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# EXECUTIVE SUMMARY

## HE KŌRERO WHAKARĀPOPOTO

**“WELL MANAGED CATCHMENTS THAT ENHANCE ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY, RECOGNISE COMMUNITY AND CULTURAL ASPIRATIONS, WHILE MITIGATING NATURAL RISKS.”**

### **COROMANDEL ZONE VISION**

The Coromandel Zone Plan (the zone plan) provides the broad direction for the implementation of Waikato Regional Council's (the council) Integrated Catchment Management directorate activities within the Coromandel Zone (the zone).

The council undertakes a range of activities to protect the region's water, soil, air, geothermal areas and coasts, and its mission is to work with others to build a Waikato region that has a healthy environment, a strong economy and vibrant communities.

The council's work, functions and priorities are guided by statutory and non-statutory requirements and decisions made by councillor representatives. These decisions are then implemented through five directorates: Community and Services, Finance, Integrated Catchment Management (ICM), Resource Use and Science and Strategy.

The ICM directorate is primarily focused on delivery of catchment management, river system management, flood control programmes and asset management activities. These are undertaken alongside supporting activities which are delivered regionally, including hazard management and community safety activities, biodiversity and natural heritage operations, biosecurity operations and land management advisory services.

The zone plan is guided by Waikato Regional Council's Strategic Direction 2016-19 and The Peninsula Project 2004. It also assists the implementation of operational programmes identified in the council's key statutory documents including the Waikato Regional Policy Statement and the Waikato Regional Plan. It is important to note that the Coromandel Zone Plan is supported by a number of existing and to be developed harbour and catchment management plans, which provide further detail on many of the issues and actions identified in this plan.

The zone plan includes the following interrelated 30 year goals to guide the implementation of ICM activities within the zone:

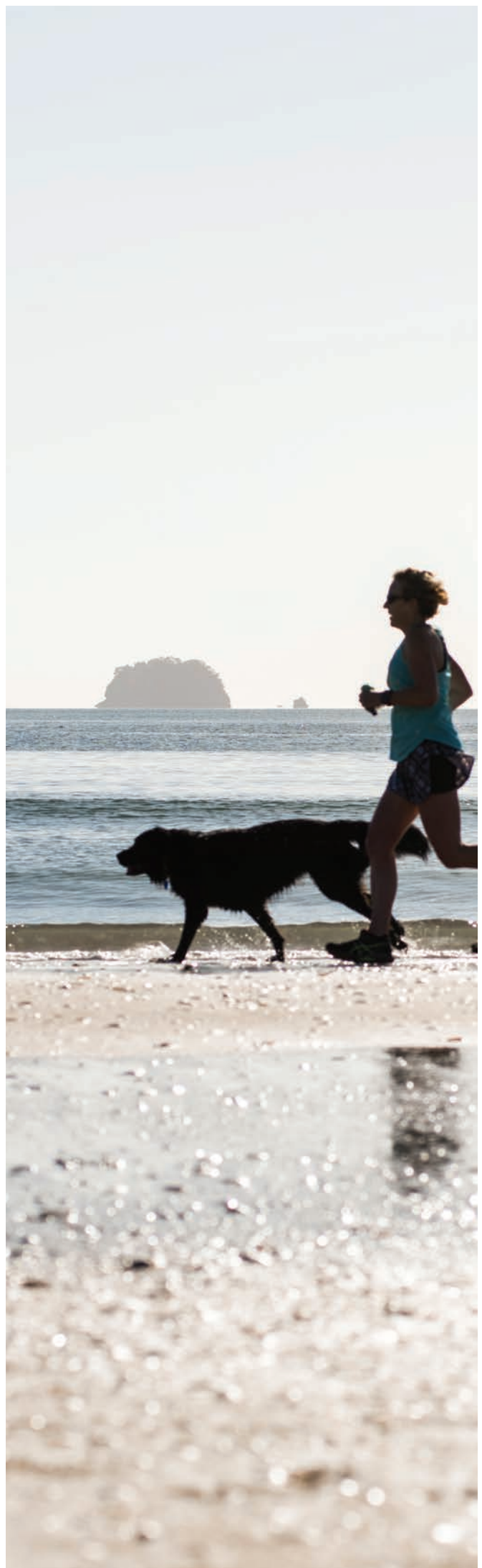
1. *Protect people, property and essential services from flooding.*
2. *Protect and improve water quality by enhancing and stabilising catchments.*
3. *Improve the diversity and habitat for indigenous plants and animals.*
4. *Enhance and protect coastal environments in the zone.*
5. *Collaborate and strengthen partnerships with mana whenua and community.*

The 30 year goals have been developed in response to the following key matters identified for the zone as part of the development of this plan:

- The challenge of addressing declining fresh water quality in some parts of the zone.
- Realising greater opportunities for sustainable land management and the implementation of catchment management activities.
- Protecting and enhancing coastal environments.
- Promoting and supporting indigenous biodiversity enhancement and effective pest management.
- The ongoing need to manage natural hazard risks.
- Forge and strengthen partnerships with mana whenua, stakeholders and community groups.

The zone plan includes a high level programme of implementation actions, grouped in focus areas that respond directly to the goals identified. These actions will inform the preparation of a more detailed annual works programme for the zone that is to be monitored through the Coromandel Catchment Committee. All actions included in this plan are either directly funded through the Coromandel Zone or funded as part of wider council activities. Many of the actions rely on involvement (and funding) from other stakeholders.

The implementation of the zone plan, and its effectiveness, will be monitored and reported on an annual basis to the community through the Coromandel Catchment Committee. Further reviews will be considered every three years to ensure the plan is reviewed in conjunction with the long term plan process and that progress is being made towards the goals identified.





# 1 INTRODUCTION

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## HE KUPU WHAKATAKI

### 1.1 PURPOSE

The Coromandel Zone Plan (the zone plan) provides the broad direction for the implementation of Waikato Regional Council's (the council) Integrated Catchment Management directorate (ICM) activities within the Coromandel Zone (the zone).

The zone plan includes:

- an overall vision for the zone
- 30 year goals for the zone
- implementation actions for the next 10 year period to meet the goals identified
- processes (and measures) for monitoring and reviewing the plan.

The implementation actions proposed within the plan give effect to aspects of the Waikato Regional Policy Statement, the council's Strategic Direction 2016-2019 and The Peninsula Project, and also assists with the implementation of the council's non-regulatory responsibilities under a variety of other statutes. The Coromandel Zone Plan is

underpinned by a number of existing, and to be developed, harbour and catchment management plans, which provide more detailed direction on implementation actions identified in this plan.

The Coromandel zone contains a range of unique environments of significant natural, economic, social and cultural value. An ongoing challenge for the council over the life of this plan will be to target limited resources into areas of greatest priority. This challenge has been identified as a key focus area for the implementation of this plan.

Achieving the plan goals will also rely on ongoing and successful collaboration with a range of stakeholders in the zone, and this is also a key focus area for implementation. Greater integration and effective advocacy across a range of council business areas will also be important in delivering the actions within the plan.

**“WELL MANAGED CATCHMENTS THAT ENHANCE ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY, RECOGNISE COMMUNITY AND CULTURAL ASPIRATIONS, WHILE MITIGATING NATURAL RISKS.”**

**- COROMANDEL ZONE VISION**

## 1.2 STRATEGIC FIT

The zone plan supports the wider council mandate of protecting the region's water, soil, air, geothermal areas and coastal areas. The ICM directorate is one of five directorates in the council that work together to achieve a range of outcomes for communities within the zone as follows:

1. Community and Services – leads, enables and helps deliver community partnerships, customer services, education programmes, organisational excellence and internal support functions.
2. Finance – council's financial management, regional public transport responsibilities, our corporate buildings, facilities and property, and corporate planning (including the annual and long term plans).
3. ICM – focuses on catchment management (including land management, biosecurity and biodiversity), river and flood management and natural hazard management.
4. Resource Use – consenting and compliance responsibilities and navigation safety functions.
5. Science and Strategy – gathers and communicates information on Waikato's natural resources and stressors, community and economy in order to achieve positive regional outcomes. The directorate is also responsible for policy making and consistent delivery of high quality policy advice.

The ICM directorate is focused on delivery of a range of activities in the areas of catchment management, flood control and protection, biodiversity, biosecurity, sustainable land management and hazard/emergency management.

The directorate provides services that achieve multiple and significant benefits for the regional community.

ICM manages the provision of its services on a regional basis and through geographic areas known as catchment zones. There are eight zones in the region, each with its own Zone Manager responsible for oversight of operational budgets, relationships, planning and priorities to deliver on agreed community level of services.



## 1.3 SCOPE

The Coromandel Zone Plan is one of eight zone plans that are part of the strategic framework for the delivery of ICM activities within the zone.

Figure 1 illustrates the overall scope of the activities undertaken within the zone. The activities that are the primary focus of the zone plan are shown in dark green, alongside the supporting activities which are delivered regionally (light green).

The Coromandel Catchment Committee holds budgetary power or considerable influence in determining the work programme for primary focus areas of the zone plan. Regarding supporting activities, the role of the catchment committee is to provide local feedback to inform the regional programme with the intention of raising the effectiveness of the programme.

The implementation of the zone plan will be monitored by the Coromandel Catchment Committee, and therefore the primary focus of the plan is on activities that are funded directly through the Coromandel Zone. In addition to physical works, this may include environmental monitoring to assess the outcomes achieved and monitoring the compliance of resource consents held within the zone.

In relation to the implementation of this plan, the council is one of many organisations working to improve catchment

health within the zone. Iwi, district councils, government departments, industry, community groups and individual landowners are all active in implementing initiatives to improve catchment health. The intention of the zone plan is to complement and support the work of these other agencies and individuals, and align programmes where opportunities arise.

Other key areas of work Waikato Regional Council is carrying out, not within the scope of this zone plan, include:

- implementing and monitoring compliance with the council's rules under the current Waikato Regional Plan, including those resource consents that are held to undertake work within the scope of this plan
- monitoring and investigations of the state of the environment
- developing and implementing new resource management policies and rules to address environmental issues.

