

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson, Utilities Manager
DATE: 14 November 2008
SUBJECT: UTILITIES MANAGEMENT REPORT

1 UTILITIES GENERAL

The utility maintenance contractor, Downer EDi Works has satisfactorily undertaken all maintenance work on council's utilities assets during October, resulting in the network being well maintained and operational issues being kept to a controlled and acceptable level.

A monthly Utilities contract meeting was held on 20 October 2008.

Proposals have been assessed, for the reconfiguration and upgrade of the telemetry radio and repeater network. A summary will be reported to this Engineering Services Committee meeting in a separate report.

Public Relations/Customer Image

Along with Council's contractor, Downer EDi Works and MWH Council staff are looking to improve our customer image. One particular issue relates to when Council's maintenance contractor (Downer EDi Works) visits a property - they are not identified as our contractor but instead as Downer EDi Works. In the past this has caused confusion especially when notice is given to customers of planned shutdowns.

The intention is to look at an option of branding our water maintenance and operations. A suggestion is to build on Council's recently adopted logo to reflect "Tasman Water" as an identity for all of Council's water maintenance and operations.

If acceptable, the logo would be included on Downer EDi Works vehicles and used on all correspondence to customers regarding water shut downs etc. In conjunction with the logo, the organisation responsible for the maintenance and operations of Council's water projects would also be identified as "Tasman Water", eg TDC, Downer EDi Works and MWH.

A report will be presented to the Engineering Services Committee after Christmas for consideration and review.

2 WATER

2.1 General

The water schemes continued to operate without significant issues. Water cyclical maintenance results received in October showed good compliance with the annual programme for Contract 688.

Dovedale and Redwoods Rural Schemes

No significant issues were experienced in the Redwoods rural supply scheme with only a few relatively minor repairs. Two major pipe breaks occurred on the Dovedale scheme causing reservoirs to run low and subsequent system airlocks needing to be worked out of the system during the days following. One was the result of a burst pipe and the other was caused by an excavator clearing river bank vegetation along the Dove River.

Other general issues include:

- Repair of 200mm mains in Old Wharf Road.
- A transgression occurred in the Upper Takaka supply - follow up sampling results showed some were clear and also a further positive result. Replacement UV bulbs for the UV unit will be installed.
- Burst 50mm ridermain on 88 Valley scheme caused reservoirs to go to low level alarm.
- Power failure at O'Connors Creek was due to trees falling on power mains, also resulting in low levels at Maiseys Reservoir.

Other work in progress includes:

- Golden Hills Road pumpstation – chlorinator was overhauled.
- Replacement of Laing's Reservoir – Redwoods Scheme.
- Upgrades to Tapawera and Upper Takaka water treatment plants.
- Replacement pump at Waimea treatment plant.
- Trialling and monitoring of releases from Wai-iti Dam.
- Extension to Permin Road of 63mm diameter watermain.
- Water meter replacements in Murchison and Richmond.

2.2 Water Capital Projects

• Brightwater Reservoir

The reservoir is now on line with final commissioning complete and the contractor achieving practical completion. Installation of connections between the existing and new reservoirs is also complete. Landscape planting with native trees and shrubs is to occur in the appropriate planting season to help to screen the reservoirs from view. The contract now enters a 12-month defects liability period.

• Motueka Watermain Renewal

Adcock & Donaldson have successfully completed the final portion of this project and completed all of the work without significant issues. Practical completion has been granted and the project is now in defects liability.

• Wakefield Reservoir

Progress is steady toward securing land for the construction of a new reservoir to increase the storage capacity for Wakefield's water supply. Detailed design of the reservoir is underway for the preferred site and the project will be tendered once agreement has been reached with the landowner.

3 STORMWATER

3.1 General

There were regular rainfall events and strong winds during October, typical of spring weather patterns. Stormwater systems experienced average flows and no major issues were reported. Continuing high groundwater levels resulting in saturated soils added further delays to some capital projects and programmed maintenance works. The maintenance contractor has now cleared some open drains programmed for September and has minor further works to complete to be back on programme. Blockages and overflows in Jimmy Lee Creek, and Bill Wilkes Reserve, Richmond were cleared.

