

Thames-Coromandel District Council Kopu Landing Site Upgrade

Draft Feasibility Report

November 2018



rationale >

IMPROVING INFRASTRUCTURE OUTCOMES

Document Title:

Thames-Coromandel Kopu Feasibility Report

Prepared for:

THAMES-COROMANDEL DISTRICT COUNCIL

Quality Assurance Statement

Rationale Limited
5 Arrow Lane
PO Box 226

Arrowtown 9351

Phone: +64 3 442 1156

Project Manager: Ben Smith
Prepared by: Ben Smith
Reviewed by: Edward Guy, Laurna White, Tom Lucas and Colleen Litchfield
Approved for issue by: Edward Guy
Job number: J000895

Document Control History

Rev No.	Date	Revision Details	Prepared by	Reviewed by	Approved by
1.1-1.3	Nov 2018	First Drafts for review	BS	EG	EG
1.4-1.6	Nov 2018	Client draft updates	BS	CL, LW, TL	EG

Current Version

Rev No.	Date	Revision Details	Prepared by	Reviewed by	Approved by
1.7	Nov 2018	Revised draft	ERG	LW, TL	EG

Contents

Executive Summary	3
1 Introduction	4
1.1 Purpose	4
1.2 Scope	4
1.3 Areas of focus and influence	4
2 Situational context.....	6
2.1 Thames-Coromandel District.....	6
2.2 Organisational Context	8
2.3 Kopu background	8
2.4 Thames-Coromandel Marine Facilities.....	9
2.5 Marine farming in the Coromandel	9
2.6 Aquaculture in the Hauraki Gulf Marine Park	10
3 How the current Kopu Landing Site works today	12
3.1 Current uses.....	12
3.2 Current constraints	12
3.3 History of Kopu Landing Site investigations.....	13
4 Assessing the opportunity.....	15
4.1 Assessment against feasibility funding criteria	15
4.2 Risks and dependencies.....	27
5 Understanding the issues, problems and benefits	27
5.1 Feasibility engagement	27
5.2 The current challenges and opportunities	28
5.3 Investment Logic Mapping	29
6 Gap analysis and option development.....	31
6.1 Needs based criteria – business needs	31
6.2 Draft longlist options.....	31
6.3 Option evaluation	33
7 Gaps for further investigation	34
8 Strategic alignment of the project.....	35
9 Economic appraisal	37
10 Commercial strategies	39
10.1 Procurement approach for the DBC development.....	39
11 Financial analysis and strategies.....	39
11.1 Refining investment cost estimates	39
11.2 Funding mechanisms	40
12 Management Strategies	41
13 Proposed Process and Schedule	42
14 Stakeholder and Community Engagement.....	43

15 Conclusion and recommendations	43
Appendix 1: ILM Issues List	44
Appendix 2: Stakeholder feedback	46
Appendix 3: Multi-Criteria Analysis.....	48
Appendix 4: List of business around Whangarei Marine area	49
Appendix 5: Whangarei Case Study Article	51
Appendix 6: Operative District Plan Zones.....	53
Appendix 7: Kopu Decisions District Plan.....	54
Appendix 8: Kopu-Thames Structure Plan.....	55
Appendix 9: Gap analysis from stakeholder workshop	56
Appendix 10: Detailed assessment against scope criteria.....	59
Present and future demands for servicing of aquaculture and charter vessels	59
The potential for the creation of a multi-use marine facility (Aquaculture, Fishing, and Boating) with bulk storage and processing capabilities	62
The potential for the creation of marine-based research facilities.....	67
Assessing tourism and tourism water-based opportunities.	68

Executive Summary

This study tests the need for a business case to invest in the Kopu landing site.

The potential for investment in the Kopu landing site has been established through a number of investigations dating back to the early 2000's. There is a growing desire to convert the many studies into this opportunity into a real solution and real action. Waikato Regional Council and Thames-Coromandel District Council see the current alignment between national and regional policies, alongside stakeholder and industry interest, as an opportunity to finally make this a reality.

The current Kopu landing site includes several impediments constraining the growth in marine servicing, aquaculture, recreational/charter boating, research and water-based tourism. Investment in the Kopu landing site has potential to remove these impediments, with marine servicing appearing to be the highest priority.

This study builds on previous investigations through a high level, objective assessment of opportunities in targeted areas in addition to an initial outline and evaluation of potential investment options using the Better Business Case (BBC) methodology. Given the funding constraints for this study, there are a number of areas where more detailed analysis is required through a Detailed Business Case (DBC) to inform and refine the investment options.

Here is a summary of the findings:

- There is a strong case for investment in marine facilities to support marine servicing in Kopu. Due to growing aquaculture and recreational demand and rising pressures on marine servicing in Auckland, Kopu is well positioned to leverage a competitive advantage in marine servicing that can support job, business and industry growth.
- The development of Kopu as a multi-use marine facility has merit, but it needs further investigation to inform the investment timing and approach. It is unclear at this stage how much benefit will come from investing in bulk storage and processing facilities in Kopu in the short term, but further investigations will provide better detail. While aquaculture resilience is required in light of forecast growth and climate change pressures, bulk storage and processing facilities may be considered over a longer term once the core marine facilities are improved and Kopu becomes a more attractive and efficient marine servicing centre.
- On a similar note, investing in Kopu as a marine servicing precinct can act as an enabler for research, product development and tourism opportunities which could strengthen a case for investment in marine facilities.

Through this broad analysis, taking a closer look at this opportunity appears to be highly justified.

Therefore, this study has initiated analysis of investment options and delivery requirements that can be addressed in a DBC.

Through the development of a draft Investment Logic Map (ILM) and better business case gap analysis, seven theoretical options were developed across an investment range of \$20,000 to \$25 million. These options were evaluated against ILM benefits, risks and business needs and costs within a Multi-Criteria Analysis (MCA) tool.

The highest performing option proposed is to build a new slipway and at least a single berth pontoon or wharf at the Kopu Landing site, on top of a range of site improvement and industry coordination initiatives.

It is therefore recommended that a Detailed Business Case (DBC) be developed to fully understand the investment opportunities, clarify the benefits and outline a potential delivery plan. This DBC is estimated to cost \$300,000 and is proposed to be delivered by June 2019. The DBC aims to deliver an investment-ready solution for Kopu. Support from the Provincial Growth Fund may be sought, subject to this Feasibility Study being completed and approved.

1 Introduction

1.1 Purpose

To complete a feasibility study report to inform the potential upgrading of the current Kopu landing site.

1.2 Scope

This study was originally created to focus on these areas:

- Investigation of the present and future demands for servicing of aquaculture and charter vessels.
- Investigation of the potential for the creation of a multi-use marine facility (Aquaculture, fishing, and boating) with bulk storage and processing capabilities.
- Investigation of the potential for the creation of marine-based research facilities.
- Investigation of tourism and tourism water-based opportunities.

These areas are discussed on their merits, ahead of considering the broader situation, potential options and suggested next steps using the NZ Treasury Better Business Case (BBC) Framework. With this in mind this report aims to:

- Confirm whether there is a case for change and investment.
- Show alignment to relevant strategies.
- Profile the potential opportunities.
- Compare high level investment options to identify the preferred way forward.
- Identify information gaps and outline how further investigations through a Detailed Business Case can address these.
- Outline recommended Commercial, Financial and Management Strategies to be developed through a Detailed Business Case.

1.3 Areas of focus and influence

The area of focus is the Kopu landing site and the surrounding business precinct, as shown below.



Figure 1: The current Kopu Landing Site – the area of focus

The study also considers a wider area of influence which takes in the Thames-Coromandel district and the marine facilities and activities across the Hauraki Gulf. By applying the Spatial area captured in the Sea Change - Tai Timu Tai Pari - Hauraki Gulf Marine Spatial Plan and stretching south to Tauranga and north to Whangarei. Appropriate consideration can be given to the inter-related nature of the marine facilities and activities within this footprint, including the result of marine facility investments. Equally important is the strategic direction for the Waikato Region, particularly through the work of Te Waka, the Waikato Region Economic Development Agency (WREDA).



Figure 2: Proposed area of influence - the Hauraki Gulf Marine Park

2 Situational context

2.1 Thames-Coromandel District

Thames-Coromandel District is located in the Waikato Region and has four main towns of Thames, Coromandel Town, Whangamata and Whitianga along with many smaller coastal townships. The District covers the entire Coromandel Peninsula from Hikutaia in the south to Port Jackson in the north.

The Coromandel Peninsula is described as a place of outstanding natural beauty with a proud history. Its many advantages can be seen in the mountain ranges, white sand beaches, native forest and bush, as well as the Māori and early-European heritage evident in older towns and settlements. The climate and proximity to the population centres of Auckland and the Waikato has meant that holiday settlements have experienced periods of rapid growth. Over 30% of land is Department of Conservation estate, providing a backdrop to coastal areas along the east and west of the peninsula and a variety of recreational opportunities.

The population of Thames-Coromandel as at June 2016 was 28,400. The population is typical of other tourist areas where more than 50 percent of ratepayers reside outside of the District. Projections indicate low growth of permanent residents over the next ten years with gradual increases in some areas (Mercury Bay) and small declines in others (Thames, Tairua-Pauanui and Whangamata). This reflects an ageing population, a lower birth rate than death rate, and decreasing migration. The popularity of all areas as holiday destinations is projected to continue.

The main drivers of economic activity for the District (along with the secondary activities generating from them) are shown below:

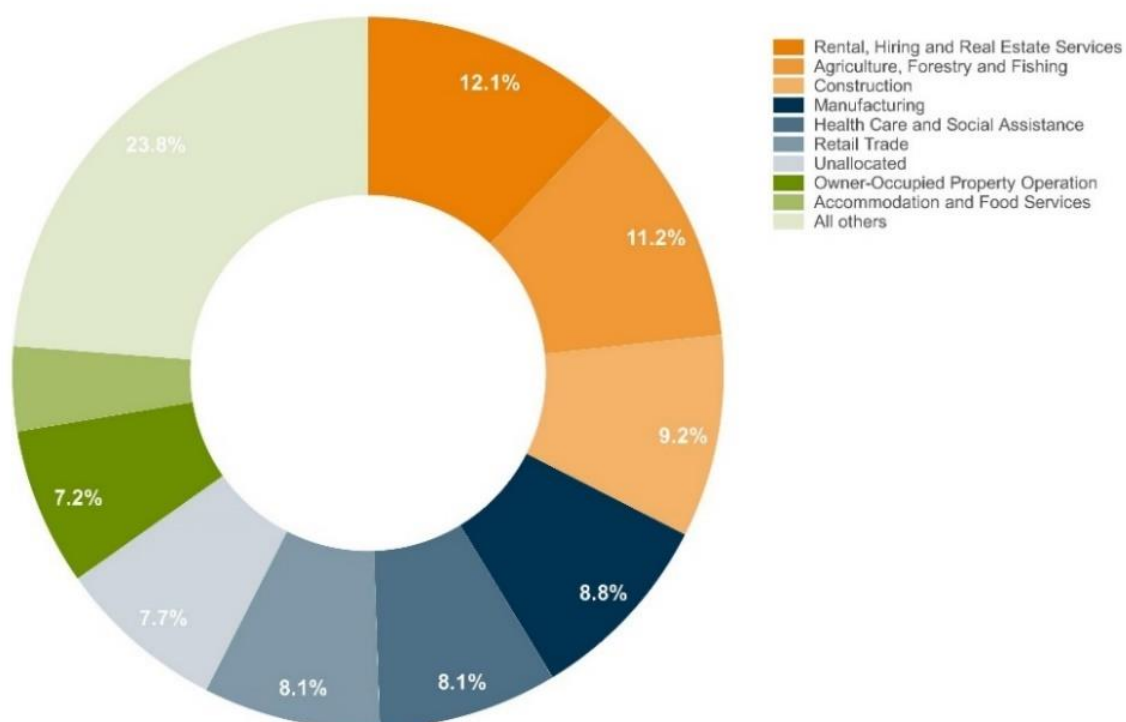


Figure 3: Infometrics industry breakdown (contribution to GDP) for the district

2.1.1 Pare Hauraki Treaty settlement

On 2 August 2018, the Pare Hauraki Collective Redress Deed was signed in a ceremony at Parliament with the Crown represented by Treaty Negotiations Minister Andrew Little and Hauraki iwi. At the date of this feasibility study being submitted not all of the iwi of the Hauraki Collective have signed the deed. The Deed provides shared redress for the collective interests of the 12 iwi of the Hauraki Collective in the Hauraki region. It also provides certain redress which will then on-transfer to specific iwi to form part of their own Treaty settlements. The Deed includes both cultural redress and commercial redress. It does not include financial redress, which each of the 12 iwi of Hauraki will receive through their iwi-specific settlements.

Importantly, the Deed outlines specific requirements that relate to the Kopu landing site. The Deed provides for the establishment of the Waihou, Piako and Coromandel Catchment Authority (the WPCC Authority) to provide co-governance, oversight and direction for the management of the Coromandel, Waihou and Piako waterways. The WPCC Authority will comprise 14 members: 6 appointed by the Collective Cultural Entity; 1 appointed jointly by the governance entities for Raukawa, Ngāti Hauā and Ngāti Hinerangi; and 7 appointed by the Waikato Regional Council and the Thames-Coromandel, Hauraki, Matamata-Piako and South Waikato district councils.

The Treaty settlement is predicted to come into effect in the Hauraki-Coromandel area by 2020 and is likely to change the governance and management environment that is currently in place. It is important that TCDC looks at how it can proactively adapt to these changes and identify opportunities that improve the way the Council works with iwi. Through the collective settlement, the Crown will return to Pare Hauraki areas of land with significant spiritual and cultural importance and extensive commercial assets. This includes large state forest holdings, rental monies, and commercial land portfolios. Settlement will also provide iwi with key roles in co-governance and management of rivers and natural assets and resources.

Consideration of how TCDC might enable Maori economic development opportunities is a key aspect of the potential to improve the Kopu landing site. There is potential for the iwi of the Hauraki Collective to act on the potential to invest in the areas they take ownership of and this may bring significant opportunities to collaboratively uplift the district across a number of sectors, including aquaculture, marine servicing, research, and tourism.

2.2 Organisational Context

The Thames-Coromandel District Council (TCDC) is a Territorial Local Authority with the responsibility for local infrastructure, local public services, and performance of regulatory functions within the geographic area shown below.



Figure 4: Thames-Coromandel District

2.3 Kopu background

Kopu is a long-established business hub in the Coromandel and with the new Kopu bridge, provides much-improved links to the surrounding regions. Kopu acts as a gateway (Kaiwhenua) to the Coromandel and is centrally located to three major cities (Auckland, Hamilton and Tauranga), New Zealand's two busiest ports and Auckland international airport. Kopu is located at the junction of four principal travel routes and has good access to sea routes, as shown below in figure 5.

In recent years, Kopu has been the subject of much proactive planning and investment to capitalise on its strength as an industrial and business hub for the district and beyond. TCDC has worked hard with its partners to identify and plan for investment opportunities in Kopu.

The resulting zoning has seen Kopu well positioned to attract investment around industrial and light industrial purposes, including aquaculture and related businesses. The following plans have been completed in the last 10 years and they help to position Kopu as a potential Marine and Business precinct.

- Thames-Coromandel Proposed District Plan (Thames-Coromandel District Council, 2017)
- Kopu to Thames Structure Plan (Thames-Coromandel District Council, 2010)
- Coromandel Peninsula Blueprint (Thames-Coromandel District Council, Waikato Regional Council, Department of Conservation, Hauraki Whaanui, 2010)
- Thames Urban Development Strategy (Thames-Coromandel District Council, 2013).

The Operative District Plan Map below demonstrates enabling zoning for industrial and marine activities. See the appendices for more detailed versions of this map, the District Plan Decisions Map for the area and the 2010 Kopu to Thames Structure plan.

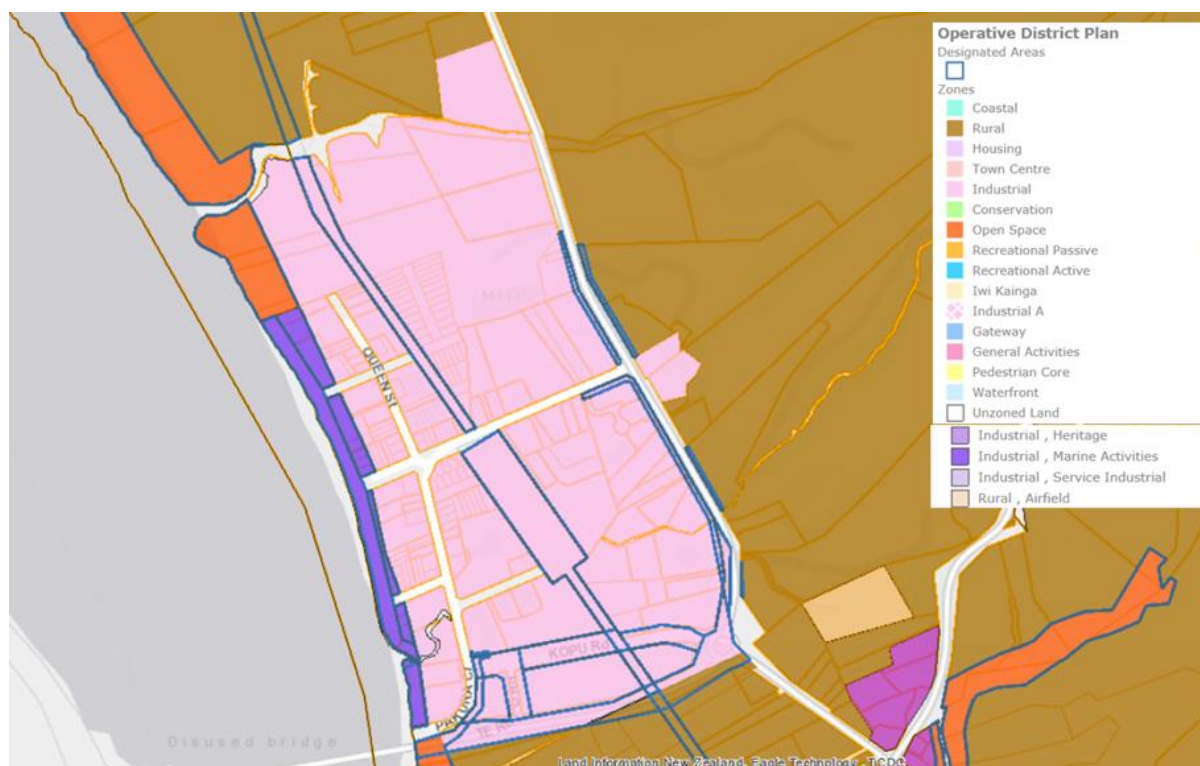


Figure 5: Thames-Coromandel Operative District Plan outline for Kopu

2.4 Thames-Coromandel Marine Facilities

As noted in the 2017 TCDC Marine and Harbour Facilities Strategy, Thames-Coromandel District has a diverse marine and harbour environment. With over 400 km of coastline Council provides a range of supporting coastal infrastructure. Locals and visitors are attracted to the recreational activities the coastal area provides - fishing, boating, diving, water sports, kayaking, shell fishing activity to name a few. A range of commercial operators are also operating around the west coast of the Coromandel Peninsula with aquaculture, ocean farming, commercial/charter fishing and water sport type activities. This strategy covers Council and community (privately owned and maintained) marine and harbour assets including boat ramps, wharves, docks and marinas. It also includes infrastructure and services that are directly related, such as roading and parking.

There are seven major wharves around the Coromandel Peninsula: Thames, Tairua, Te Kouma (Sugarloaf and Hannafords Wharves), Whitianga, Port Charles, Coromandel Town Wharf and Whangamata. Various charges for the use of these wharves are set by Community Boards under Council's Maritime Facilities Bylaw 2015. 23 boat ramps are available in the district for recreational use (the majority of which do not have all tide access.) Most of the smaller boat ramp facilities do not require a permit and are free for the public to use. Facilities including Sugarloaf, Purangi Reserve, Coromandel Town, Whitianga Wharf floating pontoon and Whangamata require a permit.