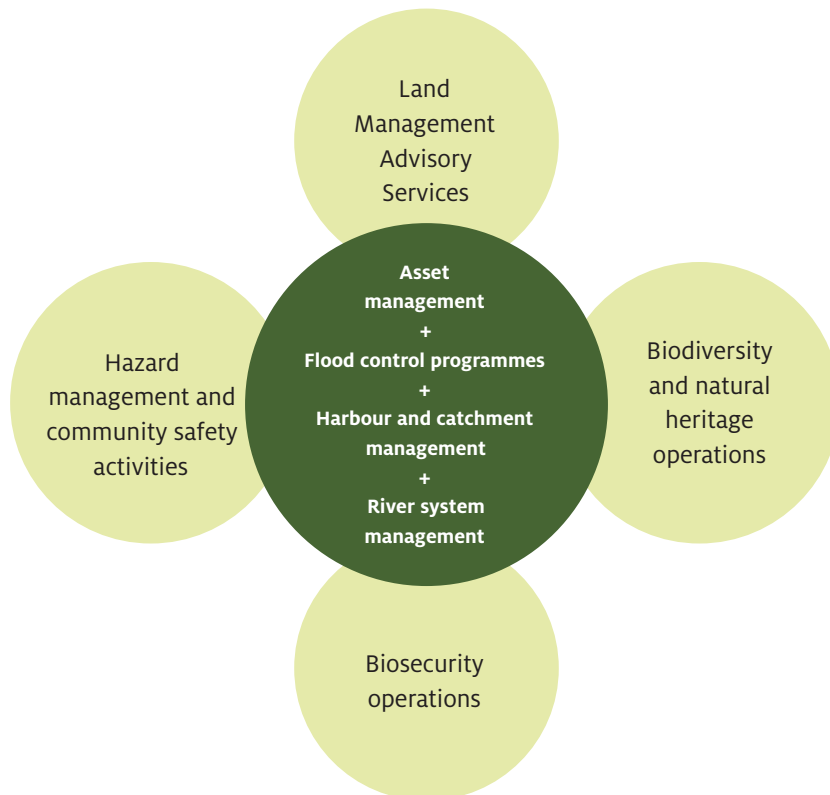


FIGURE 1 - Coromandel Zone Plan - Scope of Activities





# COROMANDEL ZONE DESCRIPTION

## NGĀ KŌRERO MŌ TE ROHE O COROMANDEL

### 2.1 ZONE OVERVIEW

The Coromandel Zone covers the majority of the Coromandel Peninsula, and has a total geographic area of approximately 193,000ha – some 6 per cent of the Waikato region (refer Figure 2). The zone includes all land within the Thames-Coromandel District Council boundary, except Kauaeranga, Tararu and catchments flowing into Thames town which are included in the Waihou Piako Zone. The zone also includes part of the Hauraki District Council area between Whangamatā and Waihi.

Since the 1800s, significant changes in land use have occurred within the zone, including kauri logging, mining, farming and forestry. Nevertheless, 63 per cent of the zone is still covered with native vegetation (including scrub), while farming and forestry respectively use 19 per cent and 15 per cent of the land.

The development of small settlements on river flood plains has also led to significant risks from flooding.

Whilst there are no major cities within the Coromandel zone, it is home to over 50 diverse coastal settlements and rural communities, and serviced by three main centres: Whitianga, Whangamatā and Coromandel township.

The zone is considered a popular holiday destination. This is emphasised by the zone's small population (5 per cent of the region's population) and nearly half of zone dwellings comprising non-resident holiday homes.

The zone is split into management areas for the purpose of harbour, river and catchment management. These areas include Northern Coromandel, Colville/Waikawau, Whitianga/Mercury Bay, Thames Coast, Kennedy Bay, Whangapoua, Coromandel/Manaia, Tairua, Wharekawa, Whangamatā, and Otahu/Whiritoa. These catchments consist of almost 3900km of perennial rivers and streams, which are generally short and steep except for the Tairua River.

The zone contains more than 500km of coastline. The Hauraki Gulf and Firth of Thames are occupied on the west coast of the peninsula, whilst the east coast extends from Cape Colville to the border of the Bay of Plenty region just north of Waihi. The east coast contains more open and exposed coastline than the western half.

Large estuaries are frequent throughout the peninsula's coast, which support an array of habitats and ecosystems.



FIGURE 2 – Coromandel Zone

"Well managed catchments that enhance economic and environmental sustainability, recognise community and cultural aspirations, while mitigating natural risks."

## 2.2 KEY FEATURES

The Coromandel Zone contains a range of unique natural habitats, landscapes, ecosystems, infrastructure and social, cultural and economic values. A summary of these key features is set out below to provide context for the key matters identified in Section 4 of this plan. It is noted that the below summary is not exhaustive, rather the intention is to provide a “snapshot” of the complex operating environment of the zone.

### COASTAL ENVIRONMENT

The coastal environment of the Coromandel area can be divided into three parts: part of the Firth of Thames, western Coromandel and eastern Coromandel. Containing over 500km of coastline, coastal landforms along the Coromandel Peninsula consist generally of short beaches and bays separated by rocky cliffs.

The west coast of the Coromandel Peninsula contains a number of gravel beaches, sandy beaches, estuaries, river mouth deltas and rocky shore habitats. The peninsula is characterised by steep rocky coastlines and a relatively narrow continental shelf. Sand dunes on the east coast have been altered to some extent by human modification, such as introduction of exotic species, coastal subdivision, grazing and pine plantation (Waikato Regional Council, 2011). Both the east and west coast of the peninsula contain a number of areas of significant conservation value (ASCV) (refer Regional Coastal Plan).

### ESTUARIES

There are 10 estuaries that are more than 200ha in size: the Firth of Thames, Coromandel Harbour, Whitianga Harbour, Whangapoua Harbour, Manaia Harbour, Tairua Harbour, Port Charles, Colville Bay, Whangamatā Harbour and Te Kouma Harbour. As rivers and streams flow into the sea, a mixture of fresh and salt water provides unique environments for a range of plant and animal species. Estuaries not only play important environmental roles throughout the zone, but also contribute economic and recreation uses.

### TE WHANGANUI A HEI MARINE RESERVE

The Coromandel Zone is home to the region’s only marine reserve, located offshore of Hahei’s Cathedral Cove. Te Whanganui A Hei (Cathedral Cove) Marine Reserve covers an area of 849ha, comprising sandflats, reefs, boulders and the habitats that support an array of rich and varied species. Reefs of hard rock, soft sediment, intricate caves and underwater arches provide homes for complex communities of plants, crustaceans, molluscs and fish. The reserve is a popular tourist destination offering good snorkelling, with excellent opportunities to view large rock lobster, snapper and other coastal species up close (Ryer, et al., 2016).

### MOUNTAIN RANGES

A dominant feature of the zone is the Coromandel Range, a chain of rugged hills that run the length of the peninsula. The highest point is Mount Moehau, which rises to 892m within the Moehau Range, at the northern end of the peninsula. Throughout the zone there are numerous other peaks that reach over 600m high. The Pinnacles, located in the Kauaeranga Valley, is one of the most popular mountainous destinations in the zone. Due to their location, orientation and height, the mountain ranges are subject to very high annual rainfall and severe storms which can result in flash flooding.

### RIVERS AND STREAMS

The Coromandel Zone has an estimated 3900km of rivers and streams, which flow from the hills to the estuaries or open coast. Management of these rivers and associated land use is vital to minimising catchment erosion and maintaining flood protection. The Coromandel Zone has the highest annual rainfall of any zone in the region, and the short, steep catchments of the rivers and streams result in short duration but damaging floods during heavy rain events.

### BIODIVERSITY

Twenty per cent of the region’s native vegetation is located in the Coromandel Zone, providing habitats for indigenous biodiversity to flourish. Many threatened plants and animals rely on the specific environmental conditions found on the peninsula, such as estuaries, streams and rivers.

Over a third of the zone area is public conservation land, and accordingly contains high conservation values. These ecosystems support a wide range of species, some at risk of extinction, such as Archey’s frog (*Leiopelma archeyi*) – a nationally critical species. The Coromandel is a stronghold for Archey’s frog, which has undergone significant population decline through habitat loss and predation. The Coromandel Peninsula also contains the world’s only population of Coromandel striped gecko, Moehau stag beetle (*Geodorcus*) and Middle Island tusked wētā (*Motuweta isolata*). The zone’s offshore islands are the only location in the region where tuatara are found (Thames-Coromandel District Council, 2008). Other examples of threatened fauna and flora in the

zone are Hochstetter's frog (*Leiopelma hochstetteri*), Northern New Zealand dotterel, North Island brown kiwi (*Apteryx mantelli*), and Cook's scurvy grass (*Lepidium oleraceum*).

The coastal margins, marine area and islands of the zone are also rich in life and include many species of seabirds, mammals, fish and diverse invertebrates such as epifauna, infauna and cryptofauna (Bouma, 2016). A range of threatened species, such as Northern New Zealand dotterel and Cook's scurvy grass are found in coastal areas.

Foredunes and reardunes on Coromandel beaches contain communities of coastal terrestrial vegetation, featuring species such as sand daphne (*Pimelia arenaria*) and sand coprosma (*Coprosma acerosa*), both threatened species that specialise in coastal conditions (Waikato Regional Council, 2011). Pōhutukawa trees (*Metrosideros excelsa*) are a key native terrestrial feature of the Coromandel coastline and the zone's main highways.

### OFFSHORE ISLANDS

The Coromandel Peninsula is surrounded by various offshore islands, including the Mercury Islands, Cuvier Island and Aldermen Islands. Many of these islands hold spectacular and distinctive features such as the basalt exposures on Red Mercury Island caused by changes in sea level through glacial and fluvial activity (Ryer et al., 2016). Managed by the Department of Conservation (DOC), the zone's coastal

islands provide predator free habitats for a number of species.

### GEOLOGY

The underlying geology of the peninsula comprises of volcanic remnants of the Coromandel volcanic zone, which became active 18 million years ago. Volcanic activity ceased around 2 million years ago. However, Mayor Island – located 25km east in the peninsula – was recently active (approximately 6500 years ago). Geothermal activity is still present in the peninsula, with hot springs in several places – notably at Hot Water Beach, on the central east coast between Whitianga and Tairua (Waikato Regional Council, 2012a).

### CULTURAL HERITAGE

The Coromandel has a rich cultural heritage extending back to around 900AD. The peninsula has been a stronghold for Māori, providing an abundance of natural resources from both the land and the sea. Key iwi within the Coromandel Zone are Ngāti Hako, Ngāti Paoa, Ngāti Tamaterā, Ngāti Tara-Tokanui, Ngāti Porou ki Hauraki, Ngāti Whanaunga, Ngāti Hei, Ngāti Maru, Ngāti Pukenga, Te Patukirikiri and Ngāi Tai ki Tāmaki Ngā Rahiri Tumutumu (Hauraki Collective iwi), as well as Ngāti Huarere and Ngāti Pū. Each has rohe within the zone and significant ongoing interests in maintaining and restoring the health of the Coromandel Peninsula.



# LEGISLATION AND POLICY FRAMEWORK

## TE TURE ME TE KAUPAPAHERE

This section outlines the legislative and policy (both statutory and non-statutory) framework that has informed the goals, focus areas and implementation actions set out in this zone plan.

Figure 3 provides an overall summary of the key legislative and policy framework for the zone plan, along with the key areas where the zone plan informs council plans and policies.

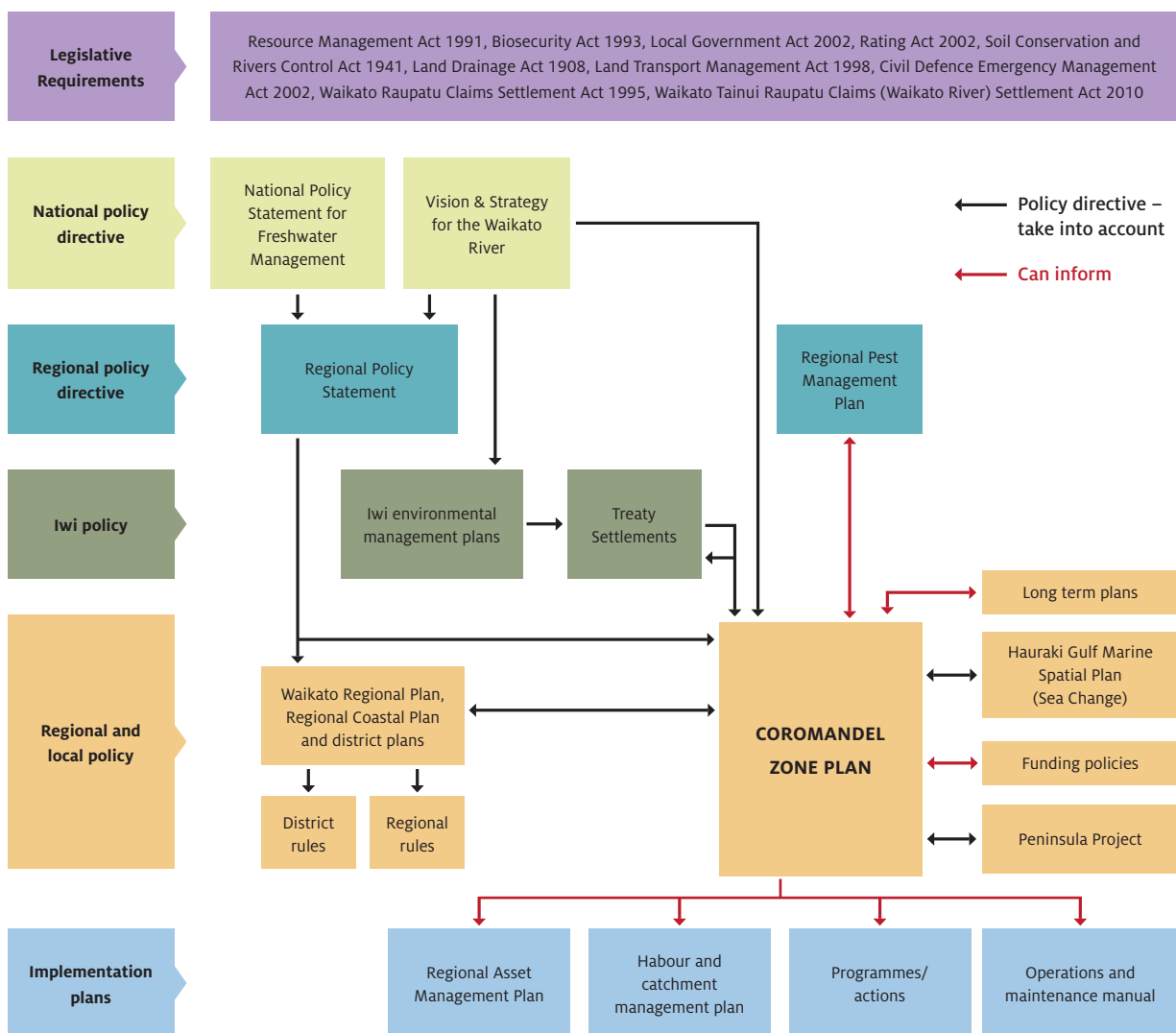


FIGURE 3 - Key linkages between the zone plan and other key legislative and policy requirements.

## 3.1 LEGISLATION AND STATUTORY PLANS

The key statutory documents of most relevance to the activities set out within this zone plan are summarised below. It is noted that this plan also takes account and assists the implementation of a number of Waikato Regional Council's non-regulatory responsibilities under the Resource Management Act 1991, Soil Conservation and River Controls Act 1941, Local Government Act 2002 and other Acts.

### REGIONAL POLICY STATEMENT

The Regional Policy Statement (RPS) has objectives for managing fresh water (3.14), riparian area and wetlands (3.16), ecological integrity and indigenous biodiversity (3.19), natural hazards (3.24), and values of soils (3.25). It also has new policies regarding managing coastal marine areas (Chapter 7), fresh water bodies (Chapter 8), indigenous biodiversity (Chapter 11), natural hazards (Chapter 13) and soils (Chapter 14). These objectives and policies are relevant to the implementation actions set out within this plan.

### WAIKATO REGIONAL PLAN (2007) AND REGIONAL COASTAL PLAN (2014)

The Waikato Regional Plan (WRP) applies across the whole Waikato region (except for the coastal marine area), and provides the regulatory framework for resource management. The WRP implements the RPS, relevant National Direction, and Treaty settlement legislation. The Waikato Regional Coastal Plan (WRCP) contains policies and methods to manage the allocation and use of coastal resources in the coastal marine area (the sea area below mean high water spring tide out to the 12 nautical miles). The WRCP implements the RPS, the New Zealand Coastal Policy Statement, and other relevant legislation (e.g. parts of the Marine and Coastal Area Act).

The council is currently planning a full review of the WRCP and WRP. Ultimately, the two plans will be combined and replaced by one: the Waikato Resource Management Plan. Notification of the first phase of the plan review (most of the current coastal plan and priority topics for the regional plan) is expected in 2019/20, with adoption of the revised plan programmed for 2025.

### REGIONAL PLAN CHANGE 1 (WAIKATO WAIPĀ HEALTHY RIVERS/WAI ORA)

The council has notified and is in the process of implementing Healthy Rivers/Wai Ora: Proposed Plan Change 1. The plan change seeks to achieve reduction, over time, of sediment, microbial pathogens and nitrogen and phosphorus entering waterbodies (including groundwater) in the Waikato and Waipā river catchments.

Although this plan change process does not include the Coromandel Zone (being outside the Waikato/Waipā river catchments), it will inform wider council direction around initiatives to improve water quality within the region.

The development of Regional Plan Change (Hauraki/Coromandel – Healthy Rivers/Wai Ora) in the next few years will directly affect the zone. This review will address the issue of water quality in the Hauraki Plains and Coromandel Peninsula, with possibility of a broader scope.

### REGIONAL PEST MANAGEMENT PLAN

The Waikato Regional Pest Management Plan (RPMP) sets out the strategic and statutory framework for managing plant and animal pests in the Waikato region. Objectives and the management approach for specific plant and animal pests present within the zone are contained in the plan.

It is noted that the RPMP review is planned to commence in late 2017 starting with the release of a discussion document in early 2018. The actions in the zone plan can inform this process.

## NATIONAL DIRECTION

Central government, through the Ministry for the Environment, has a programme of work that seeks to provide national direction and consistency around management of natural resources. This involves development or review of national environment standards, national policy statements, and national regulation.

Key national directions that will affect catchment management in this zone (and all zones) include the National Policy Statement for Freshwater Management (2011), national regulation around stock access to water and swimmability standards, the Proposed National Environmental Standard for Plantation Forestry (2017), and the New Zealand Coastal Policy Statement (2010). This zone plan would need to be amended to give effect to any national direction which requires implementation through catchment management.

## HAURAKI TREATY SETTLEMENT

In 2009, the Hauraki Collective was formed for the purpose of receiving redress in the Hauraki region where iwi have shared interests. The Pare Hauraki Collective recognises the cultural importance of Tikapa Moana (The Hauraki Gulf), Te Tai Tamahine (east coast of the Coromandel Peninsula), Te Aroha and Moehau maunga and the Waihou and Piako rivers.

A Collective Redress Deed was initialled on 22 December 2016 by the Crown and iwi of Hauraki, signalling the end of negotiations. The initialled deed of settlement is subject to a vote (ratification) by members of the iwi. If the deed is ratified, the deed will be signed by the Crown and the iwi. The Crown will then introduce legislation to Parliament to give effect to the settlement.



## 3.2 KEY NON-STATUTORY POLICIES AND PLANS

### WAIKATO REGIONAL COUNCIL STRATEGIC DIRECTION 2016-2019

Waikato Regional Council's strategic direction<sup>1</sup> guides work and sets priorities for the council's work out to 2019. It also reflects community desires and needs, and identifies key factors that will determine whether the council is successful in achieving its strategic direction.

Priorities under the council's strategic direction are:

- Support **communities** to take action on agreed outcomes.
- Forge and strengthen **partnerships** to achieve positive outcomes for the region.
- Positively influence future **land use** choices to ensure long term sustainability.
- Manage **fresh water** more effectively to maximise regional benefit.
- Increase communities' understanding of **risks and resilience** to change.
- Enhance the value of the region's **coasts and marine** area.
- Shape the **development** of the region so it supports our quality of life.

The zone plan will assist the council in delivering its strategic direction. The key connections from the zone plan to the strategic direction are summarised in Table 1 below.

