### STAFF REPORT

**TO:** Chairman and Members, Engineering Services Committee

**FROM:** Jeff Cuthbertson, Utilities Manager

**DATE:** 25 August 2008

SUBJECT: UTILITIES MANAGEMENT REPORT

### 1 GENERAL

The utilities maintenance contractor has continued to perform well during the last period and have managed their resources adequately. A significant portion of capital work has been undertaken within contract 688.

Some reasonable periods of rain have occurred during July and August. Although some delays have resulted for some projects and portions of maintenance work, no significant associated flooding issues have arisen.

The severe windstorm event of 31 July was quite localised and had a relatively minor impact on Council utilities across the Tasman region.

However, the recent snowstorm event of 14-17 August had significant impact with sporadic and sustained power outages in Murchison and St Arnaud respectively. The significant effort of the O&M contractor to keep pumpstations operating by way of rotating emergency generators was commendable.

A monthly Utilities contract meeting was held on 20 August.

The programme for the 2008/09 capital projects has been completed and is now underway. A schedule of renewal and replacement projects to be completed within contract 688 has been issued to the O&M contractor for programming and pricing.

Proposals have also been received and are being assessed for the reconfiguration and upgrade of the telemetry radio and repeater network. Proposals were put forward by four contractors and these were narrowed down to two preferred proposals. A recommendation by the evaluation team will be made in the near future. A digital radio link is being trialled between the Waimea Water Treatment plant and Council's Richmond office, and to date is proving very successful.

#### 2 WATER

#### 2.1 General

Water schemes continued to operate during the last period without significant issues. The contractor has commenced water cyclical maintenance requirements for the new financial year complying with their annual programme. The first of the pumpstation chlorinators programmed for overhaul was completed at Brightwater main pumpstation.

During water shortage issues in Nelson City as a result of the 31 July severe windstorm event, Waimea water was redirected into Stoke in Saxton Road to help Nelson City Council keep up with water demand.

The following water supply operational issues have occurred during the period:

- Break occurred on 200mm Mapua trunk main near Greenacres Golf course;
- Awa Awa Road, break occurred in Mapua rural extension line;
- Cropp PI pipe break caused temporary loss of supply;
- Lower Queen St break in 100mm main;
- Westdale road, 50mm PVC mains break occurred;
- Comms failure at Brightwater Reservoir resulted in temporary water shortage (20 minutes).

Other work in progress includes:

- Preparation for installation of upgraded telemetry for new Brightwater reservoir;
- Installation of replacement boundary meters in Murchison.

## 2.2 Water Capital Projects

## Brightwater Reservoir

Roof panels have been installed and final roof concrete has been placed. Pipework has been connected to the new main and has been tested. The reservoir is now in its commissioning phase and undergoing pressure testing. The project is now behind schedule overall, in part due to some alterations in pipework design, and it is expected to be completed by early September.

# • Motueka Watermain Renewal

Adcock and Donaldson have commenced this project and the work is to be completed within eight weeks. Some discussion is underway with Telecom to install cables and spare ducting and some further cost saving from sharing trenches is expected. The contract has been extended to include installation of mains in Whakarewa Street to provide a connection to Motueka High School.

#### 2.3 Dovedale and Redwoods Rural Schemes

Both schemes have continued to operate satisfactorily over the last month with fewer breaks due to frosts and only a few minor leaks having to be repaired.

#### 2.4 Takaka Firewells

The programme for statutory consultation is being worked through with various parties. A timetable will be issued in due course.

### 2.5 Draft Water Supply Bylaw 2008

The draft Water Supply Bylaw 2008 is currently out for public submission. Submissions close on 25 August 2008. Hearings of any submissions will be held on 5 September 2008. It is proposed to have Council adopt the bylaw on 16 September 2008.

#### 3 STORMWATER

### 3.1 General

Several heavy rainfall events were recorded in July and August. Utilities networks were not significantly impacted apart from some minor surface flooding (Motueka/Mapua). This continued rainfall following on from a wet June has resulted in saturated soils and high groundwater levels throughout the district.

- Some surface flooding occurred in Motueka and Mapua;
- Brightwater Underpass pump failed and was replaced, resulted in some floodwater in the underpass;
- A discharge of oil was found, contained and removed from the Railway Reserve stormwater drain, Richmond.

Routine stormwater maintenance was undertaken in accordance with the annual schedule. The first portion of the Staples Street Drain down to the Kumara's corner has been cleared in consultation with DoC and iwi. A further section is programmed in September.

Repairs were required to the structural supports of the Broadsea Avenue/Chaytor reserve outfall due to recent heavy seas undermining the piles and supports.

## 3.2 Stormwater Capital Projects

## Seaton Valley Stream, Mapua

The resource consent application for the stream works and outlet works was publicly notified on 5 April 2008 with submissions closing on 5 May 2008.

Staff have discussed concerns with submitters to the consent and are hopeful that the need for a hearing may be avoided.

The physical works through the causeway are now proposed to occur in the second quarter of next year to avoid holiday activities. The scheduling of remaining works is being reviewed taking into consideration alternative access arrangements for when the works are being constructed.

# • Reservoir Creek - Templemore Drive section

Adcock and Donaldson are making steady progress with contract work on the Templemore Drive section of Reservoir Creek and work is scheduled to be complete by mid-September but has been delayed by recent rain.

### Cornwall Place, Tata Beach

The tenders for this project were evaluated and a preferred tenderer has been obtained, and the project is ready to proceed as soon as resource consent has been granted. Work is programmed to commence in early October. Agreement has been reached with affected landowners.

#### 4 WASTEWATER

### 4.1 General

All treatment plants were routinely checked during the month and pumpstations cleaned. Even with the occurrence of some reasonable periods of rainfall operational issues were still minimal. Although some pumpstations were operating at higher levels in Motueka and Mapua with extra stormwater infiltration, no associated overflows were recorded.

Motueka WWTP and Upper Takaka WWTP have continued to experience high flows throughout July and August due to persistent rainfall and high groundwater levels. Monitoring of the Takaka WWTP showed instances of resource consent non-compliance in FC's and TSS most probably due to the recent de-sludging exercise.

The 150mm main which blocked at St Pauls School, Richmond, due to rocks in the line, was cleared with the overflow confined and site cleaned.

Other work in progress includes:

- Minor upgrade at St Arnaud WWTP.
- Upgrade of sewer gravity main, St Arnaud.
- Installation of aerators, screen, and associated equipment and cabling at Collingwood WWTP.

### 4.2 Capital works

## Takaka Sewer and Pumpstation Upgrades

Ching Contracting Ltd are progressing well with many aspects of the contract although the recent continued periods of wet weather have caused some delays. Work is nearing completion at the Waitapu Road pumpstation, Primary School pumpstation, and also at the Burnside site. Most of the rising main from Burnside to Sunbelt is complete and the rising main from the Primary School pumpstation to Waitapu pumpstation, is also complete. The contract is still on track for completion by the end of October.

# • Collingwood, Takaka and Upper Takaka WWTPs De-sludging

Work is now practically complete for the de-sludging of the oxidation ponds of Collingwood, Takaka and Upper Takaka WWTPs. The total volumes extracted were slightly less than anticipated, resulting in some overall cost saving.

#### Wastewater Reticulation Renewals Project - Motueka

Fulton Hogan Ltd have completed this work and have attained practical completion on this contract. The project now enters its defects liability phase.

## • Tapawera Wastewater Treatment Plant Upgrade

Adcock and Donaldson Ltd have experienced some delays with this contract at the Tapawera WWTP due to the sustained periods of recent wet weather. They have utilised specialised equipment as an alternative method of suitably drying the remaining pond sludge which it is hoped will help to bring the project back on programme.

## 4.3 Golden Bay Sewerage Liaison Group

Council staff have consulted with the Manuwhenua ki Mohua (Golden Bay iwi) regarding sewerage issues for a number of years. One of the outcomes of that consultation has been the establishment of a Memorandum of Agreement between iwi and Council. The agreement was signed on behalf of Council by Mayor Kempthorne recently at a function at Pohara.

## 4.4 Campervan Dump-stations

The investigation into a new location for a campervan dump-station site still continues. Several sites have been reviewed without obtaining agreements.

#### 5 SOLID WASTE

## 5.1 Kerbside recycling and bag collection

Kerbside collection continued over the period with no significant issues and generally good contractor performance. Kerbside recycling volumes continue to increase modestly.

Delivery of commercial recycling containers (140 litre wheelie bins) is expected in the next fortnight. Over the next month staff will be working with the contractor to prepare information for businesses wishing to use the service, with a staged roll-out proposed over the next two to three months. It is proposed to contact businesses individually to identify needs and arrange for delivery.

# 5.2 Resource Recovery Centres

Operations at the five Resource Recovery Centres continued over the period with few issues.

#### Richmond

This site continues to be particularly busy.

Drainage improvements have now been completed and are expected to significantly improve stormwater management on the site. The works included the installation of an advanced sediment trap unit, the first of its kind in the district. The installation is expected to be a useful test site for performance evaluation with the view to additional locations.

As indicated in the previous utilities report, some works scheduled for the previous year were not completed. A recent review of the site layout at Beach Road has indicated significant potential for improvement. It is proposed to review the currently scheduled capital works in the light of long term plans for the site and report back to the committee.

## Mariri

The weighbridge at the Mariri site has now been commissioned and is in service. A significant number of other miscellaneous improvements to the site have recently been completed.

As indicated in the previous report, some capital works scheduled for the last financial year were not completed, in particular the proposed improvements to site drainage. Consultants for Council have been collecting surface water data and are reviewing

resource consent needs for these works.

It is proposed to review the scheduled capital works this year in the light of recent proposals for long term improvements to the site. These plans differ somewhat from previously scheduled work and it is proposed to amend the scheduled works for this year to accommodate future works.

### Takaka

This site continues to operate well. Capital works for the year include provision of a further shed on the lower site and improvements to the existing reuse shop.

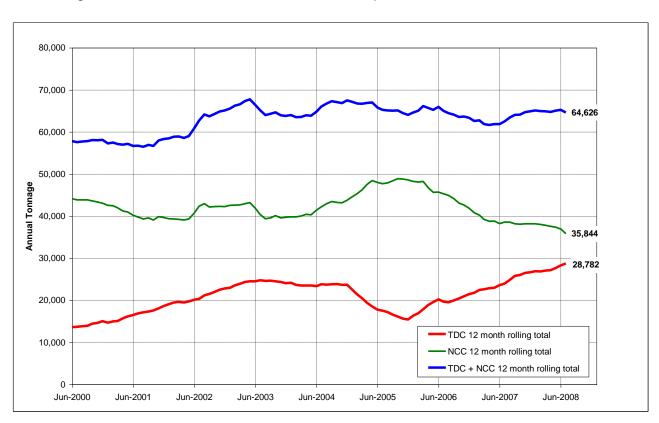
#### Murchison

Site development works and construction of the transfer facility are continuing. Construction of the transfer facility is in progress with work being delayed by recent weather.

Waste disposal to landfill continues in order to maximise the last landfill cell and to contour the cap of the cell to shed water. Capping of the cell with clay material will commence once waste transport to Eves Valley commences, expected in the next three months.

# 5.3 Eves Valley Landfill

As reported in the previous report, the annual refuse volume to Eves Valley for the 2007-2008 year was 28,800 tonnes, an increase of 20% over the prior year. The main source of this increase was additional special waste (+77%) and waste from the Richmond RRC (+21%); the special waste volume was significantly influenced by disposal of biosolids from the Collingwood and Takaka wastewater treatment ponds.



Full year data is now available from Nelson City, and indicates that the bulk of waste growth at Eves Valley has been at the expense of waste volumes at York Valley. If this trend continues (or even stabilises) then capacity at the Eves Valley site will be consumed quicker than originally anticipated, requiring the consenting and construction of Stage 3 in the reasonably near future.

#### 5.4 Waste Education and Waste Minimisation

Waste education contractors recently presented information at the annual Ecofest in Founders Park. The presentation saw a change in focus from composting and greenwaste to waste minimisation through purchasing. This is an area that will be focused on in the coming 12 months of the contract.

Council staff, with the support of Fonterra, have now arranged for additional venue in Takaka for the upcoming e-Day on October 4. Publicity for this event is being finalised for publication.

## 5.5 Waste Minimisation (Solids) Bill and Waste Management Plan

The Waste Minimisation Bill (as it is now named) is currently being debated by the House in committee. A number of small, but significant amendments are before the House. It is hoped that the bill will be passed in the month of September.

Upon the passing of the bill into law, Council staff will meet with NCC staff to further discuss the preparation of a joint Waste Management Plan.

## 5.6 Recycling in Public Places

Council has recently been successful in an application to the Ministry for the Environment for up to seventeen small and seven large public place recycling bins. The grant provides for installation (up to \$67,500) and maintenance of the bins in the first two years (\$57,500).

Council staff are working with the Ministry to finalise the deed of agreement and then will be working with local communities to establish preferred locations and design of the bins. It is hoped to have the bins installed before Christmas.

#### 6 COASTAL STRUCTURES

### Old Mill Walkway – Stage 2

Consent design and preparation of a Consent Application is now largely complete. An open day for consultation with the public is scheduled for Saturday 30 August and it is hoped to lodge the consent shortly afterwards.

#### 7 TENDERS

No tenders have been awarded since the last meeting.

#### 8 RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager