

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson, Utilities Manager
DATE: 10 February 2009
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 the summer period, resulting in the network being well maintained and operational issues being kept to a controlled and acceptable level. Compared to summer periods of the past, few issues arose and were relatively minor. Some water leaks became evident, particularly on rural schemes, and also some odour issues due to the high weather temperatures, were prevalent at sewer pumpstations between Takaka and Pohara. Two chemical dosing units have since been installed at School Road and Pohara Camp pumpstations, and are reportedly working well.

A monthly Utilities contract meeting was held on 28 January 2009.

Staff were given limited warning that the Telecom paging network was to be discontinued as from 31 December 2008. Until then, all alarm notifications were forwarded to the contractor via leased pagers, and some urgent switchover work had to be completed between 20-30 December to ensure all network alarms would now work via the mobile network on a 24hr-7days/week basis. The system is working well, and some cost saving is expected long-term for Council by not leasing pagers or being charged for paging of communications failures.

2 WATER

2.1 General

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

Compared to summer periods of the past, leading up to and during the Christmas–New Year period, few issues arose and were relatively minor. In particular, the damp weather leading up to the break was a factor in reducing the typical strain on all water supplies, reducing overall demand. Breaks and other issues were minimal.

- **Dovedale and Redwoods Rural Schemes**

No significant issues were experienced in the rural supply schemes with only a few relatively minor repairs. Some issues from telemetry communications failures have caused low levels in some reservoirs, with Redwoods Valley and others overflowing. These issues although frustrating are usually localised, of minor impact and are resolved simply and quickly, and in the long term, communications failures will continue to decrease as the telemetry system is upgraded.

Other general issues include:

- Variable Speed Pump Drive (VSD) was replaced at Pinehill Heights pumpstation.
- Fearons Bush pumpstation was affected by temporary power outage.
- 200mm main break occurred in High Street, Motueka - water supply was disrupted for 1-2 hours.
- Valhalla Drive Reservoir went into low levels due to communication failure.
- Collingwood WTP – contact tanks overflowed due to power failure and communication issues with bore pumps.
- Burst 100mm main in Tasman Street, Collingwood caused water supply disruption, cause of break unknown.
- Champion Road Reservoir– VSD overheated from overload, now replaced.

Other work in progress includes:

- 150mm watermain installation across Gladstone Road at Queen Street intersection.
- 300mm trunk main diversion across Gladstone Road at Queen Street intersection.
- Replacement of Laing's Reservoir – Redwoods Scheme.
- Upgrades to Tapawera and Upper Takaka water treatment plants.
- installation of replacement pipework in Neal's property, Redwoods scheme.

2.2 Water Capital Projects

• Richmond Reservoirs

Investigation work is underway to determine appropriate sites for future reservoirs to supplement existing reservoirs and for security of supply due to future growth in Richmond. Following hydraulic modelling, numerous sites have been identified as potential options to primarily serve Richmond East and Richmond South, but also to link with existing reservoir levels and pressure zones. Landowner agreements are being finalised to carry out survey topographical work and initial geotechnical feasibility so that preferred sites can then be determined.

• 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 predominantly complete for the preferred site and the project will be tendered once agreement has been reached with the landowner.

• Lower Queen Street/ Gladstone Road Intersection Upgrade

Installation of a new 150mm main is required as a replacement for the existing 100mm AC watermain in conjunction with the upgrade of this intersection and alongside the installation of new deep gravity sewermain.

A significant diversion of the existing 300mm trunk water main is also required so that a section of the existing stormwater box culvert can be removed and replaced with new stormwater pipework. The alignment of the new main will be positioned in a suitable location so that it can be easily extended or connected to in the future.

• Talbot Street/ Salisbury Road Intersection Upgrade

The tender for the roading upgrade of the Talbot Street-Salisbury Intersection has closed

and is undergoing evaluation. Watermain upgrade work will be completed as part of the contract.

3 STORMWATER

3.1 General

There were reasonable but short-lived periods of rain in December and January though stormwater systems typically experienced average flows and no major issues were reported apart from some isolated incidents, such as near 147 Hill Street during the 20 December event. Routine maintenance and proactive maintenance was carried out in accordance with the contract schedule.

