THAMES COROMANDEL DISTRICT COUNCIL

Thames Protection & Resilience

CLIMATE ADAPTATION ROLES AND RESPONSIBILITIES

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Contents

Executive Summary

Coastal settlements are facing increasing risks from climate change, requiring complex and challenging adaptation measures to be considered and adopted. There is currently ambiguity in terms of roles and responsibilities among local authorities – specifically when trying to understand which authority should lead and implement adaptation efforts. This is further complicated where different aspects of water services and hazard management overlap.

Thames is an important economic hub for the Waikato region, making effective adaptation measures critical. Different types of infrastructure in Thames and Tararū are currently managed by both councils under different statues. The Resource Management Act 1991 sets out that regional councils are responsible for developing policies to avoid or mitigate natural hazards, while district councils manage land to implement these policies. However, the Act does not clearly define who should lead when it comes to construction and management of the necessary infrastructure. The Soil Conservation and Rivers Control Act 1941 enables regional councils to implement fluvial flood protection measures if it so chooses. The Local Government Act 2002 requires district councils manage stormwater infrastructure; it also encourages collaboration between councils and allows for the transfer of responsibilities.

This report focuses on understanding the current state of flood and stormwater management in Thames and Tararū townships, exploring the historical context – including it being part of the Waihou Valley flood protection scheme – and examining how other local authorities in New Zealand have approached similar challenges. An example from the Hawke's Bay is explored whereby the regional council ultimately assumed responsibility for all existing and future coastal hazard protection measures.

Under the Waihou Valley Scheme, Waikato Regional Council has an existing level of service that it currently collects rates for. That level of service is protection against tidal inundation for a 100-year event. Any change in management responsibility or level of service requires changes to the Long-Term Plan following a special consultative process.

An integrated approach to managing natural hazards and climate change adaptation is required. Effective adaptation necessitates leadership, collaboration, clear understanding of who does what, whilst always keeping in mind what are the best outcomes for the community.

1 Introduction

Coastal settlements need to adapt to the ever-increasing impacts of climate change. This is particularly complex when it comes to managing natural hazards associated with climate change, where it can be unclear where roles and responsibilities sit for local authorities. For example, with respect to adaptation who should take the lead – the district council, regional council, or some combination of them both? This becomes especially difficult when one function overlaps with another, for example river flood protection in association with flooding in the river mouth by tides / increased sea levels, or increased surface ponding of groundwater as water levels increase and how this relates to stormwater management.

The purpose of this report is to understand the current state for flood and stormwater management in Thames and Tararū, how it came to be and what the relevant legislation requires. It also looks at how other local authorities in New Zealand have tackled this issue, and presents some matters to consider when coming to a decision on roles and responsibilities into the future.

2 Background

Thames township is very important to the Waikato region. It is the economic hub of the district and represents the gateway to the Coromandel peninsula. It houses important health, business and industry services for the district and is reported to have $1 billion worth of assets[1]. Risk management for existing and proposed assets, activities and processes in Thames and Tararū is complex. Climate adaptation roles and responsibilities relate to funding and managing both construction and ongoing maintenance of inundation protection assets. This report sets out the current state, which is important to understand when planning for the future.

2.1 Shoreline management pathways

In April 2019, Thames-Coromandel District Council (TCDC) embarked on a programme to develop a series of shoreline management plans (SMP) for the Coromandel's 400 km of coastline. The goal was to create a framework that would reduce risks to people, property, the environment and tāonga from coastal hazards[2]. This involved developing 'Coastal Adaptation Pathways' that addressed immediate and medium-term challenges while focusing on strengthening the resilience of local communities and hapū for long-term adaptation. Planning was undertaken in partnership with the community over the course of three years. The planning phase identified hazards, assessed vulnerabilities and risks, and explored adaptation options based on the unique tolerance levels of each community.

In September 2022, TCDC adopted 138 adaptation pathways, each tailored to reflect the aspirations and concerns of individual communities, as well as the principles of kaitiakitanga. These pathways offer customised, flexible solutions to ensure the long-term resilience of the Coromandel's coastal communities.

[1] https://www.tcdc.govt.nz/Our-Community/Council-Projects/Current-Projects/Coastal-Management/Shoreline-Management-Pathways-Project/Thames-protection-and-resilience-project

[2] https://thames-coromandelcaps.ireport.royalhaskoningdhv.com/

2.2 Thames protection and resilience project

Following completion of the SMP project, a prioritisation process was undertaken which identified Thames as an immediate high-risk location (figure 1), with over $1 billion in assets being at risk from the long-term effects of flooding and storm surge associated with sea level rise[3]. The prioritisation approach led to the Thames Protection and Resilience Project (TPRP) being launched, with governance provided collaboratively by TCDC, Waikato Regional Council (WRC) and Ngāti Maru.

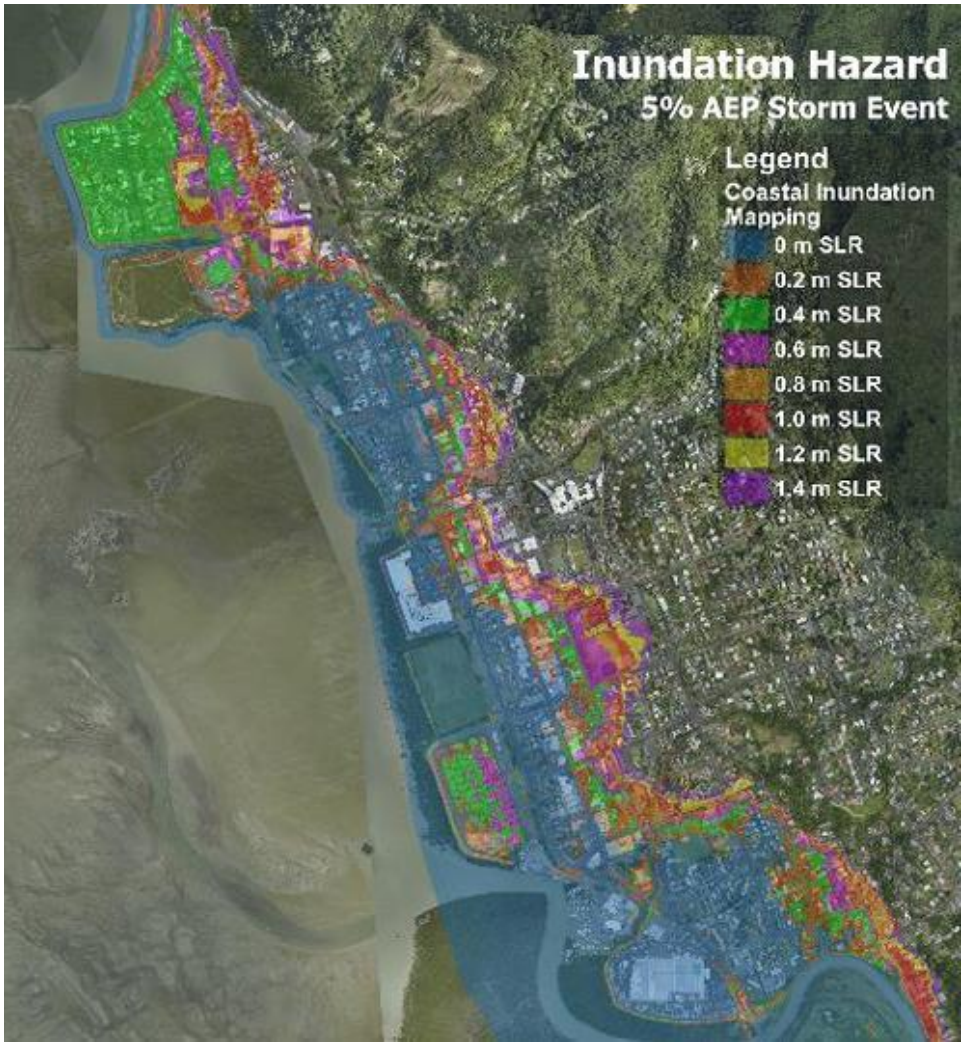

Figure 1 – Map of Thames showing the 1 in 20-year inundation hazard. SLR = sea level rise; AEP = annual exceedance probability[4]. (source: Thames Coastal Adaptation Pathway, TCDC website)

[3] https://www.tcdc.govt.nz/Our-Council/News-Media-and-Public-Notices/Latest-News/Thames-protection-solutions-identified

[4] Annual exceedance probability is the probability of an event occurring in any given year, i.e. A 1% AEP means there is a 1% chance in any given year of the event occurring. In other words, on average one event of this size will occur every 100 years.

Currently, the TPRP is in the scoping phase, determining what protection and resilience measures should be taken to mitigate coastal and river hazard risks within the project area. Concept design and community engagement has shown that stopbanks are the preferred option for protection from coastal inundation[1]. This concept would see approximately 2 km of stopbanks constructed on land from the Albert Street stopbank southward and linking into the WRC owned stopbanks at Hape Stream. A secondary project is being scoped to construct a chenier ridge in the coastal marine area (CMA) offshore of the site (figure 2) for the purpose of attenuating energy from storm surge and protecting the inland area from flooding and coastal erosion.

Figure 2: Approximate location of proposed chenier ridge, Thames

In addition to coastal inundation protection, stormwater management and high groundwater levels will also need to be addressed. Additionally, the TPRP will need to consider the most suitable planning tools to balance risk with economic and social outcomes. Significant capital and operational expenses will be necessary to carry out any proposed measures.

As the TPRP is still in the concept design and community engagement phase, TCDC is now turning its mind to what are the most optimal approaches that are viable in the long term and then how any recommended solutions will be implemented. A decision needs to be made regarding which council or councils will lead the subsequent phases, including detailed design, construction, ongoing maintenance, planning and potentially managed retreat (during development of the Coastal Adaptation Pathways, the relevant communities included retreat as an option for Tararū and Moanatairi, but not for Thames).

2.3 The focus of this report

When planning new coastal protection measures, it is important to carefully consider how they will integrate with existing fluvial protection assets. As the TPRP begins to identify the necessary assets to manage risk and enhance resilience in Thames, it is important to also understand roles and responsibilities in terms of which council should lead and fund the implementation and management of each of the in-scope activities to achieve the best outcomes for Thames and its surrounding communities, including the wider Waikato region.

