

STAFF REPORT

TO: Chairman and Members, Engineering Services Committee
FROM: Jeff Cuthbertson, Utilities Manager
DATE: 29 July 2009
SUBJECT: UTILITIES MANAGEMENT REPORT

1 UTILITIES GENERAL - End of Financial Year Summary

Council's utilities maintenance contractor, Downer EDi Works have now completed the first two years of Contract 688. They have continued to perform satisfactorily, and have grown their staff structure and expertise with additions at both service and supervisory levels.

The random audits carried out on the networks during the last period and throughout the previous 12 months have indicated the work carried out to be of a high standard and the contractor achieving required targets through performance-based audit scores. The networks have been maintained and operated to provide a high level of customer service including during times of peak demand and/or severe weather events.

Significant dry periods during the months of October-November 2008 and January-April this year placed high demand on water networks however the systems have coped well, with disruptions to customers kept to a minimum.

The operation of wastewater networks has been managed successfully with a relatively trouble-free peak Christmas-New Year period for the third consecutive year. The focus on proactive maintenance of stormwater networks, in particular prior to predicted storm events, has kept flooding issues to a minimum in traditionally problematic areas.

In addition, the maintenance contractor has undertaken portions of capital works, successfully managing and completing some significant projects, including work at the intersections of Gladstone/Queen/McGlashen Streets, and telemetry/electrical upgrades.

Overall, Downer EDi Works have continued to perform well in maintaining Council's assets and are achieving the required levels in customer service requests. In addition they have implemented improvements to their Health and Safety and Quality management systems showing a positive impact. An example is improved hazard identification/risk management processes for servicemen undertaking repairs on site.

Total combined maintenance expenditure of all utilities was above budget expectations by approximately 8%. This is largely due to higher than anticipated cost fluctuations in rates and additional pro-active work undertaken on the network, and unanticipated work associated with capital work projects outside of the utilities capital programme.

For the coming year the main objectives will be to ensure the contractor continues to provide a high level of service to customers, responds to reactive/planned work and proactively manages the utility networks to required criteria set out in Contract 688. Prior to July 2010 all scheduled rates for Contract 688 are required to be reconfirmed.

Telemetry

The backbone of the upgraded telemetry digital network is now in place for Richmond, Waimea, Hope, Brightwater, Wakefield, Tapawera and Golden Bay. Various sites have been connected to the system, and are now providing fast efficient and reliable data. The initial focus was to transfer water treatment sites to the digital network.

The upgrade of the telemetry system will continue with the migration of Tasman District Council utility sites on to the digital network in a controlled and programmed manner. Concurrently, all remaining analogue sites are undergoing a recalibration as well as minor upgrades as required, and transfer to a parallel channel. A noticeable reduction in the overall volume of data via the primary Mt Campbell channel has been recorded and this will continue to improve throughout the transition.

2 WATER

2.1 General

The water schemes continued to operate without significant issues during the last period. Some systems have continued to be affected by minor telemetry communications failures and equipment failures. Some minor issues have been experienced on rural schemes, with pipe bursts primarily due to the ongoing periods of severe frosts, fairly typical of the time of season.

There are no issues to report in relation to microbiological compliance for all schemes.

• Dovedale and Redwoods Rural Schemes

A burst watermain adjacent to Humphries Creek caused disruption to some portions of the Dovedale network. The break caused airlocks in the system and took considerable efforts to remedy and requiring ongoing bleeding of lines for three days following the initial break. Winns Valley was the worst affected area.

No other significant issues were experienced in the rural supply schemes with only a few relatively minor repairs as a result of significant and ongoing frosts.

Some developments of alternative location options are underway for the upgraded reservoir. The various alternative site options for the replacement storage tanks are being worked through with adjacent landowners and it is probable that resolution will be reached so that the reservoir can be reconstructed prior to next summer.

Other general issues included:

- Several leaks occurred on the 200mm main in High Street, Motueka, requiring replacement bends, stainless steel straps and new anchor blocks.
- Tokomaru Place – leaking meter required repair, caused by frozen above-ground RPZ's, 50% of RPZ's had frozen overnight. Lagging of other RPZ's to help prevent further breaks was completed.
- Burst occurred on 100mm AC main in Beach Road, Richmond.
- Old Coach Reservoir was temporarily out of power, following the power cabinet confronting a Dump Truck; new cabinet was reinstated.
- Tapawera Reservoir went into low level due to a level controller failing. Now repaired.
- Ongoing issues are occurring in the Mapua reticulation with gravel entering the

system and causing issues when pumped from hydrants, ongoing flushing of mains is occurring on a weekly basis as investigations continue as to the source of the gravel.

2.2 Water Capital Projects

- **Wakefield Reservoir**

Tasman Civil are due to commence site establishment and excavation of the site to base foundation levels during the month of August. Factory pre-construction processes in relation to the pre-cast wall panel units, is underway.

Amendments to easements are underway to include power cabling to the new reservoir partially within the existing right-of-way and agreement has been reached with affected parties.

- **Wakefield Source Investigation**

The property on which the drilling has been carried out has recently changed ownership, and discussions with the new landowner proved positive. The bores have been surveyed and apart from ongoing monitoring, will remain dormant until further flow testing in the summer months. Progress will then continue toward gaining resource consent for abstraction.

- **CTA Reservoirs and Pipelines**

Minor portions of pipework are included in the Ruby Bay Bypass project and are about to be installed in conjunction with the road construction and culvert installation.

Initial discussions with landowners are due to commence in relation to the proposed potential sites for future reservoirs in connection with the CTA project.

- **Richmond Reservoirs**

Specific sites have been identified and chosen based on specific criteria and discussions continue with the landowners of the potential sites. A draft report on the implications of the various site options has been received.

- **Water Renewals Projects 2009/10**

The schedule of assets that have been identified for renewal has undergone scrutiny to determine necessity of replacement on an item-by-item basis followed by a programme for implementation based on priority and location. The recent above ground asset condition assessment data has been utilised to compare theoretical (asset register/valuation age/condition rating data) with actual condition rating data, alongside local operational knowledge.

3 STORMWATER

3.1 General

During the months of June and July, intermittent and isolated rainfall events continued to occur. In mid-June, following a reasonable rain event the Bill Wilkes Reserve intake blocked due to an excess of willow tree debris. The blockage had to be initially cleared by a diver as the intake opening was not visible from the surface. Investigation continues into the installation of upstream barriers to prevent the same significant build-up of debris against the intake grill in the future. No other major issues were reported and no other

flooding was recorded. Routine maintenance and proactive maintenance were carried out in accordance with the contract schedule.

In early July a telemetry fault at the Wharf Road floodgates was due to a faulty remote controller unit which has now been replaced and site re-programmed.

3.2 Stormwater Capital Projects

- **Collingwood stormwater upgrade – Upper Gibbs Road**

This contract has been awarded to Ching Contracting Ltd and works commenced in the first week of July. The contracted works involve installation of approximately 180 metres of 750mm and 675mm stormwater pipe in Upper Gibbs Road and Washington Street.

Council staff also met with local residents in early July for a pre-contract meeting and to discuss potential solutions to drainage issues from Swiftsure Street (above Gibbs Road). Earlier attempts to agree on a solution with landowners were unsuccessful and following the meeting staff investigated alternative options. Staff will be meeting with the residents shortly to present a proposed solution.

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

Adcock & Donaldson continue to make steady progress on this contract and are nearing completion of the tendered works. The contractor has been awarded additional work to install stormwater pipe from Talbot Street to the new pipe system, and this work is scheduled for late August.

Council staff are currently considering the option of replacing kerbs and channels and the reconstruction of the remaining pavement in D’Arcy Street as part of this work. Funding options for this work are currently being considered and a decision is expected in the near future.

- **Kingsley Place Stormwater Upgrade**

Ching Contracting Ltd has achieved Practical Completion for this contract. The contract has included a significant portion of work through private gardens and all affected property owners have openly expressed appreciation of the approachability and quality of work carried out by the contractor. The final overall outcome to the project is very pleasing.

- **Salisbury Road Stormwater Upgrade**

These works comprise design of a new stormwater sewer and additional sumps along Salisbury Road between Arbor-Lea Avenue and Florence Street. Detailed design is now essentially complete and tender documentation being prepared with a view to advertising tenders in August and works commencing in September.

Council is undertaking a design of the full length of road but will be advertising tenders for the lower half of the work only. This part of the work is scheduled to be complete in advance of the next stage of Salisbury Road resurfacing.

- **Seaton Valley Stream, Mapua**

A resource consent and Archaeological Authority have now been granted for these works and discussions have resumed with landowners to secure land access (and in some instances purchase).

Because the works will occur in a waterway adjacent to the coast, construction can only occur during November-February and June-August. Staff are now working with affected landowners to identify the optimum construction period for the works.

Tender documents for the works (causeway culverts, stream widening and bridge / culvert replacements) are currently in preparation. It is anticipated that some of the works will occur in November.

- **Park Drive**

Park Drive – The construction of the culvert under Hill Street and the regrading of the footpath between Hill Street and Riding Grove have been priced. Discussions with impacted property owners continue prior to the work proceeding.

No further work in the Park Drive area is planned until the proposed rezoning of the area/catchment is completed. At that time any future proposed work will be included in the next review of the Ten Year Plan.

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. There were no reported non-compliance issues during the last period.

Other general issues include:

- Riwaka pump station went into high level alarm due to remote controlling unit developing programme fault, controller was replaced and reprogrammed. .
- Aerator at Motueka WWTP was overloaded and tripped out due to excess rag over screen, was cleared and reset.
- Issues occurred at Tapawera WWTP, step screen failed due to frosts causing the inlet water line to freeze.
- Contract staff attended 3 Wadsworth St, Takaka which was a failed septic tank, property not connected to public mains,

4.2 Capital works

- **Delaneys Pumpstation and Rising Main**

Design has been completed and tender documents are still ready and waiting to be priced by selected/shortlisted tenderers. The sale and purchase agreement has been with the landowner who has asked for further clarification of some items of the agreement. Council has responded to all requests. These are minor in nature and the agreement is expected to be signed shortly. As soon as Council receives written confirmation of acceptance, the short-listed tenderers will be invited to submit tenders.

- **Motueka Sewermain Replacements**

Ching Contracting are making steady progress with construction. Some conflicts were encountered with the existing water main pipe work within the Courtney Place intersection made initial progress difficult but the project is now back on track and expected to be practically complete by end August.

5 SOLID WASTE

5.1 Kerbside recycling and bag collection

Kerbside recycling and rubbish bag collection has continued over the period with continuing high performance by the contractor. Data for the 2008/2009 year indicates recycling volumes 19% over the previous year, which is pleasing.

Official rubbish bag sales and collections for the 2008/2009 year have recently dropped with sales at 92% of previous the previous year.

Staff are continuing to investigate a competitive per-tonne rate for greenwaste, to encourage commercial collection of this material by the private sector.

5.2 Resource Recovery Centres

Operations at the five Resource Recovery Centres continued over the period with no significant operational issues. Recent efforts by the contractor (Smart Environmental) have seen on-going improvements to tidiness across all sites.

- **Richmond**

Reductions in waste tonnages have stabilised in the last quarter to an 11% reduction on last year, with an annual increase of 1% for the year.

Design is now complete for repairs to the pit and a new bin changeover area at the Richmond site. Staff are addressing potential traffic safety issues for the site, and tenders will be advertised upon completion of this review.

A short term tenant of the recently purchased re-use shop site in Fittal Street is now moving out of the site and the building will be fitted out shortly and a lease arrangement negotiated with the new tenant (Kahurangi Employment Trust).

- **Mariri**

Waste volumes at this site have increased slightly in the last month, with volumes tracking at 98% for the 2008/2009 year.

Tenders for construction of stormwater improvements at this site closed on June 10 and a preferred tenderer has been identified. Resource consent for these works has been recently issued, and works are expected to commence in August.

- **Takaka**

While waste volumes for this site had grown steadily in the first three quarters (9%), volumes have dropped in the final quarter, so that annual growth is now at 3% for the 2008/2009 year.

- **Collingwood**

Waste volumes for this site have lifted slightly in recent months, with tonnages reducing 13% for the 2008/2009 year.

The telephone line is now installed at this site and staff are investigating the possibility of a camera to improve security and monitoring of the site entrance.

- **Murchison**

Waste transfer operations are now occurring at this site, with the contractor bedding in a few small operational issues on the site. The construction of the transfer facility was via a design-build-operate contract, and so there has been no additional cost to Council for these issues.

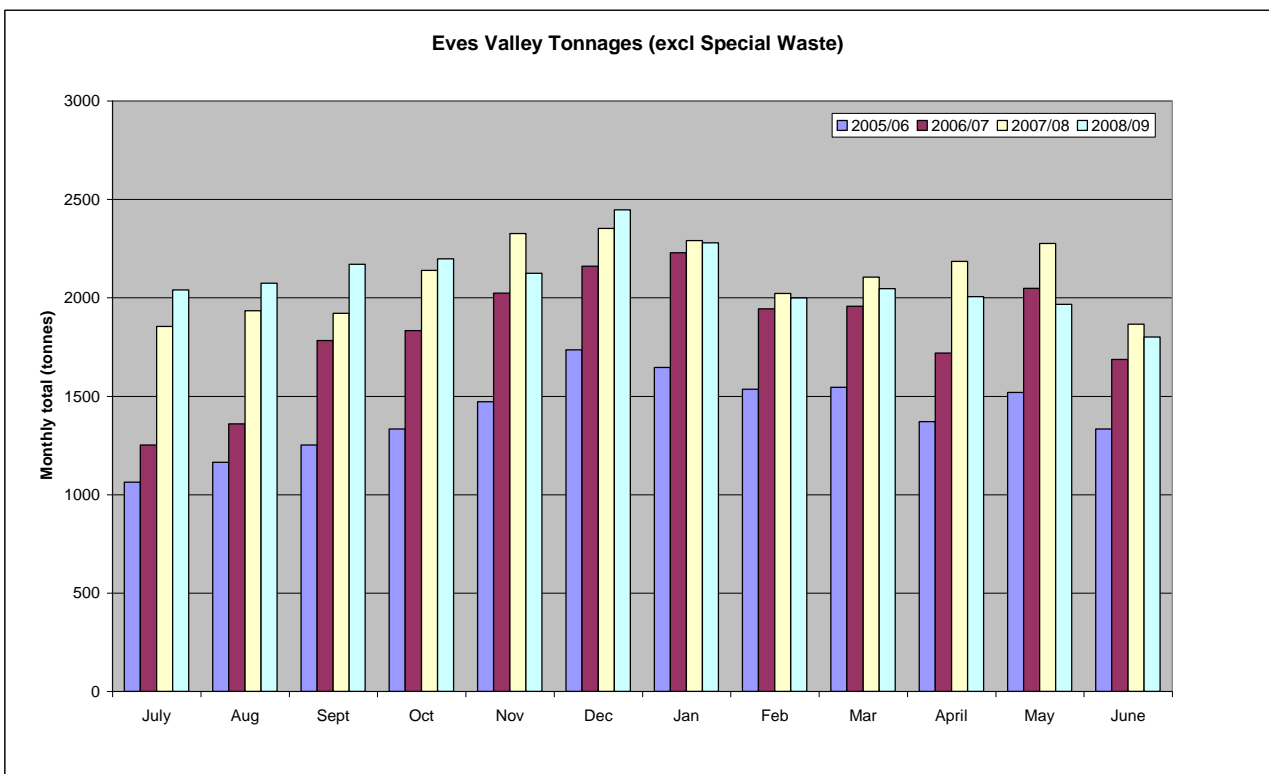
Landscaping, improved recycling facilities and a number of additional site enhancements are planned to be complete in the coming financial year.

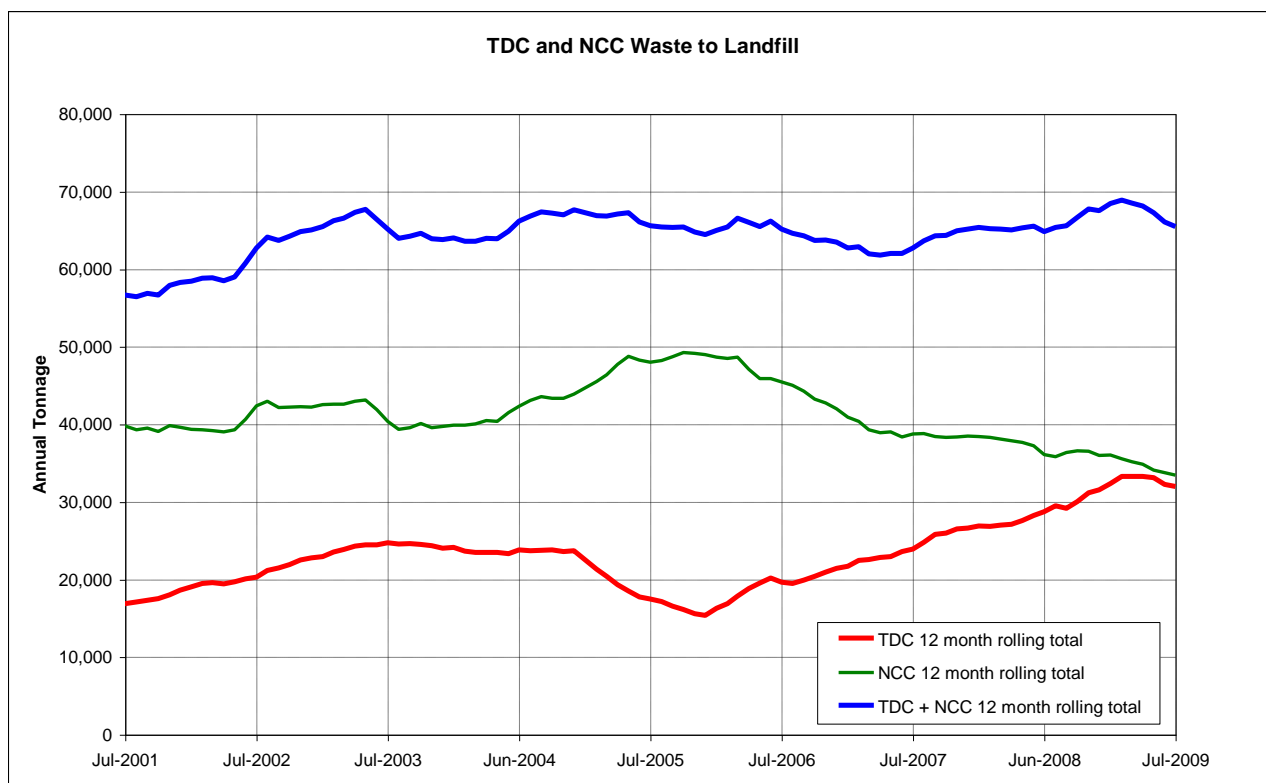
5.3 Eves Valley Landfill

Reductions in waste volumes stabilised in the last quarter at the Eves Valley Landfill. Tonnages (excluding special waste) increased in the last month, resulting in an overall total equal to that of last year.

Special waste volumes are now tracking at normal levels.

From 1 July, Council has been recording and reporting landfill tonnages to the Ministry for the Environment, for payment of the landfill levy (\$10 per tonne).





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

Staff are continuing to meet with Nelson City Council staff to scope work required for the development of a joint Waste Management and Minimisation Plan. Work is expected to commence very shortly, and staff will provide further information at the meeting.

As part of the development of the Waste Management and Minimisation Plan, it is recommended that two Councillors be nominated for membership of a joint Council working party (made up of staff and Councillors). This working party will provide for on-going involvement of Councillors in the development of the Waste Management and Minimisation Plan, and would meet regularly, on an informal basis.

The Packaging Council has recently published a product stewardship scheme for public comment. Staff are currently reviewing this proposal.

5.5 Public place recycling

The official launch for this initiative was on Friday 23 July, in Motueka, and attended by Chris Auchinvole, MP; Hon Nick Smith, Minister for the Environment; and the Mayor and selected Councillors. The ribbon was cut by Anita Newport of Parkes Automotive, who has fully funded one of the recycling bins in Motueka.

A total of 54 bins have been installed under this initiative: 23 single bin sites in Richmond, Motueka and Takaka, and 31 at multi-bin sites at information centres (i-Sites) and other sites around the district. Further bins are proposed in coming years, as part of the ten year plan.

Council will receive government funding of up to \$104,000 for installation and servicing of these bins in the first year of operation. This funding will allow Council to assess the success of the programme for future years.

5.6 Waste education

Council has a contract with the Nelson Environment Centre (NEC) for the provision of waste education services in schools, businesses and the wider community. The contractor also provides assistance for events such as eDay and in the processing of Zero Waste Grants. NEC is also the provider of waste education services for Nelson City Council.

Council staff have prepared a recommendation relating to the extension of this contract in a separate report.

5.7 Zero Waste Grants

Five applications have recently been received for Zero Waste Grants. Two of the grants were small applications from schools and community groups, and were approved under the delegated authority of the Engineering Manager and Deputy Chair of the Committee. The grants were:

Organisation	Project	Funds Sought (excl GST)	Funding approved
Brooklyn School	Development of an additional compost system to incorporate green waste	\$319.82	\$319.82
Golden Bay Kindergarten	Purchase of worm and compost bins, materials for cloth bag creation	\$1094	\$1000

Three further applications were received and reviewed by staff. In each instance the applications were reviewed and assessed as not sufficiently meeting the application criteria. The applicants have been advised.

6 Tenders

The following tender has recently been awarded:

No.	Contract name	No. of tenders	Successful tenderer	Amount	Highest amount	TDC estimate	Budget for this item	Comment
767	Mariri RRC Drainage Works	9	Concrete & Metals Ltd					Preferred tenderer advised –awaiting Resource Consent
763	Upper Gibbs Road Collingwood	5	Ching Contracting Ltd	\$229,335.50	\$297,337.82	\$246,570	\$300,000	Weighted Attributes

7 RECOMMENDATION

THAT the report be received.

Jeff Cuthbertson
Utilities Asset Manager