			REGIONAL PRIORITIES						
			Communities	Partnerships	Land	Fresh water	Risks and resilience	Coastal and marine	Regional development
ZONE PLAN GOALS	1	Protect people, property and essential services from flooding.	✓	✓	✓	✓	✓	n/a	✓
	2	Protect and improve water quality by enhancing and stabilising catchments.	✓	✓	✓	✓	✓	✓	
	3	Improve the diversity and habitat for indigenous plants and animals.	✓	✓	✓	✓	✓	✓	
	4	Enhance and protect coastal environments in the zone.	✓	✓	✓	✓	✓	✓	
	5	Collaborate and strengthen partnerships with mana whenua and community.	✓	✓	✓	✓	✓	✓	✓

TABLE 1 – Coromandel Zone Plan connections with the strategic direction

<sup>1</sup> Download at [waikatoregion.govt.nz/strategy](http://waikatoregion.govt.nz/strategy)



## SEA CHANGE TAI TIMU PARI (HAURAKI GULF MARINE SPATIAL PLAN)<sup>2</sup>

The Hauraki Gulf Marine Spatial Plan (2017) recognises the significant natural environment and national importance of the Hauraki Gulf Marine Park. This non-statutory plan is a collaborative effort between mana whenua, local and central government agencies, local communities and interest groups, and includes principles, proposals and initiatives to manage and protect the marine park.

The geographical area covered by the Hauraki Gulf Marine Spatial Plan aligns with the Hauraki Gulf Marine Park (established under legislation), and covers the catchments feeding into the coastal marine area.

The Hauraki Gulf Spatial Plan includes 16 key themes that feed into a number of recommended actions, some of which directly relate to catchment management of this zone. Where there is alignment, those actions will be implemented through this zone plan and the associated programme of works.

## THE PENINSULA PROJECT

The Peninsula Project was adopted in 2004 as a step towards a whole catchment approach to address river and catchment problems in the zone. This project was primarily triggered by the 2002 weather bomb which devastated a number of the peninsula's west coast communities. It is a collaborative project between council, TCDC, DOC and Hauraki Māori Trust Board. The Peninsula Project provides an overarching framework for river and catchment works within the zone. The four key implementation areas for the framework include:

- river and catchment management
- flood protection
- animal pest management
- coastal marine area works and services.

The principles behind the Peninsula Project led to the development of the first Coromandel Zone Plan and subsequent harbour and catchment management plans around the peninsula.

## HARBOUR AND CATCHMENT MANAGEMENT PLANS

Harbour and catchment management plans (HCMP) provide an overarching strategy and non-statutory policy direction for priority issues within the harbour and catchment area, and provide more specific implementation actions that would be subsequently undertaken.

Guiding principles in the development of HCMPs include:

- promotion of best practice techniques
- focus on sustainability – economic, social, cultural and environmental
- recognition of the importance of partnerships, both between agencies, iwi and with communities
- enable the collaboration of resources to maximise outcomes.

The process of developing HCMPs aims to:

- encourage partnerships between community, key agencies and stakeholders
- create a proactive community working towards resolving identified issues
- support sound economic, social, environmental and cultural outcomes.

In the Coromandel Zone, HCMPs have been developed for Whangamatā, Whangapoua, Wharekawa and Tairua, and have been identified for Whitianga/Mercury Bay and Coromandel/Manaia. The actions contained within these plans have been integrated where relevant into this zone plan, and help inform the annual work programmes and priorities.

## WAIKATO FRESHWATER STRATEGY

The Waikato Freshwater Strategy 2017 identifies a programme of actions to achieve the best use of fresh water through time via better allocation systems using new methods based on better information. It recognises that fresh water management is a complex problem that has not been addressed in an integrated manner. The current state of the region's fresh water is the result of ad hoc management in response to disparate directions from central government and a preference for economic development that competes with an incomplete understanding of site specific environmental limits.

<sup>2</sup> Download at <http://www.seachange.org.nz/Read-the-Plan/>

## COROMANDEL PENINSULA BLUEPRINT

The Coromandel Peninsula Blueprint is the strategic framework for managing growth and sustainable development with Thames-Coromandel District Council. This blueprint was developed with recognition of the increasing pressures of growth on the district's water, land, coast and marine uses, which need to be managed in an integrated manner. Whilst this document is non-statutory, its information and direction has and will help guide statutory policies and plans.

## ADDRESSING NEW ZEALAND'S BIODIVERSITY CHALLENGE

The Willis Report is a regional council led report on the future of biodiversity management in New Zealand. The report has a focus on the role and work of regional councils in biodiversity management. It establishes that biodiversity maintenance is a core function of regional councils, but acknowledges that biodiversity nevertheless continues to decline (Willis, 2017). This report includes recommendations for halting the continued decline in biodiversity, comprising the:

- need for strong leadership and clarity of roles and responsibilities
- need for positive action, building on our existing active plant and animal pest management
- need for agreement on where we should focus our efforts at national, regional and local level
- need to understand what success looks like, and how to measure it
- importance of a plan and delivering joined-up action across all players
- need for modern, fit-for-purpose frameworks, including legislation, to help achieve our goals.

## 3.3 IWI MANAGEMENT PLANS

Whaia te Mahere Taiao o Hauraki – Hauraki Iwi Environmental Plan and Ngāti Porou Ki Hauraki – Marine and Coastal Plan are two iwi management plans relative to the Coromandel Zone. Whaia te Mahere Taiao o Hauraki is a strategy in place to sustain mauri of the natural environment and cultural heritage of the Hauraki rohe over the next 50 years. The Ngāti Porou Ki Hauraki plan is designed to protect the customary rights and assert the custodial obligations of Ngāti Porou ki Hauraki regarding the marine and coastal area.





# KEY MATTERS FOR THE ZONE

## NGĀ KAUPAPA MATUA I TE ROHE

The following section sets out the key matters for the zone that have informed the development of the goals and implementation actions within the plan. Key matters have been identified through the process of developing this zone plan and take account of the policy context outlined in Section 3 alongside wider social, economic, environmental and cultural considerations within the zone.

### 4.1 THE CHALLENGE OF ADDRESSING DECLINING FRESHWATER QUALITY IN SOME PARTS OF THE ZONE

In comparison to other parts of the region, many of the zone's rivers and streams are of a good quality and swimmable standard. However, freshwater quality in the zone has been impacted by land use changes and many of the larger streams in the zone, such as the Tairua River, are slowly degrading (O'Donnell, 2011).

Run off from land greatly affects water quality. Sediments from natural forest slips, plantation forestry activities, roading and infrastructure, stock in and around waterways, and stream bank erosion are the main contributors to sediment in streams, rivers and estuaries. Such impacts result in turbidity and higher nutrient levels, increased water temperature and increases in bed levels. Contaminants that cause the greatest concern and can cause declining water quality include bacteria, sediment, nutrients (mainly nitrogen and phosphorus), and heavy metals and chemicals (Lewis, 2015).

Dairy farming is limited and less intensified in comparison to other zones in the Waikato region. The majority of pastoral land in the zone is used for dry stock, whilst dairy farms are dispersed in small pockets throughout the zone, for example at Hikuai and Whangamatā. Although less intensive, nutrient

run off from stock is still impacting water quality. Fencing and exclusion of stock from riparian (and harbour) margins has been identified as one of the highest priorities for the health of the zone's waterways. Stock exclusion from riparian margins and wetlands can minimise bank erosion, urine and faeces inputs, vegetation removal, the spread of weeds and sediment run off, which can contribute to healthier waterways.

Urban expansion of the zone's small coastal settlements is also occurring, consisting of a mixture of permanent residency and holiday homes. The main concern regarding urban expansion is capability of the zone's infrastructure to provide for growth. Other pressures include an increase in local stormwater disposal, demand for water supply, the coastal environment and recreational use of river margins. Accordingly, stormwater discharges, spills and rubbish can contribute to water contamination (Lewis, 2015). Onsite wastewater systems are also used extensively by private property owners throughout the zone, where reticulated waste water systems are not available. If not designed, operated or maintained properly, onsite wastewater can pose risk to ground and surface water quality (Lewis, 2015).

## 4.2 REALISING GREATER OPPORTUNITIES FOR SUSTAINABLE LAND MANAGEMENT AND IMPLEMENTATION OF CATCHMENT MANAGEMENT ACTIVITIES

Vegetation clearance and land use practices have led to the acceleration of erosion and sedimentation within the zone. Susceptibility to soil erosion is a result of complex interactions between soil type, climate, vegetation cover, terrain characteristics and land management practices. Land use changes such as farming, introduction of pests, forestry, road construction and urban development accelerate erosion and sedimentation. Unfortunately, once erosion has occurred, it is difficult to return soil productivity to its former state. Some land practices also effect soil health, versatility and productivity by compaction and reducing fertility.

Hill country and the banks of rivers tend to be more susceptible to erosion. Watercourses with high stream bank instability are more prone to erosion and sedimentation, and this is often accelerated during storm events. Accordingly, water quality is often impacted by sedimentation. Climate change is expected to result in more frequent extreme rainfall events, further exacerbating erosion, sedimentation and soil conservation issues.

Forestry production is a contributor to sedimentation in the zone. Fifteen per cent of the zone area is utilised by production forestry. While there are a number of forests on private land, the largest forest consists of Crown land leased to Ernslaw One and Matariki Forests. Sediment run off from forestry blocks is elevated during logging and reforestation operations, with much of the sediment run off arising from roads constructed to service forest blocks. As with river bank erosion, sedimentation caused by forestry production impacts the zone's freshwater quality (as well as estuaries and embayments), threatening the ecological values of these environments.

As coastal settlements in the zones expand and intensify, further land clearance may occur. The National Policy Statement for Urban Development Capacity (2016) requires territorial authorities to provide land capacity for intensification and new development of housing and businesses. This development is to be supported by appropriate infrastructure, and the management of the effects of urban intensification and growth will need to be managed collaboratively between regional and territorial authorities.

## 4.3 PROTECTING AND ENHANCING COASTAL ENVIRONMENTS

The Coromandel Zone contains more than 500km of coastline. The coastal areas of the Coromandel Zone are included in its entirety within the Hauraki Gulf Marine Park. The healthy functioning of coastal ecosystems is fundamentally important to the environmental, economic, social and cultural wellbeing of the zone. Sea Change – Tai Timu Tai Pari (2017) is a key document driving improvement of the Hauraki Gulf Marine Park. Key issues such as declining biodiversity, increased need for habitat restoration and increased sedimentation are included within Sea Change.

