowered to undertake works to protect communities from floods and erosion

Civil Defence Emergency Management Act 2002

The Waikato Regional Council, territorial authorities and emergency services have responsibilities in planning for and responding to emergencies, including river flooding. Under this Act, the river and catchment management activities in relation to flood prevention constitute risk reduction measures. River and catchment management therefore needs to be part of the planning for and response to emergencies in order to minimise the effects of any hazards, particularly river flooding.

In addition to the above statutes, Council is obliged to operate within the terms of a number of other pieces of legislation when delivering river and catchment services. These include:

- The RMA as an applicant.
- The Building Act (2004).
- The Health and Safety in Employment Act (1992).
- Health Act (1965).
- Taupiri Drainage & River Board Empowering Act (1936).

5.2 Compliance with statutory requirements

Council must fulfil its statutory requirements under the legislation described in the above section. This has implications for the delivery of river and catchment management activities. The most significant implications are the duties under the LGA and the RMA.

The ZMP's take into account the Council's statutory obligations, provide an outline of the detailed requirements and demonstrate how Council fulfils its obligations under these statutes.

5.3 Statutory policy and planning requirements

In addition, to statutory requirements, Council is also bound by statutory planning instruments implemented under the LGA and the RMA. These include:

- **Long Term Plan (LGA):** this plan identifies desired community outcomes - the things the community considers are important for its well-being over a 10-year timeframe. The plan describes the council's intended contribution to those outcomes - the activities that Council will engage in over the life of the plan, and the rationale behind engagement in those activities. The plan also describes how those activities will be funded.
- **Regional Policy Statement (RMA):** this sets the direction for the Council in terms of promoting sustainable development and managing the regions natural resources. It provides an overview of the resource management issues in the region with policies and methods to achieve integrated management.
- **Waikato Regional Plan (RMA):** The WRP contains policies and rules that enable the Council to meet their resource management objectives. The regional plan must be in accordance with the RPS and therefore contains similar policies. The plan contains modules covering issues of relevance to river and catchment management including Matters of Significance to Maori, Water, River and Lake Beds, and Land and Soil.
- **District plans (RMA):** Council must also comply with any relevant rules in district plans for each local authority

when delivering their services. Applications may be required for resource consent for structures, earthworks or other activities.

Details of the specific statutory policy and planning requirements for river and catchment management are outlined within the ZMP's.

5.4 Bylaws, consents and standards/guidelines

Bylaws

Bylaws are rules or regulations made by Councils to protect the public from nuisance, protect, promote and maintain public health and safety and to minimise the potential for offensive behaviour in public places. The majority of river and catchment services are governed by legislation, as set out in the previous sections; however, there are some bylaws that have implications for these services.

Bylaws largely protect river and catchment management assets by restricting people from damaging structures, or accidentally or deliberately blocking drainage channels. Council both creates bylaws, and needs to comply with bylaws created by territorial authorities.

Consents

Under the RMA, Council has an obligation to manage the natural and physical resources of the region in a sustainable manner and to avoid, remedy or mitigate the potential adverse effects of its activities on the environment. In fulfilling this obligation, the Council obtains resource consents for certain river and catchment management activities as required under the regional and district plans.

River and catchment management activities require consents for land use, water use and discharges. Council is seeking comprehensive scheme consents to cover maintenance and works such as medium scale vegetation removal operations, erosion control structures, sediment removal and gravel management.

Standards and guidelines

In addition to the legislative requirements, there are also a number of standards and guidelines that impact on how river and catchment services are delivered. Some of these standards are already used as part of the existing service delivery, while others provide a benchmark for future service delivery by the Council.

Details of the specific bylaws, consents and standards/guidelines for river and catchment management are outlined within the ZMP's.

6 Consultation and engagement

6.1 Overview

Effective river and catchment management is dependent upon consultation and engagement with local communities. Council undertakes both consultation and engagement on river and catchment management activities throughout the region.

Under the Local Government Act 2002 (LGA), Council has a duty to consult on certain activities such as the Long Term Plan, and is also required to engage with the community to establish community outcomes. Council is responsible for engaging with the community and undertaking consultation on strategies, policies and decisions with people that may be affected by these.

Although the terms engagement and consultation are often used interchangeably, there is a difference between the Council's consultation and engagement activities.

Consultation refers to the process of asking the community, or a group of stakeholders, for their views on a particular proposal or issue. Feedback is usually in the form of written submissions or feedback forms including the results of regular surveys conducted by the Council. Engagement is about working with the community to identify their needs and issues and involving them in the decision making process. This can change the ultimate outcome of a project or proposal.

It may be the case that the community are engaged in the initial stages of establishing river and catchment management projects and programmes through workshops and other methods, to identify key issues and think about how these could be tackled. The same community may then be consulted on the draft plan.

