

Wairoa Wastewater Discharge Consenting Planning Considerations

Prepared for

Wairoa District Council

Prepared by

L W E
Environmental
I m p a c t

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1 EXECUTIVE SUMMARY

The Wairoa wastewater system is managed on behalf of the community by Wairoa District Council ("WDC"). The Wairoa Wastewater Consenting Project ("WWCP") is for the purpose of replacing the existing resource consents, which authorise the discharges from the Wairoa municipal wastewater system, before they expire in 2019.

As part of the preparation for lodging new consent applications with Hawke's Bay Regional Council ("HBRC") a series of initial reports is being prepared to bring together existing information about the existing wastewater system. Part of that existing information is the planning provisions of the relevant statutory documents, against which the new consent applications will be assessed.

This report is to present the planning provisions that will be relevant to the re-consenting, set out against the component parts of the wastewater system, so that consideration of the planning and consenting implications of various discharge options can be included in the development of options, and in consultation with the community to help determine the Best Practicable Option ("BPO") for the discharges.

The activities that are likely to be subject to regulatory requirements are as follows:

- Wastewater discharges to surface water, and/or to land;
- Seepage to groundwater from the WWTP or any land discharge system;
- Temporary diversions and/or discharges of groundwater to facilitate any WWTP or pipeline re-construction that may be required;
- Any significant earthworks;
- Discharges to air from WWTP and from any land discharge system;
- Any activities outside the existing designated WWTP footprint, that may need either land use consent or designation from WDC; and
- Potential Building Consent requirements for any construction or earthworks activities.

The following planning legislation is potentially relevant to the WWCP:

- Resource Management Act 1991 ("RMA");
- Local Government Act 2002 ("LGA 2002");
- Conservation Act 1987;
- Reserves Act 1977;
- Marine and Coastal Area (Takutai Moana) Act 2011 ("Takutai Moana 2011"); and
- Heritage New Zealand Pouhere Taonga Act 2014 ("HNZPTA").

In addition to the above legislation, the Iwi and Hapū of Te Rohe o Te Wairoa Claims Settlement Bill is likely to be passed by Parliament soon. This Treaty of Waitangi settlement provides statutory acknowledgement of the relationship of Tatau Tatau o te Wairoa with the Wairoa River catchment which will need to be incorporated into the Regional and District Plans. It also requires direct consultation and resource consent applications affecting the river to be provided to tangata whenua, transfers some DOC reserve land to tangata whenua ownership, and includes tangata whenua membership of the reserve management boards for the urban riverbank reserves and estuary lagoons.

The planning documents relevant to the WWCP are the following:

- New Zealand Coastal Policy Statement 2010 ("NZCPS"), jointly administered by Ministry for the Environment ("MfE") and the Minister of Conservation;



- National Policy Statement for Freshwater Management 2017 ("NPS-FM"), administered by MfE and Regional Councils (including HBRC);
- National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 ("NES-CS"), administered by MfE and Territorial Authorities (including WDC);
- Hawke's Bay Regional Policy Statement ("RPS"), administered by HBRC;
- Hawke's Bay Regional Resource Management Plan ("RRMP"), administered by HBRC;
- Hawke's Bay Regional Coastal Environment Plan ("RCEP"), jointly administered by HBRC and the Minister of Conservation;
- Conservation Management Strategy for East Coast Conservancy 1998-2008 (CMS-ECC), administered by the Department of Conservation ("DOC");
- Rangihoua | Pilot Hill: Heritage Reserve Management Plan, administered by WDC;
- Wairoa Riverbank Reserves: Reserves Management Plan, administered by WDC;
- Any planning documents prepared by a customary marine title group under Takutai Moana 2011 and lodged with HBRC, DOC, and any other relevant authority; and
- Wairoa District Plan ("WDP"), administered by WDC.

The provisions of these plans and their future updates impinge on the component parts of the actual and possible wastewater system as follows:

Reticulation: Any upgrade works to the Wairoa sewer network (reticulation) will be subject to consenting processes that focus on performance standard, and the requirements will be readily achieved by good design and management. The reticulation is defined as a Utility, most of which is within the road reserve, and WDP provides in Chapter 26 for utilities to be managed and maintained as a permitted activity. A check that access for maintenance and upgrading where the reticulation passes through private property is recommended. **All** the reticulation lies within the coverage of the WDP and the RPS. **Most** of the reticulation lies within the coverage of the RRMP, with the exception only of the sewer main from Kitchener Street to Fitzroy pump station which is within the coverage of the RCEP because it is within the coastal environment and/or coastal marine area ("CMA"). Should significant earthworks associated with any reticulation modification be needed, there may be a consent requirement from HBRC.

Pump Stations: It is not expected that upgrades warranting resource consenting will be required. Minor operational changes would be authorised by WDP Chapter 26 for utilities. **All** the pump stations lie within the coverage of the WDP and the RPS. The 3 upstream pump stations (Alexandra Park, North Clyde, and Kopu Road) lie within the coverage of the RRMP; Fitzroy pump station lies within the coverage of the RCEP because it is within the coastal environment and/or CMA.

Contingent Overflows: The authorisation of works to renew reticulation and reduce overflows is addressed in Reticulation above. However, overflows caused by stormwater and groundwater leaking into the reticulation will continue until the leaks are found and fixed, or alternatively the additional flow contained. There are significant obstacles to consenting the overflows, but it is recommended that they should be consented nevertheless, because the lack of a consent will not make the overflows go away; only a reticulation upgrade can achieve that. It is also likely that overflows will continue to occur for some years to come despite WDC's works programme that is already under way.

Authorisation of overflows on land within the town, and to the river upstream from Outram Street, lies within the coverage of the NPS-FM, RPS and RRMP. Authorisation of overflows to the river downstream from Outram Street lies within the coverage of the RPS and the RCEP because it is within the coastal environment and/or CMA. The NPS-FM and NZCPS are also relevant to these discharges to the river. There is no requirement for authorisation by WDC of the overflows.



Wastewater Treatment Plant: The consenting issues at the WWTP involve the discharge of odours and aerosols into the air, and possible wastewater leakage from the ponds to groundwater. The air discharge can be consented and complied with by good design and management. The potential for pond leakage is recommended to be assessed, to establish whether installation of pond liners is warranted. The pond leakage assessment will, if necessary, also form the basis for an application to HBRC for resource consent to discharge pond seepage to land and groundwater.

The landholding on which the WWTP is sited is subject to Designation D53 which provides WDC authorisation for operation and any upgrade works within that footprint. However, earthworks may trigger contaminated site investigations and land use consents from WDC under NES-CS. Any extension of the WWTP or new storage facility construction beyond the existing landholding would need either an extension of the Designation or a land use consent from WDC. Any earthworks associated with WWTP upgrade or extension may also need consent from HBRC. The WWTP lies outside the coastal environment and CMA, so it lies solely within the coverage of the RPS and the RRMP. If storage is large enough, it may trigger Building Act requirements for building consent from HBRC for a large dam.

River Discharge: As an alternative to the existing estuary discharge, a discharge to the Wairoa River upstream from the Coastal Marine Area boundary (Outram Street) could be considered. However, this option offers effectively no consenting advantages over the existing estuary discharge, and has all the same disadvantages, with the addition that it would generate the perception of impact on water quality over a longer length of the river than happens now. Consenting such a discharge would be difficult, with many clear planning objectives that could not practicably be met.

A river discharge would lie within the coverage of the NPS-FM, RPS and the RRMP. It would be upstream of the coastal environment and CMA and therefore outside the coverage of the RCEP but not necessarily outside the coverage of the NZCPS; there is no requirement for authorisation by WDC of any river discharge. Tatau Tatau o te Wairoa legislation will provide statutory recognition of their relationship with the Wairoa River and creates Maori membership to the Wairoa riverbank reserve management boards, who are likely to oppose a river discharge and/or a pipeline route through these reserves.

Estuary Discharge: This is the existing discharge, which must have been considered to be the BPO when it was installed, along with the new WWTP on Pilot Hill, to replace the previous pump station discharges of raw sewage into the Wairoa River. It was still seen as the BPO when HBRC authorised the renewal of its discharge consent in 1998.

However, regulations covering discharges into the Coastal Marine Area which includes the estuary are now much more stringent than formerly. There is a plethora of cultural, ecological and environmental values that the NZCPS, NPS-FM, CMS-ECC, and RCEP protect, and re-consenting the estuary discharge would be difficult. It would only be possible if WDC, in consultation with DOC, tangata whenua and the wider community could show that such a discharge was the BPO, balancing the cultural, social, environmental and economic values involved. The economic value here is that continuation of the estuary discharge, even with additional treatment or land passage prior to discharge, would be the least expensive option for local residents and ratepayers.

Authorisation of any estuary discharge lies within the coverage of the NZCPS, NPS-FM, CMS-ECC, RPS and the RCEP. Much of the estuary is protected by DOC as Wildlife Management Reserve and more generally under the East Coast CMS, so concessions from DOC will be required. Tatau Tatau o te Wairoa legislation will provide Maori membership to the lagoon reserve management



boards, who are likely to oppose an estuary discharge in or near these reserves. There is no requirement for authorisation by WDC, or by HBRC under the RRMP, of any estuary discharge because it is within the CMA. Customary marine titles being sought by local iwi under Takutai Moana include the estuary, and will result in requirements for obtaining authorisations from iwi.

Ocean Outfall: An alternative to an estuary discharge could be an ocean outfall, with a pipeline discharging wastewater perhaps several hundred metres to 2 kilometres out to sea. While it would not be cheap, it may be more readily consentable than the estuary discharge. It would also avoid most of the cultural and ecological compromises that arise from the estuary discharge. Its ability to cope with the discharge would not be time-limited as at present, and its capacity to receive the discharge would be limited only by pipe and pump capacity. Its main disadvantage over the estuary discharge is that it would be geotechnically challenging and costly to set it up, and a wide range of coastal hazards will need to be factored into its route and design. Cultural advice recently received by WDC is that discharge to the ocean, even with land passage, is culturally more offensive than discharge to the river. Disturbance of the spits on each side of the Wairoa River mouth would be culturally very offensive because of the taniwha who are believed to reside there.

The NZCPS, CMS-ECC, RPS and RCEP are the only planning documents involved, and most of the inshore-focused issues of these plans would be avoided by going further out to sea. However, the route of the pipeline to the ocean will need to pass through the estuary and will therefore require care to avoid or minimise effects on the estuary's Wildlife Management Reserves as well as obtaining the necessary concessions from DOC. Tatau Tatau o te Wairoa legislation will provide Maori membership to the lagoon reserve management boards, who are likely to oppose a pipeline route through these reserves to the ocean. Customary marine titles being sought by local iwi under Takutai Moana legislation, followed by their development of planning documents, will result in requirements for obtaining authorisations from iwi.

Land Discharge: Consenting for a land discharge would be quite straight-forward compared to other options, provided that a suitably large area of land within a reasonable distance from the WWTP is available inland of the coastal environment. Where these location criteria are met, the RPS, RRMP, and WDP are the only planning documents involved, and most plan provisions can be readily met by good design and management. Any future subdivisions, large scale earthworks, or changes of land use may trigger contaminated site investigations and land use consents from WDC under NES-CS, as the discharge of treated wastewater onto land is a type of land use that falls within the NES-CS definition of a hazardous activity or industry.

Land discharge comes with the potential caveat that it may not be able to take all the wastewater all the time; when the land is too wet to irrigate, wastewater must either be stored in a large new pond, or discharged somewhere else. While the land discharge itself is expected to be readily consentable, in order to operate it will need either storage, or an environmentally unattractive contingency discharge, and the sea or the estuary are the only practicable options for this. It may be difficult to find a suitably large piece of land for siting the new storage pond in addition to the land required for irrigation. If storage is large enough, it may trigger Building Act requirements for building consent from HBRC for a large dam.

Overall Consenting Requirements

The potential consenting requirements for the various components of the Wairoa municipal wastewater system are summarised in Table 1.1 below.



Table 1.1: Summarised Consenting Requirements for Wairoa Wastewater System

Activity	Consent Authority - Plan	Issue
Reticulation	WDC - WDP	No consents needed, reticulation is permitted network utility.
	HBRC - RRMP	Earthworks and short term discharges upstream from CMA may need consent.
	HBRC and Minister of Conservation – RCEP, NZCPS, and NPS-FM	Works on sewer main downstream from CMA boundary (Kitchener Street) may need consent.
Pump Stations	WDC - WDP	No consents needed, pump station are part of permitted network utility.
	HBRC - RRMP	No consents needed unless for a major upgrade or replacement.
	HBRC and Minister of Conservation – RCEP, NZCPS, and NPS-FM	Fitzroy only; no consents needed unless for a major upgrade or replacement.
Contingent Overflows	WDC - WDP	No consents needed.
	HBRC – RRMP and NPS-FM	Discharge consents needed upstream from Outram Street.
	HBRC and Minister of Conservation – RCEP, NZCPS, CMS-ECC, and NPS-FM	Discharge consents needed downstream from Outram Street.
WWTP	WDC – WDP and NES-CS	Outline Plan required for works in Designation that covers existing site; any extension beyond existing property, and any additional storage, would need either extension of designation, or separate land use consent.
	HBRC - RRMP	Need air discharge and seepage consents; any extension or additional storage would need earthworks consent and perhaps also building consent for a large dam.
	HBRC and Minister of Conservation - RCEP	Not involved, outside the CMA.
River Discharge	WDC - WDP	No consents needed, extension of reticulation is permitted network utility.
	HBRC – RRMP and NPS-FM	Discharge consent needed upstream from Outram Street.
	HBRC and Minister of Conservation – RCEP, NZCPS, and NPS-FM	Not involved, outside the CMA.
	Tangata whenua – Tatau Tatau o te Wairoa statutory provisions	Direct consultation is required and they will be represented on the Wairoa riverbank reserve management board.
Estuary Discharge	WDC - WDP	No consents needed, existing system.
	HBRC - RRMP	Not involved, activity is inside the CMA.
	HBRC and Minister of Conservation – RCEP, NPS-FM, NZCPS, and CMS-ECC	Discharge consent and concession needed.
	Tangata whenua – Tatau Tatau o te Wairoa statutory provisions	Direct consultation is required and they will be represented on the Ngamotu and Whakamahi Lagoon wildlife reserve management boards.
	Tangata whenua – possible Takutai Moana planning document	RMA and conservation permissions needed.
Ocean Outfall	WDC - WDP	Land use consent or designation may be needed for pipeline from WWTP to beach.
	HBRC - RRMP	Not involved, activity is inside the CMA.
	HBRC and Minister of Conservation – RCEP, CMS-ECC, and NZCPS	Consents and concession needed for pipeline installation, operation and maintenance.
	Tangata whenua – Tatau Tatau o te Wairoa statutory provisions	Direct consultation is required and they will be represented on the Ngamotu and Whakamahi Lagoon wildlife reserve management boards.
	Tangata whenua – possible Takutai Moana planning document	RMA and conservation permissions needed.
Land Discharge	WDC - WDP	Designation, Outline Plan, or earthworks and land use consents may be required for rising main, storage, and discharge facilities.
	HBRC - RRMP	Discharge consents to air and to land would be needed; storage would need earthworks



Activity	Consent Authority - Plan	Issue
	HBRC and Minister of Conservation – RCEP, NZCPS, and NPS-FM	consent and perhaps also building consent for a large dam. Not involved, activity would be outside the CMA.

While a continuation of the existing estuary discharge is financially attractive because it is already in place, there are cultural, ecological and environmental obstacles to consenting its continuation. While such a discharge is not a prohibited activity, it could only be consented if WDC, in consultation with tangata whenua and the wider community, could demonstrate that it would be the BPO, results in less than minor adverse effects, and is consistent with most, if not all, planning objectives and policies. Careful consideration of possible alternative discharge arrangements is recommended so that the process and outcomes of selecting the BPO can be readily demonstrated. It is possible that the future BPO implements some land passage and/or improved treatment prior to estuary discharge, or that the estuary discharge becomes a contingency to a land discharge system.



2 INTRODUCTION

2.1 Purpose

The broad identification of the issues to be considered and addressed in meeting planning and consenting requirements for the Wairoa Wastewater Re-Consenting project ("WWCP").

2.2 Background

The Wairoa municipal wastewater treatment plant ("WWTP") and its reticulation system is managed on behalf of the Wairoa community by the Wairoa District Council ("WDC"). The discharge from the WWTP requires re-consenting from Hawke's Bay Regional Council ("HBRC") in 2019 and a possible upgrade. Planning and consenting requirements are expected to influence the choice and operation of the preferred system, as some options will be very unlikely to obtain authorisation from the relevant authorities. Their early identification will help to direct the options chosen by WDC and the community for further consideration as viable options.

2.3 Scope

To inform decisions on selection of a preferred discharge option for consenting, this Task is to produce a checklist of the issues to be covered off in the main discharge consent application. Aspects of the project which may need to be authorised include some or all of the following:

- Wastewater discharges to surface water and/or to land;
- Seepage to groundwater from part or all of the WWTP;
- Temporary diversions and/or discharges of groundwater to facilitate any WWTP or pipeline re-construction that may be required;
- Earthworks consents from both District and Regional Councils;
- Discharges to air;
- The need for Department of Conservation ("DOC") concessions for any works in the coastal marine area ("CMA") or any conservation land;
- District Council consent or designation requirements, particularly for any activities outside the existing WWTP footprint (where an existing designation authorises most works); and
- Potential Building Consent requirements for any construction or earthworks activities.

This report is **not** an AEE, but a preliminary checklist of planning considerations to be addressed as other necessary investigations are undertaken and reports prepared.



3 SUMMARY OF EXISTING STATUTORY REQUIREMENTS

3.1 General

This section lists the statutory provisions which may apply to the WWCP, listed in the approximate hierarchical order of those statutory provisions. Each provision has a potential requirement for a formal approval process to enable the project to proceed, and some provisions will be easier to meet than some others. The location of each component of the project generally determines which legislation and planning provisions are relevant, and the types of authorisations required from specified authorities.

3.2 Legislative Framework

3.2.1 Overview

The following planning legislation is potentially relevant to the WWCP:

- Resource Management Act 1991 ("RMA");
- Local Government Act 2002 ("LGA 2002") and Local Government Act 1974;
- Conservation Act 1987;
- Reserves Act 1977;
- Marine and Coastal Area (Takutai Moana) Act 2011 ("Takutai Moana 2011"); and
- Heritage New Zealand Pouhere Taonga Act 2014 ("HNZPTA").

In addition to the above legislation, the Iwi and Hapū of Te Rohe o Te Wairoa Claims Settlement Bill is currently proceeding through the Parliamentary process and is likely to be approved soon. This Treaty of Waitangi settlement provides statutory acknowledgement of the relationship of Tatau Tatau o te Wairoa with the Wairoa River catchment which will need to be incorporated into the Regional and District Plans and requires resource consent applications affecting the river to be copied to the iwi. It provides for iwi ownership of specific land that is currently owned by the Crown as part of the settlement process. It also specifies the role of iwi on a joint board with WDC that will control and manage most of the riverbank reserves along the northern and eastern edges of Wairoa's urban area, Ngamotu Lagoon, Whakamahi Lagoon, and Rangihoua/Pilot Hill. These reserves are currently managed by WDC and/or DOC.

The planning documents (and their future updated versions) relevant to the WWCP are:

- New Zealand Coastal Policy Statement 2010 ("NZCPS"), jointly administered by Ministry for the Environment ("MfE") and the Minister of Conservation;
- National Policy Statement for Freshwater Management 2017 ("NPS-FM"), administered by MfE and Regional Councils (including HBRC);
- National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 ("NES-CS"), administered by MfE and Territorial Authorities (including WDC);
- Hawke's Bay Regional Policy Statement ("RPS"), administered by HBRC;
- Hawke's Bay Regional Resource Management Plan ("RRMP"), administered by HBRC;
- Hawke's Bay Regional Coastal Environment Plan ("RCEP"), jointly administered by HBRC and the Minister of Conservation;
- Conservation Management Strategy for East Coast Conservancy 1998-2008 ("CMS-ECC"), administered by the Department of Conservation;
- Whakamahi and Whakamahia Lagoons Management Plan 2002 ("WWLMP"), administered jointly by HBRC and DOC;
- Rangihoua | Pilot Hill: Heritage Reserve Management Plan, administered by WDC;



- Wairoa Riverbank Reserves: Reserves Management Plan, administered by WDC;
- Any planning documents prepared by a customary marine title group ("CMTG") or a protected customary rights group ("PCRG") under Takutai Moana 2011 and lodged with HBRC, DOC, and any other relevant authority; and
- Wairoa District Plan ("WDP"), administered by WDC.

Table 3.1 summarises the planning legislation, regulatory authorities, planning documents, and the types of authorisations that are potentially required under each legislation.

Table 3.1: Legislative Framework

Legislation	Authorities	Instruments and Documents	Authorisations
RMA	Regional and District Councils	NZCPS, NES-CS, NPS-FM, RPS, RRMP, RCEP, and WDP	Resource consents and Designations
Conservation	DOC or Minister of Conservation	CMS-ECC and CMP	Concessions
Heritage	NZHPT	Archaeological sites and historic places registers	Archaeological Authorities
Takutai Moana	CMTG	Planning document	RMA and Conservation Permission Rights

In addition to these planning legislative provisions, large storage ponds may trigger Building Act requirements for building consent from HBRC for a large dam.

3.2.2 RMA

The RMA is the primary planning legislation which links with the other legislation listed above. National Policy Statements, including the NZCPS and NPS-FM, and National Environmental Standards, such as NES-CS, are potentially applicable to this project, but their provisions may also be addressed to some extent in Regional and District Plans, as discussed below. The relevant provisions of all of these documents, in addition to the purpose and principles of the RMA, need to be assessed as an integral part of the resource consent applications.

3.2.3 Conservation Act

The Conservation Act is directly relevant within the CMA and any land administered by DOC. The management of all land administered by DOC is guided by the CMS-ECC. Under the RMA and its related NZCPS, DOC must be consulted for proposals within the CMA and coastal environment; ideally their written approval needs to be obtained.

3.2.4 Reserves Act

The Reserves Act is directly relevant to the reserves that are managed by DOC and WDC. Each reserve must be managed in accordance with its purpose and publicly accessible at all times. WDC have developed specific reserve management plans ("RMP") that provide objectives and policies for their future use and development. DOC's CMS-ECC provides the management framework for the reserves that are part of the national conservation land portfolio. HBRC developed WWLMP in 2002 as a 5-year RMP for Whakamahi Lagoon and HBRC have undertaken ecological surveys of this area.

Whakamahi Lagoon and some of the adjacent area of the Wairoa River estuary and Hawke Bay coastline are gazetted as the Whakamahi Government Purpose Wildlife Management Reserve. Similarly, Ngamotu Lagoon and some of the adjacent area of Hawke Bay coastline are gazetted as the Ngamotu Government Purpose Wildlife Management Reserve. Rangihoua/Pilot Hill Reserve is gazetted as an Historic Reserve. Section 22 of the Reserves Act 1977 includes a clause that specifically requires this type of reserve to be managed and maintained so that its scenic, historic,



archaeological, biological, cultural, scientific, or natural features or wildlife are managed and protected to the extent compatible with the principal or primary purpose of the reserve.

3.2.5 HNZPTA

The discovery or disturbance of any known or suspected pre-1900 artefacts and sites of human occupation or use would trigger a requirement for obtaining an Archaeological Authority ("AA") from Heritage New Zealand Pouhere Taonga ("HNZPT"). All relevant iwi must be consulted and an Archaeological Management Plan including tikanga Maori and accidental discovery protocols must be prepared as an integral part of an application for an AA.

3.2.6 Takutai Moana

Customary Marine Title (CMT) and/or protected customary rights (PCR) recognise the relationship of an iwi, hapū or whānau with a part of the common marine and coastal area out to 12 nautical miles from the shore. CMT's can't be sold and free public access, fishing and other recreational activities are allowed to continue in CMT areas.

If CMT or PCR is recognised over an area, it provides for the following:

- a Resource Management Act permission right which lets the group say yes or no to activities that need resource consents or permits in the area;
- a conservation permission right which lets the group say yes or no to activities which require conservation concessions in the area;
- the right to be notified and consulted when other groups apply for marine mammal watching permits in the area;
- the right to be consulted about changes to Coastal Policy Statements;
- a wāhi tapu protection right which lets the group seek recognition of a wāhi tapu and restrict access to the area if this is needed to protect the wāhi tapu;
- the ownership of minerals other than petroleum, gold, silver and uranium which are found in the area;
- the interim ownership of taonga tūturu found in the area; and
- the ability to prepare a planning document which sets out the group's objectives and policies for the management of resources in the area.

Applications for CMT and/or PCR closed on 3 April 2017. All of the Hawke Bay seabed out to 12 nautical miles from the coastline is subject to five separate claims from at least eight iwi groups for customary marine titles (CMT) and/or protected customary rights (PCR). Appendix A provides maps of the areas officially claimed by the various claimant iwi groups, but these claims have not yet been processed by the Crown. Ngati Kaahu have lodged a claim for CMT and PCR that includes the Wairoa estuary and Whakamahi Lagoon area, which is particularly relevant for the location of the existing discharge and any future estuarine or ocean discharge if their claims succeed.

In the (likely) event that some of these claims are successful, WDC will need to request permission rights from the relevant CMTG(s) for any WWCP components within or potentially affecting those areas. Permission rights are required to be obtained separately from the relevant CMTG's for RMA consents and conservation concessions. If a relevant CMTG refuses to give their permission, then the related resource consent and/or concession cannot be exercised by the consent holder.

A CMTG may also prepare a planning document for their customary marine title or rights area which must be taken into account by any proposals affecting that area and, to the extent necessary, HBRC (and possibly also WDC) must amend their RMA plans to match the iwi planning document.



3.3 Zoning Maps and Protected Areas

A number of protective aspects apply to areas of land and water which could be considered for the development of the WWCP. Maps of the protected areas from relevant planning documents are presented and discussed below. The planning provisions from specific planning documents are identified and discussed in the sections that follow this section.

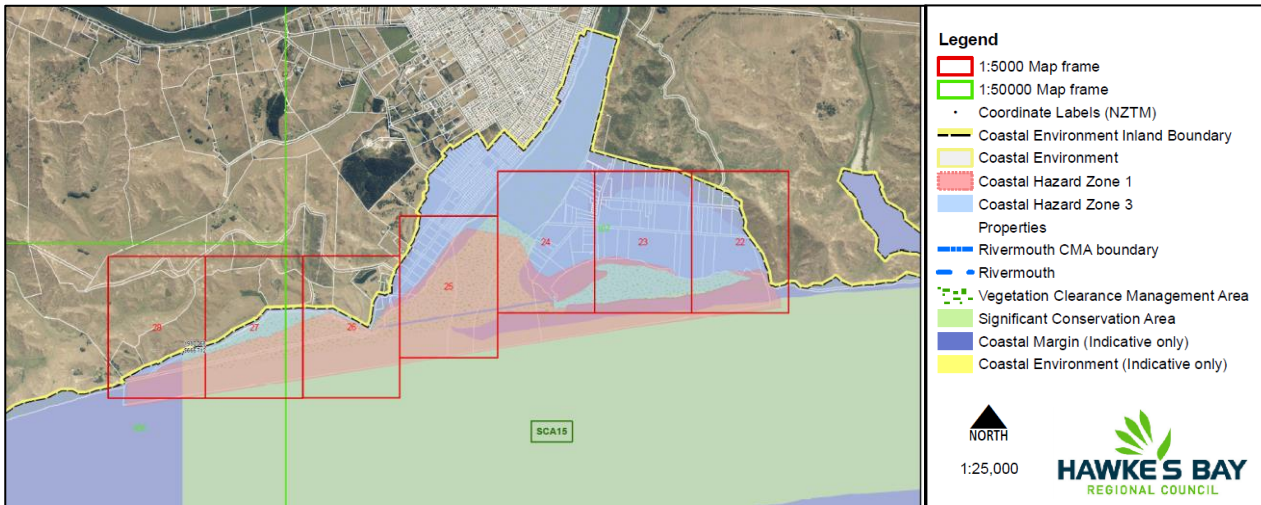


Figure 3.1: Coastal Zoning Features Mapped by HBRC for Wairoa RCEP

The mapped coastal environment and Coastal Hazard Zone (CHZ) 3 includes large areas of the low-lying flat rural land on both sides of the Wairoa estuary. The green Significant Conservation Area ("SCA") labelled SCA15 includes the river up to its CMA boundary and the ocean one nautical mile out to sea from the estuary's coastal spit/bar, but it does not include the western end of Whakamahi Lagoon wetland and its adjacent beach area. Appendix A presents a wider scale version of Figure 3.1 and most of the more detailed maps that are shown as red rectangles across the Wairoa estuary on Figure 3.1.

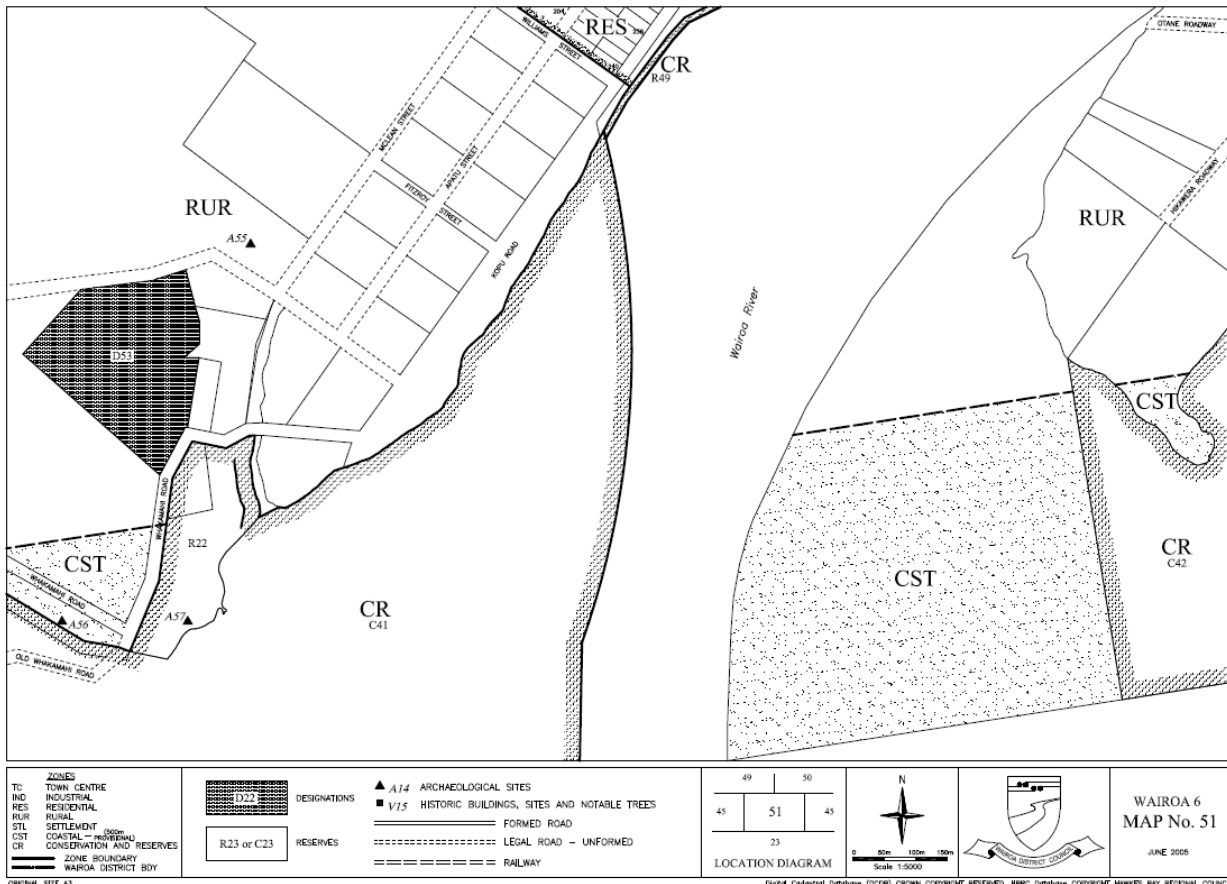


Figure 3.2: Wairoa District Plan Map 51

Figure 3.2 shows the Designation for the WWTP and the adjacent/underlying rural zone. It also shows the areas of nearby reserves, conservation areas, coastal zone, and archaeological sites that are identified and protected in the WDP provisions. Note that a wide strip of land along the eastern side of Kopu Road adjacent to the Wairoa River is road reserve which WDC own and manage. This area of land might be able to be used for infrastructure development with fewer or no formal authorisations from regulatory authorities.

Recreation reserves occupy the entire strip of land between the true right (western) edge of the Wairoa River and the nearest roads downstream of the SH1 bridge west of Wairoa's CBD. These reserves are currently managed by WDC. Rangihoua/Pilot Hill south of the WWTP is a historic or heritage reserve which is currently jointly managed by WDC and DOC. Whakamahi Lagoon Wildlife Management Reserve on the coastal sides of Rangihoua/Pilot Hill is currently jointly managed by HBRC, WDC, and DOC. DOC are currently in the process of transferring the management of these reserves to WDC. The management board for all of these reserves will include iwi once the Treaty of Waitangi settlement legislation for Tatau Tatau o te Wairoa has been passed by parliament.

All activities in these reserves will need to be compatible with the purpose of the reserve and any RMP's. The DOC wildlife management reserves shown in Figures 3.3 and 3.4 should ideally be avoided by WWCP, but, if this is not possible, particular regard needs to be given to the relevant CMS-ECC provisions, the potential effects on the lagoon ecosystem will need to be assessed, and a concession will need to be sought from DOC. If any CMTG's have been formally recognised by the Crown, then permission will need to be sought from the relevant CMTG's and/or PCRG's in addition to WDC obtaining all necessary resource consents and conservation concessions.

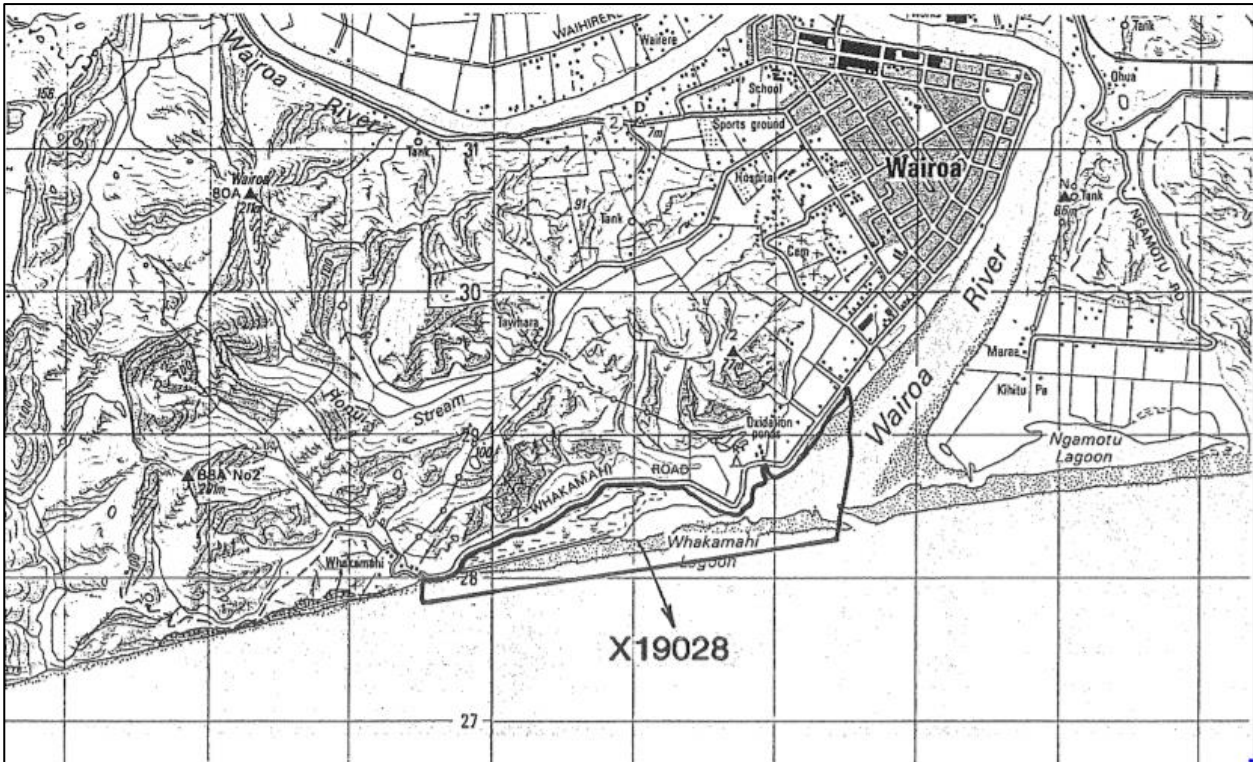


Figure 3.3: Whakamahi Wildlife Management Reserve (Source: CMS-ECC)

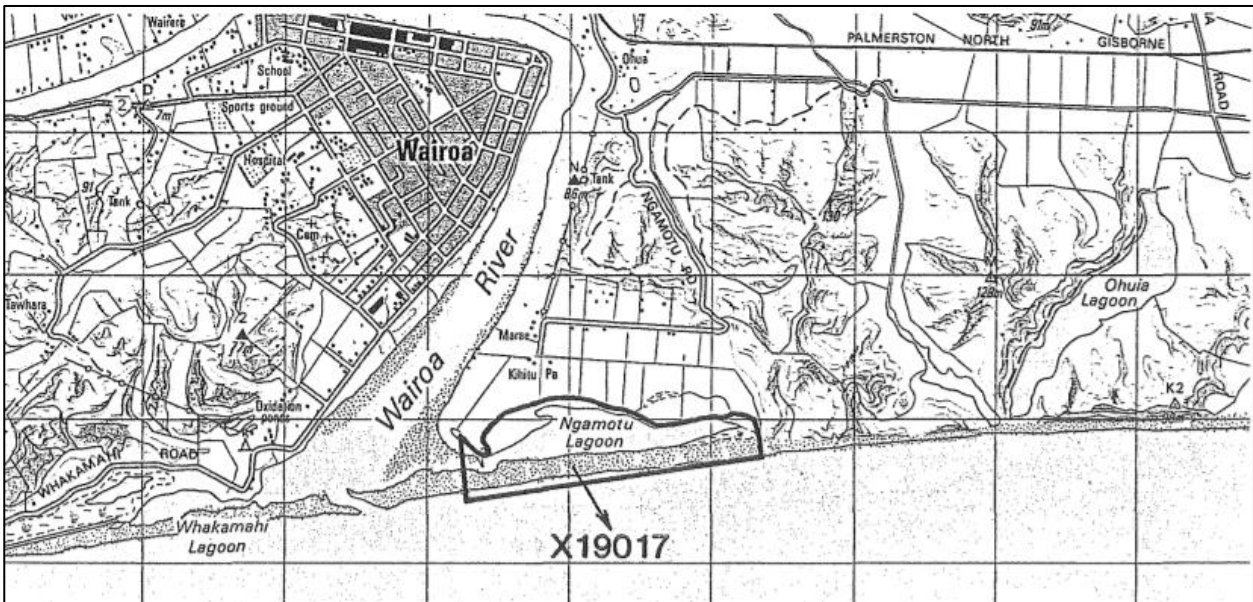


Figure 3.4: Ngamotu Wildlife Management Reserve (Source: CMS-ECC)

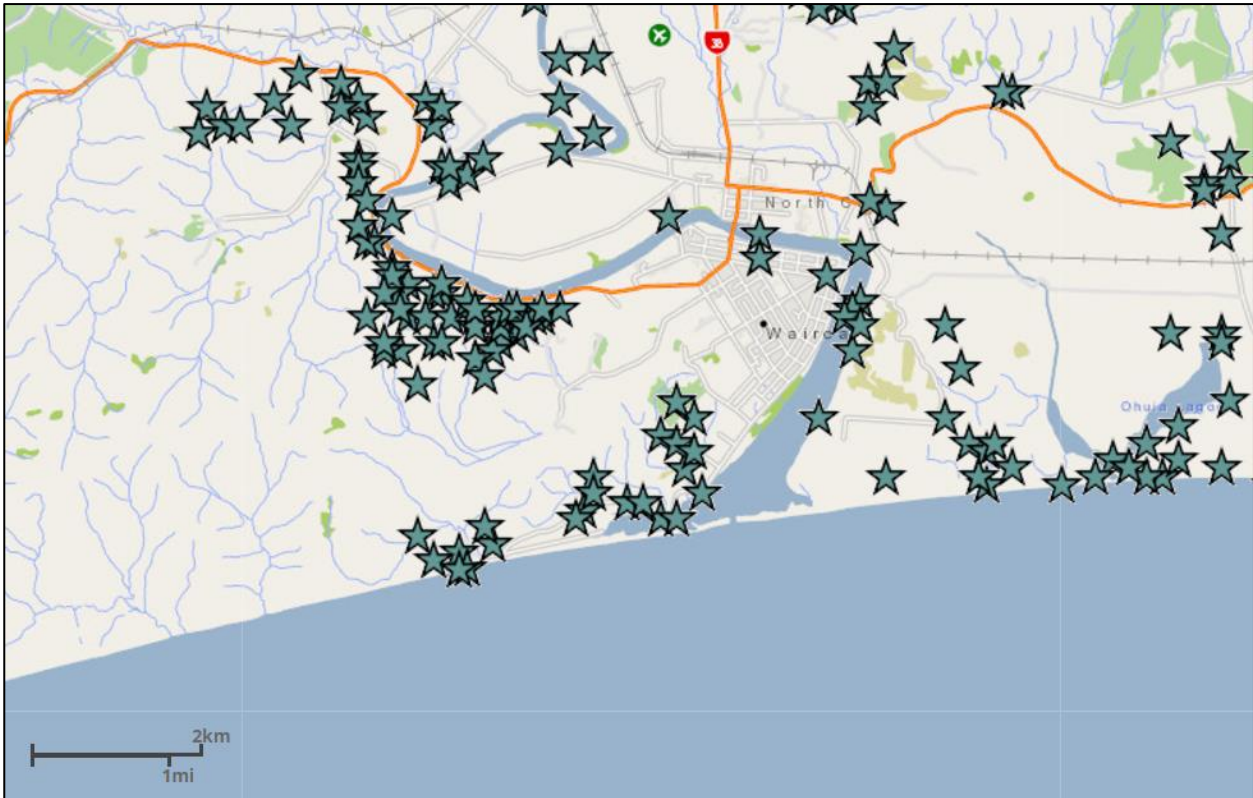


Figure 3.5: Registered Archaeological Sites (Source: NZ Archaeological Association)

Figure 3.5 only shows the archaeological sites that have been registered with NZHPT. Other sites are likely to occur nearby and in areas not previously investigated or developed. The accuracy of mapping can also be poor, which creates uncertainty for avoiding these sites. It is often prudent to seek a General AA from NZHPT to minimise the disruption to the construction of infrastructure across land areas that have a moderate to high risk of archaeological sites and artefacts.



Figure 3.6: Maori Land Titles (Source: WDC On-line maps using LINZ Cadastral data)



The registration of land as a Maori land title creates additional legal processes through the Maori Land Court to seek and formally register access and easements against these titles. If WWCP is potentially crossing or leasing Maori land, formalising this could delay or perhaps stop the relevant part of the project.

3.4 New Zealand Coastal Policy Statement

The NZCPS was published by DOC and became operative on 3 December 2010. It sets the national objectives and policies for the coastal environment which Regional and Territorial Authorities are required to give effect to in their Regional and District/City Plans where relevant. Consent and Designation applications and decisions by the regulators must also have regard for the provisions of the NZCPS where relevant.

It is very important to note that the NZCPS applies not only to the marine environment and active shoreline, but also inland to the extent that coastal processes and characteristics or connected landscape features are apparent. Because a transition zone usually occurs between shorelines and inland areas, site-specific assessments can often be necessary to determine the extent of the coastal land environment that is subject to the NZCPS provisions. The RCEP and WDP provide some indication of the extent of the coastal environment to which the NZCPS applies, but it is possible for the application of the NZCPS to extend further inland when the characteristics of a site are closely examined by a landscape architect or similar expert and found to be integral with the coastal environment.

3.4.1 NZCPS Objectives

NZCPS Objectives potentially relevant to the WWCP and their implications for the WWCP are presented in Table 3.2 below. The Objectives are paraphrased to save space; their full wording is available from the on-line version of the NZCPS.

Table 3.2: NZCPS Objectives and Implications for WWCP

Obj No	NZCPS Objective	Implication
1	Safeguard the integrity, form, functioning and resilience of coastal environment and sustain its ecosystems. Maintain or enhance coastal water quality.	Discharge into estuarine or coastal marine environment could be resisted by this objective, especially within or near DOC wildlife reserves.
2	Preserve the natural character of coast and landscapes.	Discharge onto coastal landscapes or within the coastal environment could be consistent with this objective by using low impact design features.
3	Take account of Treaty of Waitangi principles, recognise role of tangata whenua as kaitiaki and provide for tangata whenua management of the coastal environment.	Discharges using land passage and culturally acceptable mitigation measures and monitoring practices, developed in consultation with tangata whenua, could be consistent with this objective.
4	Maintain and enhance the public open space qualities and recreation opportunities of the coastal environment.	Taking care to avoid pipelines and discharge structures causing restrictions on public access and visual amenity, and reducing pathogens in wastewater discharge, could be consistent with this objective.
5	Manage coastal hazard risks including climate change effects.	Appropriate engineering design will ensure that the infrastructure will be resilient to hazards.
6	Enable communities to provide for their well-being and health and safety through use and development in appropriate ways.	The discharge is vital to the community's well-being and is an appropriate development. The semi-coastal location of Wairoa's urban area makes it difficult to discharge inland from the coastal environment.



3.4.2 NZCPS Policies

NZCPS Policies potentially relevant to WWCP and their implications are listed in Table 3.3 below. The Policies are paraphrased to save space; their full wording is available from the on-line version of the NZCPS.

Table 3.3: NZCPS Policies Relevant to WWCP

Pol No	NZCPS Policy	Implication
1	Recognise that the extent and characteristics of the coastal environment varies.	RCEP and WDP provide indications of the extent of the coastal environment. It is likely that parts, if not all, of the new infrastructure will be within the coastal environment. A coastal environment mapping exercise may be required for specific sites to better define its extent and character.
2	Take account of Treaty of Waitangi principles and kaitiakitanga. Involve Maori in identifying cultural values, practices, and sites through consultation. Ensure that Maori heritage is protected.	Consultation and seeking cultural advice including cultural impact assessments so that WDC is aware of and responds to these values when designing the future system would be consistent with this Policy. Avoiding or protecting heritage sites and incorporating tikanga Maori into the discharge design would be consistent with this Policy.
3	Adopt a precautionary approach where the adverse effects of activities are potentially significant and to ensure that climate change effects are not exacerbated.	Designing the system to cause less than minor adverse effects and to avoid disruptions to natural processes resulting from climate change would be consistent with this Policy.
4	Integrate management of activities that cross administrative boundaries, involve multiple regulators and iwi, and/or affect two or more types of environment.	Identifying and collaborating with all relevant regulators and iwi would be consistent with this Policy.
5	Consider effects on land or water managed under conservation or protective legislation and avoid, remedy, or mitigate adverse effects on the purposes for which the land or water is managed.	Careful design of infrastructure and discharges in areas of land or water managed for conservation or reserve purposes to minimise conflicts with the purposes of those protections would be consistent with this Policy.
6	Recognise the importance of infrastructure for community well-being provided that it is appropriate development and occupation of coastal areas.	Treated wastewater discharges via appropriately located and designed components would be consistent with this Policy. This infrastructure is vital for community well-being.
11	Avoid, mitigate, or remedy adverse effects on indigenous biological diversity.	Careful design and operation of the infrastructure would be consistent with this Policy.
12	Manage the release and spread of potentially harmful aquatic organisms.	Adequate treatment performance, dispersion and dilution in the receiving environment, and controls on discharge timing currently manage these concerns. A future discharge may face stricter discharge controls.
13	Preserve the natural character and protect it from inappropriate use or development.	A wide range of natural characteristics are required to be protected, so attention needs to be paid to all aspects of the coastal character when assessing the effects of the discharge and its associated infrastructure.
14	Restore and rehabilitate natural character of degraded areas.	This would probably require the removal of the existing discharge pipeline in the estuary if it ceases to be used in future, and may require some rehabilitation effort as mitigation for a continuation of this discharge.
15	Protect natural features and natural landscapes from inappropriate use or development.	A wide range of natural features are required to be protected, so attention needs to be paid to all aspects of the coastal features when assessing the effects of the discharge and its associated infrastructure.
17	Protect historic heritage from inappropriate use or development.	Historic heritage needs to be identified, with iwi assistance, and protected when designing the discharge and its associated infrastructure.



Pol No	NZCPS Policy	Implication
18	Provide for and maintain public open space.	The discharge and associated infrastructure may need to be carefully designed to minimise effects on public open space (existing reserves).
19	Provide for and maintain public walking access.	The discharge and associated infrastructure may need to be carefully designed to minimise effects on public walking access in existing reserves.
21	Improve coastal water quality.	It is likely that the future discharge will be consistent with this, although any improvement in water quality may not be scientifically detectable.
22	Control sedimentation discharges.	Infrastructure installation will incorporate erosion and sediment controls, which will be consistent with this Policy.
23	<p>Manage the discharges of contaminants to coastal water in order to minimise adverse effects on water quality and ecosystems.</p> <p>“In managing discharge of human sewage, do not allow: (a) discharge of human sewage directly to water in the coastal environment without treatment; and (b) the discharge of treated human sewage to water in the coastal environment, unless: (i) there has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and (ii) informed by an understanding of tangata whenua values and the effects on them.”</p>	Discharges to land could avoid the implications of this Policy provided that drainage to groundwater either avoids coastal environments or meets the criteria of this Policy. A robust assessment of all alternatives and meaningful consultation with iwi will ensure that this Policy is met for the discharge BPO selection and its implementation.
25	Manage development in areas of coastal hazard risk.	Careful design and operation of discharge infrastructure will be consistent with this Policy.
26	Protect and enhance natural defences against coastal hazards.	Avoidance or careful design will ensure that the natural coastal defences are protected.
27	Protection of communities and infrastructure from coastal hazards.	Retention of the existing discharge pipeline or construction of a new discharge structure will need to be consistent with this policy.

3.5 National Policy Statement for Freshwater Management

The NPS-FM sets out the national objectives and policies for freshwater management under the Resource Management Act 1991. It replaced and updated the 2011 NPS-FM when it came into effect on 1 August 2014, and further amendments took effect on 7 September 2017. These 2017 amendments were focussed on adjustments to the water quality standards, increased monitoring and management with iwi for te mana o te wai, and ensuring that freshwater management also allows communities to provide for their economic well-being within sustainable limits.

Regional Policy Statements, Regional Plans, monitoring programmes, and resource consent decisions are required to implement the NPS-FM provisions where relevant. The water quality limits set for each fresh water management unit must include specific parameters as a minimum, and generally require attainment of national bottom line water quality values within timeframes set by the Regional Councils and their communities.

3.5.1 NPS-FM Objectives

NPS-FM Objectives potentially relevant to the WWCP and their implications for the WWCP are presented in Table 3.4 below. The Objectives are paraphrased to save space; their full wording is available from the on-line version of the NPS-FM.



Table 3.4: NPS-FM Objectives and Implications for WWCP

Obj No	NPS-FM Objective	Implication
AA1	To consider and recognise Te Mana o te Wai in the management of fresh water.	WWCP's consultation with iwi and incorporation of Maori values and aspirations achieves this.
A1	To safeguard the life-supporting capacity and ecosystems of fresh water and the health of people and communities in sustainably managing the use and development of land, and of discharges of contaminants.	WWCP will be consistent with this, as it aims to improve Wairoa River water quality and avoid degradation of other waterways.
A2	The overall quality of fresh water within a freshwater management unit is maintained or improved.	WWCP will be consistent with this, as it aims to improve Wairoa River water quality and avoid degradation of other waterways.
A3	The quality of fresh water within a freshwater management unit is improved so it is suitable for primary contact more often, unless: a) regional targets established under Policy A6(b) have been achieved; or b) naturally occurring processes mean further improvement is not possible.	WWCP will be consistent with this, as it aims to improve Wairoa River water quality so it is suitable for primary contact more often, but this is currently limited by rural sources and naturally occurring processes upstream of Wairoa and the WWTP discharge.
A4	To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quality, within limits.	WWCP is a regionally significant infrastructure that enables communities to provide for their economic well-being. Its cost of implementation is a factor in its economic effects on the community.
C1	To improve integrated management of fresh water and the use and development of land in whole catchments.	WWCP is a small contributor to the Wairoa River catchment but it is integral with the urban area's development and management.
D1	To provide for the involvement of iwi and hapū, and to ensure that tangata whenua values and interests are identified and reflected in the management of fresh water and decision-making regarding freshwater planning.	WWCP will need to ensure that tangata whenua are involved in the development of the design and that their values and interests help to guide the decisions on the discharge design and location.

3.5.1 NPS-FM Policies

NPS-FM Policies potentially relevant to WWCP and their implications are listed in Table 3.5 below. The Policies are paraphrased to save space; their full wording is available from the on-line version of the NPS-FM.

Table 3.5: NPS-FM Policies Relevant to WWCP

Pol No	NPS-FM Policy	Implication
AA1	Regional policy statements and plans must consider and recognise te mana o te wai, including setting appropriate objectives and limits.	HBRC's RPS and RRMP may need to be amended, but they already address these considerations. The design and operation of WWCP will reflect iwi values and relevant limits.
A1, A2, and A5	Regional plans must be changed to the extent needed to implement objectives, targets, and methods that give effect to the NPS-FM.	HBRC's RPS and RRMP may need to be amended, but they already address these considerations. The design and operation of WWCP will reflect target values and relevant limits.
A3	Regional Councils must impose conditions on discharge consents to achieve NPS-FM limits and targets, and to impose rules requiring the adoption of the best practicable option for discharges to avoid or minimise effects.	WWCP will be consistent with this, as it aims to implement the BPO to improve Wairoa River water quality and avoid degradation of other waterways. It will contribute to achieving the water quality targets.
A4	Regional Councils must have regard to the extent to which a discharge would avoid effects on the life-supporting capacity and human health when considering a discharge consent application.	WWCP will be consistent with this, as it aims to improve Wairoa River water quality and reduce effects on human health compared with the existing discharge.
A6	Regional Councils must develop regional targets to improve the quality of fresh water	The target values which WWCP is required to contribute to achieving may change at about the



Pol No	NPS-FM Policy	Implication
	and ensure that draft targets are available to the public by 31 March 2018, and final targets are available to the public by 31 December 2018.	same time as the consent applications are lodged. The WWCP design and AEE are at some risk of becoming less acceptable for consenting at a very late design or AEE stage. It will still be necessary to demonstrate that the BPO has been selected and its effects are minor or less than minor.
A7	Regional Councils must consider how to enable communities to provide for their economic well-being while managing within limits.	WWCP is a regionally significant infrastructure that enables communities to provide for their economic well-being. Its cost of implementation is a factor in its economic effects on the community.
C1	Regional Councils must recognise the interactions between environments and to manage fresh water and land use and developments in an integrated and sustainable way.	WWCP will need to demonstrate that these aspects have been factored into its design and operation so that the adverse effects, including cumulative effects, are less than minor.
C2	Regional policy statements must be changed to the extent necessary to provide for the integrated management of the effects of the use and development of land on fresh water and of land and fresh water on coastal water.	WWCP will need to demonstrate that the effects on fresh and coastal water are managed in an integrated manner and meet the relevant policies. The timing of changes to the regional policy statement may conflict with the development of the WWCP design and AEE.
CA2	Regional Councils must determine and set fresh water objectives and water quality target values and timeframes for each fresh water management unit.	The target values which WWCP is required to contribute to achieving may change at about the same time as the consent applications are lodged. The WWCP design and AEE are at some risk of becoming less acceptable for consenting at a very late design or AEE stage. It will still be necessary to demonstrate that the BPO has been selected and its effects are minor or less than minor.
D1	Local authorities must take reasonable steps to involve iwi and hapū in the management of fresh water, identify tangata whenua values and interests in fresh water, and reflect those in the management of, and decision-making regarding, fresh water.	WWCP will need to ensure that tangata whenua are involved in the development of the design and that their values and interests help to guide the decisions on the discharge design and location.

3.6 National Environmental Standard for Contaminants in Soil

The NES-CS includes all parts of wastewater treatment and discharge systems in its Hazardous Activity and Industry List (HAIL) as an activity or land use that triggers the NES-CS consenting provisions. Resource consents are required from the regulatory arm of WDC for specific amounts of earthworks, land subdivision, and changes of land use within areas of land that are currently or have historically been a HAIL site.

The current WWTP and its discharge pipeline are HAIL sites, while any future discharge locations will be classed as HAIL sites. The NES-CS therefore constrains the ability to undertake some activities on these HAIL sites in future. This could be important for any land used for additional treatment or discharges to land (such as irrigation or rapid infiltration systems), as the NES-CS controls the scale of future earthworks and the range of alternative land uses, even if its use for wastewater infrastructure is abandoned.

3.7 Hawke's Bay Regional Policy Statement

The RRMP became operative on 28 August 2006, and includes the RPS as Chapters 2 and 3 of the RRMP. It sets the overall Objectives for HBRC's resource management in the Hawke's Bay region.



3.7.1 RPS Objectives

RPS Objectives potentially relevant to the WWCP are listed in Table 3.6 below.

Table 3.6: HBRC RPS Objectives Relevant to WWCP

Objective	Topic
4 to 9	Coastal Resources
14	Loss and Degradation of Soil
15	Indigenous Vegetation and Wetlands
16 to 18	Effects of Conflicting Land Uses
22	Groundwater Quality
27	Surface Water Quality
31	Natural Hazards
32 to 33B	Physical Infrastructure
35 to 37	Matters of Significance to Iwi and Hapu

3.7.2 Implications of RPS Objectives

The Objectives of the RPS potentially relevant to the WWCP, and a summary of their implications for the WWCP, are presented in Table 3.7 below. The Objectives are paraphrased to save space; their full wording is available from the on-line version of the RRMP.

Table 3.7: HBRC RPS Objectives and Implications for WWCP

Obj No	RPS Objective	Implication
Obj 4	Preservation of natural character of coast, protection from inappropriate use.	Discharge into coastal marine environment would be resisted by this objective.
Obj 5	Maintenance and enhancement of public access along the coast.	Effects of estuary discharge may require public exclusion, which are not supported by this objective.
Obj 6	Management of coastal water quality to achieve appropriate standards, considering public use and sensitivities.	Discharge into coastal marine environment would be resisted by this objective.
Obj 7	Protection of coastal characteristics of significance to Iwi.	Discharge into coastal marine environment would be resisted by this objective.
Obj 8	Avoidance of coastal erosion or inundation.	Potentially affects structures within coastal zone.
Obj 9	Provision for development within coastal environment, including maintenance and enhancement of infrastructure and network utilities.	Potentially enables wastewater infrastructure.
Obj 14	The avoidance of loss in the productive capability of land, as a result of reduced soil health.	Supports wastewater irrigation that is applied and managed appropriately to improve soil health and productivity.
Obj 15	Preservation and enhancement of ... ecologically significant wetlands.	Whakamahi and Ngamotu Lagoons are both listed as significant wetlands; discharge into estuary or lagoon areas would be resisted by this objective.
Obj 16	For future activities, the avoidance or mitigation of off-site impacts or nuisance effects arising from the location of conflicting land use activities.	For a land discharge, off-site effects would need to be managed; achievable.
Obj 17	For existing activities (including their expansion), the remedy or mitigation of the extent of off-site impacts or nuisance effects arising from the present location of conflicting land use activities.	May mean requirement to assess, and propose remedies for, any existing nuisance at WWTP; should be achievable.
Obj 18	For the expansion of existing activities which are tied to a specific location, the mitigation of off-site impacts or nuisance effects arising from the location of conflicting land activities.	Could apply to any WWTP or discharge upgrade; should be achievable.
Obj 22	The maintenance or enhancement of groundwater quality in unconfined or semi-confined productive aquifers, to be suitable for human consumption and irrigation.	Potential issue for both existing WWTP and any land discharge option; should be achievable.



Obj No	RPS Objective	Implication
Obj 27	The maintenance or enhancement of the water quality of rivers, lakes and wetlands as suitable for sustaining or improving aquatic ecosystems and contact recreation.	Discharge to the river, estuary, or lagoons would be resisted by this objective.
Obj 31	Avoidance or mitigation of adverse effects of natural hazards on people's safety, property, and economic livelihood.	Infrastructure and operation needs to be sited and constructed to withstand known hazards, to a standard commensurate with existing Wairoa assets. Achievable.
Obj 32	Ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's communities and provides for their health and safety.	WWCP meets this objective.
Obj 33	Recognition that some infrastructure which is regionally significant has specific locational requirements.	WWTP siting is enabled by this objective; discharge options and their distances from the WWTP can also be considered in this light.
Obj 33A	Adverse effects on existing physical infrastructure arising from the location and proximity of sensitive land use activities are avoided or mitigated.	This protects the existing WWTP, but does not apply to either the estuary discharge or any land discharge.
Obj 33B	Adverse effects on existing land use activities arising from the development of physical infrastructure are avoided or mitigated in a manner consistent with Objectives 16, 17, 18, 32 and 33.	Applies to land discharge options; should be achievable.
Obj 35	To consult with Maori in a manner that creates effective resource management outcomes.	Essential in selection of BPO.
Obj 36	To protect and where necessary aid the preservation of waahi tapu.	Waahi tapu to be avoided in considering discharge options.
Obj 37	To protect and where necessary aid the preservation of... mahinga mataitai (sea-food gathering places).	Discharge into the river or the coastal marine environment would be resisted by this objective.

In addition to the Objectives tabulated above, the RPS has 66 Policies addressing the means by which the Objectives are to be achieved. Some of these have specific relevance to the WWCP, while many do not. Most Policies are non-regulatory or refer Plan users to the RRMP for relevant regulatory Policies and Rules that are relied on to implement the RPS Objectives. For the purposes of this overview report, the RPS Objectives provide a fair indication of the consenting hurdles that may need to be crossed by the various wastewater discharge options to be considered by WDC.

3.8 Hawke's Bay Regional Resource Management Plan

The RRMP became operative on 28 August 2006 and provides more specific Objectives and Policies for resource management in the Hawke's Bay region than the RPS Objectives and Policies, in all areas that are **not included** in the Coastal Environment (the RCEP applies to the Coastal Environment instead of the RRMP).

3.8.1 RRMP Objectives

RRMP Objectives potentially relevant to the WWCP are listed in Table 3.8 below.

Table 3.8: HBRC RRMP Objectives Relevant to WWCP

Objective	Topic
38	Land
39	Air Quality
40	Surface Water Quality
43	Groundwater Quality



3.8.2 Implications of RRMP Objectives

The Objectives of the RRMP potentially relevant to the WWCP, and a summary of their implications for the WWCP, are presented in Table 3.9 below. The Objectives are paraphrased to save space; their full wording is available from the on-line version of the RRMP.

Table 3.9: HBRC RRMP Objectives and Implications for WWCP

Obj No	RRMP Objective	Implication
Obj 38	The sustainable management of the land resource so as to avoid compromising future use and water quality.	Discharge to land would need to be designed and operated to give effect to this; achievable.
Obj 39	A standard of ambient air quality is maintained at, or enhanced to, a level that is not detrimental to human health, amenity values or the life supporting capacity of air, and meets National Environmental Standards.	For both the operation of the WWTP and any land discharge, odours and aerosol propagation will need to be managed; achievable.
Obj 40	Maintenance of water quality of specific rivers in order that existing species and natural character are sustained, while providing for resource availability for a variety of purposes.	Discharge into Wairoa River would be resisted by this objective.
Obj 43	Maintenance or enhancement of groundwater quality in unconfined or semi-confined productive aquifers to be suitable for human consumption and irrigation.	Potential issue for both existing WWTP and any land discharge option; should be achievable.

3.8.3 RRMP Policies and Implications

In addition to the Objectives listed in Tables 3.8 and 3.9 above, certain Policies of the RRMP potentially relevant to the WWCP, and a summary of their implications for the WWCP, are presented in Table 3.10 below. The Policies are paraphrased to save space; their full wording is available from the on-line version of the RRMP.

Table 3.10: HBRC RRMP Policies and Implications for WWCP

POL No	RRMP Policy	Implication
POL 67	To encourage landowners and occupiers to manage the effects of activities affecting soil (including both land use activities and discharges of contaminants onto or into land) in accordance with the environmental guidelines set out in Table 5. (Soil health, soil contamination, and earthworks are more specifically addressed.)	Any land discharge, and any earthworks associated with reticulation, WWTP, rising main, and land discharge would need to meet this; achievable.
POL 69	To manage the effects of activities affecting air quality in accordance with the environmental guidelines and standards set out in Table 6. (Odour, aerosols and dust are more particularly addressed.)	Odours from WWTP, and odours and aerosols from any land discharge option would need to be managed. Dust could be an issue with earthworks. Achievable.
POL 71	To manage the effects of activities affecting the quality of water in rivers, lakes and wetlands in accordance with the environmental guidelines set out in Tables 7 and 8. (Water quality limits throughout the region are set for 5 parameters, and for Wairoa River downstream from Frasertown for 2 further parameters.)	The specified limits would apply to the river after any river discharge was added, and potentially resist some river discharge options. Does not apply to land or marine discharges.
POL 75	To manage the effects of activities affecting the quality of groundwater in accordance with the environmental guidelines set out in Table 10. (Focus is on maintaining quality for drinking and irrigation.)	May need to consider WWTP pond seepage; would need to be addressed with any land discharge but achievable.



POL No	RRMP Policy	Implication
POL 76A	National Policy Statement for Freshwater Management 2014, addressing life supporting capacity and health of people and communities.	Resists any discharge to the river options, but applies effectively no restriction to any land discharge.

3.8.1 RRMP Rules and Implications

Rules of the RRMP potentially relevant to the WWCP, and a summary of their implications for the WWCP, are presented in Table 3.11 below. The Rules are paraphrased to save space; their full wording is available from the on-line version of the RRMP.

Table 3.11: HBRC RRMP Rules and Implications for WWCP

Rule No	RRMP Rule	Implication
7	Vegetation disturbance and soil disturbance as a Permitted Activity	For earthworks that will not affect water bodies. Note that the soil disturbance definition for this rule specifically excludes works associated with pipe laying or a network utility operation.
8	Vegetation disturbance and soil disturbance as a Restricted Discretionary Activity	For earthworks that cannot meet all conditions of Rule 7 and/or may affect water bodies.
13	Discharges into air or land arising from the storage, treatment, or use of compost, biosolids, and other solid or liquid organic material for soil conditioners as a Permitted Activity.	It is possible for treated wastewater discharges to land (by irrigation or sub-surface application) to meet the criteria of this rule, but it is limited to no less than 600 mm above the winter ground water table and to no more than 150 kg N/ha/y onto grazed pasture or no more than the nitrogen uptake rate of a crop.
21	Discharges to air from management of waste and other matter as a Permitted Activity.	The WWTP and its discharge are within the scope of the RMA definition of industrial and trade premises, so cannot comply with this rule.
28	Discharges to air from any industrial or trade premises associated with waste disposal as a Discretionary Activity.	The WWTP and its discharge are within the scope of the RMA definition of industrial and trade premises, so will require consent under this rule.
30	Discharges to air that cannot comply with other rules as a Restricted Discretionary Activity.	If the WWTP and its discharge are not within the scope of rules 21 and 28, it will require consent under this rule instead.
36	Discharges to land from existing large-scale domestic sewage disposal systems as a Restricted Discretionary Activity.	While the WWTP is existing, a discharge to land would be a new activity, and therefore is outside the scope of this rule.
37	Discharges to land from domestic sewage disposal systems established since 2006 as a Permitted Activity.	The WWTP discharge rate exceeds the limit of 2 m ³ /d, so cannot meet the conditions of this rule.
47	Discharges to surface water as a Permitted Activity.	The WWTP discharge rate exceeds the limit of 50 m ³ /d, so cannot meet the conditions of this rule.
49	Discharges to land which may enter water as a Permitted Activity.	The WWTP discharge rate exceeds the limit of 50 m ³ /d, so cannot meet the conditions of this rule.
52	Discharges to land or water that do not comply with other rules, as a Discretionary Activity.	It is likely that the WWTP discharge to land or water will trigger this rule.
63	Use of any lawfully established structures in river and lake beds as a Permitted Activity.	The existing discharge structure is within the Coastal Environment, but its use would otherwise be a Permitted Activity under this RRMP rule anyway.
64	Maintenance of structures in river and lake beds as a Permitted Activity.	The existing discharge structure is within the Coastal Environment, but its maintenance would otherwise be a Permitted Activity under this RRMP rule anyway.
65	Replacement and upgrading of structures in river and lake beds as a Permitted Activity.	The existing discharge structure is within the Coastal Environment, but its replacement and upgrading would otherwise be a Permitted Activity under this RRMP rule anyway.
66	Removal and demolition of structures in river and lake beds as a Permitted Activity.	The existing discharge structure is within the Coastal Environment, but its removal and



Rule No	RRMP Rule	Implication
		demolition would otherwise be a Permitted Activity under this RRMP rule anyway.
69	Any activity in river and lake beds that cannot comply with other rules as a Discretionary Activity.	The construction and maintenance of a new discharge structure in Wairoa River or a stream that is upstream of the Coastal Environment would trigger this rule.
72	Erection and placement of structures in river and lake beds that are not regulated by other rules as a Permitted Activity.	A new discharge structure installation upstream of the Coastal Environment is likely to exceed the 10 m ² area limit for occupation of the river bed, so cannot meet the conditions of this rule, and is therefore a Discretionary Activity under Rule 69.
75	Disturbance of river and lake beds that is not regulated by other rules as a Permitted Activity.	The area of disturbance for installing a new discharge structure upstream of the Coastal Environment is likely to exceed the 5 m ² area limit for disturbance of the river bed, so cannot meet the conditions of this rule, and is therefore a Discretionary Activity under Rule 69.

3.8.2 Summary of RRMP Considerations

For any installation of a new discharge structure within a stream or river bed upstream of the Coastal Environment, it is likely to trigger resource consents for a **Discretionary** Activity. For an installation of a land discharge system, it is possible that a low rate irrigation scheme could meet the **Permitted** Activity conditions, but this is perhaps unrealistic for the daily volume of wastewater requiring discharge and the characteristics of the soils around Wairoa. It is therefore more likely that a land discharge system would trigger resource consents for a **Discretionary** Activity. The earthworks and vegetation clearance activities that would be required for installing underground reticulation to and within the discharge site appear to be **Permitted** Activities.

3.9 Hawke's Bay Regional Coastal Environment Plan

The RCEP became operative from 8 November 2014. It provides Objectives and Policies for the management of activities in both the coastal marine area (i.e. the sea) and the coastal margin (i.e. the land) in an "environment in which the coast is usually a significant part or element". The location of the coastal environment area in the locality of Wairoa is shown in Figure 1 in Appendix A, and its boundary indicates the area within which the RCEP applies. The RCEP also contains rules that include conditions that determine when resource consents are required and define the status of those activities. Activities occurring outside the coastal environment are regulated by HBRC under the RRMP as discussed above.

3.9.1 RCEP Objectives

RCEP Objectives potentially relevant to the WWCP are listed in Table 3.12 below.

Table 3.12: HBRC RCEP Objectives Relevant to WWCP

Objective	Topic
2.1	Natural Character
3.1	Outstanding natural features and landscapes
4.1	Indigenous species and habitats
5.1	Public access
6.1	Relationship of Maori and the coast
8.1	Sustainable management of land
9.1	Surface water quality
11.2	Groundwater quality
13.1	Natural resources of river beds
14.1	Maintenance of ambient air quality
14.2	Maintenance of local air quality



Objective	Topic
15.1	Coastal hazards
15.2	Coastal hazard zone 1
15.3	Coastal hazard zones 2 and 3
16.1	Discharge of contaminants into coastal marine area
16.2	Adverse effects of activities on Mauri
16.3	Adverse effects of discharges are avoided, remedied or mitigated
16.4	Life supporting capacity of water
17.2	Adverse effects of excavation in coastal marine area
18.1	Adverse effects of structures in coastal marine area
18.2	Adverse effects of occupation of coastal space

3.9.2 Implications of RCEP Objectives

The Objectives of the RCEP potentially relevant to the WWCP, and a summary of their implications for the WWCP, are presented in Table 3.13 below. The Objectives are paraphrased to save space; their full wording is available from the on-line version of the RCEP.

Table 3.13: HBRC RCEP Objectives and Implications for WWCP

Obj No	RCEP Objective	Implication
2.1	Protection of natural character of coast	Discharge into estuary or sea would be resisted by this objective.
3.1	Protection of outstanding natural features and landscapes	Discharge into estuary or sea would be resisted by this objective, which includes ecological values of estuaries.
4.1	Protection of nationally and regionally important ecosystems	Discharge into estuary would be resisted by this objective, which includes ecological values of estuaries. Whakamahi Lagoon is regionally important and the RCEP recognises it as an SCA.
5.1	Maintenance and enhancement of public access.	Discharge into estuary, and possibly to the coast, would be resisted by this objective.
6.1	Protection of characteristics of the coast of special significance to tangata whenua	Discharge to estuary or coast would be strongly resisted by this objective.
8.1	Sustainable management of land to avoid compromising future use and water quality	Applies only to land discharge; the related policy establishes criteria to be met, which are achievable.
9.1	Maintenance and enhancement of surface water quality	The related policies set water quality limits that could constrain any discharge to the river or estuary, including contingent overflows and any temporary diversions for reticulation upgrades.
11.2	Maintenance or enhancement of groundwater quality	Limits effects of land discharge, but only to protect supplies used for human consumption or irrigation. Achievable.
13.1	Maintenance or enhancement of natural resources of river beds	Habitats and outstanding natural features (including estuaries) to be protected; river and estuary discharges resisted by this objective.
14.1	Maintenance of ambient air quality (wider area)	Applies to WWTP, land discharge, and earthworks; involves aerosols, odours, and dust; will need to be addressed, but achievable.
14.2	Maintenance of local air quality (immediate locality)	Applies to WWTP, land discharge, and earthworks; involves aerosols, odours, and dust; will need to be addressed, but achievable.
15.1	Risks to people or property from coastal hazards are avoided or mitigated	Only applies to structures in the coastal marine area, such as existing estuary discharge outlet or ocean outfall. Sets a standard of durability to be met; achievable.
15.2	Avoidance of new development within coastal hazard zone 1 (current risk)	Requires appropriate risk mitigation, and only applies to ocean outfall beyond Whakamahi Lagoon. Achievable, at a cost.
15.3	Avoidance of new development within coastal hazard zones 2 and 3 (risk in next 100 years)	Requires appropriate risk mitigation, applies to existing estuary outfall, and pump stations and reticulation from outfall upstream to Colin Street,



Obj No	RCEP Objective	Implication
		and everything on the flat from the outfall up to Kitchener Street and Scott Street.
16.1	Maintenance or enhancement of water quality of the coastal marine area	Discharges to estuary or sea are strongly resisted by this objective.
16.2	Avoid, remedy or mitigate adverse effects of activities on Mauri	Discharges to estuary or sea are strongly resisted by this objective.
16.3	Adverse effects of discharges are avoided, remedied or mitigated	Discharges to estuary or sea would need to address this objective, which resists such discharges.
16.4	Life supporting capacity of water is safeguarded	Discharges to estuary or sea would need to address this objective, which resists such discharges.
17.2	Adverse effects of excavation are avoided, remedied or mitigated	Only applies to earthworks to install or maintain estuary or ocean outfall; achievable. Note that disturbance within an SCA for this infrastructure is unlikely to be authorised.
18.1	Adverse effects of structures are avoided, remedied or mitigated	Only applies to structures associated with estuary or ocean outfall; achievable.
18.2	Adverse effects of occupation of space are avoided, remedied or mitigated	Only applies to pipelines and structures associated with estuary or ocean outfall; achievable.

3.9.3 RCEP Policy and Implications

Of all the objectives and policies in the several documents considered here, Policy 16.1 of the RCEP most directly addresses the matter of wastewater discharges to water. The relevant part of this Policy provides as follows:

"3. Sewage Discharges.

(a) The discharge of sewage from land which does not pass through soil or wetland, directly into water in the coastal marine area is inappropriate, unless:

- (i) the disposal of sewage directly into the coastal marine area is the best practicable option and*
- (ii) significant adverse effects on ecosystems, natural character of the coastal environment and on water quality classified for contact recreation purposes are avoided, or remedied or mitigated where avoidance is not practicable.*
- (iii) there has been consultation with:*
 - tangata whenua in accordance with tikanga Maori and due weight has been given to s6, s7 and s8 of the RMA, and*
 - the affected community in determining the suitability of the treatment and disposal system.*

(b) The location and extent of any mixing zone for discharge of sewage shall ensure that there are no significant adverse effects on:

- (i) any Significant Conservation Area or*
- (ii) the use of receiving waters for recreation or*
- (iii) the use of receiving waters for collection of seafood for human consumption.*

(c) the adverse effects of sewage discharges on the present and reasonably foreseeable use of the receiving waters have been avoided where practicable, remedied or mitigated, particularly in:

- (i) areas where there is high recreational use or*
- (ii) areas of maintenance dredging or*
- (iii) areas adjacent to commercial or residential development."*



This Policy does not directly impinge on Reticulation, Pump Stations, the WWTP, or Land Discharge options; it does, however, show what is required for any Contingent Overflows or Estuary Discharge, and to a lesser extent any Ocean Outfall. It is noted, however, that Rule 167 specifically excludes SCA15 (Wairoa estuary and lagoons) from the requirement to first pass through soil or wetland. This Rule is likely to have been drafted in this manner to allow Wairoa's WWTP discharge to continue until expiry of its current consent, and not necessarily to allow for subsequent consents to re-authorise discharges without first passing it through soil or wetland.

RCEP Policy 2.12 is also relevant, as the Wairoa estuary and lagoons are classified as SCA15:

"When assessing applications for land use consents, coastal permits, discharge permits or water permits, HBRC will take into account the values and management objectives identified for the relevant SCA as described in HBRC Plan Number 4203."

HBRC Plan Number 4203 was never finalised from its 2006 draft form, and it did not include SCA21 near Nuhaka that was identified in the RCEP after the HBRC Plan Number 4203 had been drafted. The values identified for SCA15 in the draft HBRC Plan Number 4203 were Maori cultural significance, conservation protection, nationally significant wildlife habitat, largest coastal wetland system on the east coast of the North Island, regionally significant indigenous vegetation and fisheries habitats, and the best representative example of its coastal landscape type in the region. The management objectives identified for SCA15 in the draft HBRC Plan Number 4203 are:

1. Protection and restoration of wildlife habitat;
2. Protection and restoration of fish habitat, particularly spawning and nursery habitat of native freshwater species;
3. Protection of the significant flora in the Ngamotu Lagoon;
4. Maintenance of the ecology and natural processes of the estuary, to the extent practicable, by avoiding, remedying or mitigating adverse effects on:
 5. water, sediment and nutrient flows;
 6. water quality including: temperature, salinity, clarity and oxygen and nutrient concentrations;
 7. near shore sediment processes which support the estuary, lagoonal and beach landforms;
 8. Avoidance of the discharge of any untreated pathogens or any toxic substances directly to the estuary;
 9. Maintenance of fish passage to and from marine, estuarine and freshwater habitats;
10. Minimal disturbance to wildlife.

RCEP Policies 2.12 and 16.1 are balanced to some extent by RCEP Policy 2.6:

"To recognise that local authorities have statutory functions on behalf of their communities including provision of services for wastewater, stormwater, water supply, parks and recreation, roads, solid waste disposal."

Although this Policy supports WDC's provision of wastewater treatment and discharge, it does not necessarily allow WDC to continue the status quo without any challenges or opposition.

3.9.4 RCEP Rules and Implications

A number of RCEP rules are potentially relevant to the WWCP, depending on the location and nature of infrastructure development and discharge. Some rules prohibit certain activities in specific locations, so WWCP needs to ensure that these prohibitions are avoided. Ideally, WWCP



should seek to minimise the number of rules triggered by its design and layout. Table 3.14 summarises the RCEP rules that are most likely to be triggered or need to be avoided and their implications for the WWCP. The Rules are paraphrased to save space; their full wording is available from the on-line version of the RCEP.

Table 3.14: HBRC RCEP Rules and Implications for WWCP

Rule No	RCEP Rule	Implication
7	Vegetation disturbance and soil disturbance in Coastal Margin as a Permitted Activity.	For earthworks that will not affect water bodies and is more than 20 m from the CMA.
8	Vegetation disturbance and soil disturbance in the Coastal Margin as a Restricted Discretionary Activity.	For earthworks that cannot meet all conditions of Rule 7 and/or may affect water bodies.
9	Discharges to land or water in the Coastal Margin that are not otherwise classified or do not comply with all conditions of other rules are a Discretionary Activity.	This catch-all rule is triggered because WWCP cannot comply with all conditions of various other discharge rules to land or water.
17	Discharge of contaminants to surface water as a Permitted Activity.	WWCP exceeds the 50 m ³ /d limit, and discharge potentially increases pathogens and ammonia beyond their limits, so is not a Permitted Activity.
19	Discharge of contaminants to land as a Permitted Activity.	WWCP exceeds the 50 m ³ /d limit, and discharge potentially exceeds other limits, so is not a Permitted Activity.
28	Discharge onto or into land and ancillary into air from a new (or modified) wastewater system as a Permitted Activity.	WWCP exceeds the 2 m ³ /d limit, and potentially exceeds other limits, so is not a Permitted Activity.
29	High rate discharges (>2 m ³ /d) onto or into land and ancillary into air from an existing wastewater system as a Restricted Discretionary Activity.	It is not clear whether WWCP could fall into this category (existing system but a new discharge to land), although a continuation of any WWTP pond seepage (if demonstrated to be occurring) would appear to be in this category and is likely to comply with all conditions.
46	Activities in lakes and river beds that are not otherwise classified or do not comply with all conditions of other rules are a Discretionary Activity.	This catch-all rule may be triggered if WWCP cannot comply with all conditions of rules for activities in lakes and river beds in the coastal margin.
48	The use of existing lawfully established structures as a Permitted Activity.	The existing WWTP discharge pipeline is listed in Schedule S of the RCEP as a lawfully established structure.
49	The maintenance of existing lawfully established structures as a Permitted Activity.	The existing WWTP discharge pipeline is listed in Schedule S of the RCEP as a lawfully established structure, but some care may be required to ensure that all conditions are met.
51	Removal and demolition of existing structures as a Permitted Activity.	Removal and demolition of the existing WWTP discharge pipeline is permitted provided that 15 working days' notice is given to HBRC and all the other conditions are met.
53	Placement of structures in, on, under, or over the bed of a river or lake in the coastal margin as a Permitted Activity.	Installation of a new pipeline or discharge structure is unlikely to meet the 10 m ² area limit, so is not a permitted activity.
89	Minor land uses in coastal hazard zones as a Permitted Activity.	Construction of network utilities within a road reserve is a Permitted Activity which WWCP is likely to include.
94	Maintenance, construction, or demolition of a network utility in CHZ3 as a Permitted Activity.	WWCP will comply with the conditions of this rule for any sections of infrastructure located in CHZ3.
97	Construction of a new or upgrading of an existing network utility in CHZ1 or CHZ2 not within a road reserve as a Restricted Discretionary Activity.	WWCP is likely to trigger this rule and will need to assess effects against the various matters of discretion listed for this rule, including coastal hazard risks and effects.
109	Except as provided for in Rules 89 or 144-146, removal of in-situ gravel and other earthworks within CHZ 1 in volumes greater	WWCP is likely to trigger this rule for earthworks and any discharge infrastructure within and along the margins of the Wairoa estuary and lagoons. WWCP would not fit the criteria of Rules 144-146.



Rule No	RCEP Rule	Implication
	than 5 m ³ per property in any six consecutive month period as a Non-complying Activity.	Non-complying consents are declined unless the activities are not contrary to relevant Policies and Objectives OR will cause no more than minor adverse effects on the environment.
117	Construction, alteration, or demolition of structures within the CMA that is not otherwise classified or does not comply with all conditions of other rules as a Discretionary Activity.	This catch-all rule may be triggered if WWCP cannot comply with all conditions of rules relating to structures within the CMA.
121	Removal or demolition of a structure in the CMA as a Permitted Activity.	WWCP may exceed the conditions of this rule if the structure exceeds 50 m ² .
130	Excavation, drilling, or disturbance of foreshore and seabed that is not otherwise classified or does not comply with all conditions of other rules as a Discretionary Activity.	This catch-all rule may be triggered if WWCP cannot comply with all conditions of rules relating to earthworks within the foreshore and seabed.
160	Discharges in the CMA that are not otherwise classified or do not comply with all conditions of other rules as a Discretionary Activity.	This catch-all rule is triggered because other rules relating to discharges within the CMA do not specifically include treated wastewater.
167	Discharge of sewage from land which has not passed through soil or wetland into a SCA, excluding the Wairoa River (SCA15), as a Prohibited Activity.	WWCP is specifically excluded from this rule that would otherwise prohibit its discharge. This rule implies that wastewater passage through soil or wetland prior to entering the Wairoa River would address RCEP policies and objectives better than the current situation.
178	Occupation of the CMA that is not specifically classified by any other rule or does not comply with all relevant conditions of a rule, as a Discretionary Activity.	A new or relocated discharge pipeline and outfall within the CMA will trigger this rule.
180	Occupation of the CMA by a lawfully established structure including any alteration, extension, removal, maintenance, repair and associated discharges, disturbance, drainage, or reclamation within the CMA as a Permitted Activity.	The existing discharge pipeline is specifically listed in Schedule S of the RCEP (ID 24) as a lawfully established structure within the CMA. A wide range of possible activities associated with the maintenance or modification of this structure are therefore Permitted Activities.

3.9.5 Summary of RCEP Considerations

For any estuary discharge in particular, the following are key considerations:

- Consultation with tangata whenua and the wider community are essential;
- The Whakamahi and Ngamotu Lagoons including the full width of the Wairoa estuary have high ecological values and are specifically listed as SCA15 which is directly relevant to a number of restrictive RCEP Policies and Rules;
- Rule 167 allows the current discharge to the Wairoa River without any land passage, but it implies that implementation of land or wetland passage would be preferable and more consistent with what would be allowed for a wastewater discharge to any other SCA;
- Any changes to the location of the discharge pipeline and outfall will trigger a wide range of consenting requirements, while the use and modification of the existing structures are **permitted** activities;
- Earthworks within CHZ 1 trigger a **non-complying** resource consent (Rule 109) which is likely to be difficult to obtain;
- The Wairoa River estuary has significant actual and potential use for public recreation; and
- The Wairoa River estuary has significant actual and potential use for collection of seafood for human consumption.

For any discharge to land and/or earthworks in the coastal environment, the following are key factors:



- Earthworks within CHZ 1 trigger a **non-complying** resource consent (Rule 109) which is likely to be difficult to obtain;
- Most of the land within the coastal environment along the Wairoa River banks and across Ngamotu and Whakamahi Lagoon reserves is subject to natural hazards such as flooding, erosion, and tsunami according to the planning maps (CHZ's 1 – 3), and this triggers specific consenting rules and environmental and hazard assessments;
- Most of the land within the coastal environment along the Wairoa River banks and across Ngamotu and Whakamahi Lagoon reserves and along the foreshore of Hawke Bay is mapped as a Vegetation Clearance Management Area, and this triggers specific rules and assessments; and
- The nature and daily volume of the treated wastewater to be discharged probably triggers **discretionary** resource consent regardless of the design of the discharge system.

3.10 Conservation Management Strategy for East Coast Conservancy

Ngamotu Lagoon, Whakamahi Lagoon, and most of the Wairoa River estuary area between these lagoons are wildlife management reserves which are specifically incorporated into the CMS-ECC. It became operative in 1998 and it is currently undergoing internal review by DOC staff; upon completion of this review, the proposed CMS is expected to be publicly notified for submissions in mid-2018.

Some key objectives of the current CMS-ECC include:

- To work closely with tangata whenua to protect wahi tapu and other historic taonga on lands managed by the department.
- To allow easements where they will not adversely affect natural or cultural values (including ecological, historic or public use values), or where any adverse effects can be avoided, remedied or mitigated to the Department's satisfaction, and their purposes cannot reasonably be achieved by other means off land managed by the Department.
- To protect freshwater fish and their habitat as a significant component of the biodiversity of the natural ecosystems in areas managed by the Conservancy.
- To promote the careful consideration of conservation matters, and the provision of appropriate conditions protecting the natural and historic values of the East Coast Conservancy, in resource consent application processing.

Some key implementation methods of the current CMS-ECC include:

- Applicants wanting to locate facilities or utilities, or to undertake mineral related activities, on lands administered by the Conservancy will be required to provide a full landscape impact assessment which identifies landscape impacts and ways to avoid, mitigate or remedy these (including design, site rehabilitation, and on-going maintenance of rehabilitation works).
- The Conservancy will address the avoidance, mitigation or rehabilitation of landscape impacts in conditions on any authorities granted, and will review the conditions of existing authorities as opportunities arise.
- Easement applications which could compromise natural or historic values may be refused.
- Easement conditions will take account of natural and historic values and public use of the area.

3.11 Reserve Management Plans

The WWLMP was developed by HBRC and DOC in 2002 as the RMP for the Whakamahi Wildlife Management Reserve, but it only included actions for five years (until 2007), and has not been



updated since its expiry. The WWLMP provided background information and direction for weed control, fencing, planting, water level management, public use, and ecological monitoring within this reserve. The objectives of the WWLMP were:

- Maintain the existing drainage outfalls and flood control capacity;
- Prevent further degradation of the wetland and sand spit;
- Protect, restore and enhance biodiversity values;
- Minimise disturbance to wildlife;
- Protect cultural values;
- Maintain recreation opportunities where they are compatible with the above.

WDC have developed RMP's for Rangihoua/Pilot Hill Historic Reserve and for all of their riverbank reserves that occupy the urban side of the Wairoa River, including the roadside section of the Whakamahi Lagoon reserve area adjacent to Rangihoua/Pilot Hill. WDC has also developed a RMP for Ngamotu Lagoon on the eastern side of Wairoa River estuary. These RMP's focussed on maintaining public access and recreational enjoyment, natural landscapes with limited facilities such as pathways and seats, and possible public art installations.

HBRC monitored the ecological state of these lagoons in 2003 and 2007. This was based on the WWLMP and recommendations by DOC which included these lagoons in the top ten wetlands of significance in the Hawke's Bay Region. The monitoring data has formed part of HBRC's 5-yearly State of the Environment reports.

3.12 Wairoa District Plan

The WDP became operative on 25 June 2005 and is the document that covers Resource Management Act issues regulated by WDC. It was amended by Plan Change 1B – Coastal Protection which became operative on 23 November 2016.

While the plan as a whole needs to be considered, Chapter 26 (Utilities, Minerals Exploration and Energy Development) is the part of the plan that most directly and comprehensively addresses the issues associated with the WWCP. Section 26.2.1 describes the pertinent resource management issue as *"the need for people in the Wairoa District to have ready access to utilities in order to provide for their social and economic well-being and health and safety"* and thereby accords a priority to the accommodation of such utilities as the municipal wastewater system.

The relevant Objective is *"26.3.1: To enable utilities to establish and operate in a safe, efficient and effective manner whilst ensuring that adverse effects on the environment are avoided, remedied or mitigated"*.

The WDP definition for earthworks specifically excludes work carried out to provide for effluent disposal systems, irrigation, and network utility trenching. These exclusions are relevant and important for WWCP, as they are the most likely reasons for any earthworks activities, and this exclusion means that the WDP provisions for earthworks (such as rules controlling adverse effects or requiring resource consents) will not be applied to WWCP.

3.12.1 WDP Policies, Rules and Implications for the WWCP

Relevant Policies and Rules from the District Plan are listed against their implications in Table 3.15 below. The Policies and Rules (Provisions) are paraphrased to save space; their full wording is available from the on-line version of the District Plan.



Table 3.15: Wairoa District Plan Provisions and Implications for WWCP

No	District Plan Provision	Implication
Policy 4.4.3	Promote the protection and sustainable management of all cultural heritage places, mahinga kai, and other taonga of Maori.	New or modified WWCP infrastructure needs to avoid effects on cultural values. Ceasing a direct discharge to Wairoa estuary or improving its cultural acceptability is encouraged.
Policy 4.4.9	Where practicable and appropriate, to use traditional Maori means to manage natural and physical resources, such as rahui.	Discharge design is encouraged to incorporate traditional Maori measures where practicable and appropriate.
Policy 5.5.2	Protect and enhance biodiversity (fauna habitats, wetlands, indigenous vegetation, and riparian margins) that have recognised biological/ecological values.	The Whakamahi Lagoon and Wairoa River estuary margins would be included in this Policy.
Policy 5.5.4	Ensure that listed significant indigenous vegetation and/or significant habitats of indigenous fauna are protected from activities such as grazing, clearance and drainage.	The riverside reserves and Whakamahi Lagoon are classified as significant indigenous habitat areas which are to be protected from damaging activities.
Policy 5.5.9	Identify and protect areas, sites and structures of archaeological, cultural or historic significance.	Archaeological and culturally significant sites exist near the WWTP and along the Wairoa River banks and Lagoon areas. WDP maps identify most but not all such sites. WWCP needs to avoid affecting any of these sites.
Policy 6.5.1	Avoid use, development and subdivision in the coastal environment which adversely affects, or has the potential to adversely affect: (1) natural coastal processes; (2) the relationship of tangata whenua with their ancestral coastal lands, waahi tapu and taonga; (3) ecosystems, outstanding natural features and landscapes associated with the coast; (4) the quality of coastal waters; and (5) public access to and along the coastal environment.	Extension or relocation of the WWTP discharge into the coastal environment would be resisted by this Policy.
Policy 6.5.2	Encourage appropriate subdivision, use and development in the coastal environment where natural character has already been compromised.	If it is possible to relocate the WWTP discharge to an area of coastal environment where its natural character has already been compromised, this Policy supports that option.
Policy 6.5.7	Encourage management, maintenance and enhancement of the coastal lagoons identified in Schedule 5 to retain and enhance their wildlife values.	Whakamahi and Ngamotu Lagoons are listed in Schedule 5. Extension or relocation of the WWTP discharge into these areas would be resisted by this Policy.
Policy 7.5.1	Require measures to address degradation of soil including loss of soil stability, erosion and contamination, and promote rehabilitation and enhancement of degraded land where this is practicable.	Discharges of treated wastewater to land can improve soil properties, but poor design or operation can result in instability or contamination of soil.
Policy 7.5.8	Ensure structures attached to the land avoid, remedy or mitigate any adverse effects on amenity values and public safety for land users and users of water bodies, changes in the natural qualities of the water body, or effects on cultural values.	The existing discharge structure may meet this Policy. Any extension or relocation of the WWTP discharge will need to have regard to this Policy.
Policy 8.5.2	Ensure the potential effects of natural hazards are taken into account when considering resource consents and require measures to mitigate the risk to land, property and residents.	Any extension or relocation of the WWTP discharge will need to take natural hazards into account.
Policy 8.5.6	Maintain or enhance, where possible, the capacity of the active foredune areas and river mouths, to provide unimpeded natural protection against coastal erosion and inundation.	Any relocation of the WWTP discharge to the active foredune or through this dune to the ocean will need to have regard to this Policy.



No	District Plan Provision	Implication
Policy 14.3.3	Ensure existing activities can continue to operate within the Conservation and Reserve zone while recognising the sensitive nature and significant values associated with the surrounding environment.	This enables the existing WWTP discharge to continue to operate, and does not appear to resist relocation of the discharge within the existing Wairoa estuary or Whakamahi Lagoon reserve area.
Policy 16.3.3	Enable the operation and development of utilities, minerals exploration and energy developments in a manner that enhances economic and social well-being while avoiding, remedying or mitigating adverse environmental effects.	This Rural zone Policy supports the operation and development of utilities. This Policy supports the extension or relocation of the WWTP discharge to a land (irrigation) site in the Rural zone.
Policy 26.4.1	Ensure that, as far as practicable, utilities...are located in a manner consistent with the character and amenity values of an area.	Discharge into estuary would be resisted by this objective.
Policy 26.4.3	Ensure that new and existing utilities... are operated to enable people and the community to provide for their social, economic and cultural well-being and for their health and safety, in a way that safeguards the life supporting capacity of the District's water resources and ecosystems and that avoids, remedies or mitigates any adverse effects on the environment.	A general policy that will need to be satisfied by any option adopted.
Policy 26.4.4	Ensure that the provision of utilities...is done in a way that safeguards the life supporting capacity of the District's air, water, soils and ecosystems and avoids, remedies or mitigates any adverse effects on the environment.	A general policy that will need to be satisfied by any option adopted.
Rule 14.8.8	The use, storage, disposal or transportation of hazardous substances shall not exceed the Low Threshold Hazard Factor.	Wastewater treatment plants are listed in WDP as having a high threshold hazard factor, so the transportation and disposal of treated wastewater into the Conservation and Reserve zone breaches this Rule and is a Discretionary Activity.
Rule 15.8.14	The use, storage, disposal or transportation of hazardous substances shall not exceed the Low Threshold Hazard Factor.	Wastewater treatment plants are listed in WDP as having a high threshold hazard factor, so the transportation and disposal of treated wastewater into the Coastal zone breaches this Rule and is a Discretionary Activity.
Rule 15.8.15	Any new effluent holding pond or waste disposal area shall be set back 500 m from a residential zone boundary and/or 200 m from a residence in any other zone.	This Coastal zone permitted activity standard may be difficult for WWCP to comply with in the event that a land discharge (irrigation) system is to be designed and implemented.
Rule 16.8.5	Any new effluent holding pond or waste disposal area set back at least 500 m from a residential zone boundary and/or 200 m from a residence in any other zone is a Permitted Activity.	This Rural zone permitted activity standard may be difficult for WWCP to comply with in the event that a storage pond or land discharge (irrigation) system are to be constructed outside of the Designated WWTP site.
Rule 22.1.6	The relocation, demolition or destruction (partial or total), of any heritage resource listed in Schedule 1 is a Discretionary Activity.	WWCP will need to ensure compliance with this Rule or seek Discretionary resource consent (and AA from HNZPT).
Rule 22.1.7	Any land disturbance occurring in any defined area of significance to tangata whenua identified in Schedule 1 is a Discretionary Activity.	WWCP will need to ensure compliance with this Rule or seek Discretionary resource consent.
Rule 23.1.2	Clearance or disturbance of significant flora and fauna habitats is a Discretionary Activity.	The riverside reserves and Whakamahi Lagoon are classified as areas of significant flora and fauna habitat, so any earthworks for relocation of the discharge structure through or within these areas is a discretionary activity.



No	District Plan Provision	Implication
Rule 26.5.1(1)	The operation, maintenance, minor upgrading, or removal of any lawfully established utilities is a Permitted Activity.	The existence of the current reticulation, WWTP and discharge are permitted, but any upgrade that is more than minor would not be covered by this provision.
Rule 26.5.1(5)	Pipes for the conveyance or drainage of water or sewage, and necessary incidental equipment including household, commercial and industrial connections,...pipes and necessary incidental equipment are a Permitted Activity.	The current or extensions to reticulation are permitted, but this provision does not appear to extend to the WWTP or any discharge facility.
Rule 26.5.6	All activities that are not permitted or controlled activities, or do not meet the performance standards or conditions for permitted activities, are Discretionary Activities.	Any significant (more than minor) upgrade to the WWTP or the discharge facility would be a discretionary activity.
Rule 26.6.5	Where any underground work is installed or maintained the ground shall be restored to its original condition as far as practicable.	WWCP should generally be able to comply with this Permitted Activity standard.
Rule 26.6.10	New or expanded utilities complying with the zone standards relating to signs and natural hazards, and complying with the district-wide rules relating to cultural heritage, indigenous vegetation and habitats of indigenous fauna, are Permitted Activities.	WWCP should ensure that cultural heritage and indigenous flora and fauna are not disturbed. If an expansion of the WWTP or reticulation, or the relocation of the discharge structure cannot comply with the WDP standards (rules) for these features, the non-compliances will trigger further reasons for resource consents.

Section 26.6 of the Wairoa District Plan lists standards and conditions for Permitted Activities for Utilities. These standards and conditions relate to the following:

- Height of structures;
- Noise;
- Vehicle access and parking;
- External lighting;
- Restoration of ground disturbances;
- Floor area;
- Use of explosives;
- Masts and towers; and
- Radiofrequency fields.

Of these, only the restoration of ground disturbances is likely to apply to the WWCP, in relation to possible works on the reticulation, rising mains, and/or discharge pipeline.

Standard/condition 26.6.10 is of some significance to the WWCP, stating as follows:

- *“All utilities... shall only comply with the standards in the respective zone relating to advertising signs and natural hazards. New utilities, and the expansion and upgrading (excluding minor upgrading) of existing utilities, shall also comply with the district wide rules relating to cultural heritage (Chapter 22) and indigenous vegetation and habitats of indigenous fauna”.*

The implication of this provision is that advertising signs and natural hazard precautions also need to follow a provided specification, and that **any significant upgrade** such as new discharge arrangement or change to WWTP will also need to avoid cultural, flora and fauna assets.



3.12.2 Other WDP Provisions

Designations authorise the installation, operation and maintenance of public utilities. As listed in Schedule 2 to the District Plan, Designation D53 relates to the Wairoa wastewater treatment plant, on Part Lot 1, DP 3350, for the designated purpose of “sewerage treatment”. Any changes to the WWTP design or treatment processes are likely to trigger the need to seek approval from WDC’s regulatory arm of either an Outline Plan or an application to waive this process. This is generally a formality, and WDC’s regulatory arm can only request changes to any proposal prior to approving it; they can’t decline the Outline Plan application.

There appears to be no specifically designated provision for the reticulation in the town, or for the pump stations, or for the existing estuary discharge facility. To the extent that these essential parts of the network utility lie within the road reserve, there may be no need to further consider the authorisation of their maintenance or up-grading. However, it is known that some of the reticulation lies within private properties, and consideration will need to be given to the preferred means of authorisation for any works that may be proposed within those properties.

For improved legal protection and planning simplicity of WDC’s wastewater infrastructure, it may be advantageous for WDC to obtain Designations over the existing pump stations and the future discharge system and its related structures as part of the next District Plan review.



4 ACTIVITIES AND AUTHORISATION REQUIREMENTS

4.1 General

Having listed the relevant statutory provisions in Section 3 above, this section lays out the same information, but grouped in order of possible wastewater system components and activities, instead of according to plans and their provision numbers.

4.2 Reticulation

Reticulation refers to the network of sewer pipes laid within the town, including the mains that run from private connections to pump stations, and from pump stations to the WWTP. Strictly, the private connections from homes and businesses into the “public” reticulation will lie within private properties, but this distinction will be less clear where the reticulation runs within private property.

Works and maintenance on private connections are strictly the responsibility of the land owner involved, although owners can be lawfully instructed by WDC to undertake remedial works at their own expense if the integrity of the sewerage scheme as a whole is put at risk by some problem with the private connection.

While the WWCP focuses on the re-consenting of the discharge from the WWTP, one of the most important limitations of the existing system is the significant volumes of groundwater and stormwater entry overloading the existing reticulation. This limitation could become even more critical if a discharge to land is to be pursued. This matter is covered in detail in report LEI, 2015:A1I1 (Summary of Wastewater and Stormwater Overflow Issues) and report LEI, 2017:A2I1 (WWTP System Data and Compliance Summary).

Whether the present estuary discharge or some alternative discharge is selected as the BPO going forward, any discharge arrangement will benefit from a reduction in stormwater and groundwater entry into the reticulation, and this will likely involve excavating and replacing lengths of sewer pipe in identified priority areas.

Statutory provisions that will potentially impact on any upgrade of the reticulation are set out in Table 4.1 below.

Table 4.1: Planning Provisions Impacting on Reticulation Upgrade

Ref	Provision	Implication
RPS, Obj 9	Provision for development within coastal environment, including maintenance and enhancement of infrastructure and network utilities.	Helps to enable reticulation upgrades, particularly downstream from Colin Street where reticulation is within CMA and CHZ 3.
RPS, Obj 27	The maintenance or enhancement of the water quality of rivers, lakes and wetlands as suitable for sustaining or improving aquatic ecosystems and contact recreation.	Reduction of overflows achieved by reticulation upgrade would help achieve this objective.
RPS, Obj 31	Avoidance or mitigation of adverse effects of natural hazards on people's safety, property, and economic livelihood.	Parts of reticulation downstream from Colin Street are within CHZ 3, but upgrade of reticulation should readily avoid unreasonable exposure.
RPS Obj 32	Ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's communities and provides for their health and safety.	Any reticulation upgrade will help meet this objective.



Ref	Provision	Implication
RPS Obj 33	Recognition that some infrastructure which is regionally significant has specific locational requirements.	Any reticulation upgrade is supported by this objective.
RPS Obj 33B	Adverse effects on existing land use activities arising from the development of physical infrastructure are avoided or mitigated in a manner consistent with Objectives 16, 17, 18, 32 and 33.	Any reticulation upgrade will need to be carried out in way that minimises interference with property owners and occupiers.
RPS, Obj 36	To protect and where necessary aid the preservation of waahi tapu.	No waahi tapu sites are recorded within the footprint of the reticulation.
RRMP, POL 67	To ...manage the effects of activities affecting soil in accordance with the environmental guidelines set out in Table 5. (Soil health, soil contamination, and earthworks are more specifically addressed.)	Site restoration after any works; easy on flat land where almost all the reticulation is sited. Earthworks associated with reticulation upgrades are likely to need consent.
RRMP, Rule 7	Vegetation disturbance and soil disturbance as a Permitted Activity.	Earthworks associated with reticulation upgrades are a Permitted activity that will not need consent.
RCEP, Obj 9.1	Maintenance and enhancement of surface water quality.	Brings a requirement for careful management of any contingent discharge, whether groundwater or wastewater, arising from excavation and replacement of reticulation components.
RCEP, Obj 14.2	Maintenance of local air quality (immediate locality).	Excavating potentially smelly sewers in close proximity to homes and businesses means thought will need to be given to odour effect minimisation.
RCEP, Obj 15.3	Avoidance of new development within coastal hazard zones 2 and 3 (risk in next 100 years)	Part of reticulation, including main line from town to WWTP, is within CHZ 3; buried pipelines should be durable enough to meet this requirement.
RCEP, Rule 7	Vegetation disturbance and soil disturbance as a Permitted Activity.	Earthworks associated with reticulation extensions and maintenance are likely to be Permitted activities.
RCEP, Rule 89	Minor land uses in coastal hazard zones as a Permitted Activity.	Construction of network utilities within a road reserve is a Permitted Activity. All reticulation appears to be within the road reserve.
RCEP, Rule 94	Maintenance, construction, or demolition of a network utility in CHZ3 as a Permitted Activity.	Reticulation maintenance will comply with the conditions of this rule for the sections of pipeline that are located in CHZ3.
WDP, Policy 14.3.3	Ensure existing activities can continue to operate within the Conservation and Reserve zone while recognising the sensitive nature and significant values associated with the surrounding environment.	The existing reticulation in this zone can continue to operate, and the reduction of storm overflow discharges within riverside reserve areas is encouraged.
WDP, Policy 26.4.1	Ensure that, as far as practicable, utilities...are located in a manner consistent with the character and amenity values of an area.	The existing reticulation, and therefore any potential upgrades, meet this policy.
WDP, Policy 26.4.3	Ensure that new and existing utilities... are operated to enable people and the community to provide for their social, economic and cultural well-being and for their health and safety, in a way that safeguards the life supporting capacity of the District's water resources and ecosystems and that avoids, remedies or mitigates any adverse effects on the environment.	Any reticulation upgrade would be for the express purpose of meeting this provision.
WDP, Policy 26.4.4	Ensure that the provision of utilities...is done in a way that safeguards the life supporting capacity of the District's air, water, soils and ecosystems and avoids, remedies or mitigates any adverse effects on the environment	Reticulation upgrades would need to be undertaken in a way that meets this provision.



Ref	Provision	Implication
WDP, Rule 26.5.1(1)	The operation, maintenance, minor upgrading, or removal of any lawfully established utilities is a Permitted Activity .	This authorises the existence and operation of the reticulation without any consent requirement.
WDP, Rule 26.5.1(5)	Pipes for the conveyance or drainage of water or sewage, and necessary incidental equipment including household, commercial and industrial connections,...pipes and necessary incidental equipment are a Permitted Activity .	"Pipes" includes all of the reticulation, and the permitted activity status does not limit upgrading to "minor".

4.3 Pump Stations

There are four significant pump stations located at North Clyde, Alexandra Park, Kopu Road, and Fitzroy Street. While the first three of these originally pumped raw sewage into the adjacent Wairoa River, they all now pump wastewater from the town to the WWTP on Rangihoua/Pilot Hill, overlooking the Wairoa River mouth.

In Chapter 31 of the Wairoa District Plan, "Utilities" are defined as follows:

"electrical lines, water, sewage and stormwater reticulation, gas lines, telecommunications, radiocommunications, roads, railway lines, and airports, energy generation facilities, and their ancillary activities; including, but not limited to, all activities undertaken by network utility operators as defined in Section 166 of the Resource Management Act 1991."

Sewerage reticulation is specifically included as a utility. Pump stations are not directly provided for in this definition, but pump stations are undoubtedly ancillary activities to sewage reticulation; if the reticulation is going to function as intended, then it needs to be pumped. No pump, no functional reticulation.

The pump stations are considered unlikely to need any significant upgrade to meet the needs of the WWCP. It is expected that any re-setting of controls or renewal of components will not trigger any requirement for authorisation under the RMA. All four pump stations are located on road reserve (3 of them alongside the Wairoa River), and this fact effectively authorises their upgrade or maintenance as Utilities under the WDP.

4.4 Contingent Overflows

As described in detail in report LEI, 2015:A1I1, heavy rain events occasionally trigger overflows from pump stations and man holes on the reticulation. These overflows are essentially of stormwater, but they carry raw sewage as well, and they flood some private properties as well as discharging without authorisation into the adjacent river. The effects of these overflows are limited because the discharges are dominated by stormwater rather than wastewater (ie, they are essentially stormwater contaminated by wastewater), and the Wairoa River is flooding and already carrying higher loads of contaminants than would be contributed by the wastewater overflows. HBRC's compliance staff have acknowledged that the adverse effects from these overflow discharges would be less than minor and difficult to detect downstream.

These overflows need to be either stopped, or authorised; at present they happen, and are not authorised. Stopping the overflows is a long term objective of WDC, but it is likely to take several years and cost millions of ratepayers' dollars before complete stoppage is achieved, by a program of reticulation upgrade and, where possible, stormwater diversion. WDC are implementing such a program but it is not yet apparent whether the reticulation upgrades have significantly reduced



overflow events. WDC have also modified the pump arrangements to improve peak capacities, and this appears to have reduced the frequency and volume of overflow events in some areas.

Authorising the overflows will not be easy, and may even prove to be unachievable, but it could be pursued, for as short a term as will allow the overflows to be stopped. Authorisation should be seen as a means of identifying the reasons for the overflows, assisting and encouraging the correction of the problem, while monitoring both the occurrence of overflows and the effectiveness of remedial actions taken to reduce them.

Planning provisions impacting on both the continuing unauthorised overflows, and any proposal to authorise them while WDC reduces their occurrence, are as set out in Table 4.2 below. Contingent overflow discharges from the Alexandra Park and North Clyde pump stations into the river fall upstream from the coastal environment boundary, and they are therefore outside the requirements of the NZCPS and RCEP.

Table 4.2: Planning Provisions Impacting on Contingent Overflows

Ref	Provision	Implication
NZCPS, Obj 1	Safeguard the integrity, form, functioning and resilience of coastal environment and sustain its ecosystems. Maintain or enhance coastal water quality.	The reduction of overflows will improve the coastal water quality and ecosystems to a limited extent.
NZCPS, Obj 4	Maintain and enhance the public open space qualities and recreation opportunities of the coastal environment.	The reduction of overflows will enhance the public open space qualities and latitude for recreational opportunities in the river and riverbank reserves.
NZCPS, Pol 5	Consider effects on land or water managed under conservation or protective legislation and avoid, remedy, or mitigate adverse effects on the purposes for which the land or water is managed.	The reduction of overflows will improve the avoidance of effects on land and water managed under the Conservation and Reserves Acts.
NZCPS, Pol 6	Recognise the importance of infrastructure for community well-being provided that it is appropriate development and occupation of coastal areas.	This policy supports the importance of keeping the reticulation in its current location.
NZCPS, Pol 11	Avoid, mitigate, or remedy adverse effects on indigenous biological diversity.	The reduction of overflows will contribute to avoiding such adverse effects, to a limited extent.
NZCPS, Pol 12	Manage the release and spread of potentially harmful aquatic organisms.	The reduction of overflows will contribute to preventing the release and spread of pathogens.
NZCPS, Pol 14	Restore and rehabilitate natural character of degraded areas.	The reduction of overflows will contribute to the restoration of degraded areas to a limited extent.
NZCPS, Pol 21	Improve coastal water quality.	The reduction of overflows will contribute to some limited improvements in coastal water quality.
NZCPS, Pol 23	<p>Manage the discharges of contaminants to coastal water in order to minimise adverse effects on water quality and ecosystems.</p> <p>"In managing discharge of human sewage, do not allow:</p> <p>(a) discharge of human sewage directly to water in the coastal environment without treatment; and</p> <p>(b) the discharge of treated human sewage to water in the coastal environment, unless:</p> <p>(i) there has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and</p> <p>(ii) informed by an understanding of tangata whenua values and the effects on them."</p>	The reduction of overflows will contribute to WDC complying with this policy. As part of consenting the overflows, the considerations of alternatives and consultation with tangata whenua will need to be undertaken and documented.



Ref	Provision	Implication
NPS-FM, Obj AA1	To consider and recognise Te Mana o te Wai in the management of fresh water.	The reduction of overflows will recognise and respond to this water management value.
NPS-FM, Obj A1	To safeguard the life-supporting capacity and ecosystems of fresh water and the health of people and communities in sustainably managing the use and development of land, and of discharges of contaminants.	The reduction of overflows will reduce discharges of harmful contaminants which will improve the life-supporting capacity of fresh water ecosystems and better protect community health against kaimoana contamination and recreational contact.
NPS-FM, Obj A2	The overall quality of fresh water within a freshwater management unit is maintained or improved.	The reduction of overflows will reduce discharges of harmful contaminants which will improve the Wairoa River water quality to a limited extent.
NPS-FM, Obj A3	The quality of fresh water within a freshwater management unit is improved so it is suitable for primary contact more often, unless: a) regional targets established under Policy A6(b) have been achieved; or b) naturally occurring processes mean further improvement is not possible.	The reduction of overflows will reduce discharges of pathogens to the Wairoa River water, but these discharges only occur during storm events when the river is in flood and contact recreation is not occurring.
NPS-FM, Pol A3	Regional Councils must impose conditions on discharge consents to achieve NPS-FM limits and targets, and to impose rules requiring the adoption of the best practicable option for discharges to avoid or minimise effects.	Reticulation improvements should aim to implement the BPO to improve Wairoa River water quality, minimise effects, and contribute to achieving the water quality targets while also recognising the difficulty of ceasing discharges and the very large costs of improvements.
NPS-FM, Pol D1	Local authorities must take reasonable steps to involve iwi and hapū in the management of fresh water, identify tangata whenua values and interests in fresh water, and reflect those in the management of, and decision-making regarding, fresh water.	Reticulation improvements to prevent overflows are intended to address tangata whenua values and interests in fresh water.
RPS, Obj 4	Preservation of natural character of coast, protection from inappropriate use.	Continued overflows would conflict with this objective.
RPS, Obj 5	Maintenance and enhancement of public access along the coast.	While this may be less important than other provisions, public access and raw sewage are not a good mix.
RPS, Obj 6	Management of coastal water quality to achieve appropriate standards, considering public use and sensitivities.	Continued overflows would conflict with this objective.
RPS, Obj 7	Protection of coastal characteristics of significance to Iwi.	Iwi should be expected to be reluctant to agree to continuing overflows.
RPS, Obj 9	Provision for development within coastal environment, including maintenance and enhancement of infrastructure and network utilities.	This objective could enable managed overflows, if they were shown to be the BPO.
RPS, Obj 15	Preservation and enhancement of ... ecologically significant wetlands.	Whakamahi and Ngamotu Lagoons are both listed as significant wetlands; continued overflows would not be compatible with this objective.
RPS, Obj 27	The maintenance or enhancement of the water quality of rivers, lakes and wetlands as suitable for sustaining or improving aquatic ecosystems and contact recreation.	Continued overflows would not be compatible with this objective.
RPS, Obj 31	Avoidance or mitigation of adverse effects of natural hazards on people's safety, property, and economic livelihood.	The floods and rain events that lead to overflows are natural hazards, and overflows potentially threaten public safety (health). Continued overflows would not be compatible with this objective.
RPS, Obj 32	Ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's communities and provides for their health and safety.	This is important; overflows will be an unavoidable occurrence until reticulation upgrade can be afforded and done. As part of the infrastructure, they need to be managed to deliver health and safety.
RPS, Obj 33	Recognition that some infrastructure which is regionally significant has specific locational requirements.	The overflows have a locational requirement, and could only be moved at substantial cost.



Ref	Provision	Implication
RPS, Obj 37	To protect and where necessary aid the preservation of... mahinga mataitai (sea-food gathering places).	Continued overflows would not be compatible with this objective.
RRMP, Obj 40	Maintenance of water quality of specific rivers in order that existing species and natural character are sustained, while providing for resource availability for a variety of purposes.	Overflows occur at times when river is in flood, water quality already compromised; overflows not necessarily incompatible with this objective.
RRMP, Pol 71	To manage the effects of activities affecting the quality of water in rivers, lakes and wetlands in accordance with the environmental guidelines set out in Tables 7 and 8. (Water quality limits throughout the region are set for 5 parameters, and for Wairoa River downstream from Frasertown for 2 further parameters.)	Sets a water quality limit recipe, that may or may not be exceeded by overflows.
RRMP, Pol 76A	National Policy Statement for Freshwater Management 2014, addressing life supporting capacity and health of people and communities.	Would need to be addressed for overflows, but with overflows only at times of high river flow and poor water quality, may not be in breach.
RRMP, Rule 52	Discharges to water that do not comply with other rules, as a Discretionary Activity.	Raw sewage discharges to the Wairoa River trigger this rule and require consent.
RCEP, Obj 2.1	Protection of natural character of coast	Potentially disallows overflows.
RCEP, Obj 3.1	Protection of outstanding natural features and landscapes	Includes estuaries; potentially disallows overflows.
RCEP, Obj 4.1	Protection of nationally and regionally important ecosystems	Includes estuaries; potentially disallows overflows.
RCEP, Obj 6.1	Protection of characteristics of the coast of special significance to tangata whenua	Discharge of untreated wastewater may not be acceptable to tangata whenua.
RCEP, Obj 9.1	Maintenance and enhancement of surface water quality	Potentially disallows overflows, unless changes to reduce the number of events, timing or effects of discharges can be demonstrated to be enhancement.
RCEP, Obj 13.1	Maintenance or enhancement of natural resources of river beds	Potentially disallows overflows, unless changes to reduce the number of events, timing or effects of discharges can be demonstrated to be enhancement.
RCEP, Obj 15.3	Avoidance of new development within coastal hazard zones 2 and 3 (risk in next 100 years)	Requires appropriate risk mitigation, applies to overflows from outfall upstream to Colin Street, and everything on the flat from the outfall up to Kitchener Street and Scott Street.
RCEP, Obj 16.1	Maintenance or enhancement of water quality of the coastal marine area	Potentially disallows overflows, unless changes to reduce the number of events, timing or effects of discharges can be demonstrated to be enhancement.
RCEP, Obj 16.2	Avoid, remedy or mitigate adverse effects of activities on Mauri	Potentially disallows overflows, unless changes to reduce the number of events, timing or effects of discharges can be demonstrated to be enhancement.
RCEP, Obj 16.3	Adverse effects of discharges are avoided, remedied or mitigated	Potentially disallows overflows, although adverse effects could be considered less than minor during floods.
RCEP, Obj 16.4	Life supporting capacity of water is safeguarded	Potentially disallows overflows, although adverse effects could be considered less than minor during floods.
RCEP, Rule 9	Discharges that are not otherwise classified or do not comply with all conditions of other rules are a Discretionary Activity.	Raw sewage discharges to the Wairoa River trigger this rule and require consent.
WDP, Pol 26.4.1	Ensure that, as far as practicable, utilities...are located in a manner consistent with the character and amenity values of an area.	Any overflow outlet would be covered by this; short term, it is not "practicable" to locate them anywhere else.



Ref	Provision	Implication
WDP, Pol 26.4.3	Ensure that new and existing utilities... are operated to enable people and the community to provide for their social, economic and cultural well-being and for their health and safety, in a way that safeguards the life supporting capacity of the District's water resources and ecosystems and that avoids, remedies or mitigates any adverse effects on the environment.	To the extent that overflow outlets are utilities, upgrades are expensive (economic) but overflows are unhealthy (Health and safety). Mitigation would need to be a limited time frame to remedy the overflows; annual reports on how many and when, and annual reports on the year's progress in upgrading reticulation to fix the overflows. Could potentially be done if community agrees.
WDP, Pol 26.4.4	Ensure that the provision of utilities...is done in a way that safeguards the life supporting capacity of the District's air, water, soils and ecosystems and avoids, remedies or mitigates any adverse effects on the environment	Covered by RCEP and RPS; may be satisfied by explanation for 26.4.3 above.
Wairoa Riverbank RMP	The RMP for Wairoa's riverbank reserves aims to enhance their amenity values and retain connections to the natural character of the river and estuary.	Some care may need to be taken to protect the amenity values in and around these riverside reserves in the event that the discharge pipeline passes through them to the riverbed.

4.5 Wastewater Treatment Plant

Whether it remains unchanged, or has added capacity, or any other change, the WWTP will also need to be re-consented at the same time as the discharges. It is presumed for the purpose of this report that the WWTP will remain where it is currently located.

Statutory provisions that will potentially impact on the WWTP are set out in Table 4.3 below.

Table 4.3: Planning Provisions Impacting on WWTP

Ref	Provision	Implication
RPS, Obj 17	For existing activities (including their expansion), the remedy or mitigation of the extent of off-site impacts or nuisance effects arising from the present location of conflicting land use activities.	Potential nuisance effects on neighbouring properties (odour, aerosols, overflows) will need to be assessed, and remedied if necessary.
RPS, Obj 18	For the expansion of existing activities which are tied to a specific location, the mitigation of off-site impacts or nuisance effects arising from the location of conflicting land activities.	Potential nuisance effects on neighbouring properties (odour, aerosols, overflows) will need to be assessed, and remedied if necessary.
RPS, Obj 22	The maintenance or enhancement of groundwater quality in unconfined or semi-confined productive aquifers, to be suitable for human consumption and irrigation.	The extent of any pond leakage will need to be assessed, and reduced if necessary, although it is doubtful that potentially affected groundwater would be used for either human consumption or irrigation.
RPS Obj 32	Ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's communities and provides for their health and safety.	The existence and operation of the WWTP both meet, and are enabled by, this objective.
RPS, Obj 33	Recognition that some infrastructure which is regionally significant has specific locational requirements.	The WWTP has such locational requirements, and is enabled by this objective.
RPS, Obj 33A	Adverse effects on existing physical infrastructure arising from the location and proximity of sensitive land use activities are avoided or mitigated.	This objective protects the WWTP from future possible reverse sensitivities.
RRMP, Obj 39	A standard of ambient air quality is maintained at, or enhanced to, a level that is not detrimental to human health, amenity values or the life supporting capacity of air, and meets National Environmental Standards.	Odour and aerosols to be appropriately managed; a new consent can be expected to specify this requirement.



Ref	Provision	Implication
RRMP, Obj 43	Maintenance or enhancement of groundwater quality in unconfined or semi-confined productive aquifers to be suitable for human consumption and irrigation.	Pond leakage will need to be assessed, and reduced if necessary, although it is doubtful that potentially affected groundwater would be used for either human consumption or irrigation.
RRMP, Pol 69	To manage the effects of activities affecting air quality in accordance with the environmental guidelines and standards set out in Table 6. (Odour, aerosols and dust are more particularly addressed.)	Odour and aerosols to be appropriately managed; a new consent can be expected to specify this requirement.
RRMP, Pol 75	To manage the effects of activities affecting the quality of groundwater in accordance with the environmental guidelines set out in Table 10. (Focus is on maintaining quality for drinking and irrigation.)	Pond leakage will need to be assessed, and reduced if necessary, although it is doubtful that potentially affected groundwater would be used for either human consumption or irrigation.
RRMP, Rule 8	Vegetation disturbance and soil disturbance as a Restricted Discretionary Activity	Any earthworks associated with any WWTP upgrade, extension, or additional storage may need consent.
RRMP, Rule 28	Discharges to air from any industrial or trade premises associated with waste disposal as a Discretionary Activity.	The WWTP and any changes to its configuration will require consent under this rule.
RCEP	The WWTP is outside the RCEP mapped area of the coastal environment, and is therefore not subject to the requirements of this plan.	-
WDP, Designation 53	The WWTP site has been designated for the purpose of "sewerage treatment."	WWTP upgrades or modifications within the existing site can avoid consents but will instead need to obtain Outline Plan approvals or waivers from WDC's Regulatory department.
WDP, Pol 16.3.3	Enable the operation and development of utilities, minerals exploration and energy developments in a manner that enhances economic and social well-being while avoiding, remedying or mitigating adverse environmental effects.	The extension and continued use of the WWTP is supported by this Policy.
WDP, Pol 26.4.1	Ensure that, as far as practicable, utilities...are located in a manner consistent with the character and amenity values of an area.	This policy is met by the existing WWTP, and will not need to be re-visited during the WWCP.
WDP, Pol 26.4.3	Ensure that new and existing utilities... are operated to enable people and the community to provide for their social, economic and cultural well-being and for their health and safety, in a way that safeguards the life supporting capacity of the District's water resources and ecosystems and that avoids, remedies or mitigates any adverse effects on the environment.	While this policy sets a general performance framework for the WWTP, which will need to be shown to be met, it is not expected to lead to any change to WWTP operation.
WDP, Pol 26.4.4	Ensure that the provision of utilities...is done in a way that safeguards the life supporting capacity of the District's air, water, soils and ecosystems and avoids, remedies or mitigates any adverse effects on the environment	For the WWTP, its existence and operation directly deliver on this policy; odour and aerosols are potential issues to be considered further.
WDP, Pol 26.5.1(5)	Pipes for the conveyance or drainage of water or sewage, and necessary incidental equipment including household, commercial and industrial connections,...pipes and necessary incidental equipment are a Permitted Activity .	This policy may only apply to the reticulation, and not to the WWTP. However, Designation D53 authorises any works or activities at the WWTP that are for the purpose of "sewerage treatment".
WDP, Rule 16.8.5	Any new effluent holding pond or waste disposal area set back at least 500 m from a residential zone boundary and/or 200 m from a residence in any other zone is a Permitted Activity .	This permitted activity standard may be difficult for WWCP to comply with in the event that a new storage pond is to be constructed outside the existing WWTP land area.



Ref	Provision	Implication
WDP, Rule 26.6.5	Where any underground work is installed or maintained the ground shall be restored to its original condition as far as practicable.	WWCP should generally be able to comply with this Permitted Activity standard.
WDP, Rule 26.6.10	New or expanded utilities complying with the zone standards relating to signs and natural hazards, and complying with the district-wide rules relating to cultural heritage, indigenous vegetation and habitats of indigenous fauna, are Permitted Activities.	WWCP should ensure that cultural heritage and indigenous flora and fauna are not disturbed. If an expansion of the WWTP cannot comply with the WDP standards (rules) for these features, the non-compliances will trigger further reasons for resource consents.

Depending on the design and capacity of any new storage pond or expanded WWTP ponds, building consents may also be required from HBRC for the construction of a large dam.

4.6 River Discharge

Any discharge into the Wairoa River (or any other water body), upstream from the coastal environment boundary which is directly across the river from the end of Outram Street, would be regulated by the RPS and the RRMP; the RCEP would not apply.

This section of this report addresses any possible treated wastewater discharge from the WWTP into a new discharge structure located in the river upstream from the coastal environment boundary; relevant planning provisions are shown in Table 4.4 below.

Table 4.4: Planning Provisions Impacting on Wastewater Discharges to the River

Ref	Provision	Implication
NPS-FM, Obj AA1	To consider and recognise Te Mana o te Wai in the management of fresh water.	The discharge of treated wastewater does not recognise or respond to this water management value, although tertiary treatment and/or land passage prior to discharge may improve the acceptability from that of the current discharge.
NPS-FM, Obj A1	To safeguard the life-supporting capacity and ecosystems of fresh water and the health of people and communities in sustainably managing the use and development of land, and of discharges of contaminants.	The discharge of treated wastewater does not improve these fresh water values from that of the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge.
NPS-FM, Obj A2	The overall quality of fresh water within a freshwater management unit is maintained or improved.	The discharge of treated wastewater does not improve these fresh water values from that of the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge.
NPS-FM, Obj A3	The quality of fresh water within a freshwater management unit is improved so it is suitable for primary contact more often, unless: a) regional targets established under Policy A6(b) have been achieved; or b) naturally occurring processes mean further improvement is not possible.	The discharge of treated wastewater does not improve these fresh water values from that of the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge.
NPS-FM, Pol A3	Regional Councils must impose conditions on discharge consents to achieve NPS-FM limits and targets, and to impose rules requiring the adoption of the best practicable option for discharges to avoid or minimise effects.	The discharge of treated wastewater does not improve or contribute to achieving the water quality targets any better than the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge. The treatment and discharge would need to be justified as the BPO while also recognising the difficulty of reducing discharges and the very large costs of improvements.
NPS-FM, Pol D1	Local authorities must take reasonable steps to involve iwi and hapū in the management of fresh water, identify tangata whenua values and interests in fresh water, and	The new river discharge structure and any changes to the treatment system would need to identify and respond to tangata whenua values and interests in fresh water.



Ref	Provision	Implication
	reflect those in the management of, and decision-making regarding, fresh water.	
RPS, Obj 15	Preservation and enhancement of ... ecologically significant wetlands.	While a discharge to the river upstream from the CMA boundary may not be regulated by the RCEP, effects within the CMA would still need to be considered; the Whakamahi and Ngamotu Lagoons would potentially be affected. Limiting a wastewater discharge so that it preserves and enhances the lagoons may prove practically and financially difficult.
RPS, Obj 27	The maintenance or enhancement of the water quality of rivers, lakes and wetlands as suitable for sustaining or improving aquatic ecosystems and contact recreation.	A river discharge would be resisted by this objective.
RPS Obj 32	Ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's communities and provides for their health and safety.	This objective could help to justify a river discharge if it was found for other reasons to be preferable to alternatives.
RPS, Obj 35	To consult with Maori in a manner that creates effective resource management outcomes.	Consultation would be essential, but unlikely to be supportive of a river discharge.
RPS, Obj 36	To protect and where necessary aid the preservation of waahi tapu.	This would need consultation, with a likelihood that waahi tapu would be shown to be affected by any river discharge.
RPS, Obj 37	To protect and where necessary aid the preservation of... mahinga mataitai (sea-food gathering places).	The estuary and river mouth are mahinga mataitai, and a river discharge would be unlikely to protect or preserve this feature.
RRMP, Obj 40	Maintenance of water quality of specific rivers in order that existing species and natural character are sustained, while providing for resource availability for a variety of purposes.	Any river discharge of wastewater would have difficulty meeting this objective.
RRMP, Pol 71	To manage the effects of activities affecting the quality of water in rivers, lakes and wetlands in accordance with the environmental guidelines set out in Tables 7 and 8. (Water quality limits throughout the region are set for 5 parameters, and for Wairoa River downstream from Frasertown for 2 further parameters.)	With a sufficiently high standard of treatment a wastewater discharge could potentially meet this policy requirement. Costs would be considerable.
RRMP, Pol 71A	National Policy Statement for Freshwater Management 2014, addressing life supporting capacity and health of people and communities.	With a sufficiently high standard of treatment a wastewater discharge could potentially meet this policy requirement. Costs would be considerable.
RRMP, Rule 52	Discharges to water that do not comply with other rules, as a Discretionary Activity.	Relocation of the WWTP discharge to the Wairoa River or a stream that is upstream of the Coastal Environment will trigger this rule.
RRMP, Rule 69	Any activity in river and lake beds that cannot comply with other rules as a Discretionary Activity.	The construction and maintenance of a new discharge structure in Wairoa River or a stream that is upstream of the Coastal Environment would trigger this rule.
WDP	Under the Wairoa District Plan, any re-location of the discharge, including its re-deployment to the river upstream from the CMA, would need to meet amenity and structural standards. However, the main regulatory hurdle for a river discharge would be the RRMP.	
Wairoa Riverbank RMP	The RMP for Wairoa's riverbank reserves aims to enhance their amenity values and retain connections to the natural character of the river and estuary.	Some care may need to be taken to protect the amenity values in and around these riverside reserves in the event that the discharge pipeline passes through them to the riverbed.



Ref	Provision	Implication
Tatau Tatau o te Wairoa Treaty of Waitangi Claims Settlement	The management of reserves along Wairoa's urban riverbank is intended to be provided to Tatau Tatau o te Wairoa in partnership with WDC. A statutory acknowledgement will also cover the entire Wairoa River catchment.	The relocated discharge pipeline will need to cross beneath the riverbank reserve and discharges within the Wairoa River bed. The future RMP and joint board management views for these reserves may not support this. Consent applications will need to be provided to iwi for consultation purposes.
HNZPT	Archaeological sites may not be disturbed or destroyed without Archaeological Authority to do so. This will require iwi consultation and possibly also archaeological monitoring.	Some care may be required to avoid known or suspected archaeological sites. An archaeological survey and/or a General Archaeological Authority may be a prudent pre-emptive measure.

4.7 Estuary Discharge

This is the existing situation, with or without modifications or relocation of the discharge structure within the estuary. The estuary discharge must have been considered the BPO by WDC at the time it was installed in 1981, and it was accepted by HBRC as the BPO in 1998 when granting the existing consent. With the upcoming expiry of the consent that authorises this discharge, a new consent will be necessary (for whatever environment the discharge is into) and the regulatory goal posts for estuary discharges have moved significantly since last time this discharge was granted a new consent.

Planning provisions impacting on any estuary discharge are as set out in Table 4.5 below.

Table 4.5: Planning Provisions Impacting on Estuary Discharges

Ref	Provision	Implication
NZCPS, Obj 1	Safeguard the integrity, form, functioning and resilience of coastal environment and sustain its ecosystems. Maintain or enhance coastal water quality.	Continuing to discharge into estuary could be consistent with this objective, particularly if some additional treatment prior to discharge would enhance coastal water quality.
NZCPS, Obj 3	Take account of Treaty of Waitangi principles, recognise role of tangata whenua as kaitiaki and provide for tangata whenua management of the coastal environment.	The current discharge is resisted by this objective. Discharges using land passage and/or culturally acceptable mitigation measures with tangata whenua management could be consistent with this objective.
NZCPS, Obj 4	Maintain and enhance the public open space qualities and recreation opportunities of the coastal environment.	The existing discharge structures impose minor restrictions on public access and the discharge of pathogens restricts recreation opportunities, so it would be resisted by this objective.
NZCPS, Obj 6	Enable communities to provide for their well-being and health and safety through use and development in appropriate ways.	The discharge is vital for the community's well-being and is an appropriate development, so it is consistent with this objective.
NZCPS, Pol 2	Take account of Treaty of Waitangi principles and kaitiakitanga. Involve Maori in identifying cultural values, practices, and sites through consultation. Ensure that Maori heritage is protected.	Continuing the existing discharge without any cultural considerations would be resisted by this Policy. Consultation and implementing cultural measures when designing the future system would be consistent with this policy.
NZCPS, Pol 4	Integrate management of activities that cross administrative boundaries, involve multiple regulators and iwi, and/or affect two or more types of environment.	DOC are regulators for the Whakamahi Lagoon Wildlife Reserve, so concessions and resource consents need to be integrated. Several iwi groups are potentially affected.
NZCPS, Pol 5	Consider effects on land or water managed under conservation or protective legislation and avoid, remedy, or mitigate adverse effects on the purposes for which the land or water is managed.	Ngamotu and Whakamahi Lagoon Wildlife Reserves cover most of the estuary land and water areas. Continuation of the discharge would be resisted by this policy.
NZCPS, Pol 6	Recognise the importance of infrastructure for community well-being provided that it is appropriate development and occupation of coastal areas.	This discharge is appropriate development for its vital community well-being purpose, and its importance as community infrastructure would be supported by this policy.



Ref	Provision	Implication
NZCPS, Pol 11	Avoid, mitigate, or remedy adverse effects on indigenous biological diversity.	Continued discharge within Whakamahi Lagoon wildlife reserve would be resisted by this policy.
NZCPS, Pol 12	Manage the release and spread of potentially harmful aquatic organisms.	Adequate treatment performance, dispersion and dilution in the receiving environment, and controls on discharge timing currently manage pathogen concerns. A future discharge may face stricter discharge controls and/or treatment (eg UV).
NZCPS, Pol 14	Restore and rehabilitate natural character of degraded areas.	Removal of the existing discharge pipeline would be supported by this policy, while a continuation of this discharge would be resisted.
NZCPS, Pol 21	Improve coastal water quality.	Ceasing discharge or improving treatment prior to discharge will be consistent with this policy, although any improvement in water quality may not be scientifically detectable.
NZCPS, Pol 23	Manage the discharges of contaminants to coastal water in order to minimise adverse effects on water quality and ecosystems. "In managing discharge of human sewage, do not allow: (a) discharge of human sewage directly to water in the coastal environment without treatment; and (b) the discharge of treated human sewage to water in the coastal environment, unless: (i) there has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and (ii) informed by an understanding of tangata whenua values and the effects on them."	A robust assessment of all alternatives, efforts to incorporate cultural mitigation measures such as disinfection and land passage, and meaningful consultation with iwi and hapu will be necessary to ensure that the continued estuary discharge is consistent with this policy.
NZCPS, Pol 27	Protection of communities and infrastructure from coastal hazards.	Retention of the existing discharge pipeline is consistent with this policy.
NPS-FM, Obj AA1	To consider and recognise Te Mana o te Wai in the management of fresh water.	The discharge of treated wastewater does not recognise or respond to this water management value, although tertiary treatment and/or land passage prior to discharge may improve the acceptability from that of the current discharge.
NPS-FM, Obj A1	To safeguard the life-supporting capacity and ecosystems of fresh water and the health of people and communities in sustainably managing the use and development of land, and of discharges of contaminants.	The discharge of treated wastewater does not improve these fresh water values from that of the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge.
NPS-FM, Obj A2	The overall quality of fresh water within a freshwater management unit is maintained or improved.	The discharge of treated wastewater does not improve these fresh water values from that of the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge.
NPS-FM, Obj A3	The quality of fresh water within a freshwater management unit is improved so it is suitable for primary contact more often, unless: a) regional targets established under Policy A6(b) have been achieved; or b) naturally occurring processes mean further improvement is not possible.	The discharge of treated wastewater does not improve these fresh water values from that of the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge.
NPS-FM, Pol A3	Regional Councils must impose conditions on discharge consents to achieve NPS-FM limits and targets, and to impose rules requiring the adoption of the best practicable option for discharges to avoid or minimise effects.	The discharge of treated wastewater does not improve or contribute to achieving the water quality targets any better than the current discharge unless tertiary treatment and/or land passage are implemented prior to discharge. The treatment and discharge would need to be justified as the BPO while also recognising the



Ref	Provision	Implication
		difficulty of reducing discharges and the very large costs of improvements.
NPS-FM, Pol D1	Local authorities must take reasonable steps to involve iwi and hapū in the management of fresh water, identify tangata whenua values and interests in fresh water, and reflect those in the management of, and decision-making regarding, fresh water.	The new river discharge structure and any changes to the treatment system would need to identify and respond to tangata whenua values and interests in fresh water.
RPS, Obj 4	Preservation of natural character of coast, protection from inappropriate use.	Discharge into the estuary would be resisted by this objective.
RPS, Obj 5	Maintenance and enhancement of public access along the coast.	Effects of estuary discharge may require public exclusion, resisted by this objective.
RPS, Obj 6	Management of coastal water quality to achieve appropriate standards, considering public use and sensitivities.	Discharge into the estuary would be resisted by this objective.
RPS, Obj 7	Protection of coastal characteristics of significance to Iwi.	Iwi should not be expected to support a discharge into the estuary.
RPS, Obj 9	Provision for development within coastal environment, including maintenance and enhancement of infrastructure and network utilities.	This objective could enable an estuary discharge, if it were shown to be the BPO.
RPS, Obj 15	Preservation and enhancement of ... ecologically significant wetlands.	Whakamahi and Ngamotu Lagoons are both listed as significant wetlands; discharge into the estuary would be resisted by this objective.
RPS, Obj 27	The maintenance or enhancement of the water quality of rivers, lakes and wetlands as suitable for sustaining or improving aquatic ecosystems and contact recreation.	Discharge into the estuary would be resisted by this objective.
RPS, Obj 31	Avoidance or mitigation of adverse effects of natural hazards on people's safety, property, and economic livelihood.	The estuary discharge infrastructure lies within a coastal hazard zone. Its function is impaired by river bar closures which are also natural hazards and difficult to avoid or mitigate.
RPS, Obj 32	Ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's communities and provides for their health and safety.	An estuary discharge could potentially be supported by this objective, if it were shown to be the BPO.
RPS, Obj 33	Recognition that some infrastructure which is regionally significant has specific locational requirements.	Ideally the discharge infrastructure would be located near the WWTP, which could be recognised by this objective.
RPS, Obj 35	To consult with Maori in a manner that creates effective resource management outcomes.	Such consultation would be essential for an estuary discharge.
RPS, Obj 36	To protect and where necessary aid the preservation of waahi tapu.	An estuary discharge near where there is demonstrated waahi tapu sites would be unlikely to meet this objective, unless effects were established as being minimal and was supported by iwi.
RPS, Obj 37	To protect and where necessary aid the preservation of... mahinga mataitai (sea-food gathering places).	An estuary discharge where there is demonstrated food gathering would be unlikely to meet this objective, unless effects were established as being minimal and was supported by iwi.
RRMP	Any estuary discharge would be downstream from the CMA boundary (end of Colin Street) so the RRMP provisions would not apply.	-
RCEP, Obj 2.1	Protection of natural character of coast	Estuary discharge would be resisted by this objective.
RCEP, Obj 3.1	Protection of outstanding natural features and landscapes	Estuary discharge would be resisted by this objective, which includes ecological values of estuaries.



Ref	Provision	Implication
RCEP, Obj 4.1	Protection of nationally and regionally important ecosystems	Estuary discharge would be resisted by this objective, which includes ecological values of estuaries.
RCEP, Obj 5.1	Maintenance and enhancement of public access.	Current food gathering in the area potentially compromises public health as a result of unfettered public access to the current discharge area. The consequence of ongoing unrestricted access on discharge options will need to be considered.
RCEP, Obj 6.1	Protection of characteristics of the coast of special significance to tangata whenua	Estuary discharge would be resisted by this objective.
RCEP, Obj 9.1	Maintenance and enhancement of surface water quality	Estuary discharge would be resisted by this objective, even if it was argued that surface water quality would be no worse than it currently is.
RCEP, Obj 13.1	Maintenance or enhancement of natural resources of river beds	Estuary discharge would be resisted by this objective.
RCEP, Obj 15.1	Risks to people or property from coastal hazards are avoided or mitigated	Estuary discharge infrastructure is necessarily in a coastal hazard zone, and should be able to withstand that hazard. Its function, however, is compromised by river bar closures, which have possible public health consequences.
RCEP, Obj 15.3	Avoidance of new development within coastal hazard zones 2 and 3 (risk in next 100 years)	Requires appropriate risk mitigation, applies to existing estuary outfall.
RCEP, Obj 16.1	Maintenance or enhancement of water quality of the coastal marine area	Estuary discharge would be strongly resisted by this objective.
RCEP, Obj 16.2	Avoid, remedy or mitigate adverse effects of activities on Mauri	Estuary discharge would be strongly resisted by this objective.
RCEP, Obj 16.3	Adverse effects of discharges are avoided, remedied or mitigated	This would need to be addressed thoroughly for any estuary discharge, which would be resisted by this objective.
RCEP, Obj 16.4	Life supporting capacity of water is safeguarded	This would need to be addressed thoroughly for any estuary discharge, which would be resisted by this objective.
RCEP, Obj 18.1	Adverse effects of structures are avoided, remedied or mitigated	Would need to be addressed for estuary discharge.
RCEP, Obj 18.2	Adverse effects of occupation of space are avoided, remedied or mitigated	Potential conflict here is with otherwise unfettered public access to the discharge locality; this would need to be addressed.
RCEP, Pol 2.12	When assessing applications for resource consents, HBRC will take into account the values and management objectives identified for the relevant SCA as described in HBRC Plan Number 4203.	The cultural and ecological values and the related management objectives of SCA15 (Whakamahi and Ngamotu Lagoons and estuary) will need to be maintained or at least not further degraded by estuary discharge. Any improvements to the treated wastewater quality discharged would be more consistent with this Policy.
RCEP, Pol 2.6	To recognise that local authorities have statutory functions on behalf of their communities including provision of services for wastewater, stormwater, water supply, parks and recreation, roads, solid waste disposal.	This Policy supports WDC's provision of services such as wastewater treatment and discharge as a statutory function. However, this Policy does not necessarily allow WDC to continue the status quo without any challenges or opposition.
RCEP, Pol 16.1 3	Discharges of wastewater to CMA must: <ul style="list-style-type: none"> • First pass through soil or wetland; and • Be the BPO; and • Avoid significant adverse effects on ecosystems, natural character, and water quality classified for contact recreation purposes; and • Have included consultation with tangata whenua and the affected community; and 	All of these Policy requirements are challenging obstacles to overcome, and WDC will need to thoroughly investigate all aspects and clearly document all consultation to demonstrate that each requirement has been met while progressing towards a decision to continue any discharge to the estuary. If any of the listed criteria are not adequately met or documented, WDC will face a high risk of consenting difficulties and community opposition.



Ref	Provision	Implication
	<ul style="list-style-type: none"> The mixing zone shall avoid significant adverse effects on and SCA, recreational use of water, or seafood gathering; and The adverse effects of sewage discharges on the present and future use of the receiving waters have been avoided, remedied or mitigated, particularly in areas of high recreational use or maintenance dredging or adjacent to commercial or residential development. 	It is noted, however, that Rule 167 specifically excludes SCA15 (Wairoa estuary and lagoons) from the requirement to first pass through soil or wetland. This Rule is likely to have been drafted in this manner to allow Wairoa's WWTP discharge to continue until expiry of its current consent, and not necessarily to allow for subsequent consents to re-authorise discharges without first passing it through soil or wetland.
RCEP, Rule 8	Vegetation disturbance and soil disturbance as a Restricted Discretionary Activity.	Relocation of the discharge pipeline is likely to trigger this Rule for areas outside of road reserve.
RCEP, Rule 9	Discharges in the Coastal Margin that are not otherwise classified or do not comply with all conditions of other rules are a Discretionary Activity.	If WWCP is relocated in the Coastal Margin and upstream of the CMA, this Rule is triggered for the discharge of treated wastewater.
RCEP, Rule 48	The use of existing lawfully established structures as a Permitted Activity.	This Rule enables WDC to continue using the existing outfall structure (excluding the discharge) without requiring resource consents.
RCEP, Rule 89	Minor land uses in coastal hazard zones as a Permitted Activity.	Construction of network utilities within a road reserve is a Permitted Activity which WWCP is likely to include in some locations if the estuary discharge is relocated.
RCEP, Rule 97	Construction of a new or upgrading of an existing network utility in CHZ1 or CHZ2 not within a road reserve as a Restricted Discretionary Activity.	WWCP is likely to trigger this rule if relocating the estuary discharge structure, and will need to assess effects against the various matters of discretion listed for this rule, including coastal hazard risks and effects.
RCEP, Rule 160	Discharges in the CMA that are not otherwise classified or do not comply with all conditions of other rules as a Discretionary Activity.	This catch-all rule is triggered because other rules relating to discharges within the CMA do not specifically include treated wastewater.
RCEP, Rule 167	Discharge of sewage from land which has not passed through soil or wetland into a SCA, excluding the Wairoa River (SCA15), as a Prohibited Activity.	This Rule enables WDC to continue discharging treated wastewater into SCA15, but implies that soil or wetland passage prior to its discharge is preferred.
RCEP, Rule 180	Occupation of the CMA by a lawfully established structure including any alteration, extension, removal, maintenance, repair and associated discharges, disturbance, drainage, or reclamation within the CMA as a Permitted Activity.	This Rule enables WDC to maintain and alter the existing outfall structure without requiring resource consents. It does not include the discharge of treated wastewater via the outfall structure as a Permitted Activity (Rules 160 and 167 cover this aspect).
WDP	While there are aspects of an estuary discharge that would need to be considered against the district plan, the main regulatory hurdles for any estuary discharge will be the NZCPS, NPS-FM, RPS and RCEP.	-
CMS_ECC	Occupation of Conservation reserves and discharges into or affecting them require a concession from DOC. The values of reserves require protection and/or enhancement.	A concession is required. The existing discharge is authorised (date of expiry unknown) but its continuation or any change to its location will need a new concession supported by an AEE.
WWLMP and WDC RMP's	Reserves are to be protected and maintained for ecological, cultural, and recreational values.	The existing discharge is accepted, but any change to its location will need to be assessed for its effects on the Whakamahi Lagoon ecosystems.
Tatau Tatau o te Wairoa Treaty of Waitangi Claims Settlement	The management of reserves along Wairoa's urban riverbank, Rangihoua/Pilot Hill, and Ngamotu and Whakamahi Lagoons is intended to be provided to Tatau Tatau o te Wairoa in partnership with DOC and WDC. A statutory acknowledgement will also cover the entire Wairoa River catchment.	The existing discharge pipeline crosses beneath the riverbank reserve and discharges within the Whakamahi Lagoon reserve. The future RMP's and joint board management views for these reserves may not support its continuation. Future consent applications will need to be provided to iwi for consultation purposes.
HNZPTA	Any disturbance of heritage or archaeological sites requires HNZPTA authorisation. Iwi and	If the discharge structure and pipeline are to be relocated within the estuary, the known intensive Maori occupation and use of the estuary and



Ref	Provision	Implication
	heritage processes need to occur in the event that artefacts are discovered.	coastal margins result in high likelihood of earthworks disturbing archaeological sites.
Takutai Moana	CMTG's and PCRG's need to be consulted and their permission obtained for RMA consents and conservation concessions to be exercised by WDC. WCCP needs to have regard to any CMTG planning documents.	Ngati Kaahu in particular should be consulted, as their CMT and PCR claims include the Wairoa estuary and Whakamahi Lagoon areas. In the event that a successful CMTG issues a planning document, WCCP will need to respond to it and implement relevant provisions.

4.8 Ocean Outfall

In order to avoid the environmental, social, and regulatory challenges of a continued estuary discharge, one option that should be considered is an ocean outfall. This would avoid conflicts with ecologically significant river mouth lagoons, river bar closures, freshwater quality, and most of the cultural, recreational, food gathering and general amenity values that are compromised by an estuary discharge. Even so, an ocean outfall could be very expensive to install, maintain and operate, and resource consenting would not necessarily be straight-forward. A Marine Discharge Permit from the Environmental Protection Authority would be required if the outfall was into the Exclusive Economic Zone, which starts 12 nautical miles out to sea, but it is not likely that an outfall would need to be placed that far from land; a distance of several hundred metres up to perhaps 2 km should be sufficient.

Planning provisions impacting on any ocean outfall discharge are as set out in Table 4.6 below.

Table 4.6: Planning Provisions Impacting on Ocean Outfall Discharges

Ref	Provision	Implication
NZCPS, Obj 1	Safeguard the integrity, form, functioning and resilience of coastal environment and sustain its ecosystems. Maintain or enhance coastal water quality.	Discharge into the coastal marine environment could be resisted by this objective, especially within or near any well-stocked fishing grounds or habitats of any rare or threatened marine life.
NZCPS, Obj 2	Preserve the natural character of coast and landscapes.	Discharge within the coastal marine environment could be consistent with this objective by using low impact design features, particularly for the pipeline where it traverses the shoreline area.
NZCPS, Obj 3	Take account of Treaty of Waitangi principles, recognise role of tangata whenua as kaitiaki and provide for tangata whenua management of the coastal environment.	Discharges after land passage and culturally acceptable mitigation measures and monitoring practices, developed in consultation with tangata whenua, could be consistent with this objective. Cultural advice indicates that ocean discharges are not culturally acceptable for Wairoa.
NZCPS, Obj 4	Maintain and enhance the public open space qualities and recreation opportunities of the coastal environment.	Taking care to avoid pipelines and discharges elevating infection risks, or causing restrictions on public access and/or visual amenity could be consistent with this objective.
NZCPS, Obj 5	Manage coastal hazard risks including climate change effects.	Appropriate engineering design will ensure that the infrastructure will be resilient to hazards.
NZCPS, Obj 6	Enable communities to provide for their well-being and health and safety through use and development in appropriate ways.	The discharge is vital to the community's well-being and is an appropriate development. The semi-coastal location of Wairoa's urban area makes it difficult to discharge inland from the coastal environment.
NZCPS, Pol 2	Take account of Treaty of Waitangi principles and kaitiakitanga. Involve Maori in identifying cultural values, practices, and sites through consultation. Ensure that Maori heritage is protected.	Consultation and seeking cultural advice including cultural impact assessments so that WDC is aware of and responds to these values when designing the future system would be consistent with this Policy. Avoiding or protecting heritage sites and incorporating tikanga Maori into the discharge design would be consistent with this Policy.



Ref	Provision	Implication
		Cultural advice indicates that ocean discharges are not culturally acceptable for Wairoa.
NZCPS, Pol 3	Adopt a precautionary approach where the adverse effects of activities are potentially significant and to ensure that climate change effects are not exacerbated.	Designing the system and pipeline route to cause less than minor adverse effects and to avoid exacerbating climate change effects such as erosion would be consistent with this Policy.
NZCPS, Pol 4	Integrate management of activities that cross administrative boundaries, involve multiple regulators and iwi, and/or affect two or more types of environment.	Identifying and collaborating with all relevant regulators and iwi would be consistent with this Policy.
NZCPS, Pol 5	Consider effects on land or water managed under conservation or protective legislation and avoid, remedy, or mitigate adverse effects on the purposes for which the land or water is managed.	Careful design of pipeline and discharges in areas of land or water managed for conservation or reserve purposes to minimise conflicts with the purposes of those protections would be consistent with this Policy.
NZCPS, Pol 6	Recognise the importance of infrastructure for community well-being provided that it is appropriate development and occupation of coastal areas.	Treated wastewater discharges via appropriately located and designed components would be consistent with this Policy. This infrastructure is vital for community well-being.
NZCPS, Pol 11	Avoid, mitigate, or remedy adverse effects on indigenous biological diversity.	Careful design and operation of the infrastructure would be consistent with this Policy.
NZCPS, Pol 12	Manage the release and spread of potentially harmful aquatic organisms.	Adequate treatment performance, dispersion and dilution in the ocean, and controls on discharge timing could continue to adequately manage these concerns for a marine discharge.
NZCPS, Pol 13	Preserve the natural character and protect it from inappropriate use or development.	A wide range of natural characteristics are required to be protected, so attention needs to be paid to all aspects of the coastal character when assessing the effects of the ocean discharge and its associated pipeline route. An ocean discharge may be viewed by some people as inappropriate use and development in this coastal location.
NZCPS, Pol 14	Restore and rehabilitate natural character of degraded areas.	The removal of the existing discharge pipeline in the estuary achieves this Policy but the ocean discharge may be viewed as degrading another part of the coastal environment instead.
NZCPS, Pol 15	Protect natural features and natural landscapes from inappropriate use or development.	A wide range of natural features are required to be protected, so attention needs to be paid to all aspects of the natural features when assessing the effects of the ocean discharge and its associated pipeline route. Special care is needed to avoid affecting the Lagoons and coastal spit.
NZCPS, Pol 17	Protect historic heritage from inappropriate use or development.	Historic heritage needs to be identified, with iwi assistance, and protected when designing the ocean discharge and its associated pipeline.
NZCPS, Pol 21	Improve coastal water quality.	It is likely that an ocean discharge instead of estuary discharge will be consistent with this, although any improvement in water quality may not be scientifically detectable. The ocean will provide greater dilution and avoid all effects on the estuarine water quality.
NZCPS, Pol 22	Control sedimentation discharges.	Infrastructure installation will incorporate erosion and sediment controls, which will be consistent with this Policy.
NZCPS, Pol 23	Manage the discharges of contaminants to coastal water in order to minimise adverse effects on water quality and ecosystems. "In managing discharge of human sewage, do not allow: (a) discharge of human sewage directly to water in the coastal environment without treatment; and	Discharges to ocean is opposed by this Policy unless specific criteria are met. A robust assessment of all alternatives and meaningful consultation with iwi will ensure that this Policy is met for the discharge BPO selection and its implementation. Cultural advice indicates that ocean discharges are not culturally acceptable for Wairoa, so WDC will need to present a strong case if this advice is to be over-ridden.



Ref	Provision	Implication
	(b) the discharge of treated human sewage to water in the coastal environment, unless: (i) there has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and (ii) informed by an understanding of tangata whenua values and the effects on them.”	
NZCPS, Pol 25	Manage development in areas of coastal hazard risk.	Careful design and operation of discharge infrastructure will be consistent with this Policy.
NZCPS, Pol 26	Protect and enhance natural defences against coastal hazards.	Avoidance or careful design will ensure that the natural coastal defences are protected.
NZCPS, Pol 27	Protection of communities and infrastructure from coastal hazards.	Construction of a new ocean discharge structure will need to be consistent with this Policy.
RPS, Obj 4	Preservation of natural character of coast, protection from inappropriate use.	Discharge into the ocean could largely avoid effects on the coast.
RPS, Obj 5	Maintenance and enhancement of public access along the coast.	Public access along the coast would not be hindered by this.
RPS, Obj 6	Management of coastal water quality to achieve appropriate standards, considering public use and sensitivities.	Provided the outfall was far enough out to sea, coastal water quality should remain unaffected.
RPS, Obj 7	Protection of coastal characteristics of significance to Iwi.	To the extent that the discharge is beyond the coast and therefore does not impact on it, this option may get more support from Iwi than an estuary discharge. However, if the pipeline route crosses the lagoon/estuary and its gravel spit/bar, these areas are culturally significant.
RPS, Obj 9	Provision for development within coastal environment, including maintenance and enhancement of infrastructure and network utilities.	This objective could enable installation of a pipeline to an ocean outfall.
RPS, Obj 31	Avoidance or mitigation of adverse effects of natural hazards on people's safety, property, and economic livelihood.	Such an outfall and its pipeline would need to be designed and installed to be durable in a difficult physical environment; this is a standard to be achieved, rather than a reason not to consider the ocean outfall option.
RPS, Obj 35	To consult with Maori in a manner that creates effective resource management outcomes.	An essential step, in order to establish what degree of support (or opposition) for such an option there may be.
RPS, Obj 37	To protect and where necessary aid the preservation of... mahinga mataitai (sea-food gathering places).	The ocean is, of course, the ultimate sea-food gathering place. Whether any ocean outfall site may need protection or preservation needs to be established by consultation with Maori.
RRMP	Regional Resource Management Plan objectives and policies do not address activities in the ocean.	-
RCEP, Obj 16.1	Maintenance or enhancement of water quality of the coastal marine area	By comparison with the existing estuary discharge, an ocean outfall would almost certainly enhance coastal estuarine water quality, but direct discharge to the ocean would reduce the marine water quality in a small area until the plume dispersed.
RCEP, Obj 16.2	Avoid, remedy or mitigate adverse effects of activities on Mauri	This would need to be discussed with tangata whenua, to establish the extent and sensitivity of Mauri several kilometres out to sea. Cultural advice indicates that ocean discharges are not culturally acceptable for Wairoa.
RCEP, Obj 16.3	Adverse effects of discharges are avoided, remedied or mitigated	By locating the discharge out to sea, all the land and river environments potentially affected by discharges get off scot-free. The area affected on the sea bed, and the volumes of wastewater to



Ref	Provision	Implication
		be discharged, would be very small in the context of the Pacific Ocean.
RCEP, Obj 16.4	Life supporting capacity of water is safeguarded	The potential dilution in the ocean is such that life supporting capacity could not be considered compromised as a result of an ocean outfall.
RCEP, Obj 17.2	Adverse effects of excavation are avoided, remedied or mitigated	This objective relates to the installation, and possibly maintenance and repair, of a pipeline across the coast and into the ocean; effects would need to be considered and managed appropriately, but this should be considered achievable.
RCEP, Obj 18.2	Adverse effects of occupation of space are avoided, remedied or mitigated	Steps would be required to protect an ocean outfall and pipeline from interference or damage, say by sea bed trawling or a dragged anchor; not a reason to discount this option.
RCEP, Pol 2.12	When assessing applications for resource consents, HBRC will take into account the values and management objectives identified for the relevant SCA as described in HBRC Plan Number 4203.	The cultural and ecological values and the related management objectives of SCA15 (Whakamahi and Ngamotu Lagoons and estuary) will be improved by ceasing the estuary discharge. A new or extended pipeline to the ocean will cause short term construction disturbance and rare future maintenance.
RCEP, Pol 2.6	To recognise that local authorities have statutory functions on behalf of their communities including provision of services for wastewater, stormwater, water supply, parks and recreation, roads, solid waste disposal.	This Policy supports WDC's provision of services such as wastewater treatment and discharge as a statutory function. However, this Policy does not necessarily allow WDC to implement an ocean discharge without any challenges or opposition.
RCEP, Pol 16.1 3	Discharges of wastewater to CMA must: <ul style="list-style-type: none"> • First pass through soil or wetland; and • Be the BPO; and • Avoid significant adverse effects on ecosystems, natural character, and water quality classified for contact recreation purposes; and • Have included consultation with tangata whenua and the affected community; and • The mixing zone shall avoid significant adverse effects on and SCA, recreational use of water, or seafood gathering; and • The adverse effects of sewage discharges on the present and future use of the receiving waters have been avoided, remedied or mitigated, particularly in areas of high recreational use or maintenance dredging or adjacent to commercial or residential development. 	<p>All of these Policy requirements are challenging obstacles to overcome, and WDC will need to thoroughly investigate all aspects and clearly document all consultation to demonstrate that each requirement has been met while progressing towards a decision to implement any discharge to the ocean. If any of the listed criteria are not adequately met or documented, WDC will face a high risk of consenting difficulties and community opposition.</p> <p>It is noted, however, that Rule 167 specifically excludes SCA15 (Wairoa estuary and lagoons and ocean out to 1 nautical mile from shore) from the requirement to first pass through soil or wetland. This Rule is likely to have been drafted in this manner to allow Wairoa's WWTP discharge to continue until expiry of its current consent, and not necessarily to allow for subsequent consents to authorise discharges to the ocean without first passing it through soil or wetland.</p>
RCEP, Rule 8	Vegetation disturbance and soil disturbance in the Coastal Margin as a Restricted Discretionary Activity.	This rule may be relevant for the construction of a pipeline through the estuary margins and/or spit.
RCEP, Rule 46	Activities in lakes and river beds that are not otherwise classified or do not comply with all conditions of other rules are a Discretionary Activity.	This catch-all rule may be triggered if WWCP cannot comply with all conditions of rules for pipeline construction activities where it crosses the river and lagoon beds.
RCEP, Rule 97	Construction of a new or upgrading of an existing network utility in CHZ1 or CHZ2 not within a road reserve as a Restricted Discretionary Activity.	WWCP is likely to trigger this rule for construction of the new pipeline and ocean outfall through CHZ 1-2 and will need to assess effects against the various matters of discretion listed for this rule, including coastal hazard risks and effects.



Ref	Provision	Implication
RCEP, Rule 109	Except as provided for in Rules 89 or 144-146, removal of in-situ gravel and other earthworks within CHZ 1 in volumes greater than 5 m ³ per property in any six consecutive month period as a Non-complying Activity.	WWCP is likely to trigger this rule for earthworks for the new pipeline as it crosses the estuary, lagoons, and spit/bar. WWCP would not fit the criteria of Rules 144-146. Non-complying consents are declined unless the activities are not contrary to relevant Policies and Objectives OR will cause no more than minor adverse effects on the environment.
RCEP, Rule 117	Construction, alteration, or demolition of structures within the CMA that is not otherwise classified or does not comply with all conditions of other rules as a Discretionary Activity.	This catch-all rule will be triggered if WWCP cannot comply with all conditions of rules relating to structures within the CMA.
RCEP, Rule 121	Removal or demolition of a structure in the CMA as a Permitted Activity.	Demolition and removal of the existing estuary diffuser should meet the conditions of this rule.
RCEP, Rule 130	Excavation, drilling, or disturbance of foreshore and seabed that is not otherwise classified or does not comply with all conditions of other rules as a Discretionary Activity.	This catch-all rule may be triggered for pipeline installation within the foreshore and seabed.
RCEP, Rule 160	Discharges in the CMA that are not otherwise classified or do not comply with all conditions of other rules as a Discretionary Activity.	This catch-all rule is triggered because other rules relating to discharges within the CMA do not specifically include treated wastewater.
RCEP, Rule 167	Discharge of sewage from land which has not passed through soil or wetland into a SCA, excluding the Wairoa River (SCA15), as a Prohibited Activity.	If the ocean outfall is beyond the 1 nautical mile limit of SCA15, this rule is not relevant. WWCP is specifically excluded from this rule that would otherwise prohibit its discharge. This rule implies that wastewater passage through soil or wetland prior to entering the ocean part of SCA15 would be preferred over an ocean discharge without prior land passage.
RCEP, Rule 178	Occupation of the CMA that is not specifically classified by any other rule or does not comply with all relevant conditions of a rule, as a Discretionary Activity.	A new discharge pipeline and ocean outfall will trigger this rule.
WDP	Wairoa District Plan would only need to be considered for any pipeline installation within land that is not the bed of a river or ocean, but NZCPS, RPS and RCEP would be the main regulatory hurdles for an ocean outfall.	-
CMS_ECC	Occupation of Conservation reserves and discharges into or affecting them require a concession from DOC. The values of reserves require protection and/or enhancement.	A concession is required for the new ocean outfall pipeline traversing the Whakamahi or Ngamotu Lagoon reserve. This will need to be supported by an AEE.
WWLMP and WDC RMP's	Reserves are to be protected and maintained for ecological, cultural, and recreational values.	The new ocean discharge pipeline route will need to be assessed for its effects on the Whakamahi Lagoon ecosystems and any other reserves that may be affected. The ocean discharge will remove the estuary discharge and its effects on reserves.
HNZPT	Any disturbance of heritage or archaeological sites requires HNZPTA authorisation. Iwi and heritage processes need to occur in the event that artefacts are discovered.	Some care may be required to avoid known or suspected archaeological sites on the pipeline route. An archaeological survey and/or a General Archaeological Authority may be a prudent pre-emptive measure.
Takutai Moana	CMTG's and PCRG's need to be consulted and their permission obtained for RMA consents and conservation concessions to be exercised by WDC. WCCP needs to have regard to any CMTG planning documents.	All CMT and PCR claimants in Appendix A should be consulted, as their CMT and PCR claims include the foreshore and seabed across the Wairoa River mouth and all nearby coastline, and extending out to 12 nautical miles from the shore.



4.9 Land Discharge

The alternative to wastewater discharges to the Wairoa River, its estuary, or the ocean is a discharge to land. With respect to a land discharge, there is a wide range of more detailed options to be considered, including which particular piece of land, how best to apply the wastewater to the land, at what rate it should be applied, and options for the use of whatever is to be grown on the area of land involved.

In particular, there is a choice for land discharge between low rate application (i.e. irrigation) and a high rate system on free draining coastal soils. The more detailed options will need to be further considered, but are beyond the scope of this report.

A low rate irrigation discharge to land may not necessarily have the capacity to take all the wastewater, all the time. Because irrigation of wastewater onto land cannot take place when the land is wet (i.e. most of the winter) there would need to be consideration of where the wastewater goes when it cannot be irrigated. The options here would be to store it, or to discharge it to the river or the sea. A suitable sized wastewater storage facility would be expensive, and as shown in the sub-sections of this report above, there are significant social, cultural and regulatory hurdles to be crossed for any river or sea discharge to be authorised. The size of storage facility needed could be reduced by reductions in stormwater entering the reticulation, but that is also an issue for further consideration elsewhere, and, in any case, many years are likely to pass while the flows are gradually reduced by reticulation rehabilitation works. If storage is large enough, it may trigger Building Act requirements for building consent from HBRC for a large dam.

A high rate land discharge system could be an option that may provide for 'land passage' and potentially year-round (or at least wet weather) flow discharge, reducing the need for storage or contingency discharge. Such systems require free-draining soils, which are limited to the Hawke Bay coastline. It remains a possibility that overland flow or recapture of the drainage may need to subsequently be discharged into the estuary or ocean, ie. the high rate land discharge may not be the only and final discharge mechanism employed.

This sub-section of this report addresses land discharges generically, and lists the regulatory provisions that will need to be addressed in Table 4.7 below. Land options within the Coastal Environment Area are so small they have been disregarded (and many of the planning provisions relevant for estuary discharges will be relevant as described above), so the plans that will impact land discharges further inland will be the RPS, the RRMP, and the WDP.

Table 4.7: Planning Provisions Impacting on Discharges to Land

Ref	Provision	Implication
RPS, Obj 14	The avoidance of loss in the productive capability of land, as a result of reduced soil health.	Irrigation of wastewater would improve soil health and productivity.
RPS, Obj 15	Preservation and enhancement of ... ecologically significant wetlands.	Ceasing the estuary discharge achieves this objective.
RPS, Obj 16	For future activities, the avoidance or mitigation of off-site impacts or nuisance effects arising from the location of conflicting land use activities.	Land discharge would need to be designed and operated to minimise neighbourhood nuisance; achievable.
Obj 18	For the expansion of existing activities which are tied to a specific location, the mitigation of off-site impacts or nuisance effects arising from the location of conflicting land activities.	Expansion of WWTP storage and implementation of land discharge in the local area would need to be designed and operated to avoid nuisance; should be achievable.
RPS, Obj 22	The maintenance or enhancement of groundwater quality in unconfined or semi-confined productive aquifers, to be suitable for human consumption and irrigation.	Design and management of land discharge would need to avoid groundwater contamination; achievable.



Ref	Provision	Implication
RPS, Obj 27	The maintenance or enhancement of the water quality of rivers, lakes and wetlands as suitable for sustaining or improving aquatic ecosystems and contact recreation.	Design and management of land discharge would need to avoid surface water contamination; achievable.
RPS, Obj 32	Ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's communities and provides for their health and safety.	This objective supports a well-designed and managed land discharge.
RPS, Obj 33	Recognition that some infrastructure which is regionally significant has specific locational requirements.	This objective could assist with prioritisation of available land discharge sites, with proximity to the WWTP being an important value.
RPS, Obj 33B	Adverse effects on existing land use activities arising from the development of physical infrastructure are avoided or mitigated in a manner consistent with Objectives 16, 17, 18, 32 and 33.	Odours and aerosols from irrigation would need to be managed to minimise neighbourhood nuisance; achievable.
RPS, Obj 36	To protect and where necessary aid the preservation of waahi tapu.	Consultation with tangata whenua should be expected to assist to identify waahi tapu, which in turn should not be irrigated with wastewater.
RRMP, Obj 38	The sustainable management of the land resource so as to avoid compromising future use and water quality.	Good design and management will achieve this objective.
RRMP, Obj 39	A standard of ambient air quality is maintained at, or enhanced to, a level that is not detrimental to human health, amenity values or the life supporting capacity of air, and meets National Environmental Standards.	Management to avoid bad smells or aerosols; good design and management will achieve this.
RRMP, Obj 40	Maintenance of water quality of specific rivers in order that existing species and natural character are sustained, while providing for resource availability for a variety of purposes.	Design and management needs to prevent run-off and ponding of wastewater; good design and management will achieve this.
RRMP, Obj 43	Maintenance or enhancement of groundwater quality in unconfined or semi-confined productive aquifers to be suitable for human consumption and irrigation.	Design and management needs to prevent over-application of wastewater, to avoid contamination of groundwater; good design and management will achieve this. This Objective would need to be addressed with any high rate land discharge.
RRMP, Pol 67	To encourage landowners and occupiers to manage the effects of activities affecting soil (including both land use activities and discharges of contaminants onto or into land) in accordance with the environmental guidelines set out in Table 5. (Soil health, soil contamination, and earthworks are more specifically addressed.)	Good design and management will achieve this.
RRMP, Pol 69	To manage the effects of activities affecting air quality in accordance with the environmental guidelines and standards set out in Table 6. (Odour, aerosols and dust are more particularly addressed.)	Management to avoid bad smells or aerosols; good design and management will achieve this.
RRMP, Pol 75	To manage the effects of activities affecting the quality of groundwater in accordance with the environmental guidelines set out in Table 10. (Focus is on maintaining quality for drinking and irrigation.)	Design and management needs to prevent over-application of wastewater, to avoid contamination of groundwater; good design and management will achieve this.
RRMP, Pol 76A	National Policy Statement for Freshwater Management 2014, addressing life supporting capacity and health of people and communities.	Will need to be addressed in a consent application for land discharge, but good design and management will ensure no effect on these values.
RRMP, Rule 8	Vegetation disturbance and soil disturbance as a Restricted Discretionary Activity	Any earthworks associated with land discharge may need consent.



Ref	Provision	Implication
RRMP, Rule 28	Discharges to air from any industrial or trade premises associated with waste disposal as a Discretionary Activity.	Discharges to air from the WWTP and its land discharge system will require consent under this rule.
RRMP, Rule 52	Discharges to land or water that do not comply with other rules, as a Discretionary Activity.	It is likely that the WWTP discharge to land will require consent under this rule.
WDP, Pol 4.4.3	Promote the protection and sustainable management of all cultural heritage places, mahinga kai, and other taonga of Maori.	Ceasing a direct discharge to Wairoa estuary and implementing land discharges while avoiding any land discharge effects on cultural values will achieve this.
WDP, Pol 5.5.2	Protect and enhance biodiversity (fauna habitats, wetlands, indigenous vegetation, and riparian margins) that have recognised biological/ecological values.	Ceasing a direct discharge to Wairoa estuary and implementing land discharges will achieve this for Whakamahi Lagoon and the Wairoa River estuary.
WDP, Pol 6.5.1	Avoid use, development and subdivision in the coastal environment which adversely affects, or has the potential to adversely affect: (1) natural coastal processes; (2) the relationship of tangata whenua with their ancestral coastal lands, waahi tapu and taonga; (3) ecosystems, outstanding natural features and landscapes associated with the coast; (4) the quality of coastal waters; and (5) public access to and along the coastal environment.	Ceasing a direct discharge to Wairoa estuary and implementing land discharges while avoiding any land discharge effects on cultural values will achieve this.
WDP, Pol 6.5.7	Encourage management, maintenance and enhancement of the coastal lagoons identified in Schedule 5 to retain and enhance their wildlife values.	Whakamahi and Ngamotu Lagoons are listed in Schedule 5. Ceasing a direct discharge to Wairoa estuary and implementing land discharges will achieve this.
WDP, Pol 7.5.1	Require measures to address degradation of soil including loss of soil stability, erosion and contamination, and promote rehabilitation and enhancement of degraded land where this is practicable.	Discharges of treated wastewater to land can improve soil properties, so WWCP is likely to achieve this.
WDP, Pol 7.5.8	Ensure structures attached to the land avoid, remedy or mitigate any adverse effects on amenity values and public safety for land users and users of water bodies, changes in the natural qualities of the water body, or effects on cultural values.	Implementing land discharge will achieve these requirements.
WDP, Pol 8.5.2	Ensure the potential effects of natural hazards are taken into account when considering resource consents and require measures to mitigate the risk to land, property and residents.	Land discharge design and operation will need to take natural hazards into account.
WDP, Pol 16.3.3	Enable the operation and development of utilities, minerals exploration and energy developments in a manner that enhances economic and social well-being while avoiding, remedying or mitigating adverse environmental effects.	The operation and development of discharge to land will achieve this.
WDP, Pol 26.4.1	Ensure that, as far as practicable, utilities...are located in a manner consistent with the character and amenity values of an area.	"As far as practicable" will be the important bit here; should be achievable with appropriate site selection and infrastructure design.
WDP, Pol 26.4.3	Ensure that new and existing utilities... are operated to enable people and the community to provide for their social, economic and cultural well-being and for their health and safety, in a way that safeguards the life supporting capacity of the District's	Good design and management will achieve this.



Ref	Provision	Implication
	water resources and ecosystems and that avoids, remedies or mitigates any adverse effects on the environment.	
WDP, Pol 26.4.4	Ensure that the provision of utilities...is done in a way that safeguards the life supporting capacity of the District's air, water, soils and ecosystems and avoids, remedies or mitigates any adverse effects on the environment	Good design and management will achieve this.
WDP, Pol 26.5.6	All activities that are not permitted or controlled activities, or do not meet the performance standards or conditions for permitted activities, are Discretionary Activities .	New land discharge facility would be a discretionary activity, requiring a land use consent from Wairoa District Council. A competently prepared application should be expected to be granted.
WDP, Rule 16.8.5	Any new effluent holding pond or waste disposal area set back at least 500 m from a residential zone boundary and/or 200 m from a residence in any other zone is a Permitted Activity .	It may be difficult for WWCP to comply with this requirement for a land discharge (and related storage) system.
WDP, Rule 26.6.5	Where any underground work is installed or maintained the ground shall be restored to its original condition as far as practicable.	WWCP should generally be able to comply with this Permitted Activity standard.
WDP, Rule 26.6.10	New or expanded utilities complying with the zone standards relating to signs and natural hazards, and complying with the district-wide rules relating to cultural heritage, indigenous vegetation and habitats of indigenous fauna, are Permitted Activities .	WWCP should ensure that cultural heritage and indigenous flora and fauna are not disturbed. If the land discharge system cannot comply with the WDP standards (rules) for these features, the non-compliances will trigger further reasons for resource consents.
WDP, Designation 53	The WWTP site has been designated for the purpose of "sewerage treatment."	Activities matching the designation purposes within designated sites can avoid consents but will instead need to obtain Outline Plan approvals or waivers from WDC's Regulatory department. It may be advantageous for WDC to designate the land discharge site for treated sewage storage and discharge purposes in future.
HNZPT	Archaeological sites may not be disturbed or destroyed without Archaeological Authority to do so. This will require iwi consultation and possibly also archaeological monitoring.	Some care may be required to avoid known or suspected archaeological sites. An archaeological survey and/or a General Archaeological Authority may be a prudent pre-emptive measure.

Any future subdivisions, large scale earthworks, or changes of land use may trigger contaminated site investigations and land use consents from WDC under NES-CS, as the discharge of treated wastewater onto land is a type of land use that falls within the NES-CS definition of a hazardous activity or industry.



5 DISCUSSION

5.1 General

Section 3 above sets out the planning provisions which may apply to the WWCP project, in the order that the provisions are laid out in their respective plans. The purpose of Section 3 is to enable a quick check that no relevant provisions have been left out.

Section 4 above considers in general terms the actual current, and potential, component parts of the Wairoa municipal wastewater system, and against each of these lists the planning provisions that are likely to apply, and a brief commentary on how hard, or how easy, it is likely to be to comply with each provision.

What follows here is a discussion on the extent to which the relevant planning provisions enable, or impede, each of the actual and potential wastewater system components considered. The need to weigh costs and practicalities of options against their comparative consentabilities is beyond the scope of this report, but the process of weighing options in public consultation is where the WWCP project needs to go from here.

5.2 Reticulation

The issues with the reticulation (sewer network) are that a large proportion is old, and stormwater and groundwater are leaking into the sewer during high rainfall events. Works to modernise reticulation and reduce the stormwater inflows requires excavation and relaying of the reticulation. As the urban Wairoa area develops through subdivisions and construction of new buildings, additional connections and extensions to the reticulation also need to occur in a timely manner.

There are Regional Policy Statement Objectives that acknowledge the need for such utilities as sewer reticulation, and other Objectives specifying cultural, ecological and environmental outcomes to be achieved along the way. The Regional Policy Statement, Regional Resource Management Plan, Wairoa District Plan, and to a limited extent (downstream from Outram Street) the Regional Coastal Environment Plan all impinge on and discourage reticulation overflows while generally supporting or enabling existing reticulation upgrade works to occur without triggering consenting rules.

The likely range of works required for reticulation upgrade will involve excavations, and disposal of drainage water from some excavations. There would need to be both earthworks and discharge consents for this work from HBRC under the RRMP. Where the reticulation lies within the road reserve, authorisation of the work required is provided by Chapter 26 of the WDP where network utility work is a Permitted Activity. Where the reticulation lies within private properties, WDC will need to consider whether suitable easements or other provisions enabling access are in place, or are still required. The consents involved are effectively performance specifications and can readily be met by good design and management.

5.3 Pump Stations

For the existing 4 pump stations, there is no compelling reason to propose any changes that would call in the regulatory involvement of HBRC. Upgrades to pump capacity or even the pump station structures might at some time be considered, but the provisions in the Wairoa District Plan for utility works appear to provide all the regulation that may be called for. The Building Act provisions may apply to any significant structural alterations. Such consents as may be required



are effectively performance specifications and can readily be met by good design and management.

5.4 Contingent Overflows

The issue with the reticulation (sewer network) is that stormwater and groundwater are leaking into the sewer during high rainfall events, exceeding the capacity of the pipes and/or pumps, leading to unmanaged overflows from manholes and pump stations. These overflows are currently unauthorised, and need to be reduced. Comprehensive sewer pipe renewal was estimated by Opus in 2011 to cost \$12M. WDC are implementing a reticulation investigation and renewal programme which is aimed at addressing the stormwater inflow sources and replacing its oldest sections of reticulation as key priorities, but it has not yet achieved significant reductions in the scale and frequency of the overflow problems.

The planning provisions are stacked against authorisation of the overflows, but until such time as works to reduce inward leakage to the reticulation have been successfully undertaken and been shown to have achieved significant storm flow reductions, the overflows will continue to occur from time to time. They cannot be stopped by a wave of a regulator's pen, and even prosecution for non-compliance will not make the overflows go away, but simply cause to be spent on lawyers' fees and fines what should be spent fixing the leaks instead. However, WDC will require some 10-20 years to renew all of the leaky sections of reticulation, and this will incur substantial costs.

Objectives 32 and 33 of the Regional Policy Statement provide for public infrastructure to exist and to operate, and while there are cultural and ecological objectives that will not be met by continued overflows, even if the funds to reduce the leakage that causes them were available, the overflows will continue in the meantime.

An approach to this that should be considered is for the overflows to be granted short/medium term consents, with conditions that require annual reporting on both the timing and duration of each overflow event, and the progress made during the reporting year on works to reduce, and ultimately eliminate, the problem. Consenting the overflows will be difficult, but should be possible because there is no viable alternative to consenting them until they can be stopped.

5.5 Wastewater Treatment Plant

On the assumption that the WWTP will remain where it is, its potential issues for regulatory purposes are odour and aerosols, and leakage. Odour and aerosols can be managed, and an air discharge consent can be expected to specify that no offensive or objectionable odours etc are detected beyond the property boundary.

Leakage through the base of the existing ponds should be investigated to establish whether it has sufficient effect to warrant the expense of lining the treatment ponds, although the HBRC plan provisions for this refer to groundwater supplies for human consumption and irrigation as the trigger for any such action; these groundwater uses are unlikely to be affected by seepage in the locality of the WWTP. Pond seepage is not currently consented, and WDC may need to obtain discharge consents for this aspect of the WWTP as part of the future consenting package.

Performance specifications with regard to odours, aerosols and leakage are likely to be the focus of regulators for the WWTP. Air discharge consenting should be straight-forward. Consenting leakage without the addition of pond linings should be straight-forward if leakage can be shown to be minimal and/or have insignificant off-site effects. However, if investigations show significant leakage, and/or significant off-site effects, then consenting the leakage without the addition of pond linings will be more difficult.



There is limited scope within the WWTP site for the construction of additional storage ponds, but it is possible for some additional treatment processes to be implemented within the site and/or ponds. The Designation in the Wairoa District Plan enables these improvements to occur with minimal regulatory approval (WDC's regulatory arm will need to approve either an Outline Plan or an application to waive this process), but earthworks may trigger contaminated site investigations and land use consents from WDC under NES-CS. The RRMP also is unlikely to trigger many consenting requirements for earthworks due to the location of the WWTP site and the nature of the likely works.

5.6 River Discharge

A discharge of some or all of the Wairoa wastewater to the river, upstream from the Coastal Marine Area boundary (Outram Street), might be considered as one option.

It is difficult to see any consenting (or other) advantages of a river discharge over the existing estuary discharge; it would have virtually all the same environmental problems that the estuary discharge has, and would be perceived as polluting a longer reach of the river including the town's waterfront area into the bargain. While the treated wastewater would be more completely dispersed prior to reaching the estuary, it would be less likely to be fully flushed out to sea on every out-going tide because of the increased travel time and distance from the discharge to the sea. It is not easy to see much wisdom in piping treated wastewater from the WWTP, all the way back up the river again to a new discharge facility that will not make much if any real environmental improvement if the quality of discharged wastewater remains unchanged.

If further treatment such as disinfection or improved nitrogen removal were to be implemented at the WWTP, and with some type of land passage or wetland system used to provide further treatment and address cultural values prior to discharge to the river, then this option may have more reasons to be seriously considered. It also has the benefit of removing the discharge from the important estuarine and lagoon environments which may be a strong driver for considering relocating the discharge upstream. However, even these measures may not satisfy tangata whenua who will soon have statutory recognition of their relationship with the Wairoa River and will have representative members on the Wairoa Riverbank Reserves management boards. The over-riding tangata whenua concern is that any discharge of wastewater directly to the river is culturally unacceptable, even if it might be environmentally acceptable.

Regardless of the balance of merits for a river discharge, in order to address all the options with an even hand, Section 4.6 above lists the regulatory provisions that would apply. The biggest differences from the estuary discharge are that the RCEP, NZCPS, and DOC concessions in the Whakamahi or Ngamotu Lagoon Wildlife Reserves do not apply up-river, cutting down the number of provisions and regulatory parties to be considered. But just because those provisions do not apply doesn't mean the recognised values in the estuary downstream of the river discharge do not have to be considered; the estuary still remains part of the receiving environment even if it is more remote from the discharge and improved dilution of the discharge has occurred prior to entering the estuary.

It is also important to note that the provisions of the NPS-FM are almost as onerous as the NZCPS and RCEP provisions, and would also strongly resist such a discharge to the river. The NPS-FM seeks to improve freshwater quality and to ensure that regulators have particular regard for te mana o te wai when making decisions on resource consents. This consideration will require support from tangata whenua. Other key provisions of the NPS-FM relate to protection of recreational and ecosystem values, and these are mainly based upon pathogen concentrations. The NPS-FM provisions generally oppose a river discharge.



The river discharge appears to avoid the need for permission from PCRG's or CMTG's under the Takutai Moana legislation, but the same iwi and hapu groups will need to be consulted for a river discharge anyway. Tatau Tatau o te Wairoa legislation requires consultation with these iwi and hapu groups for any discharges into the Wairoa River and they will also be strongly represented on the reserve management boards for Wairoa's riverbank and estuary reserves. If tangata whenua values and concerns are not adequately addressed by a river discharge proposal, WDC could not expect to gain their approval, and such proposals would most likely fail to obtain all necessary resource consents and other approvals as a consequence.

Against some of the other options that are available to be considered, the regulatory hurdles for a river discharge make this an unattractive option at best.

5.7 Estuary Discharge

This is the status quo, the existing situation, perhaps with relocation of the outfall within the estuary. It may also include modifications to treatment at the WWTP and/or some type of land passage or wetland system to provide further treatment and address cultural values prior to discharge to the estuary.

The best reason to consider a continuing estuary discharge is that it is undoubtedly the cheapest option for a small and financially constrained community. However, there is a formidable array of planning provisions stacked against such a discharge, even if additional treatment and/or some type of land passage or wetland system were to be implemented as part of the future package. The primary opposing provisions are contained in the NZCPS, NPS-FM, and RCEP.

Section 4.7 above quotes from NZCPS Policy 23 and RCEP Policy 16.1 in detail, which is a road map of what would be required for such a discharge to be consented. The key to that road map is consultation, with both tangata whenua and the wider community. **Only** if such consultation gives WDC the confidence to consider an estuary discharge to be the BPO, then it may be possible for it to be re-consented. Without such confidence, and effectively support from tangata whenua and the wider community, it must be considered unlikely that such a discharge would be consented by all regulatory parties.

It must have been considered to be the BPO when it was installed in 1981, along with the new WWTP near Pilot Hill, to replace the previous pump station discharges of raw sewage into the Wairoa River. It was accepted by HBRC as the BPO in 1998 when granting the existing consent. WDC's challenge now is to show that an estuary discharge remains the BPO for Wairoa in order to have any chance of successfully obtaining future discharge consents from HBRC and permits from all other authorities.

BPO selection requires thorough assessments of all other options, practicable or not, to support a decision to nominate a specific option as the BPO. If this BPO assessment is not completed to an appropriately high standard and/or if another discharge option could be shown to be an equal or better option than an estuary discharge, it could result in HBRC declining any consent renewal application for an estuary discharge.

The RCEP promotes the protection and enhancement of SCA's but Rule 167 allows (instead of prohibiting) discharges of treated wastewater to SCA15 without first passing through soil or a wetland. Although this rule would allow the current discharge to continue to operate without installing any land passage, it seems unlikely that WDC would be able to obtain renewal consents and tangata whenua support for such a proposal. An estuary discharge design that incorporates some form of land passage is more likely (but not guaranteed) to gain tangata whenua support and consents. Additional treatment prior to discharge may also assist with gaining support.



The NPS-FM seeks to improve freshwater quality and to ensure that regulators have particular regard for te mana o te wai when making decisions on resource consents. This consideration will require support from tangata whenua. Other key provisions of the NPS-FM relate to protection of recreational and ecosystem values, and these are mainly based upon pathogen concentrations. The NPS-FM provisions generally oppose an estuary discharge.

The location of the discharge within the Whakamahi Lagoon Wildlife Reserve means that WDC will need to obtain a concession from DOC to continue occupying the estuary and discharging into the estuarine habitat. The CMS-ECC is being reviewed by DOC prior to seeking public input, but its current provisions and high ecological values for the estuary indicate that a relocated estuary discharge would likely be opposed; renewal of the existing discharge should be possible assuming that a detailed AEE demonstrates that there are less than minor adverse effects on the lagoon's ecosystems. Obtaining a DOC concession for an estuary discharge will require approval of tangata whenua as well as the reserve management boards whose members will include Maori representatives; they appear likely to oppose any DOC approval of such a discharge.

The lagoons, estuary, and ever-changing islands inside the estuary have a long Maori history of food gathering and occupation, so any relocation of the outfall and pipeline would need to avoid disturbing these features in order to avoid any cultural offence.

Takutai Moana and Tatau Tatau o te Wairoa legislation are likely to result in strong Maori opposition and a refusal by PCRG's and/or CMTG's to grant RMA and conservation permissions unless WDC can adequately address their cultural concerns. If permission is denied by a CMTG or PCRG, the resource consents (and any conservation concessions) cannot be exercised by WDC.

5.8 Ocean Outfall

This discharge option would involve a pipeline beneath the beach, beneath the Whakamahi Lagoon, beneath the river mouth spit, and beneath the sea bed for at least several hundred metres out to sea (probably no more than 2 km offshore), with a discharge structure on the end firmly anchored to the sea floor. It would be quite the opposite to the estuary discharge, in that it would be very challenging and expensive to install, but would avoid almost all the ecological and environmental problems that an estuary discharge would have to accommodate. It could also be operated as a continuous 24-hour discharge, as tidal flushing is no longer a factor and the vast dilution effect of the ocean in a very short time following discharge would avoid adverse effects on marine ecology.

The acceptability of such an option would need to be the subject of consultation with tangata whenua, but if it met cultural approval it would stand a reasonable prospect of being able to meet the specified ecological and environmental objectives of the RCEP and NZCPS. Recent cultural advice to WDC has indicated that direct discharge to the ocean is culturally unacceptable, even with land passage prior to ocean discharge, and viewed as more offensive than discharge to the river. In addition, the spits on each side of the Wairoa River mouth are culturally very significant as they are the locations of two taniwha constantly battling each other. The lagoons, estuary, and ever-changing islands inside the estuary have a long Maori history of food gathering and occupation, so disturbance of these features would also be culturally offensive.

The RPS and RRMP do not include provisions that would apply to an ocean outfall, with only the RCEP being considered here out of the suite of HBRC planning documents. The NZCPS is a key planning document that underpins and is additional to the RCEP. Cultural, recreational, and coastal hazard factors are dominant planning issues that are addressed in the provisions of the NZCPS and RCEP. The dynamic coastline near Wairoa, particularly the spits enclosing the lagoons



and Wairoa River mouth, mean that a wide range of coastal hazards will need to be factored into an ocean discharge pipeline route and design.

RCEP Rule 167 allows discharges of treated wastewater to SCA15 without land passage or wetland treatment. Discharge to the ocean off-shore from the SCA15 boundary (ie more than 1 nautical mile off-shore) may avoid this rule altogether but land passage may still be preferable for cultural mitigation purposes.

Whakamahi Lagoon and the seabed out to 1 nautical mile from the Hawke Bay shore are gazetted as the Whakamahi Lagoon Wildlife Management Reserve and currently under the management of DOC. This means that a concession from DOC is required for the pipeline and, if the discharge outfall is within the reserve, the outfall structure and its discharge as well. The CMS-ECC is being reviewed by DOC prior to seeking public input, but its current provisions and high ecological values for these reserves indicate that an ocean discharge would likely be opposed unless adverse effects are less than minor within the lagoon and marine ecosystems or if the discharge is located further off-shore from these reserves. The pipeline construction beneath the lagoon and coastal spit would be more sensitive than construction of the ocean outfall structure.

Despite these difficulties, concessions should be possible to obtain assuming that a detailed AEE demonstrates that there are less than minor adverse effects on the reserve's estuarine and marine ecosystems. Obtaining a DOC concession for an ocean discharge will require approval of tangata whenua as well as the lagoon reserve management boards whose members will include Maori representatives; they appear likely to oppose any DOC approval of such a discharge.

Takutai Moana and Tatau Tatau o te Wairoa legislation are each likely to result in strong Maori opposition and a refusal by CMTG's to grant RMA and conservation permissions unless WDC can adequately address their cultural concerns. If permission is denied by a CMTG or PCRG, the resource consents and conservation concessions cannot be exercised by WDC. These iwi and hapu groups will also be strongly represented in the management boards for the lagoon reserves which include the near-shore marine environment.

A Marine Discharge Permit from the Environmental Protection Authority would be required if the outfall was into the Exclusive Economic Zone, which starts 12 nautical miles out to sea, but it is not likely that an outfall would need to be placed that far from land.

5.9 Land Discharge

Irrigating treated wastewater onto land is an attractive option from a regulatory point of view; all the regulatory provisions set performance requirements that are capable of being met by good design and subsequent management, provided that a large enough area of land with appropriate terrain and soil characteristics is available within a reasonable distance (<5 km) from the WWTP and with a small number of neighbours.

A land discharge involving irrigation also comes with the caveat that it probably cannot take all the wastewater all the time; when the land is too wet to irrigate, wastewater must either be stored in a large new pond, or discharged somewhere else, such as the estuary. While the irrigation land discharge itself can be seen in Section 4.9 above to be readily consentable, in order to operate all year round it will need either very large and expensive storage, or a potentially environmentally unattractive estuary discharge (assuming that an ocean discharge would not be implemented as the contingency discharge because of the very high expense this would entail in addition to the expensive implementation of land discharge).



Storage provided within the existing WWTP site would avoid most planning requirements, as it would be consistent with the Designated sewerage treatment purpose for the site and would only be governed by RRMP and NES-CS provisions for earthworks. However, this site probably is not large enough for the storage volume necessary to achieve 100 % land discharge. This may raise the difficulty of finding a suitably large piece of land for siting the new storage pond in addition to the requirement for a very large area of land with similar characteristics to be found for the irrigation system.

The volume and construction cost of storage required for 100 % land discharge to be successful are likely to be prohibitive. If storage is large enough, it may also trigger Building Act requirements for building consent from HBRC for a large dam. In unusually wet years, if there is no alternative 'relief valve' discharge system, when storage is full the irrigation will be forced to discharge onto undesirably wet soils which will cause at least short term adverse effects on the land and nearby groundwater and/or surface water. The land discharge design and consent conditions would need to allow for this eventuality.

The main planning provisions governing land discharge are contained in the RPS, RRMP, and WDP. Provided that adverse effects on neighbours, soils, groundwater, and surface water are less than minor, consenting of a land discharge system is supported by these provisions. WDC may wish to formally designate the land discharge and storage area(s) for wastewater discharge purposes in their future WDP in order to reduce future consenting requirements. Landholders for the storage and irrigation areas would also need to be made aware of, and accept, the NES-CS implications for future land use restrictions and consenting processes.

In the case of a dual discharge system, the estuary discharge is expected to be the secondary discharge system, as the costs of moving the existing estuary discharge to another location either up-river or in the ocean would be prohibitive on top of the cost of implementing a land discharge system. Even with an estuary discharge, some additional storage is likely to be required so that the opportunities to preferentially discharge to land and to minimise discharges to the estuary are retained in the discharge scheme package. As can be seen in Section 4.7 above, consenting an estuary discharge is likely to be difficult, even if it is to be the secondary discharge and even if additional treatment and/or some type of land passage or wetland system were to be installed prior to the estuary outfall.

As an alternative, a high rate land discharge system, potentially involving discharge into high permeability coastal sandy soils, may have the capacity to receive wastewater in wet weather, and maybe even for much of the winter. This could reduce, if not eliminate, the need for large capacity storage or a contingency discharge system. It would, however, still need to satisfy cultural values and groundwater quality maintenance requirements; if it can't achieve acceptably minor effects it is unlikely to be consentable.

The main consenting difficulty with a coastal high rate land discharge option would be the much larger set of opposing provisions that are contained in the NZCPS, NPS-FM, and RCEP. If the selected coastal sites are within or accessed via the lagoon wildlife reserves, WDC will need to obtain concessions from DOC. Maori members of the lagoon reserve management boards are likely to oppose DOC granting concessions. WDC are also likely to encounter strong Maori opposition and a refusal by CMTG's to grant RMA and conservation permissions unless WDC can adequately address their cultural concerns. If permission is denied by a CMTG or PCRG, the resource consents (and any conservation concessions) cannot be exercised by WDC. Care would also be required to ensure that cultural sites and any archaeological artefacts are not affected by the discharge system or the route of the pipeline from the WWTP.



In summary, an irrigation discharge to land should be readily consentable, but carries with it the likely requirement for storage and/or contingency discharge. A contingency discharge will encounter consenting difficulties as outlined in the appropriate sections of this report, although its contingency purpose and reduced frequency of discharge would assist with gaining the necessary consents. A high rate land discharge could reduce or avoid the costs and cultural problems of storage and contingency discharge respectively, but consenting it may be less straight-forward than would be the case for irrigation due to its effects on groundwater and its likely coastal and culturally sensitive location.



6 CONCLUSIONS

6.1 General

The planning provisions of the New Zealand Coastal Policy Statement, National Policy Statement on Freshwater Management, Hawke's Bay Regional Policy Statement, the Hawke's Bay Regional Resource Management Plan, the Hawke's Bay Regional Coastal Environment Plan and the Wairoa District Plan that may be expected to impinge on components of the Wairoa municipal wastewater system have been listed, with a brief commentary on the consenting implications of those planning provisions that are likely to be relevant. Aspects of the conservation, reserves, Takutai Moana, and Tatau Tatau o te Wairoa legislation and planning provisions are also described where relevant to WWCP. This report is for the purpose of providing a guide to consenting requirements to help to inform development and consideration of options for the Wairoa wastewater system.

While the seemingly endless tables of objectives, policies, and rules in Sections 3 and 4 above make regrettably dry reading, there are nevertheless some key consenting and design messages to be derived from this exercise. The summarised conclusions are grouped against each of the wastewater system components below.

6.2 Reticulation

- Works to upgrade the reticulation (sewer network) will be required in order to reduce stormwater and groundwater leakage into the reticulation.
- The planning provisions and their implications in Table 4.1 for such work are performance requirements that can readily be met by good design and management; there are not the consenting uncertainties that go with some other system components.
- Where reticulation lies within the road reserve, WDC has the authority to access, maintain, service and upgrade the reticulation as may be required. However, where the reticulation passes through private property, unless an easement or other mechanism has been put in place to secure access, it is **recommended** that WDC should consider whether it needs to take steps to secure its right to access the sewer for these purposes.

6.3 Pump Stations

- While it is not expected that any major change will need to be made to any of the four pump stations, there may be minor changes to pump capacities and internal configuration.
- It is expected that the only changes required will be authorised by the existing Utilities provisions (Chapter 26) of the Wairoa District Plan. There could potentially be Building Act requirements to be met, but there should be no requirement for consents from Hawke's Bay Regional Council or any other parties.

6.4 Contingent Overflows

- These are caused when high rainfall events lead to overloading of the capacity of the reticulation and/or pumps.
- The planning provisions for the **works required to fix the problem** are addressed in Section 4.4 above, but the ultimate prevention of overflows could take years and cost millions. A reticulation renewal and upgrade work programme is underway but has not yet achieved significant reductions in the scale and frequency of the overflow problems. Meanwhile the overflows will continue, albeit at reducing frequencies and volumes as remedial works take effect, and should be authorised instead of remaining unauthorised.



- Authorisation of the overflows will not be straight-forward, as there is a plethora of objectives and policies opposing such discharges.
- However, as part of the existing essential public infrastructure the overflows are inevitable, and will not be stopped by the non-granting of consent, or by abatement notices, or even by prosecutions. They will only be stopped by reticulation remedial works, and those will necessarily take time and money, which WDC is already investing.
- Meanwhile, it is **recommended** that consent be sought to authorise the overflows, with requirements for annual reporting on the causes, timing and duration of overflows, and the reporting year's progress on works to reduce, and eventually eliminate, the overflows.

6.5 Wastewater Treatment Plant

- It is expected that the WWTP will remain in its present location, and that its consenting issues will relate to discharges of odours and aerosols to the air, and perhaps also to pond leakage to land and groundwater.
- Air discharges will run into requirements for an odour management plan, and for no objectionable or offensive odours beyond the property boundary; these can be met by good design and management.
- It is **recommended** that the scale of any pond leakage should be assessed to establish whether there is a problem that may warrant the installation of pond liners. However, the driver for protection of groundwater quality is whether the resource involved is used for human consumption or irrigation, and as neither of these are likely anywhere near the WWTP, there may be no problem to correct. In any case, the pond leakage assessment should form the basis for an application to HBRC for resource consent to authorise its discharge of pond seepage to land and groundwater.
- Any changes or additions to treatment processes, other than earthworks for construction of a storage pond, should be able to occur within the WWTP site without requiring any resource consents under the RRMP provisions. Earthworks may also trigger contaminated site investigations and land use consents from WDC under NES-CS.
- The WDP Designation of the site for sewerage treatment purposes also allows a range of works to proceed without triggering consents under the WDP rules. However, an Outline Plan approval or an application to waive the requirement for an Outline Plan approval would need to be processed by WDC's regulatory arm.

6.6 River Discharge

- A discharge into the Wairoa River upstream of the Coastal Marine Area and Coastal Environment boundary (Outram Street) is one potential alternative to the existing estuary discharge.
- Such a discharge, if the wastewater quality remains unchanged, would have all the same environmental effects on the estuary that the present discharge has, but would be perceived as polluting a longer length of the river including the town's waterfront area. While the treated wastewater would be more completely dispersed prior to reaching the estuary, it would be less likely to be fully flushed out to sea on every out-going tide because of the increased travel time and distance from the discharge to the sea.
- Further treatment and some type of land passage or wetland system prior to discharge to the river could provide environmental and cultural mitigation, but may not overcome the fact that a discharge of wastewater directly to the river is culturally unacceptable.
- Tatau Tatau o te Wairoa iwi and hapu will soon have statutory recognition of their relationship with the Wairoa River and will have representative members on the Wairoa Riverbank Reserves management boards. Their views will therefore have significant bearing on consentability of river discharges.



- The only possible advantage of such a discharge would be to elude the tight requirements of the RCEP and NZCPS; however, the strong cultural, ecological and environmental protections delivered by the RRMP and NPS-FM would still need to be addressed and may be almost as difficult to overcome as the coastal planning provisions. The RRMP and NPS-FM provisions generally oppose a river discharge for cultural, environmental, and recreational reasons.
- From a consenting point of view, a discharge to the river offers no practical advantage over the existing estuary discharge. It appears likely to generate stronger opposition from tangata whenua and the wider community than would be the case for a continuation of the existing estuary discharge.

6.7 Estuary Discharge

- This is the existing situation, which must have been considered the BPO when it was installed, replacing several raw sewage discharges into the river through the town. It was still seen as the BPO when HBRC authorised the renewal of its discharge consent in 1998. It is also the cheapest discharge option, because it already exists and any modifications to it would be cheaper than any entirely new alternative discharge system.
- However, there are formidable consenting obstacles to a continuation of this discharge. There are highly weighted cultural and ecological values in and around the estuary which are compromised by the discharge. Such a discharge is not a prohibited activity, but the threshold to get it “over the line” is set very high.
- The key planning provisions are NZCPS Policy 23 and Policy 16.1 of the RCEP, quoted directly in Sections 3.4.3 and 4.7 above. It could allow an estuary discharge if WDC, in consultation with tangata whenua and the wider community, could show that such a discharge would be the BPO. BPO selection would involve thorough assessments of all other options for their balancing of the cultural, social, environmental, and cost implications. If this BPO assessment is inadequate for supporting an estuary discharge, it could result in HBRC declining any consent renewal application for an estuary discharge.
- Despite RCEP Rule 167 allowing (instead of prohibiting) discharges of treated wastewater to SCA15 without first passing through soil or a wetland, an estuary discharge design that incorporates land passage is more likely to gain iwi support and consents.
- The NPS-FM and NZCPS provisions generally oppose an estuary discharge for cultural, environmental, and recreational reasons.
- Tatau Tatau o Te Wairoa iwi and hapu will soon have statutory recognition of their relationship with the Wairoa River and will have representative members on the Whakamahi and Ngamotu Lagoon Wildlife Reserves management boards. Their views will therefore have significant bearing on consentability of estuary discharges.
- DOC appear likely to oppose an estuary discharge, partly because of Maori representation on the Lagoon reserve management boards and statutory recognition of Tatau Tatau o te Wairoa’s relationship with the estuary and its lagoons. The CMS-ECC places high value on the lagoon reserves and does not support an estuary discharge unless its effects on the ecological values are less than minor.
- Takutai Moana claims are likely to result in strong Maori opposition and a refusal by PCRG’s and/or CMTG’s to grant RMA and conservation permissions unless WDC can adequately address their cultural concerns.

6.8 Ocean Outfall

- A pipeline out to sea is another discharge option that should be considered.
- Its advantages over the estuary discharge are that it avoids almost all the cultural and ecological compromises in the accessible inshore environment. Its ability to cope with the



discharge would not be time-limited as at present, and its capacity to receive the discharge would be limited only by pipe and pump capacity.

- Its main disadvantage over the estuary discharge is that it would be geotechnically challenging and costly to set it up, whereas the estuary discharge is already there. The dynamic coastline means that a wide range of coastal hazards will need to be factored into an ocean discharge pipeline route and design.
- Cultural advice recently received by WDC is that discharge to the ocean, even with land passage, is culturally more offensive than discharge to the river. Disturbance of the spits on each side of the Wairoa River mouth would be culturally very offensive because of the taniwha who are believed to reside there.
- The RCEP would be the only plan against which an ocean outfall discharge would be assessed, and most of the values protected by that plan lie close inshore and in the estuary, where adverse effects from an ocean outfall would be avoided. The NZCPS provisions also require consideration, but would mainly affect the installation of the pipeline from Whakamahi Road to the ocean side of the surf zone. Both the NZCPS and RCEP contain strong provisions regarding coastal hazards, estuarine and marine ecosystems, and cultural and recreational values. An ocean outfall design will need to carefully address each provision.
- RCEP Rule 167 allows discharges of treated wastewater to SCA15 without land passage or wetland treatment. Discharge to the ocean off-shore from the SCA15 boundary may avoid this rule altogether but land passage prior to ocean discharge may still be preferable for cultural mitigation purposes.
- DOC concessions would be necessary where the pipeline crosses the lagoon reserves. The CMS-ECC seeks to protect the lagoon ecosystems but does not appear to oppose an ocean discharge further off-shore from these reserves.
- Maori membership of the lagoon reserve management boards is likely to be a strong factor opposing DOC approval of concessions for an ocean discharge.
- Takutai Moana imposes a potentially large obstacle to implementing this option, as the various claimants on this marine area may be strongly opposed to authorising an ocean discharge. If permission is denied by a CMTG or PCRG, the resource consents (and any conservation concessions) cannot be exercised by WDC.
- Tangata whenua and the wider community would need to be consulted on this option, but the combination of all-weather reliability, high flow capacity, and avoidance of close in-shore effects make this option worthy of serious consideration.

6.9 Land Discharge

- The alternative to discharging the wastewater to the river, the estuary or the sea is to discharge it to land; there are no other feasible options.
- Consenting for a land discharge by way of irrigation is almost entirely a matter of performance specification which is capable of being met by good design and management. However, it relies upon the availability of an adequately large area of suitable land within a reasonable distance (<5 km) of the WWTP.
- The main planning provisions governing land discharge are contained in the RPS, RRMP, and WDP. Provided that adverse effects on neighbours, soils, groundwater, and surface water are less than minor, consenting of a land discharge system is supported by these provisions.
- WDC may wish to designate the land discharge and storage area(s) for wastewater discharge purposes in their future WDP in order to reduce future consenting requirements.
- An irrigation discharge has the limitation that it cannot take all the wastewater, all the time. There would need to be either a large capacity storage facility or an alternative discharge to take wastewater at times when it cannot be irrigated (wet weather, winter time); the alternative discharge would most likely be to the estuary. As outlined in earlier



sections, consenting such an alternative discharge is likely to be difficult, even if it is to be the secondary discharge and even if additional treatment and/or some type of land passage or wetland system were to be installed prior to the estuary outfall.

- Storage is likely to be very large and expensive. Storage provided within the existing WWTP site would avoid most planning requirements, as it would be consistent with the Designated sewerage treatment purpose for the site and would only be governed by RRMP provisions for earthworks. However, if storage needs to be located elsewhere, it may be difficult to find a suitably large piece of land for siting the new storage pond in addition to the land required for irrigation. If storage is large enough, it may also trigger Building Act requirements for building consent from HBRC for a large dam.
- An alternative to irrigation would be a high rate land discharge, onto high permeability sandy soils (most likely near the coast), that could take a discharge even in wet conditions. This could avoid, or at least reduce, the requirements for storage and/or contingency discharge, but consenting would closely consider the effects of such a discharge on groundwater and the coastal environment. If this discharge is located within or accessed via the lagoon wildlife reserves, most of the consenting difficulties for estuary or ocean discharges are likely to be encountered.
- There are further “hoops to be jumped through”, including finding a landholder reasonably close to the WWTP prepared to take the wastewater, ensuring that landholders are accepting of the NES-CS implications for future land uses, making sure that effects on neighbouring properties and people are minimal, and managing potential issues of marketing produce irrigated with wastewater. But if these matters can be addressed, consenting a land discharge should be more straight-forward than any of the other discharge options.



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8 APPENDICES

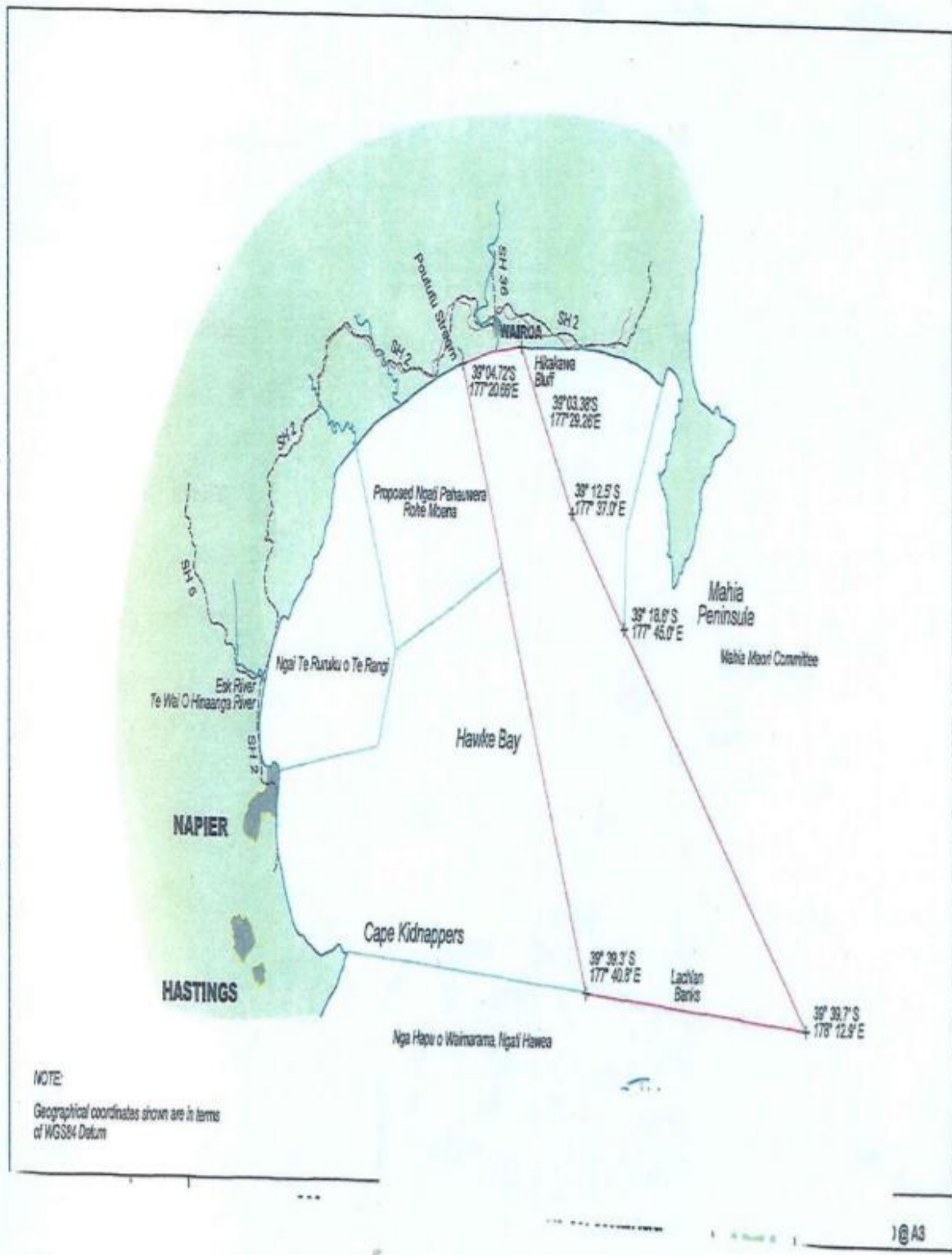
Appendix A Figures



APPENDIX A

Figures

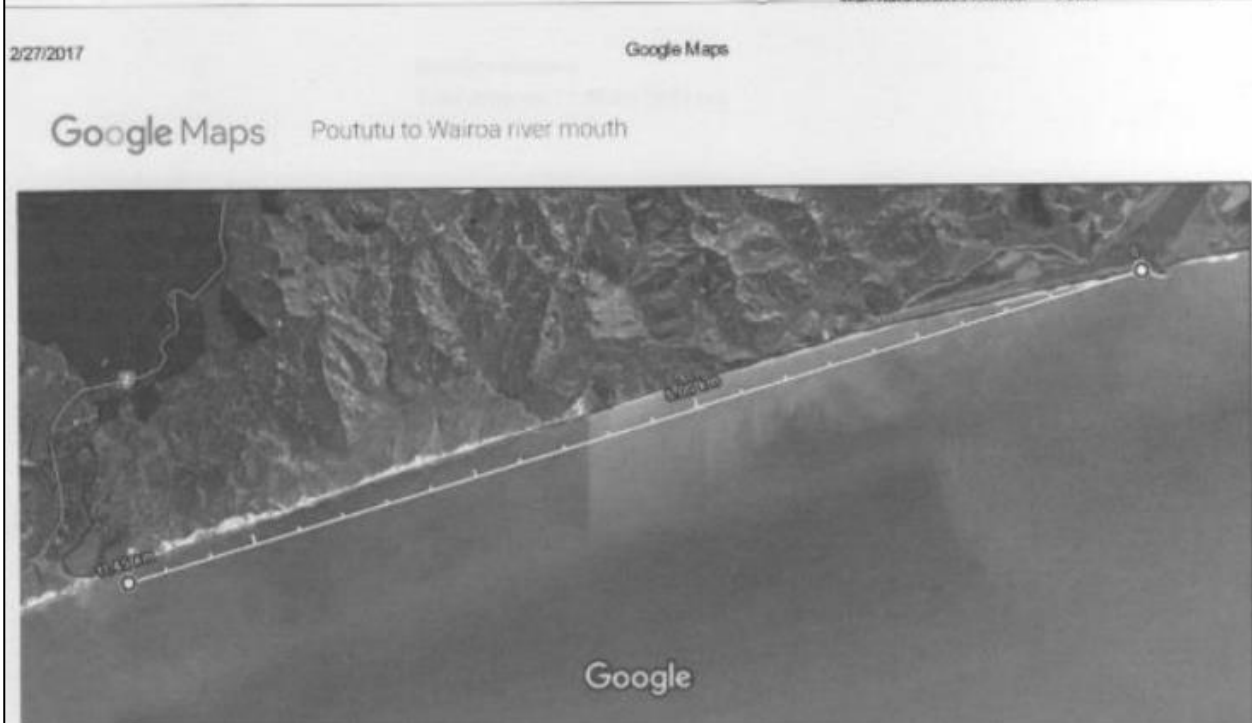
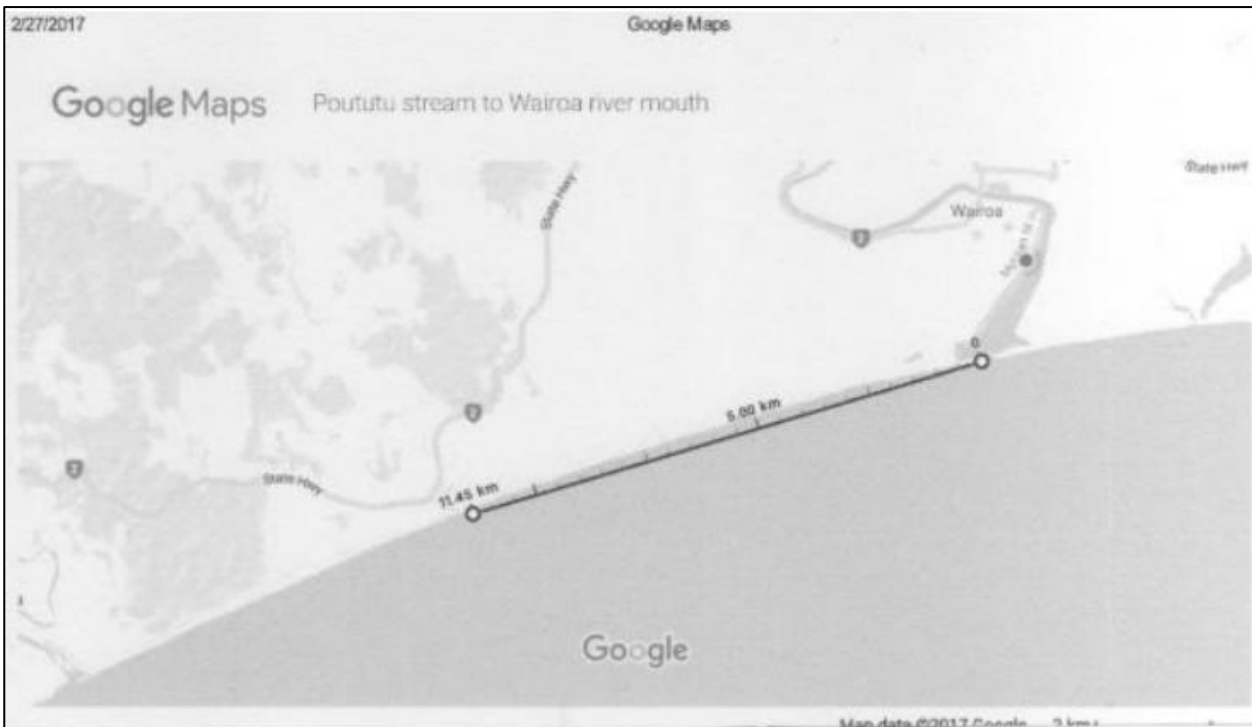
**Maps of Takutai Moana Act CMTG Claimant Areas
RCEP Map for Wairoa Locality
RCEP Maps 24-28**



Te Aitanga a Puta, Ngati Kurupakia e Ngai Tauria Hapu CMT and PCR Claim Area



Ngati Kaahu and Others CMT and PCR Claim Area



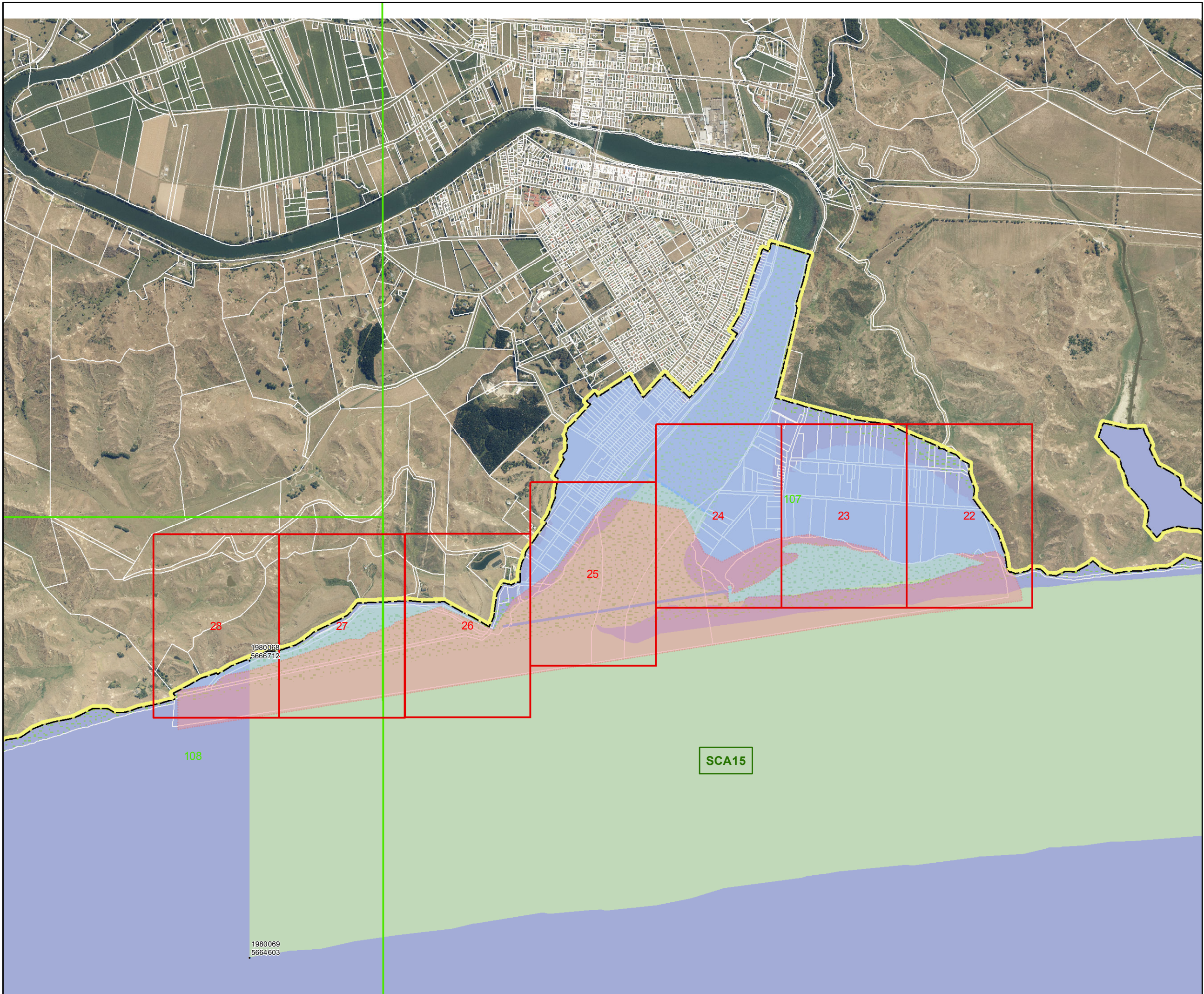
Ngāti Rahui and Ngāi Te Apatu CMT and PCR Claim Area



Ngāti Kirituna CMT and PCR Claim Area



Ngāti Kahukura and Ngāti Rakaipaka CMT and PCR Claim Area



- Legend**
- 1:5000 Map frame
 - 1:50000 Map frame
 - Coordinate Labels (NZTM)
 - Coastal Environment Inland Boundary
 - Coastal Environment
 - Coastal Hazard Zone 1
 - Coastal Hazard Zone 3
 - Properties
 - Rivermouth CMA boundary
 - Rivermouth
 - Vegetation Clearance Management Area
 - Significant Conservation Area
 - Coastal Margin (Indicative only)
 - Coastal Environment (Indicative only)
 - HawkesBay_RegionalBoundary

Wairoa RCEP



1:25,000

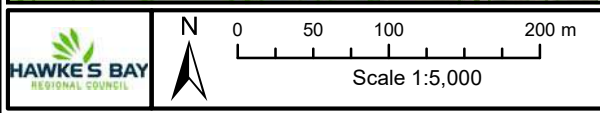
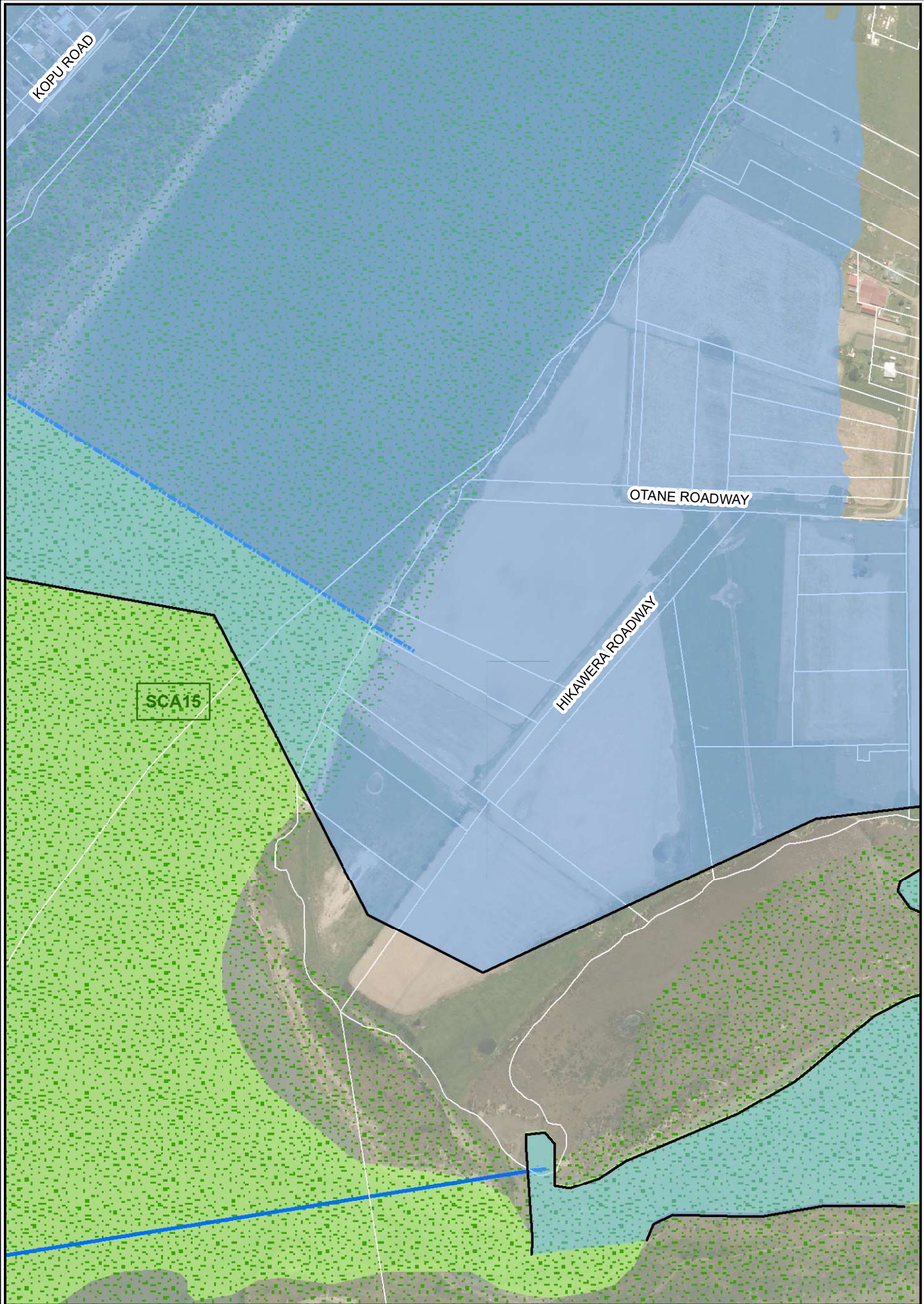


DATA FROM: Information obtained from the Hawke's Bay Regional Council's Geographic Information Systems Database.

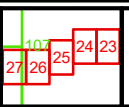
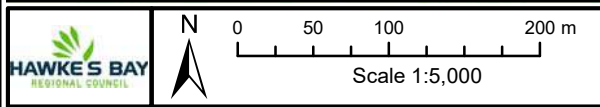
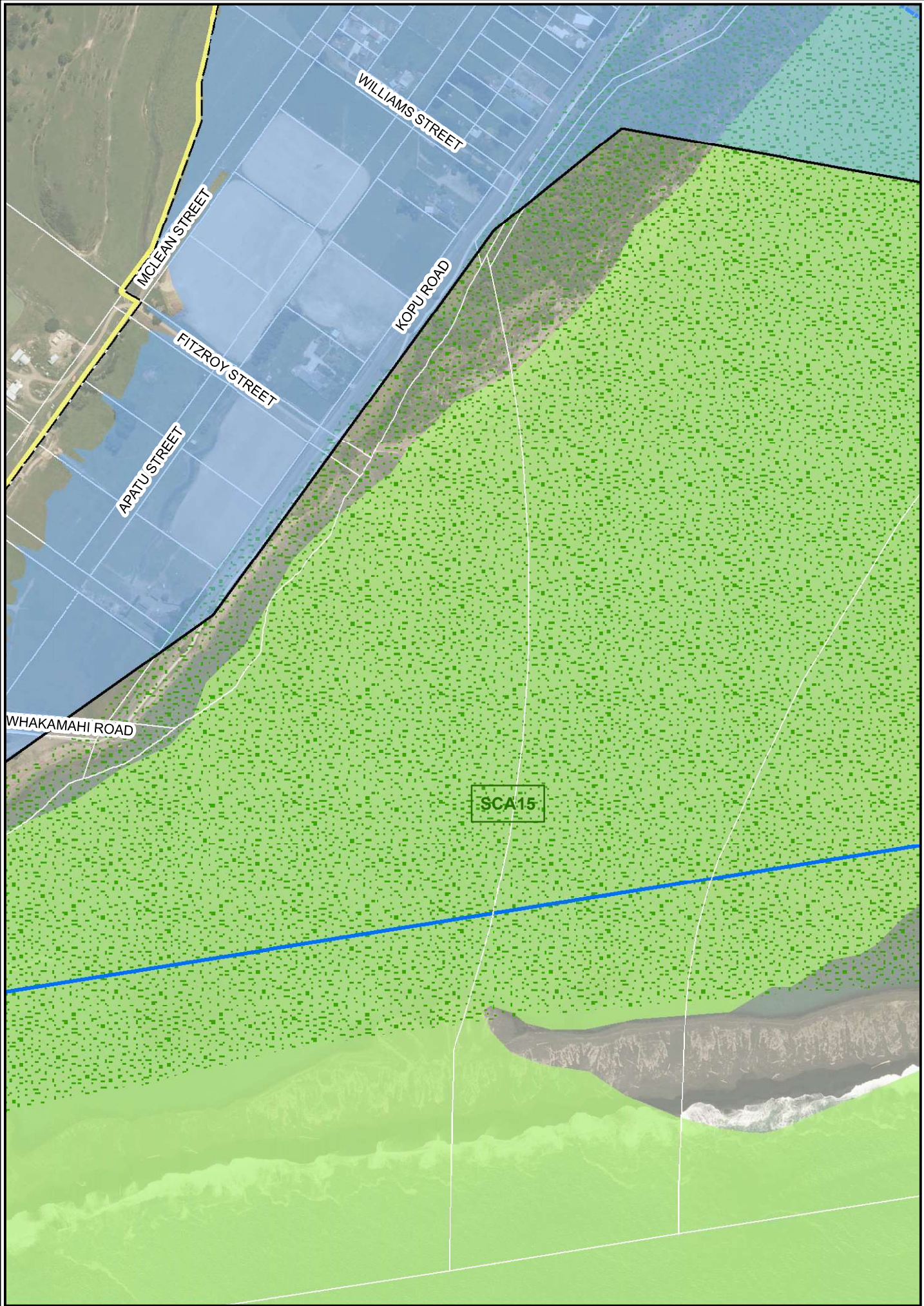
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DISCLAIMER
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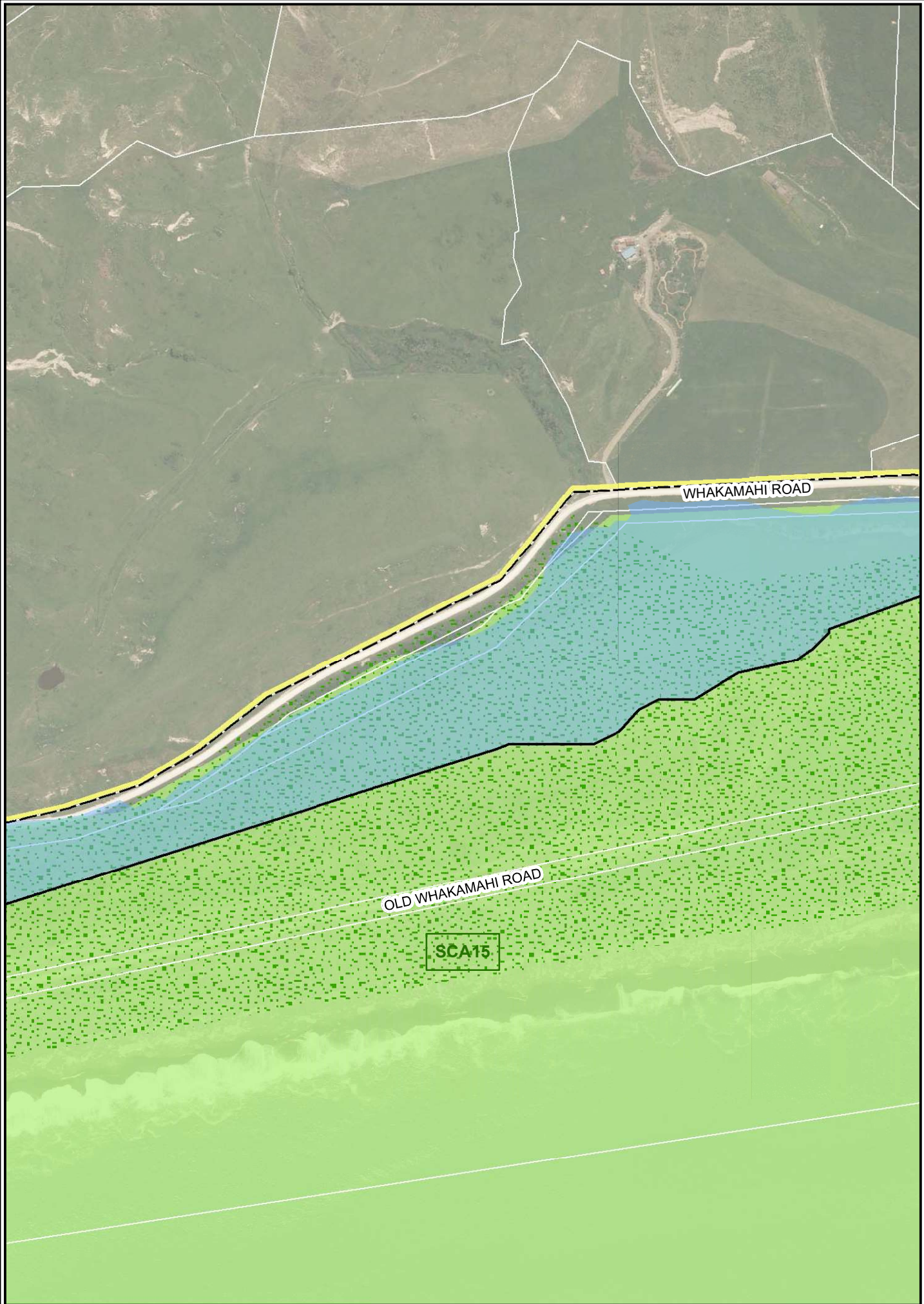
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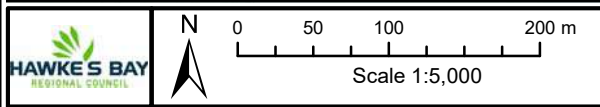
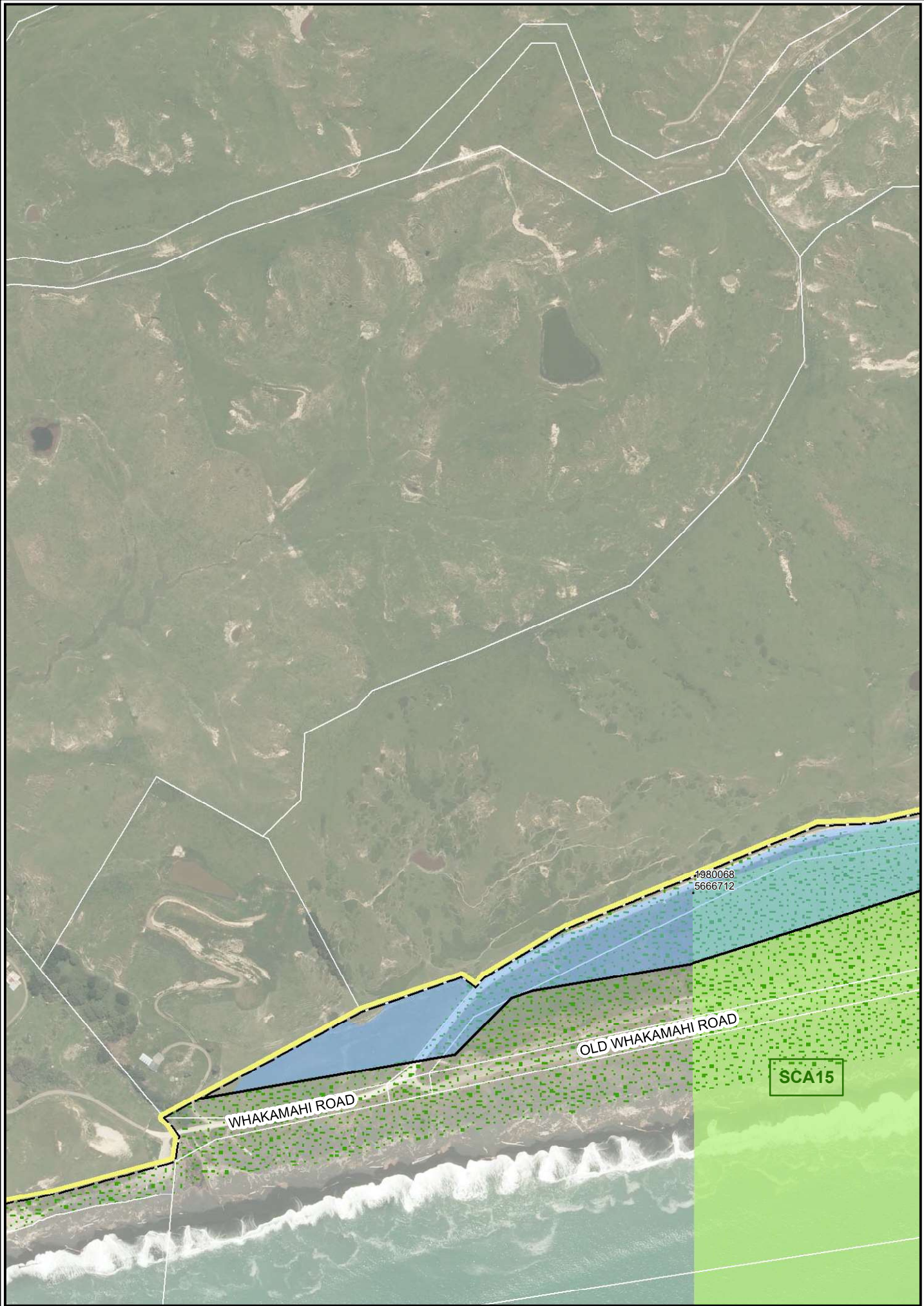


Regional Coastal Environment Plan
Approximate location: Wairoa River mouth East









Regional Coastal Environment Plan
Approximate location: Whakamahi West