2.5 Marine farming in the Coromandel

Marine farming in the Coromandel area is mainly serviced via the Sugarloaf Wharf within the Coromandel Harbour and approximately 1,118 ha is farmed within the following areas;

- Rabbit to Kereta
- Waimaungo Point

- Barrier & East Coromandel
- Waiheke
- Firth, Wilson Bay.

The marine farming operations currently established in the Coromandel area produce approximately 25,000 tonne of harvest per annum. The Coromandel aquaculture industry is important from both a national and a regional perspective. The Coromandel is the second largest producer of mussels after Marlborough, which means that the income flows and job creation as a result of Coromandel aquaculture is important to the whole Waikato region – and also to NZ given the goal of meeting the Business Growth Agenda target of \$1 billion in aquaculture earnings by 2025. A 2017 report by NZIER showed that the Firth of Thames currently accounts for 30% of NZ's green shell mussel production, along with 24% of NZ Pacific oysters. The Coromandel aquaculture industry is worth \$73 million in exports, plus \$30 million in New Zealand retail sales per annum. The aquaculture industry is important to the Thames-Coromandel economy as it creates some 400 jobs directly, along with significant numbers of ancillary jobs in related industries such as ropes, buoy making, charter fishing boats, engineering, retail and culinary hospitality. The industry is also a significant generator of jobs and income for iwi, who collectively own large mounds of water space and are in joint ventures with major companies.

The Coromandel industry is set to continue growing, with the NZIER report estimating that once the already consented marine areas producing mussels and oysters come on-stream this will grow the industry's production by 50%. This growth is likely to be further stimulated by the emergence of finfish farms in the Firth, as well as potential new aquaculture areas identified through the Hauraki Gulf Marine Spatial Plan project. However, as the industry grows in size, there will be an increasing demand for vessel maintenance and associated services.

2.6 Aquaculture in the Hauraki Gulf Marine Park

Within the Hauraki Gulf Marine Park there are nearly 1500 hectares of consented mussel farm space, mainly within the Wilson Bay zone in the Firth of Thames, producing around 30,000 tonnes per year, accounting for over a quarter of national production. Production from the existing farms is predicted to double to 60,000 tonnes per year by 2025 based on improved productivity, development of consented farms within the Wilson Bay zone, and small extensions to existing farms outside the zone. There are 210 hectares of consented oyster farm space in the Hauraki Gulf Marine Park, accounting for nearly half of national production. Two thirds of the Hauraki Gulf Marine Park's oyster production occur in the Auckland region, with Mahurangi Harbour (108 ha of farms) being the centre of the industry.

There are currently no finfish farms in the Hauraki Gulf Marine Park. However, there is 90 hectares of space in the Wilson Bay zone (of which 18 hectares is Treaty settlement space) and 300 hectares of space in the Coromandel Marine Farming Zone (of which 60 hectares is Treaty settlement space).

Waikato Regional Council has granted Pare Hauraki Kaimoana authority to apply for resource consents to occupy 240 hectares of fin fish farming space in the Firth of Thames following a tender process. The space, known as the Coromandel Marine Farming Zone, is located about 10 kilometres offshore of Coromandel Town. Pare Hauraki Kaimoana propose farming kingfish in the space and the authorisation means they now have two years to prepare and submit an application for the necessary resource consents.

The Sea Change - Tai Timu Tai Pari - Hauraki Gulf Marine Spatial Plan provides a guide for the development of the Gulf and the role aquaculture plays in its future. The map below outlines current and future aquaculture activities in the Hauraki Gulf Marine Park as outlined in the Spatial Plan.

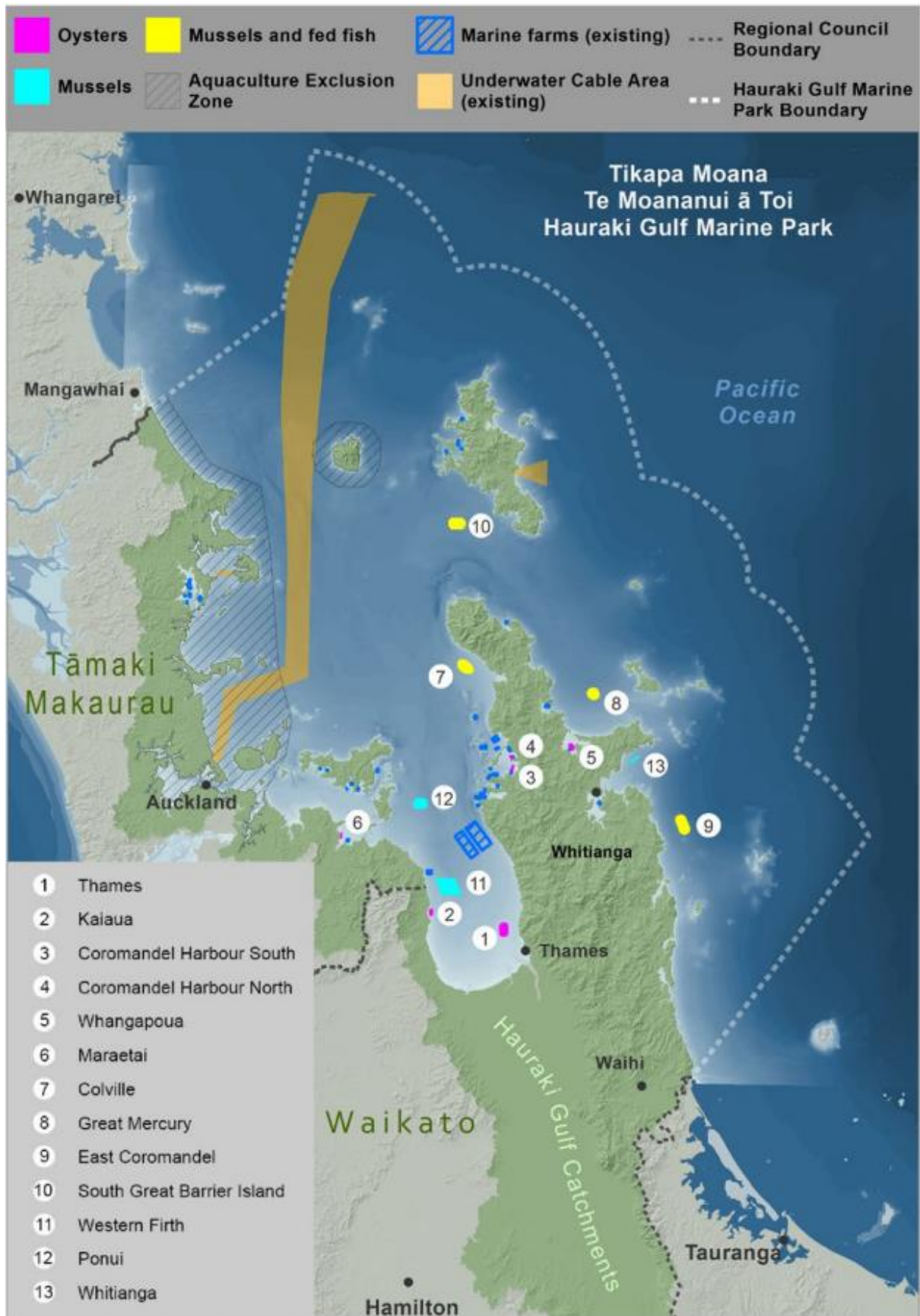


Figure 6: Current and future aquaculture activities in the Hauraki Gulf Marine Park as outlined in the Spatial Plan

3 How the current Kopu Landing Site works today

3.1 Current uses

In 2016, Beca completed a Kopu Boat Ramp Concept Development Study. This study used several workshops and investigations to understand the current use of the ramp, its challenges/constraints, potential future uses and development options. This Feasibility Report draws on the 2016 study as the use and opportunities remain largely the same, with the exception of Kopu Marine, a private commercial business progressing their operations to now extract vessels of up to 100 tonnes for servicing.



Figure 7: The current landing site ground level view

As listed in the 2016 Beca Report, the existing activities include a mix of commercial/ industrial and recreational activities:

- Haulout and launching of fixed keel yachts and launches by Kopu Engineering and Kopu Boat Yard. A tractor and purpose-built trailers are used for boat haulout.
- Unloading of sand and loading of armour rock to barges at the HG Leach loadout reclamation, and storage of sand and rock on the unpaved area adjacent to the boat ramp. The barging uses McCallum's 750 tonne barge, which has a maximum draught of 2.7m. It occurs a minimum of twice per month, for approximately 4 hours around high tide. The unpaved area is used for aggregate storage prior to and post each barging operation. Trucks access the site via Quay St, with increased truck movements immediately prior to and post barging.
- Launching and retrieval of the Coastguard vessel when other western Coromandel ramps are unavailable due to weather or tide conditions.
- Local recreational users e.g. fishing and duck shooting boats.

3.2 Current constraints

The site is constrained by a lack of marine and associated facilities that are required to support an attractive and efficient site, including:

- an unsealed and unprotected slipway
- no wharf, jetty or pontoon to allow vessel servicing in the water
- unsealed informal roads, inadequate signage and defined car parking areas

- inadequate lighting
- no security cameras
- no onsite toilet facilities
- informal interfaces with rail trail cycling traffic
- a lack of publicly available hardstand for boat storage
- poor appearance/public realm to support increased recreational. Charter and tourism use
- informal aggregate storage area
- potential for flooding, as noted in the 2016 Beca Kopu Land Site Concept Development Report.

The image below demonstrates the key aspects of the site. The fact that Kopu Marine and HG Leach have been operating reasonably well despite these constraints is a credit to their determination and ingenuity.



Figure 8: The current Kopu Landing site and associated operational sites

3.3 History of Kopu Landing Site investigations

The need for the investment in Kopu as a marine servicing precinct has been established through a number of investigations and reports dating back to the early 2000's. The list below demonstrates the breadth of studies that have investigated the merits of this area. In each case, valid drivers and opportunities have been presented, often with the need to do a bit more investigation to inform clear investment options and delivery steps.

- The Economic Contribution of Marine Farming in the Thames-Coromandel District 2017 - Zealand Institute of Economic Research (NZIER)
- The Waikato Regional Council Draft Regional Aquaculture Study
- Kopu Boat Ramp Concept Development (Beca, 2016)

- Economic impact of Coromandel aquaculture (Sapere) Hauraki-Coromandel Development Group 2011
- The Hauraki-Coromandel Development Group "Wharfing Infrastructure Options Report" report 2011
- Kopu Business Opportunities Project (2014 onwards)
- Kopu Development Concept Plan (Beca, 2014)
- Demographics and Options Analysis: Kopu Service Centre Development (JLL, 2014)
- Kopu to Thames Structure Plan (Beca, 2010)
- Proposed All Tide Wharf Facility at Kopu Scoping Study Report (Maunsell, for the Hauraki-Coromandel Development Group, 2005).

4 Assessing the opportunity

The merits of investment are outlined below using the four key report scope areas. The table below shows a snapshot summary in each area. The shadings have been applied to demonstrate the level of investment priority assigned to each area at this stage. In this sense, green is high, amber is medium, and orange is medium-low. More detail can be found in Appendix 12.

4.1 Assessment against feasibility funding criteria

Table 1: Assessment against scope criteria

Investigation area	Assessment	Investment Priority level
Present and future demands for servicing of aquaculture and charter vessels	<p>Current servicing levels and trends:</p> <p>Today marine servicing for vessels operating in the Coromandel can be completed in Kopu, Auckland, Whitianga and Tauranga. Minor servicing can be undertaken at Coromandel Harbour, but this is problematic due to the need to take the vessel out of service while relying on a small tidal window and only non-routine servicing can be done in this way. Auckland marine facilities are also under pressure due to increasing land value and the local cost of labour.</p> <p>Routine servicing is required annually for any vessel, every 12 months, and full vessel surveys are required every two years. Non-routine servicing needs to be completed off water, while routine can be completed on-water with the right facilities available, such as a wharf to tie up to. The Coromandel Harbour is also constrained by the lack of available local skills, scarcity of affordable housing and the distance required for specialists to travel from Auckland when required (the reliability of SH25 (which is the loop main link road around the Coromandel district) also impacts this).</p> <p>Motors and hydraulics are the big issues and they require highly skilled workers and good access to parts to complete this work efficiently. Through the work of Kopu Marine (which is part of Kopu Engineering), Kopu is managing a range of servicing requirements for vessels up to 100 tonnes today. Private use of Kopu facilities is significant and in August 2018, 20 of the last 26 boats serviced were private. Through a strong reputation, self-investment and development of specific capability, Kopu Marine is reaching its operational capacity while operating without adequate marine facilities (such as a proper slipway and a wharf). The growth in aquaculture that is forecast may double the number of barges and this demand will be beyond the capacity of Kopu Marine, or other service providers, without investment in improved facilities.</p> <p>Kopu Engineering (who are the primary user of the landing site today) are investing in their own capacity and capability</p>	High

Investigation area	Assessment	Investment Priority level
	<p>based on the demand they see, but they can only stretch their resources so far. They are already supporting a growing number of apprentices (10 this year) as they build their capability in the face of growing demand and an ongoing need to deliver high quality outputs.</p> <p>A recent update from Vaughan Austin of Kopu Marine has provided the following demand snapshot (see direct quotes below):</p> <ul style="list-style-type: none"> • The shed we have and smaller trailers has been in operation for nearly 20 years and would do approximately 6-10 boats a year depending on the extent of the work, some boats have occupied the shed for over a year. Our large capacity gear has only been in operation for 18 months. • This year we have ramped that up tripling the capacity, this year we are up to 35 haulouts in total, and demand is growing steadily. • The large trailer has done 14 commercial vessels since completion, most of these vessels will be back annually and some bi annually. • Then you have the emergency breakdowns that are unforeseen. At the moment I have 10 vessels on the list to come out before Christmas 2018 most of these are new customers. • We have only scratched the surface of the local commercial vessel fleet and are also getting constant calls from Auckland and further afield. I would think in another year the large trailer will be booked solid. <p>"As I said at the stakeholder meeting there is a lot of work that these vessels don't have to come out of the water for if we could tie them to an all tide wharf. Kopu Marine is steadily growing but all infrastructure costs have to be covered by Kopu Engineering and ourselves personally this has got to straining point with such big and expensive machinery and land value. As I see it the market potential is huge, but it takes a bit of time and you can only grow at a certain speed a very important part of this is training staff. A business like this requires very highly skilled people. More people will be trained as the Infrastructure in the area grows to accommodate more vessels and marine activity. An all tide wharf is the next step to increasing this marine activity".</p> <p>A common issue noted by marine operators in the area is the inefficiency of current arrangements, which involves completing partial servicing in the water within Coromandel Harbour or making a lengthy and inefficient trip to an alternative port. The quote below is taken from a recent the email from Rob Baldwin (of Marine Power Systems) to Vaughn Austen regarding the development of improved haul-out facilities at Kopu.</p> <p>"The thing that limits us at present is the lack of a working wharf in the Thames area. We have lots of customers in</p>	

Investigation area	Assessment	Investment Priority level
	<p><i>Auckland that are happy to bring their boats to us for repair and servicing, however our only option at present is to put them in Tairua or Whangamata which is obviously a much further trip for them (and us) to make. We also service the mussel fleet in Coromandel Town and have to do this at their mooring which makes things extremely difficult and is far from ideal when you consider we are immobilising their propulsion in order to do this work. The few boats that use the Town wharf (Coromandel Town Wharf) have to do so at high tide which means the vessel is out of action at a time dictated by tides rather than maintenance requirements.</i></p> <p><i>A working wharf in Kopu would offer us a place to service these vessels, which would be non-tidal dependant, safe and an asset for the local fleet as well as those visiting boats from Auckland”.</i></p> <p>There is also evidence to suggest that Auckland is moving away from marine servicing as demand grows for more useful public spaces in a prime position. The increasing land value in the area also has an effect on the land use and this is prompting consideration of other activities in the commercial market. This movement in combination with the significant cost of land and labour in Auckland are contributing to a growing desire for alternative locations for marine servicing. The land cost comparisons between Kopu and Auckland are significant, and they may prove pivotal in attracting private investment. Kopu land costs are around \$80 - \$120 /sq m (land only), whereas equivalent Auckland costs can be more than \$1,000 /sq m, depending on the zoning.</p> <p>Coromandel stakeholders have flagged the following issues with sending their vessels to Auckland for servicing:</p> <ul style="list-style-type: none"> • High demand creates long lead times for servicing bookings. • The extra distance (when compared to Kopu) that can result in lost operational time and increased staff costs. • The higher cost of labour in Auckland which can push up the price of Marine servicing there compared to other places. Servicing costs in Auckland are around \$85-\$120 per hour, whereas Kopu Marine currently cost around \$80 per hour. On top of this, the berthage costs in Auckland would be higher and very much in demand. Also, use of specific tools and equipment can often be an extra cost, whereas this is typically included in the servicing rate in Kopu. <p>Growth in aquaculture servicing needs:</p> <p>The Coromandel Marine Farming industry is set to continue growing, with the NZIER report estimating that once the already consented marine areas producing mussels and oysters come on-stream this will grow the industry's production by 50%. This growth is likely to be further stimulated by the emergence of finfish farms in the Firth, as well as potential new aquaculture areas identified through the Hauraki Gulf Marine Spatial Plan project. As the industry grows in size,</p>	

Investigation area	Assessment	Investment Priority level
	<p>there will be an increasing demand for vessel maintenance and associated services. The growth in aquaculture that is forecast may double the number of barges and this demand will be beyond the capacity of Kopu Marine, or other service providers, without investment in improved facilities.</p> <p>Given aquaculture vessels cannot be properly serviced in the Coromandel Harbour area, there is opportunity for Kopu to play a bigger role in supporting this growth through improved marine facilities. There is strong stakeholder support for Kopu to play a bigger role as a marine servicing precinct. See an example of this support in Appendix 4.</p> <p>As demonstrated by Peter Bull, of Paddy Bull Limited - one of the largest Marine Farmers in the area, there is industry support for the development of improved haul out facilities at Kopu. In a recent letter of support for this development, Peter Bull said:</p> <p><i>"At present, we have to take our boats to either Auckland or Northland for servicing which is a lengthy trip that is inefficient in terms of lost man-hours, and the distance travelled. This is why we need a proper aquaculture haul-out facility at Kopu, as it will be closer, and staff can return home to Coromandel while the vehicle is being serviced. It will also ensure that the Coromandel becomes more self-sufficient in servicing the industry, as the Auckland sites are often booked out months ahead.</i></p> <p><i>Once the Kopu haul-out is fully up and running, I can definitely commit to bringing my vessels there for regular servicing".</i> See Appendix 2 for the full letter.</p> <p>Growth in Recreational and Charter Fishing</p> <p>Aquaculture helps to enhance the recreational fishing attraction in the Coromandel, but overloading of boat ramps and long delays are constraining growth in this sector. An improved Kopu landing site could play a role in managing this demand.</p> <p>Recreational fishing is a billion-dollar industry for New Zealand according to a 2016 NZ Marine Research Foundation report. Saltwater fishing is the fifth most popular leisure activity for hundreds of thousands of New Zealanders. To add to this, NZ is the third largest trailer-boat-owning nation per capita and the trend is moving from moored vessels to larger trailer boats. The recreational and charter fishing industry in NZ is currently growing by 10% annually.</p> <p>The Thames coast and Coromandel area are extremely popular destinations for recreational fishing and this is in part due to the presence of the mussel farms and the habitat they provide for many fish species including snapper and kingfish. Many recreational fishers also visit the Coromandel independently for the good fishing that is in and around the</p>	