The purpose of this report is to understand the current state and how it came to be, which will set the basis for how the future might look. The scope has been extended beyond the TPRP footprint to include the Tararū settlement (figure 3), and the geographic area sits within the Waihou flood protection rating scheme.

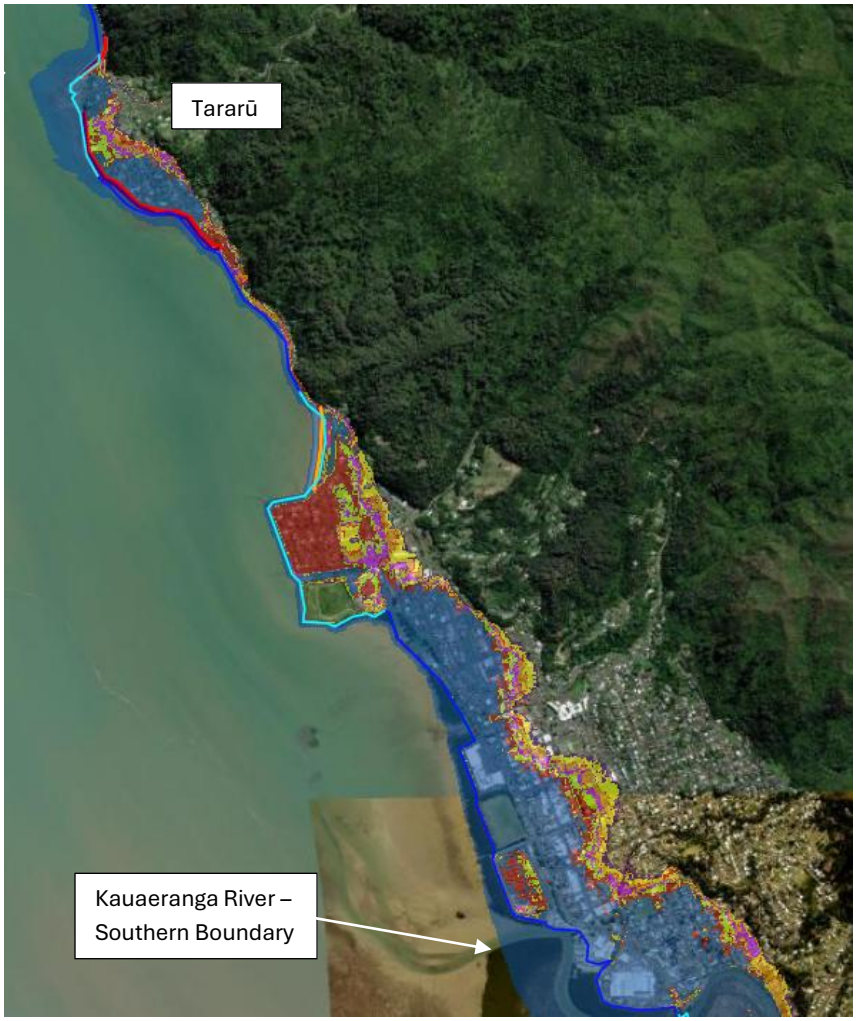

Figure 3 – Geographic area for consideration in terms of roles and responsibilities for leading adaptation.

The in-scope activities include fluvial protection, coastal protection, stormwater management and groundwater management. It is intended that this work will also inform future management of other low-lying coastal areas within the district.

3 Legal framework

3.1 Relevant legislation

This section highlights relevant sections of the law with respect to roles and responsibilities for the TPRP project. The two primary legislative frameworks relevant to climate change and flood risk management are the Resource Management Act 1991 (RMA) and Civil Defence Emergency Management Act 2002 (CDEM). Other relevant laws include Local Government Act 2002 (LGA), and Soil Conservation and Rivers Control Act 1941 (SCRCA).

Local Government Act 2002

Part 2 of the LGA sets out the purpose of local government, as well as its role and powers. Section 14 includes direction relevant to this project, including:

S14(1)(c) when making a decision, a local authority should take account of—

- *(i) the diversity of the community, and the community's interests, within its district or region; and*
- *(ii) the interests of future as well as current communities; and*
- *(iii) the likely impact of any decision on each aspect of well-being referred to in s 10.*

S14(1)(e) a local authority should actively seek to collaborate and co-operate with other local authorities and bodies to improve the effectiveness and efficiency with which it achieves its identified priorities and desired outcomes; and

S14(1)(g) a local authority should ensure prudent stewardship and the efficient and effective use of its resources in the interests of its district or region, including by planning effectively for the future management of its assets; and

S14(1)(h) in taking a sustainable development approach, a local authority should take into account—

- *(i) the social, economic, and cultural well-being of people and communities; and*
- *(ii) the need to maintain and enhance the quality of the environment; and*
- *(iii) the reasonably foreseeable needs of future generations.*

Section 97(1)(a) states that consultation is mandatory for any decisions to significantly alter the intended level of service for any significant activity undertaken by an authority, i.e. the Long-Term Plan (LTP) process.

Section 101A requires councils to prepare a financial strategy that includes (among other things) a statement of factors that relating to the expected capital expenditure on network infrastructure, flood protection and flood control works that are required to maintain existing levels of service.

Section 101B requires local authorities to prepare and adopt an infrastructure strategy for a period of at least 30 years. The purpose of an infrastructure strategy is to identify significant infrastructure issues for the council over that period and identify the principal options for managing those issues and the implications of those options. Importantly the council must take into account the need to provide for the resilience of infrastructure assets by identifying and managing risks relating to natural hazards and by making appropriate financial provision for those risks.

S130(2) outlines that a council must continue to provide water services and maintain its capacity to meet its obligations under this subpart, noting that there are limited certain circumstances where the agency may close down or transfer the water service to another entity.

The 1974 version of the LGA had a provision whereby local authorities had the ability (but not the express duty) to protect properties from encroachment from the sea. This provision was repealed when the 2002 LGA came into force but might explain why there is a feeling in some communities that councils should be protecting private property from coastal inundation.

Key points:

- Transfer of responsibilities between councils is enabled in the LGA.
- The LGA does not explicitly mention climate change, so offers no guidance in this regard.

Resource Management Act 1991

The RMA sets out the functions of local authorities as follows.

Section 30 of the RMA sets out the functions of regional councils and assigns them the responsibility for the integrated management of regional natural and physical resources, including air, water, land and the coastal marine area. In relation to natural hazards, the regional council has control over the use of land or the bed of a waterway for the purpose of avoidance or mitigation of natural hazards. In the CMA, it can control any actual or potential effects of the use, development or protection of land, including the avoidance or mitigation of natural hazards.

Section 31 of the RMA outlines the responsibilities of district councils as being responsible for developing policies and plans related to land use and subdivisions, among other matters. These functions form the foundation of the district plan and district rules. It also assigns to district councils the control of any actual or potential effects of the use, development or protection of land, including for the avoiding or mitigating of natural hazards.

The RMA does not directly address councils' powers to initiate or cease services, nor does not impose a legal obligation on councils to protect properties from natural hazards[5]. All local authorities are required to have particular regard to the effects of climate change when implementing the RMA.

[5] Simpson Grierson, 2022. *Ability to limit or stop the provision of services infrastructure and potential liability consequences*. Prepared for LGNZ.

The RMA also requires the Minister of Conservation to prepare a New Zealand Coastal Policy Statement (NZCPS). The NZCPS (2010)[6] outlines numerous objectives and policies dealing with resource management issues in the coastal environment. All coastal hazard policies flow from objective 5 and policies 24 – 27 outline a 100-year timeframe, risk-based approach to coastal hazard management. This approach is reinforced by policy 3 which sets out the requirement to apply a precautionary approach to address the effects climate change.

NZCPS Policy 3 – Precautionary approach

1. Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.
2. In particular, adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that:
   a. avoidable social and economic loss and harm to communities does not occur;
   b. natural adjustments for coastal processes, natural defences, ecosystems, habitat and species are allowed to occur; and
   c. the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations.

The RMA defines the CMA as including the foreshore and seabed, and the landward extent is defined by the line of mean high water springs (MHWS). Where the CMA boundary intersects with a river mouth, it is then defined as the lesser of either 1 km upstream from the mouth of the river, or the point upstream that is calculated by multiplying the width of the river mouth by five. In many instances in the Waikato region this has been interpreted as coinciding with a bridge for ease of reference. For example, in the Kauaeranga River the CMA boundary coincides with the Ngāti Maru Highway bridge. The reason that this is important is that it defines the boundary of where the Waikato Regional Coastal Plan and the Waikato Regional Plan intersect, therefore the different planning and consenting regimes required for fluvial and coastal protection works.

It is noteworthy that s33 of the RMA, allows for the planning function of one local authority to be transferred to another local authority on the grounds of community interest, efficiency, or technical or special capability. The intention of this to facilitate coordination of functions between regional and district councils, and to allow for combined, administrative arrangements, in turn enabling cooperation between councils as to which should exercise a common function.

Soil Conservation and Rivers Control Act 1941

One of the objectives of the SCRCA is to prevent damage by floods and to utilize the land in such a manner that will "*tend towards attainment*" of that objective.

Part 7 outlines the powers and duties of catchment and drainage boards, which have since been superseded by regional councils. The SCRCA gives regional council the power to undertake works in relation to the minimisation and prevention of damage by flooding and erosion of watercourses, including by maintaining waterways and defences against water.

[6] https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf

Interestingly, s133 states that in normal (non-emergency) circumstances the regional council 'may' repair and maintain defences against water, i.e. there is discretion as to whether or not regional councils do this work. However, s148(2) 'Liability for damages arising from neglect' provides a specific form of statutory liability, where statutory claims against a regional council may be made if it decides to limit or stop maintenance on a flood protection asset[7]. This means there may be liability implications if the council does not at least 'maintain' its existing level of service.

Key points:

- The SCRCA enables a regional council to put in place flood protection measures, but in doing so could be liable for any failure in certain circumstances.
- It then must continue to meet the agreed levels of protection unless the community agrees it can be decreased.