6.2 Waikato Regional Council consultation policy

Consultation and engagement is an integral part of the delivery of river and catchment management services. It forms a critical part of

the development of policies and strategies and in determining levels of service for river and catchment work programmes.

The consultation policy sets out Council's approach to consultation including who will be consulted, when consultation will occur and how this will be carried out.

The vision for the Council consultation is "WISE" consultation:

- Working together and well focused
- Interactive and involving
- Sincere and strategic
- Efficient and effective

The policy promotes opportunities for participation in general decision-making processes by encouraging the most effective and efficient ways of consulting. This strategy closely follows the decision-making and consultation principles of the Local Government Act 2002.

The policy provides an overall framework for consultation activities undertaken by the Council, including river and catchment management, by setting out how Council intends to interact with the regional community. This means recognising how important consultation is and building it into the way Council undertakes its activities. It is also about encouraging a collaborative approach between the Council and members of the community, to ensure that decision-making processes are of the highest quality.

The consultation policy sets out a number of key principles that Council follows when undertaking consultation. These include:

- Being open and transparent.
- Actively encouraging community participation.
- Listening to the community and respecting their expertise.
- Taking into account conflicting community views and balancing these, while acknowledging that decisions rest with Council.

The policy addresses the following five questions:

1. **What to do** – when consulting the public, Council will outline the purpose of the consultation, provide relevant information to the public and provide

meaningful feedback and transparent reasons for final decisions.

2. **When to consult** – consultation should be undertaken where there is a statutory requirement to do so, where there is a new, significant or challenging issue in the region, where initiatives are raised by the community that require wider input, and when community input is fundamental to robust and transparent decision making.
3. **Who to consult** – stakeholders should be identified for each project or proposal. Consideration should be given to any MoU's the Council has and other agencies and the community should be consulted on proposals that are likely to affect them.
4. **How to consult** – the method of consultation will differ depending on the issue and the communities and stakeholders involved. However, consultation should be well targeted, allow reasonable time for consideration of community input and record the results of consultation for future reference.



5. **Where to consult** – consultation should be conducted in a way that is appropriate for the community. This means having a flexible approach to where consultation takes place including meetings, use of the website and postal and telephone contact.

6.3 River and catchment management consultation and engagement

6.3.1 Methods

There are a number of methods used by Council to engage with and consult the community. The type of engagement or consultation used depends on the level of involvement required from the community. The primary methods used are

- **Surveys:** Council conducts surveys of Waikato residents related to either particular projects or general awareness and satisfaction with Council services. These surveys give an overview of public opinion, and relate to river and catchment management issues such as fencing, soil erosion and water quality.
- **Community groups:** Representative community groups are brought together to discuss particular issues and test potential solutions and opportunities for short-term projects. Liaison subcommittees provide community and stakeholder oversight and advice on river and catchment management issues.
- **Formal consultation on plans and policies:** As part of the responsibilities under the LGA, Council must consult on particular plans and policies in a formal manner outlined by the special consultative procedure. This applies to the Long Term Plan, the Annual Plan, bylaws and significant activities such as rating reviews.
- **Project based consultation and engagement:** The public are often consulted or engaged in response to a specific project or programme such as community soil conservation projects.
- **Direct engagement with key stakeholders** The broad scale of river and catchment management means that partnerships with many groups and organisations are required for effective management. Council therefore directly engages with key stakeholders such as territorial authorities, the Department of Conservation, Fish and Game,

electricity generators and the New Zealand Transport Agency.

6.3.2 Catchment liaison subcommittees

Catchment liaison subcommittees are the primary mechanism for local consultation and engagement on river and catchment management. Catchment liaison subcommittees are expected to be in place for all eight management zones as from 2011.

Appointments to the subcommittee are made on a three year cycle, based on the triennial election process. Representation is made up from the constituent councillors, key stakeholder organisations, community representatives, local iwi and property owners.

Subcommittee representatives serve in an advisory capacity to council in relation to river and catchment programmes for that zone. Subcommittees meet three to four times a year, with usually one event being a zone field inspection. The meetings involve consideration of and recommendations related to river and catchment strategies and programmes in the zone. Recommendations received are reported back through council's Catchment Services standing committee.

The scope of subcommittee activity is as follows:

1. To consider and recommend on work programmes for river and catchment management.
2. To be a local contact for river and catchment issues, including involvement with local groups.
3. To facilitate the flow of information and communication between ratepayers, Council and other agencies.
4. To provide input into catchment management plans, asset management plans and rating system reviews.
5. To consider and provide feedback on other matters relevant to river and catchment management in the nominated area(s), including biosecurity, coastal and harbour management programmes.

7 Relationships with iwi

7.1 Overview

Council acknowledges the special position of tangata whenua within the region. Council recognises the need to work with iwi/hapu in river and catchment management. Council has undertaken and continues to undertake a number of processes aimed at recognising the role of tangata whenua in river and catchment management within the region.

There are numerous iwi authorities within the region including:

- Tuwharetoa
- Te Arawa
 - Ngati Tahu - Ngati Whaoa
 - Ngati Kiaroa - Ngati Tuara
 - Tuhourangi - Ngati Wahiao
- Ngati Raukawa
- Ngati Maniapoto
- Waikato
- Hauraki

7.2 Treaty of Waitangi settlements

Across New Zealand, there are numerous treaty settlements in progress between the Crown and Maori claimant groups to settle historical claims against the Crown. Several of these groups within the region are currently in negotiations with the Crown.

The Waikato-Tainui Deed of Settlement was passed into law in May 2010. The agreement establishes a River Management Authority to oversee governance of the river, and the Vision and Strategy for the Waikato River is input in its entirety directly into the RPS. These and other co-management arrangements will significantly influence the approach to river and catchment management, and over time, must be fully considered within ZMP's.

Integrated river management plans (IRP's) will be developed by the various iwi as a result of Treaty settlements. The relationship between zone management plans and the IRP's will need to be considered. The outcome sought is the establishment of connections between the range of objectives and promotion of a collaboration approach.

7.3 Consultation and engagement with iwi

In addition to the settlement processes and the co-management arrangements resulting from this, Council continues to work with iwi on a range of issues as part of day to day activities. Relationships with these groups are being formalised through Memoranda of Understanding (MoU). At present, Council has three MoU being with:

- Hauraki Maori Trust Board
- Tuwharetoa Maori Trust Board
- Raukawa Trust Board

Discussions are also progressing with the Maniapoto Maori Trust Board.

In addition to the MoU's, iwi representatives hold positions on catchment liaison subcommittees, bringing Maori values and perspectives into these groups. The council also encourages staff to work with iwi, hapu and whanau groups at an operational level. Council has formal Memoranda of Agreements (MoA) at the operational level when undertaking river and catchment management project works.

In the future, Council will continue to build on improving relationships and engagement with tangata whenua by actively pursuing joint river and catchment management initiatives with mutually beneficial outcomes.

7.4 Iwi management plans

An iwi management plan (IMP) is a term commonly applied to a resource management plan prepared by an iwi, iwi authority, rūnanga or hapū. IMP's are generally prepared as an expression of rangatiratanga to help iwi and hapū exercise their kaitiaki roles and responsibilities. IMP's are a written statement identifying important issues regarding the use of natural and physical resources in their area. IMP's may also include information on social, economic, political and cultural issues. IMPs provide guidelines for resource management strategies and may also form an iwi planning document.

Council will have regard to any planning document recognised by an iwi authority (including IMP's) affecting a regional plan, when preparing or changing a plan. There are four current IMP's held by Council, and it is envisaged more will become available as a result of the Waikato River Settlement.

ZMP's will be updated to reflect IMP's as they become available.

8 Summary

The Waikato Regional Council is responsible for the overall management of our region's rivers and their catchments, including the effects of flooding and erosion. Flooding and erosion management play an important role in ensuring the safety of people, property and the environment. The Waikato region has more than 16,000 kilometres of rivers and streams across four major catchments.

River and catchment management describes the range of physical works and services provided to landowners by Council, including catchment oversight, provision of advice, and catchment, river management and flood protection works. A whole of catchment approach is fundamental to the delivery of effective river and catchment management works and services.

River and catchment management activities fall within the Proposed 2012 LTP 'Catchment management' and 'Flood Protection' Group of Activities – being focused on:

- Providing river and catchment works and services.
- Managing and responding to flood and river related hazards and risks in order to protect people's lives and property.
- Minimising damage and disruption to communities, to the regional economy and to the environment.

There are numerous issues and trends of significance to river and catchment management including climate change, growth, Treaty of Waitangi settlements, land use change, potential local government restructuring, infrastructure development and management and regional environmental issues.

It is important that river and catchment management activities are undertaken in full recognition of all legislative and policy requirements. It is also important that community partnerships, consultation and engagement with iwi and other regional stakeholders are undertaken as a core part of river and catchment management.

This document provides the broad context for river and catchment management within the

Waikato region. ZMP's build upon this overview by providing detailed information on management within each zone, including asset management and financial information.

Zone management plans are being developed over a four-year period as follows:

- 2010/11: Lower Waikato and Waihou-Piako
- 2011/12: Waipa and Coromandel
- 2012/13: Lake Taupo and Central Waikato
- 2013/14: Upper Waikato and West Coast

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