

**TO** Thames Protection & Resilience Project Governance Group  
**FROM** SMPP Project Team  
**DATE** 14 February 2024

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## **1 Purpose of report**

To provide the Thames Protection & Resilience (P&R) Project Governance Group with the background to the Thames adaptation pathway and protection concept, and to the Thames and Surrounds Spatial Plan.

## **2 Summary**

Thames is the economic centre of the Coromandel Peninsula and its public service hub; incorporating the Hospital, several schools, and the District Council's head office. The Thames Ward generates \$813m in GDP, over half of the district GDP, and is home to 7000 of the districts 13 700 jobs. It has significant opportunity for growth but, despite a range of positive features, is constrained by housing shortages, a lack of corporate investment and an increasing natural hazard risk. Through its spatial planning process (Yours Thames Tomorrow, December 2021), TCDC identified both economic development and increasing productivity as priority areas of interest. However, coastal inundation and fluvial flooding are key issues (presenting an extreme level of risk in the short, medium and long term) that need to be addressed to move forward. The outcome of TCDC's SMP action prioritisation project, put the defence of Thames at the top of the list in terms of urgency and importance. The first steps being detailed design for stop bank enhancement, combined flood modelling and financing. Associated with this, water supply storage and wastewater processing capacity need to be enhanced, and drainage systems will be affected by the protection. Significant road improvements are also required.

A two-stage Concept Design has now been commissioned. The aim of Stage 1 is to develop a consistent level of protection from marine and fluvial flooding based on a high-end forecast sea level rise over 50 years (to 2075), that will provide a platform that facilitates future increased protection, while minimising costs and community impacts. Stage 2 would be undertaken in the future, when defined triggers are reached, to provide consistent protection for the next 50 years (to 2125), within the Stage 1 footprint (against 1.2m of sea level rise and a 1% AEP event).

In addition to protecting the areas of Thames exposed to flood hazards, significant investment in roading and three waters is required to enable urban development in greenfield areas that are free from future sea level rise hazards. The Spatial Plan identifies these needs, but further investigation is required.

## **3 Suggested resolution**

That the Thames P&R Project Governance Group:

1. receive the 'Thames P&R Background' report dated 14 February 2024.

## **Reference – Tabled / Agenda attachments**

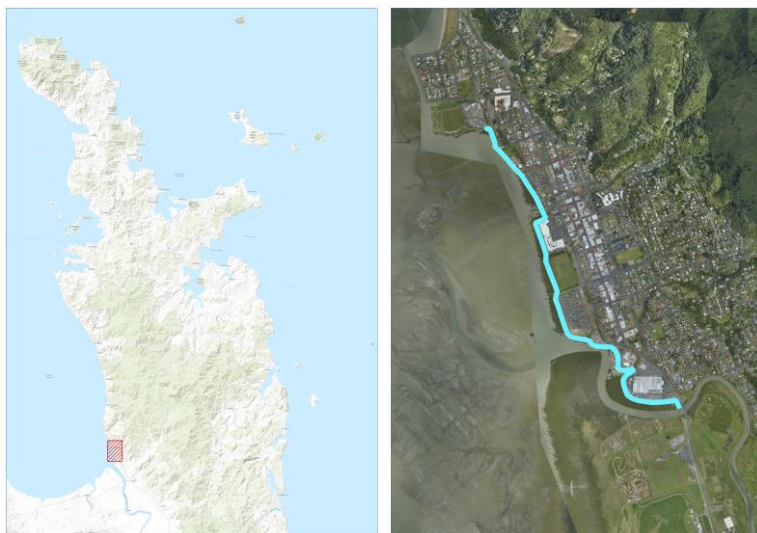
1. Attachment A – PU2 Thames Coastal Adaptation Plan (CAP)
2. Attachment B – Thames and Surrounds Spatial Plan (October 2022)

## Coastal Adaptation Pathway: Thames

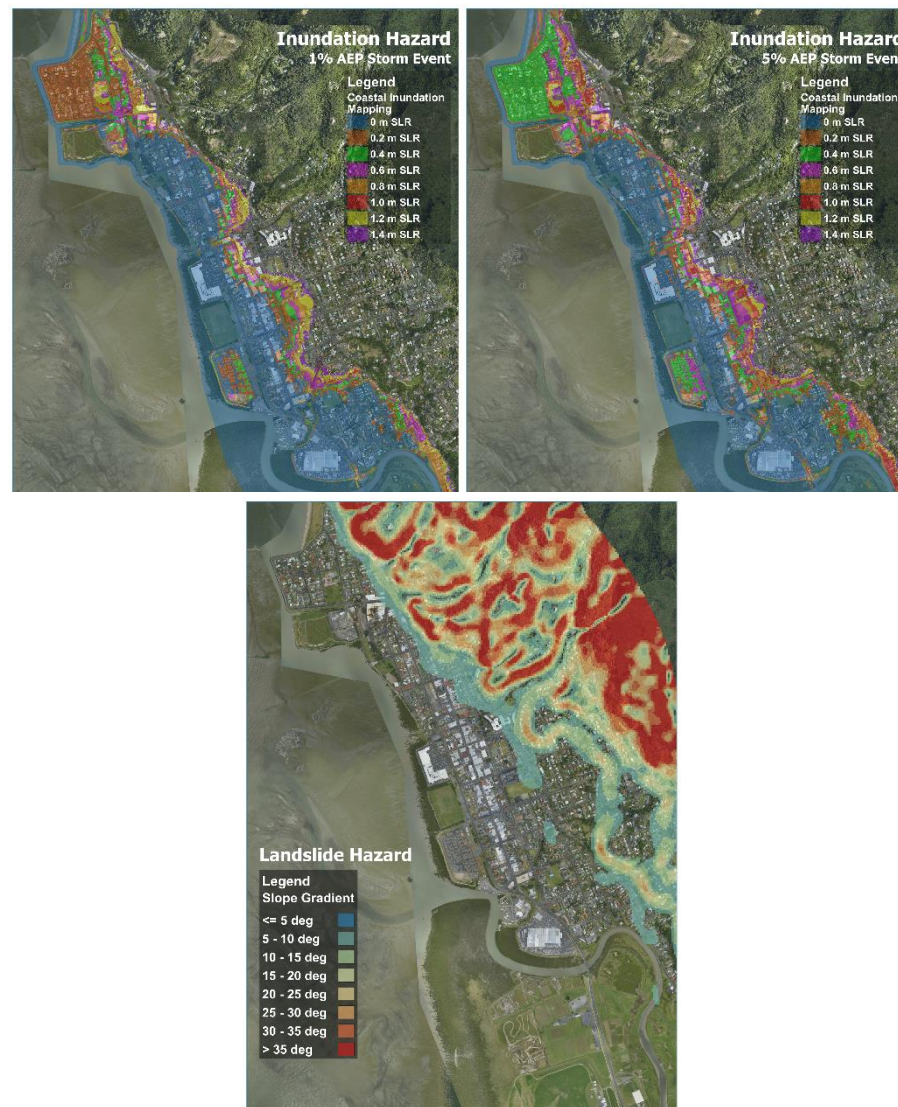
### Policy Unit 2, Management Area A2

#### Introduction

Thames is the economic centre of the Coromandel Peninsula and its public service hub; incorporating the Hospital, several schools, and the District Council's head office. It has significant opportunity for growth but, despite a range of positive features, is constrained by housing shortages, a lack of corporate investment and an increasing natural hazard risk. Through its spatial planning process (Yours Thames Tomorrow, December 2021), TCDC has identified both economic development and increasing productivity as priority areas of interest. However, coastal inundation is a key issue that needs to be addressed in moving forward and the NZ SeaRise programme (<https://www.searise.nz/>) has identified that reclaimed areas seaward of SH25 are subsiding<sup>1</sup>.



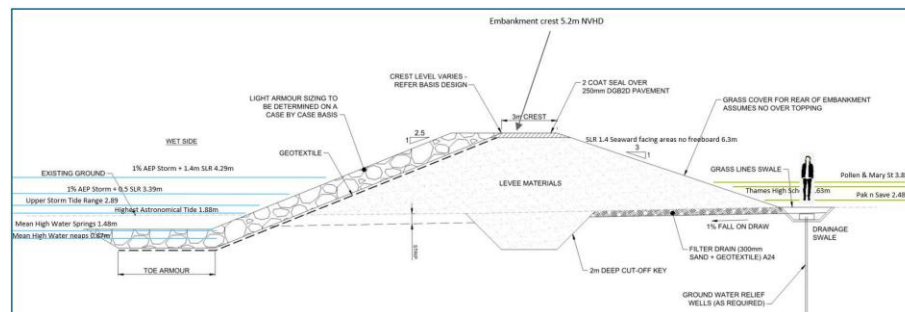
#### The Hazard



<sup>1</sup> This could exacerbate the rate of sea level rise in these locations and means that, in measuring the rate of change, relative sea level rise needs to be determined.

## The Risk

Type	Year/SLR	Storm	Exposure	Vulnerability	Consequence
Erosion	2020	1% AEP	Low	Moderate	Minor
Erosion	2040	1% AEP	Low	Moderate	Minor
Erosion	2070	1% AEP	Moderate	High	Moderate
Erosion	2120	1% AEP	Moderate	High	Moderate
Inundation	0 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	0.4 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	0.8 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	1.2 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	0.4 m SLR	5% AEP	Extreme	Extreme	Extreme
Inundation	0.8 m SLR	5% AEP	Extreme	Extreme	Extreme
Inundation	1.2 m SLR	5% AEP	Extreme	Extreme	Extreme
Inundation	0.4 m SLR	King tide	Low	Low	Insignificant
Inundation	0.8 m SLR	King tide	Extreme	High	Minor
Inundation	1.2 m SLR	King tide	Extreme	Extreme	Extreme



## The Response

At the option assessment stage, the following adaptation options were considered:

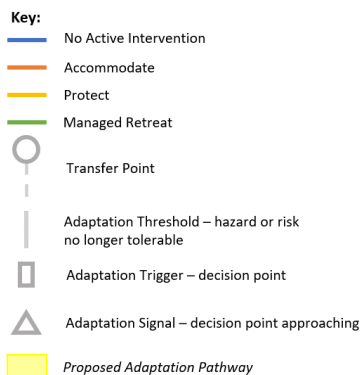
Policy	Option
Be Prepared	Provide regular information to affected stakeholders on hazards, risks and management measures.
Be Prepared	Implement hazard warning systems and prepare emergency response plans.
Accommodate	Maintain natural defences through dune management; maintenance of sediment supply; maintaining foreshore vegetation and wetlands; and managing stock access to the foreshore.
Protect	Improve the resilience of existing coastal defence assets, including seawalls, revetments, stop banks, groynes and cliff stabilisation works.
Protect	Construct a new seawall or revetment.
Protect	Construct a new stop bank and drain.
Managed Retreat	Changing planning practices.
Managed Retreat	Relocate assets.

To provide context for the option assessment and inform the Thames Spatial Plan, the feasibility of protecting Thames against a 1% AEP storm event and 1.2m of relative sea level rise was investigated.





