STAFF REPORT

TO: Chairman and Members, Engineering Services Committee

FROM: Utilities Asset Engineer, David Stephenson

REFERENCE:

DATE: 23 August 2006

SUBJECT: **SOLID WASTE – QUANTITIES AND BUDGET UPDATE**

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1 PURPOSE

The purpose of this report is to inform the Engineering Services Committee of Solid Waste quantities and income for the current financial year.

2 SOLID WASTE QUANTITIES

The report relates to solid waste disposal from the Eves Valley Landfill waste catchment and does not include disposal to the Murchison landfill; the Murchison landfill accounts for less than 2% of the total waste volume.

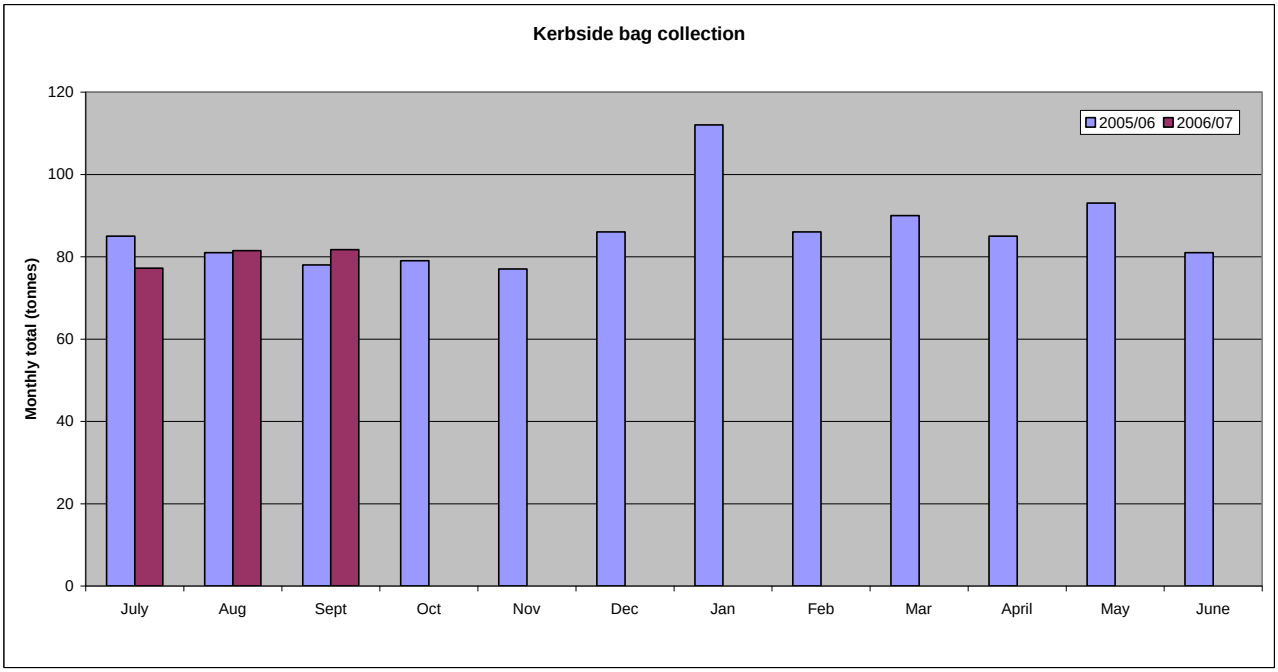
2.1 Kerbside Bag Collection

The following table summarises bag sales and collections for the first quarter; projections to the annual total use a seasonal factor.

	Year to date (Jul – Sept)	**Projected annual total**	**Annual budget estimate**
Bags collected	51,256	235,404	
Tonnage collected	240	1018	1050

Figure 1 (over) compares monthly waste totals with those from the last financial year and shows total bag collections continue at a rate similar to last year.

Figure 1 - Kerbside Bag Tonnages



2.2 Kerbside Recyclable Collection

The following table summarises bag sales and collections for the first quarter; projections for the annual total use a seasonal factor.

	Year to date (Jul-Sept)	Projected annual total	Total last year
Bins collected	75,321	344,370	326,699
Tonnage collected	527	3,019	2,001

Figure 2 compares monthly waste totals with those from the last financial year and shows a significant increase in total tonnages collected, particularly in August. This combined with the modest increase in total bin collections (above) indicates an increasing average weight in each bin collected.

Figure 3 summarises the processed recyclable materials leaving all sites and includes materials dropped off free-of-charge at RRC sites. Glass is currently being stockpiled on site and so is not presented as a processed material, but it is estimated that approximately 160 tonnes has been collected to date this financial year.

Figure 2 - Kerbside Recycling Totals

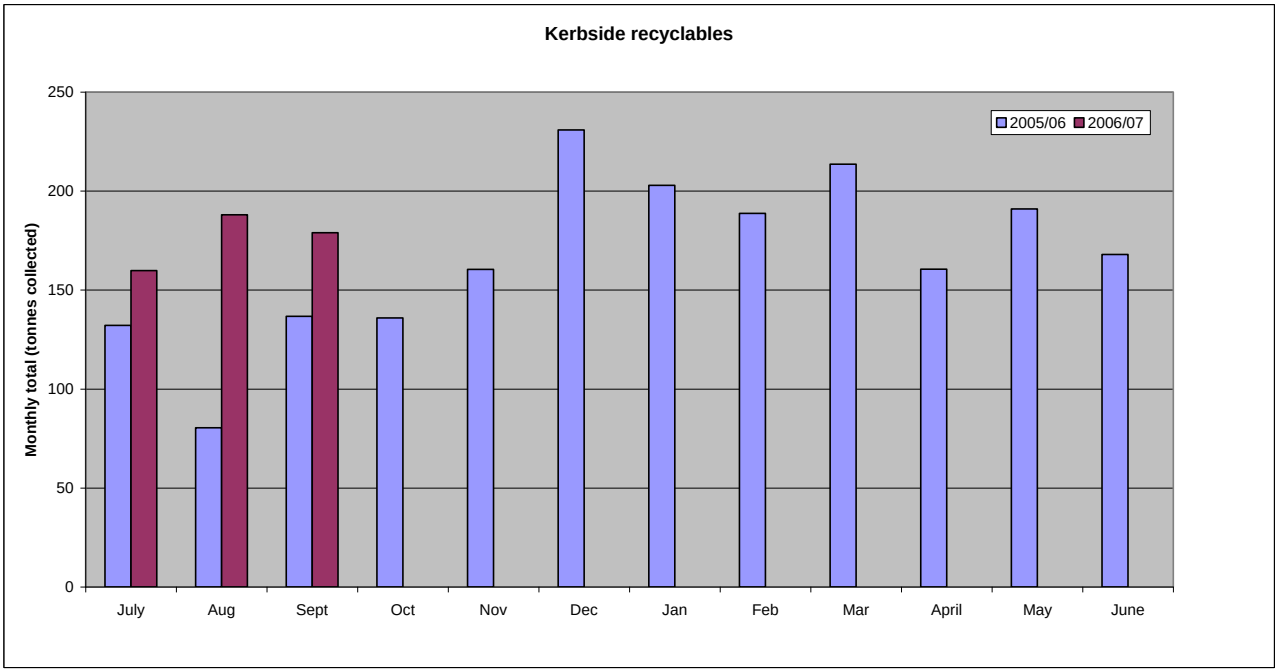
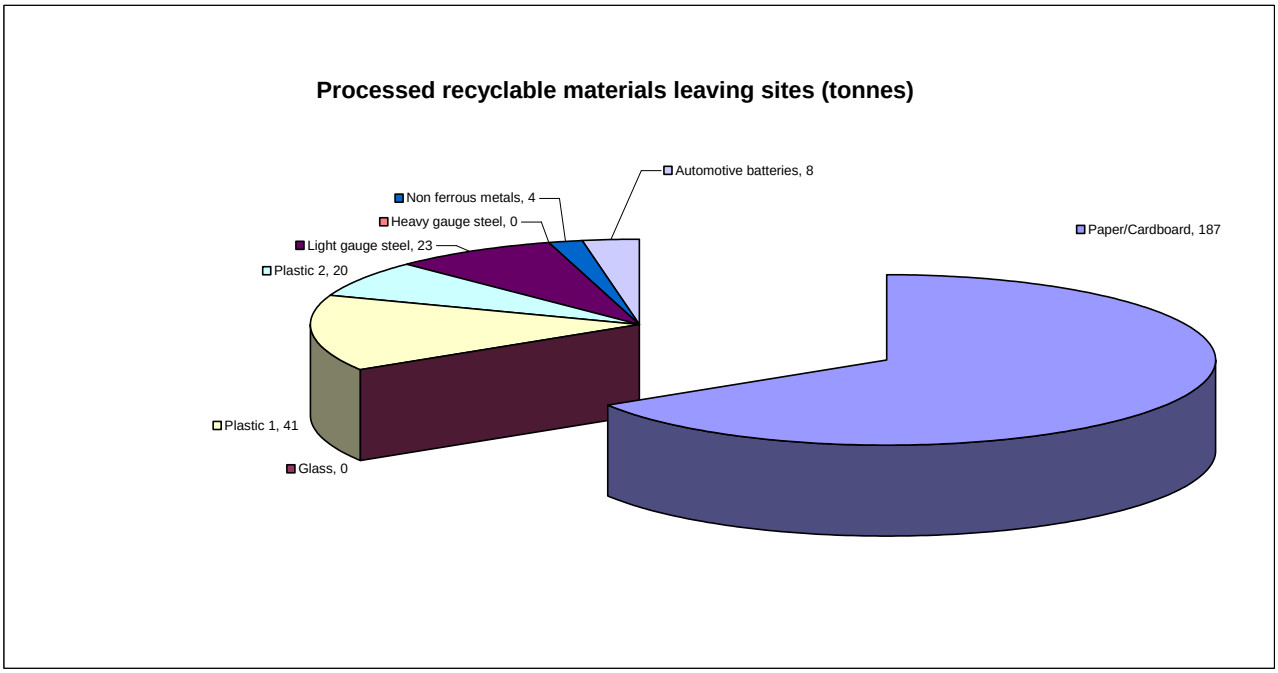