Civil Defence Emergency Management Act 2002

The CDEM Act is important in governing flood risk management. The purpose of the CDEM Act (s3) includes to:

> *(a) improve and promote the sustainable management of hazards[8] (as that term is defined in this Act) in a way that contributes to the social, economic, cultural, and environmental well-being and safety of the public and also to the protection of property; and*
>
> *(b) encourage and enable communities to achieve acceptable levels of risk (as that term is defined in this Act), including, without limitation,—*
>
> > *(i) identifying, assessing, and managing risks; and …*
>
> *(d) require local authorities to co-ordinate, through regional groups, planning, programmes, and activities related to civil defence emergency management across the areas of reduction, readiness, response, and recovery, and encourage co-operation and joint action within those regional groups…..*

The Act is primarily concerned with the sustainable management of hazards, resilience of communities, and the protection of people, property, and infrastructure during emergencies. It advocates for a comprehensive approach centred on risk reduction, preparedness, response, and recovery.

[7] Simpson Grierson, 2022. *Ability to limit or stop the provision of services infrastructure and potential liability consequences*. Prepared for LGNZ.

[8] 'Hazard' is defined in the CDEM Act as '*something that may cause, or contribute substantially to the cause of, an emergency*'.

3.2 Relevant legal opinions

Two recent legal opinions relevant to the question of roles and responsibilities are summarised below.

Asher KC advice for Hawke's Bay Regional Council[9]

Raynor Asher KC (King's Counsel) was engaged to review and make a recommendation on which local authority should lead and fund the implementation of coastal hazard mitigation projects for the Hawke's Bay coastline extending from Clifton to Tangoio. The relevant agencies for the area were Hawke's Bay Regional Council (HBRC), Napier City Council (NCC) and Hasting District Council. Two key differences between the Hawke's Bay project and the TPRP are that there were three councils in Hawke's Bay that the site pertained to (it extended across two district boundaries), and it was addressing coastal hazards only, not fluvial.

Questions he considered in preparing this advice were:

- Who should collect the rates to fund the projects?
- Who should decide which rate payers should pay and in what proportions?
- Who should decide and control the projects to which the funds are applied?
- Who should be in charge of the implementation of the projects?

Asher explored six separate models being that one agency took the lead plus a range of different hybrid models where the three authorities shared different tasks between them.

Asher's research of case law revealed two interesting cases that may have relevance for the TPRP, the first being the Court of Appeal in *Canterbury Regional Council v Banks Peninsula District Council*[10], where the judge stated:

> *"It follows that the use of the land for the avoidance of mitigation of natural hazards is within the powers of both regional councils and territorial authorities. There will no doubt be occasions where such matters need to be dealt with on a regional basis, and occasions where this is not necessary, or where interim or additional steps need to be taken by the territorial authority".*

Further, in *Awatarariki Residents Incorporated v Bay of Plenty Regional Council*[11], the Environment Court ruled:

> *"The District Council requested this change to the Regional Plan because it does not have any power to alter existing use rights arising under s 10 of the RMA. The Regional Council, under s 30(1)(c)(iv) of the RMA, has the function of controlling the use of land for the purpose of avoiding or mitigating natural hazards… It is by that combination of functions and powers that the Regional Council may terminate existing use rights".*

In other words, it is only the regional council that has the power to direct property owners to engage in managed retreat, through the removal of existing use rights. This cannot be done by district councils.

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[9] Asher, R., 2021. *Review and recommendations for the Clifton to Tangoio coastal hazards strategy joint committee*. Hawkes Bay Regional Council.
[10] [1995] 3 NZLR 189 (CA)
[11] [2020] NZEnvC 215 at [10] and [11]

Asher's final recommendation was that HBRC take charge of all aspects of coastal hazard mitigation and protection along the Clifton to Tangoio coast, including:

- Decisions on which mitigation and protection solutions are appropriate.
- Decisions on the best rating model to pay for the works, including rate collection.
- Implementation and maintenance of all works.

He further recommended the three councils set up an advisory committee to provide input into any significant proposals bought forward by HBRC. The advisory committee would include an equal number of Councillors from each council, alongside iwi representation. It would have the ability to comment on proposals but would have no decision-making powers and no ability to delay process or implementation. He further recommended that the committee should be supported by an expert technical advisory group.

The primary reasons for his recommendation were:

- HBRC was the only agency of the three that has jurisdiction over the entire area.
- His interpretation of s30 and 31 RMA is that it is the regional council's role to develop policies to avoid or mitigate natural hazards, and that district councils have a role (alongside the region) in implementing the policy. (He did stress however that "*the legislation provides no clarification on who should implement such policies, including the construction of new infrastructure to reduce hazard risks"*).
- The district council owns assets such as reserves and pipes that could be threatened by coastal erosion, and the body making decisions on protection should be independent.
- Regional councils have expertise in identifying and managing water hazards.
- An integrated approach is required.

An alternate view in relation to the third bullet is that if WRC were to take the lead, it would be its own regulatory body (e.g. would need to obtain consents for protection works under s12 and 13 RMA). This should not be a barrier however as the Regional Consents section already processes consent applications from the Integrated Catchment Management team. It may be that the use of an independent decision maker is appropriate to avoid any perception of conflict of interest.

Asher's recommendations have subsequently been adopted by the three councils, and the Clifton to Tangoio coastal hazard strategy is now moving to the implementation phase.

Key points:

- An integrated approach is required.
- s30 and 31 RMA state it is the regional council's role to develop policies to avoid or mitigate natural hazards, and that district councils have a role in implementing the policy.
- The legislation does not clarify which authority should implement the policies, specifically who should construct infrastructure to reduce hazard risk.
- If the regional council were to take the lead it would be its own regulatory body.
- Asher's recommendations were adopted by the councils

Simpson Grierson advice for LGNZ[12]

Simpson Grierson was engaged by Local Government New Zealand (LGNZ) to provide a legal opinion on the ability of local authorities to limit or cease providing infrastructure services as well as any potential liability consequences that could arise. Simpson Grierson notes that while the focus of its legal opinion is on hazards and risks relating to climate change, it is also relevant to community assets vulnerable to natural hazards in general.

The document canvasses funding and constructing new infrastructure, purchase of land or assets, improving existing protection infrastructure, as well as potential liability if an agency chooses to cease or reduce its level of service. Relevant to the TPRP are the parts of the opinion specific to the provision of flood and erosion protection works, which the document defines as including "*stop banks, groynes, coastal revetments or seawalls, and other flood protection works such as detention dams, swales and ponds*", and where it relates to the provision of three waters services[13].

In terms of flood and erosion protection, the legal opinion traverses whether these works are mandatory versus discretionary and concludes that in fact both coastal and fluvial flood protection works are discretionary – there is no mandate for either regional or district council to construct or maintain such assets. For fluvial resources, this is because the provisions in the SCRCA being empowering rather than directive. For coastal resources, there is no express duty delineated in either the LGA or the RMA to actively protect properties from coastal inundation.

Key point:

The provision of fluvial and coastal protection works is discretionary for both councils.

When it comes to decreasing or ceasing a level of service, Simpson Grierson states that there 'may' be a duty on a council to properly consider whether the powers should be exercised or cease to be exercised. This would need to follow a robust decision-making process and likely require consultation with the community through the LTP development process.

As previously noted in relation to fluvial protection works, s148 of the SCRCA "*could provide for statutory claims against a regional council if it were to decide to stop or limit maintenance of a flood or erosion protection, work such as a stop bank.*" Simpson Grierson conclude that;

> "*It is not entirely clear whether a decision to cease maintenance of existing works in response to climate change (risk or impact) would protect a local authority from a negligence claim for failing to maintain an existing asset. This position is likely similar in relation to coastal protection works*".

They outline there are a number of considerations to consider with respect to duty of care:

- *"The factual context and the proximity between the parties*
- *the consistency of a duty of care with the statute; and*
- *whether, as a matter of policy, a finding of a duty of care is in the public interest*."

[12] Simpson Grierson, 2022. *Ability to limit or stop the provision of services infrastructure and potential liability consequences*. Prepared for LGNZ.
[13] The third factor – roading – is outside the scope of this review.

For delivery of three waters services (in this case stormwater management) the LGA requires that local authorities "*must continue to provide water services and maintain its capacity to meet its obligations*" (LGA s 130(2)). Simpson Grierson's interpretation of this is:

> *"…local government organisations must provide (and continue to provide) adequate (in terms of safe and sufficient) water services for their district. In our view, this extends to making any relevant upgrades to this infrastructure to deal with natural hazard risks".*

In very limited circumstances, closure or transfer of a water service can be undertaken, one of the key thresholds being that there must be 200 or fewer people "*who are ordinarily resident in the district, region, or other subdivision"* (LGA s131) that receive the service. Any cessation outside of the requisite statutory provisions would leave council open to judicial review for breaching its statutory duties, and potentially a private claim for damages.

Key point:

The provision of stormwater management services is mandatory for district councils.

4 Current state – Flood management

More frequent storms, higher intensity rainfall events and higher sea levels are all anticipated outcomes of climate change[14]. This in turn will lead to higher water levels and more frequent flooding events. When high river levels combine with high tides or storm surge, the level of risk increases yet again. Future flood protection management will need to address these matters to ensure the Thames community is protected.

4.1 TCDC assets

Existing infrastructure owned and managed by TCDC for the purpose of inundation protection include the Moanataiari seawall and Albert Street stopbank in Thames and a gabion basket wall, Robert Street, Tararū. TCDC also undertook beach construction and reclamation on the western edges of the Thames landfill site as part of landfill rehabilitation and closure in late 2013, however this is not considered an asset that requires ongoing management or maintenance.

The TCDC 2024 – 2034 LTP[15], outlines Council's plan to increase the height of seawalls in Tararū (in the 2027/28 – 2028/29 financial years) and Moanatairi (in the 2030/31 – 2031/32). For new Thames township protection works, $78.2 million has been set aside for the period 2027/28 to 2030/31.

[14] https://environment.govt.nz/publications/preparing-for-future-flooding-a-guide-for-local-government-in-new-zealand/part-one-climate-change-impacts-on-flooding/

[15] https://www.tcdc.govt.nz/files/assets/public/v/1/our-council/long-term-plan/ltp24-document-final-july-1.pdf

4.2 Waihou Valley Scheme

Scheme overview

Thames and Tararū are located in the Waihou River catchment and as such are within the WRC Waihou-Piako catchment management zone. A major component of the zone is the Waihou Valley flood control scheme (figure 4), which was conceived in1965 by the Hauraki Catchment Board, and constructed between 1972 and 1997. Scheme development cost the 1997 equivalent of $175M and was funded through a combination of local rate and central government contributions at a ratio of 1:3[16]. The scheme incorporates 177 km of stop banks, 729 km of rivers, natural streams and artificial channels, 75 floodgates and 20 pump stations[17], all infrastructure owned and managed by WRC.

Purpose of the Waihou Valley Scheme

The Hauraki Catchment Board (HCB) published a booklet in 1967 titled 'The Waihou Valley Scheme' stated a purpose of the scheme as 'doubling of the flood protection in the Plains Zone', and listed the overall aims of the scheme[18]:

1. *To provide an effective basis for the development and maintenance of the principal waterways of the Waihou Catchment, i.e. the main river channels and the main stem channels of the tributaries.*
2. *To provide a sustained programme for the control of the spreading pattern of channel erosion in any waterway or watercourse in the Waihou River Catchment, this programme to include full consideration of present and future conditions in the Mountain range and plateau.*
3. *The aims of the Plain Zone in the lower reaches, i.e. Thames to Te Aroha - include:*
    a. *To provide safe capacity against major floods in the stop banked channels of the. Waihou and Ohinemuri Rivers which is to be approximately doubled, as is the margin against overflow into Awaiti or lower Piako Basin with its attendant danger of flooding large portions of the Hauraki Plains, and the risk of tidal flooding.*
    b. *To provide reliable drainage outlet conditions through lower mean river levels, more sustained tidal action, adequate floodgates, flood pumps etc.*
    c. *To reduce or eliminate flooding in eastern areas, near the Waihou River, due to poor or non-existent tributary stop banks to be reduced or eliminated.*
    d. *To provide improvements on the Waihi Plains.*
4. *The aims of the scheme in the Middle Zone, i.e. Te Aroha to Okoroire Springs - were: To reverse the present trend towards high mean winter levels and excessive flooding of the river flats from minor floods. Advantages are - retention of river flats in production (4,000 acres); maintenance or improvement of outlet conditions for the eastern canalised streams and the eastern tributaries; elimination of the existing trend towards*

[16] Royds Consulting, 1995. *Waihou Valley Scheme end of scheme review: Independent review.* Prepared for Waikato Regional Council

[17] https://www.waikatoregion.govt.nz/assets/WRC/Council/Policy-and-Plans/hazard-catchment-management/zone-management-plans/Waihou-Piako-ZMP.pdf

[18] Royds Consulting, 1995. *Waihou Valley Scheme end of scheme review: Independent review.* Prepared for Waikato Regional Council

higher flood levels in the Waihou Valley and the likely long-term effects on adjoining lands, roads and the river system.

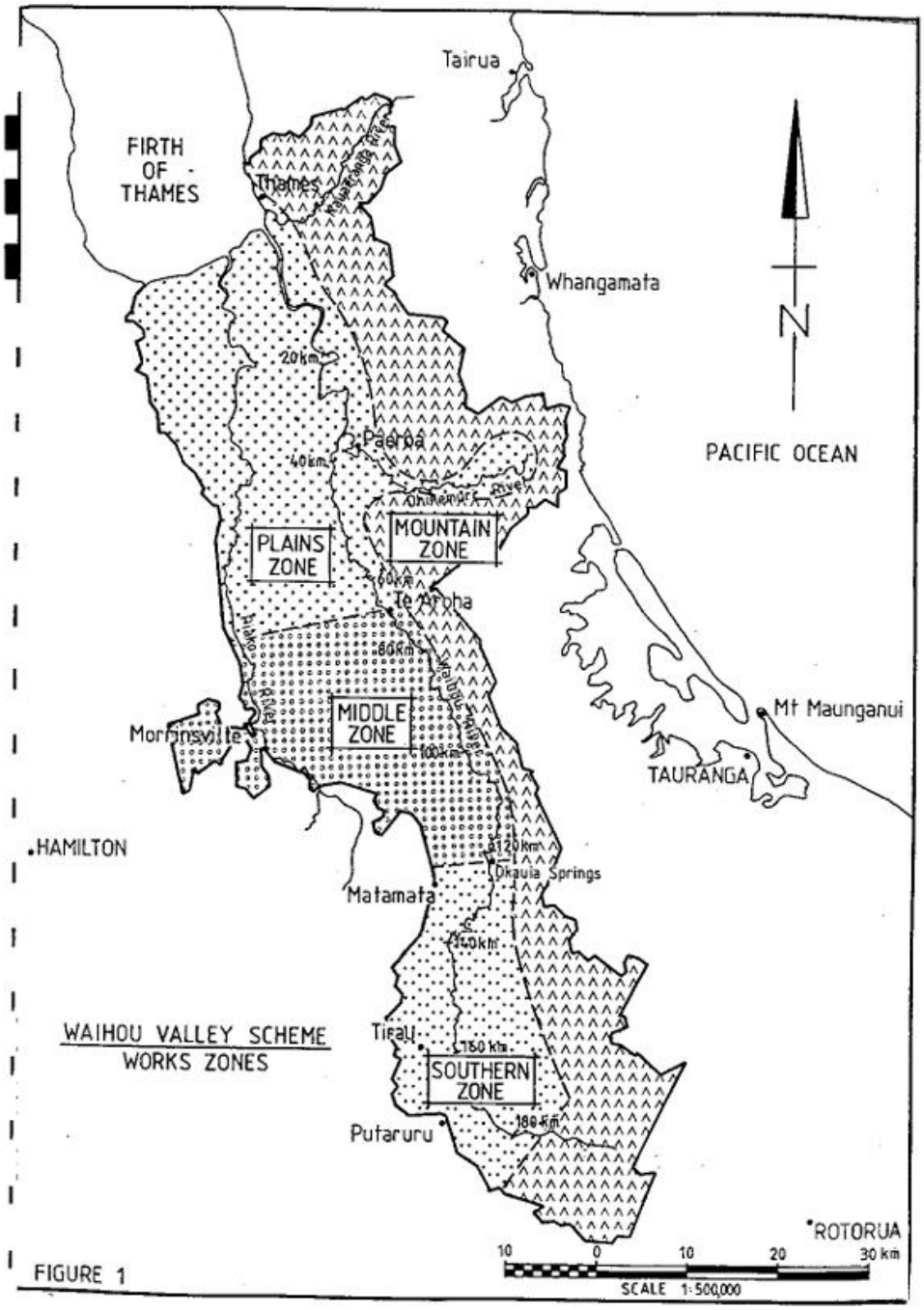

Figure 4 – Early map of the Waihou Valley Scheme. Thames and Tararū are located in the Mountain Zone (sourced from Royds Consulting, 1995)

5. *In the Southern Zone, i.e. Okauia Springs to Putaruru*
    a. *To provide a programme of channel improvement and maintenance which will give particular attention to the mitigation of stop bank*
    b. *erosion on the main river channels.*
    c. *To provide drainage and stream outlets which are both efficient outlets and are also safe against headward erosion.*
6. *In the mountain range and plateau (which we refer to here as "the mountain zone") the eventual plan will be to divide this zone into a recommended pattern of land use, which will represent a compromise between the various (and at times conflicting) forms of land use possible in the zone.*

In the early days of scheme development, the protection to be provided to Thames from urban stream floods was for two- and five-year events, and a 50-year event for the Kauaeranga River. Benefits were considered in terms of avoiding the costs associated with flood damage[12].

These objectives were subsequently reviewed and in 1984 in its 'Five Yearly Review' of the scheme, HCB released updated objectives this time with protection levels specified:

1. *An effective minimum 100-year level protection to rural and urban areas from flood flows in main rivers.*
2. *Gravity and/or pump assisted outlets to the major rivers and tributaries capable of handling runoff from a 10-year return period storm for rural sub-catchments and a 50-year return period storm for significant urban areas.*
3. *An effective 100-year level of protection from high tides to all areas adjacent to the estuarine/tidal portion of the river system.*

The Waihou Valley Scheme connects in with the Piako River Protection Scheme, and these are managed together by WRC as a comprehensive 'zone' that protects the Hauraki Plains and surrounding areas and includes approximately 343 km of stopbanks. If the proposed Thames stopbank were to be added to the scheme, it would make up 1% of the total length (figure 5).

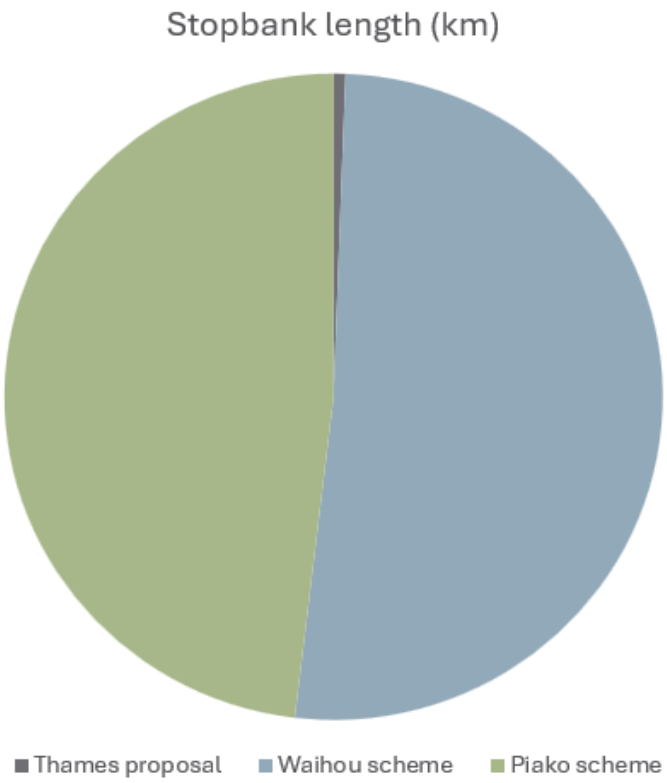

Figure 5 – Proportion of the proposed Thames stopbank length in comparison to the extent of the existing Waihou-Piako flood protection scheme[19].

WRC flood protection assets in Thames

WRC owns and operates existing flood protection assets at Tararū and in Thames, including the Kauaeranga River mouth (figure 6), which are all part of the Waihou Valley Scheme. Protection assets at Tararū include flood walls and stopbanks adjacent to the Tararū Stream, the walls being located both upstream and downstream of the NZTA SH25 bridge. The Kauaeranga River assets are on the true right side of the river and consist of a series of stopbanks, floodwalls, floodgates and pump stations. At the northern extent the protection starts just south of the Grey Street / Mackay Street intersection, sweeping around the perimeter of the Toyota factory, ending at the Parawai Reserve. Other assets in Thames include an overflow piped channel in the Moanatairi Stream and a timber lined channel in the Hape Stream. These assets have been designed to provide a 100-year level of protection in the lower tidal reaches and that is the level used to set the design levels within the scheme.

The assets in the Karaka Stream have a different design standard[20]. In the early 1980s, the Karaka Stream was hit by several major flood events, which caused extensive flooding and damage to the Thames township and hospital. Following these floods, an upgraded flood

[19] Waikato Regional Council, 2017. *Waihou Piako Zone Plan*. https://waikatoregion.govt.nz/assets/WRC/Council/Policy-and-Plans/hazard-catchment-management/zone-management-plans/Waihou-Piako-ZMP.pdf

[20] Waikato Regional Council. Memo from Scott Fowlds to Peter Roberts dated 20 October 2005. WRC document # 1033267

protection with a new enlarged channel was constructed under the Waihou Valley Scheme. The new flood protection system included the following, all designed to a 1 in 50-year standard:

- A new, larger concrete channel, and extending further upstream.
- Replacement of all road bridges, in conjunction with the channel.
- Installation of two debris traps upstream of the concrete channel.

WRC owns two flood pump stations at Rolleston Street and Heale Street, on the northern banks of the Kauaeranga River. These pump stations convey stormwater into the river and are part the flood protection scheme (designed to a 1 in 50-year standard) which includes management of overflow from Hape Stream.

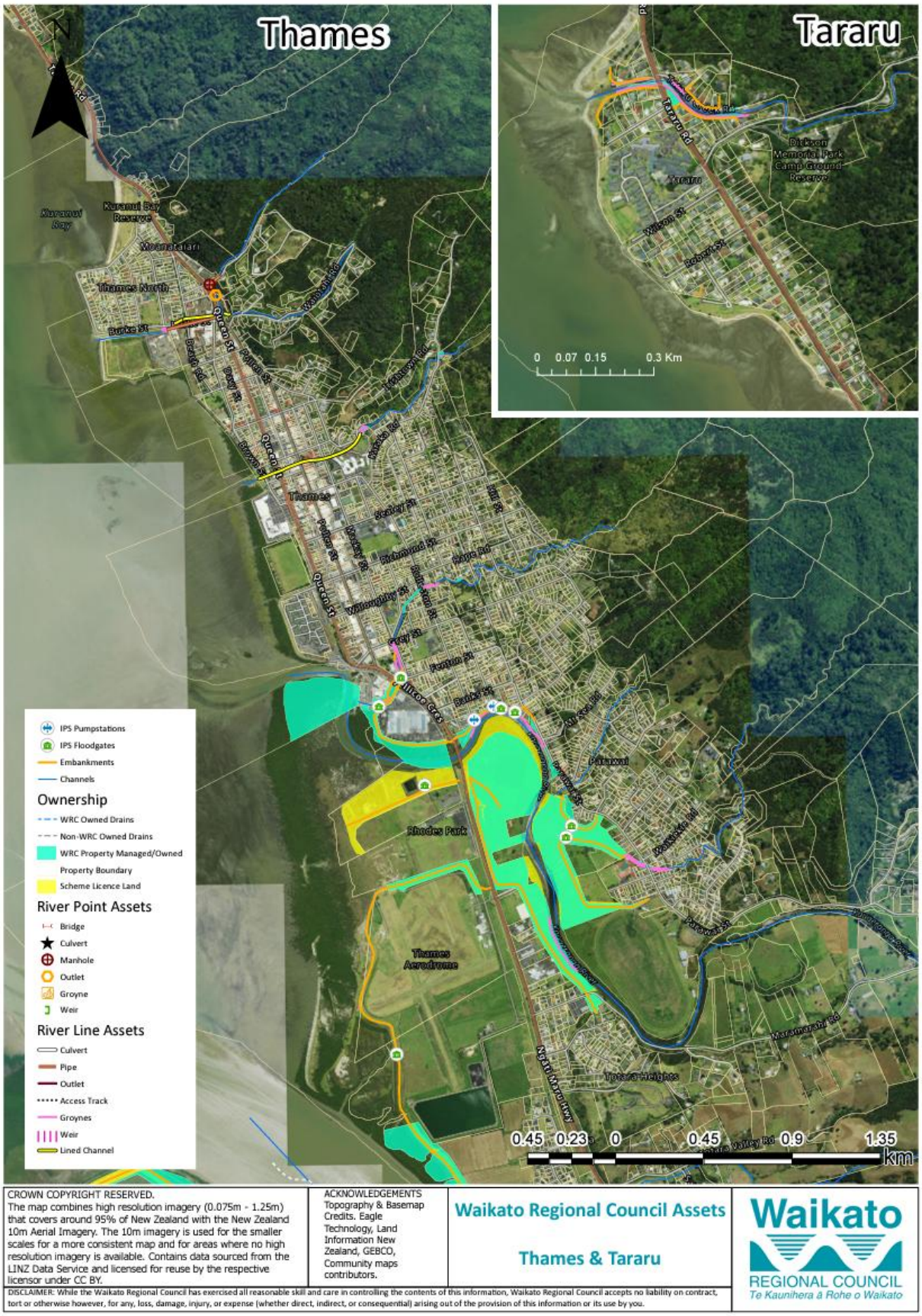

Figure 6 – WRC flood protection assets in Thames and Tararū

Key point:

Protection from tidal inundation is a key aspect of the Waihou Valley Scheme as stated by the third objective of the scheme: "*An effective 100-year level of protection from high tides to all areas adjacent to the estuarine/tidal portion of the river system"*.

5 Current state – Stormwater management

Coastal flooding associated with climate change, combined with increasing groundwater levels, rainfall and rising high tides in estuaries, inlets and lowland rivers, will result in more frequent flooding in urban areas and coastal lowlands. This will create additional challenges for managing stormwater networks and drainage systems[21], and in turn will likely lead to the need for stormwater pumping to maintain levels of service.

With regard to urban stormwater management, the latest iteration of three-waters management 'Local water done well' outlines that councils will retain legal responsibility and control of stormwater services, but will have flexibility to choose the arrangements that best suit their circumstances. The Bill intends to improve management of urban overland flow pathways and will enable service agreements to support integrated management of stormwater networks. The detail of how this will happen is expected to be revealed in the proposed Local Government Water Services Bill, which is currently planned to be introduced to Parliament in December 2024.

5.1 Existing assets

TCDC is required to deliver water services, including stormwater management. It presently manages a comprehensive stormwater network in Thames and Tararū (figure 7). There are two stormwater pump stations in Thames being the Richmond Street pump station near Danby Field and the Fergusson Street pump station in Moanatairi.

[21] Ministry for the Environment, 2024. *Coastal hazards and climate change guidance*. https://environment.govt.nz/assets/publications/Coastal-hazards-and-climate-change-guidance-2024-ME-1805.pdf

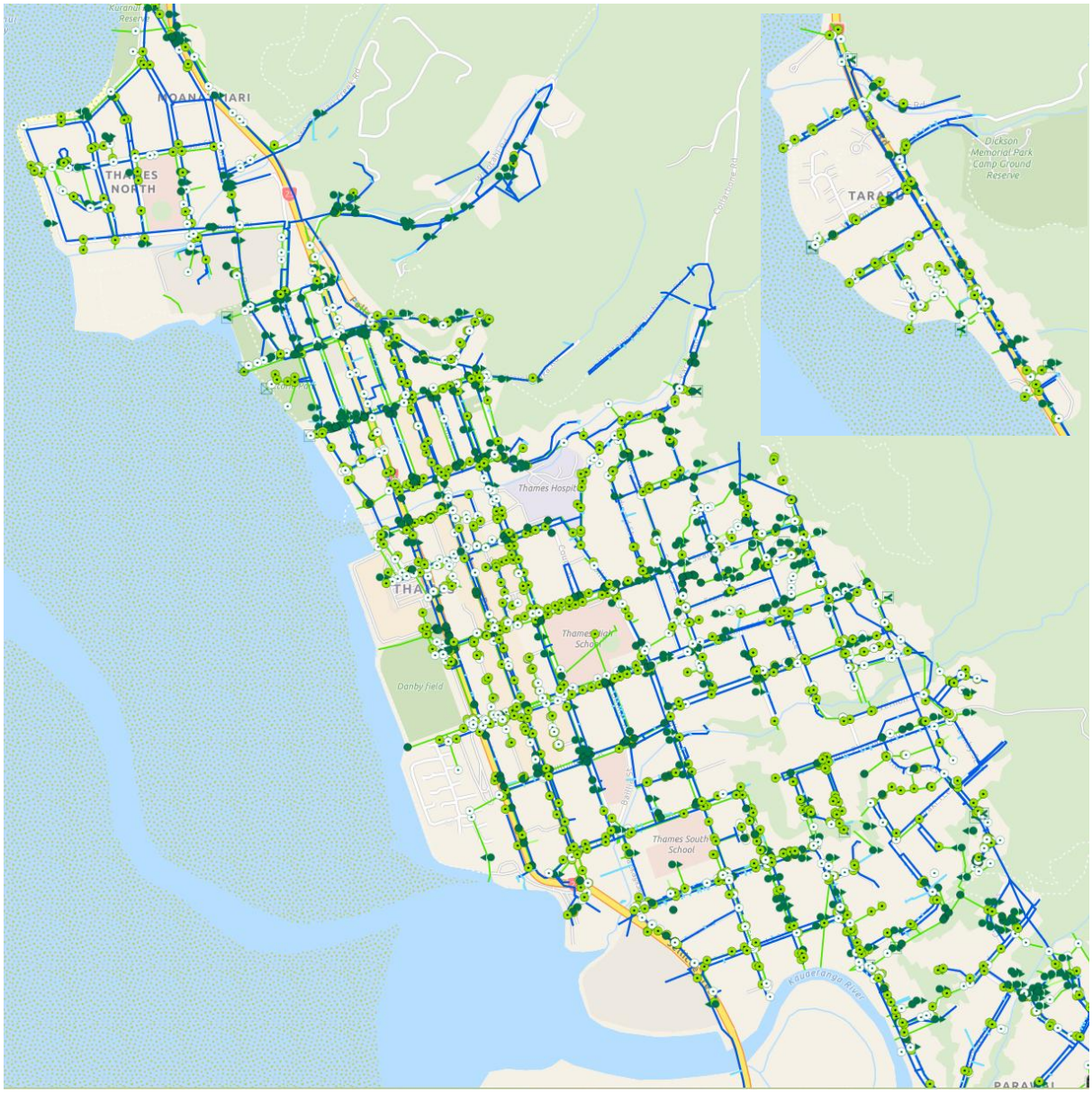

Figure 7 – Complexity of the stormwater infrastructure within Thames township (Tararū in the inset).