## Adaptation Pathway

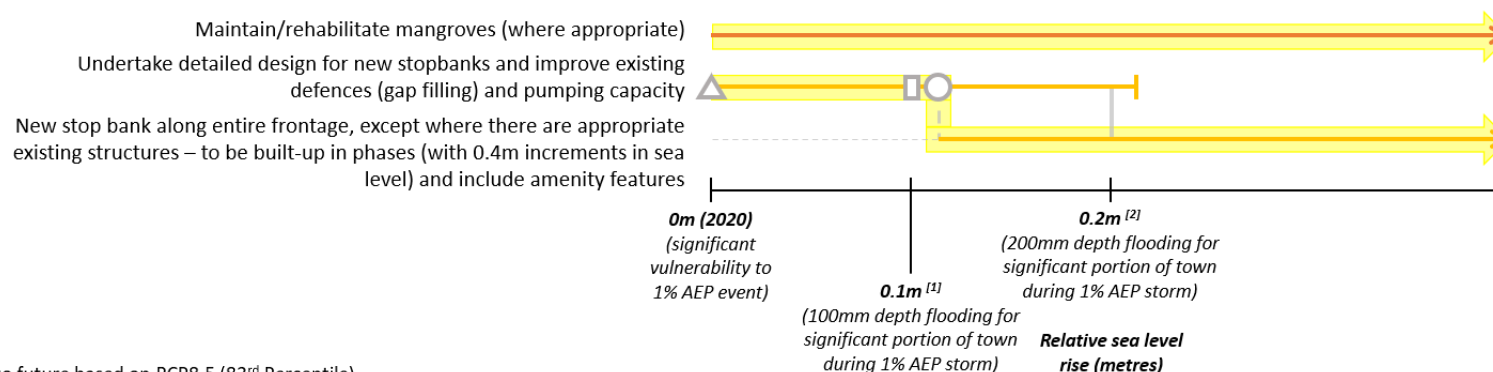


## Strategy



The strategy advocated for Thames over the 100-year timeframe of the project is to 'Protect' the estimated near \$1 billion of assets at risk. The hazard exposure mapping indicates that, if a foreseeable set of circumstances arise (in terms of wind direction and tide levels), Thames is vulnerable to inundation now from any storm larger than and including a 5% AEP event (approximately a 1-in-20-year event). Given this, the trigger for adaptation is considered to have been met already. That is, the status quo cannot be maintained and a new option needs to be progressed.

The action proposed is to improve the existing defences and plan to construct a new stop bank along the entire coastal frontage in the short term. This should be designed from the outset to provide protection against 1.2m of relative sea level rise (taking account of subsidence) and a 1% AEP event but can be built-up in phases. The design phase needs to consider the existing WRC 1-in-50-year event (Thames stream) flood defences and the potential to realign the drainage network. The opportunity should also be taken to incorporate amenity features and public realm space (including maintaining mangroves where possible).



<sup>1</sup> Approx. 13 years into future based on RCP8.5 (83<sup>rd</sup> Percentile)

<sup>2</sup> Approx. 24 years into future based on RCP8.5 (83<sup>rd</sup> Percentile)





**YOUR THAMES,  
TOMORROW**

Maiea ake - Mai i te hiku ki te kauae,  
tō pito whenua, tō āpōpō

# THAMES AND SURROUNDS SPATIAL PLAN

OCTOBER 2022

# FOREWORD

Thames and its surrounding areas are poised for growth. Together, they are the economic engine of our beautiful Coromandel, and a vibrant, positive place to live and work.

Our proximity to Auckland, Hamilton and Tauranga, our enviable lifestyle due to the natural environment and climate, and our access to the stunning coastlines of our Coromandel create significant opportunities for Thames' communities and economy.

But at the same time, we know that aspects of the area are under performing. It's hard for families to buy or rent houses here, businesses that want to grow are struggling to find staff, and our infrastructure needs better planning and investment if it is to support our aspirations. Our coastal geography requires us to pay careful attention to the potential hazards from sea level rise as our climate changes.

Our Spatial Plan is a strategic response to these issues. It sets a direction and a vision that will guide us in years to come. It will help us realise our growth opportunity in a sustainable and effective way.

The Plan brings together thinking from our Thames and Surrounds communities, landowners, stakeholders and partners to offer a vision for our area. It acknowledges our constraints and helps mitigate the risks we are facing in a responsible and collaborative way. It celebrates local knowledge and expertise. It reflects the ideas, wishes and dreams of the people who will be central to its success – the residents of our communities.

We'll align the Spatial Plan with our Council's Long Term Plan to ensure our decisions and direction reflect what's happening on the ground. We'll use the Plan as our long-term blueprint as we make the hundreds of smaller day-to-day decisions that make up our future success and prosperity.

I'm immensely proud of the work that has gone into the Thames Spatial Plan and know that it will help retain and expand what makes our area special for years to come.

- Sandra Goudie Thames - Coromandel District Mayor

Nei rā ngā kupu

maioha a ngā mātua tupuna e mihi atu ana i roto i ngā āhuatanga o te wā nei o ō tātou Ao Hurihuri.

Ngā tini Whetū ki te rangi, Ngāti Maru ki te whenua.

Ngāti Maru have committed to working collaboratively with the Thames Coromandel District Council to develop sustainable strategic solutions for the forward planning of Thames township and its environs.

With the complex issues facing our town and area mana whenua participation has been a collaborative exercise encompassing the mitigation of the effects of the rising sea levels, the increased frequency of tidal inundation and flooding and, population growth and distribution as these concepts relate to the modelling that has been presented across the spectrum covered in the spatial planning for the future of Thames town and its environment.

We are committed to bring a mana whenua focus to the Thames Spatial Plan with the incorporation of our cultural, historical and anecdotal knowledge to our involvement in any forward planning for our area.

Wati Ngamane - Chairman, Ngāti Maru Rununga

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# WHAT IS A SPATIAL PLAN?

## WHAT IS A SPATIAL PLAN?

A Spatial Plan is a high-level blueprint for the future, showing what should go where in our built environment, and how each part should interact with the others. The Thames Spatial Plan will chart the future of Thames, ensuring growth can occur in a positive, sustainable way.

## WHAT IS THE SHORELINE MANAGEMENT PLAN?

Community-led Coastal Panels have developed coastal adaptation plans that will help us mitigate and adapt to the coastal erosion and flooding risks to our people, property and assets. This important work has made recommendations for which sustainable flood and coastal defence measures are appropriate for different parts of Thames. The considered options range from soft solutions such as wetland regeneration, to hard solutions such as stop banks, rock walls or partial managed retreat. The key moves identified in the Spatial Plan are informed by the recommendations set out in the Shoreline Management Plan.

For more information visit [www.tcdc.govt.nz/smp](http://www.tcdc.govt.nz/smp)

The Spatial Plan has been developed using a process that puts the community at its heart, ensuring it reflects the ideas, wishes and aspirations of the people who have a connection with Thames. The Thames Spatial Plan will ensure the town and its surrounds can grow in a sustainable way, while protecting what makes it special for years to come.

## HOW WILL THE SPATIAL PLAN BE USED?

The Spatial Planning process has integrated a considerable amount of thinking across a range of workstreams (i.e. infrastructure studies, shoreline management plan, growth projections) – offering a compelling case for change that brings our community, mana whenua, landowners, stakeholders and partners together. It creates a shared vision, setting expectations for the future of Thames that will help central government prioritize and plan investment.

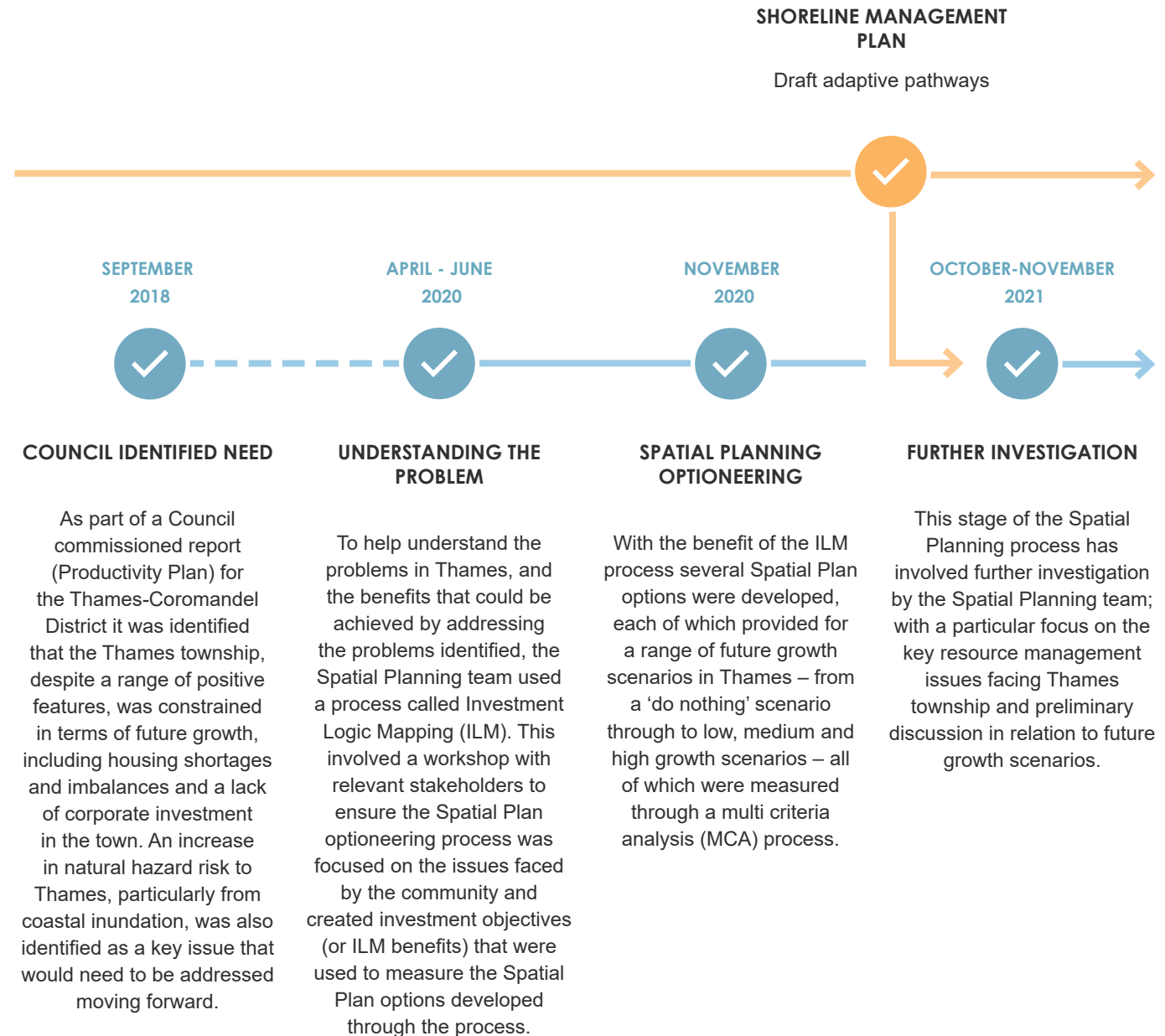
The Spatial Plan will inform changes to the District Plan, infrastructure planning and investment decisions made by our Council and signal to landowners, developers and investors growth intentions for the area. Importantly, the needs and aspirations of the community will be captured through this document into future regional spatial plans as proposed under the incoming Spatial Planning Act.



