SUMMARY: STORMWATER ASSET MANAGEMENT PLAN

Contribution to Council outcomes

(AMP Chapter 2)

Council's stormwater services are provided for the benefit of the community to ensure that the Vision of 'Healthy people thriving in a safe, vibrant and sustainable community', as expressed in the Long Term Plan, is achieved.

All of Council's activities work towards implementing the Vision, which is implemented through the <u>four well-beings</u> (Economic, Environmental, Social and Cultural), each of which is associated with related <u>outcomes and strategies</u>.

The Stormwater Activity contributes towards all four of the well-being's and their related outcomes and strategies, as further described in the AMP.

Council's current ownership stems from a legacy ownership role that, except in particular circumstances, is now prohibited from passing to the private sector by the Local Government Act 2002.

The Stormwater assets are considered to be strategic assets in terms of the LGA and are identified as such in Council's Significance Policy.

Common Law, the Land Drainage Act 1908 and amendments provide mechanisms for Drainage Boards to operate, for Local Authorities to carry out some drainage works, and for protecting the rights of private drain owners. South Waikato District Council does not own or operate any land drainage schemes; however stormwater detention is provided in some areas to attenuate peak flows following heavy rainfall.

Council owns and operates stormwater drainage schemes in Arapuni, Tirau, Putaruru, and Tokoroa communities. The drainage assets under local roads are described in the Land Transport Asset Management Plan.

Levels of service

(AMP Chapter 3)

Customers' expectations of the service have been identified and subsequently defined in terms of Levels of Service and Performance Indicators that can be monitored, measured and reported.

Issues raised in previous surveys focused mainly on short term operational issues. Concerns regarding the level of stormwater flooding were addressed in the updated design standards.

The Community Consultation prior to development of the 2012-2022 Long Term Plan indicated that the community was satisfied with the current levels of service.

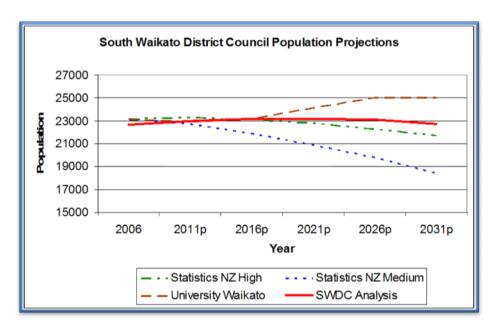
Planning

(AMP Chapter 4)

Resident Population Trends

South Waikato District Council has been carefully monitoring population and demographic trends as part of its planning processes for many years.

Due to the 2011 Census being deferred, Council has reviewed the 2008 report and has concluded that the projection remains valid.



The following key issues have been identified for the ten year planning period:

- Renewal of resource consents for stormwater management plans
- Service responsiveness
- Increasing capacity in some areas

Lifecycle management

(AMP Chapter 5)

The Council's Professional Engineering Staff manages four separate Urban Stormwater drainage areas (Tokoroa, Putaruru, Tirau and Arapuni).

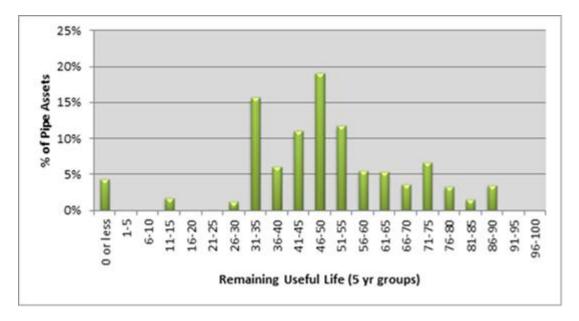
The Stormwater assets include:

- Pipes (mostly of reinforced concrete and between 225mm and 600mm in diameter as shown above).
- Manholes at points where pipes intersect or their direction changes.
- Catchpits with gratings to collect stormwater run-off at roadsides and elsewhere.
- Inlet and outlet structures on the ends of pipelines to protect land and control water flow.
- Detention facilities to store and detain stormwater resulting in reduced flow rate and improved water quality.

Details of these assets are recorded in a management software system ('BizeAsset'). This enables the individual components to be tracked including size, age, depreciated and replacement value, and reports can be produced to predict theoretical replacement requirements.

Stormwater operations and maintenance strategies set out how the stormwater activity will be operated and maintained on a day to day basis to consistently achieve the optimum use of assets. The operation and maintenance of stormwater assets is carried out using a combination of Council Asset Management staff, Council Business Unit staff and external contractors.

Remaining Useful Life Percentage



There are no significant stormwater system renewals projected for the period of this plan, and current projections show the first major renewals starting in the period 21 – 25 years.

Based on asset lives the replacement costs over the next ten years are projected to be \$414,538 (2009/10 \$). This is a very small proportion of the \$25 million total replacement value of the assets, and covers assets that are failing after a shorter time than their expected useful life. This may be due to service conditions, or to original design or construction errors.

Additional new components are required to respond to public requests to convert open drains to piped systems, and to construct improved inlet/outlet or water detention structures, which help to prevent flooding or damage to the pipe system. \$342,744 has been budgeted for minor new works projects for the plan period.

Critical individual infrastructure assets have been identified and will be managed through enhanced inspection, maintenance, early replacement, duplication or other means.

Quantifying and managing risk

(AMP Chapter 6)

Sustainable and reliable delivery of the Stormwater service requires careful consideration of the various types of risk associated with the service.

The major risks addressed in this Asset Management Plan include:

Business

The Corporate Risk Management Policy addresses the four well beings, vision statement and strategic themes. Full details can be found in the South Waikato Risk Register and Risk Profile, which ranks the risks and includes control measures, where they exist.

Insurance

Council is a member of the LAPP fund, which is provided by local authorities to provide funds for reconstruction following major catastrophic events. This type of cover is not available through private insurance providers. Membership requires that all participants undergo a full risk management assessment.

Risk Pool

Council is a member of Risk Pool, which is provided by local authorities for long term legal and professional liability.

Civil Defence

Council participates in a region wide Civil Defence Emergency Management Group, as required by legislation. The scope includes co-ordinated planning, training, public awareness and response to major events that affect the safety of its residents.

Waikato Engineering Lifelines Group

Council participates in the co-ordinated assessment of risks and responses to events that are likely to affect a range of services, some of which are not Council's responsibility, such as communications and energy utilities.

Business Continuity

Council is developing Business Continuity Plans that address the continuation of service delivery.

Financial forecasts

(AMP Chapter 7)

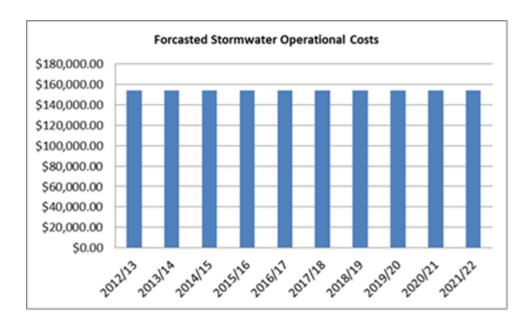
Maintenance is work done that is of an operational nature that neither increases the value nor extends the remaining life of any asset.

Renewal is improvement work done, (including plant, labour, materials and professional services used), on an existing asset that increases its depreciated replacement value by more than \$5000 (\$2000 for culverts) and extends its remaining life. The cost of renewal is a capital expenditure that must be recognised by an appropriate adjustment in the Asset Register. The renewed value in the Asset Register cannot exceed the optimised replacement value of the asset.

Expenditure components are as follows:

- Direct costs.
- Support costs.
- Depreciation.
- Interest and Principal.
- New Works.
- Renewals.

Direct costs: Covers the costs of operating and maintaining the stormwater service. The direct costs for the operation and maintenance of the stormwater systems in the South Waikato District are graphically represented on the next page:



Support Costs: Covers the share of corporate support costs apportioned to Stormwater Service.

Depreciation: Both renewal of existing assets and investment in new ones drive a gradual increase in depreciation charge over the plan period. The contribution of the older pipe assets to depreciation charges decreases as their value diminishes toward the end of their lives. Depreciation is based on the useful lives of assets, tabulated in AMP Chapter 7. Useful lives vary depending on many factors:

- Different pipe materials have different life expectancies.
- Different historical installation standards and service conditions also affect asset lives.

Interest and Principal:

New works are funded by borrowing. The existing annual level of loan funding will increase slightly, to finance planned new works.

New works:

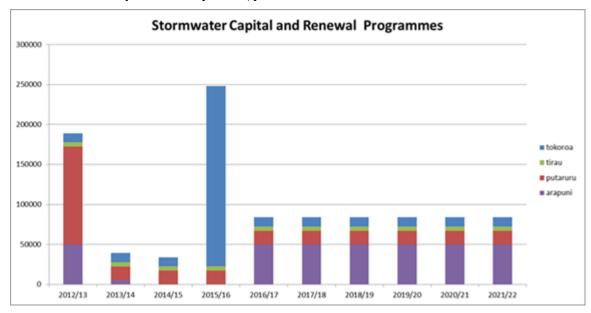
Capital investment is required to service additional consumers, to meet residents expectations or to manage risk exposure.

Renewals:

This capital cost is for replacing old pipes to maintain service to existing consumers at the agreed levels of service. It is funded by drawing from the depreciation reserve.

The projected renewal and capital costs for the stormwater activity is graphically represented below:

Renewals and Capital Costs (2011 \$)



The principal function of asset management is to ensure that the service provided by assets is sustainable in the long term. Council accounts for the wearing-out of assets by putting aside funds in a depreciation account, where the money is invested until needed to pay for new assets. The amount of funding required depends on how long the assets will last, and the cost of replacing them.

Council is taking a conservative position regarding the level of depreciation funding, and further work will be carried out to refine the analysis.

Systems and processes

(AMP Chapter 8)

The Group Manager Assets is responsible for all the activities described in the Asset Management Plans, while the Group Manager Corporate is responsible for corporate risk management.

The Stormwater Activity uses the BizeAsset software system for recording all relevant information regarding the individual infrastructure items and is updated regularly to include all additions and deletions. The information is used for regular reporting on depreciation and triennial revaluations. BizeAsset is currently being updated to provide increased capability via a web base and is being developed to assist with achieving the target 'core plus' level of asset management.

Accounting is processed via Council's NCS financial system.

Geographic data is managed electronically, using Council's GIS software.

Various other information flows and processes are used to develop the Long Term Plans, establish service agreements, manage contracts, update standard operating procedures, monitor performance and report on resource consent compliance.

Improvement

(AMP Chapter 9)

Council's asset management target is to achieve the 'core plus' level, which is considered to be appropriate for an organisation of its size. Following guidance from the Office of the Auditor General and the NAMS manual, a number of Improvement Plans have been developed and implemented historically, while others are on-going. Further improvement proposals are based on a review of the current status of compliance with the requirements of 'core plus' and the recently updated IIMM, which refers to 'intermediate' rather than 'core plus'.

The 2015 AMPs are planned to be completely restructured to make them more useful and to streamline their structure and content.

Further reading

Where necessary, the reader is encouraged to refer to the full Asset Management Plan document for further discussion and information on the topics in this summary.