Water quality is of high interest in the Hauraki Gulf Marine Park. Estuaries throughout the zone are unique features that contain a mixture of fresh and salt water, as rivers flow into the sea. Estuaries support a wide range of aquatic life and are often popular swimming locations. The crossover of freshwater and marine environments provides environments for a range of plants and species, which can be impacted by

activities and land use practices further upstream causing things such as sedimentation infill. Activities occurring in the zone's estuaries can also result in changes to water quality, impacting estuarine systems and ecology (O'Donnell, 2011).

Various catchments in the zone feed freshwater run off from small streams into the coastal marine area. The most common causes of coastal water quality degradation trace back to contaminants washed from the land into the coastal marine area through freshwater run off (Wilson, 2016). Contaminants in freshwater run off include sediment, nutrients, heavy metals and microbial pathogens. As a result of increased sediment discharged from the land over the past 25 years, expansion of mangrove habitats in the zone's estuaries has occurred (Waikato Regional Council, 2016a; Ryer et al., 2016).

Research and information on coastal water quality in the

zone is limited. However, a water quality testing study on Coromandel river mouths, using ANZECC<sup>3</sup> guideline values, showed that turbidity was typically low, indicating overall water clarity in the stream mouths were good (Wilson, 2016). Whilst some sites exceeded nutrient concentration guideline values, there may not necessarily be any adverse environmental effects and instead may trigger the need for further investigation to better understand if there is a problem. Water quality testing is also undertaken by the council each summer to determine suitability of the water for recreation purposes, such as swimming and fishing.<sup>4</sup>

These results show that water quality at Coromandel beaches is generally high but can vary following heavy rainfall events due to containments from urban and rural land being flushed into waterways and making their way to the coast.

Maintaining good water quality is important for retaining all uses and values associated with the zone's coastal environments. Methods such as preparing HCMPs (through prioritisation of catchments) and sediment management (e.g. sediment load limits, increasing sediment traps in waterways, addressing sediment in the coastal marine area, review of forestry) will assist in protecting and enhancing coastal environments.

## 4.4 PROMOTING AND SUPPORTING INDIGENOUS BIODIVERSITY ENHANCEMENT AND EFFECTIVE PEST MANAGEMENT

The Coromandel Peninsula is a hot spot for indigenous biodiversity, being of both regional and national significance. Factors such as climate change, browsing, predation and land use change contribute to biodiversity degradation. Some of the issues associated with modifications to the natural environment include:

- an increased threat from animal and plant pests
- reduction, fragmentation and isolation of indigenous ecosystems and habitats
- loss of corridors or connections linking indigenous ecosystems and habitats
- loss or disruption to migratory pathways in water, land or air
- the difficulty of restoring indigenous forest and other ecosystems once they have been lost
- effects of changes to water flows, levels and quantity on ecosystems
- water quality degradation by sediment and other contaminants
- loss of cultural values, amenity values and recreational opportunities.

Whilst the zone consists of a smaller proportion of the region's population and land area, the Coromandel Peninsula contains a substantial 20 per cent of the region's native vegetation. Indigenous vegetation covers 63 per cent of the zone area, alongside a smaller 19 per cent of pastoral land and 15 per cent forestry. Coromandel catchments contain highly significant ecosystems. These significant ecosystems include freshwater streams, wetlands, native bush, estuaries, and coastal and marine ecosystems.

The Coromandel stands out from most other areas in the Waikato for having a diverse and unique array of fauna and flora species. A total of 107 nationally threatened species, comprising 51 flora species and 56 fauna species, are present within the peninsula (including offshore islands), including kauri, kākā, tuatara, wētā, frogs, kiwi, long tail bats and seabirds. Whilst many of these threatened species are found solely within the Mercury Islands, diverse and abundant threatened fauna are located on the mainland (Kessels Associates, 2010).

Throughout the zone there are a range of animal and plant pests that threaten indigenous species and habitats. The effects and severity of each pest varies throughout the zone depending on the location and the values at the site that require protection.

One pest plant (disease) in particular that has potential for devastating impacts on the zone is kauri dieback, which has killed thousands of kauri throughout New Zealand. The disease has been identified in four sites in the Coromandel Peninsula, and it has the potential to kill more kauri trees if not maintained sufficiently. With no known treatment available for kauri dieback, the only way to save the zone's kauri forests is to contain the disease in existing locations and stop the spread into healthy areas through measures such as staying within tracks and cleaning gear (Ministry for Primary Industries, 2016). The devastating impacts of kauri dieback is just one example of the need for effective pest control in the zone (Lewis, 2015).

<sup>3</sup> Download at <https://www.waikatoregion.govt.nz/environment/natural-resources/coast/coastal-water-quality/coastal-recreational-water-quality/>

<sup>4</sup> Australian and New Zealand Guidelines for Fresh and Marine Water Quality

*"Well managed catchments that enhance economic and environmental sustainability, recognise community and cultural aspirations, while mitigating natural risks."*

Myrtle rust is another disease that is a significant biosecurity threat to the zone and is currently under surveillance (by DOC) on the Coromandel Peninsula. It is known to impact a range of species, including rātā and pōhutukawa. As of late 2017, myrtle rust has not been detected within the zone.

Despite the presence of invasive exotic species, the peninsula still provides habitat for a broad range of indigenous species. Many species that have survived in the peninsula are now extinct in other parts of the Waikato.

This is likely due to significant cover of indigenous bush and scrubland and a later entry of mammalian pests to the areas.

Indigenous biodiversity management seeks to protect and enhance significant flora and fauna. Protection includes enhancing buffers and recreating corridors by replanting, fencing fragments from stock, and pest control to remove exotic animals and plants that consume and compete with native species.

## 4.5 THE ONGOING NEED TO MANAGE NATURAL HAZARD RISK

The Coromandel is susceptible to multiple inland and coastal hazards, including river flooding, debris flows, cliff erosion and instability, coastal inundation, earthquakes, tsunami and storm surges. In particular, river flooding has posed considerable risk to the Coromandel Zone in the past and is the most frequent natural hazard in the zone.

The Coromandel Range attracts high intensity rainfall on a regular basis, making the zone vulnerable to flooding (Munro, 2007). Severe weather events and associated river flooding have been common throughout the zone, with more than 10 significant flood events recorded since 1873. The Thames Coast is especially vulnerable, containing streams that can be volatile in heavy rainfall. The short, steep catchments and high sediment load in rivers and streams cause flash flooding with short warning times. Sedimentation and river congestion consisting of vegetation debris has proven to exacerbate flooding when high rainfall events occur over localised areas.

State Highway 25 has many high risk flooding points near Whangamatā, Wharekawa, Tairua, Whitianga and Manaia, posing the risk of community isolation when roads become inaccessible. The weather events of June 2002, February 2014 and March 2017 illustrated the devastating effects storm events have on the peninsula, with high winds damaging roofs and cutting power, and torrential rain causing flooding, forcing evacuations and isolating communities.

Severe storm events have also been known to cause cyclonic winds, notably on the western side of the Coromandel Range. Strong winds can cause considerable damage and possible injury to people. The east Coromandel coastline is prone to erosion associated with episodic storms from the north and east. In quieter periods between storms, the sand generally returns onshore, resulting in beach and dune recovery (Dahm, 2009).

Tsunami hazards also pose a risk to the Coromandel Zone, particularly to the northern and eastern faces of the peninsula. Whilst the risk of a tsunami is still relatively low, the impact could be potentially significant, especially when considering the effects of the devastating Japan tsunami in 2011. In the Coromandel Peninsula, a distant sourced tsunami could occur from a large earthquake in South America, whilst a near source tsunami would likely be caused by a large earthquake event along the Tonga-Kermadec Trench, northeast of New Zealand (Waikato Regional Council, 2017). Ongoing work of the Eastern Coromandel Tsunami Strategy<sup>5</sup> outlines the management of tsunami risk to multiple eastern Coromandel communities, including Mercury Bay, Whitianga, Cooks Beach, Hahei and Hot Water Beach, alongside others.

The peninsula has one faultline – the Hauraki Faultline – which runs down the west side of the Coromandel Peninsula. Movement of this faultline created both the mountains to its east and the basin to its west. This faultline poses seismic risk to the zone also.

<sup>5</sup> Download at <https://www.waikatoregion.govt.nz/services/regional-services/regional-hazards-and-emergency-management/coastal-hazards/tsunami/eastern-coromandel-tsunami-strategy>

## 4.6 FORGE AND STRENGTHEN PARTNERSHIPS WITH MANA WHENUA, STAKEHOLDERS AND COMMUNITY GROUPS

Coromandel Peninsula communities are reliant on the healthy functioning of the natural and physical resources of the Coromandel Zone for their social, economic, cultural and environmental wellbeing. However, given that the Coromandel Zone comprises a relatively small rating base of 23,500 rateable properties, the level of funding does not always match desired community outcomes for catchment, river, coastal and flood works.

This means that in order to achieve desired community outcomes the council must partner with other councils, community groups, businesses, individual landowners, central government, iwi/hapū and non-governmental organisations.

Treaty-based partnerships with Hauraki iwi/hapū are particularly vital to achieve step change for our environment, economy and communities. Key iwi within the Coromandel zone are Ngāti Hako, Ngāti Paoa, Ngāti Tamaterā, Ngāti Tara-Tokanui, Ngāti Porou ki Hauraki, Ngāti Whanaunga,

Ngāti Hei, Ngāti Maru, Ngāti Pukenga, Te Patukirikiri and Ngāi Tai ki Tāmaki Ngā Rahiri Tumutumu (Hauraki Collective iwi), as well as Ngāti Huarere and Ngāti Pū. Council values and will continue to sustain its partnerships with these iwi. Continuing proactive iwi, hapū and marae engagement, both within formal agreements and more informally, will be important to building enduring partnerships and ensuring the goals of this zone plan are met.

It is important that the council continues to engage with community sectors to identify opportunities to work together, to avoid duplication and therefore add significant value where priorities are aligned. Good examples of partnering (and co-funding) with various groups to undertake community projects throughout the zone include those undertaken with DOC and Beachcare. This type of collaborative approach is a challenge, but assists in focusing resources into priority areas, where the biggest gains can be achieved.







# PLAN IMPLEMENTATION

## TE WHAKATINANATANGA O TE MAHERE

### 5.1 ZONE GOALS

The following sets out the goals for the Coromandel Zone.