Investigation area	Assessment	Investment Priority level
	<p>mussel farms. These people also buy fuel, bait, food, tackle and accommodation locally for their adventures.</p> <p>Demand for adequate recreational facilities to cater for recreational fishing demand and growth is increasing. In the Thames-Coromandel District, the available boat ramps are overloaded during peak season and this is creating risks around lost economic opportunities and potential safety risks emerging from recreational and commercial operations conflicts.</p> <p>The publication of the Thames-Coromandel Fishing and Boat Ramp Calendar for the fourth year demonstrates the challenges in this area. The calendar contains profiles and schedules for boat ramps along the West Coast of the Coromandel peninsula, from Kopu, south of Thames to Amodeo Bay, north of Colville to try and get recreational fishers to use these ramps more, rather than the Sugarloaf Wharf or Waikawau where there is overcrowding problems</p> <p>The verdict:</p> <p>In summary, there is a strong case for investment in marine facilities to support marine servicing in Kopu. The Kopu Landing Site is an underutilised asset and without investment in improved marine facilities, this site will be a constraint to growth in marine servicing as well as the aquaculture, tourism and recreational fishing sectors.</p> <p>Kopu is well positioned to leverage a competitive advantage in marine servicing that can start with a moderate level of investment and add to this over time in keeping with the industry and investment response. Given a reasonable level of activity is currently being handled with the bare minimum facilities, improved infrastructure can yield rapid benefits. The changes occurring in Auckland Harbour are supporting the potential for Kopu as high levels of demand, higher costs and inefficient travelling distances are prompting customers to consider other options.</p> <p>Improving the attractiveness and functionality of the site will help draw more customers, improve efficiencies and enable growth in servicing, associated industries and aquaculture. Therefore, marine servicing at Kopu has been identified as a high investment priority and this should be formalised through refining the planning, investigations and designs in the Detailed Business Case.</p>	
The potential for the creation of a multi-use marine facility (Aquaculture, Fishing, and	<p>Providing resilience for the aquaculture industry</p> <p>While it is acknowledged that the Sugarloaf Wharf is the primary site for aquaculture processing, given the scale of the growth expected in the area, it makes sense to consider alternative sites to plan for industry resilience. In its current form, the Sugarloaf Wharf is highly susceptible to climate change and severe storm impacts through storm surges could affect</p>	Medium

Investigation area	Assessment	Investment Priority level
Boating) with bulk storage and processing capabilities	<p>the wharf and its access roads (SH25 and Te Kouma Road).</p> <p>The 2018 Aecom Sugarloaf Options Assessment Report highlighted the need for the Coromandel Aquaculture industry to consider the need for improved resilience of marine facilities. See an excerpt from the report below.</p> <p><i>It is clear that recent climatic events have adversely impacted on efficient industry operation at/from the Sugarloaf. This has been produced through overtopping and submergence of the landing facility itself, and restrictions on the ability of heavy vehicles to access Te Kouma Road and the Sugarloaf via the coast road (SH25). While the most recent weather event in January 2018 is acknowledged to have been extraordinary in terms of the coincidence of several tidal and weather factors, it needs to be recognised that extreme weather events are predicted by all official government agencies to become more frequent in the future.</i></p> <p><i>Resilience to climate change can be directly accounted for to a certain degree in the design of any future expansion at the Sugarloaf. In a wider sense however, when putting forward an application to expand the Sugarloaf, CoroMFA should have regard to and document at least some consideration of the resilience of the Sugarloaf in terms of its wider geographical location on the Coromandel Peninsula.</i></p> <p>The capacity of the Kopu landing site to take barge traffic as a supporting service to the Sugarloaf Wharf has already been demonstrated by Leach's, who currently operate a barging service from Kopu. At present the barge pulls up onto the edge of the riverbank to load and unload cargo – which is currently aggregate shipped directly to the Gulf Islands. The Leach's barging operation commenced with a subsidy from the NZTA Alternatives to Roading fund, which demonstrated the viability of the operation. This funding has now ceased, but the barging is still continuing on a commercial basis to Auckland and the islands of the Hauraki Gulf. Leach's original consent also allowed for a 65-metre conveyor belt, which has never been built.</p> <p>Enabling zoning, access to resources and consents</p> <p>Through coordinated planning, the constraints to potential development have been minimised over time. The Kopu landing site is already zoned industrial. In addition, the land required for the berth/wharfing infrastructure sits on an unformed public road owned by TCDC. Furthermore, the flood bank immediately adjacent to the site is owned by the Waikato Regional Council, which potentially makes consenting issues easier. Other features include:</p> <ul style="list-style-type: none"> • Good all-tide access adjacent to the potential wharf site. • Easy access to State Highway 25. 	

Investigation area	Assessment	Investment Priority level
	<ul style="list-style-type: none"> The new Kopu Bridge has improved traffic flows for product going to Auckland, and relieved congestion. However, the re-routing of traffic via the new bridge has left the current Kopu accessway comparatively underused. This means traffic issues adjoining the industrial land will be minimised. There are plenty of existing industrial properties which could be utilised for offices, storage facilities or factory processing. The site has adequate supply of electricity, water and Ultrafast broadband. The Kopu site's proximity to Thames and Paeroa means that there should be an adequate supply of labour. Freight activities at Kopu are well supplied by Mainfreight and Coromandel Peninsula Couriers with other providers using Kopu as a drop off pick up point to transfer goods from the greater peninsula to other areas. <p>Kopu already has some capacity to handle barge servicing, but through improved marine facilities at the Kopu landing site, Kopu could play a key role in underpinning the resilience and capacity of the Coromandel Aquaculture industry well into the future. This role could start with greater vessel servicing capacity and in time develop further to take on processing and storage capability.</p> <p>It must be noted that while most businesses support the idea of improving the Kopu Landing site, they also note the need for TCDC to avoid constraining opportunities by focusing just on marine-orientated business. As noted below, there is a wide mix of business already established in the area and this needs to be supported through the appropriate zoning.</p> <p>A complementary business precinct</p> <p>The Kopu business centre holds a mix of businesses that are able to or are already providing a form of support for the marine industry, including (but not limited to):</p> <ul style="list-style-type: none"> Kopu Marine and Engineering Cirtex Industries - a geosynthetics company servicing a broad range of industries in NZ and Australia - already supplying product to the Aquaculture industry. Peninsula marine - a boat retailer Autotech panel beaters supply campervan maintenance, rental and supplies Hydralink Hosing and pneumatics. VETEL - a local training provider is based at Kopu Wintech, who provide manufacturing and technology courses based in Kopu Placemakers 	

Investigation area	Assessment	Investment Priority level
	<ul style="list-style-type: none"> • Kopu ITM • Hunting and Fishing • Flooring Extra • Fairview windows and doors • The Kopu Hotel • Farm source • Safe n Sound storage <p>Furthermore, there are a multitude of smaller service businesses such as equipment hire, mechanics, tyre services, panel beaters builders all support both the marine, Aquaculture and Tourism businesses in some capacity or another.</p> <p>Kopu is well positioned to cater for business growth through There are also sections for new business growth and empty buildings some small for offices.</p> <p>The opportunity to invest in catalyst infrastructure</p> <p>There is potential for the government and councils to play a catalyst role through investing in infrastructure that can facilitate a flow of investment in Kopu, which will benefit the wider region. There are several opportunities that can leverage improved marine facilities and through greater use and attraction for customers, there is strong potential for corporate investors to follow.</p> <p>There is growing public and private investor interest in the Coromandel area. This interest provides an opportunity for the TCDC and regional/national partners to leverage and enable this. A holistic approach needs to be taken to ensure that investments in the region are complementary and integrated to ensure they collectively bring value to the region. The map below shows how the potential for investment in Kopu as a marine and business precinct is being considered alongside investment proposals for investment in a Coromandel Gateway facility and expansion of the Sugarloaf Wharf for commercial aquaculture. Collectively, these investments could uplift the performance of the Coromandel in the marine and aquaculture sectors while improving the appeal of the area for business, tourism and recreation purposes.</p> <p>The development of a berthing/wharfing facility could potentially be used for several industries – marine servicing, aquaculture, aggregate transportation, storage, forestry, recreational boating, maintenance site for charter boat operators and tourism linked to the Hauraki Rail Trail.</p> <p>There are good examples in New Zealand of places where marine infrastructure investment has served as a catalyst to</p>	

Investigation area	Assessment	Investment Priority level
	<p>attract a cluster of business around it to meet customer demands and create broader opportunities. Two examples are outlined below.</p> <p>Whangarei marine infrastructure investments have been a useful case study for development of a marine precinct and the effect it can have on the area. As shown in the 2014 news article included in Appendix 7, this area attracted investment in marine businesses through combining enabling infrastructure, a good skills base and cheaper land costs. In a 2017 trip to Whangarei to explore the way the place has developed because of investment in marine infrastructure, Vaughan Austen counted over 60 businesses in close proximity to the marine precinct. These are listed in Appendix 6.</p> <p>Tauranga is another example of the opportunities to build on clusters of related marine activities, albeit at a bigger scale than what is being considered for Kopu. The Tauranga Harbour Marine Precinct (the "Marine Precinct") is a \$11.4m project that delivered a purpose-built marine servicing facility at Sulphur Point.</p> <p>The precinct provides a base for boat building and refit businesses in Tauranga City, and is managed by Tauranga City Council (TCC) under the Vessel Works brand. The project was funded by TCC (\$6.4m to be partially recovered through land sales) and BOP Regional Council (\$5m provided through the Regional Infrastructure Fund). The Marine Precinct site is currently zoned as Port Industry and owned by Tauranga City Council. The central location of the precinct and its direct connection to the strategic transport network are an added bonus, making it the ideal spot for marine businesses large and small. The precinct was predicted to create 130 fulltime equivalent jobs.</p> <p>The verdict:</p> <p>In summary, there is an opportunity for TCDC and partners to use a staged approach to invest in marine facilities that enable private investment into marine and related businesses. While resilience is important, bulk storage and processing facilities are not in themselves a direct investment driver, but they can be developed over time once the core marine facilities are improved and Kopu becomes a more attractive and efficient marine servicing centre. It is recommended that the Detailed Business Case look closer at the resilience role that Kopu could play and identify at what stage it would make sense to trigger processing and storage investment, whether this is government or private industry-led.</p> <p><i>This area has been rated as a medium investment priority that needs to be further investigated.</i></p>	
The potential for the creation of marine-based research	<p>Aquaculture research:</p> <p>As indicated by the aquaculture representatives in the August 2018 workshop, it makes sense to have marine research facilities nearby to monitor the health of the environment and their products. Today there is no local research facility</p>	Medium - low

Investigation area	Assessment	Investment Priority level
facilities.	<p>that can help understand the threats and opportunities for this area across areas like biosecurity, pests and hatchery management. The Summary and Outcomes of Sea Change – TaiTimu Tai Pari Community Engagement (January 2014 – February 2015) noted the following community feedback:</p> <p><i>"Aquaculture is valued for its economic and environmental benefits, but its impacts on natural character, water quality and other uses of the marine environment need to be closely managed. Agencies need to provide more research opportunities to identify both the benefits and effects of aquaculture".</i></p> <p>The Hauraki Gulf Spatial Plan also notes the potential for the wider gulf aquaculture to support research and innovation.</p> <p><i>"Aquaculture in the Hauraki Gulf Marine Park already supports some educational and research activities and this opportunity can be leveraged further because of the proximity of the Hauraki Gulf Marine Park to a large highly skilled workforce, the proximity to a number of existing tertiary educational facilities, and the proximity and accessibility of the aquaculture activities within the Hauraki Gulf Marine Park. There is the potential for the Hauraki Gulf Marine Park to become a hub of aquaculture excellence, supported by research and innovation relating to all aspects of aquaculture activity including environmental enhancement projects".</i></p> <p>Aquaculture in Nelson currently benefits from the proximity and work of the Cawthron Institute, where research and development is adding value to aquaculture exports through selective breeding, improved farming systems and advances in hatchery technology.</p> <p>While it does not make sense for Kopu to attempt to compete with the likes of the Cawthron Institute, progressive development of research activity through planning and enabling marine facilities could deliver a more localised benefit. The lack of local capability in this area may be a potential vulnerability and lost opportunity for Coromandel marine farming today.</p> <p>Investor interest in product development and sustainability priorities</p> <p>There is potential for Kopu to play a role in enabling growth in research and development in the Coromandel. There is growing interest in value-add industries that use a 'circular economy' approach to consider where bi-products from existing industries may be used to develop new products in emerging industries, such as pharmaceuticals, pet food or culinary products. This approach aligns with a broader shift towards more sustainable communities and industries as demonstrated by the United Nations Sustainable Development Goals, the New Zealand Government's Zero Carbon Act and the strengthening of the focus on the four wellbeing's as part of the Living Standards Framework.</p>	

Investigation area	Assessment	Investment Priority level
	<p>TCDC is experiencing a surge in investor interest around product development that can utilise the resources and industries in the district. While these interests need to be kept confidential for commercial purposes, growth in this area demonstrates the potential benefits of investment in marine facilities at Kopu and across the district.</p> <p>The “Musselling-up” programme at the Nelson-based Cawthron Institute is an example of the potential in this area. The Cawthron Institute and Sanford Limited have joined forces to identify and validate the health benefits of Greenshell mussels, in particular looking at its potential anti-inflammatory qualities, improved joint and bone health and increased mobility. The programme will generate scientific evidence of the health benefits of Greenshell mussels and assist the industry to identify and develop optimal Greenshell mussel-based functional food products that will appeal to the emerging market of wealthy, aging, health conscious consumers – predominantly in China.</p> <p>The verdict:</p> <p>In summary, there is potential for improved Kopu marine facilities to play a role in attracting marine-based research and development investment activities. Without these marine facilities, it is more difficult for researchers to visit the area and a more attractive site and heightened marine activity will also help attract them.</p> <p>Whether TCDC and partners invest directly in research facilities or supports another organisation in doing so should be considered further in a Detailed Business Case. The ability for Kopu to compete with the likes of the Cawthron Institute for research and product development is low, so further work needs to be done to understand how more targeted and unique work may be done in this area to justify specific investment in R&D facilities in Kopu.</p> <p><i>This area has been rated as a medium-low investment priority that requires further investigation.</i></p>	
Assessing tourism and tourism water-based opportunities.	<p>An improved Kopu landing site has the potential to play a role in improving the water-based tourism opportunities on the Waihou River. Investment in a wharf at Kopu could encourage tourism charter boats to sail from Kopu up to Paeroa. This would also strengthen links with the Hauraki Rail Trail and provide another eco-tourism option for those wishing to travel by boat for part of their journey, and then joining the Rail Trail for the scenic Karangahake section through the Waihi.</p> <p>For recreational boaties, if berthing facilities are upgraded at Kopu this could provide easier access to the fertile fishing grounds of the lower Firth, and reduced congestion from recreational fishers on the winding roads heading north towards Coromandel Town.</p> <p>The Riverhead Ferry, which makes regular trips up the Waihou throughout summer to Paeroa, is an example of the</p>	Medium - low

Investigation area	Assessment	Investment Priority level
	<p>potential growth in tourism which the Kopu marine precinct could support. This type of tourist attraction would link strongly with the Hauraki Rail Trail, which is a government priority project.</p> <p>There are other investment opportunities being discussed that may help justify the need for improved marine facilities at Kopu on tourism grounds. A proposed funding application for the old Kopu Bridge as an attraction, in addition to a current application for a potential upgrade of the Historical Maritime Park at Paeroa could provide rationale to develop charter or self-driven tourist trips in this area.</p> <p>The Historical Maritime Park has a significant collection of local importance relating to the history of the town of Paeroa and the Hauraki Plains region. As New Zealand's only inland port, the Museum has significant links dating back to pre-European settlement and the arrival of Captain James Cook in 1769 in HMS Endeavour.</p> <p>The Verdict:</p> <p>In summary, while tourism will not be the main driver for investment in Kopu's marine facilities, it can provide secondary benefits to strengthen the case for investment. This should be assessed further in a DBC in coordination with Destination Coromandel and Te Waka the Waikato Region Economic Development Agency Part of this consideration should be how well this location stacks up against other parts of the Coromandel for Tourism-driven investments.</p> <p>There is the potential for this area to align with and support Maori economic development. Following the conclusion of the Hauraki Treaty settlements, greater resources will be available for Hauraki iwi to consider investment in this area. It will be important to work closely with them to understand where there are synergies that can help to enable Maori to reach full potential in iwi based economic and social development.</p> <p><i>This area has been rated as a medium-low investment priority that requires further investigation.</i></p>	

4.2 Risks and dependencies

4.2.1 Vessel forecasting

Due to limited funding, a detailed analysis of future vessel servicing cannot be completed at this time. This should be the subject of further investment during the business case development.

4.2.2 Aquaculture growth forecasts

The aquaculture growth forecasts need to be tested further. To an extent, the growth levels estimated for current operations have not met the expected levels. Growth in Aquaculture may be currently constrained by inadequate facilities and a lack of industry coordination, but this should be investigated further through the business case development process.

4.2.3 Consenting

The current landing site is operating without appropriate consents and interim agreements have been made between the operating parties and the district/regional councils. It is also understood that there may be varied ownership titles in place for the river bed near the landing site. This will need to be progressed to ensure it does not become a barrier to investment in the future.

4.2.4 Environmental impacts

Environmental impacts need to be better understood through a range of surveys and technical analysis. The impacts of climate change as well as further understanding of flooding, sediment studies and ecologies should all be completed in the next phase of work to give a complete picture of the risks and opportunities.

4.2.5 Disconnected investments

There is a risk that investments across the district and the region proceed without strategic guidance to deliver integrated value for industries and communities. Therefore, it is imperative that TCDC continue to play their coordinating role alongside Te Waka the Waikato Region Economic Development Agency. Equally, the stakeholder engagement for this opportunity needs to remain rich and frequent. Importantly, staying in close contact with iwi to understand priorities and investment interests in light of the recent treaty settlements will be critical.

4.2.6 Treaty settlements

During the final implementation of the Hauraki-Coromandel Treaty settlements, there could be a risk that the appropriate governance, liaison, and planning is not completed through the delivery of this project. In addition to the potential for disconnected investments. There is a need to proactively plan for and manage treaty requirements as if and/or when they relate to the project.

5 Understanding the issues, problems and benefits

5.1 Feasibility engagement

A considerable amount of stakeholder engagement has already been carried out as part of the establishment of this project. This has included multiple discussions with regional economic development representatives and meetings with representatives from neighbouring districts, including the Mayor and Deputy from Hauraki District Council. As part of recent studies, there have been numerous stakeholder surveys, workshops and meetings. As noted earlier, studies in 2005 (Maunsell) and 2016 (Beca) brought together stakeholders to understand the situation and work through investment options. This has been completed again recently to confirm the current situation. On 2 August 2018 a Feasibility Workshop was held with representatives from these organisations:

- Coromandel Marine Farmers Association
- Thames/Coromandel Fishing Charter Association
- MPI
- North Island Mussels/Sanford

- "Thingys Ltd" (a consultant company that has supported TCDC and WRC in investigating aquaculture opportunities)
- Gold Ridge Marine Farms
- Waikato Regional Council
- Kopu Marine and Kopu Engineering
- NZTA
- Gulf Mussels
- Destination Coromandel
- Cirtex Industries (Kopu-based business supplying Geosynthetics to the construction industry NZ wide and socks to the aquaculture industry for spat.
- Waikawau Bay Boat Ramp Society
- Pare Hauraki Kaimoana
- Thames-Coromandel District Council staff and elected arm
- Destination Coromandel
- Hauraki District Council
- Paddy Bull Ltd
- TCDC Staff.

Other invited stakeholders that were not able to participate were Aquaculture New Zealand, Waikato Economic Development Agency and the Department of Conservation.

5.2 The current challenges and opportunities

The current situation includes several impediments constraining the growth of aquaculture, marine servicing, recreational/charter boating, research and water-based tourism. Investment in the Kopu landing site has potential to remove these impediments.

This workshop also took a wider view that allowed for consideration of the functional role an enhanced Kopu landing site could play in delivering wider economic benefits for the district, region and nation. These drivers are summarised below:

- The constrained marine infrastructure at the current Kopu landing site.
- The lack of attractive and adequate marine facilities to support business growth.
- The inconvenience of travelling to and the lack of capacity at alternate marine servicing sites in Auckland.
- The lack of resilience in State Highway 25 (which is a key dependency for marine facilities in Coromandel Harbour).
- The lack of access to resources (workforce and accommodation) in Coromandel Town.
- The need for greater resilience in aquaculture facilities that may be affected by climate change (notably the Sugarloaf Wharf facility).
- The need for increased aquaculture facilities to support projected industry growth (to support the consented new 70ha of mussel farming and 300ha of proposed finfish farming within a convenient distance to Kopu).
- The rising user demand and lack of peak space in recreational boating facilities (growing by 10% per year).
- The opportunity to agglomerate business opportunities around a Kopu Marine Services Hub.
- The lack of accessible research facilities to support aquaculture resilience and innovation.
- The lack of marine infrastructure to support potential water-based tourism ventures.

