

Thames-Coromandel District Council

Coastal Management Strategy

Introduction

The Thames-Coromandel District is renowned for its iconic and diverse coastline. With over 400 kilometres of coastline, our communities value the recreational and lifestyle opportunities that the coast provides as well as the integrity of the natural environment. It offers a range of economic benefits and attracts industries and businesses reliant on the coastal resource. A large proportion of our communities are absentee landowners who enjoy the quintessential "kiwi bach" as a welcome respite from busy urban life. The Coromandel Peninsula attracts domestic and international visitors keen to experience a slice of paradise.

Our coastlines are dynamic and distinctive. Our eastern seaboard is renowned for its white sandy beaches; while the west coast provides a rugged, rocky contrast - long favoured by hardy fishermen. These distinct environments bring their own unique challenges and this requires Council to understand the characteristics, opportunities, and solutions that are best matched to each area.

Opportunity/Problem Statement

Strategic direction from Council on coastal management is imperative in order to inform the development of the Long Term Plan 2018-2028, other planning and strategic documents, and how Council advocates for (e.g. to Waikato Regional Council and government) and funds coastal management practices into the future.

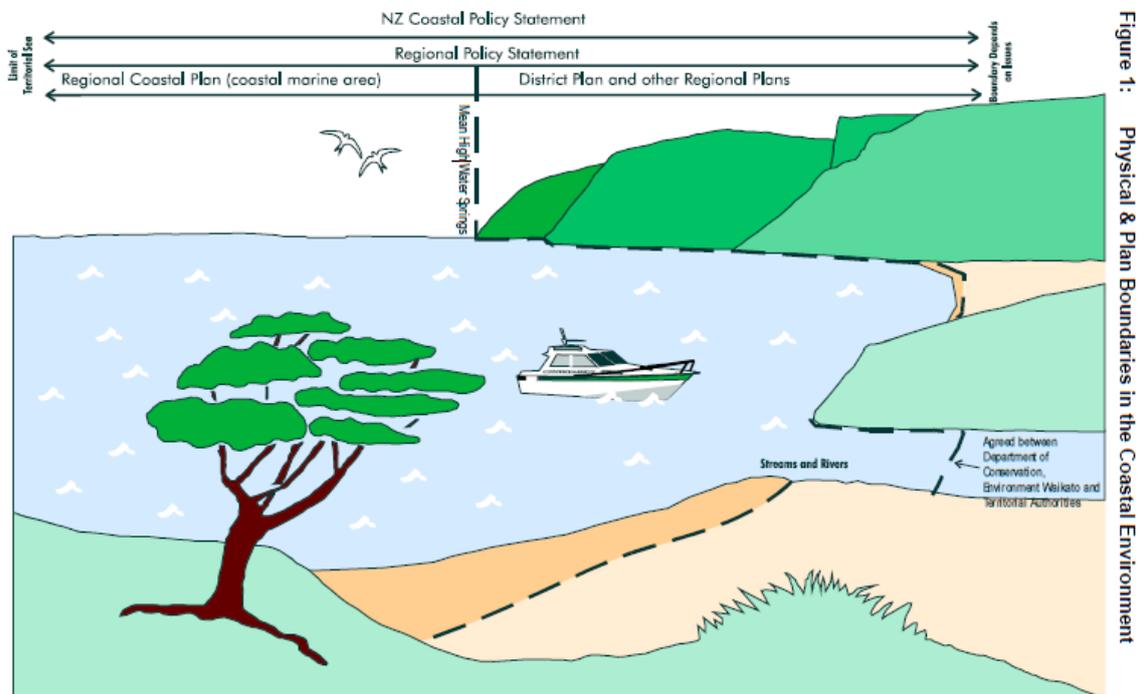
The future projected impacts of climate change and inevitable pressures caused by land use and development need to be carefully considered along with ways in which we, as a Council, and as a community, can ensure sustainable management of our natural and physical coastal resources, now and for future generations.