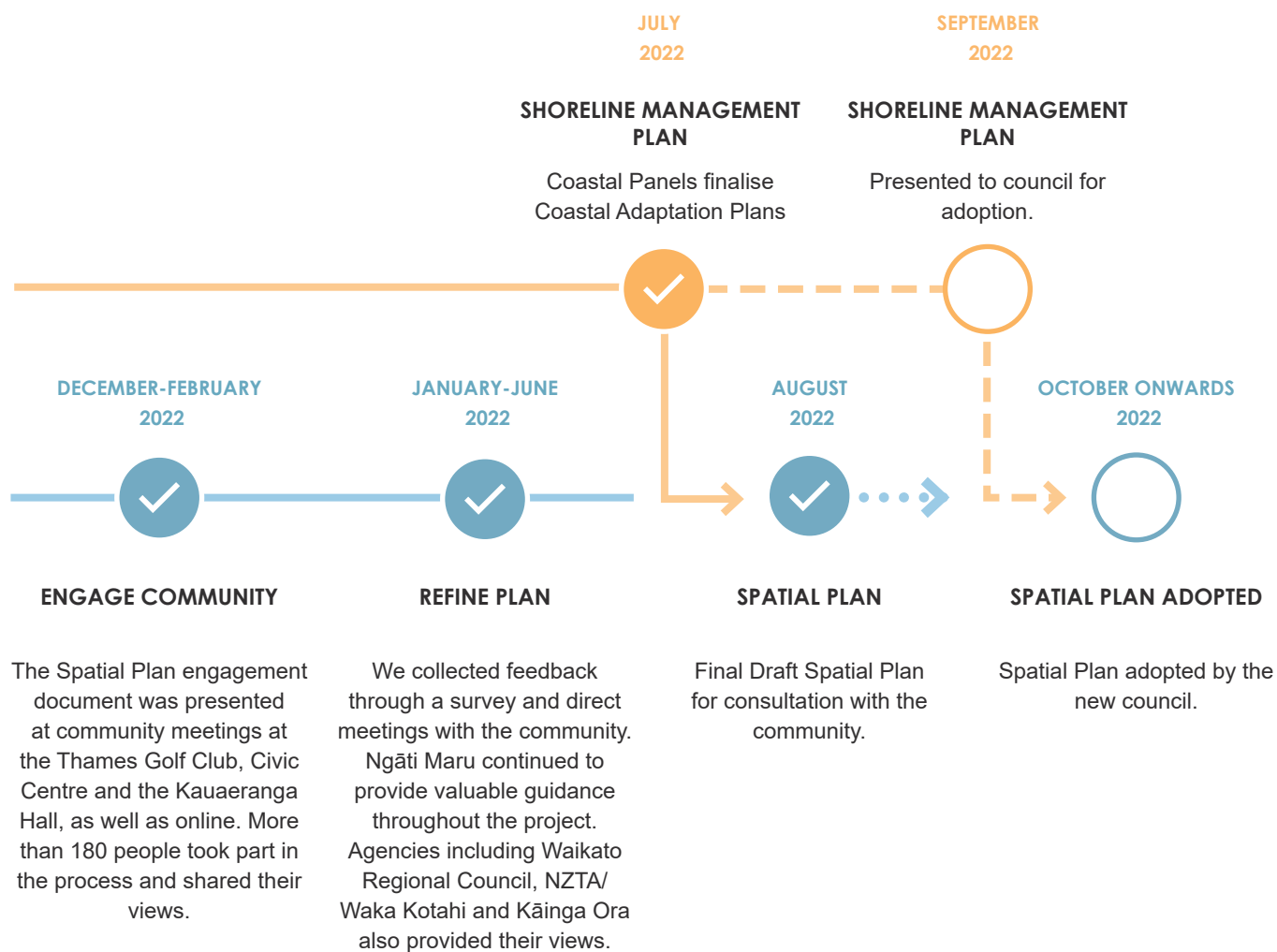




# PROCESS









# MANA WHENUA

Ngā puke ki Hauraki ka tārehua  
E mihi ana ki te whenua, e tangi ana ki te tāngata  
Ko Moehau ki waho, ko Te Aroha ki uta  
Ko Tīkapa te moana, ko Hauraki te whenua

The peaks of Hauraki lie shrouded in mist  
We revere the land and lament the people  
Moehau stands afar while Te Aroha stands within  
Tīkapa is the sea and Hauraki the land

Haere mai ki Hauraki he aute te awhea<sup>1</sup>

The spiritually and culturally symbiotic relationship between the people of Pare Hauraki and our world, mai Matakana ki Matakana, is founded on whakapapa links between the cosmos, gods, nature and people. Our world is a holistic unified whole consisting of spiritual and physical interrelated realities.

Our relationships are first and foremost genealogical. All things, animate and inanimate, have a whakapapa derived from Papatūānuku and her children. The works of nature – mountains, seas, rivers, wetlands, animals and plants – are either kin, ancestors, or founding parents. From our cosmogony, all things have their own mauri and personality requiring respect and protection.

Whanaungatanga lies at the core of our relationships. Te taura tāngata is the cord of kinship that binds us together through whakapapa. It is a braid that is tightly woven, tying in all its strands. It is unbroken and infinite.

Our traditional imagery holds that the Coromandel Peninsula is the jagged barb of the great fish of Māui (Te Tara o te Ika a Māui), while the peaks of Te Aroha and Moehau form the prow and stern of the waka.

Important tribal taniwha and tupua dwell in the ancestral seas and rivers which are also the location of continued spiritual and cultural traditions and practices maintained over the many centuries.

The extensive coastline, mountainous backbone, rivers and wetlands make for a resource rich and environmentally diverse rohe, desired by many over the centuries. The taonga tuku iho bestowed upon us include taonga species, fertile soils, hua whenua, hua rākau, kai moana, kai awa, kai ngahere, timber, textile flora and minerals.

<sup>1</sup> "Come to Hauraki, where the aute is not disturbed."

The aute plant (paper mulberry), brought to Hauraki from Hawaiiki, is an iconic symbol representing the fertility and mana of Hauraki, and this pepeha is a metaphor of peace and endurance.



The seas and foreshores of Tīkapa Moana to Mahurangi and Te Tai Tamahine / Te Tai Tamawahine to Ngā Kuri a Whārei provide nourishment and spiritual sustenance as well as the maritime pathways to settlements throughout our rohe. The maunga of Hauraki are uplifted places of revered events in time and space. There, resides the tangible history of Pare Hauraki. Many rivers flow from the maunga into the plains and sea and provide sustenance and inland pathways. To the west includes the Waihou, Ōhinemuri and Piako, and to the east Whitianga and Tairua. The flood plain of the Piako and Waihou rivers was an inland sprawling sea and wetland rich with flora and fauna.

These places are revered in tribal histories and mōteatea.

Our traditions hold that our people have dwelt in Hauraki for over a millennium.

Our tūpuna inhabited a rohe temperate and generally frost free which enabled the cultivation of kūmara, taro and yam from Polynesia. The broadleaf and podocarp forests include miro, hinau, tawa and karaka whose fruit were harvested. The rohe abounds in bird life with many wetland species and thousands of migratory waders, which congregate on the coastal mudflats in season. The seas and foreshores teem with marine mammals, fish and shellfish, the wetlands and rivers with birds, tuna and fish, as well as berries and medicinal and textile flora. Much of the rohe was thickly forested, with the rivers and water bodies giving access to great stands of kahikātea and kauri.

These resources were subject to access and use rights as an essential part of kaitiakitanga. Some species would be generally available, while other species would be regulated by rangatira in order to ensure sustenance and sustainability for the tribe.

The richness and diversity of this natural world is reflected by the many peoples who have belonged to the land and seas of Hauraki over the centuries. Thus, there are some 6,000 recorded historical sites, 700 of which are pā. It is generally accepted that there are more than double that number. More numerous again are the wāhi tapu cared for by Pare Hauraki as kaitiaki of these revered places.

The traditions of Pare Hauraki are of a highly mobile and maritime nation. Movement throughout tribal areas was influenced by areas of occupation and the location and availability of natural resources. Seasonal harvesting, especially kai moana, involved travel and occupation over very wide areas of Tīkapa Moana – Te Tai Tamahine / Te Tai Tamawahine and their motu. Preservation of birds and fish was an important activity, together with tending of extensive cultivations.

The mana and wellbeing of Pare Hauraki was displayed in many ways - the quantity and quality of kai; waka and whare; tools/ weaponry personal ornaments (including tahanga, tōhora, and huruhuru); and korowai and whāriki etc.

Many whānau, hapū and iwi have dwelled in Hauraki over the centuries. The complexity and diversity of Pare Hauraki is reflected in the separate waves of tribal migration - various waka, tōhora and taniwha traditions, together with histories of conflict, intermarriage and tuku whenua. Tribal entities have come and gone, with the 12 Iwi of Hauraki now comprising:

- Ngāti Maru;
- Hako;
- Ngāi Tai ki Tāmaki;
- Ngāti Hei;
- Ngāti Paoa;
- Ngāti Porou ki Hauraki;
- Ngāti Pūkenga;
- Ngāti Rāhiri Tumutumu;
- Ngāti Tamaterā;
- Ngāti Tara Tokanui;
- Ngaati Whanaunga; and
- Te Patukirikiri



# WHAT IS DRIVING THE SPATIAL PLAN?

## 1. IMPACT ON ECONOMY

Thames is the economic powerhouse of the Coromandel. Our economy is growing, but our population is stagnant, and the workforce is shrinking. Businesses can't recruit workers due to a lack of housing so well-paying jobs are going unfilled.

THIS HAS A UNIQUE IMPACT ON THE COMPOSITION OF OUR LOCAL WORKFORCE:



36%  
Employed full time



15%  
Employed part time



3%  
Unemployed - lower unemployment than national average



46%  
Are not in the labour force



46%

OF OUR DISTRICT'S JOBS ARE IN THAMES, BUT ONLY

36%

OF THE POPULATION

OUR AGING POPULATION WORSENS OUR SHORTAGE OF WORKING-AGE PEOPLE

AGED 65+



35%  
TCDC



15%  
NZ

During engagement with the community, many businesses expressed the desperate need for staff, and the shortage of rental and market housing available as the single largest contributor to their ongoing viability.

### Thames Business Association survey results:

"Nearly 80% of businesses know of workers outside the District who are looking for housing in the Thames area; and nearly 50% say that lack of housing is impacting their business."

### Comments from Long-Term Plan consultation:

"We are unable to recruit talent... simply because there is no available housing"



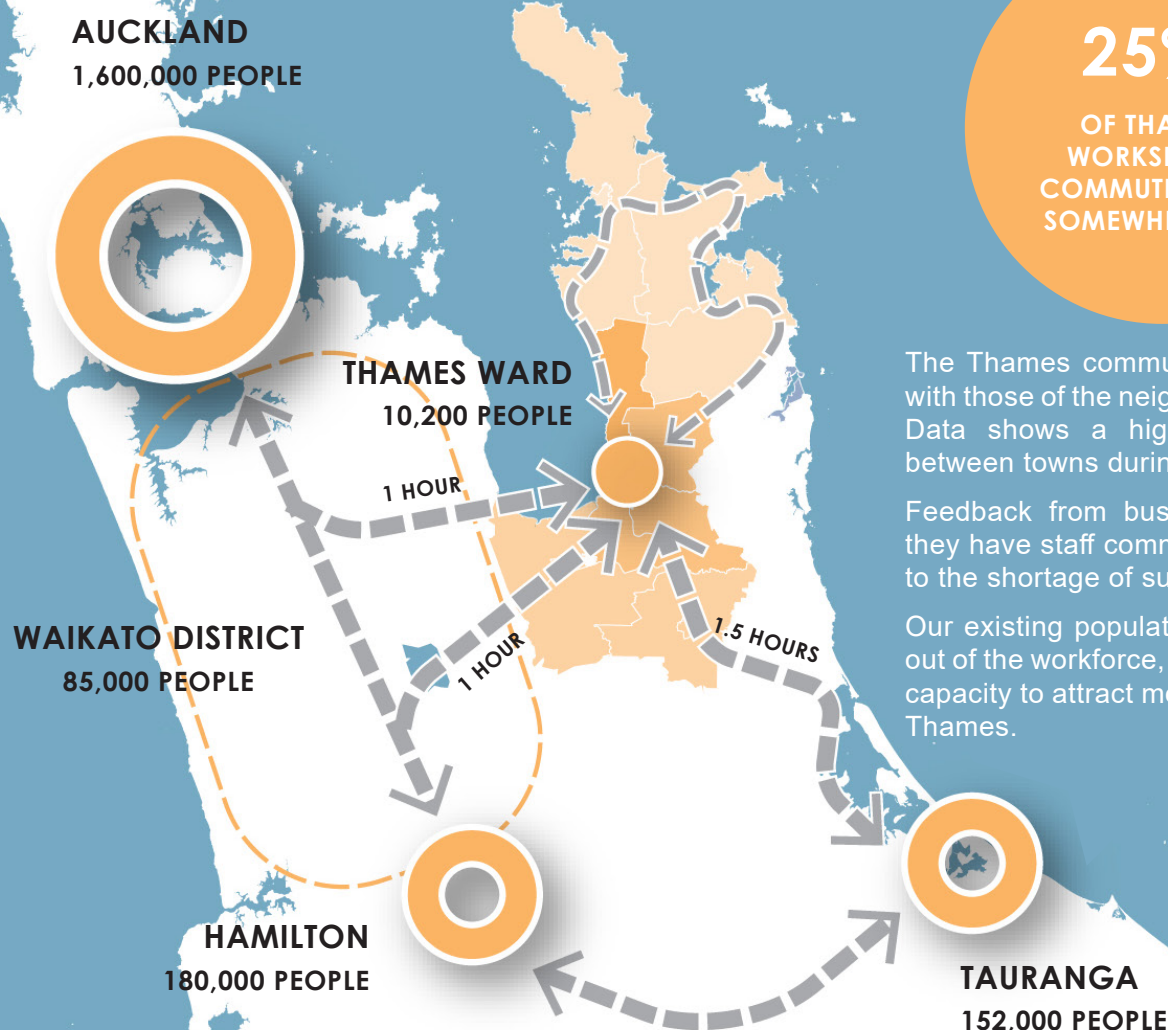
25%

OF THAMES' WORKFORCE COMMUTES FROM SOMEWHERE ELSE

The Thames community is tightly interwoven with those of the neighbouring Hauraki District. Data shows a high degree of movement between towns during commuter hours.

Feedback from businesses has shown that they have staff commuting long distances due to the shortage of suitable housing.

Our existing population will continue to move out of the workforce, so we need to provide the capacity to attract more working age people to Thames.

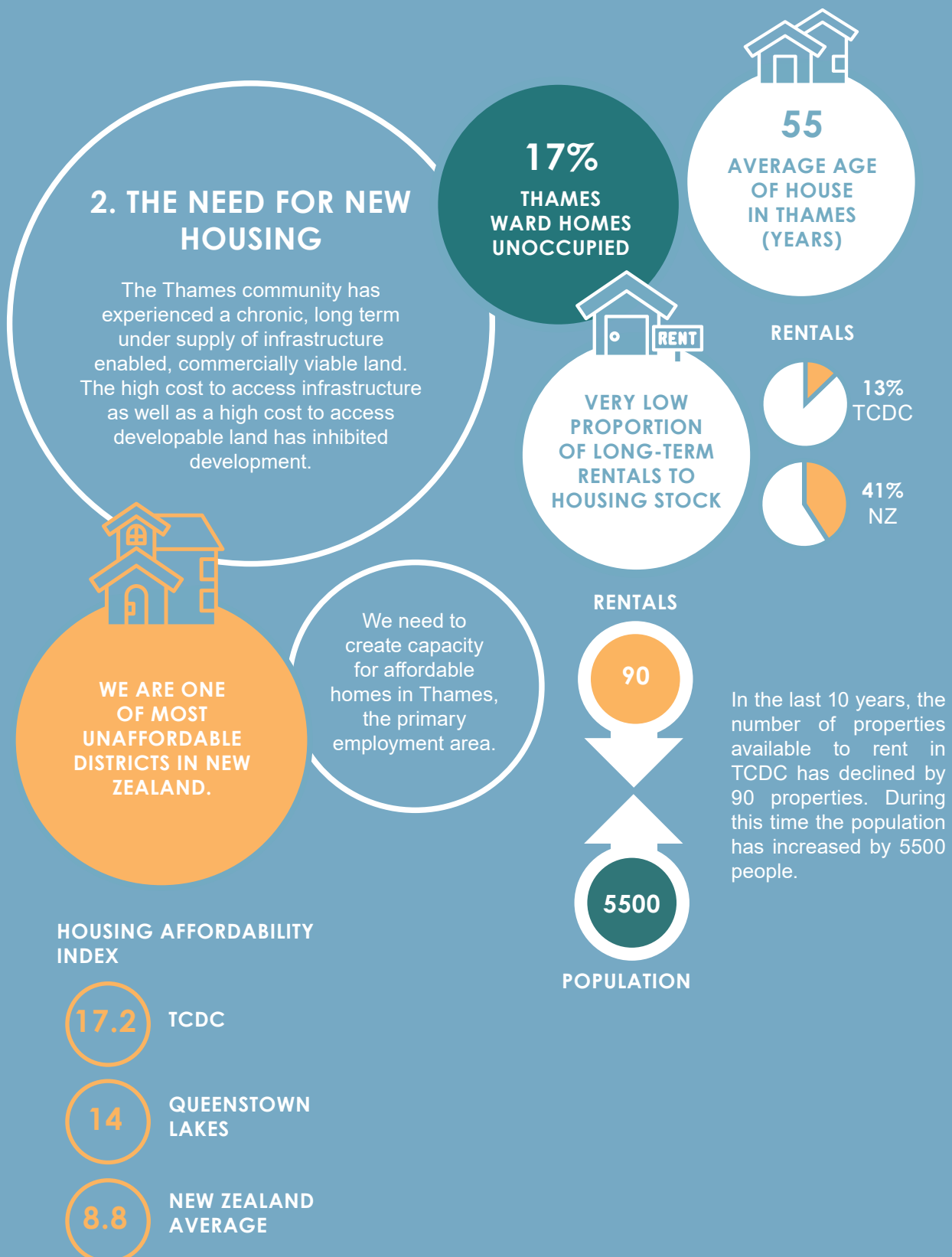


## EMPLOYMENT LED DEMAND PROJECTIONS

Thames need to build at least 70 homes a year to service existing demand, however over the last ten years there has been an average of only 16 homes built a year.

	OPTION 1 No Job Growth	OPTION 2 Low Projection	OPTION 3 Medium Projection	OPTION 4 High Projection
Dwellings @2020	4,200	4,200	4,200	4,200
Dwellings @2070	5,000	7,600	9,400	10,600
New Dwellings	900	3,400	5,200	6,500
Annual Growth	20	70	100	130
Annual Growth %	0.4%	1.2%	1.6%	1.9%

# WHAT IS DRIVING THE SPATIAL PLAN?





### 3. CLIMATE CHANGE

Low lying coastal areas of the Thames coast and the greater Thames area are at risk of coastal inundation and erosion. When planning for the future it's important to think about how climate change and rising seas will affect our communities, assets and infrastructure. By addressing Climate and Flooding risk we can improve investor confidence to develop.

FAILURE TO ADDRESS  
FLOODING AND  
INUNDATION  
HAZARDS DIMINISHES  
INVESTOR  
CONFIDENCE TO  
DEVELOP

**\$1B**  
WORTH OF  
ASSETS ARE AT  
RISK LONG TERM

**\$408M**  
WORTH OF  
ASSETS ARE  
CURRENTLY AT  
RISK

### INUNDATION RISK IN THAMES

	% at risk in 2020 1% AEP	% at risk 0.5 SLR	% at risk 1.0 SLR
Commercial Zone	42%	77%	84%
Light Industrial Zone	45%	54%	83%
Industrial Zone	0%	0%	53%
Extra Density Residential Zone	37%	58%	71%
Residential Zone	7%	12%	22%