The TCDC 2024 – 2034 LTP[22], which includes land drainage in the stormwater activity group, recognises that additional investment may be required to mitigate the stormwater infrastructure against the effects of climate change. The LTP notes however, that any consideration of future investment and levels of service will occur through the SMP project, and that project has not progressed to a stage where a decision on future management can be made.

The second objective of the Waihou River Scheme is to provide "*gravity and/or pump assisted outlets to the major rivers and tributaries capable of handling runoff from … a 50-year return period storm for significant urban areas.*" Operational and capital expenditure funding has

[22] https://www.tcdc.govt.nz/files/assets/public/v/1/our-council/long-term-plan/ltp24-document-final-july-1.pdf

been provided for in the Waihou Valley Scheme in the WRC LTP[23], however that document does not go to the level of detail of which assets those funds have been attributed to.

5.2 A perspective on stormwater pumping verses flood pumping

Urban catchments typically have stormwater networks that manage 'normal' intensity frequent rainfall events. The need for stormwater management arises from increased impervious surfaces in urban development and growing community expectations. Developers install stormwater assets that meet community expectations and adhere to development standards (typically a 10-year return period) as part of the development process. These assets are then transferred to councils, who become responsible for their maintenance and operation.

Floodwater is water that inundates land that is normally dry. This can occur due to rainfall exceeding 'normal' levels, or from the breaching of natural channels and overland flow.

The capacity or scale of the event is a significant factor in determining whether water is classified as stormwater or floodwater, which in turn influences the asset's function (figure 8). For example, an urban area with a stormwater network may have stormwater pumps to manage 'normal' rainfall. During an extreme event, flows could exceed the stormwater network and flow overland. If an asset is designed to provide relief during extreme events rather than just 'normal' flows, it could be considered a flood protection asset.

Comprehensive flood protection schemes may include stopbanks that disrupt or block natural flows. Floodgates can be used to allow water to exit from the internal catchment through the stopbank. During a flood, gravity flow might not be possible due to elevated levels in the main channel or coastal environment. In such cases, a pump can be used to discharge water from the internal catchment. A comprehensive scheme may include both floodgates and pumps to mitigate flooding, thus qualifying as flood protection assets. However, stormwater pumps can also exist alongside stopbanks or flood protection schemes.

The key consideration should be the design: is the pump intended for normal flows or extreme flows? The answer to that question reveals which agency is better placed to own and operate the pump.

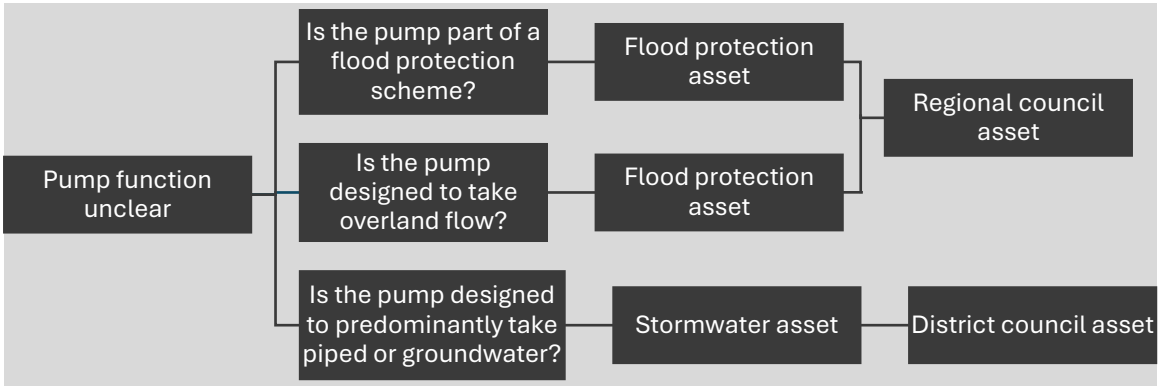

Figure 8 – Decision tree to help determine which council should own which pump

[23] https://www.waikatoregion.govt.nz/assets/WRC/MahereWhanui20242034LTP.pdf

5.3 Relevant examples from other districts

South Dunedin

South Dunedin is built on reclaimed tidal wetland, is very low-lying and in places the water table sits just below the ground surface. The water table fluctuates with tides and seasons, and South Dunedin is experiencing increasing instances of surface ponding, which is predicted to become more frequent as sea level rises and heavier rainfall occurs. Otago Regional Council (ORC) and Dunedin City Council (DCC) are working together to understand the extent of the issue and plan for future adaptation with the 'South Dunedin Future' programme of work[24]. DCC is currently in the process of upgrading the stormwater infrastructure, while ORC supports the programme by providing technical expertise, environmental research and monitoring data. Both parties are funding investigative work into adaptation options.

Napier

Much of Napier is situated on land that either rose from the sea during the 1931 earthquake or has been reclaimed since then[25]. Nearly 8,000 homes are located less than 150 cm above mean high water springs, and a significant portion of the city, including the airport, lies less than 50 cm above this mark. The city's low-lying areas are primarily protected by gravel banks along the beach on Marine Parade which are replenished by sediment carried northward from the Tukituki River mouth.

The Napier stormwater and drainage system is jointly managed by both HBRC and NCC[26]. The system relies almost entirely on pumping. HBRC owns seven pump stations within the system (four of which are operated by NCC) and NCC owns eight. The dual management of the assets is historical and currently being reviewed by the councils with a view to passing full management to NCC[27].

Key points:

Risk and frequency of groundwater flooding in low lying coastal areas will increase as sea levels rise. Across the country stormwater has differing management regimes which may include input from the regional council, however primary management of these assets sits with the district council in statute.

[24] https://www.dunedin.govt.nz/council/council-projects/south-dunedin-future
[25] Parliamentary Commissioner for the Environment, 2015. *Preparing New Zealand for rising seas: Certainty and uncertainty*. https://pce.parliament.nz/media/fgwje5fb/preparing-nz-for-rising-seas-web-small.pdf
[26] Hawke's Bay Regional Council, 2021. *Napier rainfall event November 2020: Hazard report*. HBRC publication No. 5551
[27] Pers. comm., Gavin Ide, HBRC, 15 August 2024

6 Funding

6.1 Current TCDC funding framework

Stormwater services and upgrades of existing TCDC assets are funded by the district rate, being a combination of a flat rate and one relative to the value of improvements on the property. The exception is the Moanatairi flood protection programme where funding is more complex. At Moanatairi the benefiting properties pay a targeted rate which repays the loan TCDC took out to fund the capital works (table 1).

Table 1 – Moanatairi flood protection rating scheme proportions

Rate	22/23 ppn	Rating method
Moanataiari Flood Protection	6.1%	Targeted
Urban Stormwater Charge	34.7%	District
General Rate	14.4%	District
Thames Works and Services Rate	44.8%	
Total	*100%*	

6.2 Current Waihou Valley Scheme funding framework

Operation and maintenance of the Waihou Valley Scheme flood protection assets is funded by both a regional rate and a targeted rate. The regional rate makes up 15% of the funding proportion. The regional rate is made up as per table 2 below:

Table 2 – Funding proportions for the Waihou Valley Scheme regional rating component

Beneficiary	Benefit	Proportion
State highway, roading and networks	Protection to highways, roads, bridges, railways, utilities. Saved costs of diverted or delayed road and railway traffic. Saved costs of emergency services.	3.5%
Recreational users	Improved boating conditions and facilities, improved recreational tourism, environment, improved water quality, improved ecosystems.	3.5%
Fishermen	Improved commercial and recreational fisheries.	
General security	Security of transport, communication, energy	
Resource management	Active surveillance of rivers and catchments. Active surveillance of adjacent land use activities. Availability of system information and models used for other activities.	8%
Economic benefit	All of the above	
Total		*15%*

The targeted rate is made up of a catchment rate and a direct benefit rate. Thames and Tararū are classified as 'Catchment 1' being "*land that receives a high degree of catchment benefit provided through flood protection works*"[28]. Direct benefit rates are further differentiated by the degree of direct benefits received (figure 9) and are explained below.

Tararū – Class A benefits:

1. Prevention of over topping or failure of stopbanks either from tidal condition or river or tributary stream levels
2. Reduction of flooding at frequent intervals, typically consequent on rainfall intensities of 1-2 year return frequency pre-scheme conditions
3. Reduction of depth and duration of ponding of flood waters
4. Improvement in drainage outlets capacity by improved outlet and floodgates, flood pumping, and/or enhanced floodgate action from reduced river levels
5. Wide range of indirect benefits.

Thames coastal frontage (including Moanatairi) and Toyota factory area – Class B / U2 benefits:

1. Prevention of over topping or failure of stopbanks either from tidal condition or river or tributary stream levels
2. Reduction of flooding as regular occurrences (typically consequent by rainfall with a return frequency of 3-10 years, pre-scheme conditions
3. Reduction of depth and duration of ponding of flood waters
4. Improvement in drainage outlet capacity, in some cases with flood pumping
5. Reduction of erosion risks and/or flooding by tributary streams
6. Indirect benefits.

Thames township – Class U3 benefits:

1. Reduction of risk of flooding
2. Drainage benefits from the reduction of water levels on adjacent land
3. Protection of access to the property or part of the property
4. Protection of areas in the Piako River catchment from flooding by Waihou water
5. Protection from erosion of land drained by improved or artificial channels where drainage or access may be detrimentally affected
6. Indirect benefits.

Although there are a range of different rating classifications and benefits for different property locations in are Thames and Tararū, the Waihou Valley Scheme level of service clearly provides for protecting both townships from tidal inundation for a 100-year event in accordance with the scheme objectives.