Council has historically had an "ad hoc" approach to coastal management, comprising a range of documents and approaches. Many of these are dated and require review to ensure they are fit for purpose and meet legislative requirements. There are also a number of "work in progress" projects which would benefit from an overarching strategic direction from Council. Coastal erosion has been explored at a community board level, with plans developed; however momentum on these has been varied; with funding proving to be a sticking point.

A series of major storm events has increased community interest in coastal management, particularly how Council will respond to coastal hazards.

Context

National, Regional and District Context



1

Coastal management is underpinned by the New Zealand Coastal Policy Statement 2010 (NZCPS). It sets out the policies and objectives that will help achieve the purpose of the Resource Management Act (RMA) - "to promote the sustainable management of natural and physical resources" in relation to the coastal environment. Of note, the surf break generated by the Whangamata bar is one of nineteen identified in Policy 16 of the NZCPS as being of national significance. It ensures that activities in the coastal area don't adversely affect the surf breaks or access to, and use and enjoyment of the surf break. Our entire coastline is also subject to the Hauraki Gulf Marine Park Act 2000 and Council is a constituent party of the Hauraki Gulf Forum.

The new National Environmental Standard (NES) for Plantation Forestry will come into force on 1 May 2018. It covers eight core plantation forestry activities: afforestation, pruning and thinning of waste, earthworks, river crossings, forestry quarrying, harvesting, mechanical land preparation and replanting. Councils may apply stricter rules in special circumstances where local conditions require a more restrictive approach. This is an important NES given the amount of plantation forestry cover in the district, as forestry has an impact on sedimentation into our waterways and coastal receiving environments.

In December 2017, the Ministry for the Environment released a new *Coastal Hazards and climate change: Guidance for local government* document. Council has ensured its Long Term Plan 2018-28 climate change assumptions reflect the guidance contained in this publication; and are actively investigating how this guidance should be responded to and

¹ <https://www.waikatoregion.govt.nz/Council/Policy-and-plans/Rules-and-regulation/Regional-Coastal-Plan/Regional-Coastal-Plan/1-Introduction/13-Planning-Framework/>

how it might permeate into the planning and asset management activities across Council. This government guidance is required to be taken into account by Council under the NZCPS.

Determining management and responsibility for the coastal area can be fraught with difficulty and can be further complicated by legislative change. Management of the coastal environment is jointly undertaken by the Minister of Conservation, Waikato Regional Council and District Council. Tangata whenua have both a customary and legislative role as kaitiaki over the marine and coastal environment which is engaged at all levels of governance and management and with all involved decision makers.

While the Coastal Management Strategy is a non-statutory document, it aligns with the intent of national and regional frameworks.

Coastal Adaptation to Climate Change

Adaptation is about undertaking actions to minimise threats or to maximise opportunities resulting from climate change and its effects.

Adapting to climate change along with intensive development pressures on our coasts will be an ongoing challenge into the future. The projected impacts of climate change will lead to changes in our coastal environments. People within our coastal communities will need to become more aware of climate change effects and either accept the changes and live with them, or start adapting their communities so that they become more resilient to climate change.

Quantifying the impact of climate change is not an exact science - even the experts find it difficult to agree. What we do know is that inaction over climate change (to whatever extent it may be) is not an option; and indeed Council is bound by legislation to ensure it utilises the best information available in its planning and decision making on any areas where climate change is a potential factor. Our District Plan has used the best information available to provide a risk assessment model in relation to coastal hazards and meets the requirements of Policy 24 of the New Zealand Coastal Policy Statement (NZCPS) 2010².

We want to provide the best information we can to our communities so they can determine what risk they are willing to accept or tolerate. This will involve discussions around sea level rise, coastal inundation (flooding), how each community might be affected into the future and how these are best addressed in the context of their particular location.

² Policy 24 of the NZCPS: Identification of coastal hazards

- (a) Identify areas in the coastal environment that are potentially affected by coastal hazards (including tsunami), giving priority to the identification of areas at high risk of being affected. Hazard risks, over at least 100 years, are to be assessed having regard to:
 - (a) physical drivers and processes that cause coastal change including sea level rise;
 - (b) short-term and long-term natural dynamic fluctuations of erosion and accretion;
 - (c) geomorphologic character;
 - (d) the potential for inundation of the coastal environment, taking into account potential sources, inundation pathways and overland extent;
 - (e) cumulative effects of sea level rise, storm surge and wave height under storm conditions;
 - (f) influences that humans have had or are having on the coast;
 - (g) The extent and permanence of built development; and
 - (h) the effects of climate change on:
 - (i) matters in (a) to (g) above;
 - (ii) storm frequency, intensity and surges; and
 - (iii) coastal sediment dynamics;taking into account national guidance and the best available information on the likely effects of climate change on the region or district.

What we do now

The New Zealand Coastal Policy Statement (NZCPS) and the Waikato Regional Policy Statement (RPS) require our District Plan to identify coastal hazards, and to restrict subdivision, use and development within areas subject to coastal hazards over a 100 year timeframe, including increased hazards from climate change.

Our District Plan (Decisions Version) contains a range of policies and rules relating to the coastal environment and to natural hazards. Of particular note are two indicative mapping lines. The Current Coastal Erosion Line (CCEL) is a green line identifying the current erosion risk. Land seaward of the green line is currently at risk of coastal erosion. At the green line, there is a 1% chance of a coastal erosion event per year. The closer to the ocean you go, the higher the risk. Small structures like garden sheds and garden amenities are still permitted, but landowners need to be aware of the risk level and plan accordingly. Buildings seaward of the green line are not permitted.

The Future Coastal Protection Line is a dotted brown line that defines the area potentially at risk from erosion following projected sea level rise. This is not linked to current risk but where erosion might be seen in the next 100 years if sea level rises as projected. To avoid more cost or risk for future generations, we want to avoid more intense residential use or key community assets in this area. Any resource consent also needs to show how it will deal with the future erosion risk.

The plan also includes rules around where you can build/undertake activities in relation to flooding risk, tsunamis and types of flood risk defences. This can include things like requiring a minimum floor level for buildings in a flood plain, and requiring specialist reports on identified hazards and how these can best be mitigated.

We have information and mapping available on our website and a duty planner available to discuss how these might relate to your particular property. This information is also available on our Land Information Memorandums (LIMS). Waikato Regional Council also provides a range of mapping tools and information portals on their website.

Our planning and consenting processes sit alongside the other work we do in the coastal environment. Things like dune management and maintenance, mangrove management, foreshore maintenance and provision of community, recreational and commercial infrastructure. We work collaboratively with Waikato Regional Council who monitor our coastal environment, work with community groups like Beachcare to restore and replant dunes, manage mangroves, and look after our natural resources. We engage with tangata whenua where subdivision, use or development is likely to impact on identified sites of significance or areas where there is a strong relationship in terms of culture and tradition.

1. Natural, Environmental and Amenity Values

Our coastal environment is a taonga which we need to look after. The coastal environment has interconnecting parts - with each part functioning interdependently with and of each other. These include linkages with rivers and streams, and fresh groundwater (aquifers).

Estuaries and rivers are detrimentally affected through increases in sediments, nutrients and pollutants caused by a range of land uses and developments including agricultural and horticultural practices, forestry, land clearance, coastal settlements, and infrastructure (sewage discharge, infilling/reclamation, road building). These sediments have a flow on effect; for example they create the perfect environment for mangroves to flourish in our harbours³. This requires us to appropriately review our catchment management planning in conjunction with WRC, Māori and our communities.

The health of our rivers and streams has an effect on the health of our coast line. Climate change will impact on existing fresh and salt water balances in coastal margins. This includes sea-level rise causing salt water encroachment further up rivers and creeks, longer dry or drought periods leading to reduced river flows; and higher sea water levels encroaching on estuaries and lower river areas resulting in saline water intrusion into unconfined aquifers⁴. We need to ensure that our streams and rivers are proactively monitored - and understand how historic and future development affects them. We need to look at how we can improve and protect their health through a range of mechanisms including encouraging riparian plantings and adapting to changes in the nature of our rivers.