Figure 3 - Processed recyclable materials leaving sites



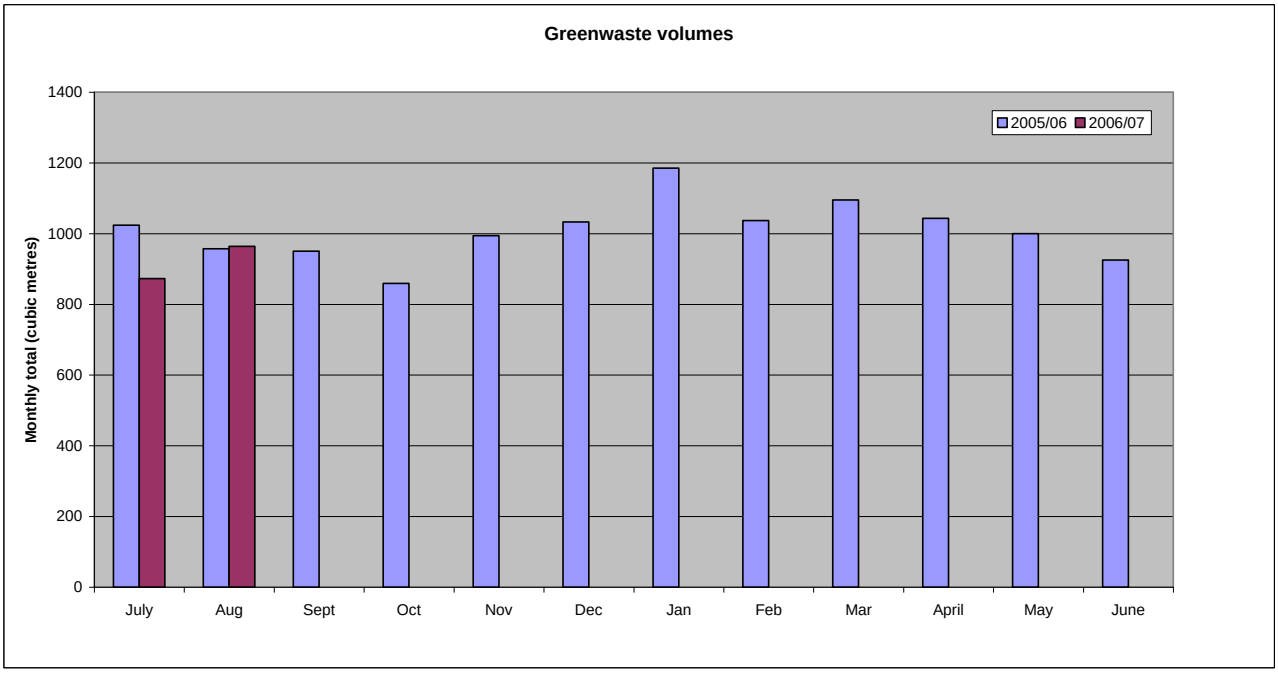
2.3 Greenwaste processing

Council provides a greenwaste disposal facility through Greenwaste to Zero via Contract 622. The following table summarises greenwaste volumes accepted in July and August; projections for the annual total use a seasonal factor.

	Year to date (Jul – Aug)	Projected annual total	Total last year
Delivered direct to contractor (Richmond)	1,058	6,300	7,223
Delivered to Mariri	683	4,513	4,262
Delivered to Golden Bay	96	482	617
Total greenwaste volume (m^3)	1,837	11,222	12,102

Figure 4 compares monthly waste totals with those from the last financial year and shows a reasonably significant reduction in Greenwaste volumes for the month of July.

Figure 4 – Greenwaste processing



2.4 Residual waste disposal to landfill

Solid waste from the four RRC sites is transferred for disposal at Eves Valley, as well as Special Waste (such as animal waste and material from the Mapua Fruitgrowers site) which is delivered direct to the site. The following table summarises waste quantities to Eves Valley for the first quarter and these are compared with last year's quantities in Figures 5 and 6.

From September 1, mixed refuse fees for larger vehicles (3000kg gross or greater) at Richmond and Mariri sites changed from a volume-based to weight-based charge, at $57 per tonne. This rate matches the York Valley Landfill fee.

This change has seen a significant increase in total refuse presented at these sites, particularly at Richmond which has seen a 55% increase from August to September and a 78% increase on September of last year. Anecdotal evidence indicates that significant quantities previously disposed at York Valley are now returning or diverting to Tasman District Council sites.

	Year to date (Jul – Sept)	Projected annual total	Total last year
Richmond*	2,567	13,538	8749
Mariri*	1,384	6,468	6035
Takaka*	416	1,765	1906
Collingwood	27	114	256
Special waste (Jul-Aug)	452	2,564	3226
Total waste tonnage	3,063	24,449	20,172

* includes kerbside bag disposal

Figure 5 – Eves Valley Waste Quantities (excl. Special Waste)

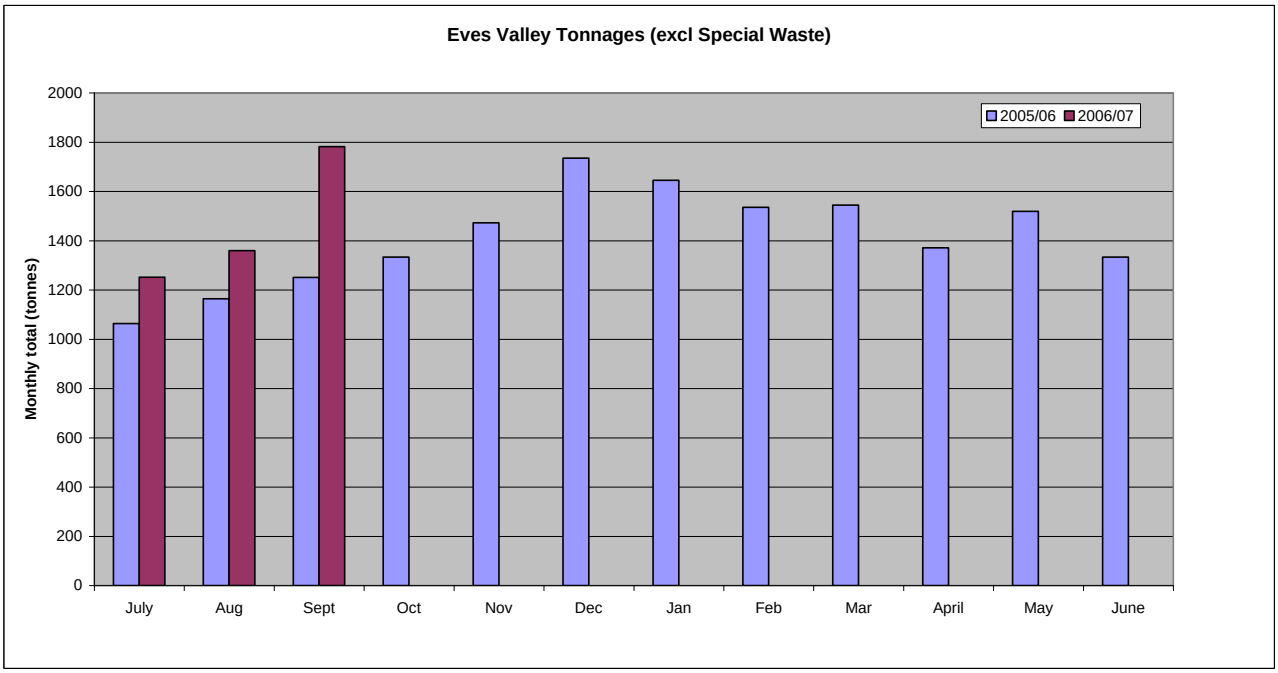
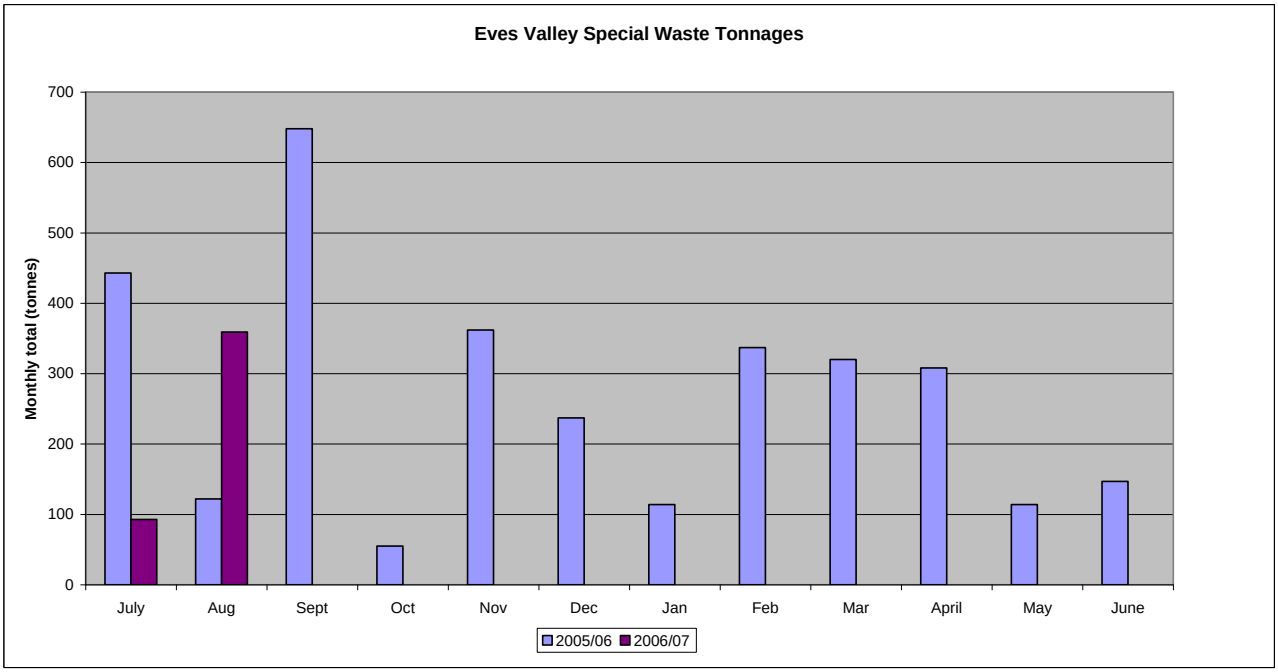


