

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee

FROM: Utilities Asset Manager, Jeff Cuthbertson

REFERENCE:

DATE: 8 March 2006

SUBJECT: UTILITIES MANAGEMENT REPORT

UTILITIES ASSET MANAGEMENT

1. Capital Works Projects

1.1 The following updates progress on capital projects:

- a) Richmond Trunk Sewer main upgrade project – construction continues to make steady progress.
- b) Takaka Sewer Upgrade – Sunbelt and Hiawatha pumping stations and pumping main construction – project is progressing well.
- c) Wensley Road Watermain Replacement – budget \$630,000 – construction is nearing completion.
- d) Dovedale Rural Water Supply – watermain upgrading – budget \$150,000, includes upgrade of lower Humphries Creek intake, reservoirs and pumpstation.
- e) Murchison Reservoirs – budget \$100,000. This work is about to be undertaken.
- f) Murchison WWTP Upgrade – budget \$200,000. The contract is currently at preferred tenderer stage, however resource consent is yet to be granted.
- g) Brightwater – Jefferies Creek work improvements are about to be tendered.
- h) Borck's Creek widening (lower end). Council has now received resource consent and the work is due to start in March.
- i) Motueka Northern diversion – budget \$303,700. This work is now 90% complete. Staff have arranged to have the pipeline CCTV inspected so as to check construction and have a record of the installation.
- j) Mapua – Upgrading stormwater reticulation in Aranui Road from Higgs Road to the estuary is about to be tendered.
- k) Wai-iti Valley Community Dam – The cured in place pipe (CIPP) liner has been successfully installed in the concrete conduit through the base of the dam. Final sealing, pressure testing and grouting work will be completed by the end of March. The dam should be ready to enter its commissioning phase at this time. During the summer dry period, all flow from the Kainui Stream has continued to discharge into the Wai-iti River and therefore no storage has been possible. A report will be presented to the next committee meeting with final project costings and any associated funding implications for Council and the irrigators.

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

- a) Takaka Wastewater Treatment Plant Upgrade;
- b) Murchison Wastewater Treatment Plant Upgrade;
- c) Jefferies Stream Upgrading Work;
- d) Tapawera Wastewater Treatment Plant Upgrade.

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, and Water Reservoir;
- d) Collingwood – Beach Road/Gibbs Road Stormwater Upgrading;
- e) Bird Street stormwater investigation being undertaken by Opus Consultants is complete;
- f) Collingwood Sewerage – New Aerators and Mechanical Screen;
- f) Kaiteriteri – Upgrading Ladders Lane Sewerage Pumping Main.

1.2 Motueka Wastewater Treatment Plant Upgrade

Work is proceeding into the investigation of new storage lagoons and wetlands on the adjacent land.

1.3 Collingwood Wastewater Treatment Plant

The installation of the ultra-violet (UV) disinfection unit is complete. Electrical control systems and control building have also been installed and there remains only minor site cleanup works to complete.

1.4 Murchison Wastewater Treatment Plant

Tenders have now closed for the upgrading of the Wastewater plant. Whitakers Contracting from New Plymouth have been given “preferred Contractor Status”. Until Council has received the new Resource Consent for the upgrade work, any work relating to the construction will not be undertaken. Work in relation to the removal of sludge from the pond is to proceed in the coming weeks as it does not relate to the required Resource Consent.

It is expected that the tendered work will commence at the earliest, in late March/early April.

1.5 Richmond Trunk Sewer Upgrade

The contractor has commenced the next stage of work in Beach Road, which is one of the more challenging phases involving deep, wide open trenching in a tidal estuarine environment. What has been found during these excavations is that the condition of the old pipework is less than satisfactory – large leaks have been found and rubber rings are non-existent in some of the pipework. The contractor is progressing well and is on schedule.

1.6 Takaka Sewerage Upgrade

This contract was awarded to Ching Contracting Ltd in November 2005 and the physical works are well advanced. The installation of the new Sunbelt pumpstation proved difficult but is now practically complete. The contractor has also installed the new rising main from the Sunbelt pumpstation to Waitapu, and is also completing the Motupipi pumpstation. The contract continues to progress well toward a timely completion.

2. WATER

2.1 Wensley Road Water Main Upgrade

The contractor is currently working between Crescent/Waverley Street and the Oxford Street roundabout and completing final testing, connections to existing mains and commissioning. The contract is on schedule to be completed by end of March 2006.

2.2 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 has been finalised, and this work is now programmed to be carried out by the maintenance contractor. A flow meter is also to be installed at the reservoir in conjunction with this work. Because the telemetry continued to experience communication failures in part due to overcast weather, a deep cycle battery has been installed to remedy this problem.

2.3 Dovedale Rural Water Supply

The Dovedale water scheme continues to struggle to meet customer demand. Work has been completed re-commissioning the old intake and installing isolating valves to determine system leakages more readily. A number of consumers have experienced reduced water supply flows and have been without water. The new pump supply has remedied that situation. However, no rain may finally result in this system too, being rendered insufficient.

After the pumping system started and water was restored, a number of consumers have complained about dirty water. The water being pumped is relatively clean, however dry tanks and the reintroduction of water has stirred up the sediment with their tanks – thus the dirty water. A “boil all drinking water” notice has been placed on the scheme.

At present there is a moratorium on new water connections to the Dovedale Water Scheme. Although there has been extensive mains replacement over the past ten months to eliminate pipeline failures, leaking and water losses, there is no guarantee that the two intakes combined will provide enough water if consumers were to use their full allocations. It is therefore not recommended to lift the moratorium on water connections.

2.4 88 Valley Rural Water Supply

The 88 Valley scheme continues to operate well and is more than keeping up with demand. Minor works have been undertaken including regular maintenance of the intake.

2.5 Redwoods Rural Water Scheme

Staff continue to investigate the option of relocating a reservoir to improve access for maintenance purposes. Easement plans for the pipeline upgrade work are still under review by LINZ for final approval. Some further breaks in the dry period have meant that the system at times has been struggling to satisfy demand.

2.6 Golden Hills Road Pump Station

Some operational issues continue to cause problems at the Golden Hills pumpstation. The high lift pumps had a period of running continuously, resulting in the number one pump requiring stripping and parts replacement. The system has been investigated for major leaks with no significant leaks found.

2.7 Waimea Emergency Wells

The emergency bores have been commissioned and telemetry control systems are being installed to ensure efficient monitoring of the system.

2.8 Brightwater Reservoir

Geotechnical reports are pending to determine that a nominated site is an appropriate location for extra future reservoirs which will increase the storage capacity for Brightwater water supply scheme. Detailed reservoir design is underway along with design of valving and connection requirements to link the proposed and existing reservoirs.

2.9 New Zealand Drinking Water Standards

Attached to the report is a recent notice for tankered drinking water carriers from the Ministry of Health regarding the implications of the Drinking Water Standards New Zealand 2005. As requested, staff will be reporting back to the Committee on the full implications of this standard for Council's public water supplies.

3. STORMWATER

3.1 Reservoir Creek Dam

Options and estimates are still being reviewed for this project.

3.2 Mapua – Aranui Road

The new 1200 mm diameter stormwater pipe under Aranui Road and through the adjacent private property has now been completed. The replacement of the section of stormwater reticulation from Higgs Road to the estuary is about to be tendered.

3.3 Motueka – Glenaven Drive stormwater detention dam

The grass in this area has now been cut, the stormwater intake has been lowered and a swale dug around the northern and western sides so as to drain the area.

Council's Parks Department are going to maintain the grass height at a similar level as the adjacent area.

3.4 Patons Rock

Attached is a letter from the Patons Rock Beach Society Inc. supporting the proposed new stormwater UDA for the township. This letter will be held with other submissions received when the draft LTCCP is published.

4. WASTEWATER

4.1 General

- Overflow at Tata Beach Pumpstation was caused by electrical/mechanical faults. Pump overloads were replaced to eliminate pump failures due to voltage supply fluctuations.
- Site improvements have been made to Tapu Bay pumpstation, bunding has added protection against emergency overflows, work continues to upgrade all coastal pumpstations (photo attached).
- Overflows have also occurred in a private Hill Street gully trap, and Waitapu Rd Takaka; overflows were confined to the immediate area.

4.2 Tapawera Ponds

The new aerator, including power supply, has been installed and is running well. The switchboard, previously operated via a generator, is now on permanent supply.

4.3 Trade Waste by-law

Investigations are underway into the purchase of appropriate sampling/monitoring equipment for the analysis and monitoring of effluent with the implementation of the TDC Trade Waste Bylaw 2005. The bylaw was signed and sealed on 26 January 2006 and is due for implementation from 1 July 2006. The bylaw has been placed on the TDC website.

5. REFUSE

5.1 Kaiteriteri Refuse

The Kaiteriteri area has now resumed with the standard one-day collection service. A number of residents are still leaving rubbish bags out at the street verge well prior to the official collection day. Council staff continue to receive complaints regarding the visual appearance of these bags.

The additional weekly collection over the Christmas/New Year period was at a total cost of \$3,500. At this low level of investment expenditure, it is felt that a separate targeted rate to fund this service is not warranted and would be inefficient in terms of the administration costs of such a rate.

6. TENDERS

The following report on awarded tenders was omitted from the last meeting papers in error.

No	Contract Name	No. tenders received	Successful tenderer	Amount \$	Highest amount \$	TDC Estimate \$	Budget \$
635	Richmond trunk main sewer replacement	4	Ching Contracting	3,575,026	5,363,098	2,619,555	3,295,000
649	Takaka sewer pumping system upgrade	2	Ching Contracting	1,792,658	1,863,442	1,967,381	1,950,000

Recommendation

THAT the report be received.

Jeff Cuthbertson
Utilities Manager