



## Executive Summary

This is the Executive Summary to the full Assessment of Effects on the Environment (AEE) Report. This Executive Summary has been prepared so that it can also be read as a stand-alone summary document.

### 1. Introduction (Section 1 of this AEE)

The projected growth in the Ruakaka and One Tree Point area is of a scale that necessitates Whangarei District Council (WDC) to plan for, and implement, a medium to long-term solution that will cope with significantly increased amounts of wastewater generated from the area. To meet this growth substantial wastewater treatment and disposal facilities are required. These new facilities are referred to as the 'Proposed Scheme'.

The 'Proposed Scheme' will be a critically important part of the infrastructure as it contributes to the health, safety and well-being of the residents, visitors and business of the Ruakaka area. It will support and underpin the area's growth and economic development.

### 2. This AEE and Companion / Support Documents (Sections 1 to 19 of this AEE)

This Assessment of Effects on the Environment (AEE) Report has been prepared in accordance with Section 88 and the Fourth Schedule of the Resource Management Act 1991 (RMA). The Report also takes into account provisions of the Local Government Act 2002.

Two Companion Documents accompany this AEE. These are:

- Ruakaka Wastewater Long-Term Resource Consents Project Cultural Impact and Assessment Report, prepared by Patuharakeke Te Iwi Trust Board (Inc), 3 May 2009, commissioned by Whangarei District Council.
- Kepa M and Pirihi, L – 'Convincing a Marae-Based Organisation in a Rural Area to Support a Government Agency's Application for Resource Consents to Itself' – presented at the 'Critical and Sensitive Research Issues Symposium', Christchurch, 15-16 November 2010.

This documentation is all part of what is required to provide in support of its resource consent applications for the 'Proposed Scheme', including treated wastewater disposal to land, beneficial reuse and the construction and use of an offshore ocean outfall in the Bream Bay. Forty-one (41) Support Documents supply additional information on key aspects of these resource consent applications and AEE. Each Support Document covers a separate investigative task related to this wastewater consents project.

A cross reference summary to the provisions of the Fourth Schedule of the RMA is included at the end of this Executive Summary. This summary also includes a number of summary tables from the AEE that relate to the effects assessment, both potential and actual adverse and positive (beneficial) effects.

### 3. Project Structure and Project Advisory Group (Section 2 of this AEE)

*At the outset of this Project WDC set the overall aim to:*

*"To work in partnership with the community and tangata whenua to obtain the necessary long-term resource consents for the 'Proposed Scheme'. The 'Proposed Scheme' shall encompass a high level of public health and environmental protection and be the best practicable option for Ruakaka's future wastewater management that is in keeping with sustainable management principles and practices."*

To assist in achieving this objective a Project Advisory Group (PAG) was set up by WDC to ensure that thorough, objective and appropriate investigations of all options were undertaken, taking account of community concerns.



Membership of the PAG comprised representatives from the following organisations:

- Whangarei District Council (WDC);
- Department of Conservation (DOC);
- Northland Regional Council (NRC);
- Northland District Health (NH); and
- Bream Bay Land Owners Association (BBLOA).

#### **4. Project Objectives (Section 2 of this AEE)**

In order to advance the wastewater consent project, achieve a robust decision making process and to meet Whangarei District Council's (WDC) statutory obligations it was considered important that Project Objectives be developed. The PAG, Project Management Group and the Patuharakeke Te Iwi Trust Board took a lead role in development of the Project Objectives.

A key function of the PAG was the setting of Project Objectives. The PAG activities were completed in May 2008 when a Preferred Scheme was identified and presented to, and accepted by the Works and Services Committee of the WDC on 13 August 2008.

A Project Management Group consisting of Council Officers and Consultants managed the overall development of the project.

An 'Overall Objective' and separate 'Environmental', 'Social', 'Economic' and 'Tangata Whenua' objectives were set. This approach follows that of the Local Government Act 2002 in terms of the purpose of local government and its over arching plank of the four well beings. The approach also well meets the purpose of the RMA. The Project Objectives are set out below.

#### **WDC Ruakaka Wastewater Treatment Plant Consent Project Project Objectives**

##### Overall Objective

- To work in partnership with the community and tangata whenua to obtain the necessary long-term resource consents for the 'Proposed Scheme'. The 'Proposed Scheme' shall encompass a high level of public health and environmental protection and be the best practicable option for Ruakaka's future wastewater management that is in keeping with sustainable management principles and practices.

##### Environmental Objectives

- To protect the natural environment and in particular the soil and water quality of the land, Ruakaka River, Whangarei Harbour and Bream Bay and ensure these are not compromised.
- To ensure a high level of compliance with recreational, ecological and water quality standards and guidelines, and Regional and District Planning requirements.
- To promote the efficient use and development of natural and physical resources, and the sustainable reuse of wastewater products.
- To minimise energy use and the emission of greenhouse gases and any other adverse effects on climate change as far as is practicable.

##### Social Objectives

- To ensure that the Ruakaka Wastewater Scheme achieves the greatest practicable protection of public health.



- To provide a suitable wastewater system which will maximise the uptake of the services provided to the existing and growth's communities.
- To work in partnership with the Project Advisory Group (PAG), the community and key stakeholders to achieve a good understanding of this Project, so as to enable genuine and effective consultation.

Economic Objectives

- To provide an economically sustainable future 'Proposed Scheme' which will match the anticipated growth in the area, – i.e. affordable for both the existing and growth communities now and in the future.
- To ensure the optimum economic use of the existing infrastructure.
- To promote outcomes that ensure sufficient flexibility to adopt appropriate technology and more sustainable solutions in the future, including treated wastewater reuse, where they provide more effective solutions.
- To apply appropriate technology that will protect public health and meet environmental standards and tangata whenua and community aspirations while achieving lowest whole of life costs.

Tangata Whenua Cultural Objectives

- To recognise and provide for the special role and relationships that Maori have as tangata whenua.
- To work in partnership with tangata whenua to share knowledge and achieve a good understanding of this Project, so as to enable genuine and effective consultation and allow knowledge sharing.
- To promote widespread community awareness and concern for the land and water-based resources and taonga including kaimoana, fisheries, native birds and wildlife, the foreshore, seabed and surrounding estuaries, and indigenous flora and fauna of Te Rohe o Patuharakeke Hapu.

## **5. Consents Strategy and Consents and Other Approvals Needed (Section 1.5 of this AEE)**

As long term (35 year duration) consents are being applied for by WDC for the key components of the 'Proposed Scheme', a Consents Strategy has been developed that allows sequential staging of components of the Scheme over time consistent with the wastewater needs resulting from the projected growth. This Strategy involves efficient use of the existing treatment facilities and land application of treated wastewater in the immediate and short term with the proposed new treatment plant (WWTP) and offshore ocean outfall components being soakage staged as required. WDC currently holds two discharge consents to discharge via soakage treated wastewater on land designated as DW4 and for an air discharge. The existing discharge consent also allows for discharge (via soakage) on adjacent conservation Crown property, however this does not currently occur. WDC also has an agreement to use adjacent private property (Keith Block) for the discharge of wastewater to land.

WDC is also applying for three concessions from the Department of Conservation (DOC) for pipelines and associated structures to Rama Road and into Bream Bay and to dispose of treated wastewater on Crown land. Amongst other approvals and consents, WDC will also apply for authorities under the Historic Places Trust, along with any necessary land use consents for earthworks and works within the coastal hazard zone from WDC and/or NRC when more precise design and construction details are known.



Whangarei District Council		
Ruakaka Wastewater Long-Term Consents Project		
Schedule of Resource Consents Applied for from the Northland Regional Council		
Type of Resource Consent Applied for		Existing Consent
	<b>Ruakaka Wastewater Treatment Plant (WWTP)</b>	
1	Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.	
2	Discharge permit for the discharge (via soakage) of an annual average of 660 cubic metres per day of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant, being Zone 3 (DW4 in the Whangarei District Plan).	CON20040415501 (01) Zones 3, 6 and 7
3	Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.	CON20040415501 (02) Zones 3, 6 and 7
	<b>Roger Hall Memorial Park</b>	
4	Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.	
	<b>Rama Road Block</b>	
5	Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.	
6	Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.	
	<b>Ocean Outfall</b>	
7	Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.	
8	Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.	
9	Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.	

## 6. Area Served by the 'Proposed Scheme' and Wastewater Assessments (Section 4 of this AEE)

The area to be served by the 'Proposed Scheme' includes all residential, businesses, industrial and primary and local service areas included for in both WDC's current District Plan and WDC's Marsden Point Ruakaka Structure Plan 2008 Plan 6, Land Use Proposals. Additionally it is planned that the Waipa wastewater will be conveyed to the Ruakaka Scheme in 2026.

Extensive work has been undertaken projecting the future wastewater flows, volumes and contaminant loads. The recent revised projections for the average dry weather flows/volumes (ADWF) are set out in the Table below.



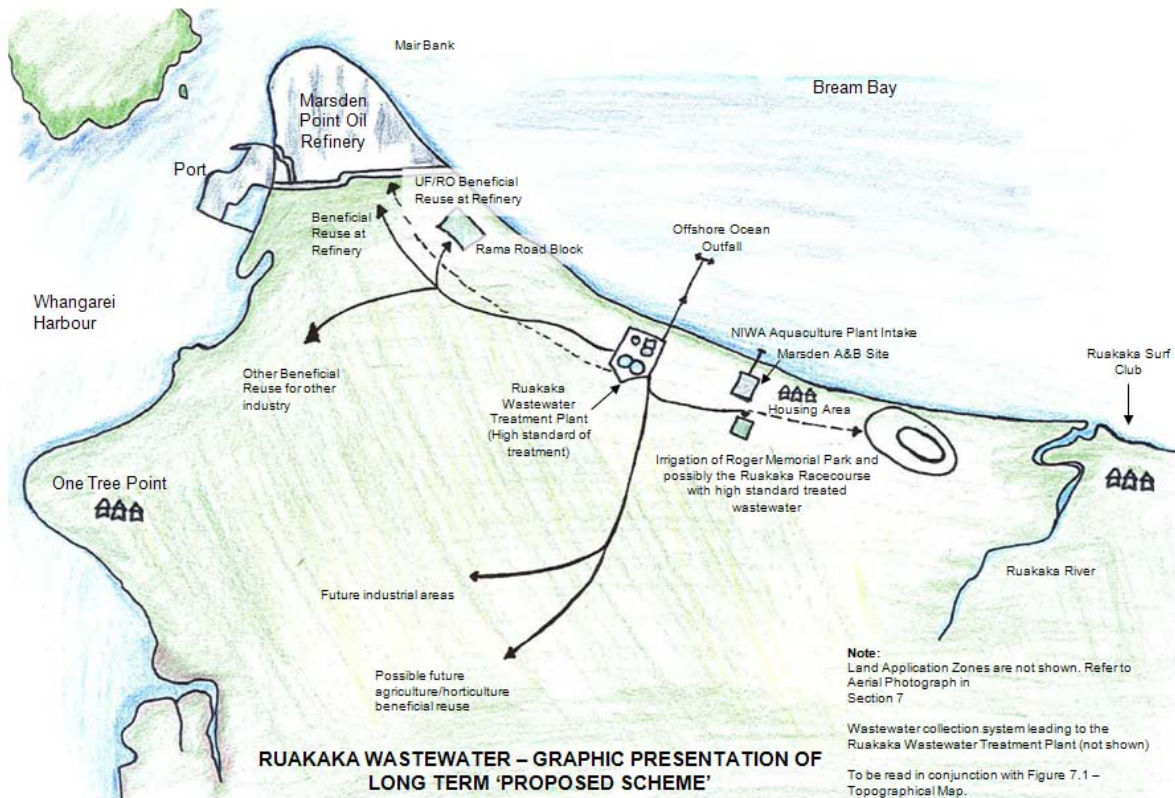
Expected Growth: Usually Resident	2011	2016	2021	2026	2031	2036	2041	2046	2051	2056	2061
<b>Medium Business</b>											
Flow (m <sup>3</sup> /d)	645	1,886	2,864	4,304	5,711	7,118	8,524	9,953	11,367	12,782	14,196
<b>High Growth: Usually Resident</b>											
<b>High Business</b>											
Flow (m <sup>3</sup> /d)	687	2,931	4,534	7,668	10,279	12,888	15,529	15,792	16,061	16,739	16,974

The 'High Growth' is a worst (highest) case of growth and has been used for the environmental effects studies, while the 'Expected Growth' is considered to be more realistic and is used for infrastructure planning and associated phasing in (and out) of the respective resource consents being applied for.

**7. 'Proposed Scheme' and 'Ruakaka Wastewater Strategy' (Section 4 of this AEE)**

The development of the 'Proposed Scheme' first began in 2007 soon after inception of this Resource Consents Project. Stage 1 and the first part of the Stage 2 Project lead to the identification firstly of a 'Preferred Scheme'. Further investigation and consultation on the 'Preferred Scheme' then lead into the development and definition of the 'Proposed Scheme' and associated 'Ruakaka Wastewater Strategy'.

The diagram below graphically shows the 'Proposed Scheme'. The following schematic diagram depicts the 'Ruakaka Wastewater Strategy', which underpins the ongoing development and operation of the 'Proposed Scheme'.



The key components of the 'Proposed Scheme' are:

**Component 1 - Wastewater Inputs Management**

This includes:

- Water Conservation Measures
- Water Demand Management
- Environmental and Engineering Standards



- Trade Waste Control
- Infiltration and Inflow Management

### **Component 2 – Wastewater Collection System**

### **Component 3 – Continued Use of the Existing Oxidation Pond, Wetland Treatment Plant and Ground Soakage System until around 2016**

### **Component 4 – Wastewater Treatment – A New High Standard of Wastewater Treatment**

- The proposed new wastewater treatment plant is to be located on the existing designated wastewater treatment plant site in Ruakaka. The plant will be a modern, best practice, secondary treatment plant with UV disinfection and probable filtration of the highly treated wastewater.
- The new WWTP will produce a high standard of wastewater treatment. WDC's target standard of treatment is set at 5.5.10.10. These numbers refer to concentrations of Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Total Nitrogen (TN) and Faecal Coliforms (FC). BOD, TSS and TN are set as median concentrations in mg/l (g/m<sup>3</sup>) and FC as median number of organisms (cfu) per 100/ml of sample.
- Contingency Wastewater Storage Management. The use of the existing oxidation ponds, once the new WWTP is commissioned, as contingency storage ponds provides a unique opportunity for management of excess wet weather inflows and out-of-consent (treated) wastewater.

### **Component 5 – Land Application of Treated Wastewater for the Short- and Medium-Term**

- This involves a number of sites or zones in or around the wastewater treatment plant site and the nearby Rama Road Block owned by WDC. These are shown in the marked up photography below.

### **Component 6 – Beneficial Reuse of Treated Wastewater**

- The first and major component of this is the proposed reuse of 2000 m<sup>3</sup>/day treated wastewater (treated to a very high standard) by the New Zealand Refining Company. This will involve an ultra filtration/reverse osmosis (UF/RO) advanced treatment plant module that further treats to a very high standard the municipal (Ruakaka) treated wastewater.

### **Component 7 - Offshore Ocean Outfall System**

- This key future component of the 'Proposed Scheme' consists of an outfall of approximately 3,000m in length located in Bream Bay offshore from the Ruakaka Wastewater Treatment Plant site. The investigations into the location of the outfall (which involved an assessment of 22 locations) involved consideration sensitive receptors including the seawater intake of the NIWA Bream Bay Aquaculture Park, the Mair Bank shellfish beds area and the Ruakaka surf club area.

The 'Ruakaka Wastewater Strategy' is based on an integrated and holistic approach to future wastewater management that meets a wide range of objectives and drivers in terms of provision of more sustainable wastewater management in the short, medium and longer-term.

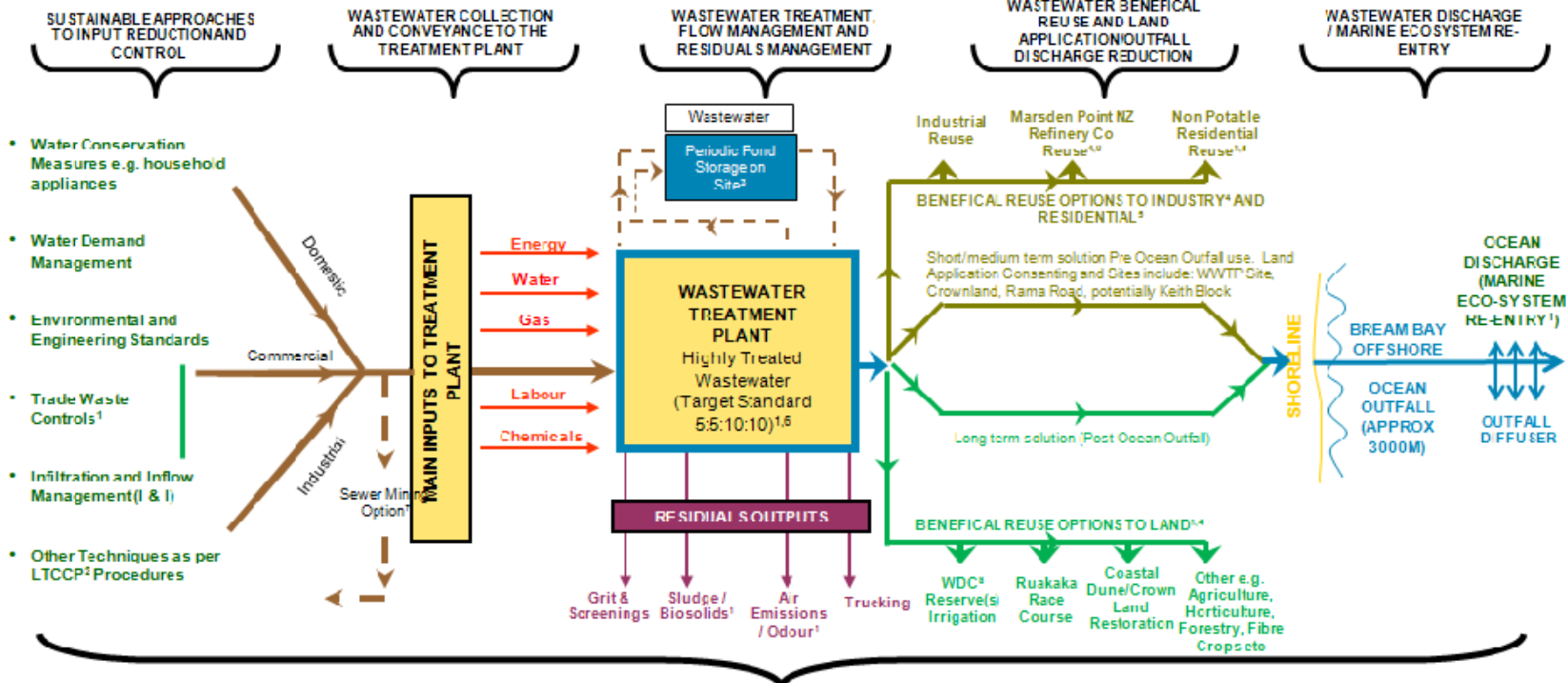
Further development and implementation of the Strategy and Scheme over time will go hand in hand with periodic reviews of the Development, Technology and Environmental / Monitoring Review Conditions as suggested by WDC and included in the consent applications.



WHANGAREI DISTRICT COUNCIL – RUAKAKA WASTEWATER LONG TERM CONSENT PROJECT  
DEVELOPMENT OF A “WASTEWATER STRATEGY” AND PROPOSED SCHEME

Issue Date  
August 2010

**SCHEMATIC DIAGRAM**



THE “PROPOSED WASTEWATER SCHEME” IS UNDERPINNED BY THE “RUAKAKA WASTEWATER STRATEGY”. THIS STRATEGY WILL ENCOMPASS ‘HOLISTIC AND INTEGRATED’ APPROACHES TO WASTEWATER MANAGEMENT THAT WILL BE REFLECTED THROUGH THE WHANGAREI DISTRICT COUNCIL’S PROPOSED LTCCP<sup>2</sup>, WASTEWATER ACTIVITY MANGEMENT PLANS AND RESOURCE CONSENT CONDITIONS.

1. Monitoring WDC’s and compliance
2. LTCCP – Long Term Council Community Plan
3. Storage Ponds for:
  - Unplanned and emergency events
  - Excessive wet weather flow
  - WWTP and discharge operation optimisation
  - Emergency toxic spill management
  - Out of specification treated wastewater
4. Additional advanced treatment to be added if required for specific reuse options e.g. UF/RO treatment for NZ Refinery
5. Non potable reuse residential (toilets and garden watering). This is shown as a possible longer term future reuse option only
6. The target highly treated wastewater standard of 5:5:10:10 is the median level of BOD, Suspended Solids, Total Nitrogen (all in g/l) and faecal coliforms (Indicator bacteria) in clu/100ml of sample
7. Sewer mining involves withdraw from a sewer of the untreated wastewater and treating it on the industrial (or other site) for reuse, discharging waste products back to the sewer.
8. Roger Hall Memorial Park
9. UF/RO Reject Water disposal options not shown refer to AEE.



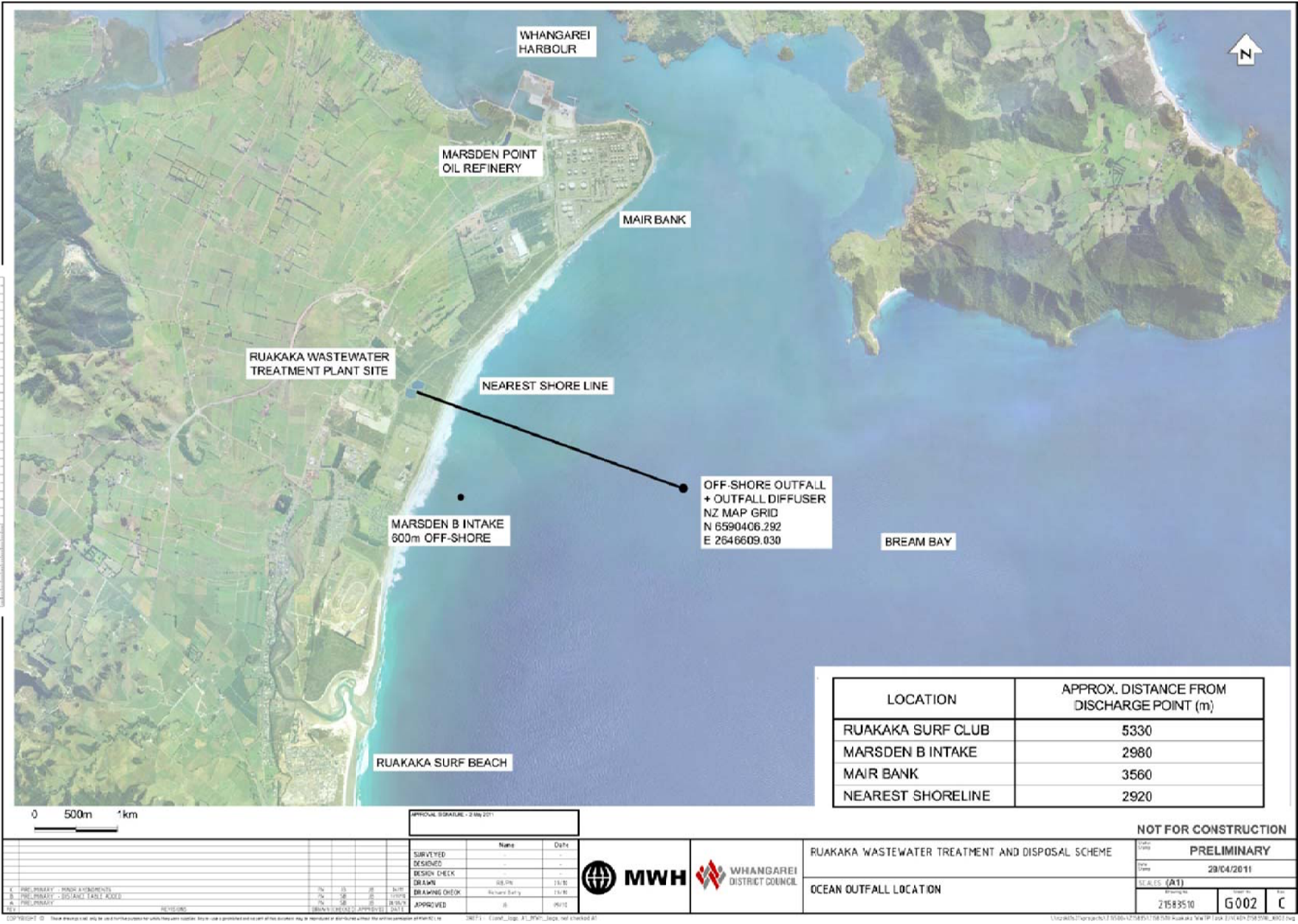
Whangarei District Council



Whangarei District Council



**WHANGAREI DISTRICT COUNCIL**  
 Ruakaka Wastewater Long-Term Consents Project  
 Assessment of Effects on the Environment and  
 Resource Consent Applications – Application Version

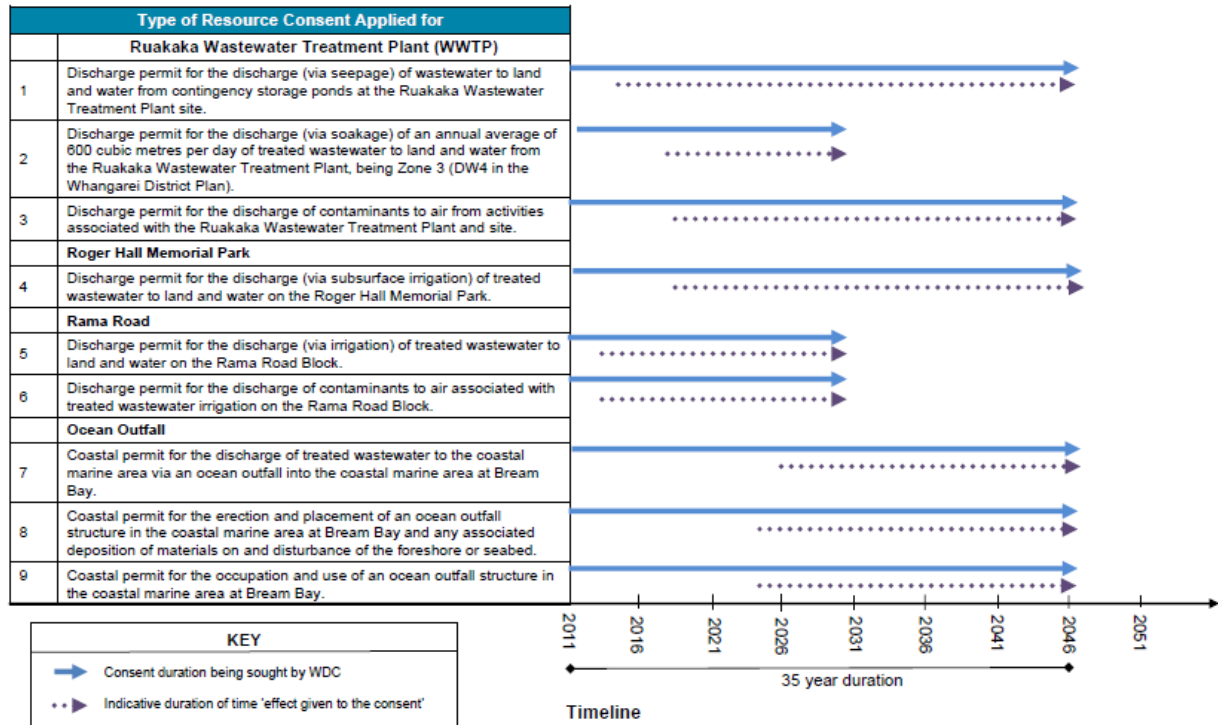






### 8. Staged Development of 'Proposed Scheme' (Section 4.8 of this AEE)

As introduced in Section 5 above, WDC have devised as part of the Consent Strategy a staged sequence for the provision of the necessary infrastructure works that are part of the 'Proposed Scheme' and associated resource consents phasing in (and out). This allows a planned and financially prudent approach to the progressive development for the long-term management of the increasing amounts of wastewater.



Note: Chart is based on consents issued in 2011. Consent durations will govern – not dates

The 'Proposed Scheme' includes for staging as envisaged to cover a 35 year (resource consent duration) period and beyond.

This staging can be grouped into two principal areas, namely:

1. The staging, by using modular construction of the new wastewater treatment plant (WWTP) once the existing oxidation pond system reaches its capacity expected to be around 2015/16.
2. The staging of the development of reuse and treated wastewater disposal and discharge facilities.
  - The phasing (or staging) of land disposal of treated wastewater by progressively using more zones (areas) of land including the Rama Road block until the consented capacity of all land blocks.
  - The provision of reuse water primarily to the New Zealand Refinery Company and also it is envisaged other users.
  - The delaying of the installation of the ocean outfall to facilitate the above staged modular approach to the WWTP requires there to be a sequence of timing for the resource consents being applied for. This sequence must ensure that appropriate lapse durations are known and lapse dates set.



## 9. Rationale for ‘Proposed Scheme’ and ‘Ruakaka Wastewater Strategy’ (Section 4 of this AEE)

The common components of the ‘Ruakaka Wastewater Strategy’ and the ‘Proposed Scheme’ have been grouped and assessed against the Project Objectives and other WDC Strategies and drivers in terms of the rationale for each of the component groupings. That extensive assessment can be summarised as follows:

Overall, WDC considers that the ‘Proposed Scheme’ and associated ‘Ruakaka Wastewater Strategy’ will meet the Project’s Overall Objective and associated Environmental, Social, Economic and Tangata Whenua Objectives and in doing so will:

- *Achieve a high level of public health protection.*
- *Achieve a high level of environmental protection.*
- *Ensure a ‘Best Practicable Option’ approach is implemented that is consistent with the interpretation of ‘Best Practicable Option (BPO) in the RMA.*
- *Keep with sustainable management practices and principles.*

Furthermore in developing the ‘Proposed Scheme’ and associated ‘Ruakaka Wastewater Strategy’ WDC considers it has met the objective of working in partnership with the community, stakeholders and tangata whenua.

WDC also consider that the ‘Proposed Scheme’ and associated ‘Ruakaka Wastewater Strategy’ are not only consistent with WDC’s Waste and Drainage Wastewater Strategy 2010, but also sets out a practicable and proactive implementation of this Strategy in the Ruakaka – One Tree Point and overall Bream Bay area.



## **10. Planning Instruments and Guidelines (Section 5 of this AEE)**

The resource consent applications have been prepared, processed and considered in accordance with relevant provisions of the Resource Management Act 1991 (RMA) and all relevant planning instruments and guidelines including the new (December 2010) New Zealand Coastal Policy Statement. Under these Regional Plans the resource consent applications must be assessed as Discretionary Activities.

## **11. Alternatives Considered (Section 6 of this AEE)**

Section 105 and the Fourth Schedule of the RMA require that alternatives (i.e. options) are considered. In response to this RMA requirement and as WDC also desired to ensure that all representative groups of alternatives have been appropriately considered, an extensive amount of work has been undertaken throughout the Project in assessing alternatives to cope with the extensive growth and associated wastewater generation projected for the medium- to long-term. The full AEE provides a comprehensive and chronological record of the assessment of the alternatives.

Alternatives within each Scheme Option have been considered under the following categories:

- Category 1: Alternatives for Wastewater Management
- Category 2: Alternatives for Producing Less Wastewater
- Category 3: Alternatives for Wastewater Treatment Locations & Wastewater Treatment Processes
- Category 4: Alternatives for Treated Wastewater Discharge and Reuse
- Category 5: Alternatives for Residuals Management
- Category 6: Alternatives for Wider Environmental Enhancement

The Stage 1 Project considered 24 disposal options that were evaluated against a range of factors. Beneficial reuse was seen as the highest ranked option, but it was noted that this was most unlikely to be the long-term solution for all the wastewater, as it could only deal with limited volumes of wastewater. From this evaluation four options were short listed as follows for further investigation in Stage 2 of the study.

- Option A – Land Disposal with Wet Weather Vent (overflow) to Water (Bream Bay, Whangarei Harbour or the Ruakaka River)**
- Option B – Ocean Outfall Discharge to Bream Bay**
- Option C – Discharge to Ruakaka River**
- Option D – Discharge to Whangarei Harbour**

Aspects of the alternative assessment that involved extensive investigations in the Stage 2 Project included the following:

- Beneficial Reuse Options; and
- Land Application/Land Disposal Options. In accordance with the Northland Regional Policy Statement relating to key policy in Section 17.4(b) land disposal is a preferred option that must be fully evaluated.
- Treated wastewater standard and treatment technologies.
- Ocean Outfall Location, which required an extensive oceanographic modelling assessment.

The findings of the wide ranging initial technical, scientific and planning investigations of the Stage 2 short-listed and refined scheme options has shown, that at that stage of the Project, the most appropriate scheme is Option B discharge to the ocean through an offshore outfall into Bream Bay.

Feedback from the Stage 2 consultation at that stage of the Project indicated some growing support for an ocean outfall option. In this respect it is acknowledged however that the position of tangata whenua is clear in that their preference is for all treated wastewater to be disposed of onto land if that is practical and sustainable over the long-term.



The four generic options and the additional four refined Stage 2 sub options were also assessed against the Project Objectives. This assessment identified that Option B, Ocean Outfall discharge into Bream Bay, with reuse opportunities; best met the Project Objectives when all factors were taken into account.

The preference for Option B, the Ocean Outfall to Bream Bay, with reuse opportunities, has been further confirmed and strengthened by the two following Stage 2, Task 2G activities, namely:

- a) The results of the high level risk assessment of the refined Stage 2 short-listed options which shows significantly less (potential) risks are associated with Option B than the other options; and,
- b) The results of the MWH Multi-Criteria Analysis (MCA) which also gives a very significant preference for Option B the ocean outfall.

Option B, the Ocean Outfall discharge into Bream Bay with reuse opportunities was first selected by WDC as the 'Preferred Scheme'. The further detailed technical and scientific investigations then focused on confirming and further refining the detailed assessment of an Ocean Outfall location. The 'Proposed Scheme' has now been developed to include a mix of land disposal, wastewater reuse and an ocean outfall in the long term to provide the required capacity over time. It is this 'Proposed Scheme' for which these resource consents and other approvals are being lodged.

## **12. Description of Environment (Section 7 of this AEE)**

The Project involved understanding the local environment from a physical, ecological, social, recreational, business, climatic, land use, economic and cultural perspective. This included the marine environment of Bream Bay and the adjacent Whangarei Harbour.

## **13. Assessment of Effects of Discharge of Treated Wastewater into the Bream Bay (Section 8 of this AEE)**

The proposed treated wastewater discharge to Bream Bay is one of the key outcomes of investigations, evaluations and consultation processes which the Whangarei District Council has undertaken over the last three years.

These investigations and the associated assessment of effects of the proposed treated wastewater discharge included the following:

- Characterisation of the treated wastewater discharge;
- Understanding the (treated wastewater) receiving Bream Bay marine environment and its recreational and commercial uses, social and cultural dimensions;
- Assessment of water quality and dilution and dispersion of the proposed treated wastewater discharge;
- Assessment of effects of the proposed discharge on recreation, shellfish gathering, nutrients, aquatic ecology, marine mammals, commercial aquaculture, recreational and commercial fishing; and
- Measures to mitigate, avoid or remedy potential and actual adverse effects.

This evaluation of potential effects of the proposed discharge of wastewater to Bream Bay through approximately 3,000m offshore outfall identifies a number of adverse effects on the receiving environment. These effects are considered to be no more than minor, other than for the tangata whenua cultural effect on mauri of the waters of Bream Bay.



<i>Adverse Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
<b>Water Quality: S107</b> <ul style="list-style-type: none"> <li>Visual &amp; aesthetic</li> <li>Effects on aquatic life (water temp, DO, pH, toxicity, EDCs, bio-accumulation)</li> </ul>	Minor at edge of 100m mixing zone Minor at edge of 100m mixing zone	S8.6.2 - S8.6.4 S8.6.8 - S8.6.14
<b>Contact Recreation</b> <ul style="list-style-type: none"> <li>Microbiological Water Quality</li> <li>Undesirable biological growths</li> </ul>	Minor at edge of 100m mixing zone Minor in Bream Bay	S8.6.5 - S8.6.6 S8.6.11
<b>Shellfish Gathering</b>	Minor at Mair Bank	S8.6.5 – S8.6.6
<b>Commercial Aquaculture</b>	Minor at aquaculture park water intake	S8.6.14
<b>Recreational &amp; Amenity Effects</b>	Minor at edge of 100m mixing zone	S8.6.6 – S8.6.7
<b>Maori Cultural and Spiritual Effects</b>	Although partly minimised and mitigated adverse effects still exist with the discharged of treated wastewater into the coastal marine environment.	S16

<i>Positive Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
Overall positive effect of having a safe water borne wastewater scheme.	Considerable positive effects.	Section 17.1

#### **14. Assessment of Effects of the Construction and Occupation of an Ocean Outfall (Section 9 of this AEE)**

It is proposed that these effects are managed in accordance with a Construction Management Plan. They are short term (during construction) and considered to be manageable providing appropriate procedures are undertaken. WDC has decided to adopt a trenchless construction technique by Horizontal Direction Drilling (HDD) or similar techniques for the land and beach section of the outfall pipeline. This will mean that there will be no, or minimal, disturbance of vegetation, sand dunes and the beach, and no need for beach access limitations in the vicinity of the outfall alignment.

#### **15. Assessment of Effects of Irrigation of Treated Wastewater onto Roger Hall Memorial Park (Section 10 of this AEE)**

This evaluation of potential adverse effects of the proposed sub soil irrigation of treated wastewater onto the Roger Hall Memorial Park identified some potential and actual adverse effects on the soils and groundwater surface. The magnitude and extent of these effects, taking into account the mitigation measures outlined in the previous section, are summarised below. There are also positive (beneficial) effects as summarised in the table below.



<i>Adverse Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
(Potential) contamination of soil and groundwater from nutrients, salts and other micro-pollutants.	Considered to be no more than minor.	Section 1.5
Potential for wastewater ponding if sub-surface irrigation system malfunctions – with associated public health risk.	Low risk, design and operational procedures will minimise risk – effect would be localised and short-term until problem rectified.	Section 10.1

<i>Positive Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
Beneficial reuse of treated wastewater to enhance turf health and thus playing experience.	Healthy turf (grass growth on park playing surface).	Section 10.3.4
Reduction in volume to be discharged to land application areas and ocean outfall.	Reduces any adverse effects.	Sections 8 and 11
Probable positive effect from a Maori cultural perspective, as this is land application.	Refer tangata whenua sections of Report.	Sections 10.3.7 and 16
Overall positive effect of having a safe water borne wastewater scheme.	Considerable positive effects.	Section 17.1

#### **16. Assessment of Effects of Irrigation of Treated Wastewater onto Rama Road Block (Section 11 of this AEE)**

This evaluation of potential and actual adverse effects of the proposed irrigation of treated wastewater onto the Rama Road Block identifies a number of potential and actual adverse effects on the soils, surface, and groundwater and vegetation of the area. These adverse effects are assessed to be no more than minor for both the oxidation pond effluent and also the high standard WWTP treated wastewater, both with and without the Reverse Osmosis (RO) salty reject water being blended with this treated wastewater. The magnitude and extent of these effects, taking into account the mitigation measures outlined in the previous section, are summarised below. This summary also includes the positive effects.

<i>Adverse Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
Potential groundwater contamination.	From work on existing Ruakaka wastewater disposal at Zone 3 no significant effects are predicted on the water quality along the Bream Bay beach.	Sections 11.5 and 11.4.3
Some potential for public health risk associated with groundwater seepage to the Bercich Drain.	Some potential risk which is expected to be low. Monitoring will assist to determine the level of risk. If found significant, changes can be made to the irrigation regime.	Sections 11.5 and 11.4.3



<i>Adverse Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
Public health risk to beach users from treated wastewater seepage to ocean.	Risk assessed as minimal.	Sections 11.5 and 11.4.3
Risk to vegetation.	Acceptably low. Note: RO blended treated wastewater will not be irrigated on the sand kanuka.	Sections 11.5, 11.5.3 and 11.4.3
Build up of salts and contaminants in soil.	Acceptable as monitoring and trigger levels will be applied.	Section 11.5.2
Air discharges (odour and aerosol)	Refer Section 13.	Section 13

<i>Positive Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
Assists in prudent financial planning by allowing additional time before an ocean outfall is required.	Significant positive financial effect.	Sections 4.9, 4.11 and 2.3
Will assist in establishing buffer zone vegetation along the coastal boundary with associated dune enhancement.	Amenity and landscape value enhanced.	Section 11.3.4
Overall positive effect of having a safe water borne wastewater scheme.	Considerable positive effects.	Section 17.1

### 17. Assessment of Effects of Air Discharges (Sections 12 and 13 of this AEE)

The proposed WWTP will be designed and operated following best practice that is focused around minimising the generation and release of odour and other air discharges. Odour modelling of the proposed WWTP has highlighted that there should not be an objectionable odour beyond the designated treated plant site boundary. The management and treatment of odour from key process components such as the inlet works and sludge handling facilities. Notwithstanding this, the assessment of effects for air discharge for the Ruakaka Wastewater Treatment Plant has identified the following as summarised below.

<i>Adverse Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
Objectionable or offensive odour beyond the designated treatment plant boundary.	Any localised and short-term odour could be mitigated if it occurs.	Section 12.2.6
Compromise of the mauri of the air – to tangata whenua.	Maybe difficult to assess.	Section 16.

<i>Positive Effect</i>	<i>Magnitude and Extent of Effect</i>	<i>Relevant Section in this AEE</i>
Overall positive effect of having a safe waterborne wastewater scheme.	Considerable positive effects.	Section 17.1.



The assessment of effects for the arising irrigation of treated wastewater on the Rama Road site has concluded that the potential for odour nuisance potential outside the site boundary is low, and if it did occur management techniques are ready available to rectify the matter. Similarly potential aerosol effects from spray irrigation are considered to be low providing appropriate design and operational techniques are followed, furthermore, if any problems arise management techniques including changing to non-spray irrigation are available.

#### **18. Assessment of Effects to Tangata Whenua (Sections 16 of this AEE)**

The assessment has identified that the discharge of wastewater into Bream Bay does not fit comfortably in the traditional Maori view of natural processes. This is due largely to the man made nature of the discharge process and the quantities of discharge into the coastal marine area. Local iwi have strongly voiced their concerns about the potential impacts on the mauri of both the air and water in Te Poupouwhenua (Marsden Point/Ruakaka area).

Tangata whenua's preferred option for discharge of wastewater in Te Poupouwhenua is to land; therefore the consents for discharge to Rama Rd and Roger Hall Memorial Park are **not** likely to be opposed by iwi. In addition to this, reuse options at the Marsden Point Refinery are strongly supported, in fact any option that limits discharge to water is generally preferred by iwi.

Ongoing and constructive consultation will continue around both what the mitigation options might be and how they may be applied. The suggested consent conditions are proposed at this stage of the process to avoid remedy or mitigate adverse effects on cultural values that have been identified through the consultation undertaken to date.

#### **19. Positive Effects, Holistic and Sustainable Approaches (Section 17 of this AEE)**

Under the RMA and Local Government Act it is appropriate that an integrated and holistic approach is followed to ensure that environmental, social, cultural and economic matters are all addressed in this Project. Considerations that are addressed under these wider categories include affordability and economic effects, technological capability, energy considerations, climate change, sustainable approaches and cumulative effects generally.

There are many positive effects associated with both the existing Ruakaka Wastewater Scheme and the 'Proposed Scheme' that provide for the Ruakaka community's including its businesses and industries well-being, health and safety, in addition to the wellbeing of the entire Whangarei District and Northland Region. The full AEE document discusses some ten groupings of positive effects, the most significant and fundamental of these being the provision of safe and reliable public health sanitation for the present and future community, business and industry of the Ruakaka and One Tree Point area.

A key consideration and driver for the Project as included in the Overall Project Objective, is the consideration of Best Practicable Option (BPO) approach in determining the 'Proposed Scheme' and associated 'Ruakaka Wastewater Strategy'.

#### **20. Consultation (Section 18 of this AEE)**

To ensure that the consultation on this Wastewater Long-Term Consent Project was carried out effectively, and in a manner that actively engaged those persons and organisations interested in or affected by the Project, a Consultation Approach (strategy) was developed. A full copy of this document entitled 'Ruakaka Wastewater Stage 2, Consultation Approach and Programme Update' is contained in the Consultation Record (Support Document No. 41).

The parties consulted with are grouped as follows:

- Tangata whenua,
- Key stakeholders; including BBLOA, NIWA and their commercial tenants, business and local community groups and recreational organisations;
- Statutory bodies;
- Wider community.





A wide range of consultation activities were undertaken including open days, newsletters, providing information on WDC's website, one on one stakeholder meetings, and hui. The PAG played an important role in terms of advice on consultation activities during the earlier part of the Project.

Consultation continued periodically throughout the project development with a final round of consultation based on the Consultation Draft AEE being undertaken in the November 2010 to May 2011 period. This final round of consultation allowed stakeholder parties to further consider the then Draft Proposed Scheme and Ruakaka Wastewater Strategy and WDC's suggested resource consent conditions that would be submitted as part of the consent applications and Application Version of the AEE.

The consultation section of this AEE includes details of the key matters identified in that final consultation and along with WDC's responses to those matters.

## **21. Mitigation of Adverse Effects (Section 8-16 of this AEE)**

As indicated in respective sections above, there are a number of minor adverse physical effects. These are greatly outweighed by the substantial benefits of the 'Proposed Scheme'. Key components of the 'Proposed Scheme' that are important parts of the mitigation include:

- Development and on-going implementation of the 'Ruakaka Wastewater Strategy'.
- The beneficial reuse of highly treated wastewater by industry, and for subsurface irrigation of WDC's Roger Hall Memorial Park and other possible purposes.
- The land application of treated wastewater for the short and medium term until the limited of consented land disposal capacity is reached and/or consents in place and further approvals expire.

The physical (infrastructure) components of the Scheme in terms of their proposed design and operation including:

- the high standard of treated wastewater and odour management that WDC has decided on. This will require a best practice secondary treatment plant with UV disinfection and probably filtration, and
- the long offshore ocean outfall into Bream Bay (approximately 3,000m long) located to ensure protection of sensitive shoreline and other areas in the Bay; and
- the use of present oxidation ponds once decommissioned when the new wastewater treatment plant is commission, as contingency storage ponds at the treatment plant site.

Further mitigation measures include:

- The sequencing of infrastructure implementation that future proofs the growth of Ruakaka and One Tree Point area and also spreads the large financial requirements out over time.
- The suggested suite of monitoring, reporting and review provisions that WDC propose are included in the nine new resource consents being sought.
- Use of management plans for the treatment plant, contingency storage ponds, Roger Hall Memorial Park treated wastewater sub-surface irrigation, Rama Road treated wastewater irrigation and the ocean outfall construction.

Suggested special resource consent conditions that will assist are being developed. They are likely to include:

- involvement of tangata whenua, other stakeholders including the NIWA Bream Bay Aquaculture Park (seawater intake) and the community at large in protecting, managing and enhancing the natural environment and Bream Bay environs; and
- the capacity building with tangata whenua and the community.



## **22. Suggested Resource Consent Conditions (Section 19 of this AEE)**

An extensive set of specific conditions have been offered by WDC for each of the nine resource consents which are being applied for. In addition, a number of special resource consent conditions are suggested by WDC in respect of some key stakeholder parties. These parties include:

- Patuharekeke Te Iwi Trust Board (Inc),
- Ruakaka Wastewater Stakeholder Liaison Group
- NIWA and their commercial tenants (for the Bream Bay Aquaculture Park)
- Bream Bay Land Owners Association (BBLOA)

In addition an all embracing WDC Development, Technology and Environmental / Monitoring Review Condition is also being offered by WDC.

These WDC offered consent conditions have been structured to ensure the potential and actual adverse effects of the wastewater treatment plant and the treated wastewater disposal and discharges and associated structures are appropriately avoided, remedied or mitigated for the duration of the consents applied. These conditions also include management plan approaches, targeted and rigorous monitoring, reporting, reviewing, and as part of the special resource consent conditions involvement of tangata whenua and other key stakeholders. It is envisaged that a number of these WDC offered special resource consent conditions will be further refined and developed during the statutory resource consent process.

## **23. Overall Conclusion (Section 19 of this AEE)**

The present Ruakaka Wastewater Scheme and the 'Proposed Scheme' is a critically important and significant part of the infrastructure of the Ruakaka area as it contributes significantly to health, safety and well-being of the Ruakaka, One Tree Point and wider Bream Bay residents, visitors to the area and business. It will support and underpin the area's growth and economic development. Accordingly, there are many positive (beneficial) effects associated with both the existing Ruakaka Wastewater Scheme and the 'Proposed Scheme'.

This Wastewater Long-Term Resource Consents Project has involved extensive investigations, evaluation and consultation over a four year period. This work has allowed WDC working with stakeholders, the wider community and tangata whenua to determine a 'Proposed Scheme' and associated Ruakaka Wastewater Strategy that when implemented in a staged manner to match the growth predictions for the area and will achieve a high level of environmental protection. Also through its staging the 'Proposed Scheme' will be affordable to the ratepayers and business served by the scheme.

The assessment of the 'Proposed Scheme' and 'Ruakaka Wastewater Strategy' is considered to meet the Best Practicable Option (BPO) in accordance with the provisions of the RMA. The 'Proposed Scheme' results in a number of significant positive or beneficial effects, the key positive effect being the provision of a safe and reliable public health sanitation for the community, business and industries of the Ruakaka and One Tree Point area.

There are number of minor (physical) adverse effects of the 'Proposed Scheme'. These have been outlined and evaluated associated with the construction, and operation of the components of the 'Proposed Scheme'. These include the wastewater treatment plant and the land disposal areas in the short to medium term, wastewater reuse and the offshore ocean outfall into the Bream Bay in the medium to long-term.

Tangata Whenua have identified a number of potential adverse effects most of which are considered to be mitigated to a reasonable level. It is acknowledged that there are adverse cultural and spiritual effects to tangata whenua associated with the mauri of the water from the discharge to the Coastal Marine Area of the Bream Bay and the mauri of the air from air discharge associated with the wastewater treatment plant.



## Cross-Reference to the Provisions of the Fourth Schedule of the Resource Management Act

1. Matters that should be included in an assessment of effects on the Environment	Relevant Section in this AEE
(a) A description of the proposal	1.5, 4.4, 4.5, 4.6
(b) Description of any possible alternative locations or methods for undertaking the activity	6
(c) Repealed	--
(d) An assessment of the actual or potential effect on the environment of the proposed activity	8,9,10,11,12,13,14,15
(e) Hazardous risk assessment	8,9,10,11,12,13,14,15
(f) Discharge of contaminants	8,10,11,12,13,14,15
(f)(i) The nature of the discharge and the sensitivity of the proposed receiving environment to adverse effects	8,9,10,11,12,13,14,15
(f) (ii) Any possible alternative methods of discharge, including discharge into any other receiving environment	6
(g) Mitigation measures (safeguards and contingency plans where relevant) to help prevent or reduce the actual or potential effect	8,9,10,11,12,13,14,15
(h) Consultation undertaken, and any response to the views of those consulted:	18
(i) Monitoring	3.4, 19

2. Matters that should be considered when preparing an assessment of effects on the Environment	Relevant Section in this AEE
(a) Any effect on those in the neighbourhood and, where relevant, the wider community including any socio-economic and cultural effects	7.6, 17, 16
(b) Any physical effect on the locality, including any landscape and visual effects	8,9,10,11,12,13,14,15,17
(c) Any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity	8,9,10,11,12,13,14,15,17
(d) Any effect on natural and physical resources on plants or animals and any physical disturbance of habitats in the vicinity	8,9,10,11,12,13,14,15,17
(e) Any discharge of contaminants into the environment, including any unreasonable emission of noise and options for the treatment and disposal of contaminants	8,9,10,11,12,13,14,15
(f) Any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations	8,9,10,11,12,13,14,15,17

# Application Forms

# Resource Consent Application Forms

## APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

### APPLICATION 1

#### Discharge Permit Pursuant to Section 15 of the Resource Management Act 1991 for the Discharge of Wastewater to Land and Water

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148 applies for the following type of resource consent:

Discharge permit for the discharge (via seepage) of up to 63 cubic metres per day of wastewater of variable quality mixed with rainwater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Whangarei District Council is the owner of Sec. 65, Blk VII Ruakaka Survey District, being the Ruakaka Wastewater Treatment Plant.

**2. The location to which this application relates:**

The location of the discharge is at the Ruakaka Wastewater Treatment Plant Site at Sec 65 Blk VII Ruakaka Survey District being SO 57225.

The location is more fully described in Sections 3.2, 4, and 15 of the Assessment of Effects on the Environment ('AEE') that is filed in support of this application.

**3. Duration of consent sought:**

The duration sought for this consent is 35 years.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.
- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.
- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.

- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.
- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.
- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

## 5. Effects on the Environment:

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Section 15).

In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

## 6. Information required by regional plan:

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Water and Soil Plan for Northland.

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On behalf of Whangarei District Council

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Date

### Address for Service:

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148

# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 2

### Discharge Permit Pursuant to Section 15 of the Resource Management Act 1991 for the Discharge of Treated Wastewater (via soakage) to Land and Water

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148 applies for the following types of resource consent:

Discharge permit for the discharge (via soakage) of an annual average of 660 cubic metres per day of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant, being Zone 3 (DW4 in the Whangarei District Plan).

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Whangarei District Council is the owner of Sec. 65 Blk VII Ruakaka Survey District.

**2. The location to which this application relates:**

The location of the discharge is at the Ruakaka Wastewater Treatment Plant Site at Sec 65 Blk VII Ruakaka Survey District being SO 57225.

The location is more fully described in Section 3.2, 4 and 14 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 20 years.

A lapse period from issue of the permit until the expiry of Northland Regional Council Consent Number CON20040415501 is sought under section 125(1) of the Resource Management Act 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.
- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.
- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.
- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.
- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.

- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

## 5. Effects on the Environment:

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Section 7 and 8).

In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

## 6. Information required by regional plan:

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Water and Soil Plan for Northland.

## 7. Application to Replace an Existing or Expired Consent

This application for resource consent is in part to replace Northland Regional Council Consent Number CON20040415501.

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On behalf of Whangarei District Council

-----  
Date

### Address for Service:

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148



# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 3

### Discharge Permit Pursuant to Section 15 of the Resource Management Act 1991 for the Discharge of Contaminants to Air

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148, applies for the following type of resource consent:

Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Whangarei District Council is the owner of Sec. 65 Blk VII Ruakaka Survey District.

**2. The location to which this application relates:**

The location of the discharge is at the Ruakaka Wastewater Treatment Plant Site at Sec 65 Blk VII Ruakaka Survey District being SO 57225.

The location is more fully described in Sections 3.2, 4, and 12 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 35 years.

An extended lapse period from issue of the permit until the expiry of Northland Regional Council Consent Number CON20040415501 is sought under section 125(1) of the Resource Management Act 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.
- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.
- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.
- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.

- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

**5. Effects on the Environment:**

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Section 7 and 12). In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

**6. Information required by regional plan:**

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Air Quality Plan for Northland.

**7. Application to Replace an Existing or Expired Consent**

This application for resource consent is in part to replace Northland Regional Council Consent Number CON20040415501.

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On behalf of Whangarei District Council

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Date

**Address for Service:**

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148

# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 4

### Discharge Permit Pursuant to Section 15 of the Resource Management Act 1991 for the Discharge of Treated Wastewater to Land and Water

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148 applies for the following type of resource consent:

Discharge permit for the discharge (via subsurface irrigation) of up to 260 cubic metres per day of treated wastewater on a basis of irrigation when required to maintain turf health, from a trade premise, which may result in discharge of treated wastewater onto or into land and may enter water on the Roger Hall Memorial Park.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Whangarei District Council is the owner of Sec. 65 Blk VII Ruakaka Survey District.

**2. The location to which this application relates:**

The location of the discharge is the Roger Hall Memorial Park being Lot 1 DP396871 also known as 9 Takutai Place, Ruakaka.

The location is more fully described in Section 10 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 35 years.

An extended lapse period of 10 years is sought under section 125(1) of the Resource Management Act 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.
- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.
- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.

- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.
- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

## 5. Effects on the Environment:

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Section 4 and 8).

In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

## 6. Information required by regional plan:

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Water and Soil Plan for Northland.

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On behalf of Whangarei District Council

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Date

### **Address for Service:**

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148

# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 5

### Discharge Permit Pursuant to Section 15 of the Resource Management Act 1991 for the Discharge of Treated Wastewater to Land and Water

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148 applies for the following type of resource consent:

Discharge permit for the discharge (via irrigation) of up to 1,700 cubic metres per day of treated wastewater from a trade premise into or onto land which may result in discharge of treated wastewater onto or into land and may enter water on the Rama Road Block.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Whangarei District Council is the owner of Sec. 65 Blk VII Ruakaka Survey District.

**2. The location to which this application relates:**

The location of the discharge is the Rama Road Block being located at Lot 4 DP 419151.

The location is more fully described in Section 12 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 20 years. An extended lapse period of 10 years is sought under Section 125(i) of the Resource Management Act, 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.
- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.
- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.
- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.

- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

#### **5. Effects on the Environment:**

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Section 11 and 13).

In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

#### **6. Information required by regional plan:**

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Water and Soil Plan for Northland.

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On behalf of Whangarei District Council

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Date

#### **Address for Service:**

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148

# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 6

### Discharge Permit Pursuant to Section 15 of the Resource Management Act 1991 for the Discharge of Contaminants to Air

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148, applies for the following types of resource consent:

Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Whangarei District Council is the owner of Sec. 65 Blk VII Ruakaka Survey District.

**2. The location to which this application relates:**

The location of the discharge is the Rama Road Block being located at Lot 4 DP 419151.

The location is more fully described in Section 11 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 20 years. An extended lapse period of 10 years is sought under Section 125(i) of the Resource Management Act, 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.
- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.
- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.
- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.

- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

**5. Effects on the Environment:**

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Sections 11 and 13). In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

**6. Information required by regional plan:**

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Air Quality Plan for Northland.

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On behalf of Whangarei District Council

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Date

**Address for Service:**  
Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148



# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 7

### Coastal Permit Pursuant to Section 12 of the Resource Management Act 1991 for the Discharge of Treated Wastewater

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148 applies for the following type of resource consent:

Coastal Permit for an average dry weather discharge of treated wastewater of up to 16,000 cubic metre per day at an average dry weather flow of up to 185 litres per second and a peak wet weather flow of up to 740 litres per second to the coastal marine area via an approximately 3,000 metre long ocean outfall into the Pacific Ocean off Ruakaka Beach.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

The ocean outfall from which the treated wastewater is discharged is located in part of the coastal marine area being the seabed of Bream Bay. The subject seabed is vested in the Crown, C/- Department of Conservation, Northland Conservancy, PO Box 147, Whangarei 0140.

**2. The location to which this application relates:**

The point of discharge will be into the Pacific Ocean via an approximately 3,000 metre long ocean outfall located off the shoreline off Ruakaka map reference NZ07 N17 20 77. Co-ordinates in NZ Transverse Mercator for the end of outfall structure are approximately NZTM East 1736025.00 and NZTM North 6028848.00.

The location is more fully described in Sections 4 and 8, and Figure 4.7 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 35 years.

An extended lapse period of 15 years is sought under section 125(1) of the Resource Management Act 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.

- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.
- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.
- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.
- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

## 5. Effects on the Environment:

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Section 8 and 9).

In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

## 6. Information required by regional plan:

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Coastal Plan for Northland.

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On behalf of Whangarei District Council

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Date

### Address for Service:

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148

# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 8

### Coastal Permit Pursuant to Section 12 of the Resource Management Act 1991 for the Placement, Occupation and Use of an Ocean Outfall Structure

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148 applies for the following type of resource consent:

Coastal Permit for the erection and placement of an ocean outfall structure in, on or under the foreshore or seabed and any associated deposition of materials on and disturbance of the foreshore or seabed in the coastal marine area.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Part of the ocean outfall structure is located under the foreshore at Ruakaka Beach and on or under the seabed of Bream Bay. The subject foreshore and seabed is vested in the Crown, C/- Department of Conservation, Northland Conservancy, PO Box 147, Whangarei 0140.

**2. The location to which this application relates:**

The ocean outfall structure is located under the foreshore at Ruakaka Beach and on or under the seabed of the Pacific Ocean (Bream Bay) approximately perpendicular to the shoreline at Ruakaka Beach, map reference NZ07 N17 20 77. Co-ordinates in NZ Transverse Mercator for the end of outfall structure are approximately NZTM East 1736025.00 and NZTM North 6028848.00.

The location is more fully described in Section 4, 8 and 9 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 35 years.

An extended lapse period of 15 years is sought under section 125(1) of the Resource Management Act 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.
- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.

- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.
- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.
- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.
- Application 9: - Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.

## 5. Effects on the Environment:

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Sections 8 and 9). In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

## 6. Information required by regional plan:

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Coastal Plan for Northland.

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On behalf of Whangarei District Council

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Date

### Address for Service:

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148

# APPLICATION FOR RESOURCE CONSENT SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

## APPLICATION 9

### Coastal Permit Pursuant to Section 12 of the Resource Management Act 1991 for the Occupation and Use of an Ocean Outfall Structure

**TO: NORTHLAND REGIONAL COUNCIL**

**THE WHANGAREI DISTRICT COUNCIL**, Private Bag 9023, Whangarei 0148 applies for the following type of resource consent:

Coastal Permit for the occupation and use of an ocean outfall structure on, or under, the coastal marine area at Bream Bay.

**1. The names and addresses of the owner and occupier of the land to which the application relates:**

Part of the ocean outfall structure is located under the foreshore at Ruakaka Beach and on or under the seabed of Bream Bay. The subject foreshore and seabed is vested in the Crown, C/- Department of Conservation, Northland Conservancy, PO Box 147, Whangarei 0140.

**2. The location to which this application relates:**

The ocean outfall structure is located under the foreshore at Ruakaka Beach and on or under the seabed of the Pacific Ocean (Bream Bay) approximately perpendicular to the shoreline at Ruakaka Beach, map reference NZ07 N17 20 77. Co-ordinates in NZ Transverse Mercator for the end of outfall structure are approximately NZTM East 1736025.00 and NZTM North 6028848.00.

The location is more fully described in Sections 4, 8 and 9 of the Assessment of Effects on the Environment that supports this application.

**3. Duration of consent sought:**

The duration sought for this consent is 35 years.

An extended lapse period of 15 years is sought under section 125(1) of the Resource Management Act 1991.

**4. Additional resource consents:**

The additional resource consents required in relation to this activity are being applied for concurrently with this application and are as follows:

- Application 1: - Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.
- Application 2: - Discharge permit for the discharge (via soakage) of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant at the Plant site.
- Application 3: - Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.
- Application 4: - Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.

- Application 5: - Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.
- Application 6: - Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.
- Application 7: - Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.
- Application 8: - Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.

## 5. Effects on the Environment:

**Attached**, in accordance with the Fourth Schedule of the Resource Management Act 1991, is an Assessment of Effects on the Environment in the detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment (see in particular Sections 8 and 9). In addition there are a number of documents that are support documents for the Assessment of Effects on the Environment. These are appended to the Assessment of Effects on the Environment.

## 6. Information required by regional plan:

The attached Assessment of Effects on the Environment contains all the information required to accompany resource consent applications as specified in the Regional Coastal Plan for Northland.

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On behalf of Whangarei District Council

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Date

### Address for Service:

Simon Weston, Group Manager Infrastructure & Services  
Whangarei District Council  
Private Bag 9023  
Whangarei 0148

## Summary Table: Existing Resource Consents and Resource Consents Applied for

Whangarei District Council Ruakaka Wastewater Treatment Plant Schedule of Resource Consents Held as Issued by the Northland Regional Council				
Consent Number	Activity to be Authorised	Date Issued	Date Expired	New Consent Required
CON20040415501 (Zones 3, 6 & 7)	Discharge of contaminants to land from the Ruakaka treatment system	01.12.2006	31.05.2018	For Zones 3 and 6A only
CON20040415501 (Zones 3, 6 & 7)	Discharge of contaminants to air from the Ruakaka treatment system	01.12.2006	31.05.2018	For Zones 3 and 6A only
CON20061752701 (Keith Block/Zone 5)	Discharge of treated wastewater to land on Lot 10 DP 55607 Blk VII Ruakaka SD	02.12.2008	31.05.2018	
CON20061752701 (Keith Block/Zone 5)	Discharge of contaminants to air (primarily odour) to air from a wastewater disposal system on Lot 10 DP 55607 Blk VII Ruakaka SD	02.12.2008	31.05.2018	

Whangarei District Council Ruakaka Wastewater Long-Term Consents Project Schedule of Resource Consents Applied for from the Northland Regional Council		
Type of Resource Consent Applied for	Existing Consent	
<b>Ruakaka Wastewater Treatment Plant (WWTP)</b>		
1	Discharge permit for the discharge (via seepage) of wastewater to land and water from contingency storage ponds at the Ruakaka Wastewater Treatment Plant site.	
2	Discharge permit for the discharge (via soakage) of an annual average of 660 cubic metres per day of treated wastewater to land and water from the Ruakaka Wastewater Treatment Plant, being Zone 3 (DW4 in the Whangarei District Plan).	CON20040415501 (01)
3	Discharge permit for the discharge of contaminants to air from activities associated with the Ruakaka Wastewater Treatment Plant and site.	CON20040415501 (02)
<b>Roger Hall Memorial Park</b>		
4	Discharge permit for the discharge (via subsurface irrigation) of treated wastewater to land and water on the Roger Hall Memorial Park.	

Whangarei District Council		
Ruakaka Wastewater Long-Term Consents Project		
Schedule of Resource Consents Applied for from the Northland Regional Council		
Type of Resource Consent Applied for		Existing Consent
	<b>Rama Road Block</b>	
5	Discharge permit for the discharge (via irrigation) of treated wastewater to land and water on the Rama Road Block.	
6	Discharge permit for the discharge of contaminants to air associated with treated wastewater irrigation on the Rama Road Block.	
	<b>Ocean Outfall</b>	
7	Coastal permit for the discharge of treated wastewater to the coastal marine area via an ocean outfall into the coastal marine area at Bream Bay.	
8	Coastal permit for the erection and placement of an ocean outfall structure in the coastal marine area at Bream Bay and any associated deposition of materials on and disturbance of the foreshore or seabed.	
9	Coastal permit for the occupation and use of an ocean outfall structure in the coastal marine area at Bream Bay.	



# Cross-Reference to the Provisions of the Fourth Schedule of the Resource Management Act

1. Matters that should be included in an assessment of effects on the Environment	Relevant Section in this AEE
(a) A description of the proposal	1.5, 4.4, 4.5, 4.6
(b) Description of any possible alternative locations or methods for undertaking the activity	6
(c) Repealed	--
(d) An assessment of the actual or potential effect on the environment of the proposed activity	8,9,10,11,12,13,14,15
(e) Hazardous risk assessment	8,9,10,11,12,13,14,15
(f) Discharge of contaminants	8,10,11,12,13,14,15
(f)(i) The nature of the discharge and the sensitivity of the proposed receiving environment to adverse effects	8,9,10,11,12,13,14,15
(f) (ii) Any possible alternative methods of discharge, including discharge into any other receiving environment	6
(g) Mitigation measures (safeguards and contingency plans where relevant) to help prevent or reduce the actual or potential effect	8,9,10,11,12,13,14,15
(h) Consultation undertaken, and any response to the views of those consulted:	18
(i) Monitoring	3.4, 19

2. Matters that should be considered when preparing an assessment of effects on the Environment	Relevant Section in this AEE
(g) Any effect on those in the neighbourhood and, where relevant, the wider community including any socio-economic and cultural effects	7.6, 17, 16
(h) Any physical effect on the locality, including any landscape and visual effects	8,9,10,11,12,13,14,15,17
(i) Any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity	8,9,10,11,12,13,14,15,17
(j) Any effect on natural and physical resources on plants or animals and any physical disturbance of habitats in the vicinity	8,9,10,11,12,13,14,15,17
(k) Any discharge of contaminants into the environment, including any unreasonable emission of noise and options for the treatment and disposal of contaminants	8,9,10,11,12,13,14,15
(l) Any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations	8,9,10,11,12,13,14,15,17