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**Mangawhai Ecocare -  
Discussion Paper on Rates  
and Charges**

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# **Mangawhai Ecocare - Discussion Paper on Rates and Charges**

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Prepared for  
Kaipara District Council

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By

Beca Carter Hollings & Ferner Ltd

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Kaipara District Council

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Dear Sir

**Mangawhai Ecocare - Discussion Paper on Rates and Charges**

Yours faithfully  
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## Revision History

Revision N°	Prepared By	Description	Date
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Action	Name	Signed	Date
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# 1 Introduction

This discussion paper has been prepared to explain the impact of the proposed modification to the project scope on the proposed Uniform Annual Charges, Uniform Targeted Rates and Development Contributions (Rates and Charges) required to fund the project. The changes to the project scope are set out in Section 2 of this Report. This paper provides background information to the Kaipara District Council (Council) for their consideration in assessing these impacts on the viability of the Mangawhai EcoCare Project.

The paper builds on previous work undertaken with the Council on this topic including the preparation of the Statements of Proposals, Development Contributions policies and various modelling projects using the model developed in conjunction with PricewaterhouseCoopers.

The key parameters influencing the Rates and Charges are:

- Capital and Operating Expenditure
- Number of sections within the scope of the Project (now and in 25 years)
- Long term interest rates

The capital and operating expenditure parameters are described (including reasons for additional capital expenditure) in Sections 3 and 4 and a scenario proposed for the consideration of Council.

Section 5 reviews options for the number of sections within the scope of the Project. Section 7 brings the parameters together in a series of scenarios, which were discussed with the Mayor, Deputy Mayor and the Portfolio Councillor.

The proposed Modification is currently being negotiated with Earthtech and ABN Amro at the time of writing of this report and will be the subject of a presentation at the Council meeting on 25<sup>th</sup> October 2006.

## 2 Scope Changes

### 2.1 Original Scope

Earthtech's original proposal was based on the following parameters:

- Servicing 1216 sections within the developed areas of Mangawhai Heads and Village, excluding all developments west of Molesworth Drive, all of the Moir Point Road area, any new developments in the Village in any area.
- Provision of sewer pipe past the property (house connections excluded)
- Disposal of treated effluent to Mangawhai Park via drip irrigation
- Treatment standards suitable for the above disposal option
- Consents lodged in March 2002 with an expected start date of September 02 and final completion in August 2004 assuming a six-month resource consent period.

## 2.2 Changes to Date

Since the original proposal there has been significant development within the Mangawhai area and discussions have continued with Earthtech on the impact of these developments and the proposed change to the original disposal option which has been found to be not sustainable, nor preferred by Council.

Council has been informed of the progress these discussions and have been updated on the potential impact on the Rates and Charges.

## 2.3 Proposed Modification

The proposed modification now includes amended parameters to address these changes including:

- Servicing some 3000 sections within Mangawhai, including Jack Boyd Drive and the Sands development, Moir Point Road developments, Mangawhai Tavern development and the Anchorage and other developments within the Village;
- Acquisition of the Lees farm (\$5M) and the construction of an estimated 11km transfer pipeline, construction of a wet weather storage dam and installation of an irrigation scheme for water reclaimed that will meet Fonterra's standards for them to purchase dairy produce from the irrigated land;
- House connection for all existing properties; and
- Resource Consent lodged in September 2006 with an expected construction commencement date of February 2007 (based on 6-month resource consent period) and a construction and commissioning period of two years (nominal end date of February 2009).



## 3 Capital Costs

### 3.1 Capital Cost Summary

In response to the revised scope, the following capital costs increases are outlined below, including a range of scenarios including a mid range scenario for the consideration of Council.

ELEMENT	CONSERVATIVE (\$000s)	VERY CONSERVATIVE (\$000s)	MOST CONSERVATIVE (\$000s)	MID RANGE (\$000s)
<b>ORIGINAL CAPEX</b>				<b>26,400</b>
<b>ADDITIONAL CAPITAL EXPENDITURE</b>				
Extension of network to Jack Boyd Drive/ Sands	1800	1980	2200	1,800
Extension of network to Moir Point Drive	2025	2228	2475	2,025
Extension within the Village network	720	792	880	720
Amended work within reticulated networks	360	400	440	360
Treatment Plant Modifications/ Disinfection	430	430	473	430
Transfer Line to Disposal Site	2244	2550	2805	2,550
Bygraves Irrigation works	300	300	600	300
Storage Dam	2538	2820	3102	2,820
House Connections	2350	2500	2500	2,350
Additional Capex approx 2014	1500	2000	2500	1,500
Escalation to Feb 2007	1284	1440	1618	1,284
Thelma Road Upgrades - Provision Only	50	75	100	100
<b>SUB TOTAL</b>	<b>15551</b>	<b>17439</b>	<b>19593</b>	<b>16,239</b>
Farm Purchase Price	5000	5000	5000	5,000
<b>TOTAL ADDITIONAL CAPEX</b>	<b>20551</b>	<b>22439</b>	<b>24593</b>	<b>21,239</b>
<b>REVISED CAPEX</b>				<b>47,639</b>
Council Charges & Finance Fees				10,126
<b>TOTAL PROJECT COSTS</b>				<b>57,765</b>