Recent development of a property in Dorset Street, Richmond has identified a section of significantly substandard pipework which has failed in a number of places. Council is working with the maintenance contractor to investigate and replace a limited section of this pipework. Remaining sections of this pipeline will be added to scheduled renewals in future years as necessary.

3.2 Stormwater Capital Projects

- **Croucher / D'Arcy / Bird / Elizabeth Streets, Richmond**

Contract works commenced in the second week of November with preparations for the installation of three additional stormwater pipes under the Richmond deviation. The contractor proposes to complete this crossing by early December and to then move downstream to commence new pipe installation from McPherson Street, moving upstream.

Pipe installation in D'Arcy Street is expected to commence in February, and Council is currently working with the contractor to provide information and advance warning to residents in the surrounding streets.

Council is currently working on a variation to the original design to accommodate flows from the Talbot Street intersection upgrade scheduled for this year.

- **Seaton Valley Stream, Mapua**

Staff are now in a position where they feel they have reached agreement with all submitters that wished to speak to this resource consent application and are writing to each to confirm this. In the event that formal agreement is reached staff are hopeful of a speedy resolution of the consent application.

- **Reservoir Creek – Templemore Drive section**

These works have now been completed, with the walkway reopened to the public. Some additional planting is programmed for this area in the autumn when conditions improve for plant survival. The contractor worked carefully to ensure consent compliance and to avoid conflict with local residents.

- **Cornwall Place, Tata Beach**

Tasman Civil has largely completed the work involved in this contract. Reports have been received that the contractor has liaised well with landowners, Historic Places Trust and iwi. Some additional work for other council departments to extend the existing carpark and to upgrade footpaths, channels and kerbs may be also carried out by the contractor. The stormwater upgrade work is on budget and on track for completion by mid-December.

- **Salisbury Road Stormwater upgrade**

A review of stormwater network capacity in Richmond has been completed recently. It identified significant areas of pipework not meeting Council's capacity requirements, including Salisbury Road, between Talbot Street and Arbor Lea Avenue. It has been identified that upgrading of this pipework this financial year, in advance of scheduled road surfacing, may be beneficial. A separate report on the agenda discusses funding for this project. Staff are currently working with consultants on a preliminary design scope for this work with a view to progressing to a detailed design.

Other Projects Underway

Design and feasibility work is progressing for Kingsley Place stormwater upgrade in Richmond, and Gibbs Road stormwater improvements in Collingwood.

4 WASTEWATER

4.1 General

All treatment plants were routinely checked during the month and pumpstations cleaned. Random audits of a selection of the contractors work indicated the quality of work was of a high standard, resulting in them achieving the required audit scores of above 80%.

Other general issues include:

- Burst 200mm rising main on Bullivant Drive, Rabbit Island. Effluent was contained, the affected area cleared and disinfected. A new valve is to be installed for better isolation of the main.
- 100mm rising main break near Country Lodge, Pohara, was repaired, discharge was contained and minimal.
- Blockage occurring in High Street, Motueka was cleared, no overflow occurred.
- Tree roots caused blockage in manhole, Stafford Drive, Mapua, no overflow occurred.
- Woodlands Ave, blockage cleared, no overflow occurred.
- Whitby Road, Wakefield - Blockage in reticulation causing overflow was cleared and disinfected.
- Outlet to Tapawera WWTP temporary pond and outfall pipe that was partially blocked required regular cleaning due to temporary nature of small aeration/settling pond (will soon be resolved when new pond comes on line).
- Several instances of non-compliance with resource consent conditions occurred at Takaka WWTP, from overflowing infiltration trench surface water (due to excess rainfall), results are to be retested to determine if effects are significant.

Other work in progress includes:

- Removal of trees at Upper Takaka WWTP and installation of cut-off drain
- Installation of aerators, screen and associated equipment, pipework and cabling at Collingwood WWTP is expected to be completed this month.

- Aerator #2 at Motueka ponds was repaired and recommissioned, along with new stainless steel anchor wire.
- Water supply system is installed at St Arnaud WWTP for maintenance and equipment washdown and health and safety purposes.

4.2 Capital works

- **Takaka Sewer and Pumpstation Upgrades**

Despite wet weather delays, the contract has achieved practical completion and has now entered a 12-month defects liability period.

- **Tapawera Wastewater Treatment Plant Upgrade**

Adcock & Donaldson Ltd have continued to experience some significant delays with this contract at the Tapawera WWTP due to the ongoing wet weather. Drying of the excavated sludge has proved difficult during the wet month of October but they are making progress on site with the installation of the main pond liner and completion of other pipework, mechanical and structural portions of the contract. The contract is expected to be practically complete by the end of this month.

- **Wally's Rest Pumpstation and Sewer Rising Mains Upgrades**

Tenders have now closed for this contract which has attracted a significant amount of interest. The tenders will be evaluated utilising the weighted attributes evaluation method, with all tenderers total score weighted by 50% of non-price attributes and 50% of price scores. The contract is expected to be awarded by mid-December.

- **Mapua Channel Crossing**

Investigation works are about to re-commence to determine the integrity of the existing unused section of pipework beneath the Mapua Channel. The contractor was previously only able to clear debris from the pipe to approximately half way from the Rabbit Island side of the channel within the confines of its resource consent. This time the contractor will set up equipment on the Mapua side of the channel, adjacent to the existing pumpstation, to complete the works. The work is expected to be complete by mid December. The nearby café owner has received regular updates via ongoing consultation.

5 SOLID WASTE

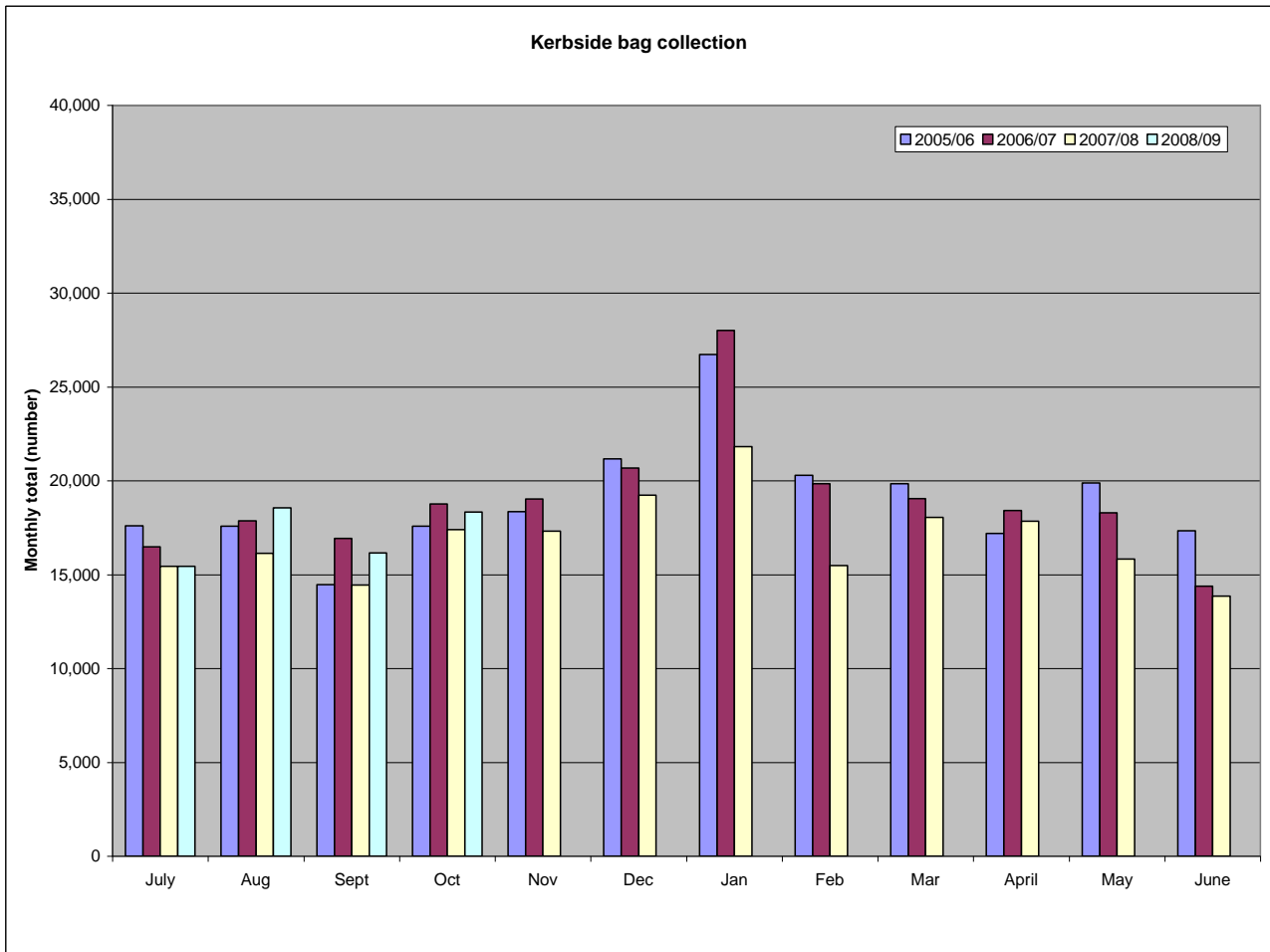
5.1 Kerbside recycling and bag collection

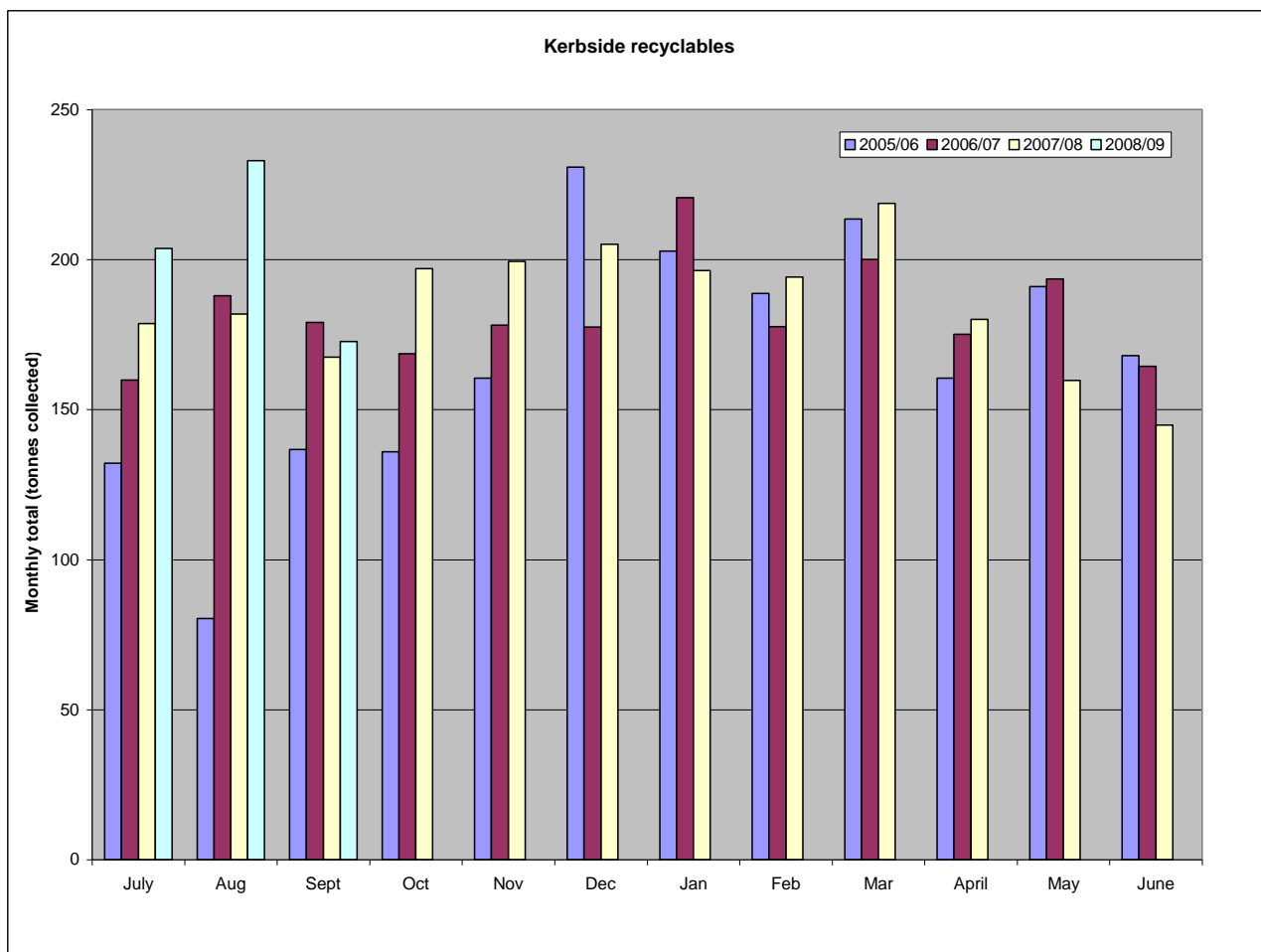
Kerbside collection continued over the period with no significant issues and generally good contractor performance.

The following graphs illustrate trends in kerbside collection of refuse and recycling. Recycling quantities indicate a pleasing 15% increase on the same period last year. While bag collections remain static, recent trends have indicated a drop in bag sales; this trend will be monitored in coming months.

The collection of paper and cardboard for most business properties within the targeted rating area is now in commencing in the Richmond CBD. Information is being sent to

businesses in the CBD inviting their participation in the service. One 140 litre wheelie bin will be provided to each rateable commercial zoned property.





5.2 Resource Recovery Centres

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

- **Richmond**

This site continues to be busy with a further 16% increase this quarter on the same period last year. Staff have been assessing potential improvements to load-out arrangements and have identified a need for a new bin parking area adjacent to the compactor. Site investigations for this work are progressing.

- **Mariri**

Weighbridge installation at this site is now fully complete. A new water supply line has recently been installed to the site from Robinson Road. Connection to the Lower Moutere Water Supply Scheme was expected at the time of writing.

Work continues to assess the water quality of runoff from this site and potential treatment options.

- **Takaka**

Structural design and preparation of a building consent application for the construction of a shed in the lower area of the site is currently underway. Improvements to the reuse shop programmed for this year will be included within this work. Prices for undertaking this work will be sought from a number of contractors once building consent is obtained.

Construction of new fall barriers adjacent to the waste chute is programmed to be completed prior to the busy holiday season.

- **Collingwood**

Minor improvements to the recycling shed and to the surfaced area on the front of this site are programmed for this year at Collingwood. Prices for undertaking this work are currently being sought from a number of contractors.

- **Murchison**

Site development works and construction of the transfer facility continue with substantial completion of the transfer facility expected prior to mid December.

Waste disposal to landfill continues in order to maximise the last landfill cell and to contour the cap of the cell to shed water. Transport of waste to Eves Valley is expected to commence in January 2009. Capping of the cell with clay material will commence once waste transport to Eves Valley commences.

5.3 Eves Valley Landfill

Operations at the Eves Valley Landfill have been particularly busy in the first quarter and the following graphs illustrate recent waste quantities. The first graph illustrates a 19% increase in landfill tonnages over the same period last year, although if special wastes are excluded this reduces to a 10% annual increase.

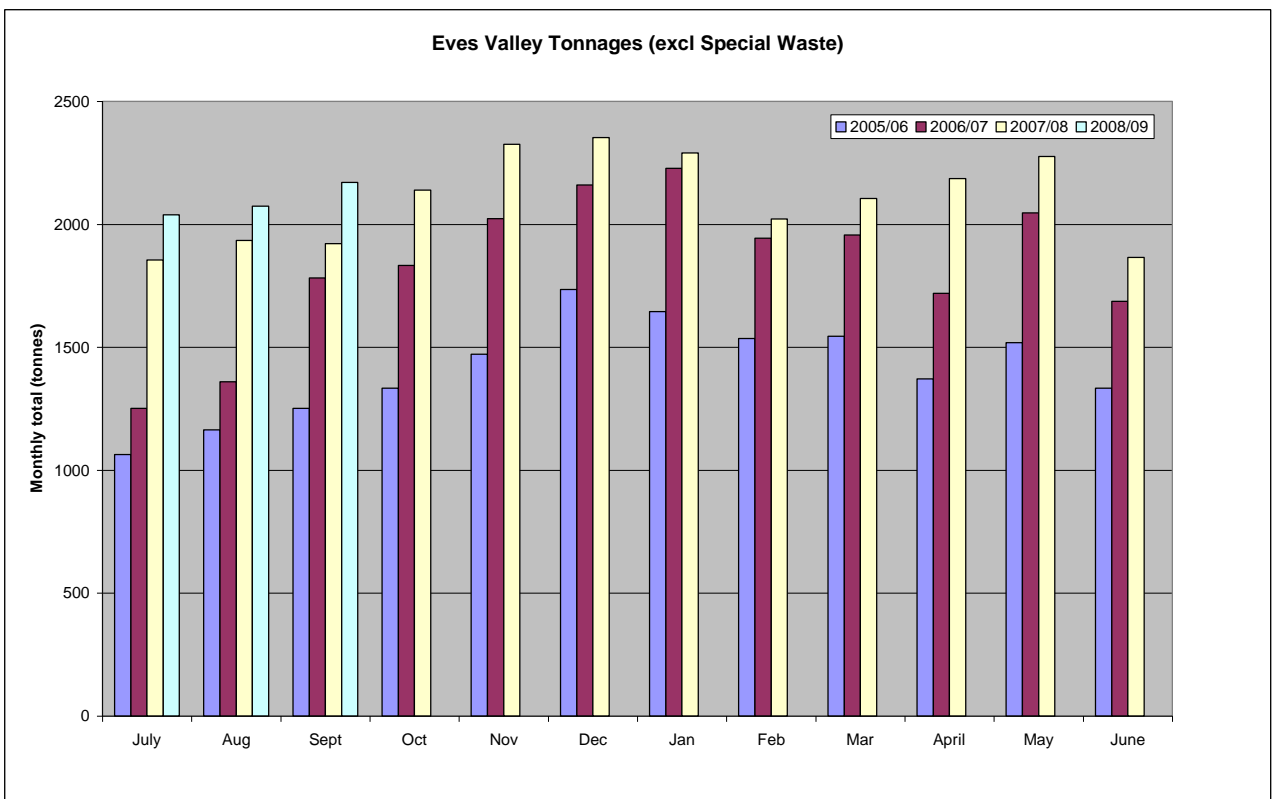
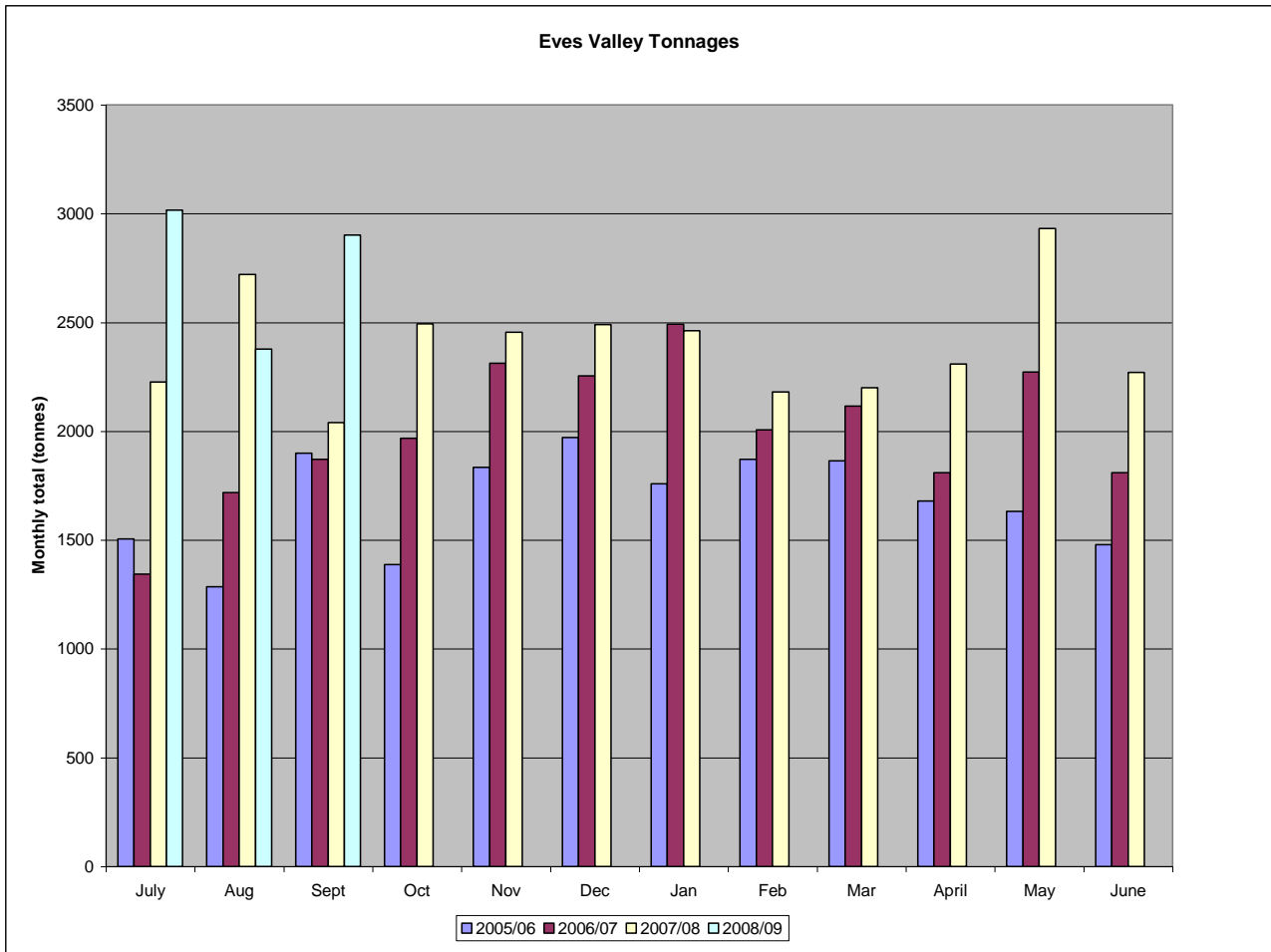
Special waste quantities have been so high in recent months that the special waste total to the end of October is equal to the entire special waste quantity of last year.

Recent sources of the special waste include:

- Biosolids from Tapawera, Takaka and Collingwood oxidation ponds.
- Contaminated soil from Richmond urban development sites.
- Waste material removed from site improvements at the Mariri RRC.

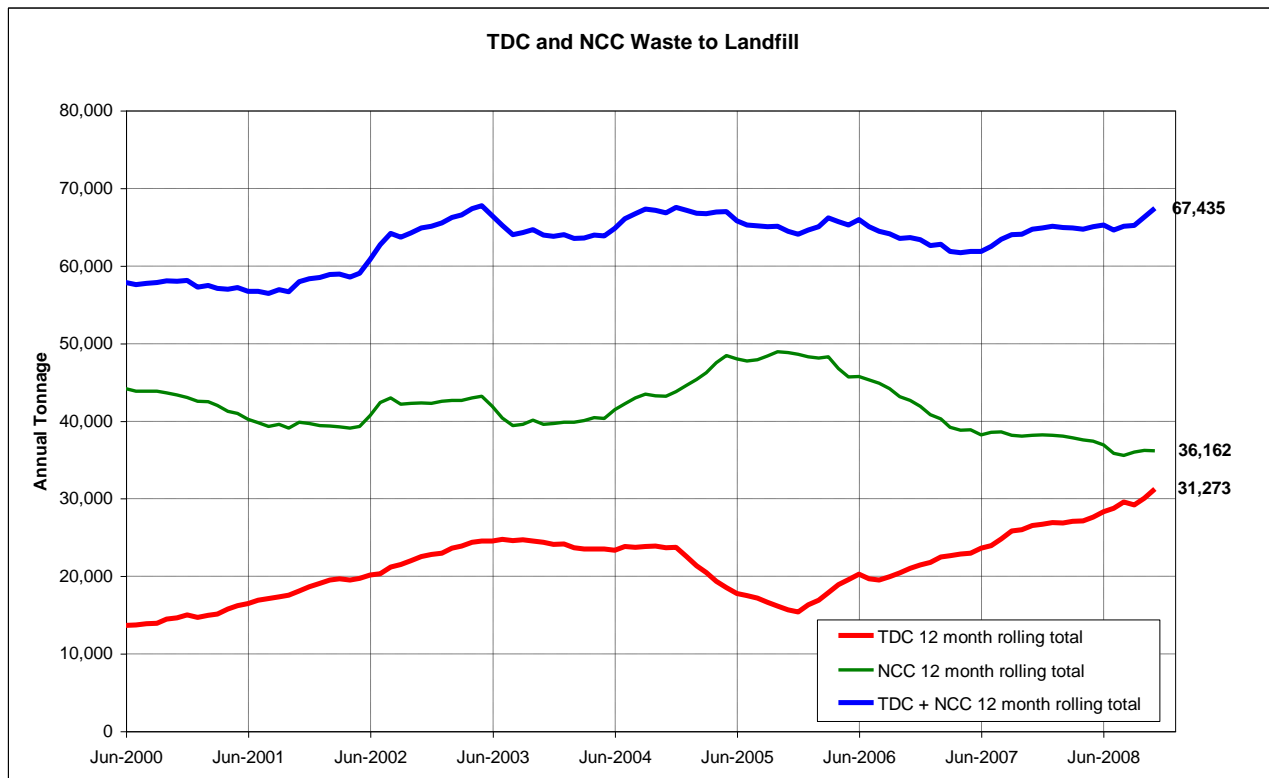
As noted in the last report, wet weather and larger than normal special waste quantities led to lower than normal performance at the site. This in turn has led to some delays in dealing with special wastes over the last two months.

Recent and ongoing work on site has now improved the contractor's capacity to deal with unscheduled waste quantities. Council will continue to work with the contractor to improve site performance.



A comparison of Tasman District with Nelson City Council data illustrates regional trends - in particular a convergence of Tasman and Nelson waste quantities. While the recent spike in special waste at Tasman District is evident, analysis of the regional data indicates

that if special waste is excluded then regional waste quantities continue to plateau.



5.4 Waste Education and Waste Minimisation

Council's waste education contractor continues to work with schools, community and business groups. Upcoming work will concentrate on promotion at A&P Shows and community events. The focus of the A&P Shows this year will be promotion of recycling of agricultural products.

5.5 Waste Minimisation Act 2008 and joint TDC / NCC Waste management plan

Nelson City and Tasman District Council staff are working on an assessment of each waste management plan in accordance with s51 of the Waste Minimisation Act, with a view to reporting back to each Council in the new year. The first stage in this process is a waste assessment, for which a brief is currently being prepared.

5.6 Public place recycling

Council staff have continued to work with the Ministry for the Environment to implement public place recycling for this summer. Staff are hopeful that a formal funding agreement will be signed with the ministry prior to the meeting.

6 RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager