



# Stormwater

## Asset Management Plan 2021-2031



TE KAUNIHERA Ā ROHE O  
**WHAKAAHURANGI**  
**STRATFORD**  
DISTRICT COUNCIL

Long Term Plan 2021-31

## DOCUMENT QUALITY ASSURANCE

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**THE STORMWATER  
ASSET MANAGEMENT PLAN  
(SAMP)  
2021-2031**

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# **EXECUTIVE SUMMARY**



## The Stratford District

The Stratford District is a land locked area encompassing 2170km<sup>2</sup> located in the heart of Taranaki. The district is adjacent to the New Plymouth and South Taranaki districts in the Taranaki region and the Ruapehu and Whanganui Districts in the Horizons Regional Council. Within the district there are four distinct geographical areas:

- The alpine and bush environment of Egmont National Park;
- The ring plain around Mt Taranaki;
- Hill country located between the ring plain and the eastern hill country; and
- Eastern hill country to the boundary with Ruapehu District Council.

The district's rural landscape supports large farming, forestry and Department of Conservation reserves. Stratford is a growing tourist destination owing to key attractions such as the Egmont National Park, the Manganui Ski Field, Forgotten World Highway (SH43), Dawson and Mt Damper Falls. Three main townships make up the Stratford District: Stratford; Midhirst and Toko.

## The Stormwater Asset and Activity Management Plan

The Stormwater Asset and Activity Management Plan (SAMP) describes the planning, engineering, financial and technical strategies and practices employed in the delivery of Council's obligations for the delivery of stormwater services at the agreed levels to the community. Activities include the operation, maintenance and development of distribution system including underground pipework and tunnels. The SAMP identifies the local, regional and central government strategic and legislative drivers for the provision of stormwater service in the areas of benefit.

Based on forecasted growth and demand for the service, the SAMP sets out how the stormwater service will be managed over its lifecycle to ensure the optimal delivery of the service within the financial constraints set by the Council in its Long Term Plan (LTP) 2021-2031. The level of service to be delivered is determined by the priorities and performance measures set by both central government and Council.

The SAMP is a living document and is used to inform the Council's Long Term Plan and relevant reserve management plans. The AMP details Council owned assets and is used for communicating complex asset management information/strategies with stakeholders, elected members, service managers and other interested parties.

## The Strategic and Legislative Context

The Strategic and Legislative Context for the SAMP is as per the framework below.

The key central, regional and local government drivers include the:

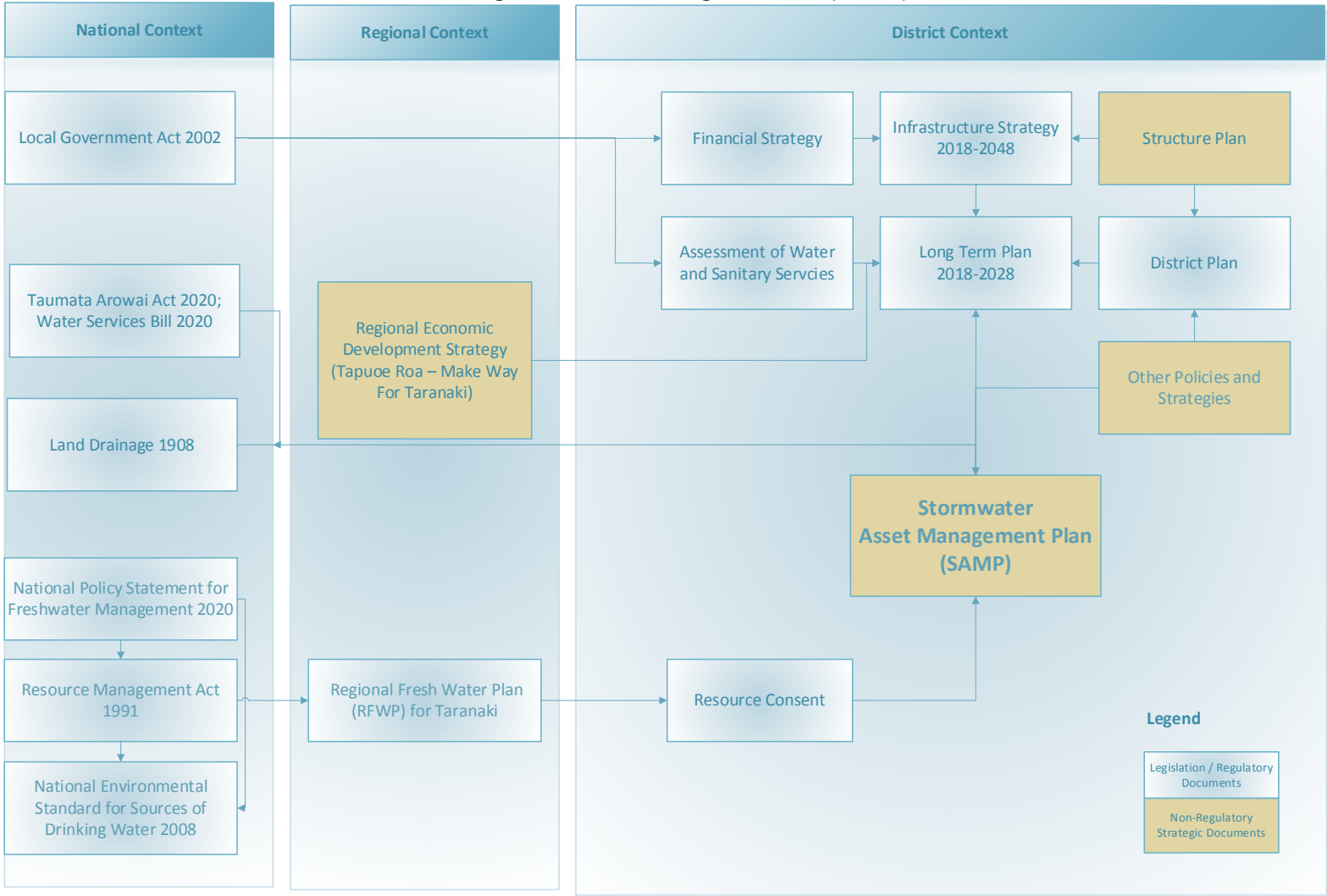
- The Local Government Act (LGA)2002 (and amendments);
- The National Policy statement for Freshwater Management (FVNPS)
- The Resource Management Act (RMA);
- The National Environmental Standards for Sources of Human Drinking Water.

## Our Community Outcomes

The Council's vision for the 2021-2031 Long Term Plan (LTP) is '*a vibrant, resilient, and connected community – in the heart of Taranaki*'. The Council's identified *Community Outcomes* to achieve the vision are:

- Vibrant community;
- Sustainable environment;
- Connected communities; and
- Enabling economy

The Legislative and Strategic Context (SAMP)



## Our Problem and Benefit Statements

The Council has identified key problems to be addressed in the coming years. Along with these, projects have been highlighted and statements of the benefits of implementing those projects in solving the identified problems. A summary of our *Problem and Benefit Statements* along with projects identified to deliver the benefits, are provided in the Table below.

### Summary of Problem and Benefit Statements

Problem Statements	Preferred Option / Project	Benefit Statements
<b>Problem Statement 1:</b> Network Planning and Modelling	Commission a new Wastewater model	<p>To accommodate growth and increased demand, Council has programmed to increase pipe capacity to cater for high flows..</p> <p>While officers are aware of some pipes within the network requiring increased capacity, the Council will commission a network modelling project on our stormwater network to reveal how our network systems are behaving.</p> <p>This modelling project will comprise</p> <ul style="list-style-type: none"> <li>• the evaluation of network capacity;</li> <li>• the identification of bottlenecks in the existing or proposed network; and</li> <li>• the design of improvements needed to accommodate growth.</li> </ul> <p>The modelling project is expected to reveal the areas for improvement.</p>
<b>Problem Statement 2:</b> Pipework Capacity Issues	Programme the implementation of pipework capacity increase to support growth.	<p>This programme is to address under-capacity of pipe network to support growth, residential infill and other intense land-use activities.</p> <p>There have been new residential subdivisions and developments, urban infill and other growth-related pressures created in both our wastewater and stormwater networks. The consequence of this is that some pipes are requiring upgrades in capacity to accommodate the increased flow.</p>
<b>Problem Statement 3:</b> Stormwater Safety Improvements	Conduct an inlet structure study, and its implementation, to ascertain the extent of potential upgrades required to meet public safety requirements	Knowledge of what inlet structures are in the network and whether they are adequate is not at an appropriate level. This study will help Council gain the appropriate level of knowledge required to plan for the construction of new, safe stormwater inlet structures.
<b>Problem Statement 4:</b> Climate change	Create a catchment management plan to support upgrade of existing assets to accommodate a 1 in 100 year storm event	Should improve stormwater management in the existing network
<b>Problem Statement 5:</b> Replacement of stormwater tunnels	Consider rerouting of larger waterways/pipeline/tunnels to be more accessible and within public land or easements	Properties currently connected to existing infrastructure will need to be accounted for in any new design route

## Our Levels of Service and Performance Measures

Stratford District Council undertakes performance monitoring of the activities and services it provides.

The Council monitors its performance through the use of performance measures and targets. The Council's 'Internal' performance measures and targets were developed and set by the Council. The performance targets measure how well the Council is delivering on Levels of Service and the performance of the activity assets. A summary of the Level of Service (LoS) performance measures is provided below. A snapshot of Council's performance trends and targets is provided in Section 5 of the SAMP.

### Our Level of Service Performance Measures

	Level of Service	Performance Measure	Outcome Category
1.	<b>Stormwater system protects property from impacts of flooding.</b>	<p><b>System adequacy</b></p> <ul style="list-style-type: none"> <li>The number of flooding events that occur in a territorial authority district. "Flooding" in this context means stormwater entering a habitable floor.</li> <li>For each flooding event, the number of habitable floors affected. (Expressed per 1000 properties connected to the territorial authority's stormwater system.)</li> <li>For each flooding event, the number of buildings in the central business zone affected by flooding.</li> </ul>	DIA measure
2.	<b>Discharge Compliance</b>	<p><b>Resource Consent Compliance</b> – Compliance with the territorial authority's resource consents for discharge from its stormwater system measured by the number of</p> <ul style="list-style-type: none"> <li>Abatement notices</li> <li>Infringement notices</li> <li>Enforcement orders; and</li> <li>Convictions,</li> </ul> <p>Received by the territorial authority in relation to those resource consents. This target is 0.</p>	DIA measure
3.	<b>Response and Resolution Times</b>	The median response time to attend a flooding event, measured from the time that the territorial authority receives notification to the time that service personnel reach the site.	DIA measure
4.	<b>Customer satisfaction</b>	<b>Complaints</b> - The number of complaints received by a territorial authority about the performance of its stormwater system, expressed per 1000 properties connected to the territorial authority's stormwater system.	Council/Internal measure

## Our Programme Business Case

The programme business case details how the problems identified in the previous sections will be addressed. This is presented in the Table below and shows how our identified projects address the identified problems and achieve our Internal/Council Performance Measures.

Work Category	Identified Projects	Performance Outcomes			
		System Adequacy	Discharge Compliance	Response Times	Customer Satisfaction
Renewal/ Replacement	Stormwater reticulation renewals	✓		✓	✓
	Inlet screen renewals	✓			✓
	Desilt ponds	✓	✓		
Level of Service Improvements	Reticulation capacity increase	✓	✓	✓	✓
	Modelling	✓	✓	✓	✓
	Manhole lid safety screens	✓	✓		✓
	Victoria Lake by-pass	✓	✓	✓	✓

The delivery of good quality infrastructure and the provision of essential water services in a cost-effective manner via effective asset management planning will ensure the achievement of Council's Community Outcomes.

## Funding Our Investment Strategy

The Council's Investment Strategy covers how the Stratford District Council plans to deliver on the services it offers whilst achieving value for money, with a key focus on future-proofing Council's assets.

Capital projects and activities carried out to maintain the Stormwater service, including Renewal or Replacement projects and Level of Service Improvements, for the next 10 years will be funded as per the Revenue and Financing Policy, through one or a combination of the following sources:

- Loans;
- Reserves; and/or
- Subsidies/ Grants by other Partners.

The Council expects that:

- All Level of Service Improvement projects for all the Three-Waters Activities will be funded 100% from Loans;
- Renewal or Replacement projects will be equally funded from Loans and Reserves.
- While the cost of capital projects driven by growth and led by a private Developer will be borne by the Developer, any Council-led projects in support of growth will be accounted for within the particular project budget rather than by activity budgets.

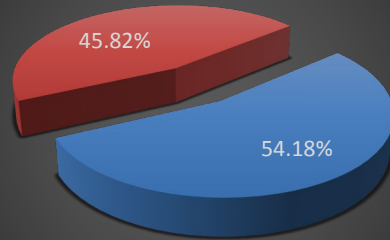
A summary of Council's Capital Investment Funding Strategy over a 10-year period is shown in the Figures and Table below.

# Executive Summary

## Our 10-year Operating and Capital Expenditure for Stormwater

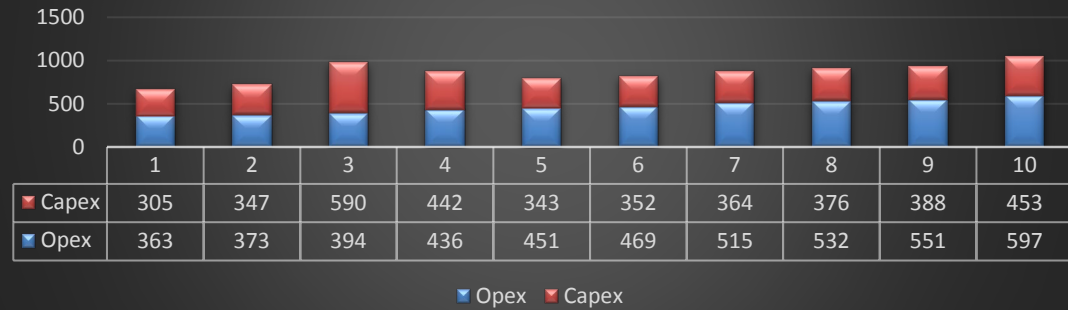
Budget 2020/21	STORMWATER	Forecast 2021/22	Projection								
			2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
\$000		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
<b>328</b>	<b>Operating Expenditure</b>	<b>363</b>	<b>373</b>	<b>394</b>	<b>436</b>	<b>451</b>	<b>469</b>	<b>515</b>	<b>532</b>	<b>551</b>	<b>597</b>
<b>0</b>	<b>Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>328</b>	<b>Net Cost of Service</b>	<b>363</b>	<b>373</b>	<b>394</b>	<b>436</b>	<b>451</b>	<b>469</b>	<b>515</b>	<b>532</b>	<b>551</b>	<b>597</b>
<b><u>EXPENDITURE</u></b>											
61	Operating Costs	63	59	61	62	64	66	68	69	71	73
18	Interest	22	27	35	49	54	59	77	83	89	95
141	Depreciation	146	151	157	182	187	193	218	224	230	264
107	Allocated Overheads	132	136	140	143	146	151	153	156	161	164
<b>328</b>	<b>Total Operating Expenditure</b>	<b>363</b>	<b>373</b>	<b>394</b>	<b>436</b>	<b>451</b>	<b>469</b>	<b>515</b>	<b>532</b>	<b>551</b>	<b>597</b>
27	Principal Loan Repayments	41	50	64	78	86	94	102	110	119	127
292	Capital Expenditure	305	347	590	442	343	352	364	376	388	453
<b>647</b>	<b>Total Expenditure</b>	<b>709</b>	<b>770</b>	<b>1,048</b>	<b>956</b>	<b>880</b>	<b>915</b>	<b>981</b>	<b>1,018</b>	<b>1,058</b>	<b>1,176</b>
<b><u>FUNDED BY:</u></b>											
<b>0</b>	<b>Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0	General Rates	(0)	(0)	0	0	(0)	(0)	(0)	0	0	(0)
326	UAGC	356	367	387	429	444	462	508	526	545	591
0	Targeted Rates	0	0	0	0	0	0	0	0	0	0
85	Transfer from Reserves	94	105	121	245	146	155	165	176	186	249
0	Depreciation funded from Reserves	0	0	0	0	0	0	0	0	0	0
234	Loan Funding - Capital	252	292	533	275	283	291	300	310	321	331
2	Grants/Other Funding - Capital	0	0	0	0	0	0	0	0	0	0
1	Other Funding	7	7	6	7	7	7	7	7	6	5
<b>647</b>	<b>Total Funding</b>	<b>709</b>	<b>770</b>	<b>1,048</b>	<b>956</b>	<b>880</b>	<b>915</b>	<b>981</b>	<b>1,018</b>	<b>1,058</b>	<b>1,176</b>

### Stormwater Expenditure



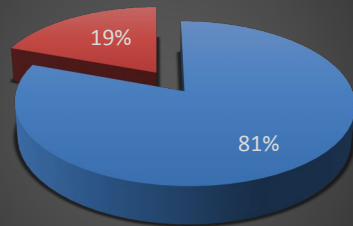
■ Operating Expenditure ■ Capital Expenditure

### Annual Stormwater Budget - Capex vs Opex 2021-2031



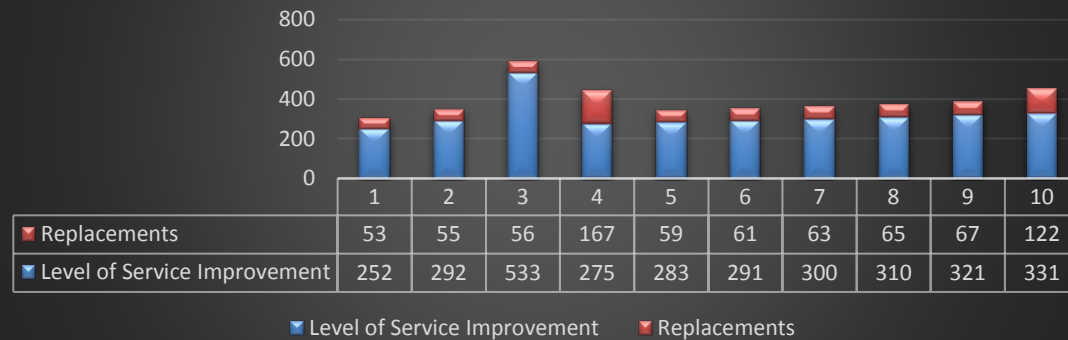
■ Opex ■ Capex

### Stormwater Capex



■ Level of Service Improvement

### Annual Stormwater Budget - LoS vs Replacements 2021-2031



■ Level of Service Improvement ■ Replacements

# **1.0**

## **Introduction**



**1.0: INTRODUCTION**

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## 1.1. PURPOSE OF THIS PLAN

The Stormwater Asset Management Plan (SAMP) is a 10 year plan for the Stratford District Council ('the Council') which details how the Council will manage the stormwater activity and assets in an efficient, safe, reliable and sustainable manner to provide value for money to our customers and investors.

The SAMP informs the development of the Council 2021-2031 Long Term Plan ('the LTP'). It shows how the Council will prioritise and address key stormwater issues facing our District, in the face of competing projects and constrained resources. The prioritisation of competing projects is necessary to deliver on Community Outcomes, the agreed Levels of Service (LoS) and also meet legislative objectives and requirements. The SAMP proposes work programmes that deliver good value for money for our investment partners. This is achieved by doing the right things, in the right places, at the right times and for the right price.

The audience for this plan includes our stormwater customers, ratepayers, residents, stakeholders, Council representatives, Council staff, contractors, consultants, developers and members of the public who will take an interest in the future of levels of service the Council will be offering.

The SAMP is reviewed every three years in line with the long term planning process and in compliance with the Council's Asset Management Policy.

## 1.2. THE STRATFORD DISTRICT

### 1.2.1 DISTRICT HISTORY

Initial settlements in the Stratford District were small Maori villages in the forested hills which were used as places of refuge in times of war, and for seasonal activities.

While New Plymouth and other coastal regions of Taranaki were settled by Europeans in the 1840s, the densely-forested inland Taranaki areas remained relatively isolated until the land wars of the 1860s. Following those wars, the land of Stratford District was both compulsorily purchased and freely sold.

The site for Stratford Township on the north bank of the Patea River was cleared in 1877 and was originally named Stratford-on-Patea. It was named after Stratford-Upon-Avon, Shakespeare's birthplace, and the streets were named after Shakespearean characters including Oberon, Cordelia, Juliet and Hamlet. By 1906 the population of Stratford numbered almost 6,000. Other towns throughout the district sprung up as the bush was cleared and new farming districts developed. Schools, hotels, stores and other community facilities were established, however, the Stratford Township remained the hub of the area.

From early on in the twentieth century there was rapid development of the dairy industry, with most communities having their own factory. Roads through the district were still relatively basic, which meant travelling any distance was difficult. As roads improved throughout the 20th century, communities in the district gradually began to lose their facilities. It was cheaper and easier to travel to larger towns for services than to maintain those services in smaller settlements.

The Forgotten World Highway (State Highway 43) links the towns of Stratford and Taumarunui and later became New Zealand's first heritage trail. It passes through the village of Whangamomona which was first settled in 1895, with no road or rail access. Today the village has approximately 150 full-time residents, a hotel, a handful of historic buildings and the odd goat. (*Refer: Stratford District Council Website.*)

### 1.2.2 DISTRICT GEOGRAPHY

The Stratford District is one of three territorial authorities ('TA') in the Taranaki region, overlying of which is the administrative area of the Taranaki Regional Council. The far eastern portion of the Stratford District is also overlain by the administrative area of the Horizons (Manawatu/Wanganui) Regional Council. The political division between the two regional councils lies along the Whangamomona Saddle.

Mount Taranaki or Mount Egmont, and Egmont National Park, dominate the landscape of the District. In the past, successive eruptions of ash and natural erosion have created an "apron" or a "ring plain" around the base of the mountain. The fertile and generally free draining soils of this ring plain support intensive pastoral farming, especially dairying.

East of the ring plain lies the rolling topography of the frontal hill country and further east, the deeply dissected hill country. These hills are not volcanic but consist of sedimentary rocks (mudstone, sandstone and siltstone). Soil properties in the eastern hill country are closely linked to the differences in rock hardness and composition. Most are steepland soils, ie, are shallow soils which have developed on steep, relatively unstable slopes. (*Refer: Stratford District Plan 2014.*)

### 1.2.3 DISTRICT COMMUNITIES

The Stratford District is home to many settlements, with the four main centres being Stratford, Midhirst, Toko and Whangamomona.

**Stratford (Māori: Whakaahurangi)** is the main town in the Stratford District. It is located on the banks of the Patea River roughly 48 km south-east of New Plymouth and 30 km north of Hawera at the junction of State Highways 3 and 43. Stratford is near the geographic centre of the Taranaki region and the largest settlement of the Stratford District with an estimated population of 5,466 (Statistics NZ 2013). The town is central Taranaki's main rural servicing centre, and the administrative base of the Stratford District Council and the Taranaki Regional Council.

**Midhirst** is located approximately 4 km north of Stratford, on State Highway 3. Inglewood is 17 km north of Midhirst and New Plymouth is 35 km to the northwest. An estimated 234 (Statistics NZ 2013) people live in Midhirst. One of the most distinctive features of Midhirst is the towering concrete and glass milk-powder drying plant, which was one of New Zealand's most advanced in its time (1980). The factory closed after amalgamating with Kiwi Dairies in 1983 and is now used for bulk grain storage.

**Toko** is located 10 km east of Stratford, at the intersection of East Road (State Highway 43) and Toko Road. It is situated on a railway, the Stratford–Okahukura Line, the western portion of which was operated as a branch line known as the "Toko Branch" prior to the line's completion. The Toko Stream flows through the area to join the Patea River. An estimated 1,188 (Statistics NZ 2013) people live in or around Toko. This includes people living in the settlement and those living in the surrounding rural areas.

**Whangamomona** is a rural settlement 65 km North East of Stratford on State Highway 43. Once quite a thriving settlement and the headquarters of the Whangamomona County Council with a hotel, a number of stores and a post office, it suffered decline from the mid-20<sup>th</sup> Century with only the hotel remaining as a business in town. Today an estimated 150 people live in and around Whangamomona (Statistics NZ 2013).

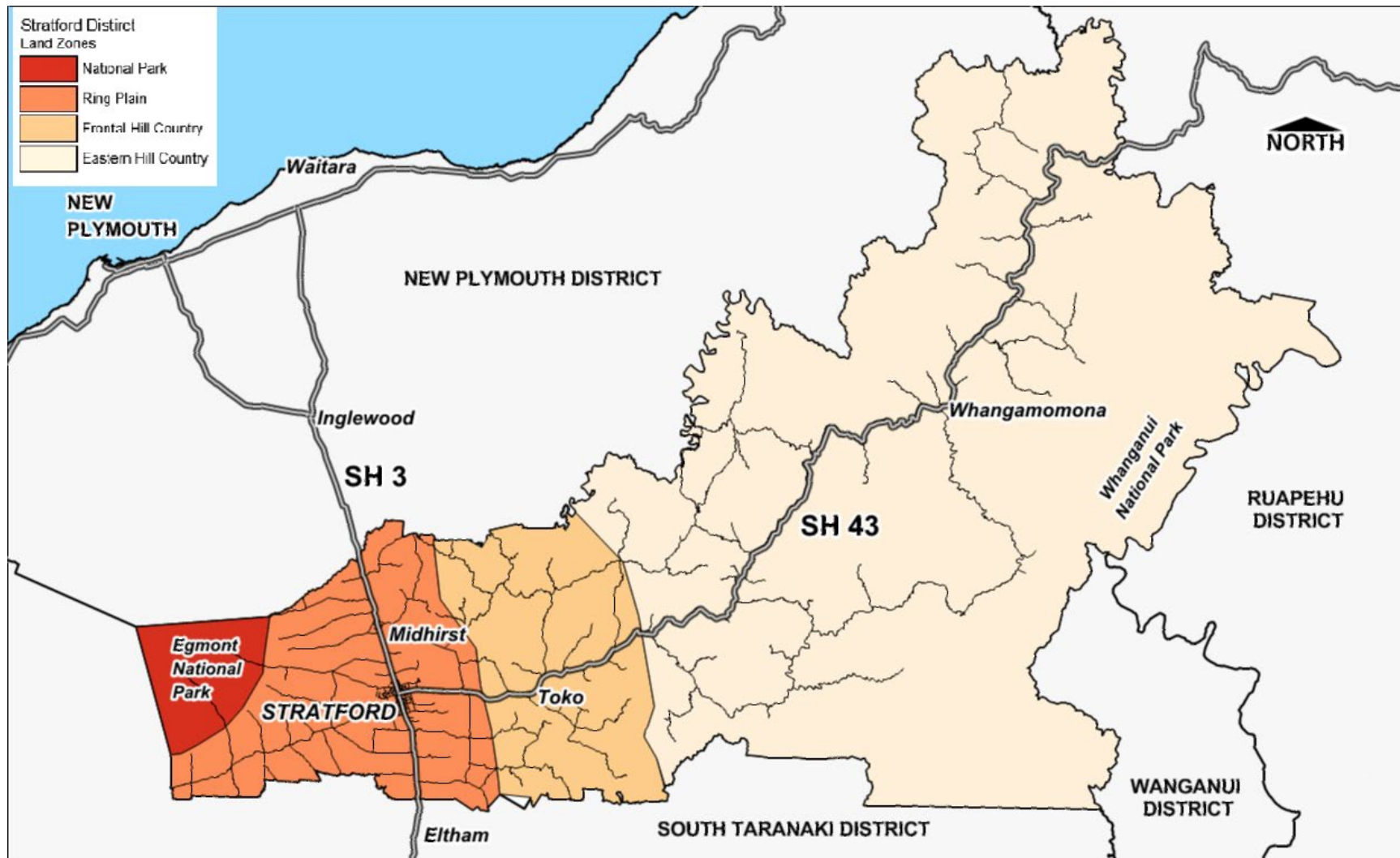


Figure 1 - Stratford District 2020

## 1.3. OUR MISSION, VISION AND VALUES

Stratford District Council is local territorial authority for the Stratford District. Council's role in accordance with the Local Government Act 2002 (LGA) is to:

- Enable democratic local decision-making and action by, and on behalf of, communities; and
- Promote the social, economic, environmental, and cultural well-being of communities in the present and for the future

### The Stratford District Council's Mission Statement is

*'To serve the district and its communities through advocacy, promotion, services, facilities and positive leadership'*

### The Stratford District Council's Vision Statement is:

*'A vibrant, resilient, and connected community – in the heart of Taranaki'*

### The Stratford District Council's Values are:

**Integrity:** *Be loyal to the organisation and trustworthy, honest and courteous with everyone we deal with.*

**Teamwork:** *Work together in the same direction, assist each other and have respect for others. Maintain a positive attitude and encourage teamwork.*

**Excellence:** *Be effective in everything we do using our experience and knowledge. Do the right thing at the right time. Be efficient by being cost effective and ensure prudent management of public money and assets.*

**Pride:** *Take pride in our performance and our organisation.*

**Commitment:** *Have commitment and respect for each other, our business and our customers.*

**Innovation:** *Examine alternatives, challenge the obvious and have a flexible attitude.*

The Stratford District Council carries out its duties under the LGA (2002) through two key Management Teams:

- The *Executive Management Team*, comprising the Senior Leaders of the Council and headed by the Chief Executive. This team sets the overall direction for delivery of Roding activities and services; and
- The *Assets Management Team*, comprising the operational and maintenance staff who carry out the direction set by the *Executive Management Team*.

The structure for each Management Team is provided in Figures 2 and 3.

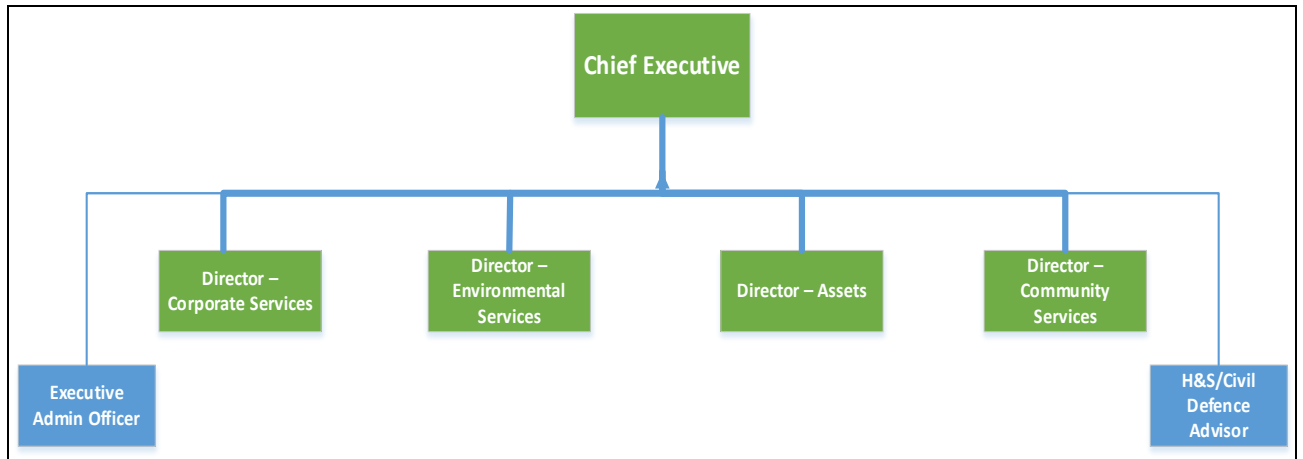


Figure 2 - The Executive Management Team

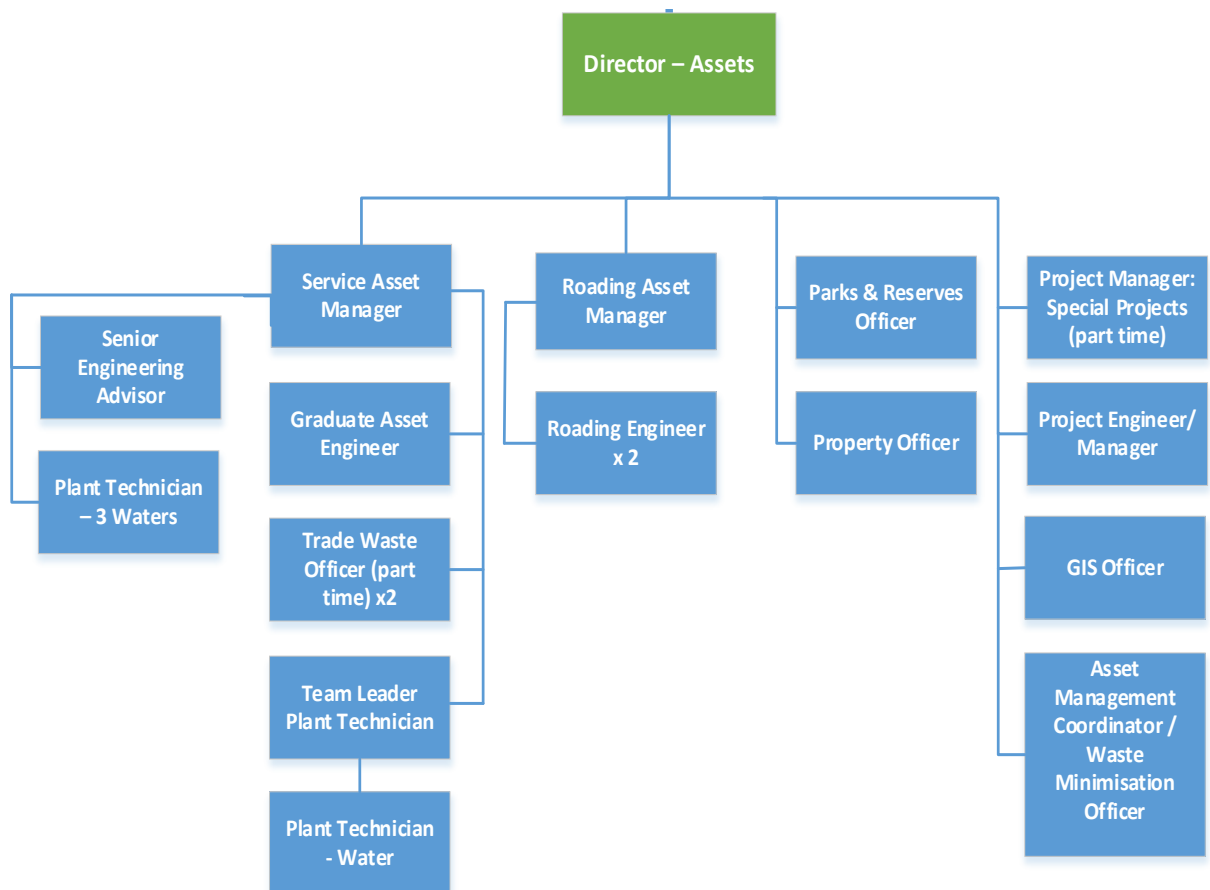


Figure 3 - Assets Department

## 1.4. THE STORMWATER ACTIVITY

The Stormwater activity encompasses the planning, provision, operation, maintenance and renewal of stormwater reticulation systems and all associated infrastructure contained in the SAMP.

## 1.5. THE IMPORTANCE OF THE STORMWATER ACTIVITY

Stormwater assets are critical for the protection of properties and infrastructure. As required under Part 2 of the Local Government Act 2002 and Part 2 of the Health Act 1956 Stratford District Council provides stormwater reticulation and collection services that:

- Collects and disperses any excess water from a major rainfall event.
- Provides a system for the normal drainage of stormwater and groundwater, thereby enhancing the life of other infrastructure e.g. roads and protecting private property, at the agreed level of service.

The Council provides the Stormwater service to meet the needs and requirements of its customers and stakeholders. The stormwater activity goals and objectives are:

- Channelization of stormwater flows in a safe and efficient manner:
- Protection of property from impacts of flooding;
- Protection of receiving environments.

By meeting its goals and objectives the Stormwater Activity contributes to the achievement of national, regional and district goals and objectives.

The stormwater activity goals and objectives contribute to the Community Outcomes shown in Table 1.

**Table 1 - Community Outcomes**

Community Outcomes		Stormwater Activity Contribution
Vibrant community	<p>We celebrate and embrace our community's cultures and traditions.</p> <p>We tell our unique story.</p> <p>We will develop strong relationships with iwi, hapu and marae.</p>	<ul style="list-style-type: none"> <li>• Maintaining the stormwater infrastructure in a sustainable and efficient manner for the future.</li> <li>• Delivering on the agreed level of service.</li> <li>• Funding capital works which offer value for money for current and future generations of Stratford District ratepayers and ensures the financial security of Council is not compromised.</li> </ul>
Sustainable environment	<p>Our natural resources can be enjoyed now and by future generations.</p> <p>We are committed to working towards zero waste.</p> <p>We have well planned and resilient infrastructure that meets the current and future needs of the district.</p> <p>We strive to understand and support Te Ao Māori values and principles.</p>	
Connected communities	<p>Our neighbourhoods are safe and supported</p> <p>We enable positive healthy lifestyles, through access to health, social and recreation services</p> <p>We have a strong sense of belonging</p> <p>We value opportunities to be involved and work together as a community</p>	
Enabling economy	<p>We are a welcoming and business friendly District</p> <p>We encourage a strong and diverse local economy</p> <p>We promote opportunities to visit, live and invest in the district</p> <p>We support economic opportunities for Māori</p>	

## 1.6. OUR CUSTOMERS, PARTNERS AND KEY STAKEHOLDERS

The Stormwater activity exists to meet the needs and requirements of our customers, partners and key stakeholders. These groups help us focus our strategic planning on the right things. They have information and knowledge that helps us make more informed decisions. Table 2 shows how our partners, customers and key stakeholders are involved in our planning activity.

**Table 2 - Customers, Partners and Key Stakeholders**

Customers, Partners and Stakeholders	Involvement
Home Owners and Occupiers; Businesses and Organisations;	These customers realise the benefits provided by the Stormwater activity.
Taranaki Regional Council	Administers and enforces effective resource management in the Taranaki region. Applications from SDC are processed through TRC.
Audit New Zealand	Carries out annual audits of Council on the Auditor-General's behalf to give ratepayers assurance that Council is appropriately reporting on how they spend public money and on the services they have provided.
Other Government agencies; Ratepayers Associations; Iwi groups	These groups liaise with Council in relation to stormwater services.
Utility Owners	New Zealand Utilities Advisory Group (NZUAG) requirements for co-ordinating networks.
Local Iwi; Environmental groups	Affected parties to Council's resource consents
TEMO/Civil Defence	In the event of a Civil Defence emergency they provide advice and work alongside emergency services, lifeline utilities and government departments.
Elected Members; Committees; CEO, Management and Staff	Key internal stakeholders responsible for the management and operation of the stormwater system.

### 1.6.1 THE CUSTOMER CHARTER

Following an internal review an organisation-wide *Customer Charter* was developed and introduced in 2015. The [Customer Charter](#) states that Stratford District Council is dedicated to having commitment and respect for each other, our business and our customers. We will be honest, courteous and efficient and use our knowledge and experience to be effective by doing the right thing at the right time. We support a culture of innovation by examining alternatives, challenging the obvious and having a flexible attitude.

Our Customer Service Charter establishes a consistent customer service standard across all Council business, regardless of whether our customer is borrowing a book, going to the pool, or lodging a building consent. Our philosophy is to provide quality service to all our customers in line with the Service Standards stated in the Customer Charter.

### 1.6.2 SIGNIFICANCE AND ENGAGEMENT POLICY

The Stratford District Council uses its [Significance and Engagement Policy](#) in its decision-making to determine the level of community engagement needed for an issue or proposal, to gain a clearer understanding of community views and preferences and the ways the community can influence and participate in the decision-making of the Council.



## **2.0**

# **Legislative and Strategic Context**

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## 2.1. OVERVIEW

This section describes the legislative and strategic context of the Stormwater AMP at the national, regional and district levels.

## 2.2. NATIONAL DRIVERS

There are a number of national legislative requirements that drive the Stormwater level of service (LoS) and influence the operation and management of the Stormwater Assets. While many are listed below; the key drivers are described in detail in the following section.

- The Local Government Act 2002 and amendments;
- The National Policy statement for Freshwater Management 2020;
- The Resource Management Act 1991;
- Land Drainage Act 1908;
- Civil Defence Emergency Management Act
- The Health Act 1956;
- Public Works Act 1981;
- The Building Act 2004;
- Utilities Access Act 2010 ;
- Electricity Act 1992;
- Gas Act 1992;
- Non-Financial Performance Measures Rules 2013

### 2.2.1 THE LOCAL GOVERNMENT ACT 2002 AND AMENDMENTS

The Local Government Act 2002 Amendment Act 2019 amended the purpose of the Act to be: *“to provide for democratic and effective local government that recognises the diversity of New Zealand communities”*.

The purpose of the Local Government Act is now amended thus:

- *to enable democratic local decision-making and action by, and on behalf of, communities; and*
- *to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future.*

The LGA outlines the responsibilities of local authorities and the decision-making process for activities undertaken on behalf of their community, primarily through the requirement to adopt a Long Term Plan. The LGA includes the principles that require Council to:

- make itself aware of community views;
- provide opportunities for Māori to participate in decision-making processes;
- collaborate and cooperate with other local authorities as appropriate; ensuring prudent stewardship of resources; and
- and take a sustainable development approach.

The LGA in Section 125, requires the Council to *‘from time to time’* complete assessments of water and sanitary services for communities throughout their districts. The purpose of the assessment is to determine, from a public health perspective, the adequacy of water and sanitary services available to communities. In making such an assessment the following matters need to be considered:

- (a) the health risks arising from any absence or deficiency in water or other sanitary services;
- (b) the quality of services available to communities within the district;
- (c) the current and estimated future demands for such services;
- (d) the extent to which drinking water meets applicable regulatory standards; and
- (e) the actual or potential consequences of stormwater or sewage discharges within the district.

An assessment of water and sanitary services was undertaken by the Stratford District Council in 2011.

## 2.2.2 THE NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT

The National Policy Statement for Freshwater Management 2020 sets out the objectives and policies for freshwater management under the Resource Management Act 1991. It comes into effect on 3 September 2020 and replaces the National Policy Statement for Freshwater Management 2014 (amended 2017). The new policy directions which are of relevance to, and have a direct impact on, how the Council manages its water and wastewater activities. The key requirements of the Freshwater NPS include:

- Managing freshwater in a way that 'gives effect' to Te Mana o te Wai through:
  - involving tangata whenua;
  - working with tangata whenua and communities to set out long-term visions in the regional policy statement and
  - prioritising the health and wellbeing of water bodies, then the essential needs of people, followed by other uses.
- Improving degraded water bodies, and maintaining or improving all others using bottom lines defined in the Freshwater NPS;
- An expanded national objectives framework:
  - two additional values - threatened species and mahinga kai - join ecosystem health and human health for recreation, as compulsory values
  - councils must develop plan objectives that describe the environmental outcome sought for all values (including an objective for each of the five individual components of ecosystem health)
  - new attributes, aimed specifically at providing for ecosystem health, include fish index of biotic integrity (IBI), sediment, macroinvertebrates (MCI and QMCI), dissolved oxygen, ecosystem metabolism and submerged plants in lakes; councils will have to develop action plans and/or set limits on resource use to achieve these attributes.
  - tougher national bottom lines for the ammonia and nitrate toxicity attributes to protect 95% of species from toxic effects (up from 80%)
- Identifying and working towards target outcomes for fish abundance, diversity and passage and address in-stream barriers to fish passage over time.
- Setting an aquatic life objective for fish and addressing in-stream barriers to fish passage over time.; and
- Monitoring and reporting annually on freshwater (including the data used); publish a synthesis report every five years containing a single ecosystem health score and respond to any deterioration.

## 2.2.3 THE RESOURCE MANAGEMENT ACT 1991

The Resource Management Act 1991 (RMA) promotes the sustainable management of natural and physical resources such as land, air and water and is considered New Zealand's principal legislation for environmental management. The RMA regulates the discharge of wastes into the environment particularly to water and land.

The purpose of the National Planning Standards have been introduced as part of the 2017 amendments to the Resource Management Act 1991. The development of the National Planning Standards is enabled by sections 58B–58J of the RMA and is to improve consistency in plan and policy statement structure, format and content so they are easier to prepare, understand, compare and comply with. The Standards also support implementation of national policy statements and help people observe the procedural principles of the Resource Management Act 1991 (RMA).

## RMA Reform

The RMA is currently undergoing a reform into 3 pieces of legislations being the:

- Natural and Built Environments Act;
- Strategic Planning Act; and
- Climate Change Adaptation Act.

The reform is based on the findings of the comprehensive review of the resource management system which were released last year. These pieces of legislations are currently before Parliament and it is expected that they will be passed by the end of 2022.

The *Natural and Built Environments Act* is the core piece of legislation to replace the RMA. The purpose of this Act is to enhance the quality of the environment to support the wellbeing of present and future generations. Under the Act, central government's proposed new National Planning Framework will provide a set of mandatory national policies and standards on specified aspects of the new system. These will include environmental natural limits, outcomes and targets. This would be achieved by:

- promoting positive outcomes for both the natural and built environments;
- ensuring that use, development and protection of resources only occur within prescribed environmental limits; and
- ensuring adverse effects of activities on the environment are avoided, remedied or mitigated.

The *Strategic Planning Act* provides a strategic and long-term approach to how we plan for using land and the coastal marine area. The regional strategies would enable more efficient land and development markets to improve housing supply, affordability and choice, and climate change mitigation and adaptation.

Long-term spatial strategies in each region would be developed to identify areas that:

- will be suitable for development;
- need to be protected or improved;
- will need new infrastructure and other social needs; and
- are vulnerable to climate change effects and natural hazards such as earthquakes.

The *Climate Change Adaptation Act* would support New Zealand's response to the effects of climate change. It would address the complex legal and technical issues associated with managed retreat and funding and financing adaptation.

## 2.2.4 LAND DRAINAGE ACT 1908

The Land Drainage Act 1908 prescribes the Council's responsibilities for land drainage in the protection of private property from flooding. The Act also states Council's liability in the event of 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, the Council adequately maintains the existing drainage systems and undertake any upgrades required to maintain the delivery of that service, particularly in the face of climate change.

## 2.2.5 TAUMATA AROWAI - THE WATER SERVICES REGULATOR ACT 2020

The Water Services Regulator Act was passed in July 2020. It establishes Taumata Arowai as a Crown Agent and provides for its objectives, functions, operating principles, and governance arrangements, including the appointment of an independent Board and a Māori Advisory Group. It provides the new drinking water regulator - Taumata Arowai - with significant new powers to give effect to the Government's expectation that New Zealanders are "able to drink the water that comes out of the tap knowing that it is safe"

A complementary Bill, *the Water Services Bill*, is now before Parliament. This Bill is anticipated to be introduced in the second half of 2021, dependent on the election outcome and the post-election Parliamentary timetable. Once passed, Taumata Arowai will become Aotearoa's dedicated regulator of the three waters: Drinking water, wastewater and stormwater. Until then, the Ministry of Health remains the regulator of drinking water.

The establishment of Taumata Arowai is one three pillars of the Government's Three Waters Reform programme, alongside the regulatory reforms outlined in the Water Services Bill, and the reforms to water delivery services. These reforms are intended to address issues and opportunities that were highlighted by the Government Inquiry into the Havelock North Drinking Water, and in the Government's Three Waters Review. The reforms are designed to:

- Provide clear leadership for drinking water regulation through a new, dedicated regulator;
- Significantly strengthen compliance, monitoring, and enforcement relating to drinking water regulation, and equip the new regulator with the powers and resources needed to build capability, support suppliers of all kinds to meet their regulatory obligations, and take a tougher, more consistent approach to enforcement where needed;
- Manage risks to drinking water safety and ensure source waters are protected;
- Ensure more people can access water that is safe to drink, by requiring all suppliers (except individual domestic self-suppliers) to be part of the regulatory system, and to provide safe drinking water on a consistent basis;
- Lift the environmental performance and transparency of wastewater and stormwater networks; and
- Improve national-level leadership, oversight, and support relating to wastewater and stormwater.

When Taumata Arowai is fully functionally, its role in essence will be to:

- Oversee and administer an expanded and strengthened drinking-water regulatory system, to ensure all New Zealand communities have access to safe drinking water. That includes holding suppliers to account, if need be; and
- Oversee from a national perspective the environmental performance of waste water and storm water networks. (Regional councils will remain the primary regulators of waste water and storm water).

### **2.2.6 THE WATER SERVICES BILL 2020**

While the Taumata Arowai Act was passed in July 2020, Taumata Arowai will not become fully operational until enactment of the Water Services Bill, projected to in the second half of 2021.

The Water Services Bill proposes to repeal Part 2A of the Health Act 1956 and replace it with a standalone Act to regulate drinking water. The Bill received its first reading on Tuesday 8 December 2020 and has been referred to the Health Select Committee for consideration. The Bill is a companion to the Taumata Arowai - the Water Services Regulator Act 2020, which was passed earlier in the year.

Essentially, the Water Services Bill 2020 is a part of a broader Three Waters reform programme by central government. It proposes a new regulatory regime for managing drinking water supply. The obligations on drinking water suppliers proposed by the Bill are more onerous than those under the existing Health Act regime.

Until Taumata Arowai is fully operational, the Ministry of Health will remain the regulator for drinking water safety. The Water services Bill contains all of the details of the new drinking water regulatory system, and provisions relating to source water protection and Taumata Arowai's wastewater and stormwater functions.

### **2.2.7 THE THREE WATERS REFORM**

The Council signed a Memorandum of Understanding (MoU) with central government to work together to identify approaches that consider the design features of the 3 waters reform and is participating in the exploration of future service delivery options. The central government expects to create new water service delivery entities that are:

- of significant scale (most likely multi-regional) to enable benefits from aggregation to be achieved over the medium to long-term;

- asset owning entities, with balance sheet separation to support improved access to capital, alternative funding instruments and improved balance sheet strength; and
- structured as statutory entities, with competency-based boards;

The Council expects to make a decision in late 2021, to either stay with the new water service delivery entity or opt out. Any decision to participate is likely to be given effect to at some point in the 2023/4 financial year.

Reference to the Government's reform strategy and timeline, including highlighting when it is proposed that there would be further engagement and consultation with communities is available at <https://www.dia.govt.nz/Three-Waters-Reform-Programme>.

### **2.2.8 CIVIL DEFENCE EMERGENCY MANAGEMENT ACT 2002**

The Civil Defence Emergency Management Act 2002 establishes a framework for building resilient New Zealand communities.

The National CDEM Strategy is the crown's vision for emergency management in New Zealand and is supported by:

- The National CDEM Plan, which sets out strategies and goals, outlining arrangements for managing emergency events of national significance, and,
- CDEM Group Plans, outlining similar arrangements at the regional level.

The Civil Defence Emergency Management Act 2002 establishes to:

- Promote sustainable management of hazards
- Enabling communities to achieve acceptable levels of risk
- Requires co-ordination of CDEM activities
- Encourages co-ordination and integration across sectors to address interdependencies

## **2.3 REGIONAL CONTEXT**

The main regional drivers are the requirements of the Regional Freshwater Plan for Taranaki (RFP) and any other resource consents issued by the Taranaki Regional Council for relevant purpose.

### **2.3.1 THE REGIONAL FRESH WATER PLAN FOR TARANAKI (RFP)**

The Regional Fresh Water Plan promotes sustainable management of the region's freshwater resources by applying rules and conditions to various activities. This Plan is currently under review.

The Plan identifies how the fresh water resources of the region (both surface water and groundwater) are to be managed. It does this by identifying important issues from state of the environment monitoring relating to the use, development and protection of the fresh water resources of Taranaki. Objectives, policies and methods are set out for addressing these issues. Ongoing state of the environment monitoring will enable the Taranaki Regional Council to assess the effectiveness of the Plan and review policy direction where necessary. In particular the Plan contains regional rules which categorise activities into different classes (permitted, controlled, discretionary or prohibited), with different standards, terms or conditions which apply to them, depending on the effects on the environment of that activity. Activities have been classified in this way to facilitate the processing of resource consents and to provide certainty for the community.

### **2.3.2 THE REGIONAL ECONOMIC DEVELOPMENT STRATEGY 2017**

The four local authorities of the Taranaki region in association with Venture Taranaki and the Ministry of Business, Innovation and Employment (MBIE) have developed a new regional Economic Development Strategy and Action Plan for Taranaki. The Taranaki Regional Economic Development Strategy became official in August 2017 and is known as "Tapuae Roa - Make Way for Taranaki".

This strategy sets a direction for economic development and identifies priorities and measurable goals for the region as a whole. It is anticipated that the Strategy will enable and support economic growth and development in the Stratford District.

While economic growth for the Stratford District is desirable, Council is aware that growth can have an impact on infrastructure and the services delivered by that infrastructure.

## **2.4 DISTRICT CONTEXT**

The Stormwater Asset Management Plan feeds, and in turn is fed into, a number of district strategies. The SAMP forms a critical part of the planning framework, as shown in Figure 4. Table 3 provides a description of the District Strategic Drivers for the SAMP, and how they influence or relate to the SAMP. The key district drivers are provided in more detail below.

### **2.4.1 THE LONG TERM PLAN (LTP) 2021-2031**

The Long Term Plan (LTP) 2021-2031 is a regulatory document pursuant to Section 93 of the Local Government Act 2002 Amendment Act 2014 that:

- Describes the activities of Stratford District Council;
- Outlines Council's contribution to the community outcomes and describes how we will manage activities we are responsible for;
- Provides integrated decision making and co-ordination of resources; and
- Provides a long-term focus for Stratford District Council's decisions and activities

The LTP provides the direction and strategies that drive the SAMP. Programmes for Capital, Maintenance and Renewal works are linked to the LTP along with essential budgeting requirements. The LTP covers a planning period of 10 years and is reviewed three yearly.

### **2.4.2 THE INFRASTRUCTURE STRATEGY 2021 - 2031**

The Infrastructure Strategy (IS) is a regulatory document pursuant to Section 101B of the Local Government Act 2002 Amendment Act 2014 for the purpose of:

- Identifying significant issues over the period covered by the strategy; and
- Identifying the principal options for managing those issues and the implications of these options.

The IS identified issues/opportunities from the 30 year strategy inform the relevant AMP and is reviewed every 3 years.

Like the LTP, the IS provides the direction and strategies that drive the SAMP but in this case, the planning period primarily focussed on is for 10-30 years. The IS is a strategic document that allows Council to make informed decisions and place Council in a better position to understand and plan for major infrastructure investments.

### **2.4.3 THE DISTRICT PLAN**

Developed in compliance with the requirements of the Resource Management Act 1991(RMA), the District Plan specifies land use policies aiming to mitigate and control the detrimental environmental effects of new developments. These areas of growth and development need to be accounted for within the SAMP through levels of service increase works and forward works programming.

### **2.4.4 THE ANNUAL PLAN**

The Annual Plan is a regulatory document pursuant to Section 95 of the Local Government Act 2002 Amendment Act 2014. The Annual Plan is developed in compliance with section 95 of the LGA 2002 and updates information reported on within the LTP including its objectives, intended activities, performance, income and expenditure. The Annual Plan shows how that year of the LTP will be funded.

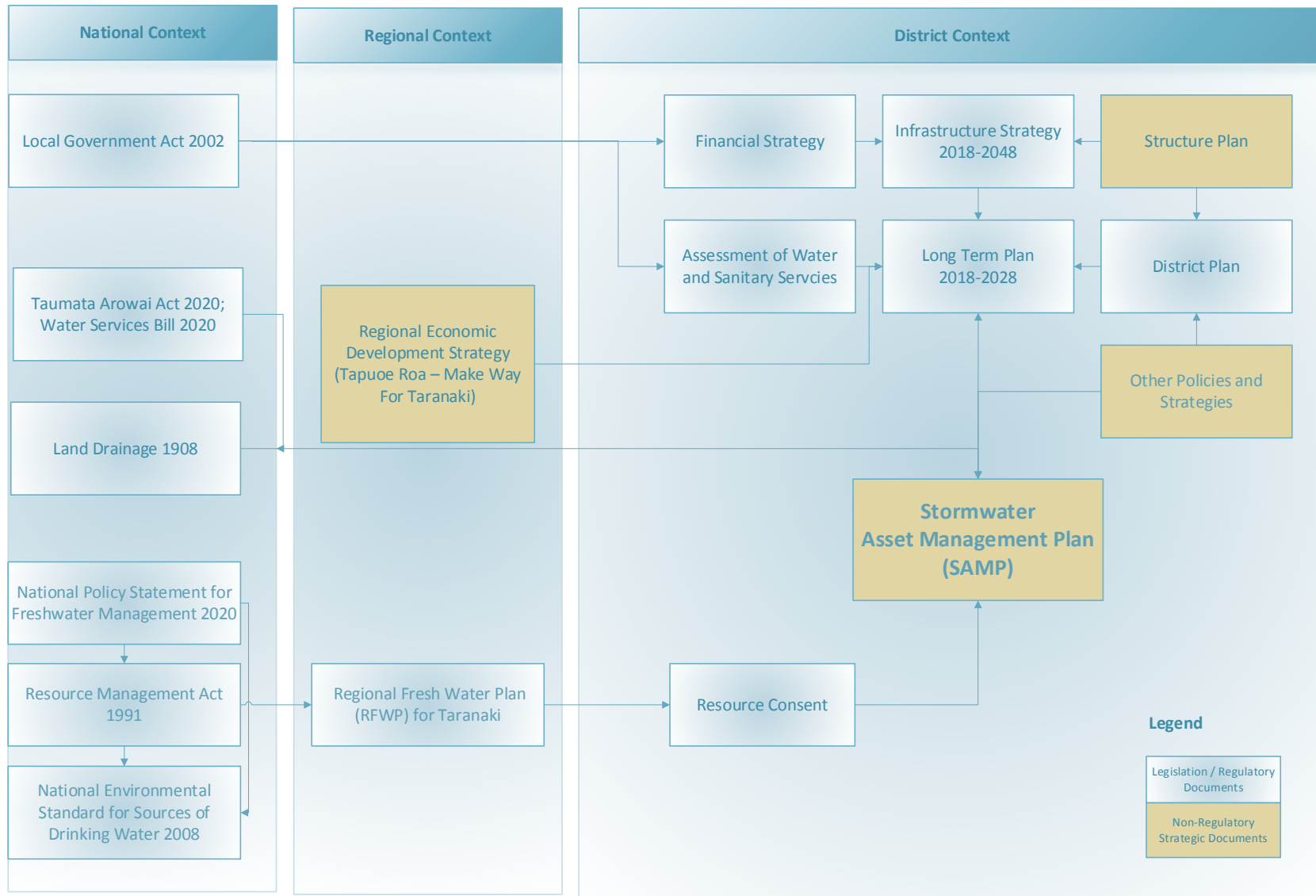
The relationship between the Annual Plan and the SAMP is similar to that of the LTP, with the exception of it only applying to the year of the LTP being prepared for.



## Legislative and Strategic Context

**Table 3 - District Strategic Drivers**

Strategies/ Plans/ Documents	Description	Review Frequency	Relationship to the Asset Management Plan
Communication and Engagement Strategy	Developed in compliance with Section 76AA of the Local Government Act 2002 to set out Council's approach to communicating and engaging with the community.	Ten yearly	Provides a framework for communication and engagement
Financial Strategy	Developed to provide a financial framework for Council debt and rate levels and limits - future proof Council owned and operated assets.	Ten yearly	Provides financial framework for asset management and activity budgeting and expenditure.
Economic Development Strategy	Sets the direction for economic development and identifies priorities and measurable goals.	Three yearly	Support asset management planning and good practice.
Structure Plan	Provide a long term planning framework for the future development and redevelopment of the Stratford District. The plan will set out in broad terms, the layout of land uses, key infrastructure and transport links.	Unknown at this stage	Support asset management planning.
Significance and Engagement Policy	Developed in compliance with Section 76AA to set out Councils approach to: <ul style="list-style-type: none"> <li>▶ The assessment of significance during decision-making. It provides direction on the consideration of community views and the level of community engagement that might be desirable to enable Council to develop a clearer understanding of community views and preferences on an issue or proposal.</li> <li>▶ Regarding community engagement and the ways the community can influence and participate in the decision-making of the Council.</li> </ul>	Three yearly	Determines level of engagement required for asset management planning activities/projects
Procurement Policy	The purpose of this policy is to ensure Council, when procuring goods, works or services; <ul style="list-style-type: none"> <li>• achieves the right outcomes and value for money;</li> <li>• manages risk while allowing staff to exercise business judgement and be innovative;</li> <li>• demonstrates fairness;</li> <li>• reflects best management practice; and</li> </ul> has a local procurement policy applying to works with a monetary value up to a limit prescribed by Council.	Three yearly	Provides the framework for the purchasing of goods, works and services for Stratford District Council
Annual Plan (AP)	A regulatory document pursuant to Section 95 of the Local Government Act 2002.  The Annual Plan updates information reported on within the LTP including its objectives, intended activities, performance, income and expenditure and shows how that year of the LTP will be funded.	Annually	Determines annual KPI targets for performance monitoring
Annual Report (AR)	Reports Council's performance for the previous year.	Annually	Provides annual KPI targets that are reported in the Annual Report.
Assessment of Water and Sanitary Services	Undertaken in compliance with Section 125 of the Local Government Act 2002 as part of Council meeting its obligation under the Health Act 1956 to improve, promote, and protect public health within its district.	Ten yearly	Identified issues and required actions feed into the relevant AMP
Other Council Policies, Bylaws	The tools that guide and direct Council activities (see <a href="#">Appendix 2</a> )	As applicable	Support asset management planning and good practice.



**Figure 4 - Legislative and Strategic Framework (SAMP)**

# **3.0**

## **Asset Information**

**3.0: ASSET INFORMATION**

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## 3.1 ASSET OVERVIEW

The Stratford District Council manages around 6.7km of stormwater pipes, and 1.9km of open channels/drains in the Stratford urban area. Council is also responsible for approximately 70 metres of 450mm culvert in Midhirst.

The Stormwater system is a network of pipes, open drains and tunnels that collect stormwater from developed urban areas (Figure 5). Stormwater is discharged and collected in three ways;

- Collection from roads and public areas is usually via sumps and directed to reticulation
- Commercial and industrial properties are permitted to discharge into a Council system or kerb line
- Residential area stormwater is discharged to ground mainly by soak holes, although if soil or other conditions are not suitable for soak holes, discharge is carried out via runoff through sumps and reticulation.

This section details the current asset valuation summary and provides details about infrastructure asset components. It identifies the general condition of assets and any issues/opportunities Council will need to consider. It highlights how asset condition is identified and Council's level of confidence in asset data.

## 3.2 ASSET VALUATION

Section 111 of the Local Government Act 2002 requires that local authorities comply with "generally accepted accounting practice" which is taken to mean the principles of the General Accepted Accounting Practice that is prepared by the New Zealand Society of Accountants (ICANZ) and included in the New Zealand Accounting Standards.

Section 6 of the Local Government (Financial Reporting and Prudence) Regulations 2014 requires Local Authorities to disclose information about core assets in its annual report, including the local authority's most recent estimate of the replacement cost. The concept of intergenerational equity in the funding of infrastructure asset is included as one of the principles of financial management. Without accurate knowledge of serviceability of assets, local authorities will only be guessing when they attempt to spread the costs of infrastructure across present and future ratepayers.

The asset valuations contained in Table 4 were carried out by Infrastructure Associates Ltd as at 01 July 2018.

- **Replacement Cost (RC)** is the cost of the modern equivalent asset that replicates the existing asset most efficiently;
- **Optimised Depreciated Replacement Cost (ODRC)** is the optimised replacement cost after deducting an allowance for wear or consumption to reflect the remaining or economic service life of an asset; and
- **Annual Depreciation (AD)** is the systematic allocation of an amount over an asset over its useful life.

Financial Reporting Standards (PBE IPSAS 17) applies to all SDC water infrastructure assets considered in the Infrastructure Associates Ltd re-valuation for the general purpose of financial reports.

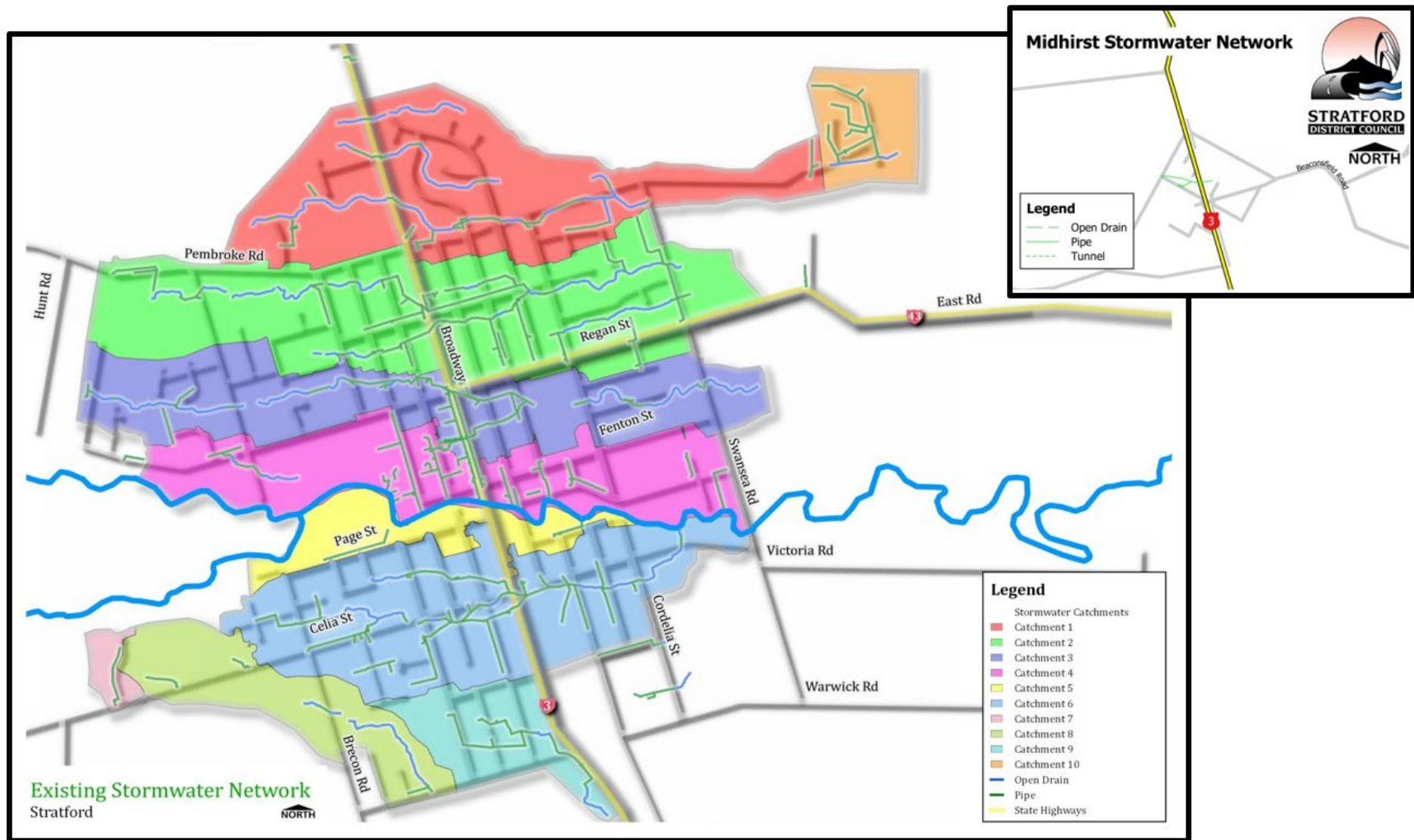


Figure 5 - Stratford Urban and Midhirst Stormwater Network

**Table 4 –Stormwater Asset Valuation Summary**

Asset Group	Asset Component	Size (mm)	Quantity	Useful Life (yrs.)	Remaining Useful Life (yrs.)	Values (\$)		
						RC	ODRC	AD
<b>Pipes</b>	Culvert	225mm	5,042	20-80	46	1,158,325	553,753	11,805
	Culvert	250mm	233	20-80	68	53,548	36,581	535
	Culvert	300mm	4,707	20-80	72	1,204,727	886,955	12,260
	Culvert	375mm	1,529	20-80	67	493,488	356,040	5,292
	Culvert	450mm	1,275	20-80	57	459,420	269,196	4,693
	Culvert	525mm	810	20-80	64	338,300	241,530	3,728
	Culvert	600mm	1,091	20-80	60	572,416	346,850	5,734
	Culvert	750mm	308	20-80	75	190,013	147,406	1,952
	Culvert	900mm	2,738	20-80	39	2,672,942	925,599	23,309
	Culvert	1050mm	313	20-80	74	255,704	198,209	2,651
	Culvert	1200mm	737	20-80	74	785,235	586,922	7,901
	Culvert	1350mm	106	20-80	80	188,045	183,657	1,880
	Culvert	1500mm	152	20-80	75	209,973	158,045	2,100
	Culvert	Unknown	783	20-80	40	232,990	94,222	2,330
<b>Total Pipes</b>			<b>19,822</b>			<b>8,815,124</b>	<b>4,984,965</b>	<b>86,170</b>
<b>Point</b>	Manholes and Sumps	Varies		20-80	69	1,437,641	994,301	14,383
<b>Total Point</b>						<b>1,437,641</b>	<b>994,301</b>	<b>14,383</b>
<b>Total Stormwater</b>						<b>10,252,765</b>	<b>5,979,266</b>	<b>100,553</b>
<i>Note: Stormwater Asset Valuation Summary as at 01 July 2018 – Infrastructure Associates Ltd Asset Valuation Report</i>								

### 3.3 USEFUL LIFE

Useful life (Base life) refers to either;

- The period over which an asset or component is expected to be available for use by an entity, or
- The number of production or similar units expected to be obtained from the asset or component by the entity. *Refer: International Infrastructure Management Manual (2015).*

The asset Useful lives are expressed as years. The asset **Age** is based on construction dates. The *Remaining useful life* is based on age and useful life of the assets.

### 3.4 ASSET INFORMATION SYSTEM

Stratford District Council uses *AssetFinda* to support management of the Stormwater Activity. Data on infrastructure assets is collected during inspections and monitoring using both paper based and electronic methods.

All data collected in relation to the Stormwater activity infrastructure is entered into AssetFinda by the Engineering Officer, GIS Officer, engaged Consultants or the Contractor.

### 3.5 THE STORMWATER INFRASTRUCTURE ASSETS

The Stormwater system is a reticulation only system. It is a network of pipes, open drains and tunnels that collect stormwater from developed urban areas. Stormwater is discharged and collected in three ways:

- Collection from roads and public areas, usually via sumps and directed to reticulation;
- Commercial and industrial discharging into Council's system or kerb line;
- Residential area stormwater discharging to ground mainly by soak holes. Where soil or other conditions are unfavourable for soak holes, discharge is via runoff sumps and reticulation.

### 3.6 ASSET MANAGEMENT MATURITY ASSESSMENT

The Council has assessed its Asset Management maturity across 5 key disciplines of asset management practice including:

- Setting the Strategic Direction;
- Establishing Levels of services;
- Forecasting Future Demand;
- Collecting Asset Information; and
- Monitoring Asset Performance and Condition.

The Asset Management Maturity Index assessment in Table 5 below provides a snapshot of where the Council is at in its asset management practices and in particular, emphasizes that seeking advanced practice in all areas may not be the best solution across activities, as this depends on the scale and type of assets being managed.

**Table 5: 3-Waters Asset Management Maturity Index Assessment**

	Asset Management Disciplines	Maturity Index	Maturity Description	What we do
1	Strategic Direction	Intermediate	<ul style="list-style-type: none"> <li>• AM System scope is defined and documented.</li> </ul>	<ul style="list-style-type: none"> <li>• The Council has adopted an <b>Asset Management Policy</b> to provide the overall direction for asset management in the district.</li> <li>• Scope is also refined as a consequence of</li> </ul>



	Asset Management Disciplines	Maturity Index	Maturity Description	What we do
				our Early Conversation discussions with Elected Members, which inform the LTP, and also during our regular workshops to define Strategic Direction for the Council.
2	Defining Level of service	Intermediate to Advanced	<ul style="list-style-type: none"> <li>Level of service and cost relationship understood.</li> <li>Customers are consulted on significant service levels and options.</li> <li>Customer communications plan in place.</li> <li>Levels of service are integral to decision making and business planning.</li> </ul>	<ul style="list-style-type: none"> <li>Again, existing levels of service is generally maintained, however, can be re-defined as result of either legislative requirements; customer feedback or in response to new technology. Re-definition is done as an outcome of our discussions with Elected Members, either prior to the LTP year or as and when required during the year.</li> <li>The LOS are defined in the AMPs for each work activity.</li> <li>Redefined levels of service in previous years include: <ul style="list-style-type: none"> <li>Network Planning and modelling</li> <li>Pipe work – increase the size;</li> <li>New management of the trade waste discharges</li> <li>Reduction in the wastewater pipe inflow/infiltration</li> <li>Addition of new back flow devices;</li> <li>More staff to implement higher LOS defined;</li> <li>Universal metering;</li> <li>Higher wastewater discharge quality;</li> </ul> </li> </ul>
3	Forecasting future demands	Core to Intermediate	<ul style="list-style-type: none"> <li>Risk associated with demand change broadly understood and documented.</li> <li>Demand management considered as an alternative to major project development.</li> </ul>	<ul style="list-style-type: none"> <li>We have a broad understanding of the issues for each work activity and these are documented in the AMP as “Problem Statements”.</li> <li>Forecasting is based on population and economic growth statistics in addition to regulatory changes at the central government level..</li> <li>Demand Management has been used in the water and wastewater activities, enforced by the Water Supply and Wastewater and Trade Waste Bylaws. Our resource consents also support our demand management initiatives. DM initiatives employed include: <ul style="list-style-type: none"> <li>Universal metering to encourage water conservation; and</li> <li>New PRVs for flow and pressure managements;</li> </ul> </li> </ul>
4	Collecting Asset Information	Intermediate	<ul style="list-style-type: none"> <li>A reliable register of physical, financial and risk attributes recorded in an information system with data analysis and</li> </ul>	<ul style="list-style-type: none"> <li>AssetFinda is the database for our 3-waters assets for recording the physical, financial and risk attributes.</li> <li>Data is collected, updated and validated on an ongoing basis, particularly when new assets are being installed and maintenance occurs on existing assets.</li> </ul>

	Asset Management Disciplines	Maturity Index	Maturity Description	What we do
			reporting functionality. Systematic and documented data collection process in place.	
5	Monitoring Asset Performance and Condition	Core	<ul style="list-style-type: none"> <li>Condition and performance information is suitable to be used to plan maintenance and renewals to meet over the short term.</li> </ul>	<ul style="list-style-type: none"> <li>The condition - physical integrity - of an asset is deduced based on the age, material type and analysis of collected statistical data.</li> <li>The performance, being a measure of whether the asset is delivering level of service requirements – is monitored during routine inspections and asset upgrade.</li> </ul>

### 3.7 ASSESSMENT OF ASSET CONDITION

Asset condition is a measure of an asset’s physical integrity, while asset performance is a measure of whether the asset is delivering level of service requirements. Knowing the condition of an asset enables more accurate prediction of asset development, maintenance and renewal/replacement requirements. The Stratford District Council identifies the condition of stormwater infrastructure assets by the age of the asset, through visual targeted inspections (including sampling) and maintenance monitoring.

Generally, the Council takes a risk-based approach to monitoring the condition of assets and conducts condition assessments of its critical assets. Where assets have low risk because they are in the first half of their life, condition monitoring is low. If the consequences of running an asset through to failure are high, the Council, through a more intensive monitoring regime and targeted inspections, hold more information on the asset condition. The Council has no backlog or deferred maintenance in its work programme.

**Targeted inspections** are carried out on asset components that are considered critical to Council and the community, have the potential to impact on public health and safety; or where there is a specific requirement, for example to meet regulatory requirements or for asset acquisition, disposal, or justification.

Targeted inspections of stormwater infrastructure assets are carried out by Council staff, the Maintenance Contractor, or specialist Consultant to identify the condition of specific asset components at intervals specified by the Asset Manager or upon request. To identify the general condition of its stormwater assets Stratford District Council undertakes the underground reticulation inspections, carried out by the Contactor during works or as issues are identified.

**Maintenance monitoring** is carried out by the Contractor at intervals specified in the Maintenance Contract. Maintenance monitoring is carried out to identify the condition of infrastructure and any item(s) that needs attention or could affect the integrity of the asset and the service it provides. Maintenance monitoring of stormwater includes:

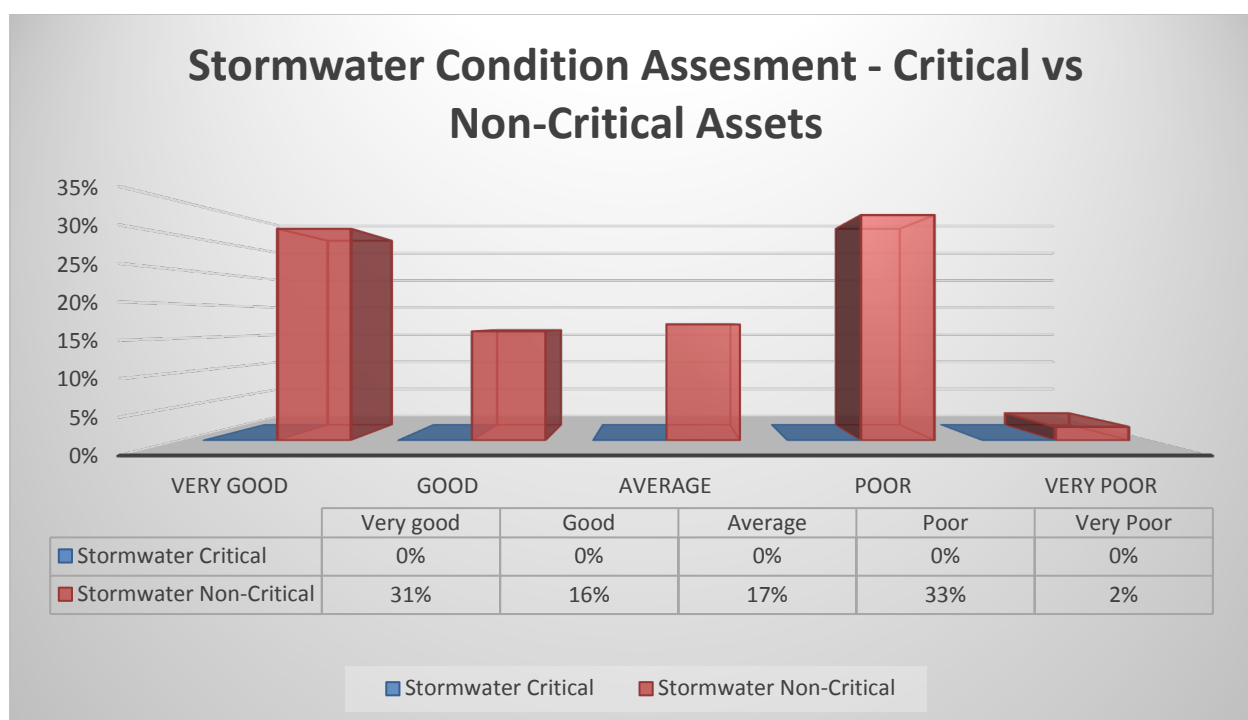
- Underground reticulation;
- Manholes;
- Visual stream inspections for obstructions (twice per year).

**Condition Grading** - Visual targeted inspections (including sampling), and maintenance monitoring provide both qualitative descriptions and quantitative grading of asset component condition. Condition grading supports the development, maintenance, and renewal/replacement of an asset by enabling more accurate prioritisation of forward works programmes.

The International Infrastructure Management Manual (2011) provides guidance on assessing the condition of assets and approaches to grading the condition. In line with this Stratford District Council has developed a condition grading system to support identifying the condition of assets at the group level. Using the system, the assumed condition of assets are ranked from 1-5 as illustrated in Table 6 below. In the last 3 years new stormwater assets were installed. 33 sections have been added to the stormwater infrastructure with the creation of the new subdivision on Pembroke Road.

**Table 6 - Condition Grading System**

Grade	Condition	Description	Expected Proportion of network (%)
1	Very Good	Asset in structurally sound and excellent physical condition. No work required	31%
2	Good	Asset in structurally sound and acceptable physical condition. Minor work required (if any)	16%
3	Average	Asset is structurally sound but shows deterioration. Moderate work required to return asset to agreed level of service	17%
4	Poor	Asset failure likely in the short term. Significant work required now to return asset to agreed level of service	33%
5	Very Poor	Asset has failed/is about to fail. Renewal/Replacement required Urgently	2%



**Figure 6: Stormwater Condition Assessment - Critical vs Non-Critical Assets**

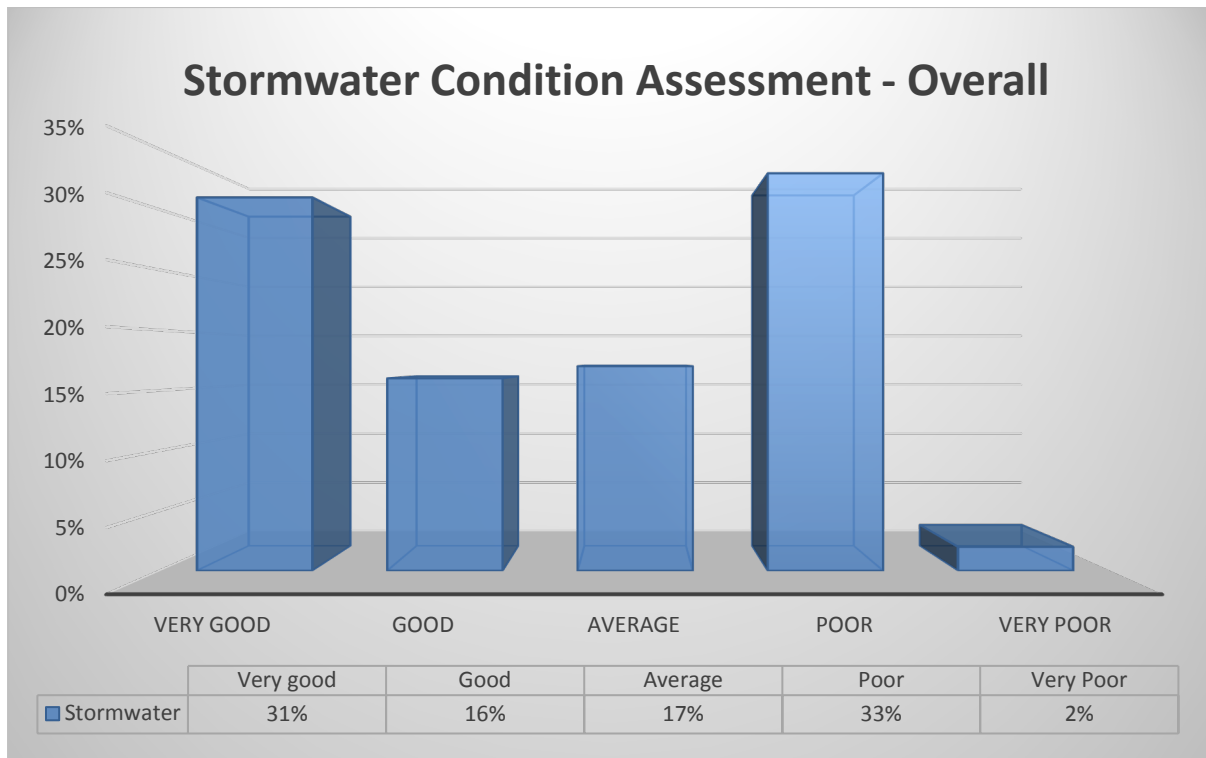


Figure 7: Stormwater Condition Assessment - Overall

### 3.7 DATA ACCURACY AND CONFIDENCE

The accuracy and currency of data is critical to effective asset management. Accurate data enables Council and the community to have confidence in decisions made about asset development, maintenance, and renewal/replacement.

To ensure accurate asset data is entered into the asset management system Stratford District Council has put in place the *Inspection Data Management Process* for managing targeted visual inspection data. Also, to determine the Council’s level of confidence in targeted inspection data, the Stratford District Council has implemented the *Data Confidence Grading System* in Table 8. Asset Grading by asset group is provided in Table 9.

Table 7 - Inspection Data Management Process

Step	Management process	Description
1	Collect Data	Data is collected and documented about asset and asset condition.
2	Hold Data	Where feasible data is stored in a temporary place until enough is gathered for sample auditing.
3	Audit a sample of Collected Data	Where applicable a sample of collected data is checked against the asset by authorised Council staff/Consultant – minimum 5%.
4	Enter Data into Asset Management System	Data is entered into the Asset Management System by the staff member responsible for the system.

**Table 8 - Data Confidence Grading System**

Grade	Confidence Level	Description
1	Highly Reliable	Data based on sound records, procedures, investigations and analysis which is properly documented and recognised as the best method of assessment -Dataset is complete and estimated to be accurate +- 2%
2	Reliable	Data based on sound records, procedures, investigations and analysis which is properly documented but has minor shortcomings -Dataset is complete and estimated to be accurate +- 10%
3	Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolation from a limited sample for which grade A or B data is available. -Dataset substantially complete but up to 50% extrapolated data and estimated to be accurate +- 25%
4	Very Uncertain	Data based on unconfirmed verbal reports and/or cursory inspection and analysis -Dataset may not be fully complete and most data is estimated or extrapolated and estimated to be accurate +- 40%
5	Unknown	None or very little data held

**Table 9: Asset Grading by Asset Group**

Asset Group	Key Confidence Attributes Percentage (%)				Average	Assessed Confidence Level	Confidence Grading
	Location	Diameter /size	Material	Age			
Pipes	80	60	70	80	72.5	Very Uncertain	4
Points	85	60	70	85	75	Uncertain	3
<b>OVERALL ASSESSMENT</b>	<b>Reliable to Uncertain</b>						

### 3.8 ASSET MANAGEMENT IMPROVEMENT PLAN ITEMS

Actions identified in this Section for improving management of the asset are as follows:

**Table 10 - Asset Management Improvement Plan Items**

Sub Section	Task	Due Date
3.7	<p><b>Improve condition data accuracy and reliability</b></p> <p>Council’s knowledge of the extent, location and condition of the stormwater reticulation system is currently not fully understood. This lack of knowledge hasn’t allowed Council to accurately prepare a renewal/replacement program or in some cases, understand how Council performance against Levels of service is/is not attained. Therefore, improving condition data information is required.</p>	Ongoing

## **4.0**

# **Future Growth and Demand**

## **4.0: FUTURE GROWTH AND DEMAND**

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## 4.1 OVERVIEW

This section provides a description of population; economic growth trends forecasts and the demand drivers for the provision; development and sustainability of the Water Services to the community. It identifies the demand forecasting model used by the Council and highlights the factors that influence the demand for infrastructure and services and the associated impacts of each driver on the demand for the Water Services.

The demand for the provision of Water Supply services is generally determined by the degree to which customers use the service. The forecasting of future demand for services enables Stratford District Council to plan ahead and identify the best way to meet that demand.

Section 14 of the Local Government Act 2002 requires local authorities to take a sustainable development approach in conducting business. In doing this Stratford District Council must take into account;

- I. the social, economic, and cultural interests of people and communities; and
- II. the need to maintain and enhance the quality of the environment; and
- III. the reasonably foreseeable needs of future generations.

Stratford District Council is committed to planning for the changing needs of its community. As part of this commitment Council utilises demand forecasting in all asset management planning. Information on future growth forecast has been supplied by Infometrics NZ.

## 4.2 DEMAND FORECASTING

Demand forecasting enables Stratford District Council to identify areas that are likely to experience significant pressures, and plan accordingly. Currently, the Stratford District Council uses a “basic” model for demand forecasting. It is a combination of formal and informal techniques. Central to this is an understanding of how growth and future demand trends will impact on Levels of Service and desired community outcomes. As part of the planning process Council considers:

- the Asset use, demand, and capacity;
- the implementation and planning for quality and process improvements; and
- environmental impacts

Key Information gathered during the forecasting process includes:

- Historical data;
- Observed patterns and trends – use, demand, and popularity;
- Statistical estimates and projections;
- Commercial activity and anticipated business migration;
- Pending legislative changes.

From this, assumptions are formed about what could happen; enabling Council to better plan for the future needs of the community.

## 4.3 DEMAND DRIVERS AND IMPACTS

Demand drivers are the factors that influence demand for services or the infrastructure that provides those services. Future growth in the Stratford community can be attributed to a number of factors described in detail below, including:

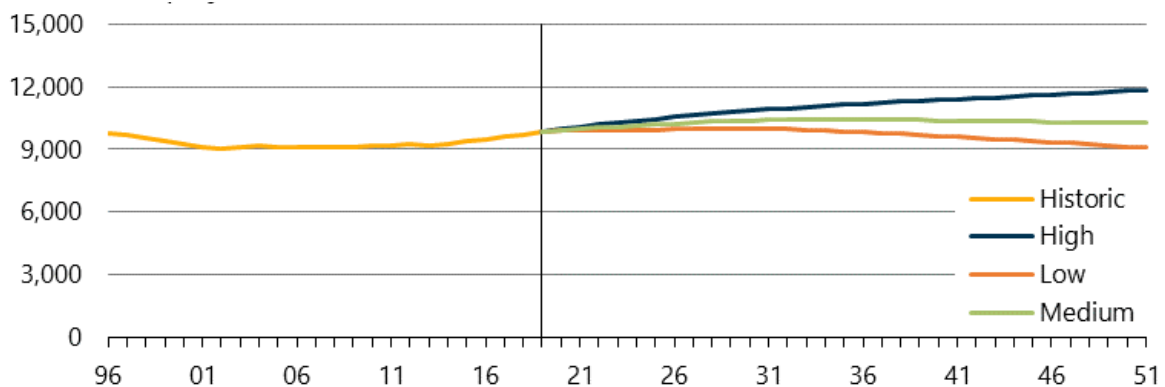
- Population;
- Economic Development;
- Tourism;
- Regulatory Changes;
- Land Use Changes via the Structure Plan; and
- Changing Customer Needs and Expectations.



## 4.3.1 POPULATION

Under the medium population growth scenario projected by the Infometrics Model, the Taranaki region's population is expected to grow to over 145,100 by 2051. Under a high growth scenario, higher levels of net migration would lead to a regional population of 163,100 by 2051, while the low growth scenario results in the population growing to approximately 129,000 residents by 2035, and then remaining relatively static at that level until 2051.

For the Stratford District, the forecast under the High growth scenario is to increase from above 10,000 in 2021 to just under 12,000 in 2051. This is equivalent to just under 0.7% increase per annum, an estimated total increase of approximately 18% over these 30 years. Under the low growth scenario, the forecast is to decline from above 10,000 in 2030, to just above 9,000 in 2051



**Figure 8 - Stratford District Infometrics projection of population change**

### Population distribution

Currently, there are 1,250 Maori population – 48% are under 20. Maori make up 13% of district population. Population growth has averaged 0.2% in the last 20 years, and averaged 0.7% in the last 10 years, however, in the last 3 years population growth has increased annually by 0.8% on average.

Population 2019 Infometrics data shows that Stratford district is approximately 9,860 – a growth of 1.3% from previous year. The source of growth was 78% due to natural increase and 22% due to net migration. We are anticipating an annual average population growth of 0.5% over the next eight years, centered around the urban area and mostly as a result of births.

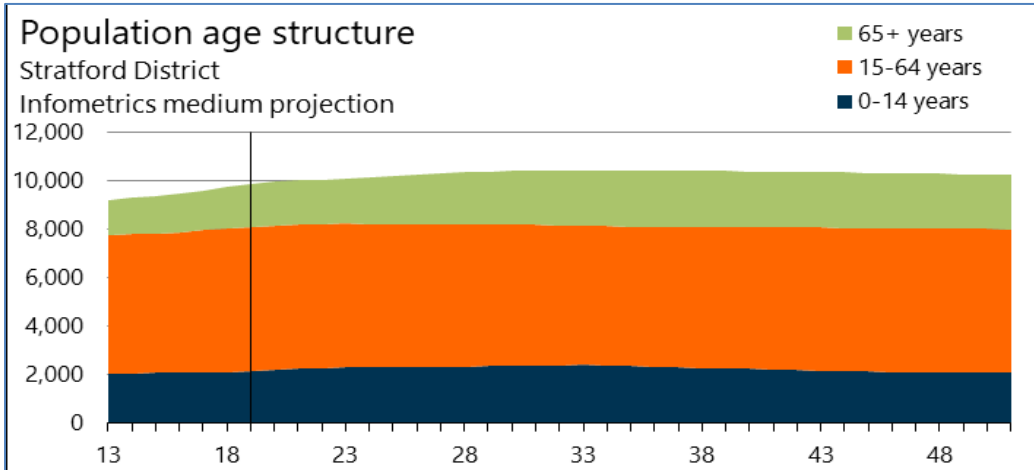
The district's Population Age Structure and Projection is shown in Figure 9; Components of Population Change in Figure 10 and the Population Geographic Distribution in Figure 11.

### Elderly Population

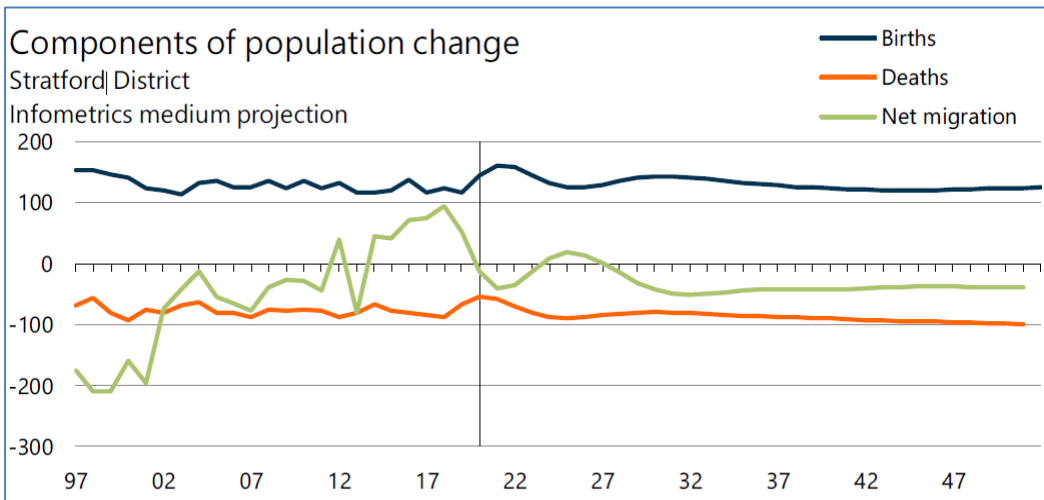
The average age of Stratford residents is expected to increase over the next 30 years from 40 to 42 years. 580 residents (5% of the district population) are aged 80+.

With a rising older population and a potentially declining older working population Stratford District Council and the Water Supply Activity will need to consider the services it delivers and the infrastructure required to deliver these services.

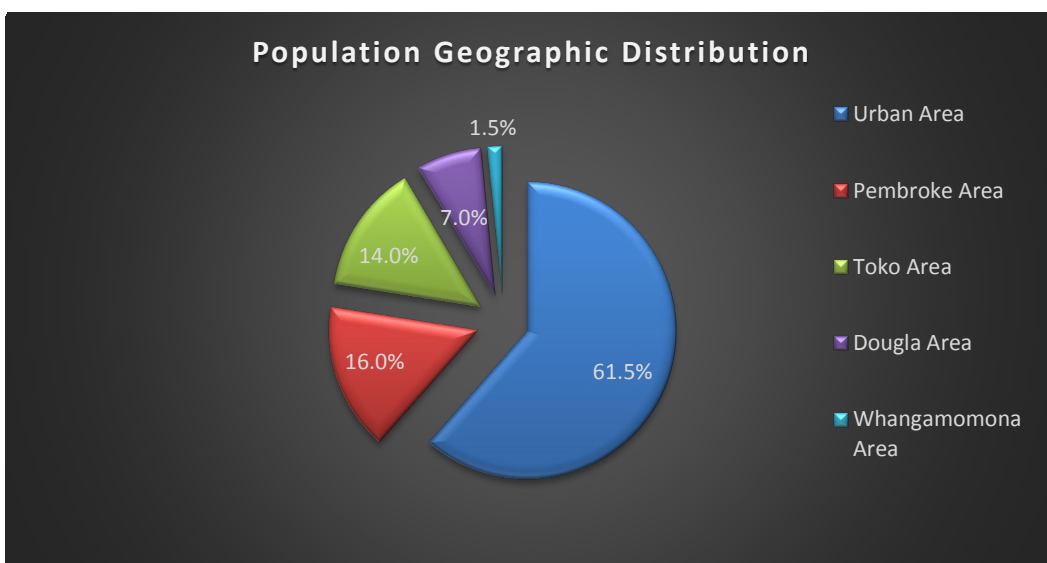
For a clearer picture of the impacts on infrastructure and the demand for services, further assessment is necessary. The cost of this assessment will need to be weighed against the benefits of embarking on the project.



**Figure 9 - Stratford District's Population Age Structure**



**Figure 10 - Components of Population Change**



**Figure 11 – Current Population Geographic Distribution**

## 4.3.2 ECONOMIC DEVELOPMENT

The four local authorities of the Taranaki region in association with Venture Taranaki and the Ministry of Business, Innovation and Employment (MBIE) have developed a new regional Economic Development Strategy and Action Plan for Taranaki. The Taranaki Regional Economic Development Strategy became official in August 2017 and is known as “Tapuoe Roa - Make Way for Taranaki”.

This strategy sets a direction for economic development and identifies priorities and measureable goals for the region as a whole. It is anticipated that the Strategy will enable and support economic growth and development in the Stratford District.

While economic growth for the Stratford District is desirable Council is aware that growth can have an impact on infrastructure and the services delivered by that infrastructure.

Anticipated impacts of the Regional Economic Development Strategy and any resulting growth on the Water Supply activity and infrastructure are expected to include:

- Increased demand for water services
- Increased pressure on existing infrastructure.
- Increased maintenance and renewal costs.

### **Economic History and Forecast**

According to the Infometrics Model, GDP growth is static to low, and generally under the national average – except for 2009 and 2012 where there were spikes in the district’s GDP compared to the rest of the country.

The two biggest contributing industries in Stratford are the Agriculture and Forestry sector contributing 27% (Dairy Farming making up 16% of this) of district GDP, and the Electricity and Gas Supply contributing 16%. Stratford has the region’s largest electricity generation site at Contact’s 575MW gas powered plant – it is considered a nationally significant generation site.

In 2019, there were 3,462 filled jobs in the Stratford District. The district unemployment rate was 4.4%, compared to the regional unemployment rate of 5.0% and national unemployment rate of 4.3%. Employment growth lags behind the rest of the country (2018 Stratford: 1.5%, National: 3.0%), although it did spike above the national average in 2009.

In terms of industry employment the top five employing industries in 2019 were:

- Education and Training 11%
- Dairy farming 9%
- Health Care and Social Assistance 7%
- Accommodation and Food Services 6%
- Supermarket and Specialised Food Retailing 6%

The biggest increase in jobs in Stratford since 2017 has been in the house construction (building) sector, and in primary education. Stratford generally has a higher rate of self-employment than the national average at 19%, compared to 17% nationally. Stratford also has a higher productivity rating per employee. In 2018, GDP per employee came to \$120,631, compared to the national average of \$97,174.

The 10-year and 30-year GDP and Employment forecast are provided in Tables 11 and 12.

**Table 11: GDP Growth 2005-2031**

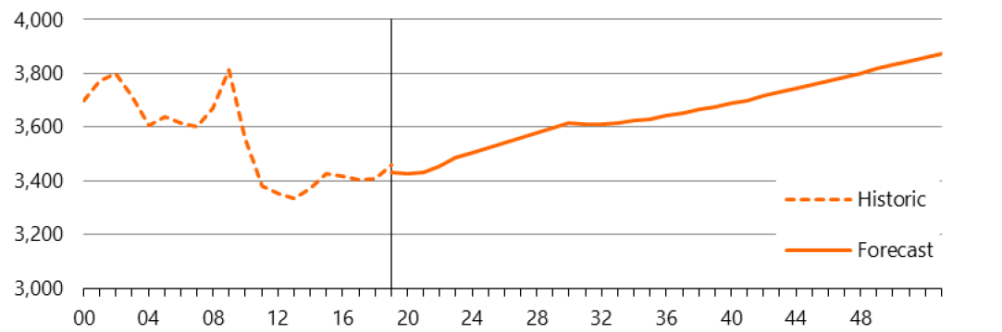
	GDP level (\$m, 2010 prices)			Annual % change	
	2005	2018	2031	05-18	18-31
New Plymouth	3,908	5,349	6,074	2.4%	1.0%
South Taranaki	1,869	1,948	2,080	0.3%	0.5%
Stratford	415	414	459	0.0%	0.8%
Taranaki	6,192	7,712	8,613	1.7%	0.9%

The Infometrics data above shows minimal change in GDP growth from 2018 to 2031

**Table 12: Employment Levels in the Region**

	Employment level			Annual % change	
	2005	2018	2031	05-18	18-31
New Plymouth	33,926	40,748	47,261	1.4%	1.1%
South Taranaki	13,959	13,952	15,256	0.0%	0.7%
Stratford	3,637	3,434	3,639	-0.4%	0.4%
Taranaki	51,522	58,134	66,157	0.9%	1.0%

Employment was expected to increase over the period to 2031, however the impact of Covid-19 has changed these figures



**Figure 12 - Employment Forecast for Stratford**

Employment is expected to increase slightly over the next 10-30 years

### 4.3.3 CLIMATE CHANGE

Scientific evidence indicates the earth's climate is changing because of increases in greenhouse gases caused by human activities.

Anticipated impacts for New Zealand over the next 100 years include:

- Changes in temperature
- Projected changes in rainfall
- Extreme weather events
- Decreased frost risk
- Increased frequency of high temperatures
- Increased frequency of extreme daily rainfalls
- Higher snow lines and possible reduced snow coverage
- Possible increase in strong winds
- An increase in average sea level.

At the regional and district level research indicates Taranaki could experience more extreme and varied rainfall patterns and severe weather events.

Extreme weather events and heavy rainfall would see increases in flooding, landslides, avalanches and mudslides during heavy rainfall events while on the flip side a lack of rain during summer months could see prolonged periods of drought. Both extremes place increased pressure on government, private flood insurance schemes, and disaster relief.

The Government's principal policy response to climate change is the New Zealand Emissions Trading Scheme (ETS). In various sectors (such as energy), the Government is also undertaking a range of other policies and measures that are contributing to reducing greenhouse gas emissions while achieving other policy goals.

Council responds to and plans for impacts of climate change as part of asset management practices by monitoring NIWA data in order to plan for and make adjustments to infrastructure where and when needed. Where adjustments are needed they are undertaken through New Works and/or Renewal/Replacement.

### **4.3.4 TOURISM**

The Visitor Sector Action Plan is one of six action plans developed as part of the "Make Way for Taranaki" Regional Development Strategy. The action plan describes the current regional sector dynamic, growth objectives, challenges, opportunities and the actions required to achieve sector growth. It is anticipated that the Visitor Sector Action Plan will enable and support growth in the Stratford District Visitor Sector.

Council welcomes the Stratford District being seen as a visitor destination but is mindful that increases in visitor numbers may have an impact on infrastructure and the services it provides. Anticipated impacts of the Visitor Sector Action Plan and any increases in visitor numbers on the Water Supply Activity and infrastructure are expected to include:

- Increased demand for water services
- Increased pressure on existing infrastructure.
- Increased maintenance and renewal costs.

### **4.3.5 THE (DRAFT) STRUCTURE PLAN FOR STRATFORD**

The SDC is currently undertaking a Structure Plan of the Stratford District, which is in response to an increased demand for residential development sites in Stratford. This 30 year Plan long term Strategy Plan will feed into the District Plan review and the Infrastructure Strategy, to ensure that the growth areas identified herein are duly catered for as and when required.

The Plan will identify key growth areas in Stratford, in addition to areas that lend themselves to in-filling. Roding, Solid Waste Services, Water and Wastewater infrastructure will be planned to service these areas accordingly. Given its proximity and centrality to key employment generators and tourist areas in the New Plymouth and South Taranaki District, the creation of new and affordable residential lots is expected to support the growth forecast for the town.

### **4.3.6 REGULATORY CHANGES**

The SDC regularly reviews regulatory changes that may or will affect the SDC water supplies. This primarily includes updates to resource consents and changes to drinking water legislation and standards. There are no immediate concerns of regulatory changes at the time of writing this AMP, however there is an expectation that the legislation, standards and guidelines related to drinking water will be reviewed and updated in the near future. This is a direct result of the Havelock North inquiry and it is anticipated that SDC water supplies will be affected. It is too early to know what aspects of the inquiry will carry over into legislation/guidelines/standards.

## 4.3.7 CUSTOMER NEEDS AND EXPECTATIONS

Council has indicated a desire to promote growth in Stratford by developing new residential subdivisions with sections serviced by municipal water supply and wastewater schemes. Inherently, this will have an effect on the Stratford water supply whereby water demand in these areas will increase. To alleviate these effects on the network, the secondary trunk main could be utilised to supply directly to the growth areas where possible.

## 4.4 IMPROVEMENT PLAN

**Table 13 - Future Growth Improvement Plan**

Sub Section	Task	Due Date
4.3.1	Further assessment needed to assess the impacts of growth demands on the adequacy of the existing stormwater reticulation systems.	On-going

## **5.0**

# **Levels of Service Performance**

## **5.0: LEVELS OF SERVICE PERFORMANCE**

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## 5.1 OVERVIEW

Levels of Service (LoS) define the form and quality of service that the Stratford District Council provides to the community. They are the balance between what the community wants and what the community is willing to pay for.

Through asset management planning, the relationship between the LoS and the cost of service is determined. Once determined, the relationship is evaluated in consultation with the community to define the agreed LoS, which are then used to:

- Inform customers of the proposed LoS;
- Develop AM strategies to the deliver LoS;
- Develop targets to measure performance;
- Identify and evaluate the costs and benefits of services offered; and
- Enable customers to assess customer values such as accessibility, quality, safety, and sustainability.

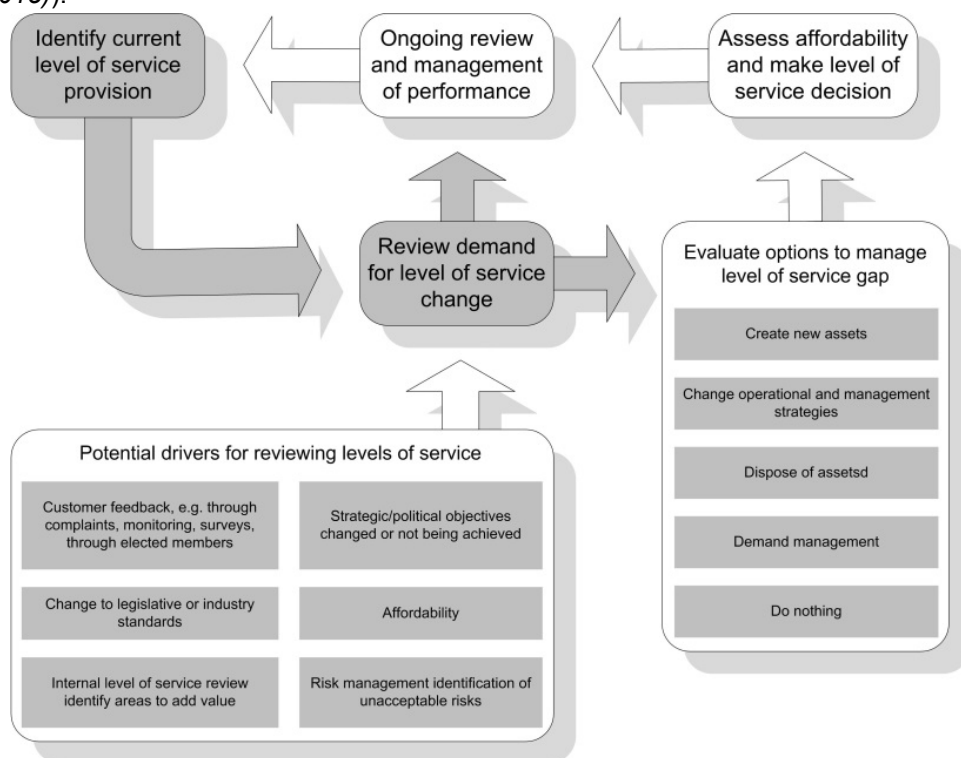
The Levels of Service section details legislative and regulatory requirements affecting the operation, management and Levels of Service for the stormwater assets.

This section:

- Highlights the current LoS provided by the Stratford District Council;
- Defines the desired LoS for the futures; and
- Outlines performance measures that will be used to monitor the delivery of the agreed LoS.

## 5.2 LEVEL OF SERVICE DEVELOPMENT/REVIEW PROCESS

LoS review is an on-going process which can be triggered by a variety of drivers. The development and review of the LoS will be undertaken following the process diagram in Figure 13 (*Source: IIMM (2015)*).



**Figure 13 - LoS Development/Review Process**

## 5.3 PERFORMANCE MONITORING AND REPORTING

The Stratford District Council has undertaken to provide a safe and well maintained network that meets LoS expectations and regulatory requirements. To ensure these expectations and requirements are met, the Stratford District Council undertakes performance monitoring of Water activities and infrastructure through the use of performance measures and key performance indicators (KPIs).

Performance measures and reporting enable Stratford District Council to identify how well it is delivering on the agreed LoS. KPIs enable Council to regularly measure actual performance against projected targets. By doing this we are able to identify trends, areas of achievement and areas for improvement to be identified.

The monitoring of the LoS is done through the Customer Satisfaction Survey and the Discharge Compliance with the territory authority's resource consents from its stormwater system.

The results of the performance monitoring are reported internally and externally through:

- monthly reports to Elected Members, also accessible to the public via the Council website; and
- the Long Term Plan, Annual Plan and Annual Report to our customers, key stakeholders and partners.

## 5.4 CURRENT PERFORMANCE

Stratford District Council is required to provide stormwater reticulation and collection services that:

- Collect and disperse any excess water from a major rainfall event.
- Provide a system for the normal drainage of stormwater and groundwater, thereby enhancing the life of other infrastructure e.g. roads and protecting private property (to the defined level of service).

To ensure these expectations and requirements are met, Stratford District Council undertakes performance monitoring of the Stormwater Activity and service it provides.

Performance monitoring is undertaken through the use of performance measures and key performance indicators (KPIs). There are two different types of performance measures and KPIs used:

- DIA performance measures
- Internal performance measures

**The DIA Performance Measures:** Since 2014 all local authorities have been required to comply with a standard set of performance measures. The performance measures are intended to provide information that will enable the public to contribute to discussions on future levels of service and participate more easily and effectively in decision-making processes. While these measures, provided in Table 14, are set by the DIA, the targets and response times are set by SDC.

**The Internal/Other Performance Measures:** These are performance measures put in place by Council that are intended to inform the community about how well Council is delivering on Levels of Service and the performance of the activity assets.

# Levels of Service Performance

**Table 14- Performance Measures**

	Level of Service	Performance Measure	Outcome Category
1.	<b>Stormwater system protects property from impacts of flooding.</b>	<p><b>System adequacy</b></p> <ul style="list-style-type: none"> <li>The number of flooding events that occur in a territorial authority district. "Flooding" in this context means stormwater entering a habitable floor.</li> <li>For each flooding event, the number of habitable floors affected. (Expressed per 1000 properties connected to the territorial authority's stormwater system.)</li> <li>For each flooding event, the number of buildings in the central business zone affected by flooding.</li> </ul>	DIA measure
2.	<b>Discharge Compliance</b>	<p><b>Resource Consent Compliance</b> – Compliance with the territorial authority's resource consents for discharge from its stormwater system measured by the number of</p> <ul style="list-style-type: none"> <li>Abatement notices</li> <li>Infringement notices</li> <li>Enforcement orders; and</li> <li>Convictions,</li> </ul> <p>Received by the territorial authority in relation to those resource consents. This target is 0.</p>	DIA measure
3.	<b>Response and Resolution Times</b>	The median response time to attend a flooding event, measured from the time that the territorial authority receives notification to the time that service personnel reach the site.	DIA measure
4.	<b>Customer satisfaction</b>	<b>Complaints</b> - The number of complaints received by a territorial authority about the performance of its stormwater system, expressed per 1000 properties connected to the territorial authority's stormwater system.	Council/Internal measure

## 5.4.1 SYSTEM ADEQUACY

These are new measures introduced with the 2015-2025 Long Term Plan. The performance measure targets for system adequacy for 2020/2021 are:

- The number of flooding events that occur in the district is 0.
- For each flooding event, the number of habitable floors affected is 0.
- For each flooding event, the number of buildings in the central business zone affected by flooding is 0.

In 2019/2020 there were no flooding events that met the measurement criteria recorded by Council in the district that affected buildings in the central business zone or any habitable buildings. The stormwater system achieved Level of Service requirements for system adequacy.

**Table 15 - System Adequacy - Annual Report**

Category	Year	
	2018/2019	2019/2020
Flooding Events	0	0
Floors Affected	0	0
Buildings in CBD Affected	0	0

## 5.4.2 DISCHARGE COMPLIANCE

This was a new measure introduced with the 2015-2025 Long Term Plan. However, Stratford District Council does not hold discharge consents for discharge from its stormwater system therefore performance measurement is not applicable in this area.

## 5.4.3 RESPONSE TIMES

This is a new measure introduced with the 2015-2025 Long Term Plan. The performance measure target for the median response time to attend a flooding event - from the time Council receives notification to the time that service personnel reach the site (as stated in the 2015-2025 Long Term Plan) is 1 hour.

In 2019/20 there were no flooding events that met the measurement criteria recorded by Council in the district.

## 5.4.4 CUSTOMER SATISFACTION

This was a new measure introduced with the 2015-2025 Long Term Plan. The performance measure target for number of complaints received by Council about the performance of its stormwater system (as stated in the 2015-2025 Long Term Plan) is <8 per 1,000 properties.

In 2019/20 there were no complaints received.

*Note: Council is not required to break down performance statistics to “per 1000 connections” as the number of actual connections is much lower than the 1000 connection threshold.*

## 5.5 DESIRED PERFORMANCE

A summary of the Council’s targets/ desired performance levels are presented in Table 16. This desire stems from the Council’s resolve to maintain its delivery of the agreed levels of service and strengthen the community’s confidence in the Council’s ability to deliver excellent Water Service to the users

The Council will take into account its Customer Charter in its provision quality service to all our customers. Council will rate its performance against the key performance indicators (KPI’s) or targets as per Table 17 below.

**Table 16 - Performance Rating Index**

Rating	Description
<b>Achieved</b>	Required actions have been completed and the intended level of service has been achieved; or Where a long-term level of service is targeted, the results for the year are in keeping with the required trend to achieve the intended level of service.
<b>Not Achieved</b>	None of the required actions have been undertaken, or The result for the year is less than half of the intended level of service, or Where a long-term level of service is targeted, the results for the year are contrary to the required trend to achieve the intended level of service.
<b>Not Applicable</b>	No action was required during the year.

# Levels of Service Performance

**Table 17 - Performance Measures**

Level of Service	Performance Measure	Outcome Category	Trend			Current	Target				How Measured
			2017/18	2018/19	2019/20	2020/ 21	Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Years 4 - 10 2024 - 2031	
<b>System Adequacy</b>	Number of flooding events	DIA Measure	Ach - 0	Ach - 0	Ach - 0	0	0	0	0	0	Reporting against corporate CRM system.  Note: specific category to be set up for flooding – to separate between residential & commercial buildings and include count of habitable floors flooded (residential only).
	Number of habitable floors affected.  Expressed per 1000 properties connected to the territorial authority's stormwater system.		Ach - 0	Ach - 0	Ach - 0	0	0	0	0	0	
	Number of buildings in the central business zone affected by flooding.		Ach - 0	Ach - 0	Ach - 0	0	0	0	0	0	
<b>Discharge Compliance</b>	Compliance with Discharge Consents	DIA Measure	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Consent & compliance documentation
<b>Response Times</b>	Response Time	DIA Measure	0	0	Ach - 0	1 hour	1 hour	1 hour	1 hour	1 hour	Work order tracking/reporting through Council's Infrastructure asset management system.
<b>Customer Satisfaction</b>	Number of Complaints received expressed per 1000 properties connected to the stormwater system		Not Recorded	Not Recorded	Ach - 0	<8	<8	<8	<8	<8	Reporting against corporate CRM system.

# **6.0**

## **Strategic Assessment**

**6.0: STRATEGIC ASSESSMENT**

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## 6.1 OVERVIEW

The '*Strategic Assessment*' section presents an assessment of the need for investment against strategic outcomes. It defines the problems facing the Stratford District Council; highlights the investment projects necessary to address these problems and the benefits of each identified investment project.

## 6.2 OUR BUSINESS CASE

Section 17A of the Local Government Act (LGA) 2002 requires the local authority to '*review the cost-effectiveness of current arrangements for meeting the needs of communities within its district or region for good quality local infrastructure, local public services and performance of regulatory functions*'.

## 6.3 PROBLEM STATEMENTS

Between July and September 2020, Council staff prepared and presented *Early Conversation* papers for discussion with the Elected Members as part of the Long Term Plan (LTP) process. The purpose of these early conversations was to ask elected members for direction regarding some capital projects being proposed in the 2021-2031 LTP.

The Early Conversations with the Elected Members identified:

- Problems and items for improvement in the delivery of our Stormwater Activity;
- Future proofing Objectives in addition to Council Community Outcomes;
- Options for addressing the identified problems; and
- An assessment of each option against Council Outcomes and the identified future proofing objectives;
- Risks and Opportunities associated with each option and
- Preferred Options to address each Problem Area.

The Elected Members considered the information and provided the necessary direction - in some cases modifying the preferred option. The outcomes of these conversations provided a 10-year plan for implementation of the Preferred Options for each Problem area identified.

The main problems identified and *workshopped* as part of the Early Conversations<sup>1</sup> are:

- Stormwater Network Modelling
- Network Capacity Increase

### 6.3.1 NETWORK PLANNING AND MODELLING

With the new subdivision, urban infill and other growth areas springing up in Stratford, Council Officers are proposing to commission a network modelling project on our stormwater network. Network modelling will involve hydraulic analysis to reveal how our stormwater system is behaving and will comprise:

- I. the evaluation of network capacity;
- II. the identification of bottlenecks in the existing or proposed network; and
- III. the design of improvements needed to accommodate growth

Stormwater modelling will reveal the areas for improvement in the network from which priority areas can be programmed for improvement. Council Officers have estimated the cost of modelling at \$35,000.

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<sup>1</sup> D21/11168



## **6.3.2 NETWORK CAPACITY INCREASE**

As described above, there have been new residential subdivisions and developments, urban infill and other growth-related pressures created in our stormwater network. The consequence of this is that some pipes are requiring upgrades in capacity to accommodate the increased stormwater flow.

Council Officers are already aware of some pipes within the network requiring increased capacity, the Stormwater network modelling above will also help to identify priority areas for upgrades in the stormwater network. Council Officers are proposing a budget of \$90,000 to address this issue over the next 3 years.

## **6.3.3 STORMWATER SAFETY IMPROVEMENT**

The Council's programme for stormwater safety improvements will continue through the LTP planning period. Safety improvements consist of inlet and outlet safety screening for stormwater manholes. The improvement programme commences from Year 1

## **6.3.4 CLIMATE CHANGE SEE ANNUAL REPORT**

The Taranaki region is susceptible to significant adverse effects from natural hazards. Natural disasters can result in heavy loss of property and threaten lives and livelihoods, forcing communities to learn to live with these hazards. While it is not possible to reduce the incidence of natural hazards, steps can be taken to reduce the vulnerability of the community to their impacts.

Natural hazards that are of concern to this activity is flooding, mainly surface flooding or flooding related to in-flow infiltration issues; Windstorm; and Land instability and erosion.

The Council proposes to create a catchment management plan to support upgrade of existing assets to accommodate a 1 in 100 year storm event.

## **6.3.5 REPLACEMENT OF STORMWATER TUNNELS**

As part of our on-going renewal programme, the Council proposes to continue the re-routing of larger waterways/pipeline/tunnels to be more accessible and within public land or easements

## **6.4 OUR BENEFIT STATEMENTS**

The Council has identified projects, to address the problems to delivering stormwater services in a safe and environmentally friendly manner and at the agreed level of service to the community. The benefits of implementing these projects are presented in Table 18 below and include:

- Minimising adverse environmental effects on downstream ecology and properties
- Returning the actual capacity of the Victoria Park Lake close to its original capacity.
- Minimise the safety risks related to stormwater infrastructure

**Table 18- Problems, Projects and Benefit Statements**

Problem Statements	Preferred Option / Project	Benefit Statements
<p><b>Problem Statement 1:</b> Network Planning and Modelling</p>	<p>Commission a new Wastewater model</p>	<p>To accommodate growth and increased demand, Council has programmed to increase pipe capacity to cater for high flows..</p> <p>While officers are aware of some pipes within the network requiring increased capacity, the Council will commission a network modelling project on our stormwater network to reveal how our network systems are behaving.</p> <p>This modelling project will comprise</p> <ul style="list-style-type: none"> <li>• the evaluation of network capacity;</li> <li>• the identification of bottlenecks in the existing or proposed network; and</li> <li>• the design of improvements needed to accommodate growth.</li> </ul> <p>The modelling project is expected to reveal the areas for improvement.</p>
<p><b>Problem Statement 2:</b> Pipework Capacity Issues</p>	<p>Programme the implementation of pipework capacity increase to support growth.</p>	<p>This programme is to address under-capacity of pipe network to support growth, residential infill and other intense land-use activities.</p> <p>There have been new residential subdivisions and developments, urban infill and other growth-related pressures created in both our wastewater and stormwater networks. The consequence of this is that some pipes are requiring upgrades in capacity to accommodate the increased flow.</p>
<p><b>Problem Statement 3:</b> Stormwater Safety Improvements</p>	<p>Conduct an inlet structure study, and its implementation, to ascertain the extent of potential upgrades required to meet public safety requirements</p>	<p>Knowledge of what inlet structures are in the network and whether they are adequate is not at an appropriate level. This study will help Council gain the appropriate level of knowledge required to plan for the construction of new, safe stormwater inlet structures.</p>
<p><b>Problem Statement 4:</b> Climate change</p>	<p>Create a catchment management plan to support upgrade of existing assets to accommodate a 1 in 100 year storm event</p>	<p>Should improve stormwater management in the existing network</p>
<p><b>Problem Statement 5:</b> Replacement of stormwater tunnels</p>	<p>Consider rerouting of larger waterways/pipeline/tunnels to be more accessible and within public land or easements</p>	<p>Properties currently connected to existing infrastructure will need to be accounted for in any new design route</p>

# 7.0 Lifecycle Management

## 7.0: LIFECYCLE MANAGEMENT

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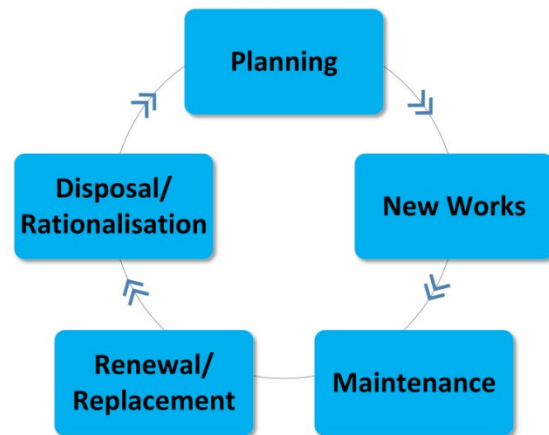
## 7.1 OVERVIEW

Lifecycle Asset Management focuses on management options and strategies to minimise risks to assets, and any potential risk of assets.

It considers all relevant consequences from initial planning through to renewal, replacement, disposal or rationalisation of assets.

Lifecycle Asset Management acknowledges that assets are always in a state of decay and their useful life is primarily influenced by;

- Physical characteristics
- Operating environment
- Customer requirements



**Figure 14 - Lifecycle Asset Management**

Lifecycle Asset Management enables the Council to identify issues, determine appropriate response options and identify strategies and programmes for response to identified issues/opportunities in order to deliver Levels of Service and achieve both asset and organisational goals and objectives.

The Lifecycle Asset Management section contains current Stratford District Council procurement and contractual arrangements and the prioritisation of works:

- That meets the short and long term needs of our community;
- That offers value for money; and
- In a sustainable manner to the least whole-of-life cost.

This section presents a detailed plan of prioritised work over a 10-year planning period in response to the problem and benefit statements highlighted in Section 6 of this AMP. It presents Council's practices and projects to maintain the stormwater assets over its lifecycle through Council's:

- Procurement Policy;
- Management Strategies;
- Contractual Arrangements;
- Programme Business Case - for the next 10 years;
- Disposal Strategy; and
- Planning for Improvement

## 7.2 PROCUREMENT POLICY

Procurement for the purpose implementing projects identified in the work programmes are undertaken in accordance with the Council's Procurement Policy. The Council's Procurement Policy for the purpose of procuring goods works and services is aimed at ensuring that Council:

- achieves the right outcomes and value for money;
- manages risk effectively;
- allows council officers to exercise business judgement by enabling flexibility and fluid, innovative approaches to procurement;
- demonstrates fairness;
- has health and safety risk management at the forefront.
- Reflects best management practice; and
- Has a local procurement policy applying to works with a monetary value up to a limit prescribed by Council.

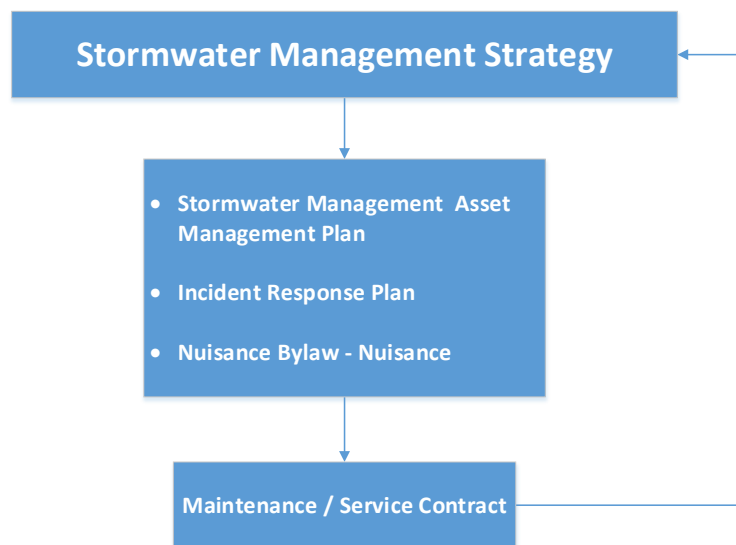
All personnel involved in procurement procedures are required to maintain the confidentiality of the process. The Council, as a public entity, must act fairly and consistently, in accordance with relevant legislation.

## 7.3 MANAGEMENT STRATEGIES

The overall management of infrastructure will be driven through strategies aimed at:

- Complying with the legislative and strategic requirements;
- Meeting customer expectations and agreed levels of service; and
- Delivering value for money for ratepayers, funding partners and the Council.

These strategies as presented in Figure 15, are either under review or currently being prepared.



**Figure 15 – Stormwater Asset Management Strategies**

## 7.4 CONTRACTUAL ARRANGEMENTS

The Stratford District Council has in place contractual agreements for the delivery of the agreed levels of service. Service is delivered under three main contractual agreements:

- Professional Services;
- Physical Works; and
- Maintenance Contracts

The Council has a 3 Waters Maintenance Contract with Citycare for the provision of ongoing maintenance services of the Council's stormwater services. This Contract requires the Contractor to provide not only physical works but also a degree of professional services for significant aspects of the work.

The contract is for an initial period of three years from 1 July 2019 which will expire on 30 June 2022 but incorporated two 2 year roll-over periods in the event Council is satisfied with the contractor's performance.

Physical Works are mainly covered by the Maintenance Contract. However, where not covered, this service is procured in accordance with Stratford District Council's Procurement Procedures.

The Council is responsible for the operation of both the treatment plant (oxidation ponds) and the pump stations.

## 7.5 PROGRAMME BUSINESS CASE

The programme business case details how the problems identified in the previous sections will be addressed. This is presented in Table 19 below and shows the identified projects that are proposed to address the identified problems presented in Section 6 of this report and achieve the DIA and Internal/Other performance measures as per Section 5.

The identified projects are grouped under three main categories of:

- Operations/Maintenance works;
- Renewal/Replacement works; and
- Level of Service Improvements.

The prioritisation of planned maintenance, renewal/replacement and capital projects is based:

- Level of Service requirements;
- Criticality and risk assessment associated with investment levels that potentially change the level of service;
- Age and condition of the infrastructure; and
- Budgetary constraints.

These key outcomes have been considered for each activity at an asset group level.

**Table 19 - Identified Projects and Performance Measures**

Work Category	Identified Projects	Performance Outcomes			
		System Adequacy	Discharge Compliance	Response Times	Customer Satisfaction
Renewal/ Replacement	Stormwater reticulation renewals	✓		✓	✓
	Inlet screen renewals	✓			✓
	Desilt ponds	✓	✓		
Level of Service Improvements	Reticulation capacity increase	✓	✓	✓	✓
	Modelling	✓	✓	✓	✓
	Manhole lid safety screens	✓	✓		✓
	Victoria Lake by-pass	✓	✓	✓	✓

### 7.5.1 OPERATIONS AND MAINTENANCE

Management strategies cover policies that determine how the asset will be operated and maintained on a day-to-day basis to consistently achieve optimum use. A key element of asset management planning is determining the most cost-effective blend of planned and unplanned maintenance.

Operating budgets are detailed in the Financial Forecasts Section of this document.

The operation and maintenance of assets is undertaken through:

- **Routine Maintenance** - The Day to day maintenance which is required on an on-going basis and is budgeted for under the Services Maintenance Contracts as “key tasks” ;
- **Planned Maintenance** - Non day-to-day maintenance which is identified in advance and is incorporated into a maintenance budget for a certain time period; and
- **Ready Response** - Maintenance that is unexpected and necessary to continue operation of the service.

The previous expenditure figures for operations and maintenance, as detailed in the Annual Plan, are presented in Figure 16. The planned works are presented in Table 20 below.

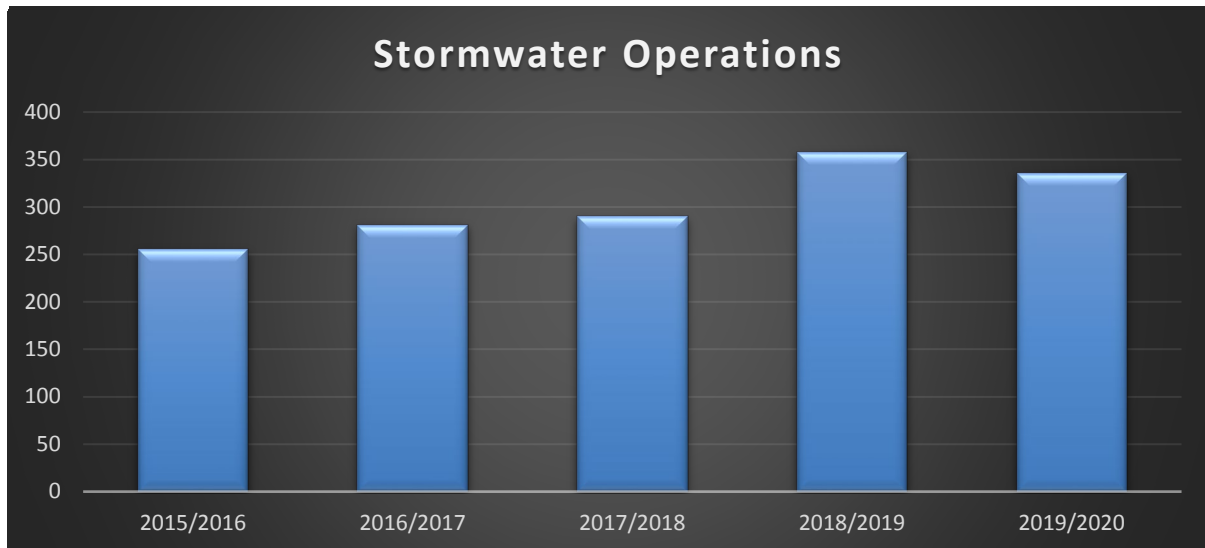


Figure 16 - Stormwater Operating Expenditure – Annual Report

## 7.5.2 RENEWAL/REPLACEMENT

Renewal is major work which does not increase the asset’s design capacity but restores, rehabilitates, replaces or renews an existing asset to its original capacity. Work over and above restoring an asset to its original capacity is new asset expenditure. Assets identified for renewal are typically:

- Near or beyond the end of their expected life
- Have known condition and / or performance deficiencies
- Have both known deficiencies and are of a critical nature

The previous expenditure figures for assets renewal / replacement, as detailed in the Annual Plan, are presented in Figure 17. The planned works are presented in Table 21 below.



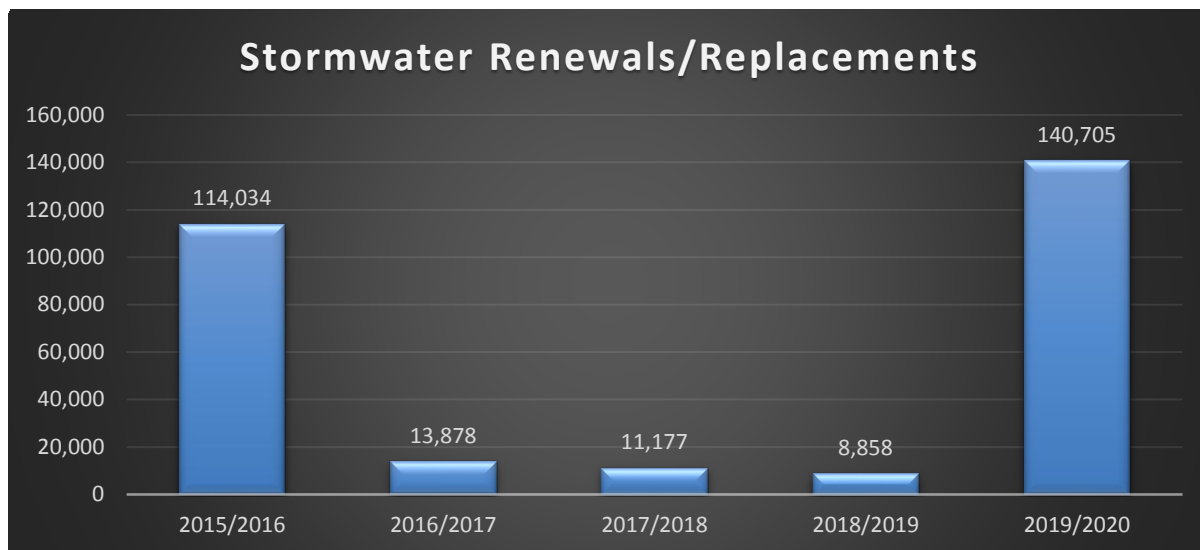


Figure 17 - Stormwater Replacement/Renewals - Annual Report

Table 20 - Planned Renewal /Replacement Works

Project	2021/22	2022/23	2023/24	2024-2031
<b>Stormwater reticulation renewals</b>	<b>\$53,000</b>	<b>\$55,000</b>	<b>\$56,000</b>	<b>\$605,000</b>

**Problem Statement** Some stormwater reticulation assets are coming to the end of their service life.

**Benefits of investment** Project will assist Council in maintaining adequate LoS performance in future.

**Consequences of non-investment** Risk of failure of stormwater assets (reticulation) causing flooding.

Project	2021/22	2022/23	2023/24	2024-2031
<b>Safety Improvements</b>				<b>\$96,000</b>

**Problem Statement** Some stormwater reticulation assets are coming to the end of their service life.

**Benefits of investment** Project will assist Council in maintaining adequate LoS performance in future and will ensure limited public access to protect public safety.

**Consequences of non-investment** Risk of failure of stormwater assets (inlet screens) causing blockages and potentially flooding.

Project	2021/22	2022/23	2023/24	2024-2031
<b>Silt Retention Victoria Park</b>				<b>\$65,400</b>

**Problem Statement** Some stormwater pond silt levels are becoming too high for the pond to be effective in reducing suspended solids before discharge into down stream water bodies.

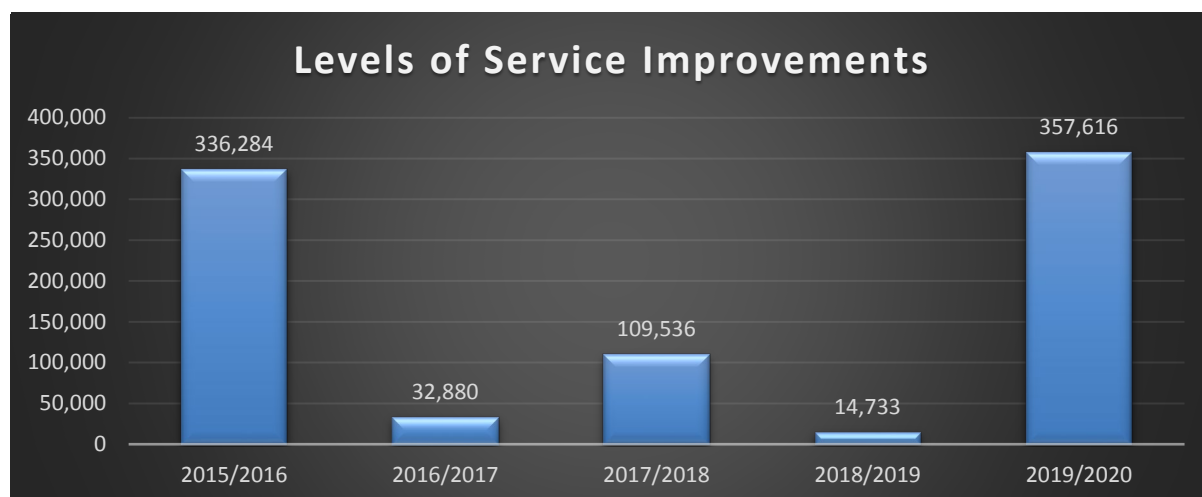
**Benefits of investment** Project will assist Council in maintaining adequate LoS performance in future.

**Consequences of non-investment** Continued settling of silt in the ponds causing the capacity of the ponds to be reduced.

### 7.5.3 LEVEL OF SERVICE IMPROVEMENTS

The Stratford District Council's main focus is to maintain levels of service rather than improving levels of services.

The previous expenditure figures for level of service improvements, as detailed in the Annual Plan, are presented in Figure 18; the planned works are presented in Table 22 below.



**Figure 18 - Stormwater Levels of Service Improvements - Annual Report**

**Table 21 - Planned Level of Service Improvement Works**

Project	2021/22	2022/23	2023/24	2024-2031
<b>Reticulation capacity increase</b>	<b>\$135,000</b>	<b>\$139,700</b>	<b>\$143,300</b>	<b>\$1,129,885</b>

**Problem Statement** Some existing infrastructure is known to be under capacity

**Benefits of investment** Project will assist Council in upgrading the infrastructure to increase the capacity for stormwater assets.

**Consequences of non-investment** Risk of flooding during more extreme events remains.

Project	2021/22	2022/23	2023/24	2024-2031
<b>Modelling</b>		<b>\$31,000</b>		

**Problem Statement** Some stormwater reticulation assets are accessible to the public and manholes are not locked down and their safety could be at risk (i.e. child falling into a manhole).

**Benefits of investment** Project will assist Council in protecting public safety.

**Consequences of non-investment** Risk potential for harm to a member of the public remains.

Project	2021/22	2022/23	2023/24	2024-2031
<b>Silt retention lake by-pass line</b>			<b>\$265,400</b>	

**Problem Statement** This is linked to the lake desilting project so that problem statement applies too. Stormwater flows will still need to be accounted for during the de silting project.

**Benefits of investment** Project will assist Council in ensuring stormwater flows during the desilting project are still able to flow downstream.

**Consequences of non-investment** Risk of desilting project being unsuccessful due to stormwater flows being present during project.

Project	2021/22	2022/23	2023/24	2024-2031
<b>Safety improvements</b>	<b>\$117,300</b>	<b>\$121,400</b>	<b>\$124,600</b>	<b>\$982,330</b>

**Problem Statement** Some stormwater reticulation assets are coming to the end of their service life.

**Benefits of investment** Project will assist Council in maintaining adequate LoS performance in future and will ensure limited public access to protect public safety.

**Consequences of non-investment** Risk of failure of stormwater assets (inlet screens) causing blockages and potentially flooding.

## 7.6 DISPOSAL STRATEGY

Disposal is the retirement or sale of assets whether surplus or replaced by new or improved systems. Assets may need to be disposed of for a number of reasons, particularly if they fall under some criteria, including those identified below:

- Underutilisation;
- Obsolescence;
- Cost Inefficiency;
- Policy change;
- Provision exceeds required Levels of Service;
- Service provided by other means (e.g. private sector involvement); and
- Potential risk of ownership (financial, environmental, legal, social).

As part of the lifecycle asset management process, Council considers the costs of asset disposal in the long-term financial forecasts. These costs are generally incorporated in the capital cost of Level of Service increases or asset renewals.

While there are assets that fit under one or more of the above criteria, the Local Government Act provides clear instances when assets can be disposed of. At this time, the Stratford District Council has no plans to dispose of any stormwater assets other than those that become obsolete as a result of renewal or upgrading works.

## 7.7 IMPROVEMENT PLAN

Actions identified in this Section for improving management of the asset are as follows:

**Table 22 - Lifecycle Improvement Plan**

Sub Section	Task	Due Date
7.3	Maximise AssetFinda capabilities for predictive modelling purposes	Ongoing

# **8.0**

## **Risk Management**

## 8.0: RISK MANAGEMENT

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## 8.1 OVERVIEW

Risk is the effect of uncertainty on objectives. Risk events are events which may compromise the delivery of the organisation's strategic objectives.

The main risk to asset management planning is the inability to deliver on agreed Levels of Service due to unplanned events and situations.

The Risk Management section highlights the Stratford District Council's risk management framework and process. It identifies significant negative effects and hazards linked to the activity and infrastructure assets. The section also identifies critical assets and our approach to emergency response and health and safety.

## 8.2 RISK MANAGEMENT FRAMEWORK

The Stratford District Council has prepared a *Corporate Risk Management Framework June 2018* which includes processes that identify, evaluate and manage all risks that may impact on the agreed Levels of Service to the Community. The purpose of this framework is to promote consistency and to describe the components of Stratford District Council's risk management system. The Council wide risk register allocates all council risks into the following 6 categories:

- Compliance and Legislation Risks;
- Data Information Risks;
- Financial;
- Health and Safety Wellbeing;
- Operational Risks; and
- Reputational and Conduct.

The potential risks identified for the Stormwater assets and activity under these six broad categories are described in detail in this report.

The Council's risk management approach is underpinned by principles that will ensure the minimisation of risks for the principal asset systems through the non-achievement of critical business objectives and impact of system failure. The risk management principles are:

- Adds value by contributing to the achievement of Stratford District Council's objectives and improving performance;
- An integral part of the Stratford District Council's planning, processes, and decision making;
- Structured approach that is well-defined, transparent, and aligned with good practice;
- Responsive to change by monitoring, reviewing, and responding to the changing environment;
- Pragmatic by focusing on the most important risks and allowing informed risk taking;
- Explicitly addresses uncertainty based on best available information; and
- Continuous improvement as we get better at identifying and managing risks and opportunities.

The objectives of the Council's Risk Management framework are to establish a systematic and structured approach to managing risks across the Stratford District Council and to embed risk management practices into business strategy, planning and core operations to ensure that key risks are proactively identified, managed and communicated. Benefits from applying effective risk management include:

- Improved achievement of the Council's strategic direction, objectives and priorities;
- Reduced risks – significant risks are identified and managed and early warning of problems and emerging risks are addressed, with appropriate design and operation of internal controls;
- Improved decisions – decisions are made after analysis of risk;
- Improved planning and resource allocation – risks are prioritised and included in business planning so that resources are better managed; and

- Increased accountability and transparency – clarity of key risks and the responsibility and accountability for their management.

## 8.3 RISK ASSESSMENT PROCESS

The Stratford District Council's Risk Management Process in Figure 19 identifies risk management strategies to minimise risks associated with the provision of services. It is designed to ensure that:

- All significant operational and organisational risks are understood and identified;
- The highest risks that should be addressed within a ten year planning horizon are identified;
- Risk reduction treatments which best meet business needs are applied; and
- Responsibilities for managing risks are allocated to specific staff and reporting regimes are specified.

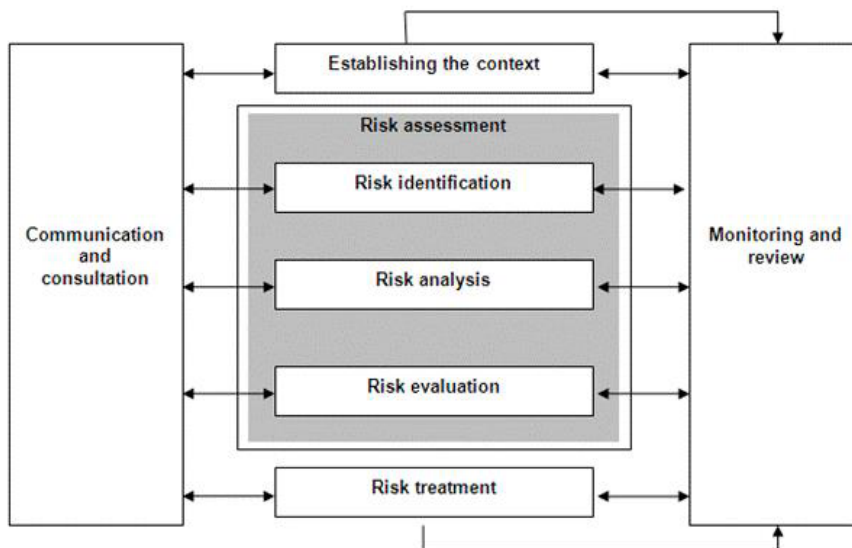


Figure 19 - Risk Management Process

A Risk Matrix allows for easy identification for the highest risks in the Council enabling appropriate resources to be allocated.

		Consequences				
		Minor	Important	Serious	Major	Catastrophic
Likelihood	Almost Certain	2- Moderate	5- High	7- High	20-Extreme	25-Extreme
	Likely	2- Moderate	4- Moderate	6- High	16-Very High	20-Extreme
	Possible	1-Low	3- Moderate	4- High	12-Very High	15-Very High
	Unlikely	1-Low	2- Moderate	3- Moderate	8- High	10-Very High
	Rare	1-Low	1-Low	1-Low	4- Moderate	5- High

Figure 20 - The Risk Matrix - sourced from Vault, the Council's risk software



## 8.4 POTENTIAL RISKS

The Stratford District Council has made a number of risk assumptions under the six broad risk areas of Compliance and Legislation, Data Information, Financial, Health and Safety Wellbeing, Operational, & Reputational and Conduct. These are presented in [Appendix 1](#).

## 8.5 TOP TEN RISKS FOR THE WASTEWATER ASSETS AND ACTIVITY

The Stratford District Council has identified the following top ten Wastewater risks from the 6 categories in the Risk Management Framework ([#Appendix1](#)) in Table 24.

While *Compliance and Legislation, Financial and Reputation and Conduct Risks* impact on the achievement of the Organisation's high-level objectives and actions in the Long Term Plan, *Operational Risks* impact people, processes and technologies that support the business-as usual delivery of activities. The *Control Description* is a set of management intervention/ mitigation measures applied in response to risks, while *Residual Risk* is the resulting risk following the application of the mitigation measures.