The above includes some provisional sums and for these a more conservative estimate is proposed. This includes possible additional works at Thelma Road, provision for future additional capital to upgrade pump stations, modify sewer network and further upgrade treatment facility. These provisions total some \$1.6M.

### 3.2 Purchase of Farm

The development of the Water Reclamation facility requires the purchase of the Lees property.

The current strategy for the development of the water reclamation facility is to:

- Install the 11km transfer pipeline;
- Construct a storage dam on the Lees property;
- Negotiate a water reuse agreement with Bygraves (adjacent farm);
- Upgrade irrigation facilities at Bygraves farm (part of reuse agreement);

- Reserve Lees farm for future irrigation use/ disposal as required (future proof Mangawhai); and
- Continue to seek other parties interested in acquiring reuse water (Golf Club for example).

The option of developing and reselling some sections of the Lees farm has been investigated but is uneconomic based on the large development cost (some \$8M -\$9M), the relatively small number of practical house sites (30) and the assessed market value of the developed sites (\$3.4M). This is the subject of a separate report to the Council from Beca dated 12<sup>th</sup> October 2006.

Key issues associated with the facility are:

- The upgrade of Bygraves existing irrigation system is the most economic solution at a cost of \$0.6M compared to installing a new irrigation system on the Lees farm at a cost of \$1.48M. Importantly in negotiations for the water reuse agreement Bygraves should contribute to the redevelopment costs with an immediate contribution or payment over time and pay for all operating costs of the irrigation scheme including any of Earthtech's increased costs. For modelling purposes 50% of the capital costs have been allowed and no additional operating costs.
- To future proof Mangawhai it is important that the remainder of the Lees property is reserved for future irrigation purposes if required due for example to lapse of Bygraves reuse agreement or additional flows from extra development. This will still leave some open parklands associated with the steeper sections of the property which are currently uneconomic to irrigate or provide little immediate benefit. This does not preclude that in the future this may be required for some form of disposal or reuse.

## 4 Operating Costs

Operating costs have remained relatively stable with an increase of \$50,000 per annum included in the final model. This increase is due to additional treatment and maintenance costs for the introduction of the water reclamation scheme.

No additional operating costs has been allowed to date for any other changes to the treatment plant or the expanded reticulation area as Earthtech's original proposal provided for operating costs for up to 3000 sections acknowledging the infrastructure has been designed to accommodate additional population growth.



## 5 Section Numbers

The number of sections within the Mangawhai Drainage District is a significant variable in developing the appropriate Rates and Charges for EcoCare and the implications related to adoption of the number of future serviced properties need to be understood by Council.

### 5.1 Original Scope

The original position adopted by Council was conservative based on an estimated 1200 sections (as at 2001) with a forecast growth rate of some 2% per annum over 25 years. This resulted in a total of 3300 sections established in 25 years. Current developments within the Drainage District (now proposed to be serviced in light of the scope changes in Section 2) have resulted in the number of sections, in existence or with resource consent applications submitted currently totalling some 2,784<sup>1</sup>.

### 5.2 Options for Revised Position

#### 5.2.1 Status-Quo Option

Earthtech have undertaken a preliminary assessment of the potential additional developments within the Drainage District that would not require expansion of the Drainage District or Plan Changes and have assessed that a further 550 sections may be established. Therefore, a "status-quo" (in terms of the District Plan and Drainage District Area) or conservative scenario is around 3336 sections within the Drainage District.

#### 5.2.2 Extended Drainage District/ District Plan Changes

It is recognised that the above option does not provide for any extensions to the Drainage District or Plan Changes.

However, a Plan Change has already been notified for up to 500 sections, immediately adjacent to the Drainage District boundary. Furthermore, current section size averages 900m<sup>2</sup> as regulated by the current District Plan. This is relatively low density for a serviced residential area by New Zealand standards and whilst acknowledging the Mangawhai community currently favours maintaining this density level, pressure for housing density increase within the current Drainage District will persist.

On the basis of possible developments immediately adjacent to the Drainage District and exploring the possibility of some further intensification within the Drainage District, various scenarios for total number of sections have been developed and are discussed in section 5.3.

Options have included possible areas for re-zoning (both within and outside the Drainage area) from rural to rural-residential and from rural-residential to residential as well as increased intensification (smaller section sizes).

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<sup>1</sup> Recognising that some of these consent applications may not be granted.

### 5.3 Impact on the Scope

In light of the above, the revised modelling of impacts on proposed Rates and Charges, has been based on forecast section numbers after 25 years of 4000, 4500, 5000 and the status quo of 3300. The table below provides a basis for this scenario planning.

TABLE OF POTENTIAL SECTIONS IN MANGAWHAI AREA				
Estimated Current Sections	1216			
Plus Misc approved Developments	80			
<b>Estimated Current Sections</b>	<b>1296</b>			
<b>Plus</b>	<b>Existing Developments</b>	<b>New Development in Area</b>	<b>Rezoning in Area</b>	<b>New Development Outside Area</b>
<b>Sub Total</b>	<b>1488</b>	<b>552</b>	<b>880</b>	<b>1450</b>
<b>CUMULATIVE TOTAL</b>	<b>2784</b>	<b>3336</b>	<b>4216</b>	<b>5666</b>

It is emphasised that all scenarios where section numbers are greater than 3300 are subject to council decisions on plan changes and future amendments to the Drainage District.

#### 5.3.1 Risks Associated with Scenarios greater than 3300

While considered a 'feasible' scenario for future development of the Mangawhai area, there are a number of issues with these scenarios. In summary, these are that Council may be perceived as:

- Anticipating outcomes of existing and future Plan Changes (such as for the Estuary Estates site) that will result in the required rezoning; and
- anticipating that the community will accept an amendment to the LTCCP to alter the Drainage District boundaries and that it will accept increased intensification.

All scenarios contain some potential that growth rates over time will not achieve the projected number. This risk should be managed by regularly reviewing the growth rates and the level of Rates and Charges being received and adjusting the Rates and Charges as required.

In addition, there are the following **process** risks:

- Council may be challenged that it has a vested interest in the outcome of all rezoning and consenting applications. This may warrant consideration of independent commissioners to hear such applications.
- Council may be challenged in future consultation processes by being perceived to have pre-determined the outcome, e.g. District Plan and Structure Plan.

#### 5.3.2 Interim Management of Developments Outside the Drainage District

The Drainage District boundaries do not require immediate amendment at this time to accommodate the above scenario however given the number of developments being submitted it is prudent to consider developing a policy that addresses proposed developments that abut the Drainage District boundaries.



In the discussions with Chief Executive, the Mayor, Deputy Mayor and Portfolio Councillor the following policy position was considered:

“Any developments that abut the Drainage District be required to connect to the EcoCare system at their cost as an extraordinary connection pending finalisation of any zoning and planning issues”.

Adoption of this policy approach would enable individual developments that fit this criteria to be managed via consent conditions or as part of any approved Plan Change.

## 6 Interest Rates

Interest rates also impact on the modelling of the costs. A fixed margin (0.55%) has been negotiated with ABN Amro however the underlying interest rate is subject to market fluctuations.

The current modelling includes a buffer against any future rises with potential upside if rates decrease or an option to fix the interest rate at the time of financial close delivers savings.

## 7 Scenarios

Based on the above information, the scenarios have been tested for sensitivity of the Rates and Charges to the above changes, including looking at the impact of balancing the cost increases across current and future users.

In addition, indicative modelling of the impact of the changes may have on the Development Contributions policy has been undertaken to ensure the scenario outputs for Development Contributions are reasonable and within potential maximum.

### 7.1 Base for Comparison

The current Rates and Charges as publicly advised are subject to annual CPI increases and therefore the minimum change to the current rates and charges to accommodate CPI increases to February 2007 are:

CHARGES	PREVIOUS GST Inclusive	CPI INCREASE 3%
Uniform Targeted Rate	\$6,862.50	\$7068.38
Developer Contribution	\$11,060.00	\$11,390.50
Uniform Annual Charge	\$630.00	\$648.90

This provides a base for comparison of the revised rates against those previously advised to the community.

## 7.2 Comparison of Scenarios

Many scenarios were developed however the final scenarios examined are based on a project cost of \$57.65M with section numbers in year 25 of 4000, 4500 and 5000 and these are compared to the status-quo of maintaining the existing 3300.

To best illustrate the impact on the Rates and Charges it was decided to model all scenarios with Annual Uniform Charges being increased by 7% (\$48.60), Development Contributions being increased by 14% (\$1,545.75) and varying the Uniform Targeted Rate in order that the total meets Council's required revenues.

This produced the following outputs:

<b>OUTPUT FROM THE MODEL FOR MANGAWHAI ECOCARE</b>				
<b>Based on Most Likely Project Costs</b>				
<b>Varying number of Total Sections</b>				
<b>Keeping Development Contributions within potential maximum</b>				
<b>Limiting Uniform Annual Charges increase to less than \$50.00</b>				
<b>Adjusting Uniform Targeted Rate</b>				
<b>MOST LIKELY PROJECT COST SCENARIO</b>				
<b>NO. OF SECTIONS INC IN ECOCARE AFTER 25 YEAR</b>	<b>4000</b>	<b>4500</b>	<b>5000</b>	<b>STATUS QUO 3300</b>
<b>ANNUAL GROWTH RATE REQUIRED</b>	<b>2.4%</b>	<b>2.9%</b>	<b>3.4%</b>	<b>1.6%</b>
<b>PROPOSED GST INCLUSIVE RATES</b>				
Uniform Annual Charges	\$ 697.50	\$ 697.50	\$ 697.50	\$ 697.50
Uniform Targeted Rate	\$11,950.85	\$ 9,090.41	\$ 6,766.19	\$ 17,276.28
Development Contribution	\$12,937.50	\$12,937.50	\$12,937.50	\$ 12,937.50
<b>PREVIOUS GST INCLUSIVE RATES (ADJUSTED FOR CPI 3%)</b>				
Uniform Annual Charges	\$ 648.90	\$ 648.90	\$ 648.90	\$ 648.90
Uniform Targeted Rate	\$ 7,068.38	\$ 7,068.38	\$ 7,068.38	\$ 7,068.38
Development Contribution	\$ 11,391.80	\$ 11,391.80	\$ 11,391.80	\$ 11,391.80
<b>CHANGE FROM ADJUSTED PREVIOUS GST RATES</b>				
Uniform Annual Charges	\$ 48.60	\$ 48.60	\$ 48.60	\$ 48.60
Uniform Targeted Rate	\$ 4,882.47	\$ 2,022.04	-\$ 302.19	\$ 10,207.91
Development Contribution	\$ 1,545.70	\$ 1,545.70	\$ 1,545.70	\$ 1,545.70

Adoption of the mid- range scenario of 4500 is presented as a potential way forward for Council recognising the current development occurring.

## 8 Final Position

The above scenarios indicate that the Mangawhai EcoCare project as presently scoped will require sustainable growth to maintain its viability while achieving its environmental outcomes.



Based on the potential mid-range scenario and acknowledging the risks in Section 5.3.1, the following Rates and Charges would be required. This includes the application of the SWSS funds to the Uniform Targeted Rate for those allotments or household units established prior to 23 March 2002.

<b>PROPOSED GST INCLUSIVE RATES</b>	
<b>Uniform Annual Charges</b>	<b>\$742.50</b>
<b>Uniform Targeted Rate</b>	<b>\$8,650.00</b>
<b>Uniform Targeted Rate (Pre 23/3/2002)</b>	<b>\$3,850.00</b>
<b>Development Contribution</b>	<b>\$12,375.00</b>

The LTCCP will need to be amended through the Annual Plan process to both account for the change to these Rates and Charges and consequential amendments will need to be made to the 'Explanation of, and Justification for, Development Contributions' (Section 2.2 of the Development Contributions Policy). These amendments would publicly notify the community of Council's intention to see further development in the Mangawhai area (which would then be subject to RMA process).

In consideration of the above Council is positioned to confirm its intention to continue with the Mangawhai EcoCare Project based on:

- The impacts of the changed scope on proposed Rates and Charges;
- The parameters discussed within this report;
- Proceeding with the purchase of the Lees property;
- Maintaining existing Drainage District boundaries but adopting the interim policy position of
  - "Any developments that abut the Drainage District be required to connect to the EcoCare system at their cost as an extraordinary connection pending finalisation of any zoning and planning issues".