3.2 Stormwater Capital Projects

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

The contractor continues to make steady progress on this contract. The installation of the additional stormwater pipes under the Richmond deviation have been successfully completed, and work has commenced on new pipe installation from McPherson Street, moving upstream.

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

Staff are finalising work 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 have now reached agreement with all submitters that wished to speak to this resource consent application, and all but one submitter have confirmed that they no longer wish to speak. The consent application is now being processed with draft conditions being prepared for review by a final submitter. Tender documents are now being prepared for the construction of a new culvert through the causeway. Construction is scheduled for May and June.

- **Cornwall Place, Tata Beach**

The contractor has now completed the work involved in this contract. 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 scheduled original work was completed within timelines and project budgets.

- **Salisbury Road Stormwater Upgrade**

Survey work is now complete and detailed design has commenced for this work. Tenders are expected to be invited in late March or April.

- **Kingsley Place Stormwater Upgrade**

Design and feasibility work is complete for Kingsley Place stormwater upgrade in

Richmond, and the project is currently out for tender. Tenders close on 4 March.

- **Park Drive – Riding Grove Stormwater Upgrade**

Survey work is now complete and detailed design has commenced for this work. Tenders for this work are expected to be invited in April.

4 WASTEWATER

4.1 General

All treatment plants were routinely checked during the month and pumpstations cleaned. Random audits of a selection of the contractor's work indicated the quality of work was of a high standard, and cyclical maintenance results demonstrated good compliance with their annual programme.

Other general issues include:

- Burst 200mm rising main on Rabbit Island. Effluent was contained, the affected area cleared and disinfected, system benefited from better ability to isolate the main.
- 100mm rising main break near Country Lodge, Pohara, was repaired, discharge was contained and minimal.
- Blockages occurred at public toilets at Thorp Bush Motueka and Fairfax Street Murchison.
- Rising main bursts occurred in Abel Tasman Drive near Four Winds SPS, and near Burnside Road.
- Woodlands Ave, blockage cleared, no overflow occurred.
- Blockages occurred at Oxford Street, Richmond near Fire Station.
- Pole fuses blown at Collingwood WWTP have been upgraded.

Other work in progress includes:

- Sewer main installation in Lower Queen Street and Gladstone Road
- Minor remedial works to Mapua Wharf Main SPS
- Various investigations around Beach Road pumpstation

4.2 Capital works

- **Tapawera Wastewater Treatment Plant Upgrade**

Adcock & Donaldson Ltd have completed this contract at the Tapawera WWTP - some delays occurred due to the ongoing wet weather. Drying of the excavated sludge proved difficult due to wet weather but the remaining material was removed from site early in January. The contract is now practically complete and is within the defects liability period.

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

This contract has been awarded to Ching Contracting Ltd and is due to commence. The contractor has established on site and will start with construction of the new Wally's Rest Pumpstation.

- **Delaneys Pumpstation and Rising Main**

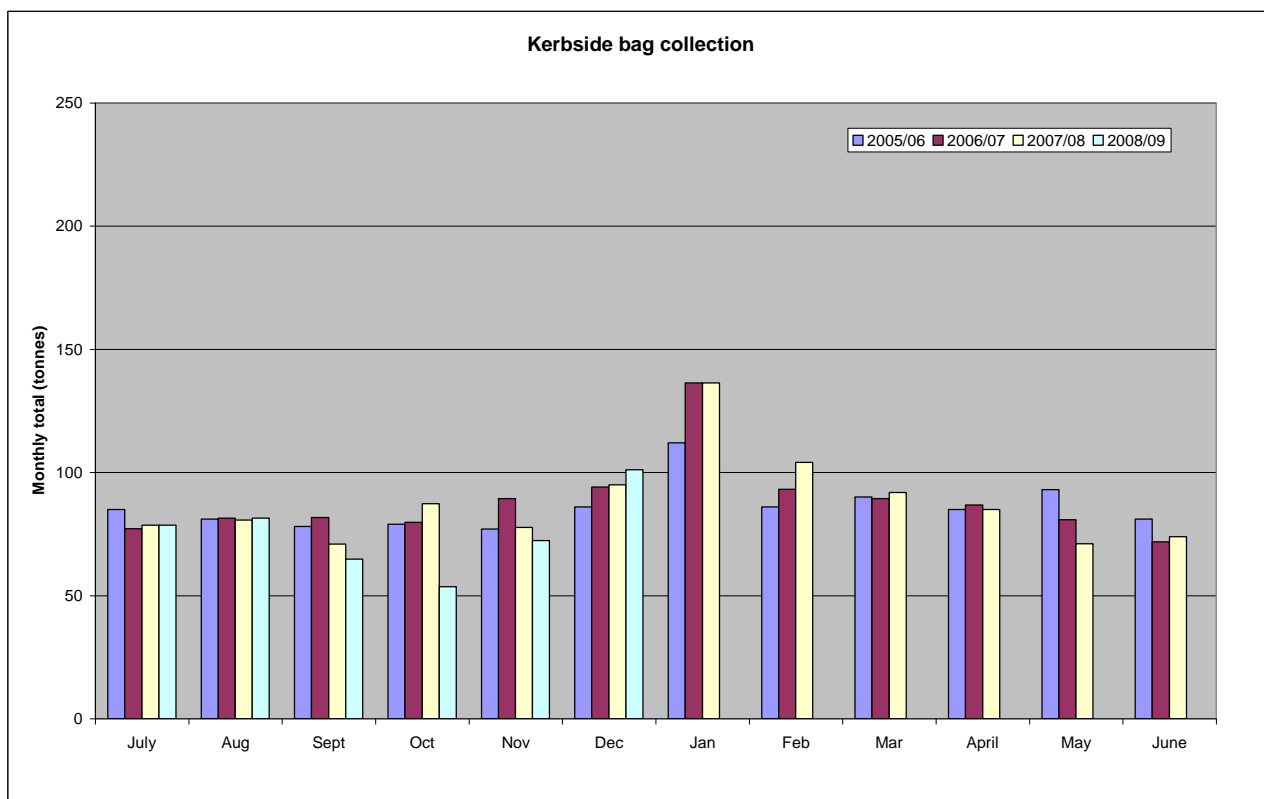
Design has been completed and tender documents are ready to go out to tender.

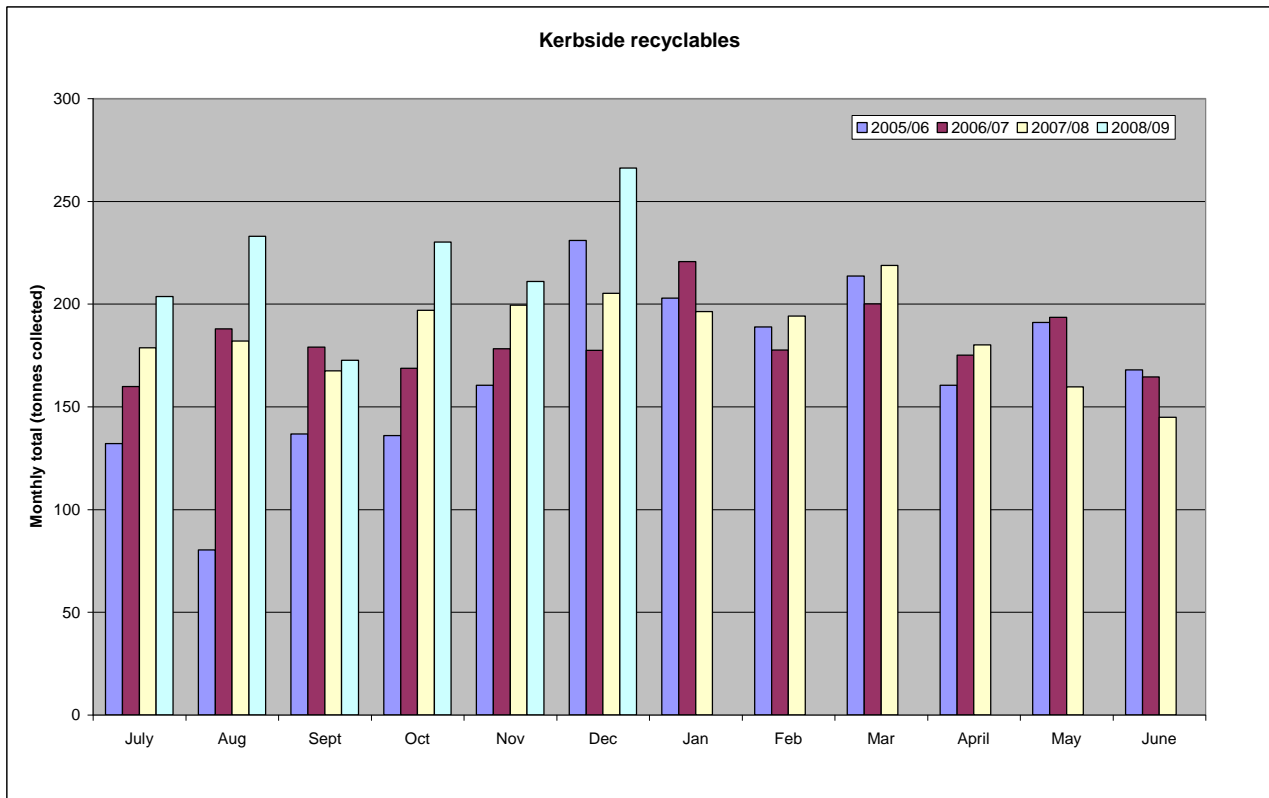
Negotiations continue with landowners to secure the preferred site prior to tendering the contract. Three tenderers have been shortlisted following a Request for Qualifications process, and these will be invited to submit tenders once land agreements proceed.

5 SOLID WASTE

5.1 Kerbside recycling and bag collection

Collections over the summer period were particularly busy with December rubbish bag and recyclable quantities up 23% and 30% respectively on last year's quantities. Additional rubbish and recycling collections were provided at Kaiteriteri again this year, with very few issues noted. The increase in recycling over the summer period resulted in some delays in collecting and processing materials but the contractor is now making good progress.





The recent decline in commodity prices for recyclable product has been well publicised in local and national media. Declines in prices for sorted recyclables have in some instances fallen by 95% in the period October to January. Before Christmas Council's contractor, Smart Environmental indicated they had sufficient markets for recyclable materials. Since this time prices for recyclable materials have dropped further.

The contractor has requested a meeting with Council to discuss these issues further. This meeting is currently scheduled for the week prior to the committee meeting and staff expect to be in a position to provide an update at the committee meeting.

5.2 Resource Recovery Centres

Operations at the five Resource Recovery Centres continued over the period with few significant issues (other than the normal seasonal increase in activity). Activity over the summer period included a satisfaction survey and traffic survey of each RRC.

- **Richmond**

This site continues to be busy, and while waste volumes continue to increase on last year, this increase has slowed to a 9% increase for the six month period (from 16% in the first quarter). It is proposed to modify the site entrance and layout to improve safety; site investigation and design for this is progressing.

- **Mariri**

Refuse volumes at this site continue to drop, with a 7% reduction for the six month period to December. Connection of a new water supply for this site is now complete. Work is continuing to assess potential treatment options for site runoff and to improve access to recycling facilities on this site.

- **Takaka**

Quantities at this site have recently increased, with a six month increase of 8% over the same period last year. Approval has recently been give for construction of a shed for handling of recyclables and car bodies on the lower level and for minor improvements to the bin loading area. Prices are also being sought for extension of the existing reuse shop.

Staff have met with the contractor and members of the general public to discuss access to the site for recovery of reusable materials. The practice occurred informally in the past, but has been halted due to potential risks to the public and contractor's staff. It has now been agreed to allow the public supervised access to useable materials, one day a week (Saturday) and on a trial basis. It is hoped that this will assist in diversion of additional material from landfill but keep the public safe.

- **Collingwood**

Improvements to the recycling shed and to the surfaced area on the front of this site are now complete. Staff are also looking at options for the relocation of the kiosk to allow better visibility and control of the site.

