

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson
REFERENCE:
DATE: 19 September 2005
SUBJECT: Utilities Management Report

6.5 UTILITIES ASSET MANAGEMENT

6.5.1 Capital Works Projects

The following capital projects have been tendered or are about to be tendered or constructed:

- a) Richmond Trunk Sewer main – budget \$2,300,000
- b) Sunbelt, Motupipi and Hiawatha pumping stations and pumping main construction – budget \$1,840,000
- c) Wensley Road Watermain Replacement – budget \$630,000
- d) Dovedale Rural Water Supply – watermain upgrading – budget \$150,000
- e) Murchison Pipeline Renewals – budget \$25,000
- f) Mapua – Upgrade of Existing 750 mm diameter Pipework – budget \$224,000

Work has proceeded in obtaining resource consents for the following works:

- a) Takaka Wastewater Treatment Plant Upgrade
- b) Murchison Wastewater Treatment Plant Upgrade
- c) Borck's Creek Widening (lower end)
- d) Jefferies Stream Upgrading Work

Investigation work has progressed on:

- a) Brightwater Water Reservoir (additional reservoir)
- b) Murchison Water Reservoir (additional storage)
- c) Wakefield Trunk Main and Bore Field Investigations
- d) Collingwood – Beach Road/Gibbs Road Stormwater Upgrading
- e) Motueka (Northern Diversion Works) Parker Street Stormwater
- f) Bird Street Investigation is being undertaken by Opus Consultants
- g) Collingwood Sewerage – New Aerators and Mechanical Screen
- h) Motueka Sewerage – New Aerators and Mechanical Screen
- i) Kaiteriteri – Upgrading Ladders Lane Sewerage Pumping Main

6.5.2 Water

6.5.2.1 Pohara Water Pump Station

Improvements are underway including the installation of a new flow meter and new pump.

6.5.2.2 Telemetry

A virus was eliminated from the MWH NZ Ltd base station which had the potential to cause significant operational problems with the Datran telemetry system operated via this base station.

It is proposed to expand the system in Golden Bay and install telemetry capability at a number of pump station sites. The Kingfisher system is being investigated as an alternative to Datran, and a selection of sites may be trialled for comparison. Council's preference is that telemetry be integrated in the construction of new pump stations. However, telemetry is required to be retrofitted to some existing sites.

Broadband and Highspeed links are being investigated by councils maintenance contractor to increase efficiencies in data transfer via telemetry links.

6.5.2.3 Golden Hills Road Pump Station

The chlorinator is currently controlled by the well pumps at Golden Hills only, and does not operate if the water is only coming from River Road. The controls are to be modified to enable the chlorinator to run on demand.

6.5.2.4 Murchison Water Supply

The upgrade of existing storage capacity is under investigation. Following a topographical survey of the existing reservoir site a proposed layout for extra storage tanks will be finalised. A flow meter is also to be installed at the reservoir.

6.5.2.5 Tapawera Water Laterals

Work is ongoing to complete the renewal of laterals.

6.5.2.6 Collingwood Water

The bore pump, to be controlled remotely from the treatment plant, to maximise the efficiency of the system is soon to be completed.

6.5.2.7 Dovedale Rural Water Supply

A new pump has been installed at Wins Pump Station.

Ongoing monitoring of the contact tank system at the head of the system is continuing at the Dovedale Water Scheme headworks.

The installation of Level indicators has been completed at Thorns Reservoir.

6.5.2.8 88 Valley Rural Water Supply

The 88 Valley scheme is operating satisfactorily and the installation of new storage tanks and some reticulation works are yet to be completed to improve the efficiency of the scheme.

6.5.2.9 Redwoods Rural Water Scheme

Work is well advanced in establishing easements over all new reticulation and the parallel existing reticulation. Plans are currently under review by LINZ for final approval.

Redwoods River Road Well – minor pipework alterations to the contact tank inlets at Golden Hills Road and O'Connors Creek pump stations are still to be carried out.

Redwoods I Reservoir Level Indication installation is delayed at the landowners request during the lambing season.

6.5.2.10 Collingwood Water

Staff are investigating the option of running the pumps at night on cheaper rates – namely the commercial off peak tariff.

The future of the old Collingwood water reservoir pond is still under review

6.5.2.11 Waimea Wells

Waimea well electrical upgrade is completed and remedial maintenance work is ongoing. The new chlorine analyser is yet to be installed in the Waimea well.

6.5.2.12 Pohara Water Supply

The initial phase of consultation to determine public interest in a water supply scheme and to determine if a feasibility study will be carried out has been completed. A separate report in this report details the results of the survey.

6.5.2.13 Wai-iti Valley Community Dam

The alternative borrow site initiated by the contractor (Taylors Contracting) and agreed to by the principal at the end of July 2005 has proved to be a very successful outcome for the dam. The contractor has sourced approximately 50,000 cubic metres from the alternative borrow site across 88 Valley Road and has continued work through the August/September 2005 period. Earthworks are now complete to dam crest level, the spillway is formed, and final works should be completed to allow plugging of the dam conduit by the end of September 2005. This will allow storage of water from October 2005 and subsequent commissioning of the dam to occur. This is a very successful outcome to the situation we found the project in at the start of winter. It remains to be seen whether we will have sufficient inflow during October/November/December 2005 to create storage benefits for irrigators during the January/February/March 2006 period. This will be reported on in more detail at the next meeting and also to irrigators in the Valley.

A formal opening of the dam will be planned in co-ordination with the Wai-iti Water Augmentation Committee and the Engineering Services Committee. At this stage we

would be looking at a date in October/November 2005 for an official dam opening ceremony. Photographs of dam progress will be presented at the Committee meeting.

Invoices for the initial financial contribution have been sent out to all property owners who have reserved applications for new irrigation. Invoices are based on the originally confirmed price of \$1,060 including GST per hectare and applicants will be allowed to spread their payments over four equal instalments between 30 September 2005 and 30 June 2006. The total new irrigation available is nominally 300 hectares and at this stage we expect applications for 220 hectares from private irrigators, approximately 60 hectares for Council's future water supply schemes and leaving approximately 20 hectares at this stage unallocated.

6.5.3 Stormwater

6.5.3.1 Motueka Flood Gates

Electrical upgrade work and refurbishment of the Wharf Road control gates is to be completed. General warning safety signage has been purchased and programmed for installation.

6.5.3.2 Reservoir Creek Dam

Options and estimates are still being reviewed for this project and expected to be completed by the end of August.

A number of smaller projects are underway to remedy various minor stormwater issues.

These include:

Totara Ave, Tapawera - cross-boundary surface water overflow issues

Arrow St/Whitby St, Wakefield - surface water runoff issues from road following realignment

Takaka Stormwater system from SH60 through to Reilly Street - camera inspection is complete, cleaning of the system is programmed, and further investigation and design is required to remedy surface flooding issues in Commercial Street, Takaka.

Rowling Road, Little Kaiteriteri – maintenance of the open channels in the wetlands area has been completed

High Street South, Motueka, surface flooding issues are under investigation

Woodlands Drain – regular maintenance is to be completed

6.5.3.3 Ruby Bay Stormwater

Opus International Consultants have completed their preliminary design report for stormwater improvements in Stafford Drive, Ruby Bay. The report includes hydraulic modelling, evaluation of working options and preliminary design costings.

TDC has given approval for Opus to proceed to the detailed design phase. Discussions with affected property owners have commenced, to determine appropriate routes for pipework through private property.

6.5.4 Wastewater

6.5.4.1 Pohara Sewer

The new pump station at 3 Oaks has been vandalised. Repairs have been carried out.

6.5.4.2 Cassidy Corner Sewer Pump Station

Investigations are underway to improve drainage around the pump station. A section of stormwater pipework is likely to be required to be installed beneath the existing roadway to achieve this.

6.5.4.3 Operator Qualifications

Tasman District Council is considering upgrading some wastewater treatment plants, which will require higher levels of operator qualifications.

Tasman District Council's maintenance contractor, Works Infrastructure, will be asked to confirm staff qualifications and may be asked to upskill appropriate staff to operate the new plants.

6.5.4.4 Illegal Drug Lab Risk Awareness Workshop

Council has organised with the local Police, a workshop to raise awareness of the potentially fatal risks associated with private (illegal) drug laboratories, particularly for contract staff involved with the maintenance of sewers either on or downstream of these properties.

6.5.4.5 Motueka Ponds

Filter fabric and rock protection work to the outlet has been completed. There is a sludge build up in the NE corner of the pond. Ongoing monitoring of the sludge layers continues with disposal of the sludge periodically when required

6.5.4.6 Tapawera Ponds

The new aerator has been installed and is running well. From an unknown source a sufficient quantity of a substance has been tipped down a drain and this has significantly affected the operation of the pond.

Investigations continue into the installation of a paddle wheel aerator to improve the efficiency of the pond.

6.5.4.7 Motueka Wastewater Treatment Plant Improvements

Work on the construction of the new sand filter disposal beds and on the upgrading and rejuvenation of the existing disposal beds, is currently on hold with the discovery of human

remains. Council continues to investigate the extent utilising ground radar equipment and is working through the issues with Iwi.