1% AEP = 1 in 100 year storm event  
SLR = Sea level rise

#### 2120 Coastal Inundation Risk Rating








- Extreme
- Major
- Moderate
- Minor
- Insignificant









# KEY SPATIAL MOVES

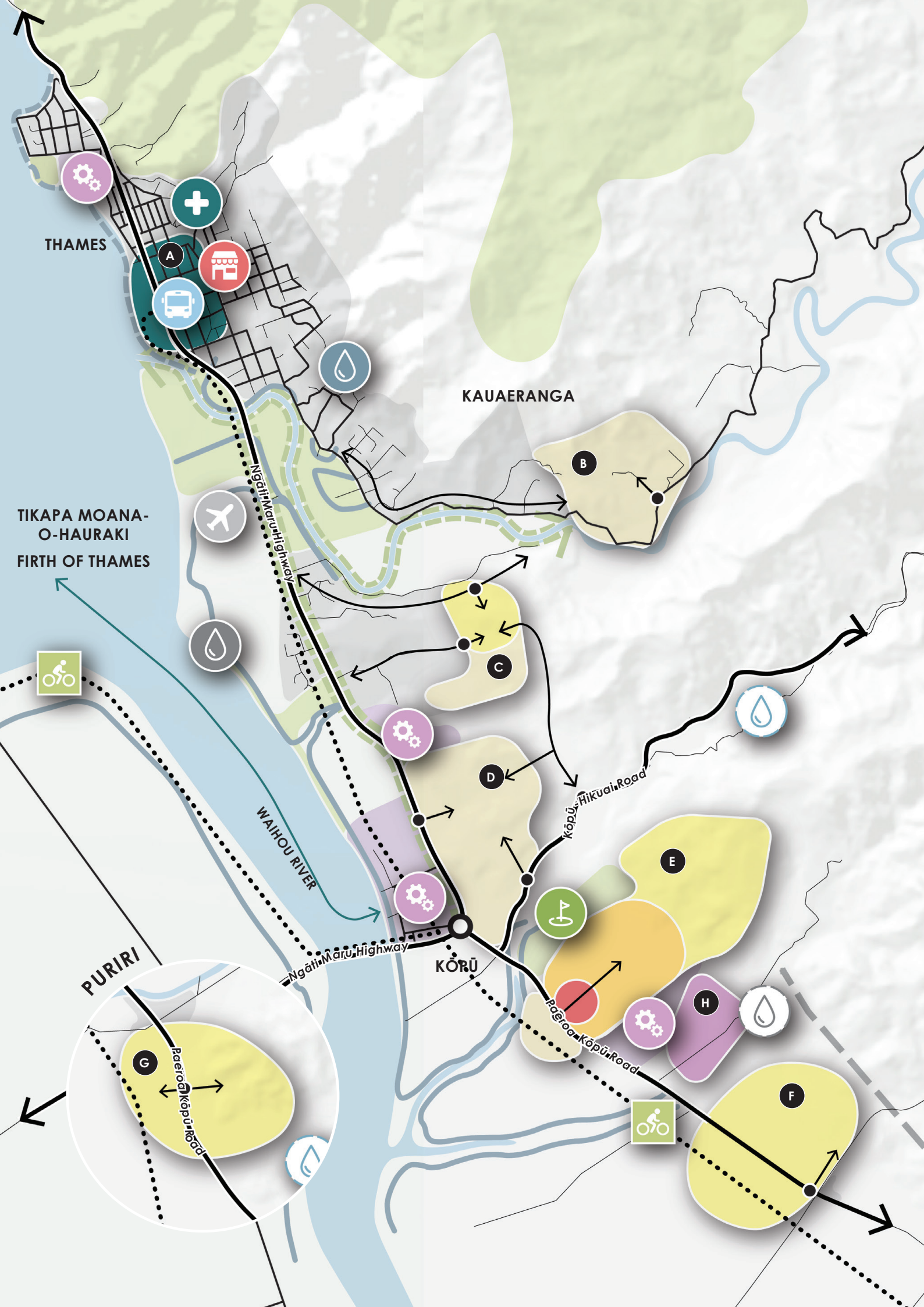
## GROWTH AREAS

- A** INTENSIFY, CONSOLIDATE & UPGRADE EXISTING TOWN CENTRE - Generate investor confidence and community pride in the central business district, provide a planning framework that anticipates typical town centre commercial activity (including short term accommodation) and medium rise development (3 – 6 levels), protect heritage.
- B** DEVELOP ALONG NORTHERN SIDE OF KAUAERANGA RIVER - Look to extend rural residential and lifestyle living choices further into the valley.
- C** DEVELOP TOTARA VALLEY - Standard density to rest of the valley in line with the direction set in the Kōpū to Thames structure plan. Retain natural gully system.
- D** DEVELOP SOUTHWARD - Additional residential growth cells worth investigating on hanging terrace above SH 25.
- E** DEVELOP SOUTHWARD - Large land parcel suitable for mixed density residential and commercial development.
- F** FUTURE GROWTH CELL AT MATATOKI - Medium to long term housing land option.
- G** FUTURE GROWTH CELL AT PURIRI - Medium to long term housing land option.
- H** Build on existing industrial node by creating new land for employment up Warahoe Road.

## LEGEND

-  Existing Thames Township
-  Convenience Commercial
-  Medium Density Housing
-  Low Density Residential
-  Large Lot / Rural Residential
-  Industrial Land
-  Existing Wastewater Treatment Plant
-  Existing Water Treatment Plant
-  Potential Wastewater Treatment Plant
-  Potential Water Treatment Plant

-  Industrial jobs
-  Hospital
-  Shops and Town Centre
-  Thames Golf Club
-  Rail Trail
-  Public Transport Hub
-  Sea freight and Marine Servicing connection
-  National Grid





# HOUSING TYPOLOGIES

## MIXED DENSITY TOWN CENTRE

<b>TYPICAL HOUSING TYPES</b>	Low rise apartments
<b>TYPICAL HOUSING HEIGHTS</b>	3-6 storeys



## MEDIUM DENSITY RESIDENTIAL

<b>DENSITY</b>	30 DW / HA
<b>TYPICAL HOUSING TYPES</b>	Semi attached terraced houses, attached terraced houses, low rise apartments
<b>TYPICAL HOUSING HEIGHTS</b>	2 - 3 storeys
<b>TYPICAL SECTION SIZES</b>	200 - 350 sqm



## LOW DENSITY RESIDENTIAL

<b>DENSITY</b>	15-20 DW / HA
<b>TYPICAL HOUSING TYPES</b>	Detached houses Villa units
<b>TYPICAL HOUSING HEIGHTS</b>	1 - 2 storeys
<b>TYPICAL SECTION SIZES</b>	400-600 sqm



## LARGE LOT RESIDENTIAL

<b>DENSITY</b>	3-5 DW / HA
<b>TYPICAL HOUSING TYPES</b>	Detached houses on a large section
<b>TYPICAL HOUSING HEIGHTS</b>	1-2 storeys Predominately single storey houses
<b>TYPICAL SECTION SIZES</b>	2,500 - 4,000 sqm



## RURAL RESIDENTIAL

<b>DENSITY</b>	1 DW / HA
<b>TYPICAL HOUSING TYPES</b>	Detached houses on a large section
<b>TYPICAL HOUSING HEIGHTS</b>	1-2 storeys Predominately single storey houses
<b>TYPICAL SECTION SIZES</b>	10,000 sqm



# CHALLENGES

Thames' unique environment creates constraints and challenges to meeting the growth needs of our district. Understanding these constraints helps identify the areas most suitable for greenfield development.

## CONSTRAINTS

### **Highly Constrained Land**

This land is highly constrained meaning that development is limited.

Constraints within this land include hazards such as flooding and coastal inundation, land that has a slope greater than 15 degrees, covenants, public conservation areas, and landscape features such as outstanding natural landscapes and features, significant natural areas, high natural character within coastal environments, significant indigenous forest areas and high voltage power lines.

### **Moderately Constrained Land (Developable with Mitigation)**

This land is moderately constrained, meaning that development is possible with mitigation.

Constraints within this land include land that has a slope between 7 and 15 degrees and landscape features such as coastal environments and amenity landscapes.

### **Un-Constrained Land (Developable)**

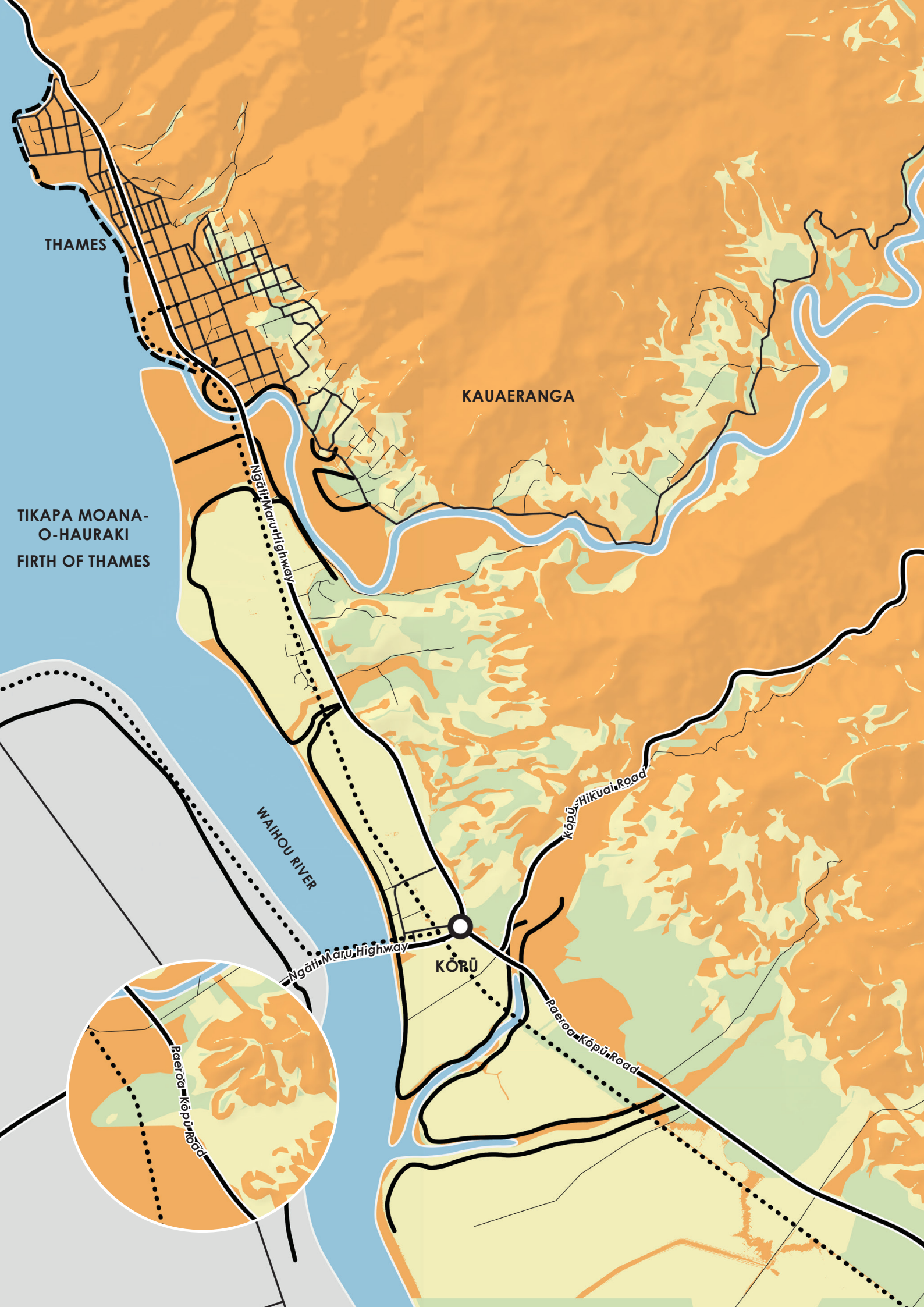
This land is un-constrained, and has the most development potential. The Spatial Plan should locate growth areas within these areas.

### **Land outside study area**

 Existing WRC Stop Banks

 Improve Coastal Protection





THAMES

TIKAPA MOANA-  
O-HAURAKI  
FIRTH OF THAMES

KAUAERANGA

WAIHOU RIVER

Ngāti Maru Highway

KŌRŪ

Kōpū Hikua Road

Paeroa Kōpū Road

Paeroa Kōpū Road

# CHALLENGES

## CONSTRAINTS



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### Moderately Constrained Land (Developable with Mitigation)

This land is moderately constrained, meaning that development is possible with mitigation.



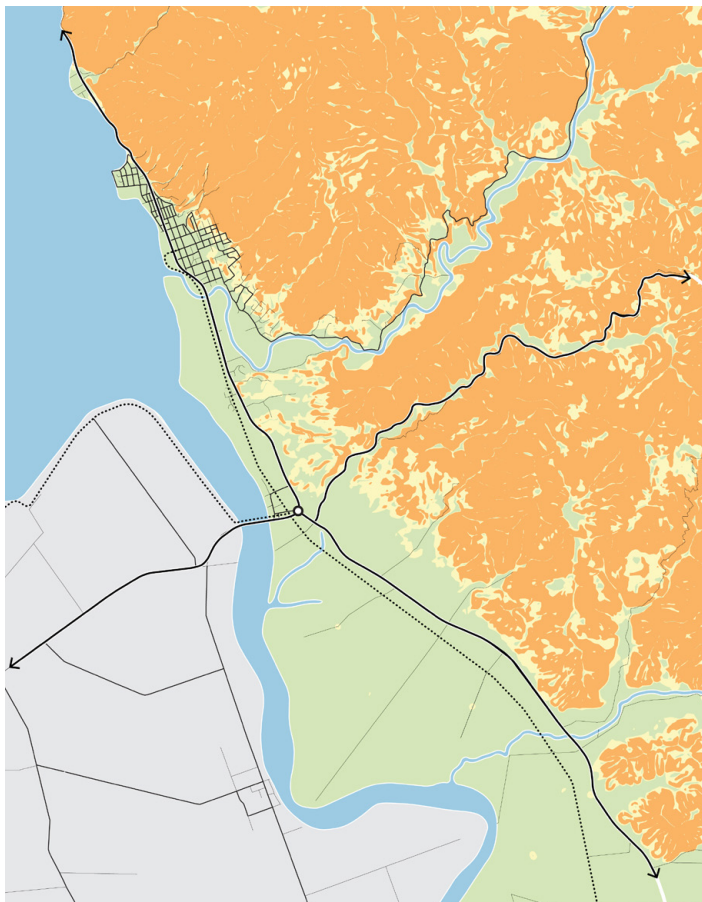
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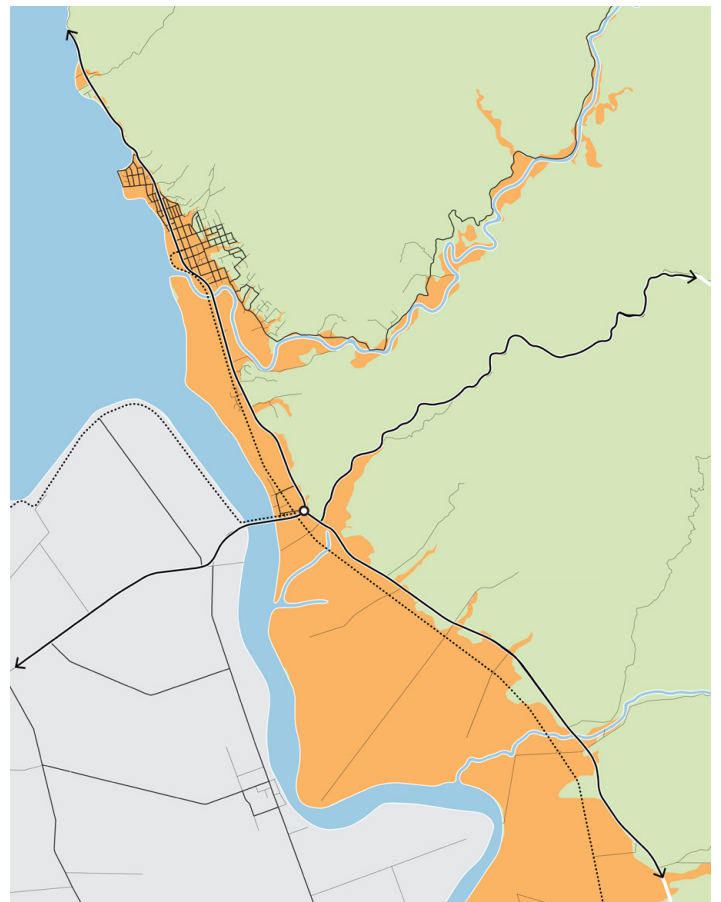


### Land outside study area

## SLOPE

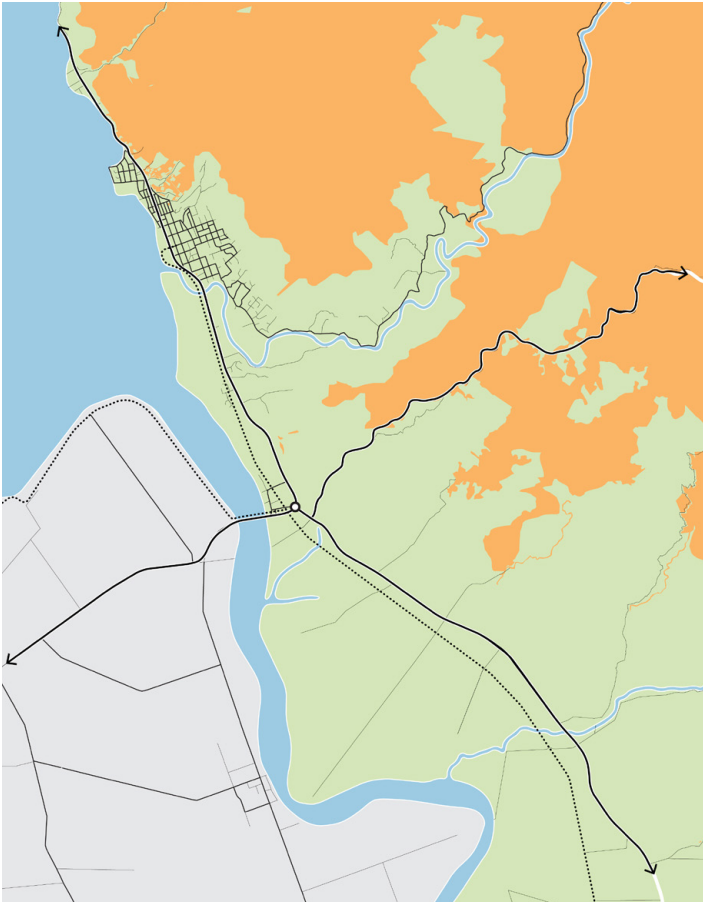


## FLOODING





**LANDSCAPE CONSTRAINTS**



**PRODUCTIVE LAND**



# SHORELINE MANAGEMENT PLAN

The Shoreline Management Plan has investigated the present and future risk of coastal inundation for the 400km of coastline of the district and considered how that risk could be managed for our communities. The considered options range from soft solutions such as wetland regeneration, to hard solutions such as stop banks, rock walls or partial managed retreat.

How do you manage the risk with uncertainty?

Community-led coastal panels have used dynamic adaptive planning pathways as a way of helping make decisions as conditions change. We have a pretty good idea of the impacts on our coastlines in the near term, but there is uncertainty on the rate of sea level rise in the medium and long term. The adaptive planning pathways in the coastal adaptation plans use sea level rise as the trigger to inform what decisions and actions are necessary.

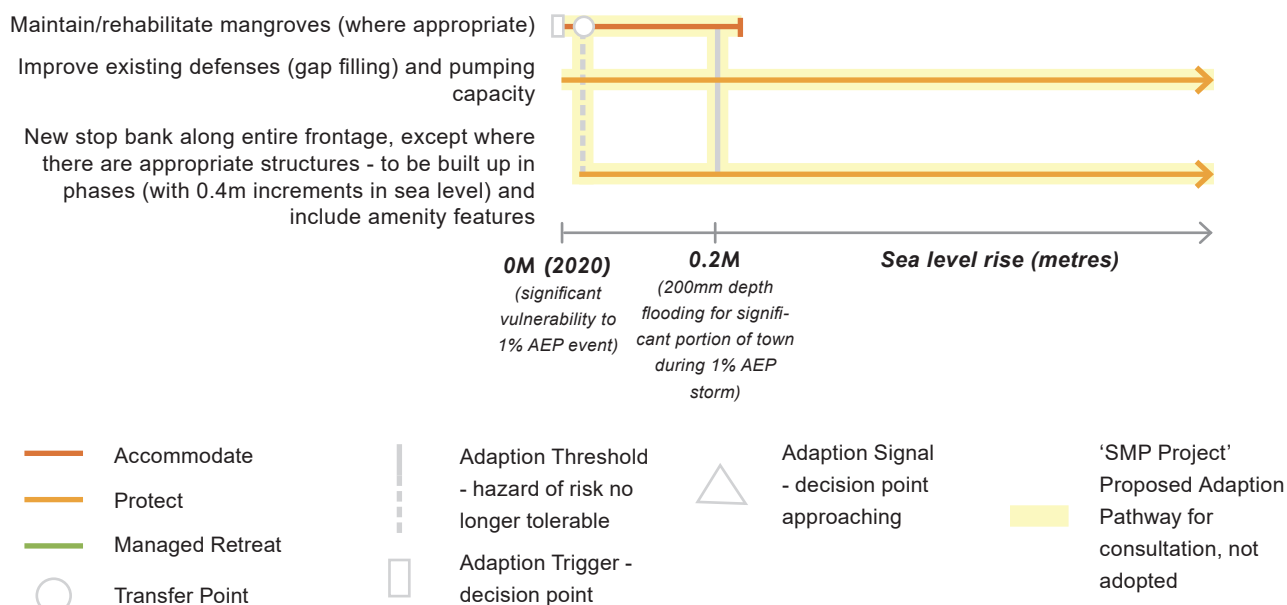
Influence on future land use planning

The Thames and surrounds Spatial Plan takes a balanced approach to managing risk from climate change by planning future greenfield residential and industrial growth outside of 100+ year hazard areas while protecting and enhancing Thames' vibrant town centre and existing employment areas.

The following summaries are taken from Coastal Adaptation Plans adopted by Council in September 2022. The plan will be reviewed every 10 years and may be assessed on a site specific basis as required. For the latest information on the Shoreline Management Plan visit [www.tcdc.govt.nz/smp](http://www.tcdc.govt.nz/smp)

Thames Main

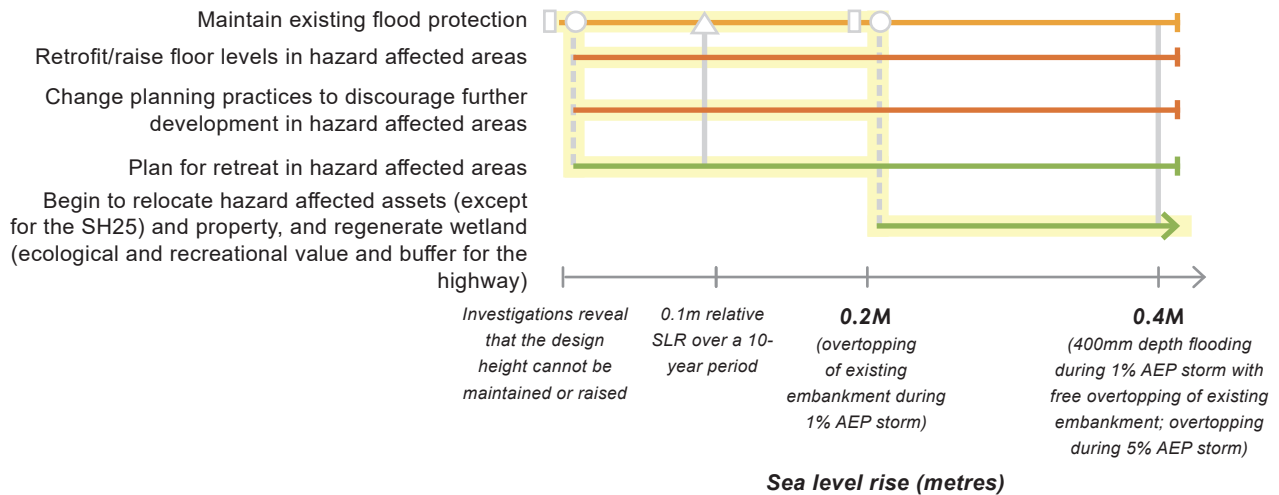
The strategy advocated for Thames over the 100-year time frame of the project is to 'Protect' the estimated near \$1 billion of assets at risk. The hazard exposure mapping indicates that parts of Thames are vulnerable to inundation in a 1 in 20-year event. Given this, the trigger for adaptation is considered to have been met already. The action proposed is to improve the existing defences and plan to construct a new stop bank along the entire coastal frontage in the short term. This can be built up in phases but should be designed from the outset to provide protection against 1.2m of relative sea level rise and a 1% AEP event. Retain and enhance thriving town centre.





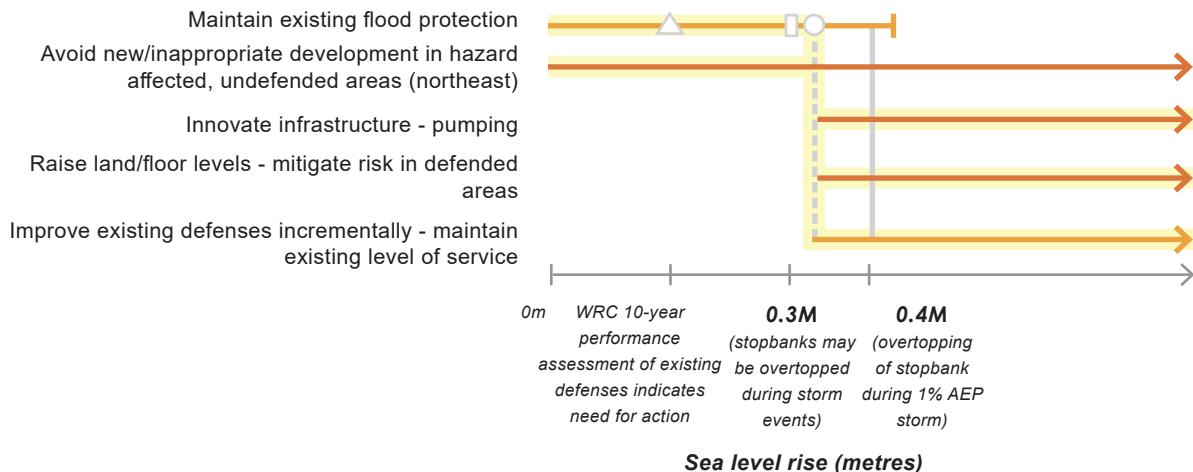
## Moanataiari

Sea level rise, subsidence, rising groundwater, and contamination create an environment where the residual risk/risk to life associated with the existing (or enhanced) defences being overtopped in a storm event will be significant. Vulnerability is high and adaptive capacity is low. Consequently, ‘managed retreat’ is advocated as the appropriate adaptation strategy in the medium to long term (and potentially sooner for those properties closest to the sea). In the short term, the existing flood protection and pumping capacity should be maintained and possibly improved to “buy time”. Infill discouraged.



## Totorā to Kōpū

The recommended strategy for this area is to maintain the existing flood protection to Waikato Regional Council's existing level of service. This means the height of the existing defences will need to be raised in advance of sea level rise. Improvements to stormwater management and pumping may be required to manage future flood hazards. Industrial infill encouraged.



## Thames Coast

The adaptation strategy advocated for Tapu, as for Tararū, Te Puru and Waiomu, is to maintain the current level of service of SH25. In the short term, the maintenance of the natural defences is advocated alongside a planning policy that restricts inappropriate development in the hazard zone. Once the natural protection has been lost to erosion, further intervention is advocated to “buy time”, through beach push-ups. However, in time, this is unlikely to provide sufficient defence and, with 0.8m of sea level rise, assets in the hazard zone could be affected by over 0.3m of water during 5% AEP, and larger, storm events. Therefore .7m of SLR has been selected as the trigger for retreat for parts Moanataiari, Tararū, Te Puru, Waiomu, Tapu, Te Mata, Waikawau. Limited growth potential.

# INFRASTRUCTURE

## WASTEWATER

Wastewater processing capacity is the most critical constraint to be addressed to ensure additional capacity is provided for growth. Upgrades to the existing WWTP will be required to enable growth in the short-term until a new WWTP and disposal site can be implemented. There is uncertainty around the oxidation pond's ability to operate within total nitrogen and total phosphorous consent limit constraints, but the latest information suggests that there may be capacity for around 450 additional dwellings.

With increasing risk from sea-level rise, difficult site conditions and trends toward land disposal, this means that long-term the current WWTP site is unlikely to be retained. It is therefore proposed that any new WWTP should be consented and designed to potentially cater for all wastewater from in and around Thames.

## WATER SUPPLY

By adding storage to the Thames WTP, to deal with peak demands, there is estimated capacity for around 1,400 additional dwellings. A further 1,000+ additional dwellings will be available from the new Thames South Water Supply upgrade. Connecting the Thames water supply to the improved Thames South Supply will deliver infrastructure through the growth corridor and improve network resilience.

However, long-term it is expected that future water takes will be reduced, by the consenting authority, meaning that an additional water source will be required. It is therefore proposed that in the future the two existing water sources from the Kauaeranga River catchment and the Thames South water takes (Matatoki, Apakura and Omahu catchments) are supplemented by a third water source. A possible location for this third water source is from the Kirikiri Stream catchment.

## TRANSPORTATION

To support growth public transport services will be improved within Thames, between the Coromandel and Hauraki, and connecting to Auckland and Hamilton. New intersections and significant road improvements will be required to provide access into the growth areas of Matatoki North, Totara Valley, Kauaeranga Valley and Kopu. TCDC will need to work with developers and Waka Kotahi to plan, fund and construct these improvements. Most of the internal roads will be provided by developers but a new collector road linking Kopu and Totara Valley, as proposed in the 2010 Thames to Kopu Structure Plan, that will also require TCDC investment. New shared walking and cycling paths will connect growth nodes to employment, education and the town centre along the Hauraki Rail Trail.

## SOCIAL INFRASTRUCTURE

Council will work with Iwi, the Ministry of Education, Health New Zealand, the Maori Health Authority and the local community and social sectors to ensure the wellbeing needs of a growing community are met. There is existing capacity in the education sector for short term growth, however in the medium to long term a new primary school may be required at Matatoki North.



## KEY INFRASTRUCTURE MOVES:



### SHORT TERM

- Add water supply storage to the Thames WTP
- Increase wastewater processing capacity at the Thames WWTP
- Extensions into:
  - Matatoki North
  - Totara Valley
- New daily public bus connection to Hamilton.



### MEDIUM TERM

- New WWTP (South of Kopu-Hikuai Road)
- New water source and WTP (Potentially from Kirikiri Catchment)
- Extensions into:
  - Kopu
- Connect Thames water supply through Matatoki to Thames South supply.
- Sub regional public transport hub



### LONG TERM

- Possibly decommission existing Thames WWTP

# STAGING AND SEQUENCING

With limited additional capacity in existing water and wastewater treatment plants the staging and sequencing will be dependent on the implementation of the following key infrastructure moves. Depending on the speed of development there may need to be short-term servicing options put in place before a more sustainable long-term solution becomes available. For example, immediate connections to the Thames water supply may be supplied in the future from the new Thames South water supply or the proposed Kirikiri water supply.

## STAGING



### SHORT TERM

0-10 years



### MEDIUM TERM

10-20 years



Industrial growth



### LONG TERM

20-50 years



Existing wastewater treatment plant



Existing Water Treatment Plant



Potential wastewater treatment plant

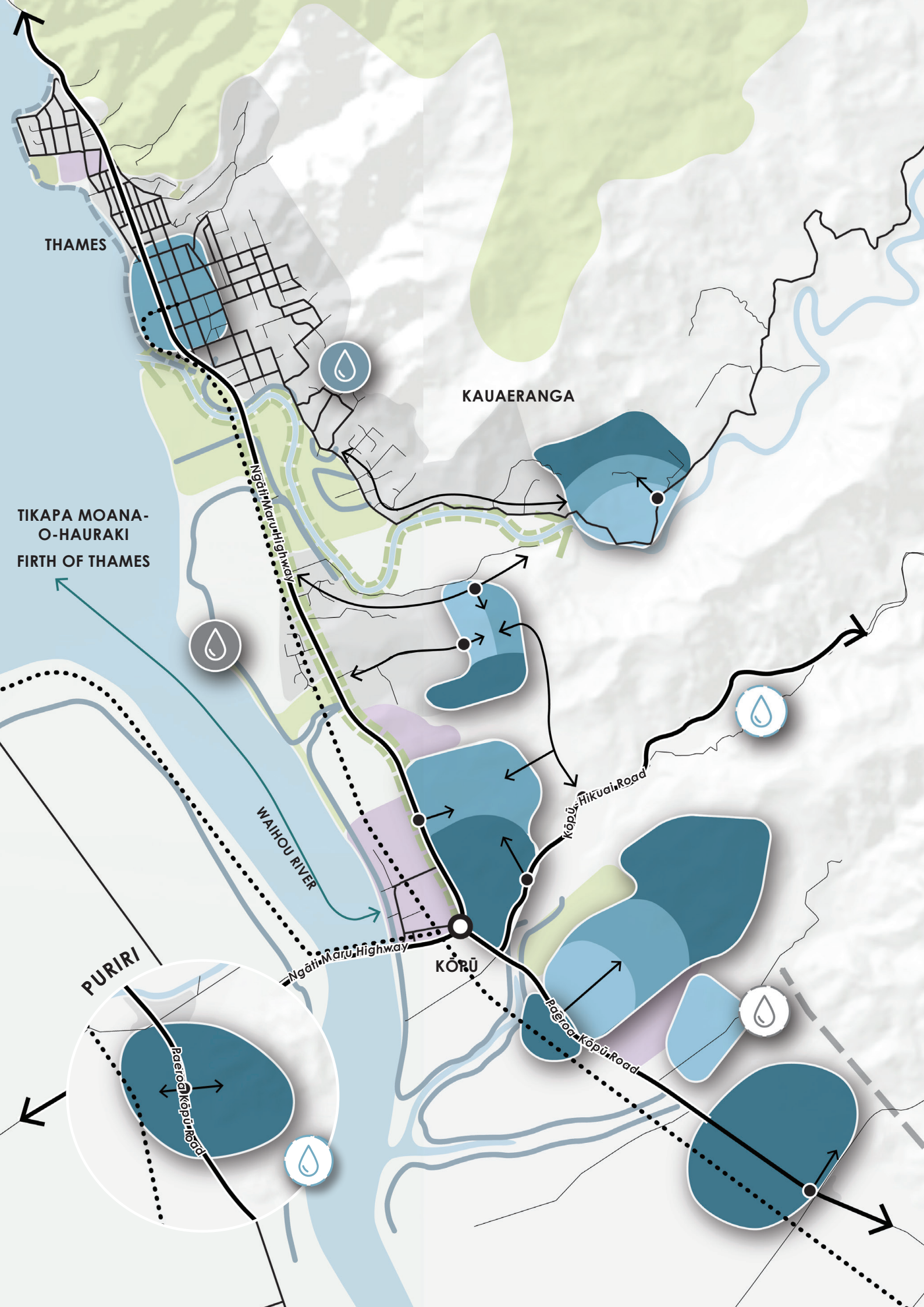


Potential water treatment plant



National Grid





THAMES

KAUAERANGA

TIKAPA MOANA-  
O-HAURAKI  
FIRTH OF THAMES

WAIHOU RIVER

PURIRI

KŌRŪ

Ngāti Maru Highway

Kōpū Hikuai Road

Ngāti Maru Highway

Rāroa Kōpū Road

Rāroa Kōpū Road



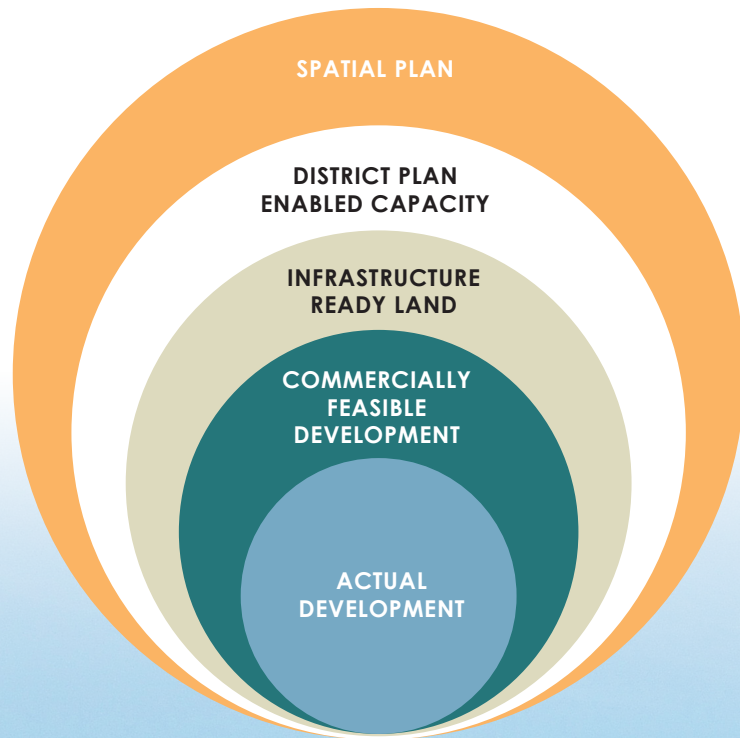
# NEXT STEPS

1. Co-develop an implementation program in partnership with Iwi, Waikato Regional Council, Waka Kotahi, Kainga Ora, Transpower and other key partners so that it is clear what role each stakeholder plays over time.

2. Plan, fund and implement required changes to the District Plan.

3. Conduct a detailed infrastructure needs assessment so decisions can be made on how those projects are prioritized and funded.

To learn more about the Thames and Surrounds Spatial Plan visit: <https://www.tcdc.govt.nz/yourthamestomorrow>





## #4 Thames P&R Terms of Reference

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**TO** Thames Protection & Resilience Project Governance Group  
**FROM** SMPP Project Team  
**DATE** 14 February 2024

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### 1 Purpose of report

To provide the Thames Protection & Resilience (P&R) Project Governance Group with draft Terms of Reference (TOR) for review and adoption.

To endorse the proposed Community Representative nominations for the Project Team.

### 2 Summary

Attachment A provides the Draft Thames P&R Project Governance Group TOR for consideration.

The Project Governance Group includes the Mayor of Thames Coromandel District Council (TCDC) and Chair of Ngāti Maru, plus up to three elected representatives each from Ngāti Maru, TCDC and Waikato Regional Council (WRC). Members can nominate alternatives.

The Governance Group will be supported by a Project Team comprised of senior officers from TCDC, WRC, two members of the public and other key stakeholders by invitation (initial consideration being given to the Thames Community Board and the Thames Coastal Panel). It will be chaired by TCDC's Project Manager and supported by the design/resilience consultants, a mātauranga Māori advisor and planning advisors.

Community representatives' nominations to the Project Team are to be discussed during the meeting.

The Thames P&R Project Governance Group will make recommendations to TCDC on the implementation of the project.


### 3 Suggested resolution(s)

That the Thames P&R Project Governance Group:

1. Receives the 'Thames P&R Terms of Reference' report dated 14 February 2024.
2. Adopts the Thames P&R Terms of Reference.
3. Endorses the community representative nominations for the Project Team.

### References – Tabled / Agenda attachments

1. Project Team Structure to be tabled/presented.
2. Agenda Attachment A – Draft Thames Protection & Resilience Project Governance Group Terms of Reference (February 2024).

  <b>SMPP Project Governance</b>	<b>Authorising Body</b>	Council
	<b>Status</b>	Project Governance
	<b>Title</b>	DRAFT: Thames Protection & Resilience Project Governance Group Terms of Reference (TOR)
	<b>Approval Date</b>	14 February 2024
	<b>Responsible Officer</b>	Chief Executive

## Purpose

To provide governance and oversight of the planning, co-ordination, and delivery of the Thames Protection & Resilience (P&R) Project.

## Membership

The Mayor of Thames Coromandel District Council (TCDC) and the Chair of Ngāti Maru, plus up to three (3) elected representatives each from Ngāti Maru, TCDC and Waikato Regional Council (WRC).

The Thames P&R Project Governance Group is to be chaired by the TCDC Mayor.

For the TCDC and WRC elected representatives, this will not affect their allocation of remuneration. TCDC will be responsible for remuneration of the Ngāti Maru members, if required, in accordance with relevant Council policies and guidelines.

## Alternates

All members may exercise the right to nominate alternates.

## Quorum

Four (4), which can include nominated alternates. The quorum must include at least one representative or nominated alternate from both TCDC and Ngāti Maru.

## Frequency of meetings

Quarterly or as required, to be approved by the Chair.

## Duration and ability to extend

The duration of the Thames P&R Project and associated governance is anticipated to be 12 months. This may be extended and/or the scope of activity altered by agreement with Council.

## Reports to

TCDC, by providing minutes from each meeting.

## Scope of activity

- To provide governance to and oversight of the Thames P&R Project.
- To provide oversight of the Thames Spatial Planning project and connect the two initiatives.
- To review the proposed Coastal Protection and Fluvial Flood Management concept designs for Thames (their pros and cons) and consider the outputs from the modelling investigations to inform the designs.



- To consider the phasing of Coastal Protection for Thames (vis-à-vis an affordable short-term option with a lower standard of protection (sufficient to avoid insurance retreat) and a longer-term option with a higher standard of protection).
- To review and test the cost estimates.
- To provide recommendations to Council.
- To recommend and advocate for the advancement of the Thames P&R Project to other agencies, where relevant.

## **Exclusions**

- Significant updates to the adopted Coastal Adaptation Pathway for Thames that would alter the strategy, adaptation pathway, thresholds, triggers, or signals, and/or their intent, are excluded from the project.

## **Associated roles**

- TCDC Project Sponsor (Operations General Manager) to attend Governance meetings and approve reports.
- A Project Team (PT) comprising senior officers from TCDC, WRC, two (2) members of the public and other key stakeholders by invitation. It will be chaired by TCDC's Project Manager and supported by the design/resilience consultants, a mātauranga Māori advisor and planning advisors. The PT has responsibility for providing technical support and strategic guidance to the Thames P&R Project. The PT will meet monthly.
- A Thames P&R Project Office, comprising TCDC and WRC staff and consultants, to provide secretariat and technical support to the PT.

## **Power to act**

The Thames P&R Project Governance Group has the power to provide direction to the Thames P&R Project.

## **Power to recommend to Council**

The Thames P&R Project Governance Group will make recommendations to TCDC on the implementation of the project.

The Thames P&R Project Governance Group will promote the recommendations of the project to other relevant parties (such as the Waka Kotahi New Zealand Transport Agency and the Department of Conservation).

## **Delegation of powers**

The Thames P&R Project Governance Group has no power to sub-delegate powers that have been delegated.

## **Limits on authority**

The Thames P&R Project Governance Group's "power to act" pursuant to these delegations is subject to the Local Government Act 2002.

**TO** The Thames Protection & Resilience Project Governance Group  
**FROM** SMPP Project Team  
**DATE** 14 February 2024

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## **1 Purpose of report**

To provide the Thames Protection & Resilience (P&R) Project Governance Group with a Draft Project Plan – a programme for the work.

## **2 Summary**

Attachment A provides an excel spreadsheet that maps key dates for project events (e.g., a site visit), deliverables and meetings. It also indicates the agenda content and information required for key meetings.

Linked deliverables include the Concept Design, integrated modelling and mapping outputs, the draft Business Case for funds, and the Thames Spatial Plan.

The aspiration is for the design to be adopted by Council in September 2024.

## **3 Suggested resolution(s)**

That the Thames P&R Project Governance Group:

1. Receive the ‘Thames P&R Project Plan’ report dated 14 February 2024.
2. Endorse the programme, while recognising that exact timings are likely to change throughout the process (the programme will remain live).

## **Reference – Agenda attachments**

1. Attachment A – Project Plan – Year 1 (2024) - Rev 5

**TO** The Thames Protection & Resilience Project Governance Group  
**FROM** SMPP Project Team  
**DATE** 14 February 2024

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## 1 Purpose of report

To undertake a stakeholder mapping exercise with the Thames Protection & Resilience (P&R) Project Governance Group.

## 2 Summary

The figure included below provides a proposed structure for a stakeholder mapping exercise to be undertaken for the Thames P&R Project.

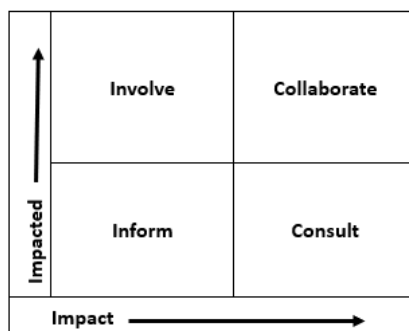
The session will be initiated by the consideration of key design principles for the protection of Thames. The group will then be split into four subgroups to consider relevant stakeholders for each of the stakeholder groupings identified. Finally, the identified stakeholder will be classified based on impact and influence (in line with the IAP2 Public Participation Spectrum).

### Purpose

Design principles – to reduce the flooding risk to Thames:

- Default structure: bund
- Protect Wai tapu and the environment
- Close to the coast but no reclamation
- Space for storm water attenuation
- Cost optimisation

### Stakeholder Mapping



IAP2 Public Participation Spectrum

### Stakeholder Groups

- Private sector / businesses
- Iwi & other distinct interests
- Community / Community Groups
- Government & Agencies

## 3 Suggested resolution

That the Thames P&R Project Governance Group:

1. Receive the 'Thames P&R Stakeholder Mapping and Design Principles' report dated 14 February 2024.
2. Endorse the outcomes of the Thames P&R stakeholder mapping exercise to inform community engagement.



**Reference – Agenda attachments**

1. None