#### GOAL 1: PROTECT PEOPLE, PROPERTY AND ESSENTIAL SERVICES FROM FLOODING.

The Coromandel Zone is subject to high intensity rainfall events. Climate change poses the prospect of increased risk of natural hazards such as flooding, resulting from sea level rise and the likely increase in the frequency and ferocity of high rainfall events. There is an opportunity to improve risk management, especially associated with flooding, by effective infrastructure and land use planning, and ensuring the community remains knowledgeable about the impacts of natural risks.

#### GOAL 2: PROTECT AND IMPROVE WATER QUALITY BY ENHANCING AND STABILISING CATCHMENTS.

Modification of the natural landscape, sedimentation, nutrient run off, intensification of urban centres and increased demand for water has adversely impacted water resources in the Coromandel Zone. There is an opportunity to protect waterways in the zone and prevent healthy waterways from declining in quality. River and hill country stabilisation, land retirement, sustainable land management and reducing nutrient run off are methods that can improve water quality. Improving water quality will not only improve the health of the zone's rivers and streams, but also estuaries and coastal water quality.

#### GOALS 3: IMPROVE THE DIVERSITY AND HABITAT OF INDIGENOUS PLANTS AND ANIMALS.

Whilst 63 per cent of the zone consists of native bush and indigenous biodiversity, the zone has been subject to land use change and urban development via land clearance. Remnant bush, wetland areas and estuaries in the zone have been degraded over time and require ongoing management to maintain biodiversity. There are opportunities to retain or reinstate such areas, whilst controlling plant and animal pests and improving habitat connectivity to enhance surviving areas.

#### GOAL 4: ENHANCE AND PROTECT COASTAL ENVIRONMENTS IN THE ZONE.

The coastal environment of the zone has been impacted by a range of interrelated causes. There is a need and opportunity to improve the health, mauri and abundance of coastal ecosystems. Sea Change – Tai Timu Tai Pari contains initiatives that aim to enhance and protect the zone's coastal environments. Further development and implementation of HCMPs will continue to strive towards managing these environments.

#### GOAL 5: COLLABORATE AND STRENGTHEN PARTNERSHIPS WITH MANA WHENUA AND COMMUNITY.

There is an increasing expectation from the community and iwi to deliver collaborative solutions to shared harbour and catchment management problems. Given the zone's small rating base and scarce resourcing, funding and capacity is problematic to achieving community outcomes. Despite this, there are opportunities to leverage funding to strengthen community partnerships. An example is the significant funding invested in the Coromandel Peninsula through regional funding streams such as the Natural Heritage Partnership Programme. Continuing to strengthen community/stakeholder partnerships and supporting iwi co-management practices are key opportunities to deliver more effective harbour and catchment management outcomes for the zone. There is also an opportunity to further explore co-funding of projects in partnership with other organisations.

## 5.2 IMPLEMENTATION ACTIONS

This section describes how the council intends to achieve its goals for the zone at an operational level. The eight focus areas identified provide a basis for monitoring this plan and the accompanying actions detail proposed implementation activities over a 10 year time frame.

The focus areas and actions may respond to one or more of the zone plan goals and this reflects the interrelated nature of implementation activities undertaken by the council within the zone. For example, focus areas designed to address erosion will also assist the council in achieving the goals of maintaining and improving water quality and protecting biodiversity. The relationship between the key focus areas and zone goals is summarised in Table 2.

FOCUS AREA	GOAL 1 Flood protection	GOAL 2 Water quality	GOAL 3 Biodiversity enhancement	GOAL 4 Coastal environment enhancement and protection	GOAL 5 Community partnerships
<b>1</b> Fund new works with a focus on priority areas	✓	✓	✓	✓	✓
<b>2</b> Maintain the integrity of existing flood schemes	✓	✓	✓		✓
<b>3</b> Maintain the integrity of existing catchment and river works	✓	✓	✓	✓	
<b>4</b> Protecting and enhancing places of value			✓	✓	
<b>5</b> Partner with iwi to achieve the greatest value	✓	✓	✓	✓	✓
<b>6</b> Collaborate with community groups and stakeholders to achieve the greatest value	✓	✓	✓	✓	✓
<b>7</b> Provide an information and facilitation service for landowners	✓	✓	✓	✓	✓
<b>8</b> Preparing for change		✓	✓	✓	✓

**TABLE 2** - Relationship between each focus area and the zone goals.

Some implementation actions are ongoing, whilst others will have more effort directed to them in either the short or long term. The implementation of some actions is dependent on funding from the zone and internal and/or external sources. The timing of implementation is also subject to change.

It is noted that the implementation actions described in this plan are directly funded through the Coromandel Zone at 2017/18 levels and are subject to review.

## FOCUS AREA 1 – FUND NEW WORKS WITH A FOCUS ON PRIORITY AREAS

Harbour and catchment management plans (HCMP) are developed for areas identified by the community and the council as priority areas for integrated management of harbours and catchments. HCMPs provide an integrated approach to the management of natural resources and the protection of community values. Further development of HCMPs will also meet requirements under the Regional Policy Statement (RPS), as well as the council's strategic direction (notably HCMPs for Whitianga/Mercury Bay and Coromandel/Manaia).

The council will continue to fund new works (at current levels) that incentivise landowners to invest in soil conservation and land management activities that provide protection beyond statutory or minimum requirements, and enhance the special values that characterise the Coromandel Peninsula, e.g. coastal environments, rivers, and offshore island features. The focus of funding of new works will be in the priority areas identified in HCMPs.

IMPLEMENTATION ACTIONS		WHO/TIMING
<p><b>Develop harbour and catchment management plans and implementation plans</b></p>	<p>The council has an ongoing commitment to prepare and implement HCMPs for all the major Coromandel Peninsula harbours and their surrounding catchments. HCMPs will include actions to:</p> <ul style="list-style-type: none"> <li>• improve water quality (fresh and marine)</li> <li>• conserve soil</li> <li>• restore and protect important biodiversity habitats (terrestrial and coastal)</li> <li>• ensure appropriate land management and land use practices</li> <li>• support community and iwi aspirations for the catchments.</li> </ul> <p>The actions above cannot be achieved individually by Waikato Regional Council. Accordingly, actions contained in HCMPs are implemented in collaboration with local territorial authorities, iwi, DOC, interested landowners, community boards and other key agencies and stakeholders.</p> <p>The zone already has four HCMPs: Whangamatā, Whangapoua, Wharekawa and Tairua. In addition, the council will:</p> <ul style="list-style-type: none"> <li>• commence development of Whitianga/Mercury Bay and Coromandel/Manaia HCMPs</li> <li>• develop implementation plans once HCMPs are complete</li> <li>• develop sub-catchment plans as required for smaller catchments.</li> </ul>	<p>WRC</p> <p>(Whitianga/Mercury Bay to start 2018 and Coromandel/Manaia to start 2019).</p> <p>WRC, partners and stakeholders (ongoing)</p>
<p><b>Encourage uptake of new catchment works</b></p>	<p>Focusing on priority areas identified within HCMPs:</p> <ul style="list-style-type: none"> <li>• Engage and inform landowners of the assistance available for new works.</li> <li>• Advise on the funding process and ongoing landowner responsibilities.</li> <li>• Provide advice and assist with preparing applications for funding from other sources to complement new works projects.</li> </ul>	<p>WRC (ongoing)</p>
	<p>Outside of HCMPs areas, respond to landowner requests for:</p> <ul style="list-style-type: none"> <li>• information and, if appropriate, funding for new works</li> <li>• assistance with preparing applications for funding to complement new works projects.</li> </ul>	<p>WRC (ongoing)</p>
	<p>Where landowners are willing, facilitate opportunities to bring people together (e.g. farm field days) to:</p> <ul style="list-style-type: none"> <li>• build knowledge and capability</li> <li>• coordinate discussion groups on enhancing catchment health</li> <li>• encourage neighbourliness and think beyond property boundaries.</li> </ul>	<p>WRC, stakeholders (ongoing)</p>
	<p>Target funding of new works into priority areas so that:</p> <ul style="list-style-type: none"> <li>• 80 per cent of funding is spent in priority areas.</li> </ul>	<p>WRC (ongoing)</p>

## FOCUS AREA 2 – MAINTAIN THE INTEGRITY OF EXISTING FLOOD SCHEMES

Together, flood protection schemes in Coromandel town, Tapu, Waiomu, Te Puru and Graham's Creek (Tairua) provide protection from flooding for various urban and rural areas in the Coromandel Peninsula.

IMPLEMENTATION ACTIONS	WHO/TIMING
<p><b>Maintenance works</b></p>	<ul style="list-style-type: none"> <li>• Maintain design standards of current assets and ensure appropriate budget is available to continue the renewals programme.</li> <li>• Maintain (or improve where required) land access to assets on both scheme land and private land.</li> </ul>
<p><b>Reduce the risk of localised flooding</b></p>	<p>Reduce risks of localised flooding in priority catchments through the removal of vegetation congestion and blockages. Works include:</p> <ul style="list-style-type: none"> <li>• annual inspections of the rivers and streams and responding to enquiries</li> <li>• removal of isolated whole trees, stumps or limbs that have fallen into the channel or are likely to, and which could create an obstruction to flow or exacerbate erosion</li> <li>• assisting with fencing of eroding portions of channels in accordance with best practice</li> <li>• planting and maintaining vegetation to help prevent erosion, using indigenous vegetation where appropriate</li> <li>• minor erosion control work to maintain channels in their present locality and to reduce sediment input caused by streambank erosion.</li> </ul>
<p><b>Consider ecological enhancement and potential effects of climate change</b></p>	<ul style="list-style-type: none"> <li>• Ensure future proofing around climate change, including adjusting level of service to consider climate change and reviewing flood assets to consider what is appropriate for longer term requirements.</li> <li>• Incorporate consideration of ecological enhancement and better environmental outcomes when planning new works and projects.</li> <li>• Explore other options to reduce the impact of climate change, e.g. purchasing flood prone land to retire.</li> </ul>
<p><b>Explore opportunities and supporting policy</b></p>	<ul style="list-style-type: none"> <li>• Prevent development and intensification on flood plains, especially on scheme land. This can be achieved through monitoring urban development processes.</li> <li>• Support the development of the Regional Asset Management Plan (RAMP) and Regional Infrastructure Strategy.</li> </ul>



### FOCUS AREA 3 – MAINTAIN THE INTEGRITY OF EXISTING CATCHMENT AND RIVER WORKS

Existing catchment management works have made a difference to erosion, subsequent downstream sedimentation and protection of productive land. It is important that the existing works are retained in good working order and that they are regularly assessed to determine whether the intended benefits are being achieved.

IMPLEMENTATION ACTIONS		WHO/TIMING
<b>Accurate property information</b>	<p>Maintain existing works through:</p> <ul style="list-style-type: none"> <li>maintaining accurate, up to date property files and asset records</li> <li>inspecting programme assets and following up any maintenance landowners are required to carry out</li> <li>ensuring landowners are aware of and meet their responsibilities under existing agreements.</li> </ul>	WRC (ongoing)
<b>Inspections and maintenance</b>	<p>Regularly inspect scheme assets and works through:</p> <ul style="list-style-type: none"> <li>follow-up of any maintenance landowners are required to carry out</li> <li>ensuring landowners are aware of and meet their responsibilities under existing agreements</li> <li>making landowners aware that Waikato Regional Council will take action if the obligations in agreements are not being met.</li> </ul>	WRC (ongoing)
<b>Renewals</b>	<p>At renewal:</p> <ul style="list-style-type: none"> <li>review agreements with landowners to ensure the assets are contributing to achieving the current purpose of the scheme</li> <li>negotiate variations to agreements where required.</li> </ul>	WRC (ongoing)
<b>Support development of new strategies and policies that ensure best practice</b>	<ul style="list-style-type: none"> <li>Support ICM's development of a policy on maintenance.</li> <li>Promote to landowners implementation of best management practices, including further development and review of current practices.</li> </ul>	WRC (ongoing)

## FOCUS AREA 4 – PROTECTING AND ENHANCING PLACES OF VALUE

The Coromandel Zone contains a range of unique natural features and places of special cultural, ecological, economic and social significance. A key focus for the zone activities will be on protecting and enhancing these places of value.

IMPLEMENTATION ACTIONS	WHO/TIMING
<p><b>Protect and enhance the zone's coastal environment</b></p> <ul style="list-style-type: none"> <li>• Give effect to statutory plans and policies, including the: <ul style="list-style-type: none"> <li>· Waikato Regional Coastal Plan</li> <li>· Waikato Regional Plan</li> </ul> </li> <li>• Give consideration to non-statutory plans and policies, including: <ul style="list-style-type: none"> <li>· harbour and catchment management plans</li> <li>· Sea Change – Tai Timu Tai Pari (Hauraki Gulf Marine Spatial Plan) – refer Focus Area 8 for more details.</li> </ul> </li> <li>• Funding policy to be reviewed in light of the Regional Coastal Plan review process.</li> <li>• Continue the implementation of current mangrove seedling removal consent processes in the zone, and associated maintenance and restoration activities.</li> <li>• Continue to review, update, develop and implement restoration plans in the zone to improve coastal habitats and ecosystems.</li> </ul>	<p>WRC, stakeholders, community (ongoing)</p>
<p>The Beachcare programme addresses hazard mitigation through recovery post-erosion, in addition to enhancing natural character, amenity value and biodiversity value of restored sites. The following actions are proposed to support the Beachcare project:</p> <ul style="list-style-type: none"> <li>• On request or as part of a focus on priority biodiversity areas, engage and inform landowners of the assistance available through the council's Beachcare programme.</li> <li>• Provide support such as plants, material, pest control and guidance to groups that aim to restore a local coastal habitat, such as foredune, reardune or coastal forests.</li> </ul>	<p>WRC, community (ongoing)</p>
<p><b>Biodiversity enhancements</b></p> <p>Enhancing biodiversity is critical for the zone and meets objectives set under the RPS. The following actions are proposed to enhance indigenous biodiversity in the zone:</p> <ul style="list-style-type: none"> <li>• Develop a Willis Report implementation plan for biodiversity management in the Coromandel Zone.</li> <li>• Continue current habitat enhancement works in Waikawau, Tairua Harbour, Papamairi/Moanaanuanu and Wharekawa, and seek further opportunities for enhancement.</li> <li>• Maintain Natural Heritage Partnership Programme funding for biodiversity projects in the zone.</li> <li>• Acknowledge the importance of ecologically significant sites in the zone.</li> <li>• Review and promote best management practices for restoration planting.</li> <li>• Monitor success of current biodiversity projects and programmes and incorporate knowledge to improve outcomes.</li> <li>• Retain/replace fish habitats when clearing river blockages.</li> <li>• Undertake riparian enhancements including stream and wetland fencing, planting and weed control.</li> <li>• Explore opportunities for wetland and dune restoration through involvement of TCDC's reserve management plans.</li> <li>• Maintain riparian margins by planting and stock exclusion.</li> </ul>	<p>WRC, DOC, stakeholders, (ongoing)</p>

#### FOCUS AREA 4 – PROTECTING AND ENHANCING PLACES OF VALUE

<b>Animal and plant pest control</b>	<p>The following activities are proposed for animal and plant pest control:</p> <ul style="list-style-type: none"> <li>• Ensure landowners comply with rules set in the Regional Pest Management Plan (RPMP).</li> <li>• Increase pest control of regional council lease land and scheme land.</li> <li>• Support DOC to manage pest plants on DOC-managed land.</li> <li>• Investigate opportunities with Integrated Catchment Services (ICS) and DOC for a collaborative biodiversity/biosecurity programme for the zone.</li> <li>• Develop a monitoring process that links pest management benefits to flood protection and river management initiatives.</li> </ul>	WRC, DOC, stakeholders, (ongoing)
	<p>Key animal pest actions include:</p> <ul style="list-style-type: none"> <li>• supporting collaborative opportunities through Predator Free 2050</li> <li>• continuing to manage possums in priority possum control areas (PPCAs) where control is needed to: <ul style="list-style-type: none"> <li>· protect and enhance biodiversity (including improving the stability of the catchments)</li> <li>· enhance farm production</li> <li>· maintain the gains of previous or existing possum control</li> </ul> </li> <li>• continuing ungulate pest control (goats, deer, pig) working in collaboration with DOC.</li> </ul>	
	<p>Key plant pest actions include:</p> <ul style="list-style-type: none"> <li>• undertaking direct control projects for high threat pest plant species that are set out in the RPMP.</li> <li>• undertaking active pest plant control on regional council owned and managed land (100 per cent compliant with RPMP)</li> <li>• supporting collaborative opportunities to enable on farm biosecurity and promote/implement biosecurity pathway management practices</li> <li>• increasing education of pest plants to council staff</li> <li>• surveillance of national interest pest plants</li> <li>• implementing measures to prevent the spread of kauri dieback (in collaboration with DOC).</li> </ul>	

#### FOCUS AREA 5 – PARTNER WITH IWI TO ACHIEVE THE GREATEST VALUE

Partnering with iwi and hapū in the zone will add significant value to harbour and catchment management activities undertaken within the zone.

IMPLEMENTATION ACTIONS		WHO/TIMING
<b>Build enduring relationships with mana whenua</b>	<p>Key actions to ensure enduring and meaningful engagement with mana whenua will include:</p> <ul style="list-style-type: none"> <li>• continuing to foster relationships with iwi to develop trust and credibility</li> <li>• understanding mana whenua objectives and priorities and aligning zone activities with these</li> <li>• identifying areas of common objectives and supporting associated initiatives, for example identifying and including archaeological sites in the council's GIS database</li> <li>• being responsive and adaptable to Treaty settlement outcomes, including the upcoming Hauraki Collective Treaty Settlement</li> <li>• Increasing staff training, resourcing and introductions to iwi collaboration in the zone.</li> </ul>	WRC, iwi (ongoing)

**FOCUS AREA 6 – COLLABORATE WITH COMMUNITY GROUPS AND STAKEHOLDERS TO ACHIEVE THE GREATEST VALUE**

Liaise with agencies, iwi, industry bodies, landowners and community groups to coordinate work programmes and to ensure comprehensive coverage, avoid duplication and add value where there is alignment with the goals of this zone plan.

IMPLEMENTATION ACTIONS		WHO/TIMING
<b>Forward planning</b>	<p>The council will develop, support and implement projects in partnership with other stakeholders and community groups that focus on priority areas, catchments or issues. Key actions will include:</p> <ul style="list-style-type: none"> <li>• developing and implementing a stakeholder management plan</li> <li>• developing and implementing a communications plan</li> <li>• co-hosting an annual meeting of zone stakeholders to consider priorities, identify common areas of interest and potential collaboration opportunities</li> </ul>	<p>WRC, iwi, Coromandel Catchment Committee, stakeholders (annually)</p>
	<p>Where common interests exist, the following actions are proposed:</p> <ul style="list-style-type: none"> <li>• Formally partner with other stakeholders to develop funding proposals and undertake joint projects.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Support applications for external funding by, for example, endorsing applications, providing part funding or in kind contributions, and providing advice on the preparation of funding applications.</li> </ul> <p>Actively facilitate or participate in workshops, forums and other networking opportunities that:</p> <ul style="list-style-type: none"> <li>· share information, knowledge and skills to address common interests</li> <li>· create opportunities to build capacity and capability.</li> </ul>	<p>WRC, iwi, stakeholders (ongoing)</p>
<b>Leverage existing relationships</b>	<p>It is important for the council to continue strengthening existing relationships with other organisations to realise a range of community benefits. The Coromandel Zone will achieve this by:</p> <ul style="list-style-type: none"> <li>• exploring further opportunities to leverage partnerships and co-funding initiatives</li> <li>• ensuring the regional council is viewed as a valuable partner that other organisations want to work with</li> <li>• building a stronger relationship with territorial authorities, especially in regard to managing the impact of urban development</li> <li>• promoting biodiversity through the EnviroSchools programme.</li> </ul>	<p>WRC, stakeholders (ongoing)</p>

## FOCUS AREA 7 – PROVIDE AN INFORMATION AND FACILITATION SERVICE FOR THE COMMUNITY

Link landowners to the full range of services provided by Waikato Regional Council, and with other organisations providing assistance.

IMPLEMENTATION ACTIONS		WHO/TIMING
<p><b>Work with landowners and land managers</b></p>	<p>Provide one-on-one advice and information in priority areas on sustainable land management practices/biodiversity protection, etc, including:</p> <ul style="list-style-type: none"> <li>• the development of farm/property plans (in priority areas)</li> <li>• appropriate land use that does not exceed the property's land use capability</li> <li>• setback distances between land use activities (agriculture and forestry) and waterways</li> <li>• stock exclusion from all water bodies</li> <li>• the management of plant and animal pests.</li> </ul>	<p>WRC (ongoing)</p>
<p><b>Work with prominent industries in the zone</b></p>	<p>Extend Waikato Regional Council's ability to support landowners and facilitate change to meet RPS objectives by building capability within industries servicing the rural sector in the Coromandel. This will be done by:</p> <ul style="list-style-type: none"> <li>• facilitating the delivery of appropriate training programmes for rural professionals</li> <li>• developing extension programmes in collaboration with stakeholder organisations</li> <li>• undertaking joint research and extension projects where appropriate</li> <li>• developing and maintaining open, constructive relationships with staff working for key rural sector organisations.</li> </ul>	<p>WRC, industry stakeholders (ongoing)</p>
<p><b>Communication and education</b></p>	<ul style="list-style-type: none"> <li>• Develop and implement strategies to inform and educate landowners and relevant industries about the characteristics of the zone and associated risks. In particular, there should be a focus on: <ul style="list-style-type: none"> <li>· communicating the risks associated with the disturbance of soil and the intensity of localised weather events</li> <li>· making practical, targeted information easily accessible (for example, the menus of practices to improve water quality and advice on the control of plant and animal pests relevant to the zone)</li> <li>· preparing for changes in regulations.</li> </ul> </li> <li>• Attend local events and other forums and utilise these opportunities to network with landowners, land managers and industry representatives.</li> <li>• Prepare case studies that illustrate the types of issues experienced in the zone to document and provide reference material for education purposes and future policy development – both district and regional.</li> <li>• Create opportunities for landowners to become educators, learning from each other's experiences.</li> <li>• Identify champion farmers (modelling best practice) and facilitate mentoring.</li> </ul>	<p>WRC, stakeholders, community (ongoing)</p>

<p><b>Ensure community resilience and education of floods</b></p>	<p>Improving community understanding of flooding risk and how the flood scheme assets will ensure the Coromandel Peninsula is more resilient. This will be achieved by the following:</p> <ul style="list-style-type: none"> <li>• Education on likelihood and consequences of the impacts of a greater than design flood event. Engage the communities in these matters and provide advice for managing these risks (residual flood risks). This could be achieved through schools, newspapers, signboards and advertising.</li> <li>• Educate the local community on the level of service provided so that public expectations are correct.</li> <li>• Promote development of a website tool to provide updates during flood events.</li> <li>• Develop scheme inundation maps (via website) to educate the public on 10 year, 50 year, 100 year flood events and their predicated impacts.</li> <li>• Collaborate with territorial authorities to enhance the district plan description of flood protection schemes, their benefits and limitations.</li> </ul>	<p>WRC, community (ongoing)</p>
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## FOCUS AREA 8 – PREPARING FOR CHANGE

Potential co-management arrangements, future regulatory policy, the implementation of Sea Change – Tai Timu Tai Pari (Hauraki Gulf Marine Spatial Plan), the Hauraki Treaty Settlement and the Healthy Rivers/Wai Ora – Hauraki/Coromandel plan change are all likely to result in changes to the way the zone is managed in the future. Waikato Regional Council is committed to supporting the community with the implementation of these changes. The zone also needs to prepare for potential changes as a result of climate change.

IMPLEMENTATION ACTIONS		WHO/TIMING
<p><b>Assist community in preparing for regulatory changes to reduce non-point discharges</b></p>	<p>Assist the community in preparing for water quality management changes through:</p> <ul style="list-style-type: none"> <li>• preparing and distributing user guides on policies and rules and ensuring the community remains informed of policy changes</li> <li>• working with agriculture industry stakeholder organisations to identify practical on-farm solutions to address non-point source contaminant discharges and support the development of farm environment plans</li> <li>• providing extension programmes in collaboration with stakeholder organisations as appropriate to ensure farmers and rural professionals have good information available on effective, practical, on-farm solutions</li> <li>• working with agriculture industry stakeholders to develop and implement support systems for landowners to ensure they are able to operate successfully within the required limits</li> <li>• supporting landowners to explore and confirm opportunities for multi property interventions to improve water quality</li> <li>• reviewing current council policy with respect to scheme maintenance in response to changes in land use and the minimum standards applied to specific land uses.</li> </ul>	<p>WRC, community (ongoing)</p>
<p><b>Build further awareness of the Hauraki Gulf Marine Spatial Plan (Sea Change – Tai Timu Tai Pari)</b></p>	<p>Where there is alignment with priorities, the council, alongside territorial authorities, will continue to implement actions that support the themes identified in Sea Change – Tai Timu Tai Pari. The themes include:</p> <ul style="list-style-type: none"> <li>• restoring habitats</li> <li>• protected, enhanced and restored habitats</li> <li>• restored species diversity and abundance</li> <li>• biosecurity</li> <li>• restoring healthy functioning ecosystems</li> <li>• sediment and nutrient management</li> <li>• risks and threats to water quality.</li> </ul> <p>The following actions will build further awareness of Sea Change – Tai Timu Tai Pari:</p> <ul style="list-style-type: none"> <li>• Release consistent information on the Hauraki Gulf Marine Spatial Plan.</li> </ul>	<p>WRC, community (ongoing)</p>

<p><b>Adapt and respond to outcomes of the Hauraki Treaty settlement</b></p>	<p>Waikato Regional Council, which provides key catchment management services regionally, will:</p> <ul style="list-style-type: none"> <li>• play a part in the implementation arrangements once the settlements are enacted through legislation at an as yet to be determined time</li> <li>• work with Hauraki iwi to achieve an integrated and coordinated approach to the management of the Coromandel, Waihou and Piako catchment waterways</li> <li>• continue existing co-governance and co-management arrangements gained over the years.</li> </ul>	<p>WRC, Hauraki iwi (ongoing)</p>
<p><b>Climate change and sea level rise</b></p>	<ul style="list-style-type: none"> <li>• Ensure that implementation of the adopted Integrated Catchment Management climate change guidance note is supported.</li> <li>• Support the implementation of future climate change guidance policies.</li> </ul>	<p>WRC (Ongoing)</p>





# FUNDING, MONITORING AND REVIEW

## TAHUA PŪTEA, AROTURUKI ME TE AROTAKENGA

### 6.1 FUNDING

The council collects rates (general and targeted) for river management and improvement, soil conservation works and catchment oversight, based on areas of benefit and activities that contribute to the matters being managed.

The actions identified in this zone plan and funded by the council will be implemented under the current levels of funding allocated to the zone. Work programmes and funding levels will be subject to review throughout the life of the plan.

The council will also actively explore opportunities for co-funding of projects with partner agencies. The zone has already been successful in some recent funding applications, and opportunities for further funding will be explored and actioned as appropriate.

### 6.2 MONITORING AND REVIEW

This zone plan will be subject to a full review every six years and a limited review three years after each full review.

Monitoring of the goals will be ongoing and will focus on the following key aspects:

- Environmental outcomes demonstrating the effectiveness or otherwise of this zone plan.
- Completion of actions to measure the degree of implementation of this zone plan.
- The outcomes of the information gathered in respect of Table 3.

The results of monitoring will be reported annually to the catchment committee and the Integrated Catchment Management Committee. A three-yearly summary will be used to inform the reviews of this zone plan.

		MEASURES
<b>GOALS</b>	<b>GOAL 1</b> <b>Protect people, property and essential services from flooding</b>	<ul style="list-style-type: none"> <li>• Agreed flood protection level of service is maintained.</li> </ul>
	<b>GOAL 2</b> <b>Protect and improve water quality by enhancing and stabilising catchments</b>	<ul style="list-style-type: none"> <li>• Agreed new catchment and river management works meet annual funding allocations.</li> <li>• Summary of data (including suspended sediment data) collected within the zone as part of regional council's regular monthly water quality monitoring.</li> <li>• Results from regional council's five-year survey of soil stability.</li> <li>• Indicator of water quality – less sediment, nutrients and bugs in the water.</li> <li>• Planned maintenance works are completed to meet long term plan (LTP) performance measures.</li> </ul>
	<b>GOAL 3</b> <b>Improve the diversity and habitat of indigenous plants and animals.</b>	<ul style="list-style-type: none"> <li>• Annual regional council funding allocated to biodiversity projects within the zone.</li> <li>• Number and area of biosecurity projects undertaken within the zone.</li> <li>• Number and area of restoration projects initiated.</li> <li>• Planned works are completed to meet LTP performance measures.</li> </ul>
	<b>GOAL 4</b> <b>Enhance and protect coastal environments in the zone.</b>	<ul style="list-style-type: none"> <li>• Annual regional council funding allocated to biodiversity projects within the zone.</li> <li>• Number and area of biosecurity projects undertaken within the zone.</li> <li>• Number and area of restoration projects initiated.</li> <li>• Planned works are completed to meet LTP performance measures.</li> </ul>
	<b>GOAL 5</b> <b>Collaborate and strengthen partnerships with mana whenua and community.</b>	<ul style="list-style-type: none"> <li>• Three to four catchment committee meetings held per annum.</li> <li>• Complete stakeholder engagement plan by June 2019.</li> <li>• Number and type of co-management activities occurring annually.</li> </ul>

TABLE 3 - Monitoring measures



# GLOSSARY OF TERMS

## TE KUPUTAKA

<b>DOC</b>	Department of Conservation
<b>HCMP</b>	Harbour and Catchment Management Plan
<b>ICM</b>	Integrated Catchment Management
<b>LGA</b>	Local Government Act 2002
<b>LOS</b>	Levels of service
<b>LTP</b>	Long term plan
<b>PC1</b>	Plan Change 1
<b>PC2</b>	Plan Change 2
<b>PPCA</b>	Priority Possum Control Areas
<b>RMA</b>	Resource Management Act 1991
<b>RPMP</b>	Regional Pest Management Plan
<b>RPS</b>	Regional Policy Statement
<b>TCDC</b>	Thames-Coromandel District Council
<b>TLA</b>	Territorial Local Authorities
<b>WRC</b>	Waikato Regional Council
<b>WRP</b>	Waikato Regional Plan
<b>WRCP</b>	Waikato Regional Coastal Plan

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