The installation of new aerators and a mechanical screen has been undertaken as part of the upgrade works.

6.5.4.8 Tapawera Wastewater Treatment Plant

Upgrading of the effluent disposal system will be undertaken once resource consent has been obtained. Application for resource consent has been submitted and is currently under a Section 92 request for further information including a Cultural Impact Assessment.

6.5.4.9 Murchison Wastewater Treatment Plant

The sludge survey is now complete. Detailed design is continuing and the release of detailed design report is imminent.

Groundwater test bores have been installed at the treatment plant site so as to determine the groundwater flows. If the tests provide a positive outcome, proposed upgrading works will commence once a resource consent has been obtained. Upgrading works to the treatment plant will need to be completed by November 2005. Delays to this deadline may occur if the consent is classified as notified and/or requires further information to the application.

6.5.4.10 Takaka Wastewater Treatment Plant

The application for subsidy has been submitted for provisional funding. Consultation has commenced with affected parties as a requirement of the new resource consent and to proceed with the treatment plant upgrades. The next step is to complete the Assessment of Environmental Effects. Iwi have also requested a Cultural Impact Assessment.

6.5.4.11 Richmond Trunk Sewer main

The tender for the Richmond Trunk Sewer Main Upgrade closed on 21 September 2005. Four Tenders were received and are being evaluated using the weighted attribute two envelope system. The tenders include the pricing of various options to allow the ability to remove or delay lower priority portions of work dependent on the prices received. The tender is expected to be awarded by mid-October and the first portion of work is expected to commence during November.

6.5.4.12 Takaka Sewer Pumping System Upgrade

Tender documents for this contract have been reviewed and the contract is to be advertised for tender by the end of this month.

6.5.5 Refuse

6.5.5.1 Kaiteriteri Additional Waste Collection Services Strategy for 2005/2006 Summer

Historically, domestic refuse collection at Kaiteriteri one day per week had been offered by Tasman District Council through its refuse contracts as with other townships in the district.

Until last summer, the Kaiteriteri Domain Board has allowed non-motor camp residents to deposit refuse in TDC refuse bags at the Kaiteriteri motor camp seven days a week. Last summer the Board decided to remove that facility for security and cost reasons. They did approach TDC staff to see if TDC would consider using their bag drop shed at another location in Kaiteriteri. The offer was declined as to provide a bag drop off facility in Kaiteriteri would have been inconsistent with the move to remove the rural refuse drop-off points in the district as they had been abused.

There was an increased amount of illegal rubbish deposited around Kaiteriteri last summer.

In response to this problem it is proposed that an additional refuse pickup service be provided from approximately 26 December 2005 to mid-February 2006. It is proposed that the additional refuse collection be conducted on a Friday (the normal refuse pickup day is Tuesday).

TDC engineering staff are currently obtaining quotes for this additional service for either refuse pickup only or refuse and recycling pickup together.

It is planned that a flyer card advertising the additional summer pickup service will be sent out to householders prior to Labour weekend which can be placed in holiday homes prior to the influx of visitors so that holiday home tenants are aware of the services over the summer.

Our TDC Waste Education Contractors are also preparing advertising and a story in the local papers to advertise the service.

6.5.5.2 Waste Bylaw

In order to have more control over the waste stream, the way waste is collected and to have the ability to license waste collection operators, a Waste Bylaw is required.

At present TDC staff are working with MWH staff scoping the issues requiring to be resolved by the bylaw and researching waste bylaws from other local authorities. The next step is to draft a bylaw and there is a need for indepth legal advice also.

6.5.5.3 Refuse and Recycling Fees and Expenditure

The refuse fees at the Resource Recovery Centres and fees from bag sales are lower than budgeted for in July and August 2005 as a percentage of the total year's budget. This time of year is normally the quiet time in terms of refuse deposition at the Resource Recovery Centres, with the summer months being the busiest. In the summer months the fees and sale are normally higher than the average monthly fee intake. The true picture of how the fee income is tracking will not be apparent until after the summer months.

Operating expenditure is slightly below budgeted for July and August 2005.

**Refuse Fees and Recoveries
2005/2006
or July and August 05**

Fees	July + August 2005	Year Budget	% of budgeted income received (At 16% through the year)
Richmond Fees	\$ 45,188	\$ 535,355	8
Mariri Fees	\$ 60,854	\$ 368,285	17
Takaka Fees	\$ 10,620	\$ 120,533	9
Collingwood Fees	\$ 2,653	\$ 25,237	11
Bag Sales	\$ 18,400	\$ 357,838	5

**Total Operating Expenditure
2005/2006 for July and August 2005**

\$355,914 \$2,835,434 13

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