Figure 6 – Eves Valley Special Waste Quantities



An initial review of increasing waste quantities suggests a conflict with the waste minimisation aims of the Waste Management Plan, but as much of the District's waste is subject to cross-border movement, quantities should be analysed in conjunction with Nelson City Council data, which is not yet available. A net decrease across the Nelson-Tasman region would be consistent with the aims of the Waste Management Plan.

3 OPERATING INCOME

Income for the Refuse account is primarily derived from

- Gate charges at Resource Recovery Centres
- Sales of TDC kerbside bags
- Charges for disposal of special waste at the Eves Valley landfill
- General and targeted rates.

Targeted and general are not expected to vary significantly from budget and therefore the following table summarises only the variable income streams for the refuse account. Figures 7 to 11 detail monthly income for each RRC site and the Murchison Landfill (note the change of scale between Figures 7, 8 and 9, 10, 11).

	Year to date Total	Projected annual total	Annual budget
RRC Income			
Richmond	133,883	723,856	380,000
Mariri	94,745	457,844	412,000
Takaka	19,764	94,376	90,000
Collingwood	3,550	16,282	20,000
Murchison Landfill	2,948	10,149	20,000
Bag Sales (Jul – Aug)	32,967	225,700	226,100
Special Waste Fees (Jul – Aug)	36,160	$215,000	132,000

While the September income data is preliminary and represents a single month, it demonstrates a significant change due to the new weight-based charges. Because the changes in fees are recent, with correspondingly short data periods, full year projections should be treated with caution.

Waste quantities at Richmond have increased significantly and the revenue per tonne of waste removed has also increased slightly (around 5%) resulting in substantial increases in income.

At Mariri total tonnages have increased slightly, while revenue per tonne has dropped around 15%. This correlates with an observed increase in loose skip deliveries which were previously delivered to York Valley.

Income at the Takaka RRC is currently tracking on budget. Weigh-bridge trials are currently being conducted at this site, and, as at Mariri, income may reduce slightly should the trial be successful and weight-based charges introduced.

Income at Collingwood and Murchison sites are currently tracking below budget and these sites will be monitored over coming months. While Collingwood waste tonnages appear to be dropping revenue appears to be increasing per tonne of refuse.

Figure 7 – Richmond RRC Income

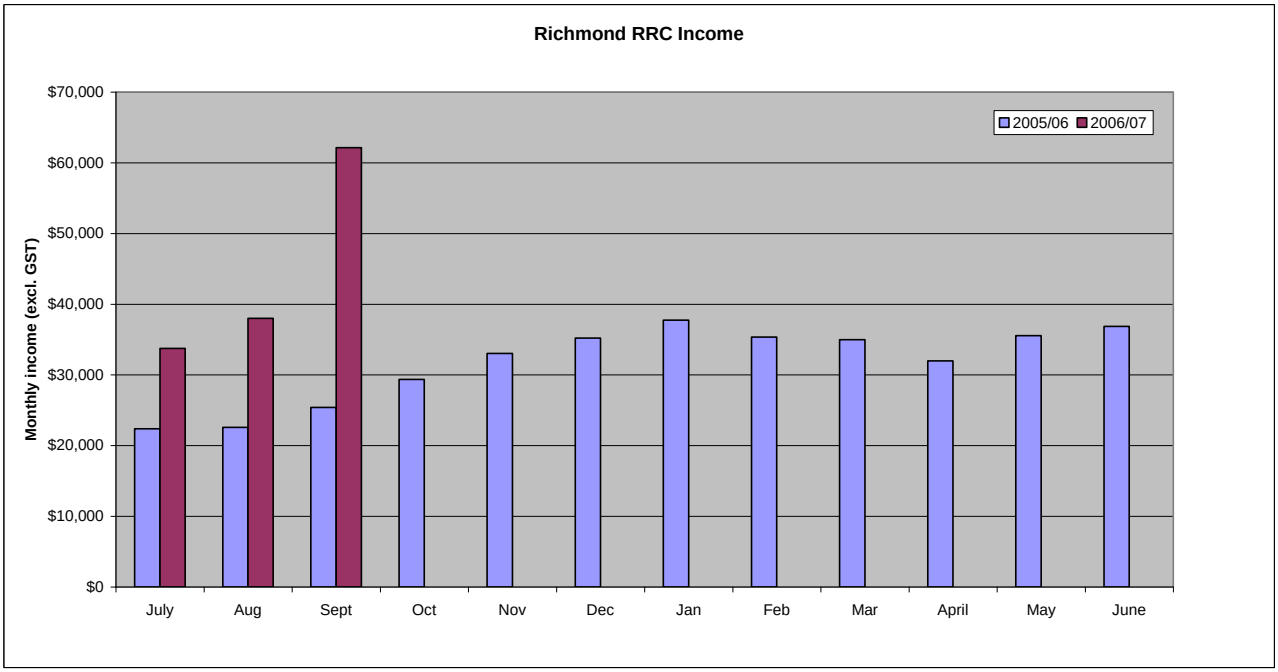


Figure 8 – Mariri RRC Income

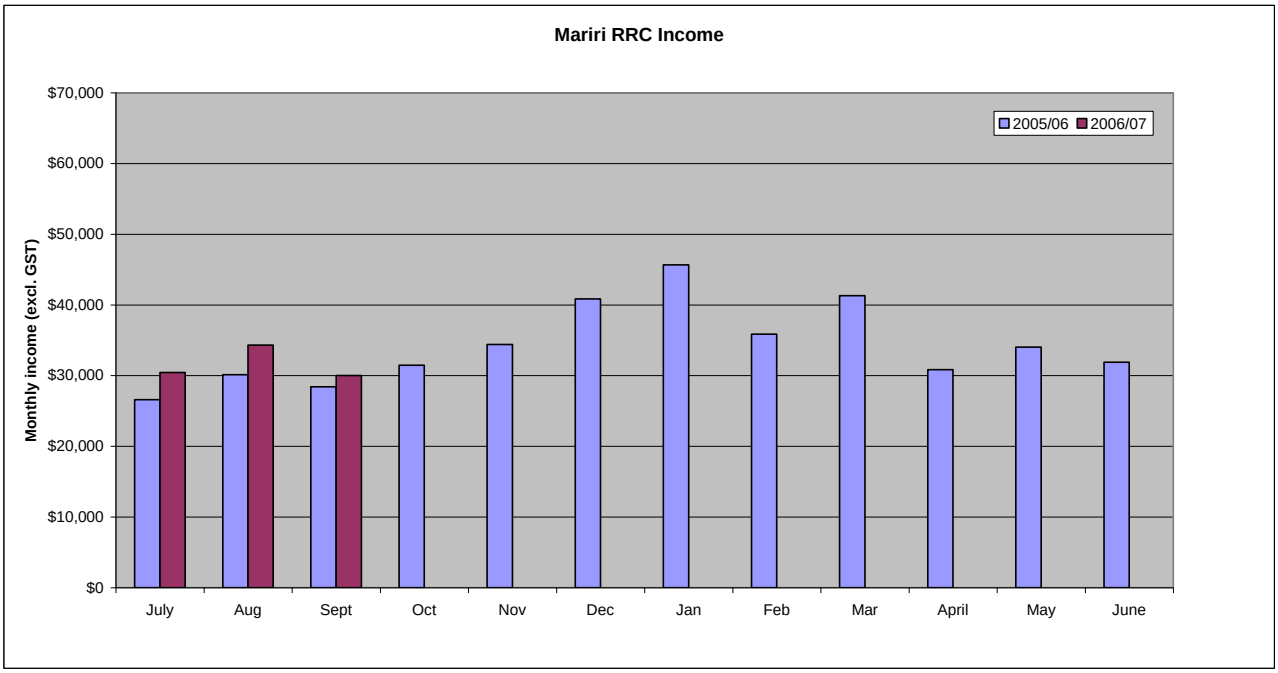


Figure 9 – Takaka RRC Income

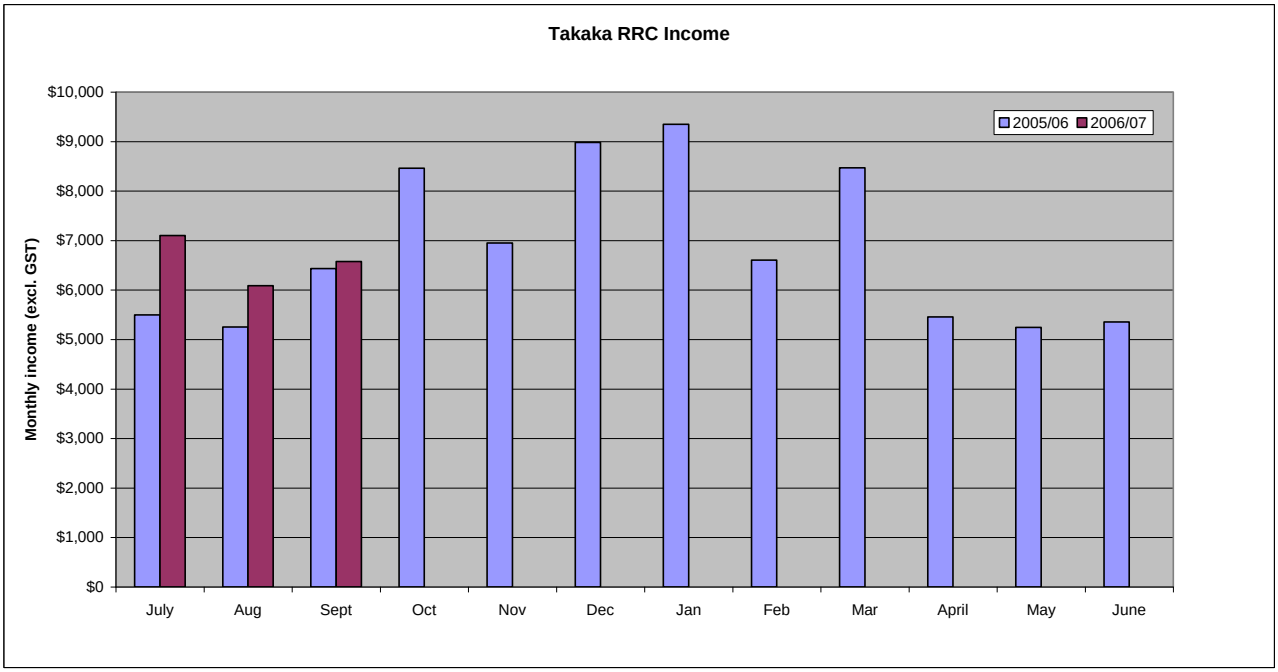


Figure 10 – Collingwood RRC Income

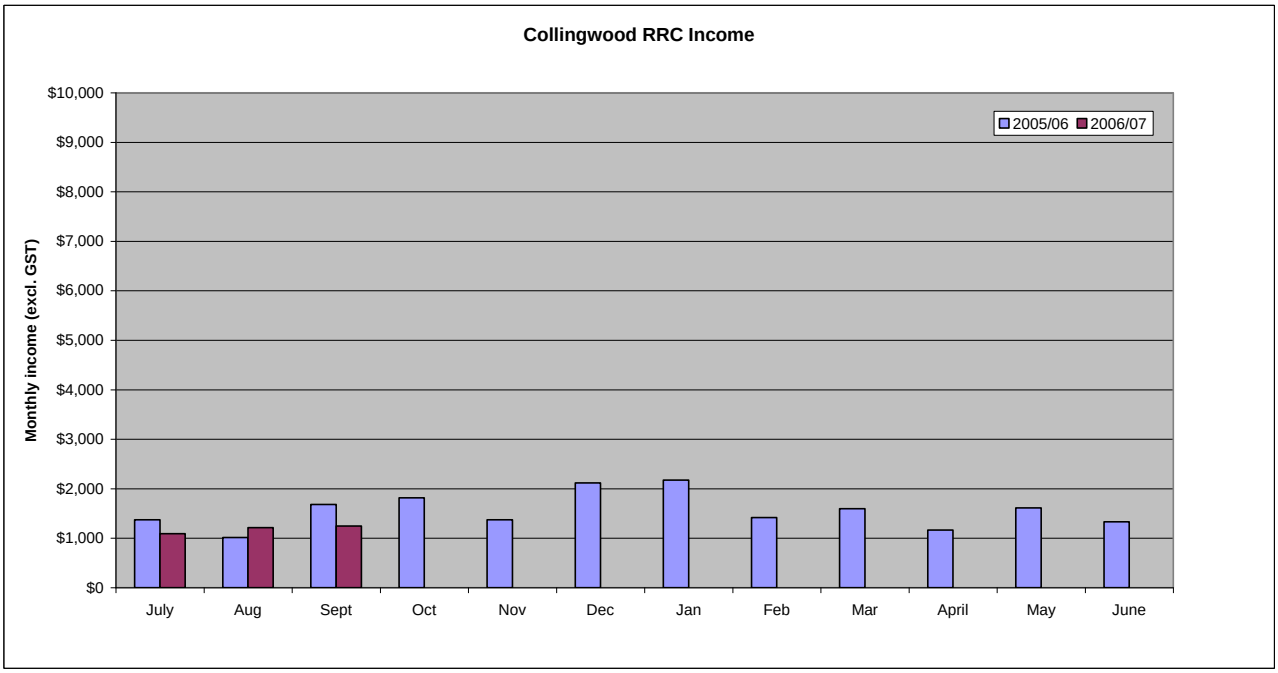
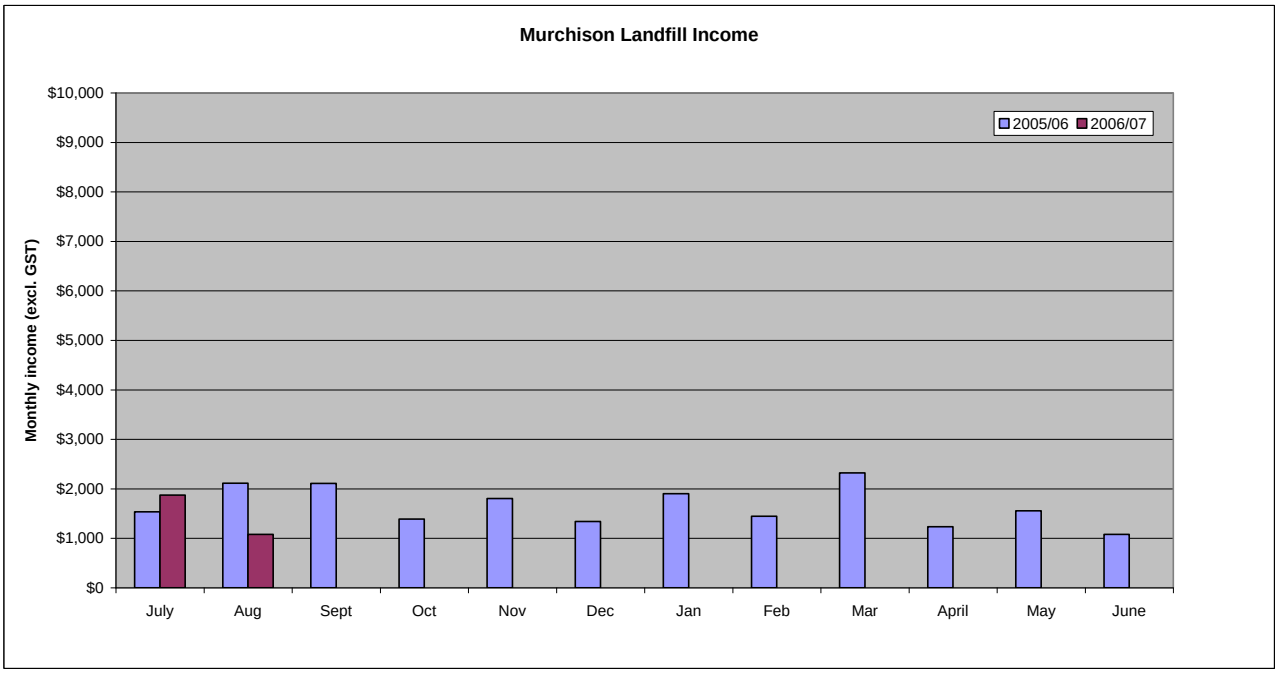


Figure 11 – Murchison Landfill Income



4 OPERATING EXPENDITURE

Operating expenditure from the refuse account can be generally categorised into seven areas:

- The kerbside collection and transport of TDC rubbish bags,
- The kerbside collection and processing of recyclable materials
- Operation of the four Resource Recovery Centres
- Operation of the Eves Valley landfill, including transport of refuse from RRC's
- Operation of the Murchison landfill
- Management of closed landfills
- Education and waste minimisation initiatives, preparation of asset management plans, staff and office overheads and control of illegal dumping.

Of these, the largest three are Kerbside Collections, operation of the RRC's and operation of the two landfills. While too early in the financial year to provide meaningful analysis of expenditure to date, the cost structure of each of these activities is such that they generally comprise significant, fixed, monthly costs and small variable costs (based on waste quantities processed).

The net effect of this cost structure is that increases in waste volumes described above are expected to result in a small increase in operating costs and a net reduction in disposal per tonne. No significant, unbudgeted expenditure is expected at this stage except the cost now incurred via weigh-bridge charges for the Richmond and Mariri sites, however these are small relative to the increased income to date. Investigation into the provision of a weigh-bridge at Richmond continues, which may result in a net decrease in the cost of weighing vehicles.

5 RECOMMENDATION

THAT the report be received.

David Stephenson
Utilities Asset Engineer