Central Hawke’s Bay District Council – Report

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| **TO:** | **Council** |
| **FROM:** | Chief Executive |
| **DATE:** | 23 June 2011 |
| **FILE REF:** | SER2-103, 104 |
| **SUBJECT:** | progress REPORT:  waipukurau and waipawa wastewater treatment project |

# 1.0 SUMMARY

One of the Chief Executive’s Objectives set by Council is

**1. SEWAGE SYSTEM**

Working with Regional Council on Land Based effluent disposal through forest. Provide written updates to Council each quarter. Reports to include costing.

This report meets this Objective.

# 2.0 RECOMMENDATION

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| ***THAT*** |
| The report on the progress of the Waipukurau and Waipawa wastewater treatment project as at 23 June 2011be noted,  And  A Council subcommittee consisting of three councillors, the Chief Executive and the Technical Services Manager be formed to monitor progress on wastewater treatment options and to report back to Council. |
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# QUARTERLY report on PROGRESS of WAIPUKURAU AND WAIPAWA LAND BASED WASTEWATER TREATMENT PROJECT

**23 June** **2011**

**Summary of Recent Work**

Pattle Delamore Partners have been modelling the wastewater flows to the land purchased and planted by the Regional Council. The proposed wastewater treatment system would consist of:

* Waipukurau and Waipawa oxidation ponds.
* Irrigation to the two HBRC forests in Waipawa and Waipukurau.
* Irrigation to the forests whenever soil conditions allow.
* Storage of the excess wastewater produced.
* Discharge of excess wastewater (when storage is full or the rivers have higher flows in them) into the Tuki Tuki and Waipawa Rivers. This would be at times when the rivers have sufficient flow to ensure no periphyton build up from the nutrients in the discharges.

The modelling looks at flow rates from the oxidation ponds, rainfall, and river flows for the last 22 years. The results produce various volumes of storage required and volumes of discharge to the rivers. There will be effluent discharged into the rivers at times. However the modelling will optimise the balance between irrigation effort, storage volumes, river discharge, and effects on the rivers. This cannot be finalised without NIWA’s input (see below).

Because we are not proposing to treat the wastewater to a higher quality (to keep the cost down) there will be more phosphorus and nitrogen discharged into the rivers annually than our consents envisaged after 2014. So the aim is to discharge wastewater into the rivers only when it will have no effect on the river environment.

In order to obtain a resource consent, we must show that the system we are proposing will result in a better environmental result in the rivers than is required in the existing consents. To do this we have engaged NIWA to model the effects our proposed system would have on the rivers. We need NIWA’s expertise to show to the Hearing Commissioners that our treatment to land project will produce a better result than the continuous discharge of higher quality effluent into the rivers.

NIWA have a FRST (Foundation for Research Science and Technology) funded project to determine the relationship between nutrient flows into the rivers and the resulting periphyton (vegetation) growth in the rivers. They are in the first year of a three year project. Their project is independent of Council’s work, but we can “piggy back” on their research (to keep the cost down) and use their model to show what the likely effect on the rivers will be. This should be completed by December 2011.

Consent applications could be made in early 2012.

**Management of Work**

Councillors have expressed a desire to form a subcommittee to monitor progress on wastewater treatment options. They propose that the subcommittee has members of three councillors, the Chief Executive and the Technical Services Manager.

The subcommittee would meet as required and report back to Council.

# 4.0 financial

Financials compared to LTCCP forecasts:

* Budget from July 2009 to June 2011 is $528,342.
* Expenditure since July 2009 is $467,781.
* Total finance left for this project is $7,677,312.

# 5.0 Options

The report on the progress of the Waipukurau and Waipawa wastewater treatment project as at 23 June 2011 be noted.

The subcommittee be formed.

# 6.0 strategic links

LTCCP 2009-2019

Steve Thrush

**Technical Services Manager**