

SOUTH WAIRARAPA DISTRICT COUNCIL

8 AUGUST 2012

AGENDA ITEM C7

FEATHERSTON WATER SUPPLY INVESTIGATION

Purpose of Report

To inform Councillors of progress with the water supply investigations for the supplementation of the Featherston Water Supply.

Recommendations

Officers recommend that the Council:

1. *Receive the information.*
2. *Proceed to confirm the potential of the Woodside aquifer for potable water production purposes*

1. Executive Summary

This investigation for an additional potable water source was approved by the Ministry of Health as being eligible for assistance under the Drinking Water Assistance programme late in 2011.

Funding assistance to the level of \$50,000 has been provided and was to be targeted at bore water exploration in Underhill Road, Featherston locality and Woodside Road to the north in close proximity to the existing water treatment plant. Test drilling has taken place at both locations with a potentially viable water source now having been identified at the Woodside Road location.

2. Background

Council applied for capital assistance on the basis that existing infrastructure was unable to at times maintain continuity of the supply to the Featherston Community.

This was because:

- There is insufficient treated water available to distribute to Featherston when the Waiohine River is in flood for an extended period of time.

- The emergency water supply sources at Boar Bush and Tait's Creek whilst generally safe in a potable sense, because of odor and other aesthetic issues are at times unacceptable to the majority of Featherston Residents.

3. Discussion

The application for capital assistance was founded on the premise that an additional source of water would be required to provide additional capacity when water was not available from the usual sources (the Waiohine River).

Since the application was made in 2011 significant progress has been made with the implementation of leak detection programmes including the repairs of detected leaks across Council's three serviced communities

In the case of Featherston "plugging the leaks" has lessened the demand upon treatment infrastructure servicing the Featherston community and has provided additional capacity and therefore resilience e.g. a renewed ability to maintain a seasonal supply to both Greytown and Featherston from the Ultra Filtration Plant, without supplement via the emergency bore.

Over a longer term however, this recently acquired resilience could be taken quickly at times during a high demand period coupled with severe water shortages at the river source due to allocation constraints. Hence the prudent action is to continue to explore additional secure water resources and assess the potential for the future integration with existing infrastructure.

Further investigation of the identified production potential of the groundwater resource at Woodside Road is hence consistent with the prudent actions to secure a future supplementary water source for Featherston and Greytown.

Production potential examines water availability and quality as factors to consider in the first instance.

Integration into or alongside existing infrastructure and consent acquisition are matters to be considered in further detail in the near future if potential can be realised and could be the subject of further capital assistance funding from the government.

Some \$20,000 of the MoH grant remains un-expended to date and to complete the programme as contemplated will require some top up funding from Council, the extent of which is estimated to be in the vicinity of \$25,000.

3.1 Options

Options the Council can consider are:

- Proceed to confirm the suitability of the resource by drilling and testing a production bore(s). Note there is some un-quantifiable risk that this step may result in failure i.e. insufficient or water too difficult to treat or requiring full processing at the nearby UF Plant.

- Do nothing i.e. proceed no further at this stage and consider in future years if and as demand for water increases due to growth or an improved level of service. This means we would declare the balance of MoH current funding surplus and that from time to time; the existing emergency takes would be deployed to maintain a supply to the Featherston community.

3.2 Financial Considerations

Some capital funding will need to be reallocated to supplement the available subsidy. This is not expected to exceed \$25,000 this year.

This extra capital cost may be able to be offset against future Drinking Water Assistance Funding should Council decide to proceed with a capital improvement programme aimed at achieving a higher level of compliance with the current drinking water standards.

4. Appendices

Appendix 1 - Bore Location Maps

- Fig 1 Locality Plan Woodside test bore location
- Fig 10 Locality Plan Underhill Road test bore and pit location

Contact Officer: Bill Sloan Utilities Manager

Reviewed By: Mark Allingham, Group Manager Infrastructure Services

Appendix 1 – Bore Location Maps

Figure 1 Location of Woodside test bore

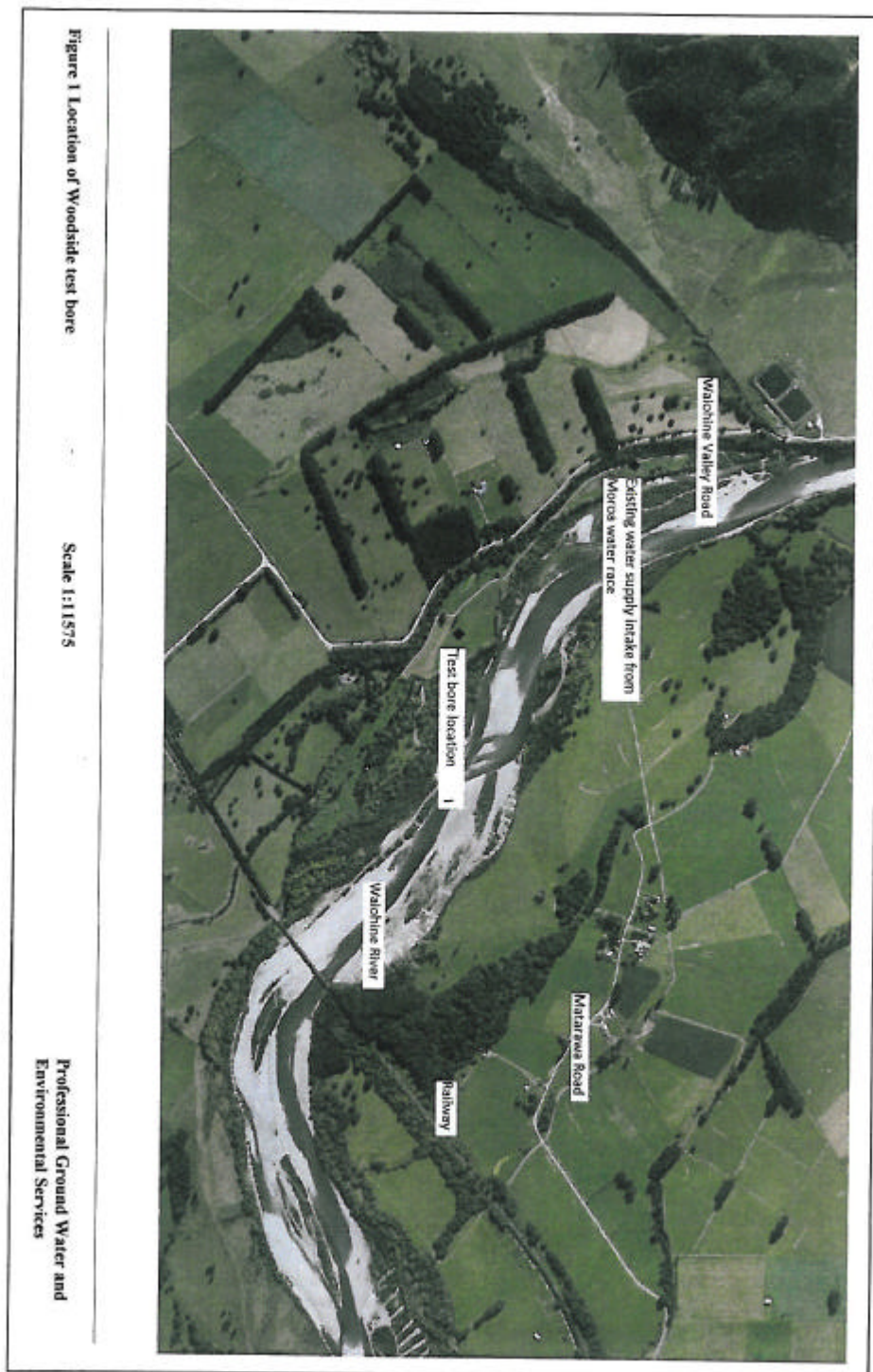


Figure 10 - Location Underhill Road test bores 1 and 2