At present, the aquaculture vessels and charter boats operating in the Firth have to go out of the region (to Auckland or Whangarei) for marine servicing. This represents a lengthy voyage, with high fuel costs, down time for crews, and issues with booking appropriate berths at times suitable to the industry.

However, the Kopu industrial area at the base of the Firth of Thames represents an ideal site for transformation into a marine servicing precinct. The Kopu area is zoned industrial and is already

home to several specialist engineering and marine outlets. The berthing site, which is already used as a loading facility for sand and aggregate barges as well as occasional marine maintenance, is close to the new Kopu Bridge, and provides ease of access to State Highway 25.

The 2016 Beca Report that considered options for development of the Kopu Boat Ramp identified the following uses and constraints identified by stakeholders:

- Haul-out and launching of yachts and launches for maintenance. *This now includes barges weighing up to 100 tonnes.*
- Aggregate supply operation involving loading and offloading barges and dump trucks.
- Coastguard vessel launching and retrieval at all hours as necessary.
- Boat launching and retrieval for recreational fishing and charter boat operations.

At the time, these activities were constrained by the following issues:

- Limited parking and poor signage.
- Ramp use is limited to around high tide because of ramp length.
- Lack of lighting for Coastguard night use.
- Narrow Quay Street access over the stop bank and adjacent culvert with compromised visibility.
- River current makes launching and retrieval difficult and potentially dangerous at times.
- The parking / yard area is flooded on king tides and north-westerly storm events.

5.3 Investment Logic Mapping

Investment Logic Mapping (ILM) is a technique to ensure that robust discussion and thinking is done up-front, resulting in a sound problem definition, before solutions are identified and before any investment decision is made.

It is a technique to ensure the 'story' about any proposed investment makes sense (the 'logic' part of ILM) and to test and confirm that the rationale for a proposed investment is evidence-based and sufficiently compelling to convince decision makers to commit to invest in further investigation and planning.

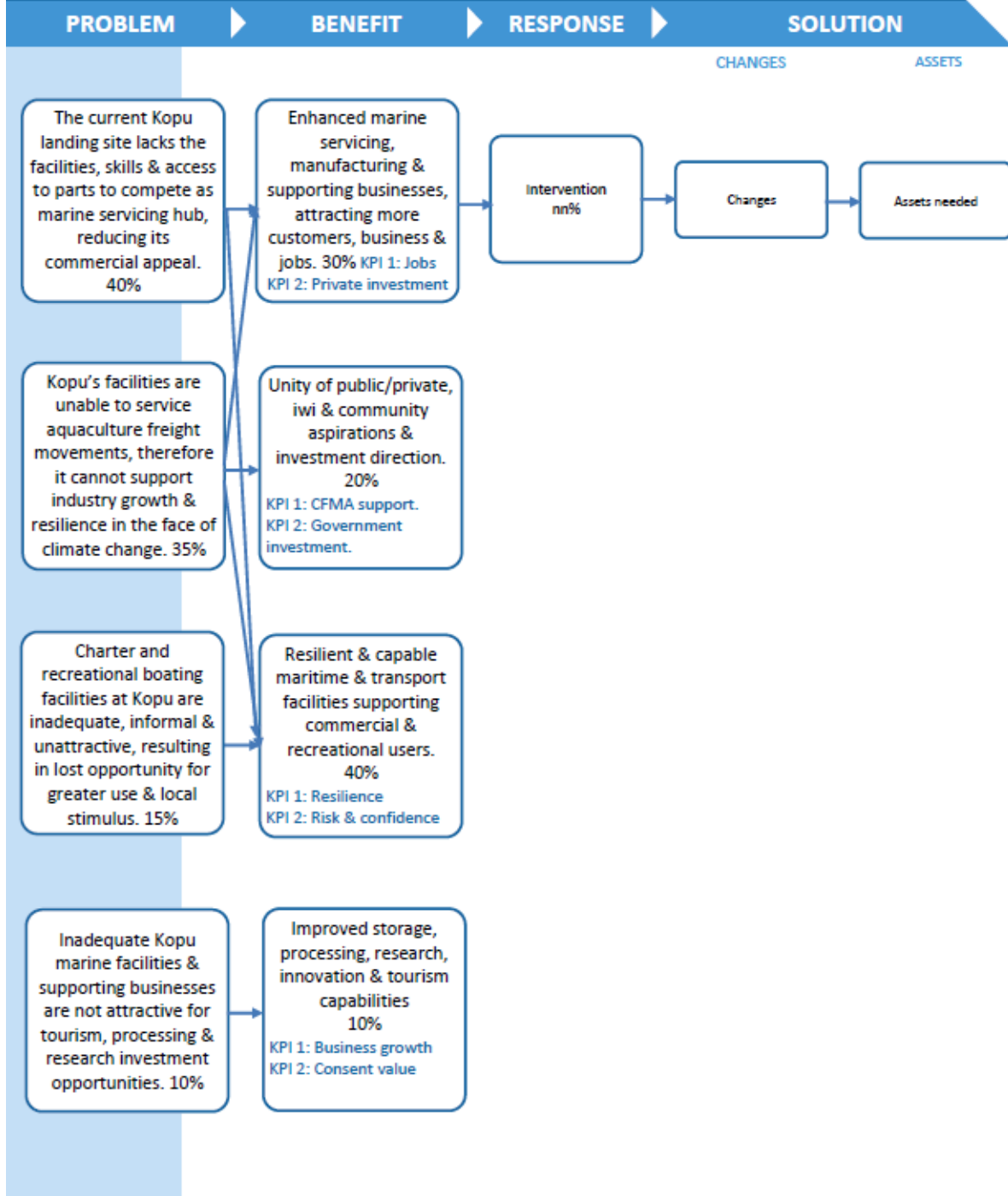
A draft Investment Logic Map (ILM) was created through this workshop using the stakeholder inputs. This has been developed in draft format only with the idea that it will be tested and formalised through a full business case. It does however, help us to understand the main problems and the benefits sought, in addition to potential strategic interventions. The draft ILM is shown below.

Kopu as a Marine Servicing Precinct

Catering for Marine Services and supporting businesses at Kopu

INVESTMENT LOGIC MAP

Initiative



Investor: Cromwell Community Board
Facilitator: Edward Guy
Accredited Facilitator: No

Version no: 1.2
Initial Workshop: 01/08/2018
Last modified by: Ben Smith 19/10/2018
Template version: 6.0

Figure 9: Draft ILM for Kopu as a Marine Precinct

6 Gap analysis and option development

A gap analysis was completed in the August 2018 stakeholder workshop. The intent was to discuss the current state in relation to the desired benefits to understand where the gaps are and what the potential interventions may look like. The draft gap analysis is included as Appendix 9. This needs to be revisited in a full business case, where new investigations can better inform the gap and the potential solutions.

6.1 Needs based criteria – business needs

Understanding business needs outside of the standard risks and investment objectives for a project helps to shape options and provide targeted evaluation. In this case, the business needs can build on the very industry-specific investment objectives/benefits created to date and connect the project to the wider opportunities for the district and region. Given this focus, the objectives of the Provincial Growth Fund were selected as business needs.

- lift the productivity of the district and region
- enhance economic development opportunities
- create sustainable jobs
- enable Māori to reach full potential in iwi-based economic development
- boost social inclusion and participation
- build resilient communities
- help meet New Zealand's climate change targets.

6.2 Draft longlist options

A theoretical longlist of options has been developed to provide an indication of what might be the right mix of interventions for Kopu. This longlist allows for a subjective assessment of how each option performs against critical success factors, needs based criteria and investment objectives. At this stage, the assessment is taken at a high level and it should be tested using a more DBC that includes current and targeted technical assessments. The costs for each option have been developed using the 2016 Beca Concept Study for the Kopu Landing Site and some high levels figures provided by TCDC. They are rough order costs for comparison only.

There is also opportunity to refine each option (and create a wider range) through a full business case. The funding constraints for this study have prevented the collaborative option development should be a feature of the DBC phase. However, the high-level options provide an opportunity to understand rough order costs, differentiate between investment levels and also demonstrate how lower end options can be developed over time to provide more inclusions over time. It is assumed that TCDC will focus on investment in enabling infrastructure that allows private investors to help develop the precinct. This means items like boat building facilities, aquaculture processing, cold storage facilities, research facilities and tourism facilities may be either developed by private investors or potentially through a public/private partnership arrangement.

The more elaborate options (5-7) are really only conceptual at this stage to support an objective comparison. These options can be better informed through working with a range of experts in the development of a Detailed Business Case.

The longlist of options is described in the table below and the full MCA inclusions and evaluation is shown in Appendix 3.

Table 2: High level description of longlist investment options

Option	Proposed TCDC investment	Expected outcomes (including private investment opportunities and benefits)	Cost range
1 - Do nothing	Status quo. Enabling zoning is in place and consenting efforts continue. TCDC continues to coordinate industry interest and support private investment proposals in the area. Existing businesses continue to operate at the landing site and plan their own growth and investments as their operational constraints allow.	Minimal change	\$20,000 - \$40,000
2 - Do minimum: better coordination	All initiatives from 1 plus: Improved industry alignment in terms of direction and investment. Better management of the landing site area. Enabling Iwi investment through treaty settlements. Facilitation of marine research visits and partnerships. Consider council grant funding (in partnership with central government) to support local marine trade training and research.	Gradual change over a long term but highly constrained by a lack of adequate marine facilities.	\$100,000 - 200,000
3 - New Slipway and minor improvements	All initiatives from 2, plus: a new sealed slipway, new vessel storage area, formalised car park, protection of rail trail users, site clearance, improved signage, a new toilet block, improved lighting, delineation of aggregate barging area, basic road access improvements.	Safer and increased marine servicing and recreational storage capacity.	\$3-5m
4- Slipway + Jetty, Pontoon and Gangway	All initiatives from 3, plus: A single berth jetty, improved security, maritime tourism support through basic connection and bike storage, incentivise industry investment in the area through zoning and grants.	Increased marine servicing attraction and activity. Increased jobs and related business investment. Potential for basic tourism and research activity. A mix of recreational & commercial use of the wharf.	\$3-7m
5-Multi-berth wharf	All initiatives from 4, plus: Multi-berth wharf and new expanded car park. Through the improved site and increased marine capacity, it is assumed that private investment may follow in areas like boat building, tourism, chandlery, processing and	Supports separation of recreational, tourism and commercial operations, basic boat building (through private investment), increased local marine materials supply, limited processing	\$6-10m

Option	Proposed TCDC investment	Expected outcomes (including private investment opportunities and benefits)	Cost range
	storage.	and storage, incentivisation of corporate investment in related industries.	
6-Marina	All initiatives from 5, plus: A multi-wharf Marina, fuel jetty and lift purchase.	Private investment in manufacturing, storage and processing facilities. Upgrade of Tourism facilities to include customer shopfront. Seafood destination development that includes wholesale outlet and dining. Expansion of boat building facilities and capabilities. Mixed use development including commercial, residential and retail.	\$15-20m
7-Marina + Business and Logistics Hub	All initiatives from 6, plus: seed funding and investment in buildings to support mixed use developments (may be through a PPP). These investments could support a: <ul style="list-style-type: none"> • Marine centre of excellence including servicing, research, training, climate change adaptation and research • A Cold storage hub for the region. 	Major retail and commercial developments. R&D Hub. Expanded manufacturing for aquaculture, innovative bi-products (healthcare and pet food, etc), marine products and boats. Transport and logistics hub for the region.	\$20-25m

6.3 Option evaluation

The options above have been evaluated and ranked using a Multi Criteria Analysis (MCA) as part of the Better Business Case decision making process. This evaluation included scoring and comparison of each option against investment objectives (benefits), costs ranges, time ranges, risks, business needs and dependencies. This process allows for a ranking of the options based on their performance. Given the high-level nature of this process, a shortlist of options is recommended to be progressed as the 'preferred way forward' within the Detailed Business Case (DBC). The shortlisted options and the interim preferred option are outlined below.

The shortlisted options identified through the Multi Criteria Analysis were:

1. Programme 4 – the Slipway and Jetty/Wharf installation scored the highest and is the interim preferred option (ahead of the DBC).
2. Programmes 5 and 6 were equal second, although programme 6 may be excluded due to reduced achievability.

3. Programme 3 ranked third, but this could easily be considered to be a stepping stone in the delivery of programme 4.

As per the BBC requirement, the do minimum should be included in future shortlist reviews to demonstrate the difference between higher and lower levels of investment.

Programme 4 scored the highest due to these factors:

- Strong performance against investment objectives.
- Reasonable cost levels.
- Moderate levels of risk, particularly in terms of financial and environmental impacts.
- An achievable delivery time range.
- Strong performance against business needs.
- The ability to add to this solution over time based on industry and investor interests.

In summary, this programme represents a highly achievable and affordable solution that has high potential to deliver the required benefits. It also aligns well with solutions proposed in past studies. Another positive is the way it allows TCDC to remove a number of constraints to enable private investment in related facilities and businesses. In this sense, this option can act as a building block on which further investment may follow to further catalyse wider investment and activity in the area. There will be opportunity to recast these options within a Detailed Business Case, using more informed inputs. The suggested approach to this is outlined below.

7 Gaps for further investigation

A number of technical investigations are recommended to inform a Detailed Business Case.

Due to funding constraints, these things cannot be completed at this time and they will be essential in ensuring the investment options are properly understood and evaluated. A key consideration of the Detailed Business case will also be whether the current landing site is actually the best place to invest in for the targeted benefits.

Site investigations will be required to provide detailed information for the design and resource consent application. Site investigations and detailed technical analysis will need to include:

- Topographic and bathymetric surveys.
- Geotechnical investigations.
- Water level, current, waves and sediment transport.
- Ecology and heritage (for resource consent application).
- Demand analysis and options development.
- Coastal structure concept design.
- Engineering assessments to inform cost estimation.
- Planning and legal assessments.
- Engineering and urban design.
- Financial modelling.
- Assessment of Environmental Effects.

Commercial and economic analysis will also be required to help understand the opportunities that may come through enabling the development of a Marine and Business Precinct.

In summary, the concept needs to be investment ready so that TCDC can go to the market in partnership with regional and central governments to engage a contractor that can complete design and commence construction using a staged approach where required.

8 Strategic alignment of the project

8.1.1 Waikato Means Business

The proposal supports the strategic objectives of the Waikato Means Business strategy, which Government is supporting through the Regional Growth Programme. These include:

- **Growing global industries** (aquaculture is a key Government priority, and the production of sustainable and environmentally-friendly food for domestic and export consumption is a prime goal of the Waikato region).
- **Maintaining and building on the region's location advantage** (The Coromandel is the largest mussel producing area in the North Island, and its location in the relatively sheltered and nutrient-rich waters of the Firth of Thames is a crucial location advantage. In addition, this food production function is close to major domestic markets in Auckland and Bay of Plenty, as well as export markets via the nearby international airport.) Further, with the potential development of fish farming within the region, Waikato is likely to be a key hub within the sector.
- **Building, attracting and retaining skills and talent** (the aquaculture industry already produces 400 jobs directly, which is important in terms of sustainable, non-seasonal employment within the Thames-Coromandel district, as well as ancillary jobs. In addition, with the projected growth of the industry and the potential development of finfish, the number of jobs is likely to continue growing. Furthermore, with the development of finfish, there will be a need for highly skilled research personnel and potentially university or Crown Research Institute facilities located in the region).
- **Telling the Waikato Story** (Coromandel mussels and oysters, which feed off the nutrients entering the Firth and thereby cleanse the water as well as generating succulent protein with high Omega value is a strong, positive environmental story, and an important part of marketing "The Mighty Waikato".)

8.1.2 Te Waka: Anga whakamua Waikato The Waikato Regional Economic Development Agency

This project will be developed in close connection with the objectives of Te Waka: Anga whakamua Waikato - Waikato's regional economic development agency.

The agency's high-level objectives are to lift economic performance in the Waikato; attract, retain and grow investment, talent and business across the region; and champion and provide one voice for regional economic and business needs and opportunities (becoming a front door for the region).

The table below demonstrates the alignment between the project and the regional strategic priorities.

Table 3: Strategic alignment with WREDA priorities

Strategic Priorities	Kopu marine servicing and business precinct DBC
Maintaining and building our location advantage	Connected journeys - improving transport connections to and around our district.
Growing global industries	Growing aquaculture and associated marine industries. Identifying and taking advantage of opportunities to add value through supporting research and development.
Building, attracting and retaining skills and talent	Supporting effective land use to support business growth and investment. Supporting growth in aquaculture and niche products that provides extra employment opportunities in the district.

Strategic Priorities	Kopu marine servicing and business precinct DBC
Making business easier	TCDC already has a strong focus on enabling business through strong customer service, prominent information flow and streamlined processes. This plan will focus on ensuring businesses can access resources through land use change that allows for more worker accommodation, increased business activity and corporate investment.
Telling the Waikato Story	This project will allow for growth in aquaculture as a defined strength within the Waikato region. The potential tourism operations that this project could support will play a role in telling and celebrating the Waikato story. It will also aim to support wider business growth in Kopu that will build attraction to the area.

8.1.3 Economic Development Strategy

The vision is that Thames- Coromandel will be a confident and vibrant business District. This plan will support this vision and the achievement of the objectives identified in TCDC's Economic Development Strategy: Towards 2028. The Strategy aims to positively influence and facilitate economic growth with a focus on:

1. Creating an easy to navigate investment environment that enables positive business development and job creation.
2. Supporting the visitor economy and using Council influence to identify what the District is good at and continue to drive those capabilities.
3. Connecting the dots that will grow the business community and local economy.

8.1.4 Thames-Coromandel Productivity Plan

This project can play a clear role in supporting the wider productivity Plan for the Thames-Coromandel District which has also been submitted as a Provincial Growth Fund application. The Productivity Plan objectives are:

- Improved land use productivity that supports better employment opportunities and corporate investment.
- Improved spatial planning for the district to support targeted economic growth.
- Improved access to and connectivity around the district.
- Expansion of aquaculture farming and supporting industries.
- Improved offering and coordination of the district as a food destination.

8.1.5 Coromandel Marine Farmers Association (CoroMFA)

This project aligns strongly with the focus of CoroMFA. Notably, Kopu has an opportunity to support resilience and complementary services in the industry alongside supporting Maori economic development.

Coromandel marine farming means (source: CoroMFA website):

- Fully sustainable production with low environmental impact.
- Healthy, delicious, available and reliable seafood products for many consumers.
- Employment, notably for Maori and also in more remote areas where other employment.
- Regional economic returns, including for Maori as significant investors in the industry
- Exports and wealth creation, with most inputs sourced locally.
- Fishing at mussel farms, enhancing catching opportunities.
- Ensuring shellfish harvests from growing waters are always clean, to meet our stringent industry agreed standards, to prevent microbiological and biotoxin contamination.

8.1.6 Provincial Growth Fund

The PGF aims to lift productivity in the provinces. Its priorities are to enhance economic development opportunities, create sustainable jobs, enable Māori to reach full potential, boost social inclusion and participation, build resilient communities, and help meet New Zealand's climate change targets. Investment in Kopu as a Marine Precinct aligns strongly with the intentions of the PGF and the benefits it can bring should be spelt out in greater details through the development of a Detailed Business Case.

8.1.7 Supporting the Maori economy

This project can play a significant role in supporting the growth of the Maori economy. Investment in marine-based industries may be an opportunity of interest to Hauraki iwi as an avenue through which to grow their economic base. This also may align with an overarching interest in sustainable coastal management by Maori. As a marine and business precinct, Kopu can also provide employment for the broader community, including iwi.

8.1.8 The A+ Sustainable Aquaculture Programme

The research and resilience aspects of this project align with the A+ Sustainable Aquaculture Programme. A+ programme provides New Zealand marine farmers with the practical tools to demonstrate transparency around their environmental performance. The research aspect of this project aligns strongly with the intentions of this programme.

A+ objectives align with those of world leading accredited certification programmes - such as Aquaculture Stewardship Council (ASC) and Best Aquaculture Practice (BAP). This association further substantiates the importance we place on our role of being outstanding guardians of our place and people. The A+ programme focuses on the following areas:

- Healthy ecology.
- Clean clear water quality.
- Responsible waste management.
- Efficient use of resources.
- Guarantee of food safety.
- Valuing Iwi participation.
- Enhancing our communities.

8.1.9 The Sea Change - Tai Timu Tai Pari - Hauraki Gulf Marine Spatial Plan

Through its ability to contribute to improved economic, community, Maori and environmental outcomes, this project aligns strongly with the Hauraki Gulf Marine Spatial Plan. This plan lays the foundation for an integrated approach to managing the Hauraki Gulf. It aims to secure a healthy, productive and sustainable future for the Gulf through:

- improving the understanding of the pressures on the coastal and marine environs
- identifying and proposing long-term solutions to improve overall health, mauri, quality and wellbeing
- providing increased certainty for the economic, cultural and social goals of our communities in and around the Gulf
- ensuring that the ecosystem functions that make those goals possible are sustained.

9 Economic appraisal

9.1.1 Ability to deliver targeted benefits

The proposed project sits within a wider Productivity Plan (which has been submitted for Provincial Growth Funding as a separate application), aimed at improving the economic outcomes for the Thames-Coromandel District. The Plan aims to produce tangible benefits for the community, including employment and improved use of Māori assets. It will focus on ensuring the protection and enhancement of the District's natural features, while ensuring productive assets can be managed sustainably into the future, considering the potential effects of climate change.

The targeted benefits for this project are:

- Enhanced marine servicing, manufacturing and supporting businesses, attracting more customers, business and jobs.
- Unity of public/private, iwi and community aspirations and investment direction.
- Resilient and capable maritime & transport facilities supporting commercial and recreational users.
- Improved storage, processing, research, innovation and tourism capabilities

As shown in the project ILM in appendix 1, there are range of KPIs that can demonstrate progress against these benefit statements. Broadly speaking, the project aims to grow investment in the Kopu area to support industry, business, employment and GDP growth. It also aims to support improved social outcomes through increasing local employment opportunities, providing greater diversity of opportunities and reducing the need to travel to other areas for employment. Through improvement in local economic outputs, we expect to see wider community benefits emerge because of improved investor confidence.

Through recent studies we already know that the aquaculture industry directly employs approximately up to 400 jobs within the district, with more jobs being created indirectly from charter boats, engineering, retail and the hospitality sectors. The DBC will aim to quantify the wider economic and social benefits of investment in Kopu as a Marine and Business Precinct. This will include analysing the agglomeration effect of bringing multiple industries together and leveraging the predicted growth in Aquaculture activity.

9.1.2 Supporting multipliers

As shown in the 2011 Economic impact of Coromandel Aquaculture Report prepared for the Hauraki-Coromandel Development Group by Saperre, economic impacts from the increased levels of aquaculture production in the region can be expected to occur in the following areas:

- Supplying industries – industries that supply the farms with intermediate inputs, like suppliers of farm equipment or boats, will benefit. The national fishing industry may end up supplying fish feed to the farms. In addition, facilitating industries like transport and business services will benefit.
- Household expenditure industries – industries that households spend money on will benefit as increased incomes from marine farming are spent in the region. Such industries include housing and real estate and consumption goods like retail trade.
- Investment related industries – There will be impacts, temporary in nature, on the construction sector as farms and accompanying infrastructure like roads, wharves and shore facilities are built.

Similar multipliers need to be considered through the flow on effect of increased marine servicing. This should be captured in the DBC.

9.1.3 Understanding social and community benefits

There are also indications that an investment in the Kopu landing Site can deliver a range of benefits that cannot be monetised, but they are still very valuable to the community. These include reduced travel times for workers (supporting improved family and community cohesion), reduced NEET levels, improved community resilience and local economic multipliers (such as retail uplift). This can all be understood better through the economic appraisal of the DBC.

9.1.4 Economic appraisal in the DBC

The full business case will provide the opportunity to test and refine the initial investment objectives, including setting clear key performance objectives. Within this case, economic analysis will be undertaken to understand the quantum of benefits that the preferred solution may bring.

With the benefit of more funds and resources, a DBC can take a detailed look at economic performance of Kopu marine facility investment options. This should consider a level of

cost/benefit analysis, net present value analysis and sensitivity analysis. Wider, non-monetised benefits should be considered alongside more traditional benefits, particularly in the context of the Living Standards Framework and the wider social benefits and agglomeration that can come from council investments.

10 Commercial strategies

Strategies around contract management, work packaging, procurement and market engagement need to be developed through a Detailed Business Case. It will be important to make use of advice from commercial specialists who can identify opportunities and shape opportunities for private investors that leverage the Council's plans and investments in the area.

10.1 Procurement approach for the DBC development

Based on the tight project timeframes and the specific nature of the work, it is proposed that TCDC selects a preferred lead supplier that has a strong track record delivering this type of project. It is also recommended that complimentary services be bundled together to increase scale and appeal of the opportunity for targeted suppliers. This approach would allow a lead supplier to integrate and coordinate the work efficiently in partnership with TCDC. This may include an early contractor engagement to develop an agreed scope using learnings from similar projects. TCDC has existing suppliers that can be approached to play this sort of role.

11 Financial analysis and strategies

11.1 Refining investment cost estimates

A high-level summary of options costs is captured in section 6. As high-level costs based on components of previous reports, these should be revisited through the development of the DBC and informed by specialist marine engineers, commercial specialists and quantity surveyors.

11.1.1 Detailed Business Case (DBC) costs

Approximately \$300,000 has been estimated for the preparation of the business case and all required technical services, including updated assessments and concept level design.

This assumes that due to their age, previous technical studies cannot be utilised to inform decision making, notably geotechnical, sediment regime investigations and bathymetric survey. These costs will be tested and refined using the TCDC and stakeholder project teams.

The estimated cost allocation assumes that the broader TCDC Productivity Plan will provide added value to this project (if Provincial Growth Funding is also approved for this application). Where savings can be made using related investigations or aligning works across the wider productivity programme for the district, they will be applied. The estimated DBC cost breakdown is as follows:

Table 4: DBC estimated cost breakdown

Service	Estimated Cost
Engagement of specialist lead consultancy to deliver an integrated set of services to understand the situation, constraints and the potential investment opportunities, including: <ul style="list-style-type: none"> • Demand assessment and option development. • Coastal structure concept design. • Planning and consenting, including RMA and legal advice. • Environmental and ecological assessments. • Sediment and bathymetric survey and assessment. 	\$165,000

Service	Estimated Cost
<ul style="list-style-type: none"> Civil engineering, including geotechnical assessments. Quantity surveying to inform cost estimating. Spatial planning and urban design services to understand the relationship between places and facilities to inform planning and investment allocation/staging. 	
Engage property and commercial advisors to investigate commercial opportunities that can guide council planning and attract private investment. <i>This may align with broader investigations through the Productivity Plan.</i>	\$20,000
Engage transport planners to complete an integrated freight assessment as part of the wider transport review and planning. <i>This may align with or benefit from TCDC's plans to work with NZTA on an integrated assessment of the transport network around Kopu.</i>	\$15,000
Engage economic specialists to complete a targeted assessment of economic impacts of a marine servicing/business precinct, including benefits analysis and multipliers. <i>This will form part of a wider review of Productivity Plan outputs.</i>	\$15,000
<p>Engage specialists to develop and deliver the business case, including:</p> <ul style="list-style-type: none"> Development of the Investment Logic Map. Project planning support. Development of the strategic, economic, commercial, financial and management cases. Financial modelling. Workshop facilitation. <p><i>This will align with the development of a Programme Business Case for the Productivity Plan programme.</i></p>	\$85,000

11.2 Funding mechanisms

It is important to understand where funding will come from to support the phases of development for the Kopu Landing Site and potential associated Marine, Business and Logistics Precinct. The following high-level recommendations can provide direction for further investigation in the DBC.

Table 5: Funding options by phase

Phase/activity	Potential funding source	Funding requirements
Development of a DBC	<ul style="list-style-type: none"> Provincial Growth Funds TCDC funds 	<ul style="list-style-type: none"> An approved submission An approved Council proposal
Investment in marine facilities (Council-led)	<ul style="list-style-type: none"> Provincial Growth Funds TCDC Capital Funds Regional Council Funds A Public/Private Partnership 	<ul style="list-style-type: none"> An approved submission Approved TCDC and WRC proposals An attractive investment proposal with commitment to develop the wider precinct
Investment in supporting business facilities	<ul style="list-style-type: none"> Private investors May be supported by PGF 	<ul style="list-style-type: none"> Delivery of the catalyst infrastructure – the marine

Phase/activity	Potential funding source	Funding requirements
	funding	facilities

12 Management Strategies

This project sits within a proposed Productivity Plan programme for the District. As shown in the diagram below, this project will sit within the Aquaculture workstream.

After identifying a wider programme of possible initiatives, this plan is focused on high value opportunities in land use, land productivity, connected journeys, aquaculture and destination management. This will all be underpinned through a productivity-focused Spatial Plan for the district. This project will bring together a wide range of workstreams to improve the economic outcomes across the Thames-Coromandel District as shown below.

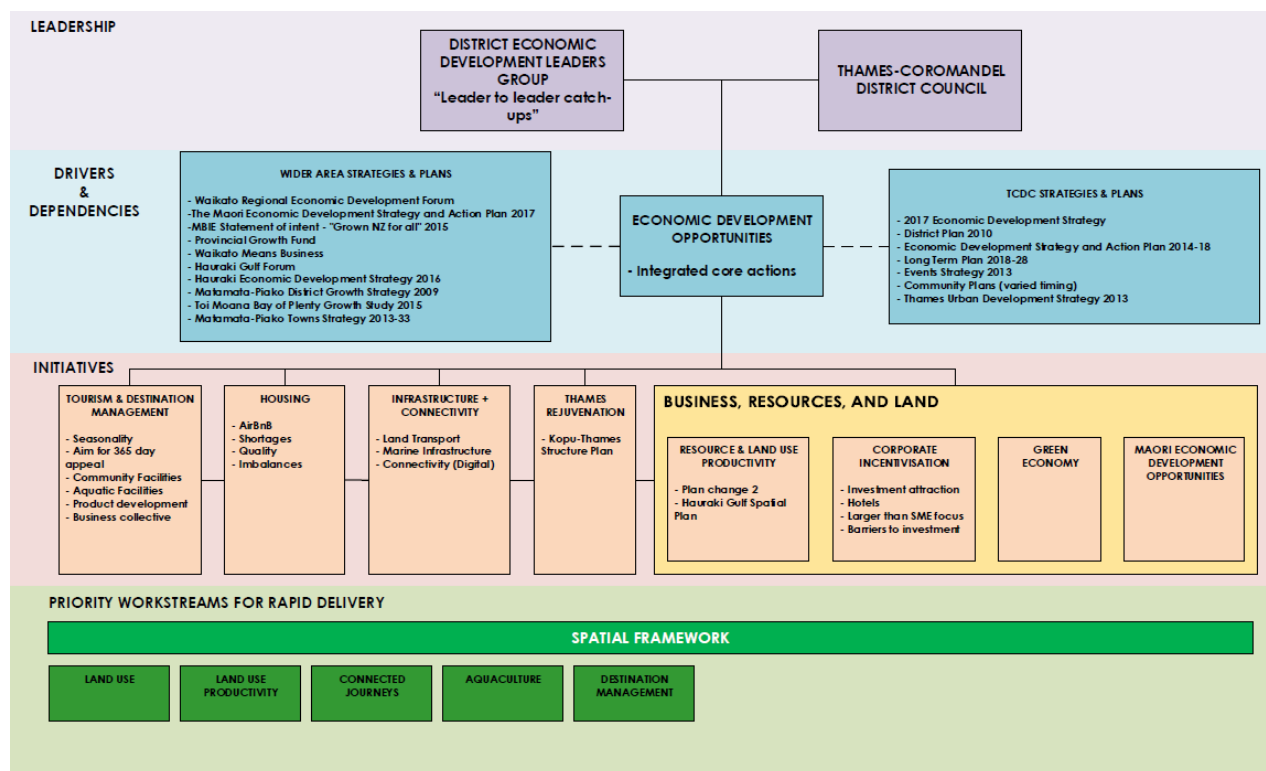


Figure 10: TCDC Productivity Plan workstreams

The Aquaculture work stream will focus on exploring opportunities to grow aquaculture and supporting industries. This includes:

- Understanding what is required to support growth in this industry, including facilities, access to resources, transport connections and industry alignment.
- This will align with the work underway to complete a feasibility study on Kopu as a Marine Servicing and Business Precinct.
- This workstream ties in with the Coromandel Marine Farmers Association (CoroMFA) PGF application for an expansion of the Sugarloaf Wharf within the Coromandel Harbour. This expansion will be designed to handle forecast production increases in aquaculture from this facility.
- This workstream also complements the Pita St Development PGF application for a marine facility for charter boats tourism, ferry and boat storage for recreational boaties.

12.1.1 Project Governance and Decision-Making

A governance framework for the project was created using internal workshops.

The Governance framework shown below is the main forum for decisions and financial approvals. The Steering Group is the primary review and integration forum to ensure implications are thought through and coordinated at an organisational level. The emphasis across the structure is to reinforce that this is the way that TCDC will work moving forward, and that everyone within the organisation has a part to play in achieving successful economic development outcomes for the District. A Stakeholder Advisory group will be established to share information and inform project decision making.

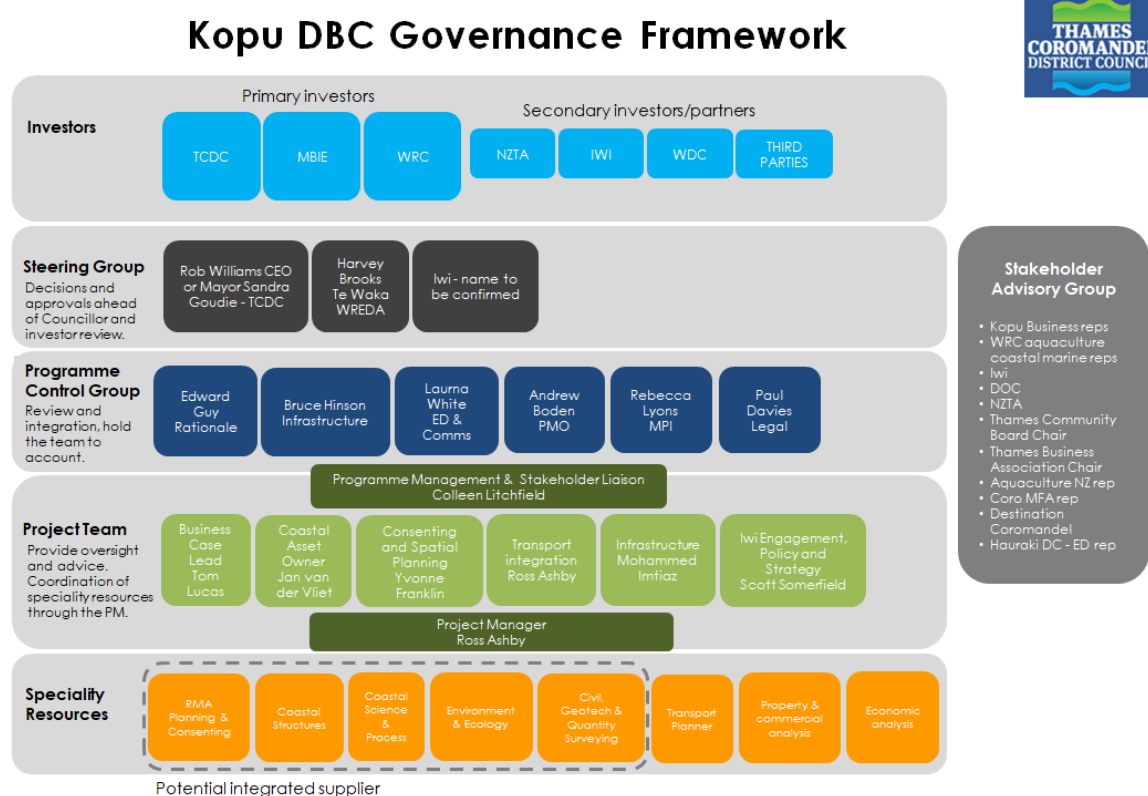


Figure 11: Proposed project governance structure

13 Proposed Process and Schedule

Current project timeframes aim to have the finalised Business Case ready for Thames-Coromandel Council approval by mid-June 2019. Key milestones include:

- Project establishment workshops to test and refine the ILM and objectives (November 2018).
- Procurement of specialists (from December/January 2018).
- Confirm the case for change (January-February 2019).
- The Economic Case - Optioneering and Integration (February-March 2019).
- Targeted engagement on the preferred programme (March-April 2019).
- Complete the Commercial, Financial and Management Cases (April-May 2019).
- Present the draft business case summary by Mid May 2019 to TCDC.
- Draft Business case to be submitted to the Ministry by 30th May 2019.
- Final Business case to be submitted to TCDC before submitting to the Ministry 30th June 2019.
- Final business case to be submitted to the Ministry which addresses the objectives and any ministry feedback by the 30th June 2019.

14 Stakeholder and Community Engagement

Community engagement is a vital element that will contribute to the success of the project. There is a building excitement about this project in the District and partnerships will be key in ensuring the positive momentum is retained and the best value solutions are developed and tested.

Building on the stakeholder engagement to date, ongoing engagement should follow to continue to build local ownership and confidence. Opportunities will be provided for community and stakeholder input at key stages throughout the development of the programme. TCDC is conscious that the message they are receiving from the community is that they want to see action (not another strategy or plan) so a tactical approach is required to give the community confidence that this will occur. Robust and genuine engagement will help to foster a sense of ownership that will support the implementation of the programme and the projects that stem from it.

15 Conclusion and recommendations

While this report is constrained by limited funding, the data and anecdotal evidence, combined with a small number of constraints points towards a positive investment potential. Marine servicing holds the strongest investment case and the potential to enable growth in aquaculture, research, recreational and tourism strengthen the investment story.

As a summary, through a high-level objective assessment, investment in the Kopu landing site appears to be justified by the following opportunities:

- Significant growth is forecast in the aquaculture industry that will drive increased marine servicing needs.
- Capitalising on a shift away from marine servicing that is occurring in Auckland.
- Improving the efficiency of vessel servicing through reduced travel and better access to resources.
- Support the Maori economy in line with Treaty Settlements.
- Increasing local employment opportunities and workforce the capability.
- Development of aquaculture transport, chandlery and storage resilience that includes climate change adaptation.
- Better supporting the strong growth in recreational boating.
- Cultivating the growing investor interest in research and development opportunities that can support current and new industries.
- Capitalising on the spatial planning, zoning and consenting efforts that have made this area investment ready for marine, industrial and business purposes.
- The ability for improved marine facilities at Kopu to support progressive development of tourism and charter operations.

Through this broad analysis, further investment in Kopu appears to be highly justified. It is therefore recommended that a Detailed Business Case (DBC) be developed as outlined above to fully understand the investment opportunities and outline a delivery plan.