[28] Waikato Regional Council, 2008. *Waihou Piako funding policy statement.* WRC doc #1437661

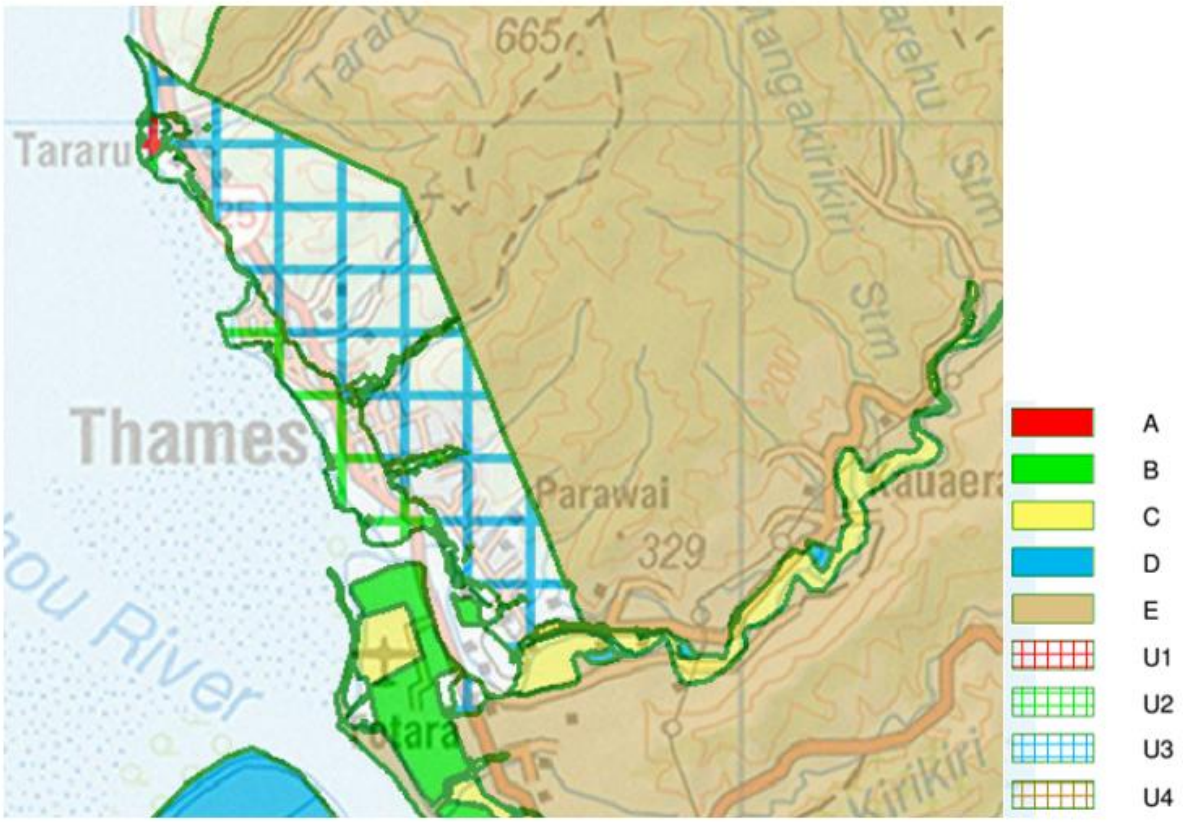

Figure 9 – Waihou Valley Scheme direct benefit rating scheme classification map for Thames and Tararū [29]

6.3 How funding has been allocated elsewhere

Graham's Creek flood scheme

In 2012, WRC engaged Andrew Honeyfield to propose a targeted rating scheme to fund the flood protection capital and maintenance works in Graham's Creek, Tairua, protecting 140 properties[30]. The assessment states that the regional rate was to pay 25% of the project with the local share being 75%. The local share was further divided to a 70:30 ratio of direct to indirect benefit rating. The indirect benefits were described as being "*less tangible community of interest and access benefits*" (15%) and based on "*increase of run off through catchment development*" (15%). The following layers were created within the scheme depending on the level of direct and indirect benefit from the works (covering both capital and maintenance costs):

- Indirect layer, all properties located within the catchment
- Channel direct benefit layer, two differentials depending on property location / degree of benefit

[29] Waikato Regional Council, 2013. *Waihou Valley Scheme direct benefit rating scheme classification.* WRC doc # 2866250

[30] Honeyfield, A., 2012. *Graham's Creek flood mitigation scheme – Tairua: Targeted rating classification.* Letter to WRC dated 14 December 2012

- Stopbank direct benefit layer, two differentials depending on property location / degree of benefit

In this way, only those properties benefiting from the channel and/or stopbank improvements funded those parts of the project.

6.4 How else could funding be achieved?

Clifton to Tangoio coastal hazards strategy implementation

In section 3.2 of this report, a legal opinion from Raynor Asher KC was summarised, relating to which of the three councils should lead the implementation of the Clifton to Tangoio coastal hazards strategy. Further to that, a review of the challenges of implementing the strategy was undertaken by the Ministry for the Environment (MfE) and HBRC in 2020[31]. It has some interesting insights that are directly relevant to the Thames scenario. One of the key findings was that the core responsibilities for adaptation are unclear: "*in the absence of clearly delineated responsibilities, councils cannot decide between them who has primary responsibility for addressing natural hazards and climate adaptation*".

The case study raised the following key questions:

- *Which level of local government is expected to take the lead on coastal natural hazards and adaptation where roles are joint or overlapping*
- *Who should fund adaptation action and on the basis of what principles*
- *Whose role is it to collect revenue or funds for any public or private good*
- *Who is responsible for the ongoing maintenance and management of any protective structures*
- *Who is responsible for implementing any managed retreat options, and how might this be achieved and funded?*

In terms of which council should take the lead role in collecting the rate and therefore owning and managing the assets, the following table was developed, setting out different reasons for which agency would be better equipped to rate and own the adaptation assets (table 3).

One of the funding principles agreed to was that those that directly benefited from the coastal protection works should pay for that benefit via a targeted rate. The Councils also agreed to create a 'contributory fund' from the general rate to offset debt and cover the public good aspect of the protective works.

[31] Ministry for the Environment and Hawke's Bay Regional Council partnership project. 2020. *Case study: Challenges with implementing the Clifton to Tangoio Coastal Hazards Strategy 2120*. Wellington: Ministry for the Environment.

Table 3 – Recommended management regime for Clifton to Tangoio (copied from case study[26])

Regional council	District council
There is a parallel between adaptation and the current regional council role to provide and maintain flood protection works	District councils are more closely linked to communities and what they want
A regional approach is desirable due to overlaps in jurisdiction and the overall coordinating role for the regional council implementing the Regional Policy Statement (RPS) in setting direction through the combined RPS and Regional Plans	District council assets (drinking water, wastewater and stormwater infrastructure, roads, reserves etc) will benefit from protection by coastal protection works
Regional councils have jurisdiction below the MHWS and are the RMA consent authority for any structures in the CMA	Much of the coastal erosion is happening inland of MHWS, which is district council jurisdiction under the RMA
	District councils are building consent authorities under the Building Act. This role is applicable within their respective city/district and also extends to building consents for structures below MHWS (as distinct from RMA resource consents).

Recent MfE perspective

In 2023 MfE released a paper traversing the issues and options of adaptation and retreat[32], including the question of who should pay. Table 4 below describes current roles and responsibilities in terms of funding paying for adaptation.

Table 4 – Adaptation funding roles and responsibilities (copied from MfE, 2023[27])

Party	Current statutory or assumed roles and responsibilities
Individuals, households and businesses	- Responsible for protecting their assets from risk, including through purchasing insurance - Insurers provide a service to transfer some of the natural hazard risk that otherwise falls on asset owners and renters. Insurance coverage across Aotearoa is high, but some people do not have insurance, particularly in vulnerable communities - Banks have an interest in helping those with mortgages to protect their assets from risk and sometimes provide lending that is used for adaptation
Councils	- Adaptation planning (including risk assessment and engagement) - Local adaptation actions, such as: – building and maintaining infrastructure – nature-based solutions, such as wetland restoration – certain adaptation costs during recoveries (shared role with central

[32] Ministry for the Environment. 2023. Community-led retreat and adaptation funding: Issues and options. Wellington: Ministry for the Environment.

	government) – pre-disaster retreat on a small scale – at times, post-disaster retreat (shared role with central government)
Central government	- Building and maintaining certain infrastructure (such as state highways) - Certain local adaptation actions on an ad hoc basis - Certain adaptation costs during recoveries (shared role with councils) - Post-disaster relief, which has sometimes included acquiring properties (shared role with councils)

As was found in the Clifton to Tangoio review, the current system relies on the principle of beneficiary pays. This can sometimes lead to a blinkered view as to who the beneficiaries are because there may be further reaching benefits that aren't immediately apparent. An example is a group of frontline houses are protected from flooding by a stop bank, however the fact that farther spread damage during the storm event has not occurred also means the council and its ratepayers will not have to pay for damage or recovery related costs. This is an indirect benefit that might not be so obvious. It also applies when assigning funding – weighing up the risk of spending on protection now in a planned way, rather than spending money on recovery later in a reactive way.

Thames-Coromandel planning framework

Reflecting the Waikato RPS's reference to collaboration with territorial authorities to develop long term adaptive management strategies with affected communities (Policy 13.1 and Method 13.1.3), adaptation is a priority for both Councils. The Thames-Coromandel District Plan (operative in part) identifies collaboration with WRC as a means of dealing with cross boundary issues such as natural hazards, particularly in the coastal environment.

The District Plan notes that TCDC's responsibility lies in controlling the use of land (except within the CMA or the beds of lakes and rivers) to avoid and mitigate natural hazards. Section 5.4.2 further acknowledges that WRC is responsible for natural hazard identification, assessment of risk and the development of strategies. WRC will lead the setting of acceptable risk, tolerable risk and intolerable risk thresholds and control natural hazard risk and effects in Primary Hazard Zones. The RPS recommends that the exercise of mapping these residual risk zones is a collaborative effort between regional and district councils.

6.5 How could funding be achieved for Thames?

External funding will be required and to achieve this it is important that protecting Thames is recognised as a regional priority by both Councils. Options for funding protection for Thames include one or more of:

- Seek funding from central government
- TCDC develop a new mechanism that ensures direct beneficiaries pay more, for example critical business infrastructure
- Consider utilising the existing Waihou Valley Scheme funding mechanism which already provides for coastal inundation

7 Matters for consideration

7.1 Land use planning and retreat

The TPRP is currently at the 'protect' stage of the adaptation process (figure 10), however protection is only one stage in the climate adaptation planning process. It is a transitional phase as communities move toward accommodating and potentially retreating. These are matters that require future work to ensure Thames' resilience in the long term. There is always residual risk once protection mechanisms have been set up and this is managed with land use planning – district plans have the ability set policies and rules to raise minimum floor heights, avoid infill development, discourage redevelopment and rezone land.

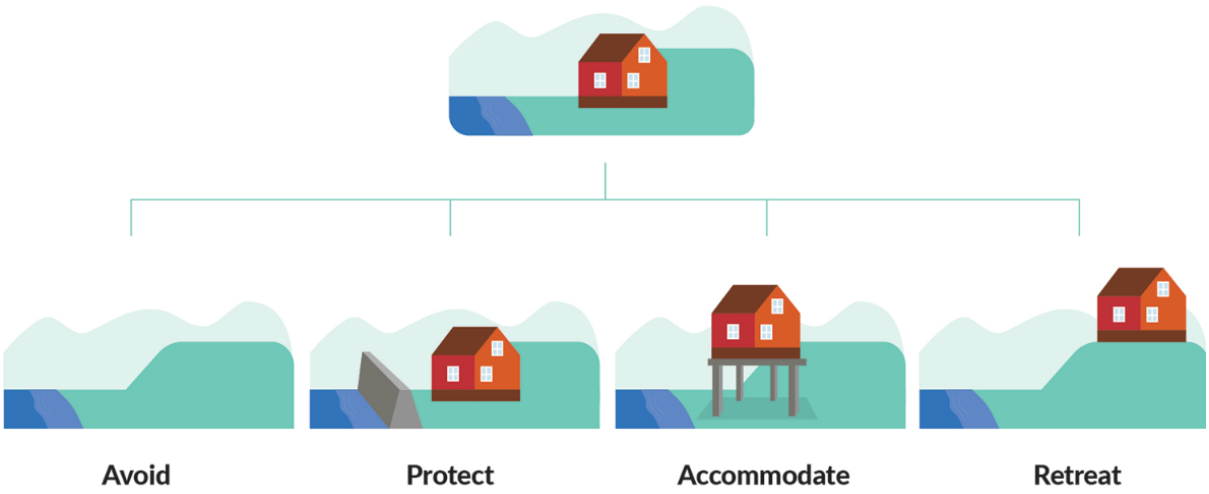

Figure 10 – Adaptation pathways (copied from MfE, 2022[33])

This report focuses on roles and responsibilities with regard to protection – roles and responsibilities for retreat is a future issue that central government is starting to grapple with. There is no clear retreat pathway at this stage, and the Clifton to Tangoio review noted a key issue for the project was the absence of clarity in terms of which agency or agencies are responsible for implementing and funding managed retreat[34]. At this time, the only mechanism to 'force' retreat sits with regional councils under sections 10(4) and s30(1)(c) of the RMA, as identified by Raynor Asher KC[35]: "*It is only the HBRC that has the power, through the removal of existing use rights, to direct property owners to engage in a managed retreat. This cannot be done by the territorial authorities*" [para 51].

[33] Ministry for the Environment. 2022. Aotearoa New Zealand's first national adaptation plan. Wellington. Ministry for the Environment. https://environment.govt.nz/publications/aotearoa-new-zealands-first-national-adaptation-plan/adaptation-options-including-managed-retreat/

[34] Ministry for the Environment and Hawke's Bay Regional Council partnership project. 2020. *Case study: Challenges with implementing the Clifton to Tangoio Coastal Hazards Strategy 2120*. Wellington: Ministry for the Environment.

[35] Asher, R., 2021. *Review and recommendations for the Clifton to Tangoio coastal hazards strategy joint committee*. Hawkes Bay Regional Council.

7.2 Summary – Bringing it all together

The key findings of this report include the following points:

- The impact of climate change means that coastal inundation and flood hazard risk will increase over time.
- Natural hazards cross council boundaries and functions.
- s30 and 31 RMA state it is the regional council's role to develop policies to avoid or mitigate natural hazards, and that district councils have a role in implementing the policy, however the Act does not clarify which authority should implement the policies or specifically who should construct infrastructure to reduce hazard risk.
- The provision of fluvial and coastal protection works is discretionary for both councils, however if it chooses to do so, fluvial flood protection sits with the regional council.
- 100-year tidal inundation protection for Thames and Tararū is a key aspect of the Waihou Valley Scheme.
- Royd noted that for "*a scheme as big and complex as [the Waihou Valley Scheme] that the scheme is managed as a whole*".
- The provision of stormwater management services is mandatory for district councils.
- Stormwater is managed differently across the country and sometimes includes support from the regional council, however primary management of these assets sits with the district council.
- The TCDC LTP includes land drainage in the stormwater activity group.
- 'Liability for damages arising from neglect[36]' provides a specific form of statutory liability, where statutory claims against a regional council may be made if it decides to limit or stop maintenance on a flood protection asset.
- When it comes to decreasing or ceasing a level of service, there 'may' be a duty on a council to properly consider whether the powers should be exercised or cease to be exercised. Any change would likely require consultation through the LTP process.
- The LGA requires councils to collaborate, and it enables transfer of responsibilities between councils (Appendix 2).
- Asher's recommendations were adopted by the councils.
- Any change requires consultation – the bigger the change, the bigger the consultation.
- An integrated approach is required.

7.3 Issues that require consideration

Big picture

- What is the appropriate balance between investing now in shorter term, transitional stormwater and coastal infrastructure compared with investing now in other longer-term fixes such as catchment scale natural infrastructure, managed retreat, and robust planning frameworks.
- Costs and challenges of implementation need to be understood.
- Once agreed where roles and responsibilities should sit, the agencies need to commit to moving forward to the implantation phase.

[36] s148 Soil Conversation and Rivers Control Act 1941

- Might the next LTP process (see potential pathways suggested in Appendix 1) be the right time to implement agreed changes.

Governance

- Is the status quo appropriate now and into the future?
- What would a decision mean for other parts of the district? What about across the region?
- If one agency takes the lead, what might the input of the other agency be?

Finances

- What is the appropriate funding mechanism?
- Who decides which rate payers pay, and in what proportion?
- Who collects the rates to fund the projects?
- What is the value of the existing assets? Annual operating costs? Cost of future maintenance required?
- What does setting up a new rating system look like? How long will it take and how much would it cost?
- Is there an existing rating system that could be utilised?
- A collaborative approach to seeking external funding is needed.

Capability

- Who should own, operate, manage and maintain existing protection assets?
- Who should decide what the new assets should be?
- Which agency should construct, manage and maintain new protection assets?

Appendix 1 – Potential adaptation and asset management pathways

Activity	Short term	Medium term	Long term
Coastal stopbank – Stage 1	TCDC or WRC - Construct coastal stopbank	Transfer to WRC	Ongoing management
Coastal stopbank – Stage 2			Confirm design or reduce level of service
Karaka Stream – Existing protection	WRC – Design/cost improvements to provide 100-year tidal protection OR signal reduction in LOS and signal managed retreat	WRC capital works	Ongoing management
Karaka Stream – Overflow pump	WRC/TCDC – Design alongside stormwater improvements	Construct or defer if possible	Ongoing management
Thames swimming pool	TCDC – Decommission pool		
Hape Stream – Existing protection	WRC – Design/cost improvements to provide 100-year tidal protection OR signal reduction in level of service and initiate managed retreat (consider pool area for storage)	WRC capital works	Ongoing management
Stormwater	TCDC – Maintain existing system, design improvements	Construct improvements	Ongoing management
Flood pumping	WRC – Maintain existing system, design improvements	Construct improvements	Timeframes depend on rates of sea level rise, Ongoing management
Residual risk	TCDC – Assess residual risk as part of the current project		
Plan change	TCDC – Commence plan change process to include current, future risk, planned protection and managed retreat	Finish plan change	
Managed retreat	TCDC & WRC– Write a Managed Retreat policy. Use residual risks and any forecast reductions of level of service to plan for retreat		Implement Managed Retreat policy

Appendix 2 – LGA processes

Transferring responsibilities

The LGA outlines various processes to enable councils to pass their duties onto others.

1. Section 16 sets out a process for regional councils to undertake 'significant[37] new activities[38]'.
2. Section 17 provides an avenue for a district council to transfer 'responsibilities[39]' to a regional council and vice versa.
3. S17(9) goes on to state that nothing in that section limits a local authority from delegating the exercise of any 'responsibility' to another local authority, or from entering into a contract another local authority 'for the performance of any activity or function'.

Based on the Asher KC legal opinion, the appropriate pathway, should the councils agree that WRC is the most appropriate body to take ownership of the Thames and Tararū protection assets, in other words to take on a 'significant new activity', the process is outlined as follows.

A proposal to take on an activity that is currently undertaken by the district council and is included in its LTP, requires a change to the LTP following a special consultative process (s93A). The regional council must advise all of the district councils within its region and the Minister of Local Government the reasons it wishes to take on the new activity. The proposal must include a consultation document stating:

- Description of the proposed amendment and the reasons for it
- The objectives of the proposal
- How rates, debt, and levels of service might be affected
- Any alternatives
- A report from the Auditor-General on effectiveness and quality
- The expected effects of the proposal on the district councils
- Any objections raised by those councils.

If the affected district council and the regional council cannot agree on an outcome, a mediation process must be held. If mediation is unsuccessful, the councils may ask the Minister to make a binding decision on the process, and he or she must do so in consultation with the Local Government Commission.

[37] S5 - **significant**, in relation to any issue, proposal, decision, or other matter, means that the issue, proposal, decision, or other matter has a high degree of significance.

[38] S16(9) - **new activity**— means an activity that, before the commencement of this section, a regional council was not authorised to undertake; but does not include an activity authorised by or under an enactment.

[39] S17(8) - **responsibility**— (a) means any **responsibility, duty, or legal obligation** and any powers associated with that obligation.

Rating considerations

Section 101(3)(a) of the LGA sets out what councils must consider when determining their funding needs (including rating decisions), being:

(i) the community outcomes to which the activity primarily contributes; and
(ii) the distribution of benefits between the community as a whole, any identifiable part of the community, and individuals; and
(iii) the period in or over which those benefits are expected to occur; and
(iv) the extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity; and
(v) the costs and benefits, including consequences for transparency and accountability, of funding the activity distinctly from other activities.