Twenty one percent of water supply in the Thames-Coromandel District comes from groundwater and is used domestically, for irrigation and industry. Increases in salination to our aquifers would have real consequences for our coastal communities.

Parts of the Coromandel are experiencing deterioration of private wastewater disposal systems which pose a threat to contamination of aquifers, along with nearby rivers and streams. While Hahei has been identified as requiring investigation, we need to understand where this is likely to occur amongst other coastal settlements in future.

Mangroves

Mangrove management is a complex issue. Mangroves provide an ecological function along with a physical function to prevent erosion and minimise inundation; however they can create amenity concerns for some communities and inhibit recreational use of a harbour as well as block discharge points for infrastructure. The key is how to find the right balance and manage mangroves within legislative requirements. Flourishing mangroves are symptomatic of wider sedimentation problems. Council is committed to working with the regional council to identify and proactively addressing the cause of mangrove flourishing, rather than simply dealing with the effect.

³ <http://envirolink.govt.nz/assets/Envirolink-reports/420-NLRC50-Guidelines-for-the-monitoring-and-management-of-sea-water-intrusion-risks-on-groundwater.pdf>

⁴ <http://www.mfe.govt.nz/publications/climate-change/preparing-coastal-change-guide-local-government-new-zealand/part-two>

Goals and Objectives:

Goal 1.1: To ensure the good health of the water bodies⁵ that interact along our coastline

- *Council will work with Waikato Regional Council, Māori and the community to ensure improved water quality as necessary.*
- *Council will minimise discharge potential from wastewater systems into the coastal environment, including rivers and streams in coastal areas*
- *Council will undertake ecologically appropriate plantings along waterways within its reserves*

Goal 1.2: Enable communities to more effectively manage harbour and estuarine mangrove systems

- *Mangrove Management Bill is supported by Council through Parliament*
- *Council will develop area specific mangrove management plans in conjunction with communities, tangata whenua and stakeholders including Waikato Regional Council and the Department of Conservation*

Actions

Develop a mangrove management plan under provisions of local bill OR work with WRC under existing statement of intent and future regional coastal plan provisions to manage mangroves within district estuaries and harbours

Identify risks to healthy streams and coastal environments from council wastewater and stormwater systems and communicate with our ratepayers about this

Develop a plan in response to risks to council, community and private water supplies from coastal inundation

Engage in the Hauraki Gulf Forum

⁵ Water bodies are defined in line with the Resource Management Act 1991 as fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof that is not located within the coastal marine area.

2. Coastal Hazards, Physical Processes and Community Resilience

Our coast is a dynamic environment with processes from both the land and sea playing an important role in shaping it. Our coastline is subject to erosion, accretion, inundation and tsunami hazard. Added to this mix is a need to consider the effects of climate change and how to best manage its effects with a risk based approach.

We need to understand our natural coastal systems (these will vary along our coastline) and make informed choices around whether we allow these to occur unfettered or use alternative methods of adjustment before implementing engineering solutions.

A coastal hazard arises where people, buildings or other assets are vulnerable to harm or damage from the coastal processes.⁶ Communities within identified coastal hazard areas need to make decisions about how the hazard is to be managed. These are not easy decisions.

Both regional and local councils have roles and responsibilities for planning and natural hazard reduction in the coastal environment, guided by the NZCPS. Issues that should be considered include:

- More frequent coastal inundation and storm surges, with effects on coastal infrastructure, roads, rail and communications networks
- Effects on groundwater levels in coastal aquifers, including effects:
 - on three waters (potable, waste and stormwater) services and other buried infrastructure
 - on foundations to roads, levees and other infrastructure
 - increased liquefaction risk
 - potential shifts in the freshwater/saltwater interface
 - increased groundwater discharge to streams
- Effects on estuaries, harbours and intertidal zones on their habitats, fisheries and wildlife
- Effects on the structure and integrity of flood protection schemes for low lying coastal plains
- Natural hazard management and planning for residential developments and other community facilities on the coast or in low-lying areas.
- The relative effectiveness and affordability of "hard" engineered solutions (structure that provide a short term respite from coastal inundation and erosion) and "soft" solutions that work with the natural environment with minimal adverse effects but may offer limited protection; and
- The prerequisite conditions to trigger a retreat (a way to manage hazard situations by shifting assets and activities away from the coastal processes threatening them, thereby removing the hazard) and the manner in which a retreat would progress⁷

There are two ways that we could approach planning for coastal hazards and climate change:

- *Proactive planning* is putting policies and actions in place in advance, to avoid or reduce the potential risks from coastal hazards. It is about involving communities and making strategic decisions for the future. Examples include controlling the location and density of landward coastal subdivision so that natural beach processes (waves, sediment movement and resulting shoreline cut and fill) are not impeded or including design requirements for redevelopment such as location away from the coastal edge or increased minimum floor levels for buildings, or flexible types of building foundations, or more strategic location for infrastructure.

⁶ <https://www.waikatoregion.govt.nz/assets/PageFiles/5405/tr06-48.pdf> *Managed Retreat from Coastal Hazards: Options for Implementation*

⁷ SOLGM (2015) *Climate Change* http://www.solgm.org.nz/Category?Action=View&Category_id=1186

- *Reactive planning* looks at options that address the effects of a hazard event once it has occurred, and often requires a rapid response to the hazard event, as well as to public and political pressures. This generally results in the consideration of a narrower range of alternatives, with an emphasis on protecting property or infrastructure at immediate risk. Such responses restrict coastal processes by 'holding the (shore) line' with structures such as seawalls, rock protection or beach nourishment.⁸

As there is existing infrastructure, development and use around our coast, there will always be an element of reactive planning. Council also has a delicate role in ensuring equity - how the protection of private property is reconciled with changes (and potential loss) to the wider public amenity.

Council's Coastal Hazard Policy covers emergency coastal protection works (under section 330 of the RMA 1991) and the use of Council foreshore property for coastal protection. It provides guidance to Council, private landowners, and/or third parties, on the approach Council will take in managing coastal hazards.

It should be noted that Policy 27.4 of the NZCPS provides that hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so.

We need to develop and empower resilient communities with the ability and capacity to adapt. This will allow them to protect the things which they value, in the face of future change. This resilience relates not only to changes over a long length of time (e.g. sea level rise) but how we respond to emergency or natural weather events (e.g. increase in number and severity of storms and flooding).

Goals and Objectives

Goal 2.1: Coastal hazards on the District's coastal foreshore land are sustainably managed to ensure risk to life and property is maintained at an acceptable or tolerable level

- *Council will assess risk and make decisions in accordance with the District Plan and the Waikato Regional Policy Statement and implement the Thames-Coromandel District Council Coastal Hazards Policy.*
- *Council will undertake a work programme which categorises hazards and identifies and prioritises risk (including in relation to coastal inundation and sea level rise) according to location and based on best information available. We will consult with communities, tangata whenua and stakeholders on levels and management of these risks.*

Goal 2.2: Landowners and the community are prepared for natural hazards and are aware of appropriate risk reduction measures they can take

- *Council will ensure that information is available and accessible on our website; and will provide linkages to information provided on the WRC website.*
- *Communication Plans will be developed and implemented on key coastal management areas; and as a result of the investigations undertaken as part of the action plan*

⁸ NIWA (2011) *Coastal adaptation to Climate Change - Pathways to Change*

Goal 2.3: Emergency response procedures and infrastructure are well established to protect people

- *Council will support its communities in enabling them to be resilient and able to respond to, and recover from emergencies*
- *Council will collaborate with infrastructure and utility providers to ensure their assets are resilient, able to respond to and recover from emergencies*

Goal 2.4: Coastal defences are in keeping with the coast's natural character and continue to provide for recreational opportunities and public access where practical.

- *Council will follow the overall approach provided for in the Coastal Hazards Policy*

Actions

Investigate current and future coastal erosion status of the peninsula and identify appropriate prioritised erosion measures. This will inform the 20 year work programme below.

Council will develop a 20 year work programme for managing coastal hazards and risks which will include:

- **Identifying and prioritising areas at risk from coastal hazards, based on scientific information, and taking into account effects of climate change; including investigating the impact of coastal inundation on communities and assets**
- **A plan for consultation with tangata whenua, key stakeholders and community members to discuss areas at risk, potential management options and expectations around actions to be taken**
- **A prioritised service delivery plan including costs and allocation of charges**

Work with Civil Defence on emergency management planning

Council will work in conjunction with NZTA, Waikato Regional Council, Department of Conservation, Māori and other relevant parties to develop a consistent approach to coastal erosion and flooding in areas where there is a shared or alternating responsibility for land management and coastal protection

Work with WRC, NZTA and DOC to develop a new RMA s330 (emergency) protocol, which sets out joint operating responsibilities and procedures.

Develop community plans for areas where 'coastal retreat' is identified as a palatable option

Include Coastal Hazard information on LIMs

Dune management programmes are undertaken in areas where they are considered appropriate

3. Māori Values

We recognise the relationship of tangata whenua with the coastal environment and engage on coastal management issues as appropriate.

Goals and Objectives:

Goal 3.1: Tangata whenua role as kaitiaki is recognised along with their enduring relationship over their lands, rohe and resources

- *Council will seek to build and strengthen partnerships between Council and tangata whenua for the purposes of:*
 - *enhancing and protecting the coastal environment*
 - *protection of wāhi tapu and recognition of sites of significance to Māori.*
 - *honouring future Treaty settlement obligations*

Actions

Support the development of Iwi Management Plans⁹ as they relate to the coastal environment

⁹ An Iwi Management Plan is any planning document recognised by an Iwi Authority (the authority that represents an iwi and that is recognised by that iwi as having authority to do so). In relation to iwi management plans, regional councils and territorial authorities are required to "Take into account any relevant planning document recognised by an iwi authority and lodged with council" under sections 61(2A)(a), 66(2A)(a) and 74(2A) of the Resource Management Act (relevant to preparing or changing a Regional Policy Statement, Regional Plan or a District Plan).

4. Recreation, Open Space and Access

Our coastal environment provides the perfect place for the enjoyment of the great outdoors. Our residents enjoy the lifestyle and our visitors enjoy the opportunity to experience recreational activity within our natural environment. Fishing, boating, coastal walks, snorkelling, surfing just to name a few. The popularity of our coastal space can come at a cost. Council needs to be mindful of the need to balance recreational need with the protection of our environment. Equally there is a need to preserve wilderness and tranquil experiences which can be threatened by increased access and development. There can be conflict between high impact recreational activities (e.g. jet skis, mountain biking, horses) and more passive activities (walking, swimming, sunbathing). Unfettered development can detrimentally affect the natural landscape.

Many of our dunes have come under considerable pressure; with adhoc walkways to the beach destroying natural ecological habitats and increasing susceptibility to coastal erosion. The positioning of walkways, ramps and other access routes need to consider impacts on the environment; including the appropriateness of materials used. We also need to cater for differing levels of mobility - our district has an elderly population; and this trend is set to continue. Council has an opportunity to look at the connectivity of its esplanade reserves along its coastline; providing an enhanced and alternative travel (walking route) for our communities and visitors to enjoy.

Upgrading of recreational infrastructure has a consequential impact on the popularity of coastal destinations. This can lead to demand for higher standards of service, and over use of the area to the detriment of the natural environment. Providing recreational opportunities for our communities needs to be balanced with the retention and protection of sensitive coastal habitats.

Council currently holds a number of resource consents which allows the "pushing up" or dredging of sand to dunes to improve protection against coastal erosion and flooding, provide wider beaches for recreational purposes, and allow greater tidal access; for example to marinas. It is acknowledged that dredging and shaping on an ongoing basis is not ideal. Such developments require an ongoing cost and levels of service expectation.

Goals and Objectives:

Goal 4.1: Public access to and along our coastline and rivers will be maintained and enhanced (where appropriate) while balancing the impact on the natural character and habitat.

- *Council will provide clearly signposted and well-maintained access ways to our beaches; with the protection of our dunes a key priority*
- *Council will restrict access to parts of the coastal line to protect vulnerable habitat (e.g. nesting birds) and to restore/maintain landform (e.g. fencing off dune plantings while they establish)*
- *Council may undertake mobility audits to ensure wherever possible our coastline is accessible; and in particular to those who are disabled or elderly.*

Goal 4.2: Improve recreational experience at key destinations

- *Council will develop a Thames-Coromandel District Council Marine and Harbour Facilities Strategy to inform decision making on the prioritisation for development and/or enhancement of recreational assets around the peninsula*
- *Council will actively seek and advocate for central government funding to support infrastructure at key destinations*

Goal 4.3: Events and commercial activities in coastal open spaces will comply with the Events Policy and/or Commercial Trading in Public Places Policy¹⁰

- *Council will provide a licensing system for commercial activities in coastal open spaces which enhances the enjoyment of the community of those spaces in a way which is consistent with reserve management plans*

Actions

Undertake dune planting programmes and regular dune weed control programmes utilising community volunteers and partner (including regional council) resources

Council will assess pest and weed control on its reserves regularly, and following the review of its Reserve Management Plans

¹⁰ These policies align with the Activities in Public Places Bylaw 2017

5. Community assets and infrastructure

Increasing demand for recreational opportunity invariably leads to pressure on existing supporting infrastructure, including toilet facilities and car parks. This can significantly fluctuate between peak and off-peak seasons; providing significant challenge when planning infrastructure. Alongside this is the attraction for the utilisation of our coastal areas for events and trading. While Council can provide exclusive use of an area of our coast for a specific reason, this should never be to the detriment of the wider public enjoyment. Council owns a broad range of assets and infrastructure around our coast.

Essential services include local roads, car parking, wastewater, stormwater and water supply assets. Council also supplies and maintains a range of community assets like wharves, boat moorings and toilet facilities. The positioning, maintenance and renewals of these assets can have a significant role in the use and recreational amenity of our coastal environment.

Our planning and our infrastructure strategies need to take into account the dynamic nature of our coast, and seek to ensure they are of high quality, fit for purpose, and in keeping with the coastal environment. This includes taking into account climate change and coastal hazards. Council needs to proactively seek to undertake infrastructure and asset planning that includes:

- Future proofing existing infrastructure/assets at the time of maintenance or upgrades
- Location and relocation of infrastructure away from high risk areas
- Increase the resilience of infrastructure and services that need to remain within high risk areas
- Promotion of alternative designs or practical options to ensure minimal impacts on the coastal environment

Goals and Objectives:

Goal 5.1: Infrastructure design, development and services will be sympathetic to the natural character and resources of our coast

- *Infrastructure will be located away from the coastline wherever possible (climate change, natural character preservation)*
- *Where wastewater disposal is failing, Council will work with Waikato Regional Council to take action promptly; particularly where it impacts on water quality, natural character, Māori values, public health and safety or biodiversity.*
- *Appropriate wastewater disposal facilities for discharge of waste from boats, motorhomes and caravans may be provided at locations where these are needed.*

Goal 5.2: Council will have a sound understanding of its existing infrastructural asset around its coastline

- *Council will stocktake its current coastal infrastructure and undertake a risk assessment against coastal hazards in line with the District Plan and Coastal Hazards Policy. Asset Management Plans will be regularly updated.*

Actions

Identify appropriate placement of wastewater disposal facilities for boat, motorhome and caravan discharge where additional capacity is required