Appendix 1: ILM Issues List

Item	Issues
1.	Tidal bar
2.	RAMSAR site
3.	Kopu is an underutilised asset
4.	Vessels are serviced in Auckland, Whangarei, Tauranga
5.	Costs of traveling to these areas is considerable - two staff, journey frequency of one to two years
6.	Not convenient
7.	Not all vessels need to be hauled out for general maintenance and repairs
8.	Vessels and human resources are an impediment to further development for the aquaculture industry
9.	Environmental issues, such as marine pests and water quality are impediments to further development of Coromandel Aquaculture industry
10.	70% of CMFA support development of the Sugarloaf facility
11.	There are capacity constraints in Auckland for marine servicing
12.	The aquaculture industry isn't united around marine facility development
13.	Transport - SH25 and Te Kuma Road aren't resilient enough for perishable goods (30,000t of mussels) and present a health and safety issue
14.	Kopu can handle all the servicing but further investment is needed
15.	Unity breakdown with the sizing of Sugarloaf
16.	Coromandel Harbour lacks facilities (wharf, parking, maintenance, 4 charter boats)
17.	Tourism on the Waihou River is impeded due to wave action and the Kopu draw bridge operational issues.
18.	A wharf would be required at Kopu to service a Kopu to Paeroa ferry service. (Opportunity to leverage a river cruise off the cycle trail and existing maritime museum)
19.	Recreational boating industry is less than \$7m – 1000 members, issues with crowded launching facilities
20.	Shortage of space at the Thames hardstand
21.	Ramp and facilities aren't perfect for recreational needs
22.	Treaty settlement – Hauraki iwi have land title, co-governance of major natural resources and resource rights that need to be considered, including in any reclaimed land in

Item	Issues
	coastal marine area.
23.	Thames wharf – one hour either side of tide, 12m limit
24.	Kopu isn't currently a destination but has potential (commuters, ferry)
25.	Potential for value-add industries at Kopu around biosecurity, hatchery, pests, research, biproducts, health, pet food – but no investment so far
26.	Water quality at Kopu questionable
27.	Processing requires lots of water and wastewater treatment
28.	SH25 issues (safety, resilience, climate change, growth, commercial costs of diversions). Tourism aspects - \$96m - \$91m (\$5m decline)
29.	Disaster recovery (N-1)
30.	Health and safety at Sugarloaf (mixed commercial and recreational)
31.	Growth hasn't occurred 60,000t consented: <ul style="list-style-type: none"> - Environment - Health and safety - Spat conditions and availability due to algal blooms - Water space owners - supported
32.	Current Kopu landing site isn't consented
33.	Climate change issues may have a significant effect on resilience of transport and marine servicing facilities
34.	Non-routine servicing (breakdowns etc) often needs to be done in Auckland, Whangarei or Tauranga

Appendix 2: Stakeholder feedback

Item 1: Email from Rob Baldwin to Vaughn Austen regarding the development of improved haul-out facilities at Kopu

Hi Vaughan,

Further to our conversation yesterday, the thing that limits us at present is the lack of a working wharf in the Thames area. We have lots of customers in Auckland that are happy to bring their boats to us for repair and servicing, however our only option at present is to put them in Tairua or Whangamata which is obviously a much further trip for them (and us) to make. We also service the mussel fleet in Coromandel town and have to do this at their mooring which makes things extremely difficult and is far from ideal when you consider we are immobilising their propulsion in order to do this work. The few boats that use the town wharf have to do so at high tide which means the vessel is out of action at a time dictated by tides rather than maintenance requirements.

A working wharf in Kopu would offer us a place to service these vessels which would be non-tidal dependant, safe and an asset for the local fleet as well as those visiting boats from Auckland.

Regards

Rob Baldwin



MARINE POWER SYSTEMS LIMITED

26 Piako Road, Turua, New Zealand

M. +64 21 191 0909 | E. robert.baldwin@marinepower.co.nz | Skype. MARINEPOWERNZ

www.marinepower.co.nz

Item 2: letter of support for the development of improved haul-out facilities at Kopu from Peter Bull of Paddy Bull Limited



PADDY BULL LIMITED
P O Box 184, Coromandel 3543
Email: pmbull@xtra.co.nz
Mobile: 0274 972295

6 September 2017

Re: Support for Aquaculture haul-out facilities at Kopu

To whom it may concern,

Dear Sir/Madam,

I am writing in support of the development of haul-out facilities for aquaculture vessels at Kopu.

Coromandel is the largest mussel growing region in the whole of the North Island, and there are large numbers of boats serving the industry out of Wilson's Bay. Speaking personally, my company is one of the biggest in terms of local production, and we currently have 4 purpose-built mussel barges, with a fifth 30 metre vessel joining my fleet shortly.

At present, we have to take our boats either to Auckland or Northland for servicing which is a lengthy trip that is inefficient in terms of lost man-hours, and the distance travelled. This is why we need a proper aquaculture haul-out facility at Kopu, as it will be closer, and staff can return home to Coromandel while the vessel is being serviced. It will also ensure that the Coromandel becomes more self-sufficient in servicing the industry, as the Auckland sites are often booked months ahead.

Once the Kopu haul-out is fully up and running, I can definitely commit to bringing my vessels there for regular servicing.

If you have any questions, please feel free to give me a call on 027-497-2295.

Regards

Peter Bull

Grower, Processor and Exporter of Green Shell Mussels

Appendix 3: Multi-Criteria Analysis

				Activity options						
Kopu Landing Site Investment Options				Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Programme 6	Programme 7
Name of option				1-Do nothing	2-Do minimum - Better Coordination	3-New Slipway and minor improvements	4- Single berth jetty, pontoon and slipway installation	5-Multi-berth wharf	6-Marina	7-Marina, Business & Logistics Hub
Description				Status quo - Kopu Engineering may continue planning their own site improvements, the enabling zoning is in place.	Our investment: All initiatives from 1 plus: Improved industry alignment in terms of direction and investment. Better management of the landing site area. Enabling Iwi investment through treaty settlements. Facilitation of Marine research visits and partnerships. Consider council grant funding (in partnership with central government) to support local marine trade training and research.	Our investment: All initiatives from 2, plus: a new sealed slipway, new vessel storage area, formalise the car park, site clearance, improved signage, protection of rail trail users, a new toilet block, improved lighting, delineation of aggregate barging area, basic road access improvements.	Our investment: All initiatives from 3, plus: A single berth pontoon and Jetty, 2.5m draft, improved security, maritime tourism support through basic connection and bike storage, incentivise industry investment in the area through zoning and outreach Expected outcome: mix of recreational & commercial/tourism use of the wharf. increased servicing attraction and activity	Our investment: All initiatives from 4, plus: Multi-berth wharf, new expanded car park. Expected outcome: supports separation of recreational, tourism and commercial operations, basic boat building, increased local marine materials supply, limited processing and storage, incentivisation of corporate investment in related industries.	Our investment: All initiatives from 5, plus: A multi-wharf Marina, large scale boat lift, fuel jetty. Expected outcome: Installation of manufacturing, storage and processing facilities. Upgrade of Tourism facilities to include customer shopfront. Seafood destination development that includes wholesale outlet and dining. Expansion of boat building facilities and capabilities. Mixed use development including commercial, residential and retail.	Our investment: All initiatives from 6, plus: seed funding for a Marine excellence academy including servicing, research, training, climate change adaptation and research, plus seed funding for a Cold storage hub for the region. Expected outcome: Major retail and commercial developments. R&D Hub. Expanded manufacturing for aquaculture, innovative bi-products (healthcare and pet food, etc), marine products and boats. Transport and logistics hub for the region.
		Relative Importance of objective		0%	9%	24%	56%	63%	67%	73%
Investment Objective 1	Enhanced marine servicing, manufacturing & supporting businesses, attracting more customers, business & jobs.	30%		0%	5%	30%	70%	80%	85%	90%
Investment Objective 2	Unity of public/private, iwi & community aspirations & investment direction	20%		0%	20%	20%	50%	55%	60%	70%
Investment Objective 3	Resilient and capable maritime & transport facilities supporting commercial & recreational users.	35%		0%	10%	30%	70%	80%	85%	90%
Investment Objective 4	Improved storage, processing, research, innovation & tourism capabilities	10%		0%	10%	20%	50%	65%	70%	80%
Cost										
Investment cost (Range)				20-40k	100-200k	3-5 million	3.3-7.2 million	6-10 million	10-15 million	12-16 million
Investment cost (Average)				\$ 30,000	\$ 150,000	\$ 4,000,000	\$ 5,250,000	\$ 8,000,000	\$ 17,500,000	\$ 22,500,000
Operational costs if significant (Range)				TBC	TBC	TBC	TBC	TBC	TBC	TBC
Time										
(Range)				1-2 YEARS	1-2 YEARS	2-3 YEARS	2-4 YEARS	2-5 YEARS	5-10 YEARS	10-15 YEARS
Risks										
Political				M	M	L	L	M	H	H
Environmental				L	L	L	M	M	H	H
Assumed aquaculture growth				M	M	L	M	H	H	H
Stakeholder/Public perceptions				M	M	M	M	M	H	H
Technical				L	L	L	M	H	H	H
Safety impacts				L	L	L	L	L	H	H
Financial impacts				L	L	L	M	H	H	H
Legal				L	L	L	M	H	H	H
Achievability				L	L	L	M	H	H	H
Business Needs (PGF objectives)										
Lift the productivity of the district and region				L	L	M	H	H	H	H
Enhance economic development opportunities				L	L	M	H	H	H	H
Create sustainable jobs				L	L	M	H	H	H	H
Enable Māori to reach full potential				L	L	M	H	H	H	H
Boost social inclusion and participation				L	L	M	H	H	H	H
Build resilient communities				L	L	M	H	H	H	H
Help meet New Zealand's climate change targets				L	L	M	M	M	M	M
Dependencies										
PGF funding				L	L	L	L	M	M	H
District Plan enabling proposed changes				L	L	L	L	L	M	M
Indicative Activity Profile:				N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ranking										
1-3				5	4	3	1	2	2	6
				<Insert ranking>	<Insert ranking>	<Insert ranking>	<Insert ranking>	<Insert ranking>	<Insert ranking>	<Insert ranking>

Appendix 4: List of business around Whangarei Marine area



HAULOUT & HARDSTAND
A DIVISION OF KOPU ENGINEERING LTD

Following is a list of businesses observed on a simple drive around the marine area while on a information gathering visit to Whangarei, August 2017.

- Stanley Marine - Used boat gear (chandlery), 09 438 4479
- Kayak Hire
- Lusty & Blundell - Leading NZ marine distribution
- Whangarei Electrical Services - Electrical, Solar, Radio, 09 470 0220
- Abacus Canvas - 09 430 0038
- Palmer Canvas - 09 438 8343
- UK Sailmakers Northland Canvas - 09 430 2801
- Canvas & Covers - 09 438 0473
- Seamac - Custom made marine aluminium windows and doors, 09 438 6884
- Martin Wallace Stainless Steel & Aluminium - 09 438 7940
- Steelmasters - Fasteners, 09 430 6407
- Autotech - Marine electrical, 09 438 3063
- Burnsco - Marine supplies, 09 438 6860
- Saltwater Connection - Fishing, scuba, snorkel, 09 438 8727
- Yamaha - Boat motors and servicing, 09 438 0804
- Diesel Maintenance Ltd - Fuel injection specialists, 09 438 9092
- Whangarei Marine Services - Marine services and supplies, 09 438 3296
- Yovich Engineering, 09 438 8260
- Rudolphs - Marine coatings, blasting, 09 438 8637
- Dockland 5 - Boat haulout and hardstand, 09 438 8558
- Cater Marine Ltd - Marine supply store, 09 402 8292
- All Marine - Boat repair shop, 09 438 4499
- Northern Marine Machining - Stainless steel fabrication specialists, 09 438 2403
- Infracom - Marine electronics, 09 438 4644
- Bridon Cookes - Industrial equipment, 09 438 8964
- McRaes Global Engineering - Hydraulic repair service, 09 438 4107
- Comer Engineering, 09 430 3316
- Culham Engineering, Marine/ship repair, heavy haulage, industrial coatings, 09 438 7145
- Steve Bowling Contracting - Pile driving and concrete repair, 09 435 2119
- SSP Engineering, 09 435 2466

- C Spar and Rigging, 021 456 185
- Vining Marine Brokers, 021 522 761
- Brian Oliver - Painters, anti-fouling etc, 09 436 3133
- Oceania Marine - Superyacht refit, repair and construction, 09 430 3148
- Jones Marine Surveys - 09 435 0133
- Nortec Engineering Marine & General, 09 433 4935
- Marine & Industrial Electrics - Electrical company primarily marine, 09 430 8061
- Electrical Systems Northland - Electrical servicing, 021 226 6430
- Boat Haulage Ltd - Boat transport company, 09 483 8111
- Phoenix Boats, 09 438 4480
- Edlin Marine - Boat builders, 09 431 6368
- Altherm Aluminium - Aluminium joinery, 09 438 3279
- Shipco 360 - New vessels, towing winches, workboats, 09 438 2219
- Norsand - Boat haulout and storage, 09 430 8485
- Absolute Stainless - Specialises in marine stainless steel manufacturing, 09 430 8608
- Transdiesel - Marine servicing and parts, 09 438 4517
- Superyacht Support - 021 409 802
- Tradeline Builders & Marine - Boat building/restoring, 09 459 5299
- Port Whangarei Marine Centre - Boatyard, haulout, hardstand, 09 430 3148
- South Pacific Gateway Marina - Refits, repairs, alterations, 09 438 9907
- CIRCA Marine & Industrial - Aluminium fabrication, 09 438 9522
- Boating & Outdoors - Electronics, parts and supplies, 09 974 8765
- Alloy Stainless - Metal fabrication, welding and machining, 09 438 0252
- Undercover Canvas, 027 874 3390
- Anchorage Marine Team - Small boat sales, 09 430 0975
- Outboard Pro - Outboard servicing and boat storage, 09 430 0975
- Donovans Trade Supplies - Trade equipment and consumables, 09 438 7028
- Titan Sailmakers, 09 402 6947
- Calibre Sails Ltd - Sailmakers and repairs, 09 430 0399
- Northland Inflatables - Boat sails and inflatable boat repairs, 09 430 6470
- Beachmaster Ltd - Boat and dinghy wheels, 021 152 2295
- Warren Hay Marine - New/used boats and servicing, 09 430 2666
- Auto & Marine Upholstery, 09 438 2551
- Chilltech - Refrigeration, 09 438 0065
- Specialized Blast & Coat, 021 440 231
- Immaculate Marine - Boat builder, 021 279 2807
- Dockwise Yacht Transport, 09 309 0229

9 – 13 Queen St, Kopu, Thames 3578
P: 07 868 7571 M: 0274 392476
E: kopumarine@xtra.co.nz

Appendix 5: Whangarei Case Study Article

Boost for local marine industry

18 March, 2015



Auckland is "eyeing up" Whangarei waterfront property.

Northern Advocate

By: Christine Allen

With waterfront property in Whangarei costing five times less than Auckland's soaring price tags, some Super City marine industry players are eyeing the north for cheaper land and skilled workers.

Mark Wightman, managing director of Auckland-based Integrated Marine Group and Shipco 360, which has established a base at Fraser St in Whangarei, said Auckland companies were feeling the squeeze and Whangarei offered them room to grow.

In January 2014 the Auckland-based super yacht refitters took over Shipco Marine Constructors, which closed down in March 2013.

Now called Shipco 360, the Fraser St component of the company has been carrying out refit and repair services for companies like SeaLink, Fullers Northland, Northtugz and other commercial operators.

Mr Wightman told the Advocate it was the quality industry skills in Whangarei that attracted the company's investment.

Shipco 360 is a partnership involving the Spanish-based, ship building, maintenance and repair veterans of Vigo, the Vicalsa Group, and the Auckland-based Integrated Marine Group, which has a strong superyacht focus.

Shipco 360 employed 14 people in Whangarei in commercial work, and up to 30 through sub-contracted work.

Mr Wightman, originally from Okaihau, said his Auckland company was focused more on super yachts. "I don't see Whangarei ever becoming the super yacht capital."

However, he said Northland's industry skill would certainly attract more companies, looking for cheaper, freehold land that allowed for expansion.

"Being a Northland boy, I've always kept my toe in the water there. There's a good level of skill, less traffic congestion, a good work ethic, deep water, easy access to the waterfront ... and lots of history of skill in Whangarei," he said.

"Land is limited in Auckland ... there's no room to expand ... they're quickly constrained," he said. Commercial real estate agent for Harcourts Whangarei, Peter Peeters said most industrial land in Whangarei started at \$130 per square metre.

He is selling the Port Nikau industrial subdivision of 18 lots with harbour frontage, including lots on Logyard Rd and Port Rd in Whangarei.

The cost per square metre of waterfront land is \$190, industrial lots \$150 and industrial land further inland \$130.

This compared with Hobsonville's \$800-\$1000 per square metre price tag or Mt Wellington's \$400 per square metre cost for industrial sites in Auckland.

Freehold industrial property in Auckland City goes for \$3000 per square metre, while you will pay a whopping \$10,000 per square metre for leasehold, waterfront land in the CBD.

Mr Peeters said he had been receiving inquiries on the lots from outside the region.

Murray Wilkinson of Norsand boat yard in Whangarei said he had seen a lift in business and interest from Auckland companies too.

He said the Whangarei industry was doing well and his business had expanded in the last three years. He employs 34 people at the "closed yard" which hauls, repairs and paints boats.

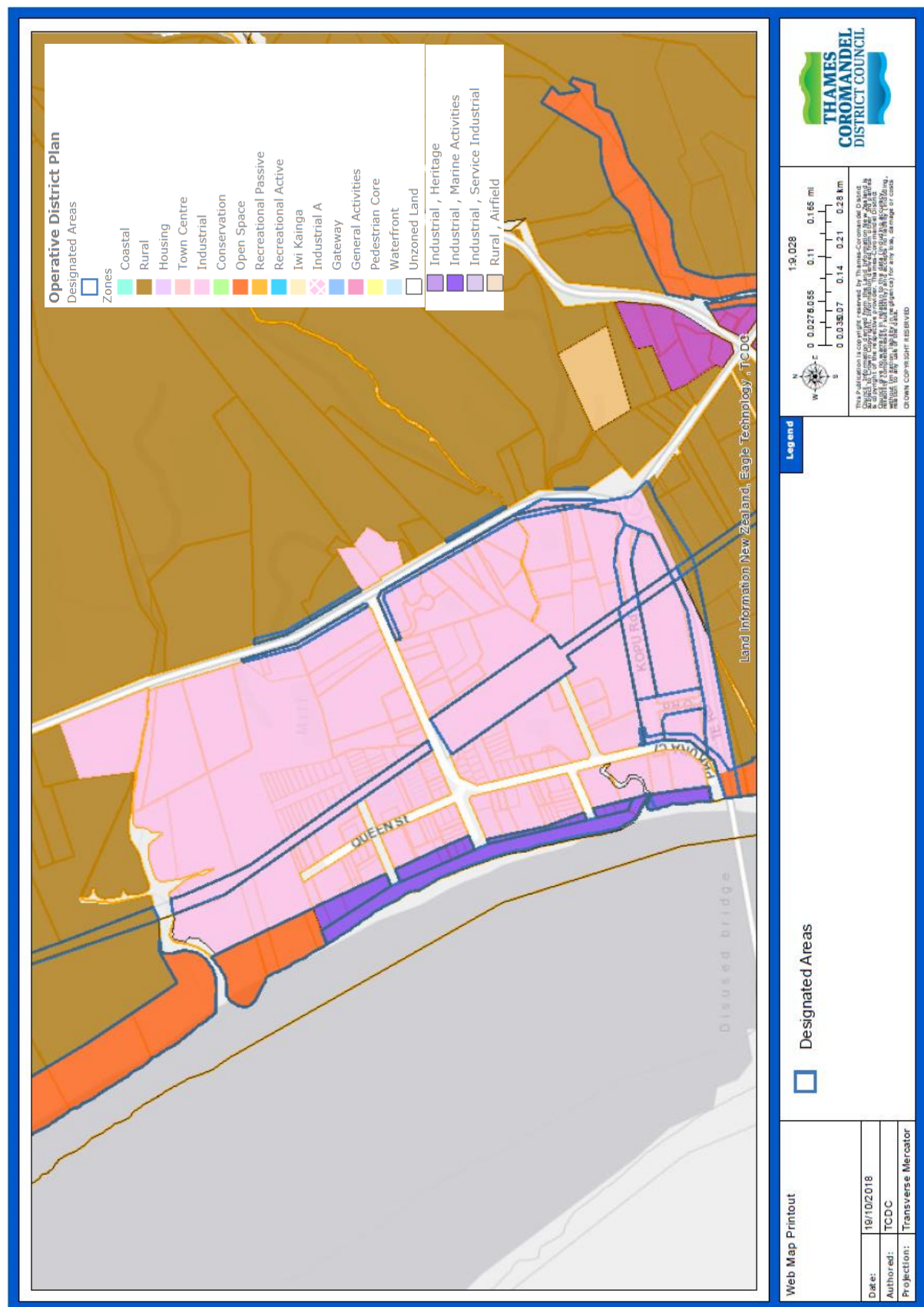
One Whangarei company which was investing in development was Oceania Marine, which has ordered the first of two travelift machines as part of a six-month travel haulout project at the Port Whangarei Marine Centre.

The 100 tonne travelift is believed to be the largest machine in New Zealand, and will be based at the south shipyard from October.

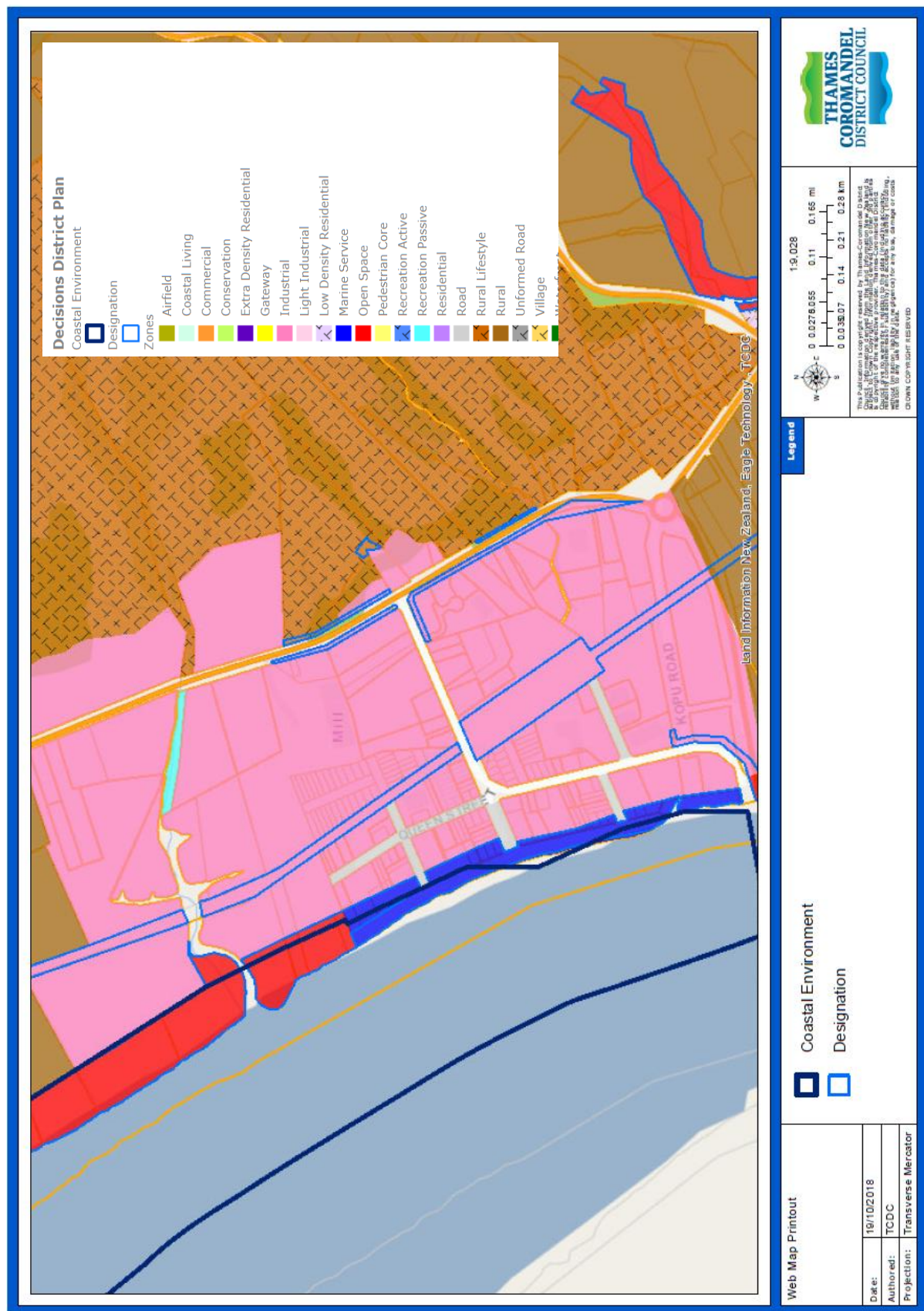
Marketing manager Jim Loynes said Oceania Marine wanted to cater for the increasing number of visiting yachts and sailing catamarans.

A 450 tonne mobile boat hauler was part of the next stage of development and that was expected to be ready for the summer 2016 season.

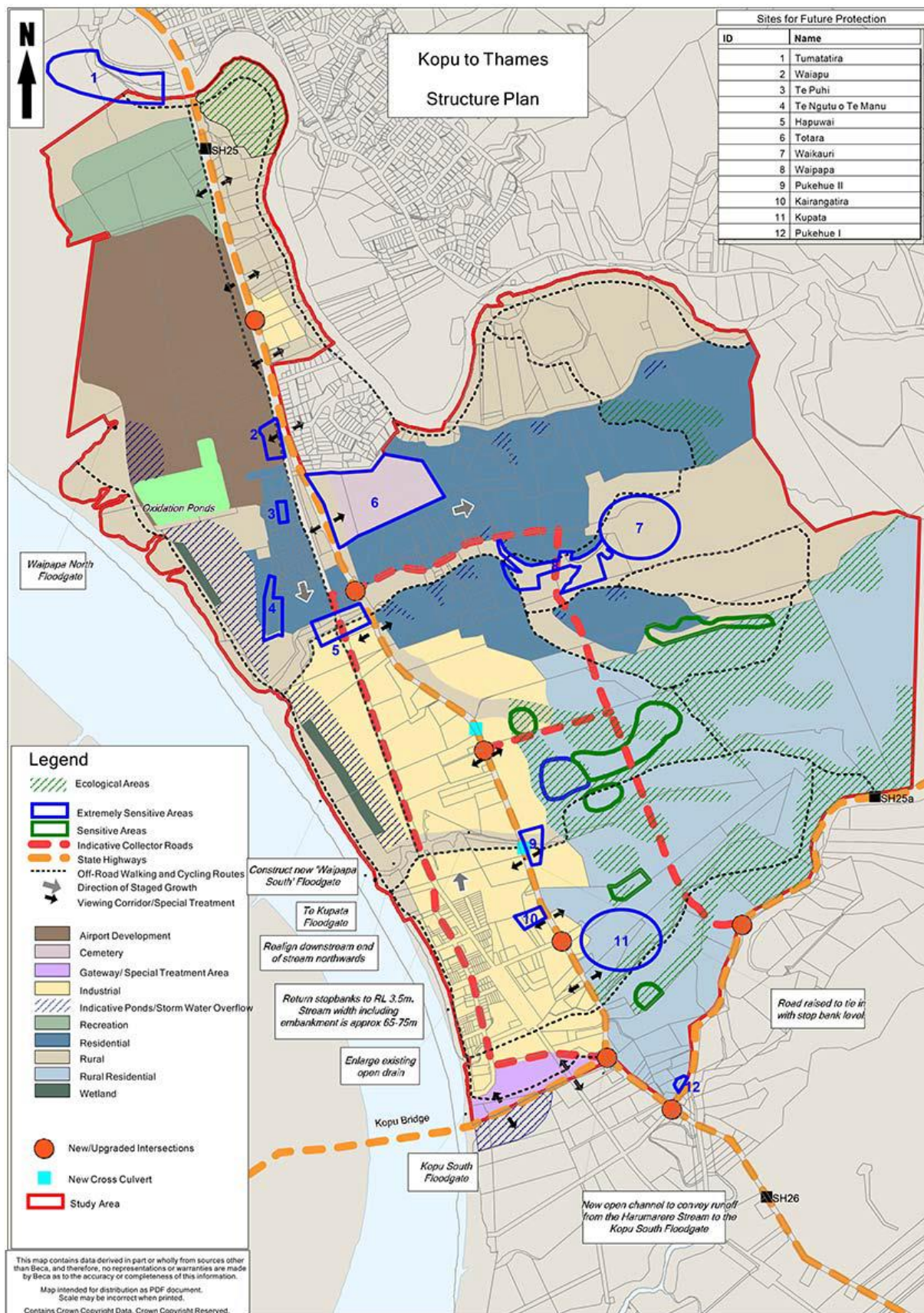
Appendix 6: Operative District Plan Zones



Appendix 7: Kopu Decisions District Plan



Appendix 8: Kopu-Thames Structure Plan



Appendix 9: Gap analysis from stakeholder workshop

Investment Objective/ Benefit	Enhanced marine servicing, manufacturing & supporting businesses, attracting more customers, business & jobs. 30%
Existing Arrangements	<ul style="list-style-type: none"> The landing site is currently will not be able to cope with growth in numbers or vessel size or support more diverse uses. There are workforce and accommodation challenges in the Coromandel that are constraining growth in Aquaculture and related Marine industries. Coromandel wharf has very limited servicing capability and this is leading to increased uptake in Kopu or alternatives (such as Auckland). Specialists to address large issues likes motors and hydraulics may need to come from Auckland. Motors and hydraulics the big issues. Private use of Kopu facilities is significant (example 20 of last 26 boats that that time). Servicing managed today but if barges double, more capacity will be required. Travel for specialist servicing. A certain amount can be done in Coromandel. Hard to get tradespeople due to housing/accommodation shortage (Kopu and Coromandel). Auckland marine facilities under pressure due to land value.
Business Needs	<ul style="list-style-type: none"> The ability to adapt to growth through expansion of services and capacity. Improved Local industry engagement and development through training and apprenticeships. Adequate workforce and associated housing. Improved slipway and wharf facility at Kopu. Consented expansion plans (TCDC land). Business continuity - needs to allow Kopu engineering and others to continue their existing business operations. Alignment with rail trail beautification works.
Potential Scope options	<ul style="list-style-type: none"> At least a single berth service wharf. Option to include provision for ferry, barge, offload space. Combined approach to spread costs and assessments. Improved slipway, including adequate load bearing pavement. Any facility to support broader involvement, such as a marine engineer. Facilitation of Boat building activity (cost of land cheaper than Hamilton for example). Opportunity for a cluster of marine-related services. Could be on a similar scale to Whangarei.

Investment Objective/Benefit	Unity of public, private, lwi and community aspirations and investment direction (20%)
Existing Arrangements	<ul style="list-style-type: none"> There is some industry and community disagreement on the scale of development required in Kopu and Sugarloaf. It appears to be agreed that Kopu should be developed as a backup facility in addition to investment in Sugarloaf to meet the needs of growing aquaculture industry. The lack of alignment has the potential to hold back decision making and investment in the area.

Investment Objective/Benefit	Unity of public, private, iwi and community aspirations and investment direction (20%)
Business Needs	<ul style="list-style-type: none"> • Agreement on investment priorities, including an appropriate mix of functions and opportunities. • Agreement on growth projections and investment focus. • Alignment with the National/Regional Strategies.
Potential Scope	<ul style="list-style-type: none"> • Further collaborative planning to create a shared direction. • An MOU or something similar. • Improved coordination of aquaculture interests with those of the wider business environment, iwi and community.

Investment Objective/Benefit	Resilient & capable maritime & transport facilities supporting commercial & recreational users. 40%
Existing Arrangements	<ul style="list-style-type: none"> • The current landing site is highly restrictive. • There are concerns around health and safety given the crossover of nature of marine servicing, recreational activity and rail trail use • There is more water space to be developed for marine farming and this will increase marine servicing requirements. • Coromandel Wharf lacks adequate maintenance facilities as well as a lack of parking, storage and access to skills and parts. • The Coromandel Wharf is also constrained by unreliable roads (SH25/Te Kouma). • Climate change and sea level rising provide a vulnerability for Sugarloaf, strengthening the need for a backup site for aquaculture product transport and storage. • Growth in recreational boating is leading to an overloading of existing facilities and more mixing of recreational users and commercial operations.
Business Needs	<ul style="list-style-type: none"> • Separation of commercial and recreational activities. • New, fit for purpose facilities that meet growing needs recreational facilities. Getting the right mix of facilities to meet needs. • Dual facilities to cater for servicing and aquaculture. Providing for growth. • Having an alternative plan for offloading product. • A network/system approach to define function and resilience. • Scalable solutions to meet growth and resilience needs.
Potential Scope	<ul style="list-style-type: none"> • A Marina or multiple wharves of meet a range of needs. • All tide and climate change resilient marine facilities. • Separation of commercial and recreational activities. • Improved recreational boating facilities. • New, fit for purpose facilities that meet growing needs recreational facilities. Getting the right mix of facilities to meet needs. • Aquaculture offloading, transport and storage facilities. • A network/system approach to define function and resilience. • Scalable solutions to meet growth and resilience needs.

Investment Objective/Benefit	Improved storage, processing, research, innovation & tourism capabilities 10%
Existing Arrangements	<ul style="list-style-type: none"> • There is currently no opportunity for Kopu to play a role in aquaculture goods processing. • There are also no locally based research facilities to help understand the issues that may impact marine based industries or identify new innovations.
Business Needs	<ul style="list-style-type: none"> • Providing the opportunity – start to evolve this as a precinct to encourage investment. • There is a need for local research facilities to help understand local threats and opportunities.
Potential Scope	<ul style="list-style-type: none"> • Facilities to enable research and development opportunities. • Arrangements to coordinate investment interest in new products, such as seaweed food and nutritional offerings. • Facilities to cater for increased tourism activity, including a ferry (multiple route options).

Appendix 10: Detailed assessment against scope criteria

Present and future demands for servicing of aquaculture and charter vessels

Current servicing levels and trends

Today marine servicing for vessels operating in the Coromandel can be completed in Kopu, Auckland, Whitianga and Tauranga. Minor servicing can be undertaken at Coromandel Harbour, but this is problematic due to the need to take the vessel out of service while relying on a small tidal window and only non-routine servicing can be done in this way. Auckland marine facilities are also under pressure due to increasing land value and the local cost of labour.

Routine servicing is required annually for any vessel every 12 months and full vessel surveys are required every two years. Non-routine servicing needs to be completed off water, while routine can be completed on-water with the right facilities available, such as a wharf to tie up to. The Coromandel Harbour is also constrained by the lack of available local skills, scarcity of affordable housing and the distance required for specialists to travel from Auckland when required (the reliability of SH25 also impacts this).

Motors and hydraulics are the big issues and they require highly skilled workers and good access to parts to complete this work efficiently. Through the work of Kopu Marine (which is part of Kopu Engineering), Kopu is managing a range of servicing requirements for vessels up to 100 tonnes today. Private use of Kopu facilities is significant and in August 2018, 20 of the last 26 boats serviced were private. Through a strong reputation, self-investment and development of specific capability, Kopu Marine is reaching its operational capacity while operating without adequate marine facilities (such as a proper slipway and a wharf). The growth in aquaculture that is forecast may double the number of barges and this demand will be beyond the capacity of Kopu Marine, or other service providers, without investment in improved facilities.

Kopu Engineering (who are the primary user of the landing site today) are investing in their own capacity and capability based on the demand they see. This investment confidence is supported by several other business owners who are already planning their own investments in the area whether the council invests in the landing site or not.

A recent update from Vaughan Austin of Kopu Marine has provided the following summary.

"The shed we have and smaller trailers has been in operation for nearly 20 years and would do approximately 6-10 boats a year depending on the extent of the work, some boats have occupied the shed for over a year. Our large capacity gear has only been in operation for 18 months.

This year we have ramped that up tripling the capacity, this year we are up to 35 haulouts in total, and demand is growing steadily.

The Large trailer has done 14 commercial vessels since completion, most of these vessels will be back annually and some bi annually Then you have the emergency breakdowns that are unforeseen. At the moment I have 10 vessels on the list to come out before Christmas most of these are new customers.

We have only scratched the surface of the local commercial vessel fleet and are also getting constant calls from Auckland and further afield. I would think in another year the large trailer will be booked solid

As I said at the meeting there is a lot of work that these vessels don't have to come out of the water for if we could tie them to an all tide wharf.

Kopu Marine is steadily growing but all infrastructure costs have to be covered by Kopu Engineering and ourselves personally this has got to straining point with such big and expensive machinery and land value.

As I see it the market potential is huge, but it takes a bit of time and you can only grow at a certain speed a very important part of this is training staff. A business like this requires very highly skilled people.

More people will be trained as the Infrastructure in the area grows to accommodate more vessels and marine activity.

An all tide wharf is the next step to increasing this marine activity".

In summary, the Kopu Landing site is nearing capacity in its current state and without investment in improved marine facilities, this site will be a constraint to growth in marine servicing as well as the aquaculture, tourism and recreational fishing sectors.

Aquaculture growth

There is significant growth forecast in Coromandel Aquaculture. Given these aquaculture vessels cannot be serviced in the Coromandel area, there's opportunity for Kopu to play a role in supporting this growth through improved marine facilities.

The growth of the Coromandel aquaculture industry is important from both a national and a regional perspective. The Coromandel is the second largest producer of mussels after Marlborough, which means that the income flows and job creation as a result of Coromandel aquaculture is important to the whole Waikato region – and also to NZ given the goal of meeting the Business Growth Agenda target of \$1 billion in aquaculture earnings by 2025.

The Coromandel industry is set to continue growing, with the NZIER report estimating that once the already consented marine areas producing mussels and oysters come on-stream this will grow the industry's production by 50%. This growth is likely to be further stimulated by the emergence of finfish farms in the Firth, as well as potential new aquaculture areas identified through the Hauraki Gulf Marine Spatial Plan project. However, as the industry grows in size, there will be an increasing demand for vessel maintenance and associated services.

The current per annum harvest volume is equal to approximately 100 Tonne per day assuming work is undertaken an average of 28 days per month during the harvest season (based on 25,000 Tonne over 9 months). The Sugarloaf currently caters for 18 vessels, with 3 new vessels currently being built for industry.

Importantly, the NZIER report states that to realise the benefits of continued aquaculture activity in the District, and its potential to drive growth, infrastructure needs to be improved, or developed, to handle the increased volumes of produce and inputs used. This will require improved wharf facilities to handle additional barge movements, as well as landing area to handle additional truck loading.

In summary, there is significant growth forecast in marine farming activities in the Coromandel that requires adequate local marine servicing and potential backup facilities for aquaculture freight, processing and storage. In its current state, Kopu cannot provide this capacity or capability.

Growth in Recreational and Charter Fishing

Aquaculture helps to enhance the recreational fishing attraction in the Coromandel, but overloading of boat ramps and long delays are constraining growth in this sector. An improved Kopu landing site could play a role in managing this demand.

Recreational Fishing is a billion-dollar industry for New Zealand according to a 2016 NZ Marine Research Foundation report. Saltwater fishing is the fifth most popular leisure activity for hundreds of thousands of New Zealanders. To add to this, NZ is the third largest trailer-boat-owning nation per capita and the trend is moving from moored vessels to larger trailer boats.

Recreational fishing contributes to the social, economic and cultural well-being of all Kiwis, whether they go fishing or benefit from the significant economic activity it generates. The Thames coast and Coromandel area are extremely popular destinations for recreational fishing and this is

in part due to the presence of the mussel farms and the habitat they provide for many fish species including snapper and kingfish.

Many recreational fishers also visit the Coromandel independently for the good fishing that is in and around the mussel farms. These people also buy fuel, bait, food, tackle and accommodation locally for their adventures.

The recreational and charter fishing industry in NZ is currently growing by 10% annually. Research also shows that fishing and outdoor activities are major drawcards for tourists and New Zealanders returning home to settle down and raise a family. Many businesses support recreational fishing, including retailers, boat builders, tackle manufacturers, suppliers, marinas, motels, restaurants and charters. Meanwhile \$89M is spent by 100,000+ international tourists on marine fishing activities each year.

Demand for adequate recreational facilities to cater for recreational fishing demand and growth is increasing. In the Thames-Coromandel District, the available boat ramps are overloaded during peak season and this is creating risks around lost economic opportunities and potential safety risks emerging from recreational and commercial operations conflicts.

The recent release of the Fishing and Boat Ramp Calendar for the Coromandel demonstrates the challenges in this area. The calendar contains profiles on boat ramps along the West Coast of the Coromandel peninsula, from Kopu, south of Thames to Amodeo Bay, north of Colville. It also includes tide times of the west coast and best bite times, thanks to Marine Deals as well as boat launching tips, car parking information and launching fees (where applicable) for each ramp.

"The purpose of the calendar is to try and alleviate pressure on some of our busier boat ramp facilities (like the Sugarloaf/Te Kouma and Waikawau boat ramps), during peak summer times and to spread the recreational fishing load across facilities to promote wider use and reduce congestion at the overcrowded ramps," says Thames-Coromandel District Mayor Sandra Goudie.

"During the summer months, the popular boat ramps, Sugarloaf and Waikawau are packed with fisherman. There are usually long delays, I think the boat ramp calendar is a great idea to inform people of alternative boat ramps on the West Coast" says Jason Chaplin Skipper of the Ruben Jack for Coromandel Fishing Charters.



Figure 12: The 2018/19 Coromandel Fishing and Boating Calendar

In summary, Kopu has a role to play in supporting the growth in recreational and charter fishing. Improved marine facilities can improve the attractiveness of Kopu as a launching point, in addition to taking the pressure off the more popular boat ramps.

Improved efficiency and attractiveness

As demonstrated by Peter Bull, of Paddy Bull Limited - one of the largest Marine Farmers in the area, there is industry support for the development of improved Haul out facilities at Kopu. In a recent letter of support for this development, Peter Bull said:

"At present, we have to take our boats to either Auckland or Northland for servicing which is a lengthy trip that is inefficient in terms of lost man-hours, and the distance travelled. This is why we need a proper aquaculture haul-out facility at Kopu, as it will be closer, and staff can return home to Coromandel while the vehicle is being serviced. It will also ensure that the Coromandel becomes more self-sufficient in servicing the industry, as the Auckland sites are often booked out months ahead.

Once the Kopu haul-out is fully up and running, I can definitely commit to bringing my vessels there for regular servicing". See Appendix 4 for the full letter.

On a similar note, other business operators are demonstrating their interest in improved facilities at Kopu. A common issue noted by marine operators in the area is the inefficiency of current arrangements, which involves completing partial servicing in the water at the Coromandel or making a lengthy and inefficient trip to an alternative port.

The quote below is taken from a recent the email from Rob Baldwin (of Marine Power Systems) to Vaughn Austen regarding the development of improved haul-out facilities at Kopu.

"the thing that limits us at present is the lack of a working wharf in the Thames area. We have lots of customers in Auckland that are happy to bring their boats to us for repair and servicing, however our only option at present is to put them in Tairua or Whangamata which is obviously a much further trip for them (and us) to make. We also service the mussel fleet in Coromandel town and have to do this at their mooring which makes things extremely difficult and is far from ideal when you consider we are immobilising their propulsion in order to do this work. The few boats that use the town wharf have to do so at high tide which means the vessel is out of action at a time dictated by tides rather than maintenance requirements.

A working wharf in Kopu would offer us a place to service these vessels which would be non-tidal dependant, safe and an asset for the local fleet as well as those visiting boats from Auckland".

In summary, the Kopu landing site is an underutilised asset that could become a highly efficient and attractive marine servicing centre if the marine facilities were improved.

The potential for the creation of a multi-use marine facility (Aquaculture, Fishing, and Boating) with bulk storage and processing capabilities

Enabling zoning, access to resources and consents

Through coordinated planning, the constraints to potential development have been minimised over time. The Kopu site is already zoned industrial. In addition, the land required for the berth/wharfing infrastructure sits on an unformed public road owned by TCDC. Furthermore, the flood bank immediately adjacent to the site is owned by the Waikato Regional Council, which potentially makes consenting issues easier. Other features include:

- Good all-tide access adjacent to the proposed wharf.
- The land at Kopu is already zoned industrial.
- There is ease of access to State Highway 25.
- The new Kopu Bridge has improved traffic flows for product going to Auckland, and relieved congestion. However, the re-routing of traffic via the new bridge has left the

current Kopu accessway comparatively underused. This means traffic issues adjoining the industrial land will be minimized.

- There are plenty of existing industrial properties which could be utilized for offices, storage facilities or factory processing.
- The site has adequate supply of electricity, water and Ultrafast broadband.
- The Kopu site's proximity to Thames and Paeroa means that there should be an adequate supply of labour.

Leveraging a competitive advantage

The Thames-Coromandel District Annual Economic Profile for 2017 noted that aquaculture and marine servicing are industries where the district has a competitive advantage.

Proximity to Coromandel aquaculture operations, good access to workforce and affordable housing, high quality connections, existing business base, a supportive community and enabling zoning all count in its favour.

There is also evidence to suggest that Auckland Harbour is moving away from Marine servicing as demand grows for more useful public spaces in a prime position. The increasing land value in the area also has an effect on the land use and this is prompting consideration of other activities in the commercial market. This movement in combination with the significant cost of land and labour in Auckland are contributing to a growing desire for alternative locations for marine servicing. Evidence of this trend was evident as far back as 10 years ago, as shown in the graph below.



Figure 13: Change in the number of marine industry business units in operation in Auckland (Source: Industry snapshot for the Auckland Region: The Marine Sector, 2008, Auckland Regional Council)

In the case of the Coromandel, stakeholders have flagged the following issues with sending their vessels to Auckland for servicing:

- High demand creates long lead times for servicing bookings.
- The extra distance (when compared to Kopu) that can result in lost operational time and increased staff costs.
- The higher cost of labour in Auckland which can push up the price of Marine servicing there compared to other places. The table below provides a comparison between Kopu and Auckland based on marine precinct land price and vessel servicing costs.

Table 6: A comparison of Auckland and Kopu Marine land and servicing costs

Costs	Kopu	Auckland
Land costs	\$80 - \$120 /sq m (land only)	\$600 - \$3,000 /sq m (depending on the area and zoning)
Vessel servicing costs per hour	\$80	\$95-\$110 plus extra equipment and berthage costs

In summary, Kopu is well positioned to leverage a competitive advantage in marine servicing that can start with a moderate level of investment and add to this in line with the industry response. Given a level of activity is currently being handled with the bare minimum facilities, improved infrastructure can yield rapid benefits.

Providing resilience for the Aquaculture industry

While it is acknowledged that the Sugarloaf is the primary site for aquaculture processing, given the scale of the growth expected in the area, it makes sense to consider alternative sites to provide industry resilience. In its current form, the Sugarloaf wharf is highly susceptible to climate change and severe storm impacts through storm surges affecting both the wharf and its access roads (SH25 and Te Kouma Road).

The 2018 Aecom Sugarloaf Options Assessment Report highlighted the need for the Coromandel Aquaculture industry to consider the need for improved resilience of marine facilities. See an excerpt from the report below.

It is clear that recent climatic events have adversely impacted on efficient industry operation at/from the Sugarloaf. This has been produced through overtopping and submergence of the landing facility itself, and restrictions on the ability of heavy vehicles to access Te Kouma Road and the Sugarloaf via the coast road (SH25). While the most recent weather event in January 2018 is acknowledged to have been extraordinary in terms of the coincidence of several tidal and weather factors, it needs to be recognised that extreme weather events are predicted by all official government agencies to become more frequent in the future.

Resilience to climate change can be directly accounted for to a certain degree in the design of any future expansion at the Sugarloaf. In a wider sense however, when putting forward an application to expand the Sugarloaf, CoroMFA should have regard to and document at least some consideration of the resilience of the Sugarloaf in terms of its wider geographical location on the Coromandel Peninsula.

The capacity of the Kopu site to take barge traffic has already been demonstrated by Leach's, who currently operate a barging service from Kopu. At present the barge pulls up onto the edge of the riverbank to load and unload cargo – which is currently aggregate shipped directly to the Gulf Islands. The Leach's barging operation commenced with a subsidy from the NZTA Alternatives to Roding fund, which demonstrated the viability of the operation. This funding has now ceased, but the barging is still continuing on a commercial basis to Auckland and the islands of the Hauraki Gulf. Leach's original consent also allowed for a 65-metre conveyor belt, which has never been built.

In summary, Kopu already has some capacity to handle barge servicing, but through improved marine facilities at the Kopu Landing site, Kopu could play a key role in underpinning the resilience and capacity of the Coromandel Aquaculture industry well into the future. This role could start with greater vessel servicing capacity and in time develop further to take on processing and storage capability.

Leveraging wider investment in aquaculture and marine facilities in the Coromandel

There is growing public and private investor interest in the Coromandel area. This interest provides an opportunity for the TCDC and regional/national partners to leverage and enable this. A holistic approach needs to be taken to ensure that investments in the region are complementary and integrated to ensure they collectively bring value to the region. The map below shows how the potential for investment in Kopu as a marine and business Precinct is being considered alongside investment proposals for investment in a Coromandel Gateway facility and expansion of the Sugarloaf Wharf for commercial aquaculture. Collectively, these investments could uplift the performance of the Coromandel in the Marine and aquaculture sectors while improving the appeal of the area for business, tourism and recreation purposes.

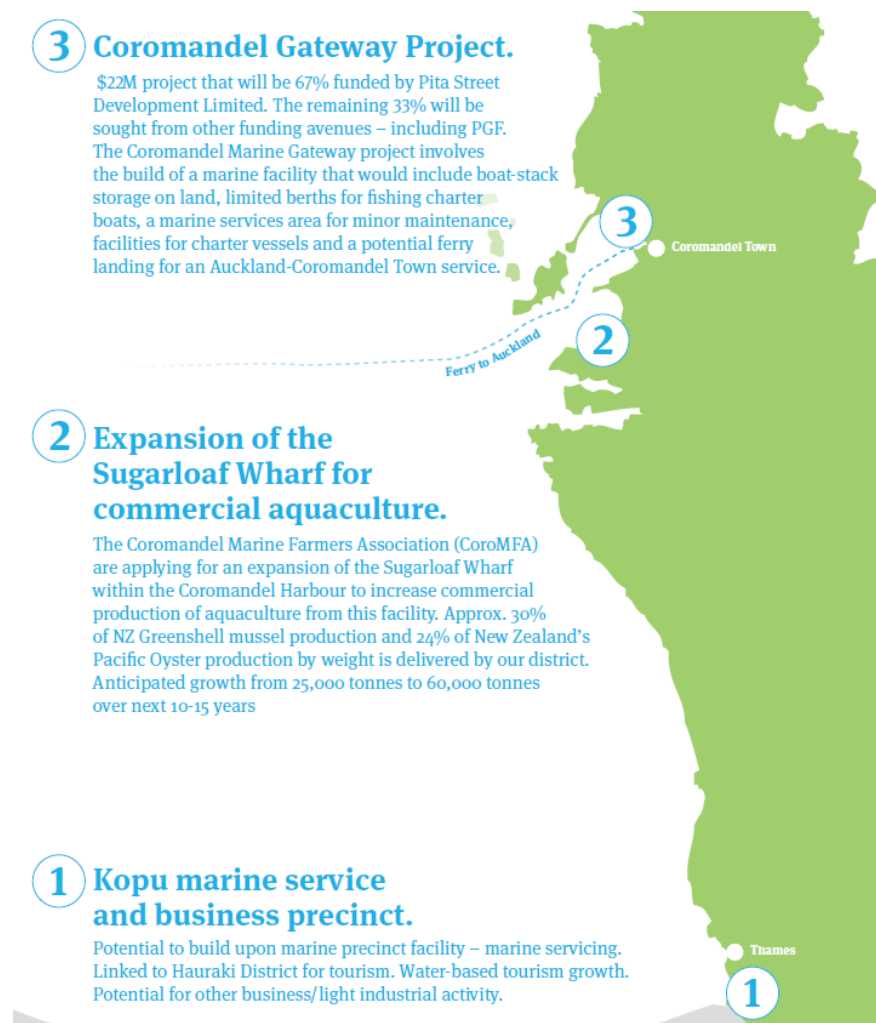


Figure 14: Integrated marine investment proposals for the district

The opportunity to invest in catalyst infrastructure

There is potential for the government and councils to play a catalyst role through investing in infrastructure that can facilitate a flow of investment in Kopu. There are several opportunities that can leverage improved marine facilities and through greater use and attraction for customers, there is strong potential for corporate investors to follow.

The development of a berthing/wharfing facility could potentially be used for several industries – marine servicing, aquaculture, aggregate transportation, storage, forestry, recreational boating, maintenance site for charter boat operators and tourism linked to the Hauraki Rail Trail.

There are good examples in New Zealand of places where marine infrastructure investment has served as a catalyst to attract a cluster of business around it to meet customer demands and create broader opportunities. Two examples are outlined below.

Whangarei

Whangarei marine infrastructure investments have been a useful case study for development of a marine precinct and the effect it can have on the area. As shown in the 2014 news article included in Appendix 7, this area attracted investment in marine businesses through combining enabling infrastructure, a good skills base and cheaper land costs.

The 2014 article captured the rationale for an Auckland-based business looking for alternative sites based on costs and land availability putting pressure on their Auckland operations. A selection of the 2014 article is included below:

Mark Wightman, managing director of Auckland-based Integrated Marine Group and Shipco 360, which has established a base at Fraser St in Whangarei, said Auckland companies were feeling the squeeze and Whangarei offered them room to grow.

He said Northland's industry skill would certainly attract more companies, looking for cheaper, freehold land that allowed for expansion.

There's a good level of skill, less traffic congestion, a good work ethic, deep water, easy access to the waterfront ... and lots of history of skill in Whangarei," he said.

"Land is limited in Auckland ... there's no room to expand ... they're quickly constrained," he said. Commercial real estate agent for Harcourts Whangarei, Peter Peeters said most industrial land in Whangarei started at \$130 per square metre.

He is selling the Port Nikau industrial subdivision of 18 lots with harbour frontage, including lots on Logyard Rd and Port Rd in Whangarei. The cost per square metre of waterfront land is \$190, industrial lots \$150 and industrial land further inland \$130. This compared with Hobsonville's \$800-\$1000 per square metre price tag or Mt Wellington's \$400 per square metre cost for industrial sites in Auckland.

In a 2017 trip to Whangarei to explore the way the place has developed because of investment in marine infrastructure, Vaughan Austen counted over 60 businesses in close proximity to the marine precinct. These are listed in Appendix 6.

Tauranga

Tauranga is another example of the opportunities to build on clusters of related marine activities, albeit at a bigger scale than what is being considered for Kopu.

The Tauranga Harbour Marine Precinct (the "Marine Precinct") is a \$11.4m project that delivered a purpose-built marine servicing facility at Sulphur Point.

The precinct provides a base for boat building and refit businesses in Tauranga City, and is managed by Tauranga City Council (TCC) under the Vessel Works brand. The project was funded by TCC (\$6.4m to be partially recovered through land sales) and BOP Regional Council (\$5m provided through the Regional Infrastructure Fund). The Marine Precinct site is currently zoned as Port Industry and owned by Tauranga City Council.

The Marine Precinct includes lots in a range of sizes for marine businesses, a 6300-square metre vessel storage area (hardstand), deep-water marina berths for large vessels and New Zealand's largest vessel hoist / travel-lift (350 tonne haulage capacity and extra-wide).

The development of the Marine Precinct will support and boost a marine sector already leading the way internationally in craftsmanship, composites and especially innovation. Tauranga has the capacity to become a regional hub for marine activities, with world-class facilities and services. Having the largest capacity vessel hoist/travel-lift in New Zealand will bring unprecedented opportunities to the local marine industry.

The central location of the precinct and its direct connection to the strategic transport network are an added bonus, making it the ideal spot for marine businesses large and small. The precinct was predicted to create 130 fulltime equivalent jobs.



Figure 15: Artists impression of the Tauranga Marine Precinct

Six marine businesses acquired lots in the Marine Precinct, signing sale and purchase agreements with the Council on 30 June 2016. Together these businesses cover a wide spread of specialities, from fibre-glassing to marine engineering, vessel painting and timber decking to composite building, a specialised workboat fleet and a fishing fleet. This means increased potential for collaboration among precinct occupiers and with other marine businesses in the area. This is the first step in the Marine Precinct's strategy of providing a one-stop-shop for customers getting their vessels serviced in Tauranga.

In summary, there is an opportunity for TCDC and partners to use a staged approach to invest in marine facilities that enable private investment into marine and related businesses. Early and indicative investment options are discussed in section 6 and these should be explored further in a detailed business case.

The potential for the creation of marine-based research facilities.

While this is not the primary investment focus for Kopu, if marine facilities were developed in Kopu, there may be significant benefits in creating marine-based research facilities. The opportunities within this area are outlined below.

Aquaculture resilience

As indicated by the aquaculture representatives in the August 2018 workshop, it makes sense to have marine research facilities nearby to monitor the health of the environment and their products. Today there is no local research facility that can help understand the threats and opportunities for this area across areas like biosecurity, pests and hatchery management. Aquaculture in Nelson currently benefits from the proximity and work of the Cawthron Institute, where research and development is adding value to aquaculture exports through selective breeding, improved farming systems and advances in hatchery technology. The lack of local capability in this area is a vulnerability for Coromandel marine farming today.

Investor interest in product development

There is potential for Kopu to play a role in enabling growth in research and development in the Coromandel. There is growing interest in value-add industries that use a 'circular economy' approach to consider where bi-products from existing industries may be used to develop new products in emerging industries, such as pharmaceuticals, pet food or culinary products.

The "Musselling-up" programme at the Nelson-based Cawthron Institute is an example of the potential in this area. The Cawthron Institute and Sanford Limited have joined forces to identify

and validate the health benefits of Greenshell mussels, in particular looking at its potential anti-inflammatory qualities, improved joint and bone health and increased mobility.

The programme will generate scientific evidence of the health benefits of Greenshell mussels and assist the industry to identify and develop optimal Greenshell mussel-based functional food products that will appeal to the emerging market of wealthy, aging, health conscious consumers – predominantly in China.

TCDC is experiencing a surge in investor interest around product development that can utilise the resources and industries in the district. While these interests need to be kept confidential for commercial purposes, growth in this area demonstrates the potential benefits of investment in marine facilities at Kopu and across the district.

In summary, there is potential for improved Kopu marine facilities to play a role in attracting marine-based research and development investment activities. Without these marine facilities, it is more difficult for researchers to visit the area and a more attractive site and heightened marine activity will also help attract them.

Whether TCDC and partners invest directly in research facilities or supports another organisation in doing so should be considered further in a Detailed Business Case. The ability for Kopu to compete with the likes of the Cawthron Institute for research and product development is low, so further work needs to be done to understand how more targeted and unique work may be done in this area to justify specific investment in R&D facilities in Kopu.

Assessing tourism and tourism water-based opportunities.

An improved Kopu landing site has the potential to play a role in improving the water-based tourism opportunities on the Waihou River. Investment in a wharf at Kopu could encourage tourism charter boats to sail from Kopu up to Paeroa. This would also strengthen links with the Hauraki Rail Trail and provide another eco-tourism option for those wishing to travel by boat for part of their journey, and then joining the Rail Trail for the scenic Karangahake section through the Waihi.

For recreational boaties, if berthing facilities are upgraded at Kopu this could provide easier access to the fertile fishing grounds of the lower Firth, and reduced congestion from recreational fishers on the winding roads heading north towards Coromandel.

The Riverhead Ferry, which makes regular trips up the Waihou throughout summer to Paeroa, is an example of the potential growth in tourism which the Kopu marine precinct could support. This type of tourist attraction would link strongly with the Hauraki Rail Trail, which is a government priority project.

There are other investment opportunities being discussed that may help justify the need for improved marine facilities at Kopu on tourism grounds. Current funding applications for the old Kopu Bridge as an attraction, in addition to a potential upgrade of the Historical Maritime Park at Paeroa could provide rationale to develop charter or self-driven tourist trips in this area.

The Historical Maritime Park has a significant collection of local importance relating to the history of the town of Paeroa and the Hauraki Plains region. As New Zealand's only inland port, the Museum has significant links dating back to pre-European settlement and the arrival of Captain James Cook in 1769 in HMS Endeavour.

In summary, while tourism will not be the main driver for investment in Kopu's marine facilities, it can provide secondary benefits that may strengthen the case for investment. This should be assessed further in a DBC in coordination with Destination Coromandel and Waikato Region Economic Development Agency (WREDA). Part of this consideration should be how well this location stacks up against other parts of the Coromandel for Tourism-driven investments.