- **Murchison**

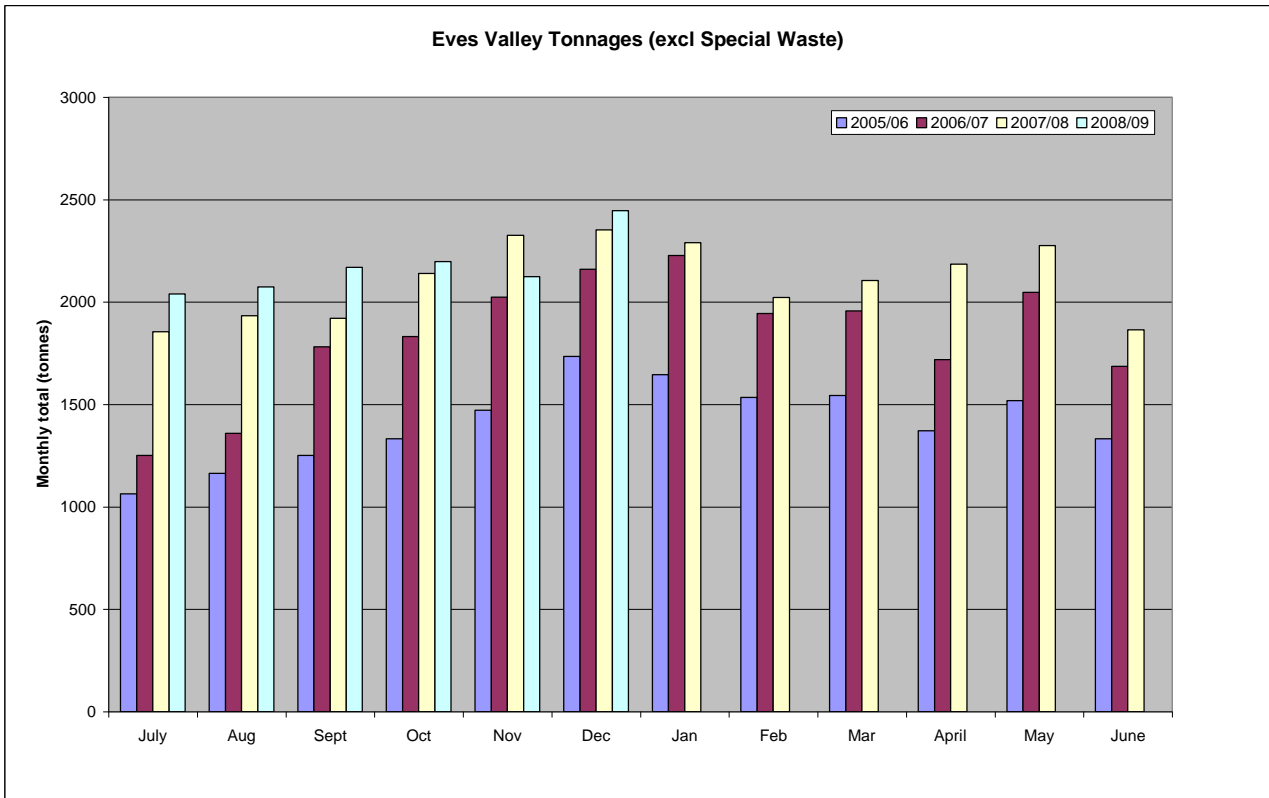
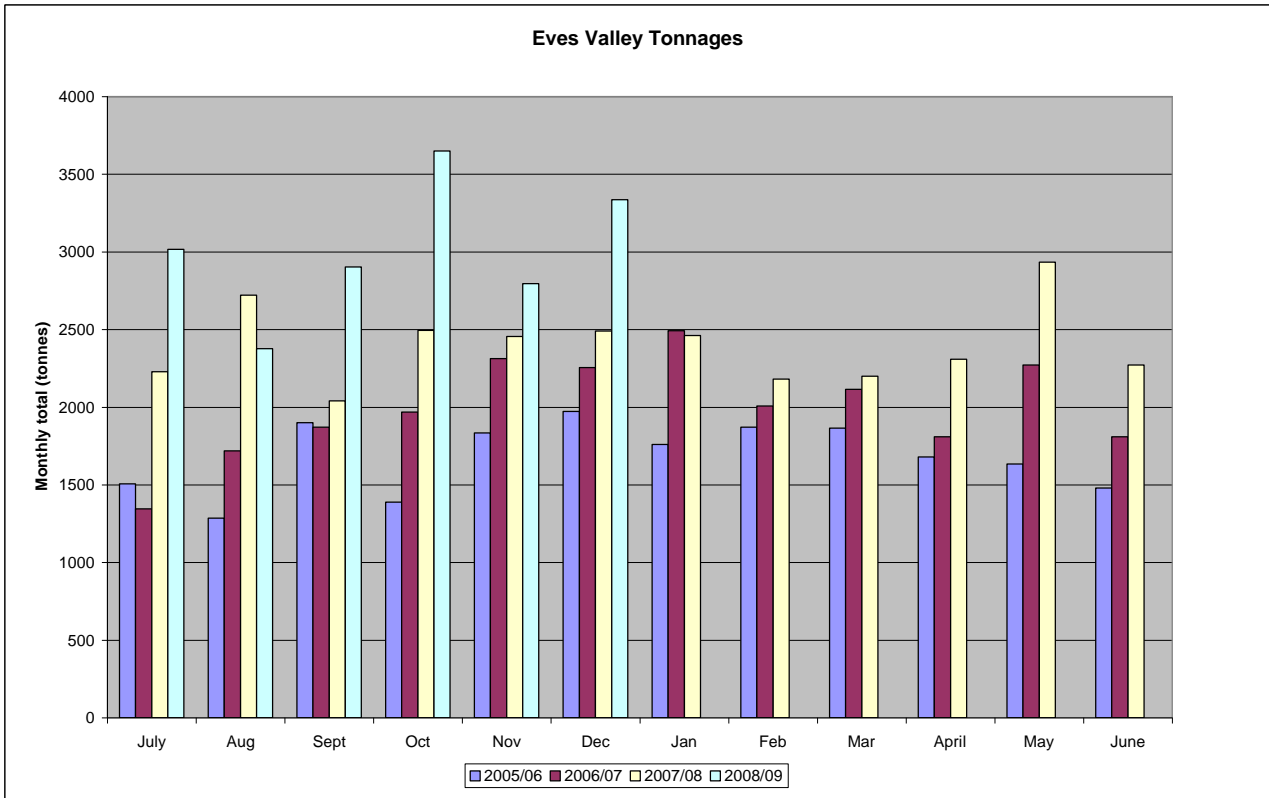
Site development works continue at this site and the transfer facility is now substantially complete. Initial capping of the final landfill cell is almost complete and the first load of refuse from the site to Eves Valley is expected in the third or forth week of February. Further work, including landscaping and construction of improved recycling facilities are programmed for this year.

5.3 Eves Valley Landfill

Operations at the Eves Valley Landfill have continued to be particularly busy in the last quarter with an increase of 30% over the same quarter last year and 25% for the six month period. Over the last quarter all of the additional activity period has been from special waste, and the bulk of this from two project sites in the district. Excluding special waste, the increase over the last six months has only been 5% over the same period in the previous year.

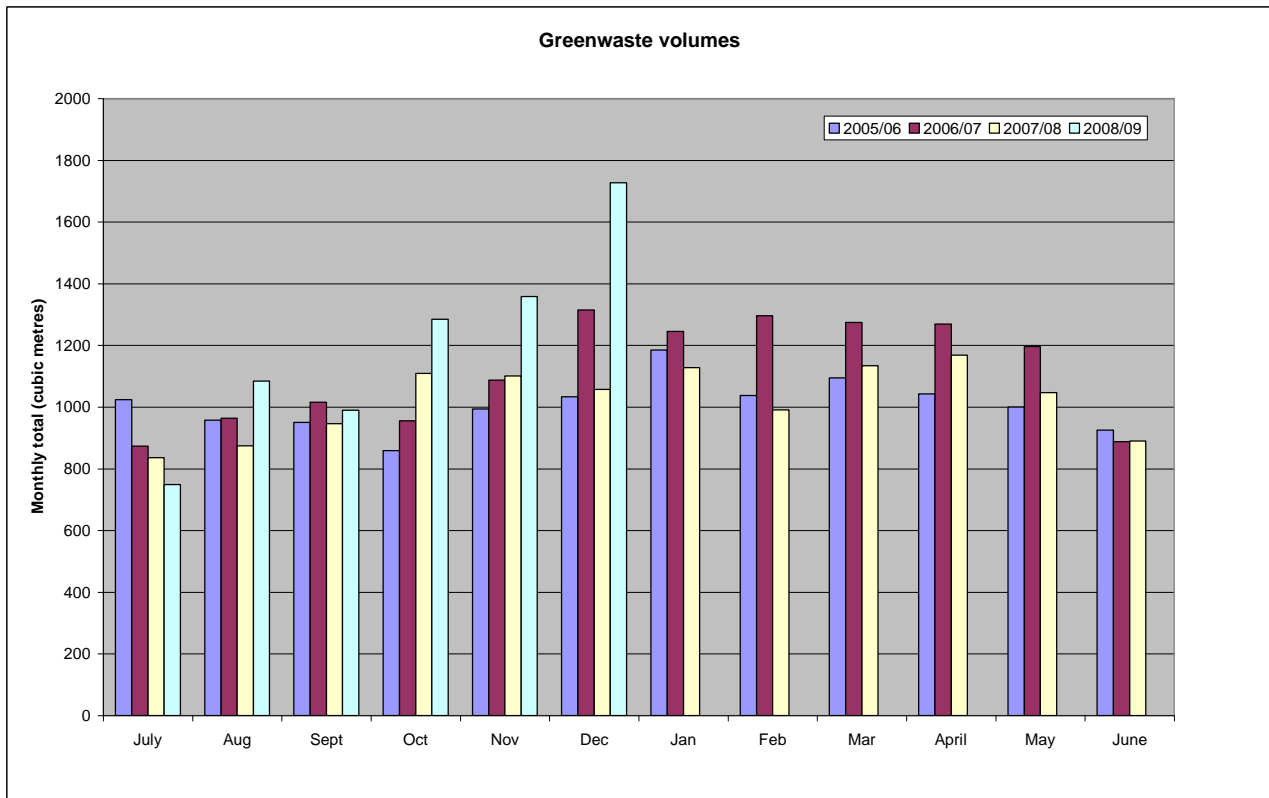
This recent increase has resulted in a need to increase activity on site and to prepare further areas of the site prior to the winter period. Staff have been working with the contractor to achieve this.

Staff will give an update on regional waste trends (Nelson City and Tasman District) at the committee meeting.



5.4 Greenwaste management

Greenwaste processing is conducted by Greenwaste to Zero, under contract to Council. The following graph indicates recent trends in greenwaste volumes. Recent activity has seen a reduction in volumes delivered to Council RRC sites (Takaka and Mariri) but a substantial increase in volumes to the contractor's site in Richmond. Council has commenced a trial of compost sales in Takaka which is progressing well.



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

Nelson City and Tasman District Council staff continue to work on assessments of each waste management plan in accordance with s51 of the Waste Minimisation Act, with a view to reporting back to each Council.

Guidance is currently being prepared by the Ministry for the Environment on the preparation of Waste Management and Minimisation Plans. It is proposed to hold significant work on the plan until this guidance is received.

5.6 Public place recycling

Staff have recently been advised by the Ministry for the Environment this initiative is under review and are awaiting further advice from the ministry.

6 TENDERS

| No. | Contract name | No. of tenders | Successful tenderer | Amount | Highest amount | TDC estimate | Budget for this item | Comment |
|-----|---|----------------|-----------------------|-----------|----------------|--------------|----------------------|--------------------------------------|
| 748 | Wally's Rest Pump Station and Rising Main Upgrade | 2 | Ching Contracting Ltd | \$633,281 | \$978,513 | \$1,011,244 | \$1,020,600 | Construction work is due to commence |

7 RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager