

1.0 INTRODUCTION

1.1 Background

1.1.1 PURPOSE OF THE PLAN

Taupō District Council is responsible for managing a range of community owned assets such as the Stormwater network. To ensure these assets are managed in an efficient and affordable way asset management plans are required.

The size of the Stormwater investment and importance of stormwater services to the community demands excellence in the management of these assets. The stormwater service delivery is a core service and the community expects the Stormwater network to be managed in such a way that costs are minimised while providing the levels of service the community desires.

The overall purpose of asset management (AM) planning is:

“To meet a required level of service in the most cost effective way through the creation, operation, maintenance, renewal and disposal of assets to provide for existing and future customers”.

This asset management plan (AMP) is the tool for combining management, financial, engineering and technical practices to ensure that the level of service required by customers is provided at the lowest long term cost to the community. The plan is intended to demonstrate that Council is managing the assets responsibly and that customers will be regularly consulted over the price/quality trade-offs resulting from alternative levels of service.

AMP's are therefore concerned with outlining optimal life cycle management strategies and providing details of the associated costs. This identification of future needs, management options and cash flows provides the ability to even out peak funding demands and account for asset depreciation loss of service potential.

The main benefits derived from AM planning are:

- Improved understanding of service level options and standards.
- Minimum lifecycle (long term) costs are identified for an agreed level of service.
- Better understanding and forecasting of asset related management options and costs.
- Managed risk of asset failure.
- Improved decision making based on costs and benefits of alternatives.
- Clear justification of forward works programs and funding requirements.
- Improved accountability over the use of public resources.
- Improved customer satisfaction and organisational image.
- Improved understanding of the funding requirements based on a programed condition assessment program
- Understanding of asset criticality and associated maintenance and renewal expenditure

A fundamental objective throughout the preparation (and future review) of this plan will be to identify potential opportunities for reductions in asset lifecycle costs.

This Asset Management Plan has been updated internally by the Stormwater & Solid Waste Asset Manger building on the existing 2015 AMP document. Data has been collated and updated by Councils contract engineers using the new Asset Data system (Asset Finda) and recent asset valuation data as well as condition assessment data that has been obtained by undertaking a CCTV condition assessment program of portions of the network. Contributions

for this plan have also been made from relevant asset managers/engineering officers within Infrastructure Services and financial updates via the Management Accountant.

1.1.2 LEGISLATIVE REQUIREMENTS FOR ASSET MANAGEMENT PLANNING

The recent focus on AM planning, results from the Local Government Amendment Act 2014. This Act places an emphasis on strategic financial planning and requires local authorities to:

- Prepare and adopt a Long Term Plan (LTP) with a 10 year planning horizon every three years, taking into account asset creation, realisation, and loss of asset service potential.
- In determining their long term financial strategy, consider all relevant information and assess the cost/benefit of options.
- Manage assets prudently, in the interests of the district and its inhabitants and ratepayers.
- Clearly identify significant forecasting assumptions and risks underlying financial estimates.
- Identify any significant negative effects that any activity within the group of activities may have on the social, economic, environmental, or cultural well being of the local community.

The preparation and implementation of an AMP from which long term financial strategies will be developed, is a means of TDC complying with these requirements.

1.1.3 LEGISLATIVE DOCUMENTS

The key legislative documents relating to the management of the Stormwater service assets are listed in the following table.

Local Government Act 2014 and Amendments	<p>The LGA empowers local authorities to carry out various Stormwater works, but does not require them to do so. The Act requires public consultation.</p> <p>Section 10 Purpose of local Government</p> <p>(1) The purpose of local is-</p> <ul style="list-style-type: none"> a) To enable democratic local decision making and action by, and on behalf of, communities; and b) To meet the current and future needs of communities for good quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost effective for households and businesses. <p>(2) In this act, good quality, in relation to local infrastructure, local public services and performance of regulatory functions means infrastructure, services, and performance that are</p> <ul style="list-style-type: none"> a) Efficient; and b) Effective; and c) Appropriate to present and anticipated future circumstances. <p>Section 17A(1) A local authority must review the cost effectiveness of current arrangements for meeting the needs of communities within its</p>
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	<p>district or region for good-quality local infrastructure, local public services, and performance of regulatory functions.</p> <p>Under Section 17A(4) you must consider as minimum.</p> <p>-Method of delivery:</p> <ul style="list-style-type: none"> • In house • Council CCO • Multi party CCO • Another local authority • Another person or agency <p>-Method of governance and funding</p> <ul style="list-style-type: none"> • Council • Joint committee or shared service
Resource Management Act 1991	<p>Requires Councils to:</p> <ul style="list-style-type: none"> ▪ sustain the potential of natural and physical resources to meet the reasonable foreseeable needs of future generation ▪ comply with District and Regional Plans ▪ avoid, remedy or mitigate any adverse effect on the environment ▪ take into account the principles of the Treaty of Waitangi in exercising functions and powers under the Act relating to the use, development, and protection of natural and physical resources ▪ Comply with resource consents issued by the Waikato Regional Council for disposal of Stormwater.
Waikato Regional Plan	<p>All activities associated with the Stormwater assets will require compliance with the Waikato regional plan i.e. new diversion and discharge activities, structures and earthworks.</p>
Building Act 2005	<p>The building act controls the construction of buildings on private property. Its relationship to the stormwater asset is limited however greater use of onsite disposal of stormwater for buildings, in particular industrial sites may assist with stormwater quality and quantity management. The building act is relevant for the construction of new stormwater treatment systems, particularly dam structures and stormwater detention systems.</p>
Land Drainage Act 1908	<p>The Land Drainage Act 1908 says that Council may construct and maintain drains in the district; however, it may also be liable for consequential damages arising from a lack of maintenance (neglect) of drains under its management causing flooding of private property. Therefore to avoid potential liability claims it would be prudent for Council to adequately maintain the existing drainage systems. Any works, or even upgraded existing construction, will require resource consent in accordance with the Resource Management Act.</p>
Comprehensive Discharge Consents	<p>I July 2007, TDC was granted comprehensive consents for the Taupō, Turangi and Waikato river urban stormwater discharges.</p>
Local Govt Act Infrastructure Strategy	<p>Requires Local Authorities to provide an infrastructure Strategy that outlines the key infrastructure issues and possible solutions over a thirty year planning horizon.</p>
Other Acts and Regulations	<p>Public Works Act 1981 Health & Safety in Employment Act 1999 Civil Defence Emergency Act 2002</p>

1.1.3.1 Water and Sanitary Assessment

A Three Waters and Sanitary Assessment has been undertaken in April 2017.

The sanitary assessment determined the ability of the stormwater network to provide a sanitary environment for the community. It was found that the Stormwater network was sufficient and this was reinforced by the very small number of flooding incidences reported.

The new growth model numbers still reflect very minimal growth in the district and during the intervening period no houses have experienced flooding, so it is considered that Council still provides a stormwater service that meets Health Act requirements.

1.1.3.2 Code of Practice for the Development of Land

A new revised code was adopted by Council in September 2009, and is intended to provide a guide to subdivision and developments within the Taupō District. It sets out a set of procedures and minimal technical standards for development against which all proposals submitted can be measured to assess their suitability for construction. It sets out what the Taupō District Council needs from developers so that the requirements of the Resource Management Act and the Taupō District Plan are met.

This document sets standards for design including capacities for stormwater assets that will become assets within this document.

The code of practice also takes into account climate change and effects on the district. Climate change provisions now require that the a 1:10 year event is soaked to ground for private property(pumice soils allow this) and Councils Stormwater network that predominantly services the roading network is now required to cater for a 1:10 year event and over land flow paths are designed up to a 1:100 year event.

The older infrastructure installed before the allowance for climate change is sized to cater for 1:5 year events. Council has district specific climate change rainfall data included into the code.

The Waikato Regional Council is updating their Stormwater guidelines and this document will be incorporated into Taupo's code once they have it finalised. There may be some district specific changes needed to reflect the Taupo district pumice soils.

1.1.4 RELATIONSHIP WITH PLANNING AND STRATEGIC DOCUMENTS

The way in which AM planning links the Strategic planning process with operations and annual plans is illustrated below.

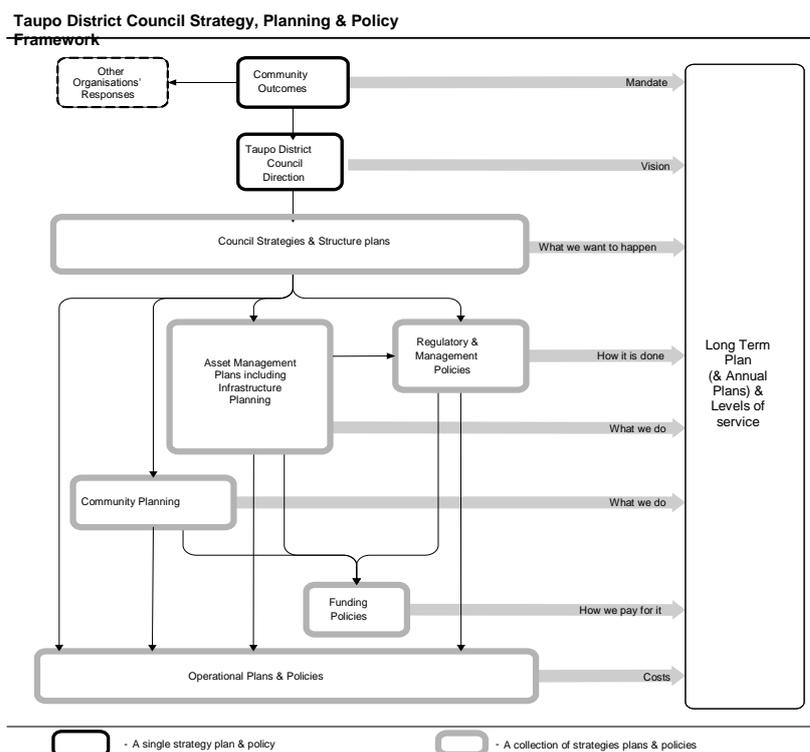


Figure 1: Council Planning

AMP's are tactical plans for achieving strategies resulting from the strategic planning process. AMP's are a key component of the council planning process linking with the following documents.

TYP: The Ten Year Plan sets the strategic direction for the Council and is the overarching planning tool which describes the activities the Council will undertake to deliver. It identifies the outcomes the community would like to achieve. It also contains the financial forecast for the next 10 years. This financial forecast is drawn from the AMP.

Annual Plan: This sets out how Council will undertake its strategic goals and details the specific activities, functions for the first three years of the LTP. The works identified in the AMP should automatically become the basis on which future LTP's and annual plans are prepared.

District Plan: The District plan is an implementation tool used to protect values and outcomes important to the community. The stormwater network is essential in the transportation of stormwater and the avoidance of flooding in the District and provides for the economic and physical wellbeing of the community.

Business/Activity Plans: The service levels policies, processes and budgets defined in AMPs are incorporated into business plans as activity budgets, management strategies and performance measures.

Legislation: The AMP must comply with all relevant legislation and provide the means of meeting legislative requirements.

Bylaws: standards and policies: These tools for asset creation and subsequent management are needed to support AM tactics. (It is considered that there is currently no need for a Stormwater Bylaw).

Waikato Regional Council Policy Statement (Stormwater): These references give the policy framework and give effect to the preferred strategic direction and a vision of what kind of stormwater systems the region wants, a set of desired outcomes the region wants to achieve and a specific direction to focus the region's efforts in meeting these objectives.

Infrastructure Strategy: As required by the amendment to the local government Act, the Infrastructure strategy provides a thirty year overarching strategy for the provision of infrastructure within the district.

Taupō Tree and Vegetation Strategy: This document gives some direction as to planting on reserves and in stormwater gullies and overland flow paths.

Stormwater Strategy: The stormwater Strategy coordinates stormwater management through a variety of management plans and codes of practice. Its purpose is to help Council meet its long term Plan objectives of protecting and enhancing the environment and improving living environments in the urban areas of the Taupō District.

Stormwater Management Plan: This plan is a management (required as a condition of the Comprehensive discharge consent) document which will record the way in which the existing municipal system is operated. It will seek to detail and guide the operation and ongoing performance of the municipal stormwater system to continually improve stormwater management and avoid, remedy and or mitigate adverse water quality and quantity effects in the receiving environment. This plan covers the exiting municipal system and outlines the procedures by which the new stormwater assets and discharges/diversions are incorporated into this plan. This document exists in parallel with the Stormwater Asset management Plan.

Comprehensive Discharge Consents: Discharge consents are granted under the Resource Management Act 1991 based on the provisions detailed in the relevant Waikato Regional plans. They assess the discharge of contaminants into or onto land or water, and the discharge of water into water. In June 2007 Environment Waikato granted Council three Comprehensive Discharge Consents to divert and discharge urban area stormwater runoff and associated contaminants into receiving environments;

- Resource Consent 105048: for Taupō urban areas (Resource Consent schedule B), including Taupō, Eastern Bays, Waitahanui, Acacia Bay and Kinloch.
- Resource Consent 105049: for Turangi urban areas (Resource Consent schedule C) including Turangi, Tokaanu, Motuoapa, Omori, Kuratau, Whareroa, Tauranga Taupō and Hatepe.
- Resource Consent 105050: for Waikato River urban areas (Resource Consent schedule D), including Wairakei, River Road, Atiamuri, Whakamaru and Mangakino.

These consents impose legally binding conditions for stormwater management in the district, which include the provision of Catchment Management plans for Green Field developments and a stormwater management plan prepared by Council. The conditions also require a stormwater quality improvement program, so existing infrastructure will be upgraded in response to compliance issues and priorities identified through Councils Stormwater monitoring program. It is Councils aim to achieve 100% compliance with the conditions of the Comprehensive Discharge Consents.

Stormwater Monitoring Program: Is a requirement of Councils Comprehensive Discharge Consent. Existing infrastructure will be upgraded in response to compliance issues and priorities identified through Councils Stormwater monitoring program. It is Councils aim to achieve 100% compliance with the conditions of the Comprehensive Discharge Consents.

Transportation Asset Management Plan: The Transportation assets are closely interwoven with stormwater assets. The boundary between these asset types are clearly defined within the stormwater asset management plans. Road catch pits and leads are considered to be roading assets. All costs associated with those catch-pits and leads, e.g. operational costs of cleaning sediment from roading catch pits are reported in the Transportation AMP. Catch-pits and leads in other than public roads, e.g. car parks and industrial sites and service stations are included within the Stormwater AMP.

Stormwater Quality Improvement Program

The comprehensive Stormwater consent requires Council to have a quality improvement program designed to improve the quality of municipal Stormwater discharges.

Growth Management Strategy 2050: At the core of Taupō District 2050 are 12 Strategic directions. These provide the framework of interrelated policies that guide decision making and growth related issues. Strategic direction 8 and 9 relate to Transportation AMP (refer page 7 of GMS).

Structure Plans: Adopted and proposed structure plans outline how growth is to be managed within areas - Taupō Urban Structure Plan (TUSP), Taupō Town Centre Structure Plan (TTCSP), Kinloch Community Structure Plan (KCSP), Turangi and Southern lakeshore Settlements Structure Plan and the (CISP) Commercial and Industrial structure plan.

Contracts: The service levels, strategies and information requirements contained in AMPs are translated into contract specifications and reporting requirements. Contract number TDC/1516/155, which expires in 2022 for Three Waters Maintenance includes all the operations necessary to maintain, repair, monitor record and report the operation and conditions of the stormwater systems in the Taupō District. This contract incorporates management and maintenance of Waste Water, Stormwater and Water assets.

This contract aims to satisfy the conditions of the Comprehensive Discharge Consents and the objectives of the Stormwater Management Plan.

1.2 Key Stakeholders

Key stakeholders are those who have significant and/or specific involvement with the assets and/or the service facilitated by the assets and describes their particular main interests.

This AMP recognises the following as key stakeholders:

Stakeholders - External & National stakeholders	Stakeholders main interest	Engagement Methods/Touch points
Audit New Zealand	Legislative responsibilities as defined in Legislation.	As per audit processes.
Local Government New Zealand/Central Government	To ensure Local Government Act is complied with (via Auditor-General). Enhance value of decision making process.	Occasional correspondence
	Three Waters performance survey	Through annual survey
Ministry for the Environment		Very occasional correspondence
Ministry of Health		Occasional correspondence Submissions if required

Water NZ	Undertake national performance measurement	Through annual survey
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Stakeholders – External and Regional	Stakeholders main interest	Engagement Methods
Bay of Plenty District Health Board (includes Lake District Board area)	Sanitary assessments	Survey of service provision
Neighbouring Councils – South Waikato, Rotorua, Hawke’s Bay, Otorohanga	Information sharing and best practise	Ongoing contact with three waters staff looking at best practise
Waikato Regional Council	Stormwater consenting and monitoring, spill response	Ongoing contact with relevant staff. Regular contact

Stakeholders – External and Local	Stakeholders main interest	Engagement Methods
Taupo District Council ratepayers, residents, customers and visitors	Recognised as large & significant stakeholders. Reliable Stormwater network services at an affordable cost that have minimal environmental effects on receiving environment.	Broad methods such as phone, service requests, general correspondence, email, meetings, face book, social media, face to face, meetings (informal) service requests.
Tuwharetoa Maori Trust Board	Impact of Stormwater on lake and river quality Maintenance of Council assets on the bed of Lake Taupo	Regular discussions. Applications to undertake maintenance. Updates on Stormwater quality improvement provision
Lakes and waterways	Recognised as a significant stakeholders. Interested in lake and river water quality	They hold quarterly meetings, we provide environmental monitoring data when requested
Bike Taupo	Recognised as a significant advocacy group. Advocate for safer cycle network on and off road. Walking and cycling strategy (cycling component) Cycle trail development.	Occasional correspondence - phone, informal meetings, email updates, Bike Taupo newsletters, website.
Consultants and Contractors	Commercial opportunities Project development Maintenance contracts Project designs	Formal and informal meetings Occasional correspondence Short term agreements Offer of service.
Emergency services	Identification of at risk property during flooding events	Contact with civil defence

Local contractors	Service provision	Day to day contact
Greening Taupo	Planting of native species fauna to protect and enhance ephemeral gully systems	Regular formal and informal discussions

Stakeholders – Internal	Stakeholders main interest	Engagement Methods
Asset Managers	Implementation of infrastructure and service management activities (eg operations, demand management, maintenance, construction). Effective decision making, finance, communications, IT etc	Continual discussion via informal meetings, face to face, regular asset manager meetings.
Infrastructure Asset Management	Operation of Asset Data function for Three Waters	Day to day collaboration
Chief Executive	Compliance with regulations, service reliability, quality and economy	Updates when required
Communication team	Project updates, event updates	Councillor weekly update, communication plans, emails, phone, meetings etc
Community engagement team	Accessible transport network Neighbourhood events Accessible audits	Informal meetings, phone, email
Contract Managers	Responsible for implementation of infrastructure and service management activities	Continual discussion via informal meetings, face to face
Council committees	As per delegated authority	Regular meetings

Stakeholders – Internal continued.	Stakeholders main interest	Engagement Methods
Customer services	Customer service request systems which minimise and resolve complaints/enquiries relating to the activity.	Broad methods such as phone, service requests, general correspondence, email, meetings, facebook, social media, face to face, meetings (informal).
Elected members	Owner of assets, responsible for sustaining service levels under the LGA 2000.	Councillor weekly updates, regular meetings, email, occasional correspondence.

Financial team	Budget requirements (income and expenditure) including forecasting, annual plan, Long term planning	Spreadsheets updated regularly, phone, email, meetings.
Infrastructure team and manager	Input into the AMP/Activity plan, AMP policy development and Infrastructure 30 year policy	Regular meetings, open plan office discussions
Parks & Reserves team	Walkways/Access/Footpath links	Asset Manager meetings
Planners & Policy team	AMP support for Long term plans, infrastructure support for current/future district activities	Regular meetings

1.2.1 LARGE OR SIGNIFICANT USERS

As the Taupo district has pumice soils the majority of district discharges up to 1:10 year event to ground. Council's main service provision is the draining of the roading network and the provision of overland flow paths after the Stormwater network has reached its capacity. The large and significant users of the system are the community within the urban catchments within the district. There are other significant interested parties that need to be considered as they represent a statutory or regulatory position, or in the interests of a portion of the community. These are noted in the table above.

1.3 Purpose of Ownership

Uncontrolled stormwater has the potential to cause significant damage to property and the environment, as well as threaten the safety of sections of the community at risk. The safe control and discharge of clean stormwater is a core council service, and TDC has historically developed and taken ownership of stormwater assets to help meet the economic, safety and environmental outcomes desired by the community.

The stormwater assets are owned by the community they serve. The Local Government Act 2014 (LGA) has clearly signaled that stormwater services are a core service provision for Councils.

Stormwater asset ownership and responsibility matrix	Legal Issues	AM plans & budgeting	Data Collection & Maintenance	Maintenance	Level of Service	Implement new works	Opex - Overheads	Opex - Rates	Opex - Interest	Opex - Insurance	Opex - Cleaning	Renewal	Technical advice/innut	Valuation
Stormwater piped Network														
Ephemeral Gullies														
Storm water to bottom of catch pits & leads														
Urban street cleaning														
Culvert maintenance rural / urban														
Enviropod Maintenance														
CDS Maintenance														
Street cleaning - rural sweeping														
Gully mowing														
Monitoring and Testing														

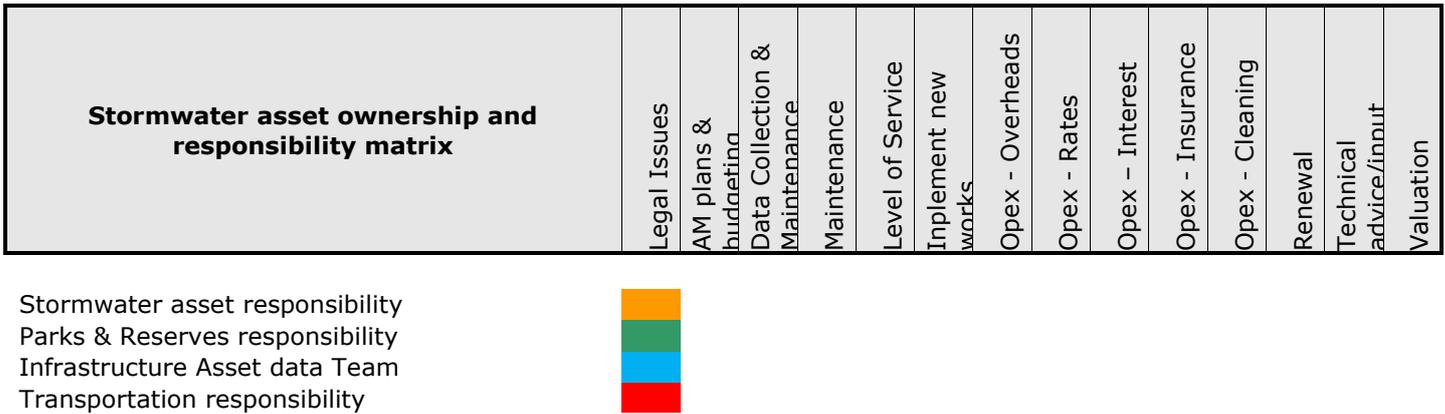


Figure 2: Ownership and Responsibility Matrix

1.3.1 LINKS OR ORGANISATIONS VISION, MISSION, OBJECTIVES, GOALS

The 2012 LTP process has now identified Community Outcomes which Council has adopted, these being.

- **Economy** – our communities prosper in a thriving local economy with a diverse range of rewarding employment opportunities
- **Environment** – A shared responsibility for places we are proud of.
- **Engagement** – Council is connected with its communities, advocating for their social and cultural well being.

Section 17A review

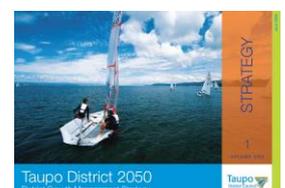
Council has undertaken a review of the “Three Waters” service delivery provided by Council and has determined that the preferred service delivery option is the enhanced status quo with a contract of 5+2+2 duration incorporating network and electrical maintenance of the three waters.

Community Outcomes are taken into account when determining life cycle strategies, levels of service, etc.

Council’s response to the Community Outcomes acknowledged that managing growth is one of the biggest issues for TDC over the next 10 years, and in June 2006 published TD2050. TD2050 provides a policy framework to guide where and how future growth should occur and identifies a series of actions to achieve this desired pattern of urban growth. At the core of TD2050 are the 12 Strategic Directions. These provide the framework of interrelated policies that guide decision making on growth related issues. Over time they will be achieved by putting into effect identified policies and undertaking the specific actions identified in TD2050.

The Strategic Directions, policies and actions out of TD2050 that are specifically relevant to the Stormwater activity are:

Strong Communities - Strategic Direction 5:



- Identify and plan for social and community infrastructure needs in advance of development (Policy 5.2).

Sustainable Economy – Strategic Direction 7:

- Ensure that economic activities reflect the need to preserve the natural environment that sustains the district's economy (Policy 7.1).

Integrating Land Use, Infrastructure & Funding – Strategic Direction 8:

- Manage the sequence of development in growth areas so that services are available from inception of new or expanding communities (Policy 8.1).

Leadership, Partnership and Collaboration – Strategic Direction 12

- Develop collaborative working relationships with other key stakeholders to achieve effective implementation (Policy 12.1)

Action – A 8.2

Include agreed growth assumptions in all Asset Management Plans.

Action – A 8.3

Ensure Asset Management Plans support the patterns of development defined by TD2050 are aligned with the LTCCP, proposed District Plan and funding policies.

1.3.2 ASSET MANAGEMENT'S CONTRIBUTION TO CORPORATE OBJECTIVES

Council's goal, as set out in the LTP relating to the Stormwater network:

The stormwater activity of Council has adopted the following aims to support Council's commitments:

*"to provide a stormwater system that:
Services the whole community,
Is affordable and managed at lowest possible cost,
Reduces the incidence of flooding impacts on people and property,
Is managed in an environmentally sustainable manner"*

1.4 Assumptions

1.4.1 FINANCIAL

The following financial assumptions have been made. Further information can be found in the TYP document.

Assumption	Potential risk	Mitigation measure
1. Asset Revaluations completed June 2015 have been used as the	Time between AMP completion and last revaluation	Council undertakes an annual price variance assumption report

Assumption	Potential risk	Mitigation measure
basis for asset values.		
2. Investment Returns eventuate as predicted.	Not the required funds to undertake capital works	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
3. Interest Rate on borrowings remains as predicted within the financial model.	Not the required funds to undertake capital works	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
4. Expenditure of capital projects occurs and estimated debt levels are as predicted	Potential under performance in capital spend reflected in Council revenue	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
5. No allowance has been made for inflation adjustment within this AMP. The source of funds for the future replacement of significant assets is stated in the revenue and Financing Policy.	Under funding of cost centre	Finance team make allowances for GST in funding plan and policy
6. The useful lives of significant assets are as per the accounting policies documented in the TYP. Depreciation is charged at 50% for the first year and 100% in subsequent years.	Asset lives have been incorrectly calculated meaning a funding shortfall	Council has asset depreciation checked externally. Asset lives are compared to the latest asset information nationally
7. Levels of service and funding has been based on historic data	The community desires changes to level of service which are not reflected in this document.	Council undertakes three yearly satisfaction surveys. Council undertakes pre LTP consultation to gauge the community for different service level needs. Council undertakes consultation with the community as part of the development of this LTP document
8. Allowance has been made for vested assets	The level of allowance for vested assets is incorrect.	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
9. Assume that the revenue received from Rates is as per expected.	A shortfall in rates funding	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
10. Assume no costs associated with structures	An increase in unbudgeted operational cost	Councils LTP and annual plan spend can be adjusted

Assumption	Potential risk	Mitigation measure
on the lake bed		annually to meet Councils revenue and finance policy.
11. Development Contributions will continue not to be collected.	Unplanned works will needed to be funded through rates as opposed to developer funded	Stormwater network provision is provided by developers apart from quality improvement device's which are seen as a benefit to the whole community.

1.4.2 NON FINANCIAL

Assumption	Potential risk	Mitigation measure
1. Assume that growth is going to occur as per the Growth Model predictions.	Changes in growth will impact capital and operational spending	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
2. The Stormwater discharge quality requirements will remain constant within the framework of the comprehensive discharge consent conditions.	Changes to discharge quality through the resource consent will require an increase in operational and capital expenditure	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
3. Contractors will be available for development and construction of projects.	A shortage on contractors for project completion will mean an increase in project cost	Council can extend tender periods to enable contractors more time to schedule in works.
4. There will be continued growth in public participation in the democratic process and Council will need to respond to this growth.	Increased growth in participation could result in changes in levels of service delivery.	Councils LTP and annual plan spend can be adjusted annually to meet Councils revenue and finance policy
5. There will be no unforeseen legislative changes or central government policy changes that will affect this asset.	Changes in legislation could impact on the funding levels	Changes in legislation have an implementation period to enable Councils to plan
6. Economic and labour market constraints may have a direct effect on recruitment.	If Council is unable to recruit to the required level to complete the works program for the year this could have impact on Councils credibility	Council may have to hire consultants to provide support; this could increase the cost of service delivery which will need to be funded through the annual plan process.

Assumption	Potential risk	Mitigation measure
7. That Councils resource consents for its activities will be renewed as required.	The renewal of resource consents will depend on Councils prior performance in meeting the conditions of the existing consent and any changes in legislation	Council works closely with the Regional council to achieve consent compliance. Compliance is also a staff performance criteria, so Council is focused on consent compliance and it is considered that any consent related issues can be resolved.

1.5 Significant Negative Effects to Providing the Stormwater Service

In general providing Stormwater services to the community has public health and environmental benefits.

There is however negative effects in providing this service.

- The cost of providing the service on rate payers, especially smaller communities.
- The cost of keeping up with ever increasing environmental standards requiring significant capital investment.
- Long term renewal cost of aging infrastructure

Mitigating Measures

The cost of providing new stormwater infrastructure is on the whole funded by new developers, the maintenance requirements is funded by general rates thus the cost is spread across the community.

Capital works are funded by loan to make sure that the cost spread is intergenerational.

Increases in Stormwater quality benefit the whole community.

1.6 Asset Management Plan Complexity

1.6.1 OUTLINE OF APPROACH

Senior Leadership Group Managers have identified the need for robust asset management planning. They have identified the level of Asset Management planning by asset type either as core or advanced. The Stormwater AMP has been identified as Intermediate.

Core asset management plans are those which produce an AMP based on providing current levels of service and meet minimum legislative requirements by supporting a long term (10 year plus) cash flow forecast and accounting for changes in the service potential of assets. Core AMPs define existing levels of service and identify costs based on renewal accounting principles.

Advanced AMP's identify processes to optimize lifecycle AM strategies and provide a greater degree of confidence in the resulting cash flow predictions. Advanced AM functions include predictive modelling, risk management, optimized renewal decision making (ORDM) and service level reviews.

The Stormwater Asset Management Plan 2018 follows the IIMM framework and it has been developed and collated internally by the Stormwater Asset Manager.

The difference between core and advanced is that at an advanced level:

- Future demand is predicted
- High knowledge of asset owned including condition assessment and performance
- Knowledge of current utilisation and ultimate capacity
- Ability to predict failure modes
- Ability to analyse alternative options
- Ability to optimise maintenance and operational activities.

The complexity of this iteration of the Stormwater Asset Management Plan sits in between Core and Advanced as council through its CCTV condition assessment of assets and criticality assessment can now determine accurate renewal profiles for the network. The overland flow path model while not a network model does enable council to identify where there are capacity issues within the network. Thus Council is able to understand the current utilization, condition and capacity of the total Stormwater network. This data is then compiled within the three waters asset data system where condition, age, historical maintenance and criticality, are analyzed and renewal funding profiles determined.

1.6.1 .1 AMP REVIEW BY COUNCIL

The involvement by councillors, including the reviewing and approving of the AMPs is briefly outlined below:

Workshops are held with the council for group of activities including AMPs which gives them following information (refer objective link A1342951)

- What we do
- Key issues
- The service(s) we provide
- Levels of service, performance measures and targets
- Key projects over the next three years
- Who pays
- Fees and charges
- Financials
- Capital expenditure (including renewals)
- Operating expenditure
- Draft AMPs are provided to councillors to view
- Council finally adopts the AMP
- Program performance measures

1.6.2 Limitations of this AMP

- Levels of Service require detailed consultation to make these more current.
- Asset condition and performance assessment need to be verified through ongoing investigations and the asset data system needs to be finalised so that accurate records of the full asset are available.

Asset Management Policy

PURPOSE

The Asset Management Policy supports Council's long term strategic goals found in the 2018 LTP of:

- Ensure that the Taupo District remains a great place to live
- Promote economic development
- Protect our water resources and use them wisely

- Maintain the quality infrastructure that we have
- Keep rates and debt affordable

OBJECTIVE

The objective of Council's Asset Management Policy is to:

- ensure service delivery is optimized to deliver agreed community outcomes and levels of service for both residents, visitors and the environment
- optimize expenditure over the life cycle of the assets
- risks are managed appropriately
- provide a service delivery that is sustainable

PRINCIPLES

The following principles will be used by Council to guide asset management planning and decision making:

- effective consultation to determine appropriate levels of service
- Integration of asset management within Council's strategic, tactical and operational planning frameworks including corporate, financial, and business planning
- Informed decision making using a lifecycle and risk management and inter-generational approach
- Transparent and accountable asset management decision making
- Sustainable management of assets for present and future needs

CORPORATE FRAMEWORK

This Asset Management Policy links to Council's LTP, Infrastructure and Financial Strategy and Asset Management Plans. It builds on Council's strategic goals by promoting an integrated approach to the management of service delivery and across all asset classes.

STRUCTURED ASSESSMENT of ASSET MANAGEMENT PRACTICE

Council has undertaken a structured assessment of the appropriate level of asset management practice for each of the asset classes. This structured assessment follows the guidelines provided in Section 2.1.3 of the International Infrastructure Manual (IIMM 2011v4).

IMPLEMENTATION and REVIEW of POLICY

This Asset Management Policy has been implemented in 2018. The next full review of this Asset Management Policy shall be completed in June 2019 prior to completing asset management plan updates to support the 2021 LTP.

MATURITY ASSESSMENT

In the first quarter of 2018 the maturity level of each of the Asset Management Plans has been assessed through an external review process to determine the actual level of maturity. This review will form the basis for the further refinement of each of the AMP's Improvement plans.

1.7 Organisational Structure

Taupō District Council has a flat organisational structure and is structured in order to deliver the key strategic directions of the Long Term Plan.

Stormwater service provision is provided by the Infrastructure Services Group.

Asset Management Planning is undertaken by the Asset Manager Storm Water / Solid Waste, who is also responsible for updating the Stormwater Management Plan and Resource Consent requirements this position reports to the Infrastructure Manager.

Asset management plans are developed with weekly meetings of the relevant asset managers to make sure that improvements identified through the "Waugh report" are included and that the documents follow a similar format.

Day to day Maintenance is undertaken by the Network Engineer who is responsible for the administration of the Stormwater maintenance Contract and reports to the Asset Manager Stormwater / Solid Waste.

Capital works identified in the AMP are undertaken by the Asset manager or Network Engineer or passed on to the Special Projects team in cooperation with the Asset manager depending on project time lines and project complexity.

Sampling and monitoring is undertaken under the maintenance contract and the samples are analysed by an independent Lab. Recommendations around monitoring compliance is undertaken by Councils in house environmental scientist.

All staff members, apart from Lab staff are located on the same floor of the Council office building and work closely together to make sure that there is a coordinated approach to the provision of stormwater service throughout the district.

Consultants are employed to assist by providing professional services as necessary. The organisational structure and the Infrastructure Group structure are illustrated in the following figures.

In addition, the Stormwater service activity is able to draw on the following in-house resources from the Finance, Regulatory & Infrastructure Group:

The Manager Asset Information is responsible for the development of the Asset Management System.

Asset management plan financial data is developed by the Assets Manager Solid Waste Stormwater in conjunction with the finance team.

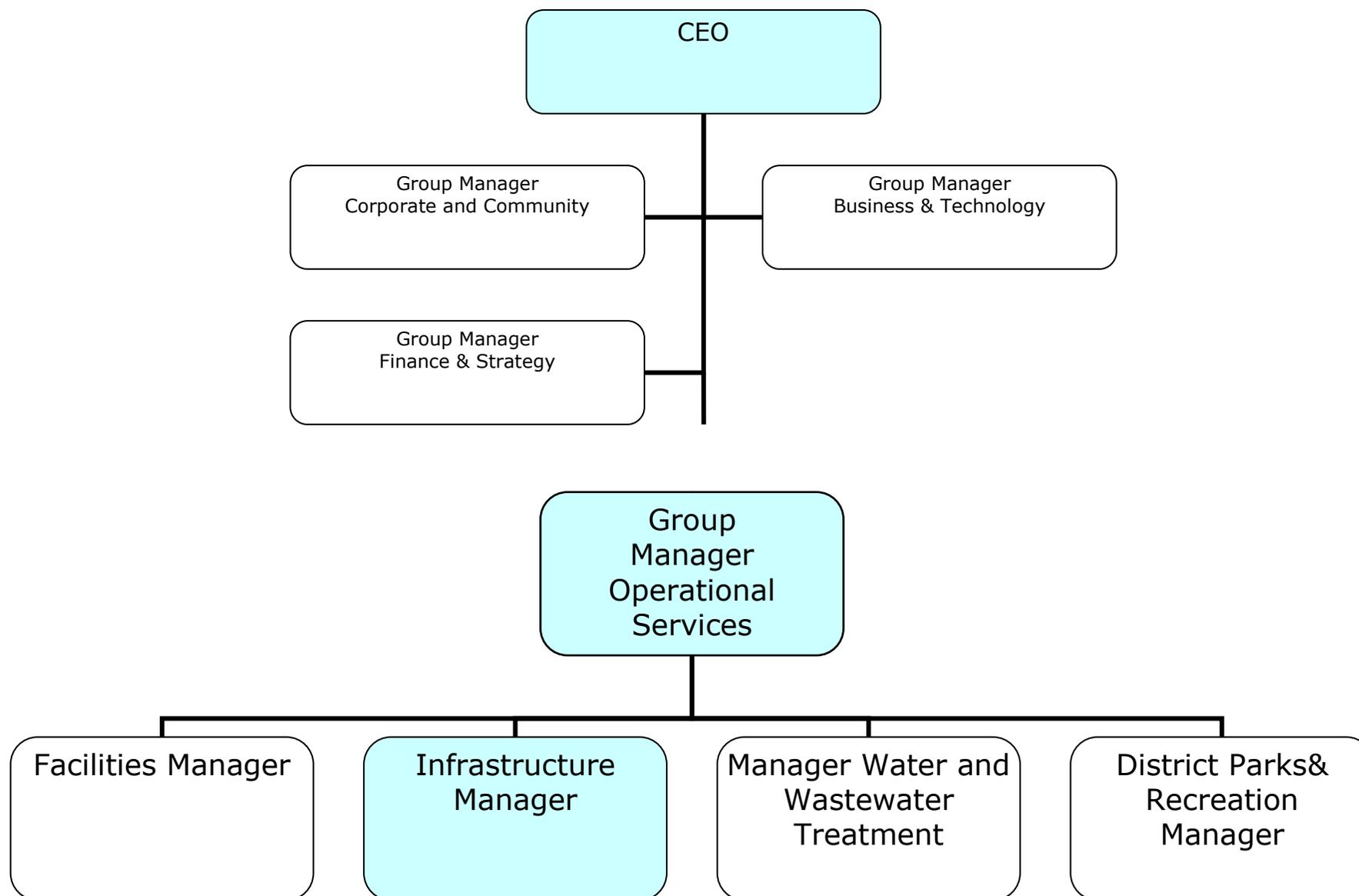


Figure 1.3: TDC Organisational Structure

Figure 1.4: Figure 5: Infrastructure team Organisational Structure as at June 2017 (i.e. who does the work and how its managed)