**Table 23 – Top Ten Identified Storm Water Risks**

	Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
<b>Compliance and Legislation</b>					
1	Bylaws and Policies	IF Council fails to keep Policies and Bylaws up to date, THEN the Policies and Bylaws may become unenforceable and irrelevant, and council could be acting illegally, or the policy is not fit for purpose.	8 High	<ul style="list-style-type: none"> <li>Quality assurance,</li> <li>Resourcing levels maintained</li> <li>Regular Policy Schedule review by CEO.</li> <li>Regular review of Bylaw timetable maintained in Content Manager.</li> </ul>	3 Moderate
<b>Data and Information</b>					
2	Systems Down - Natural Disaster/Pandemic	IF there is a natural disaster THEN systems may be down temporarily, reduction in worker productivity, unable to respond to customers, data unavailable, potential permanent loss of data.	8 High	<ul style="list-style-type: none"> <li>Backups done daily and stored off-site.</li> <li>Most critical data is in the cloud, data centre is overseas so workers can access system remotely from anywhere.</li> <li>Civil Defence will make hardware available for emergency response.</li> </ul>	3 Moderate
3	Server Failure	IF the server failed THEN systems down, data unavailable, potential data loss	12 Very High	<ul style="list-style-type: none"> <li>Restore from backup, backups stored off-site.</li> <li>Fail-over for Melbourne data centre replicates to Sydney data centre.</li> </ul>	3 Moderate
<b>Health and Safety</b>					
4	Lone Worker	IF a staff member is seriously injured or killed during field inspections/site visits, THEN possible health		<ul style="list-style-type: none"> <li>Quality assurance,</li> <li>Ongoing training/awareness of HSE requirements and responsibilities,</li> </ul>	1 Low

# Risk Management

	Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
		and safety breaches, death or serious injury.	12 Very High	<ul style="list-style-type: none"> <li>Better use of council data/knowledge base on dangerous or insanitary sites before staff member deploys to site,</li> <li>Use of GPS tracking, mobile phone tracking.</li> <li>Compliance officers to wear body cameras when on duty.</li> </ul>	
5	Employee Substance Abuse	IF staff are affected by drugs or alcohol while at work, THEN there is an increased risk of an accident or injury, property damage, and reduced work performance.	8 High	<ul style="list-style-type: none"> <li>Ensure staff are aware of drug and alcohol policy.</li> <li>Initial drug testing done prior to employment to filter out regular users.</li> <li>Utilise EAP.</li> </ul>	2 Moderate
<b>Operational</b>					
6	Attracting Qualified Staff	IF Council is unable to attract suitably qualified personnel, THEN services may become under threat and may cease.	6 High	<ul style="list-style-type: none"> <li>Internal training and succession planning programs.</li> <li>Ensure market wages are offered for all high demand positions.</li> <li>Recruit off shore option should be available for high-demand positions.</li> <li>Make greater use of consultants if necessary and/or shared services with neighbouring Councils.</li> <li>Make Stratford District Council a great place to work - measure staff engagement and respond to any issues expediently.</li> </ul>	2 Moderate
7	Maintenance Contractor fails to deliver	IF maintenance contractor fails to deliver contractual service necessitating termination of contract and re-tendering, THEN assets may become under threat, unreliable, or unable to meet community needs.	8 High	<ul style="list-style-type: none"> <li>Careful assessment of tender to ensure contract price viable for contractor to deliver level of service.</li> <li>Regular liaison with contractor to monitor performance and ensure compliance.</li> <li>Contractor pre-approval process must not be bypassed.</li> </ul>	3 Moderate
8	Natural Disaster or Fire - Response	IF a Natural Disaster or Fire causes significant damage to infrastructure		<ul style="list-style-type: none"> <li>Civil Defence Emergency Management plans are in place.</li> </ul>	12 Very High

	Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
	preparedness	and buildings THEN community welfare may be severely compromised, putting peoples lives at risk, and staff may be unable to access systems to carry out their day to day duties and functions.	12 Very high	<ul style="list-style-type: none"> <li>Procedures following an emergency event are widely known by a number of staff due to Civil Defence</li> <li>Foundational training being rolled out to majority of council staff.</li> <li>Business Continuity Plans need to be in place and practiced regularly for all activities - Directors responsible for having a plan in place for each of their departments to ensure core functions can continue to be delivered.</li> </ul>	
9	Critical Asset Failure	IF a critical asset (water treatment plants, stormwater, wastewater, reticulation, roading) failed, THEN unexpected financial burden may arise and there could be significant disadvantage and risk to the community.	12 Very High	<ul style="list-style-type: none"> <li>Conduct 2 yearly Asset Criticality Review.</li> <li>Ensure there are established Civil Defence Emergency Management response procedures in relation to fixing critical assets in an emergency event.</li> <li>Management practices and staff training, retention to ensure appropriate skill level in critical asset maintenance.</li> </ul>	4 High
10	Government Policy Impacting on Local Government	IF Government Policy significantly changes the services Council delivers or the way they are delivered, THEN this could put financial pressure on the district to fund investment in changes, or it may mean previous investment has become redundant.	12 Very High	<ul style="list-style-type: none"> <li>Where a policy change may have a significant impact on the Council then we must ensure that the Council makes a submission challenging the change and suggesting alternative options.</li> <li>Council officers and elected members need to keep up to date with policy, and anticipate potential impacts of legislative changes and respond strategically, rather than being in a reactive position or being overly proactive. This could include joint collaboration with business and other councils, accessing alternative funding sources, or obtaining legal or professional advice.</li> </ul>	12 Very High

## 8.6 RISK RESPONSE

The Stratford District Council has a suite of response strategies for the potential risks identified above, They include avoiding, exploiting, transferring/sharing, reducing or accepting the risk. These response strategies are summarised in Table 25 below.

**Table 24 - Risk Response Strategies and Definitions**

Response	Definitions
Avoid	To terminate exposure to a potential risk, generally the organisation needs to exit the activity which gives rise to the risk, or not start an activity which would give rise to the risk
Exploit	For risks which present an opportunity for Stratford District Council, a legitimate approach is to increase Stratford District Council's exposure to the risk; generally this would represent a situation where Stratford District Council can gain an advantage through their management of this risk.
Transfer/ Share	Risk transfer is getting another party to undertake the activity generating the risk, or getting another party to take on all or part of the risk itself.
Reduce	For risks which present a threat to Stratford District Council, but which cannot be avoided, the development of additional controls or mitigation strategies will reduce the likelihood or impact of the risk.
Accept	Accepting the risk by informed decision. This means continuing with the business activity/project as currently defined, aware of how much risk is being carried, monitoring changes in overall risk, and ensuring appropriate levels of contingency at the Stratford District Council level.

## 8.7 SIGNIFICANT ADVERSE EFFECTS

### 8.7.1 HEALTH

The stormwater system has the potential to affect community health if it is inadequate and results in flooded houses and properties, and causes sewerage system overflows.

Council is aware of the areas where surface flooding occurs and is progressively working towards eliminating these events. However, there will always be localised storm events that will exceed the capacity of any system and some surface flooding will occur. Council recognises this potential and endeavours to take all steps to ensure the risk is minimised.

### 8.7.2 ENVIRONMENT

While the Council does not hold resource consent to discharge stormwater into the receiving environment, the Council is committed to monitoring of discharge points to ensure that there are no negative effects on rivers or streams at these locations.

## 8.8 CRITICALITY

Critical assets are defined as those assets that are likely to have more significant consequences than other assets if they fail. Failure of critical assets has the potential to have significant economic, social and environmental impacts for the community and Council.

Stormwater assets are considered critical by Stratford District Council because they protect lifeline utilities, roads and properties from flooding during heavy rain events.

## 8.8.1 CRITICALITY EVALUATION

Stratford District Council establishes criticality by using two rating levels - activity level and corporate level. **Activity level criticality** is based on the criticality criteria shown in Table 26; Table 27 provides the Activity Level Criticality Rating with examples. **Corporate level criticality** ranks activities based on the criticality of the service the activity provides at the corporate level as illustrated in Table 28 below.

**Table 25 - Activity Level Criticality Criteria**

Customers affected	Number of customers affected by asset failure.
Redundancy	Ability to replace or circumvent the failed asset.
Health and Safety	Direct or indirect impact of asset failure on the health of safety of individuals or the community.
Cost of failure	Cost to repair/ replace the asset including cost of temporary service provision.

**Table 26 - Activity Level Criticality and Examples**

Rating ID	Rating	Description	Example
1	<b>Very High</b>	<b>Critical, no redundancy</b> - Failure of equipment compromises H&S directly (impact, explosion) or indirectly (failure to supply drinking water to hospital).	Stormwater network serving Broadway Northern Roundabout
2	<b>High</b>	<b>Critical, no redundancy</b> - Failure of equipment does not compromise H&S but affects production or Level of Service	Stormwater network on Broadway in CBD
3	<b>Medium</b>	<b>Critical with redundancy</b> - Failure of equipment does not compromise H&S but affects production or Level of Service	Stormwater network on Broadway at St Mary's School
4	<b>Low</b>	<b>Not critical, no redundancy</b> - Failure of equipment has no effects on H&S and/or production/Level of Service but cost of repair/replacement is above \$100k	Stormwater network on Celia Street
5	<b>Very Low</b>	<b>Not critical, no redundancy</b> - Failure of equipment has no effects on H&S and/or production/LoS and cost of repair/replacement is below \$100k	Stormwater network serving Broadway Northern Roundabout

**Table 27 - Corporate Level Criticality**

Rating	Description
1	Roading, Water Supply assets.
2	Cemeteries. Wastewater (Sewage).
3	Solid Waste and Stormwater.
4	Property
5	Parks and Reserves

## 8.8.2 IDENTIFIED CRITICAL ASSETS

The AssetFinda database holds a record of the critical stormwater assets. The assets are shown in Table 29. The identified critical assets are ranked according to their functional criticality.

**Functional Criticality** is a product of the Activity Criticality and Corporate Criticality, i.e.:

$$\text{Functional Criticality} = \text{Activity Criticality} \times \text{Corporate Criticality}$$

The functional criticality ranking ranks assets from 1 to 5, with 1 being the highest score (the most critical) and 5 being the lowest (least critical).

In 2017, Stratford District Council undertook an internal review of its critical assets. The review identified that there was a need to:

- Document the formula used for identifying criticality in the Asset Management Plans;
- Link criticality and critical assets to incident response; and
- Prioritise critical assets at the Activity level.

Following the review we have undertaken the following:

- Identified the formula used for identifying functional criticality. This formula is shown in the above paragraph in brackets.
- The linking of criticality and critical assets to incident response is currently being considered as part of reviewing our Incident Response Plans.

Critical assets have been prioritised at the Activity level and added to the asset register (AssetFinda).

**Table 28 - List of Critical Stormwater Assets**

Activity Priority	Criticality Rating			Asset Description	Criticality Description
	Functional Criticality	Activity Level Criticality	Corporate Level Criticality		
1	6	2	3	Stormwater network serving Broadway Northern Roundabout	Disruption directly affecting major traffic thoroughfare and a number of commercial premises. The event resulting in some immediate health & safety issue a significant Council costs and some high cost to the commercial sector.
2	6	2	3	Stormwater network on Broadway in CBD	Disruption directly affecting major traffic thoroughfare and a significant number of commercial premises. The event resulting in health & safety issue and significant costs to the commercial premises and Councils
3	9	3	3	Stormwater network on Broadway at St Mary's School	Disruption directly affecting major traffic thoroughfare causing severe disruptions due to the length of bypass. The event resulting in some health & safety issues and high financial costs.
4	9	3	3	Stormwater network on Celia Street	Disruption directly affecting major traffic thoroughfare. The event resulting in some health & safety issues and high financial costs.

## 8.9 EMERGENCY RESPONSE

### 8.9.1 CIVIL DEFENCE

The Taranaki Region operates a CDEM (Civil Defence Emergency Management) Group Office, called the Taranaki Emergency Management Office (TEMO). TEMO is a shared service between all four councils in Taranaki. In 2017 The Taranaki CDEM group agreed to a constituting agreement that outlined the separate roles of the Group Office (TEMO), Taranaki Regional Council, and the three district councils. Funding for this arrangement comes from the 'Uniform Annual General Charge; (UAGC) Rates.

The Stratford District Council has plans and resources in place to ensure it can;

- Reduce the risk of emergencies occurring;
- Be ready for an emergency;
- Respond to any emergency; and
- Recover from any emergency.

### 8.9.2 FIRE

Between 1st July 2013 and 2017, the Taranaki Rural fire Authority provided a single approach to improved fire management of rural fire within the District. From 1 July 2017, Fire and Emergency New Zealand (FENZ), a single, unified fire services organisation, was formed for New Zealand's rural, urban, paid and volunteer firefighters. FENZ is an amalgamation of more than 40 rural fire authorities, including the former Taranaki Rural Fire Authority, along with the New Zealand Fire Service, the National Fire Authority and rural fire districts.

The FENZ Bill 2017 repeals the two Acts governing fire services, the Fire Service Act 1975 and the Forest and Rural Fires Act 1977. This Bill marks the most significant change to New Zealand's fire legislation in 70 years, with full integration expected to take four years.

### 8.9.3 LIFELINES

Lifeline utilities are entities that provide essential infrastructure services to the community such as water, wastewater, transport, energy and telecommunications. These services support communities, enable business, and underpin the provision of public services. The Stormwater activity is a lifeline service as described in Part B of Schedule 1 of the Civil Defence Emergency Management Act (CDEMA) 2002.

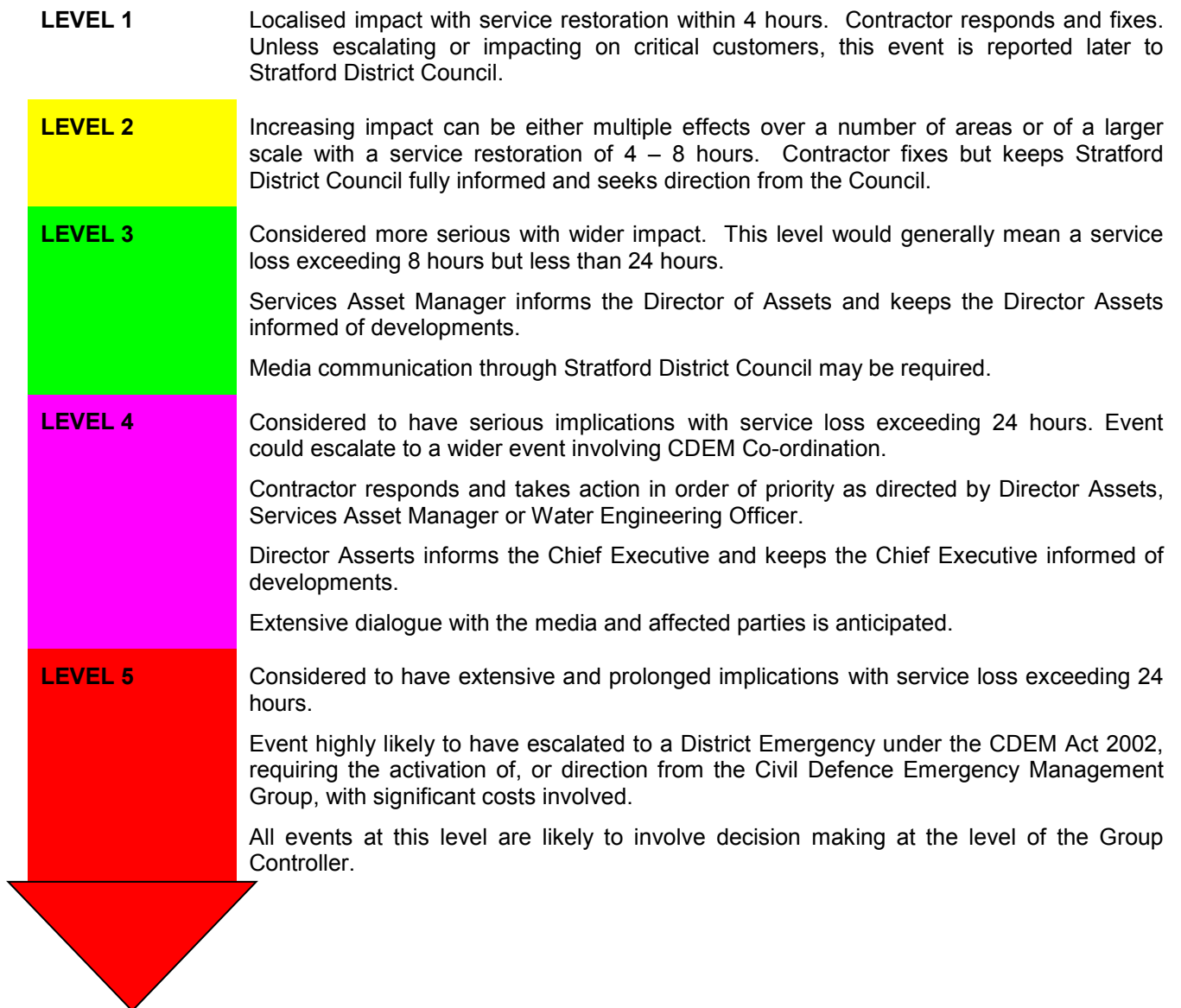
### 8.9.4 INCIDENT RESPONSE PLANS

Stratford District Council has an Incident Response Plan<sup>2</sup> for the Stormwater Activity. The plan contains schedules and procedures for managing incidents and escalating events that affect the delivery of services. Incidents are ranked on a scale of 1 – 5 to determine response and control level. See Figure 21.

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<sup>2</sup> D17/26535

**Figure 21 - Incident Response Plan Intervention Levels**





## 8.10 RISK INSURANCE

The Local Government Act 2002 requires that from 2014 details of insurance of assets be included. This information is included in the following table. Insurance Arrangements as at 30 June 2020 are as follows:

**Figure 22 - Asset Insurance Valuations**

	<b>CARRYING VALUE</b> (as at 30 June 2020) <b>\$000</b>
<b>ASSETS FROM STATEMENT OF FINANCIAL POSITION</b>	
Property, plant and equipment	328,554
Investment property	168
<b>Total</b>	<b>328,722</b>
<b>LESS</b>	
Land component of operational assets	-8,998
Land under roads	-54,384
Land – restricted assets	-8912
<b>Total</b>	<b>-72,294</b>
<b>NET NON-FINANCIAL ASSETS (EXCLUDING LAND)</b>	<b>256,428</b>

	<b>INSURED VALUE</b> (as at 30 June 2020) <b>\$000</b>	
<b>INSURANCE ARRANGEMENTS</b>		
Material damage cover for buildings, plant, contents	-51,317	Subject to various deductibles including \$5k for most claims except for earthquake or volcanic eruption where deductible is 5% of sum insured or 10% for pre 1935 buildings.
Motor vehicle insurance cover (including leased vehicles)	-183	Insured for market value – carrying value assumed for this purpose.
<b>RISK SHARING ARRANGEMENTS</b>		
Cover for infrastructure assets as a member of LAPP Central Government assistance	-22,100	Sum equates 40% of the ORV value of scheduled assets. A deductible of \$150,000 applied. It is anticipated (though cannot be guaranteed) that under the terms contained in the Guide to Civil Defence Emergency Management Plan central government may fund 60% of the qualifying cost of reinstating essential infrastructure with a deductible of \$150,000
<b>Council arrangements for covering deductibles and/or uninsured assets</b>	<b>73,600</b>	
<b>SUM NOT SPECIALLY INSURED</b>	<b>182,828</b>	Note the 60% of the ORV of infrastructure assets which may be funded by central government equates \$33.1m.

The Council has no insurances relating to financial or intangible assets. The uninsured assets consist of the Roding Network, \$202m, which NZTA may assist with in the event of an emergency.

## **8.11 PUBLIC HEALTH**

### **8.11.1 ASSESSMENT OF WATER AND SANITARY SERVICES**

In 2016 Stratford District Council undertook its second assessment of water and sanitary services. The purpose of the assessment is to determine, from a public health perspective, the adequacy of water and sanitary services available to communities.

For the Stormwater activity the assessment focused on:

- (a). the health risks arising from any absence or deficiency;
- (b). the quality of services available to communities within the district;
- (c). the current and estimated future demands for such services;
- (d). the actual or potential consequences of stormwater or sewage discharges within the district.

In relation to stormwater services currently provided by Stratford District Council the assessment concluded:

- |           |  |
|-----------|--|
| Stratford | <ul style="list-style-type: none"><li>• Stratford District Council is prepared to adequately meet increased demand for its service.</li><li>• Council has planned works in place to meet future demand.</li><li>• No public health issues have been identified at this time.</li></ul> |
| Midhirst  | <ul style="list-style-type: none"><li>• The system is adequate for current and projected future demand.</li><li>• No public health issues have been identified at this time.</li></ul>   |

No actions identified in the 2021 Sanitary Assessment.

## **8.12 HEALTH AND SAFETY**

### **8.12.1 HEALTH AND SAFETY ADVISOR**

Stratford District Council employs a Human Resource/Health and Safety Advisor. The Advisor is responsible for the ongoing development and management of our HSE environment and ensuring staff are adequately trained in all aspects of health and safety.

### **8.12.2 HEALTH AND SAFETY POLICY**

In 2016 Stratford District Council reviewed and updated its Health and Safety Policy to better reflect legislative requirements reinforce its commitment to the philosophy that the health and safety of its employees, volunteers, contractors and subcontractors is of prime importance. SDC is committed to ensuring its operations are conducted in a safe and efficient manner that will not incur injury to personnel or damage to the environment.

### **8.12.3 INCIDENT/ACCIDENT REPORTING**

In accordance with the Stratford District Council Health and Safety Policy all Council staff are required to report any accidents/incident. Accidents/incidents are reported via the Vault incident reporting system. Vault was integrated into Stratford District Council in 2016 as part of a joint initiative between Stratford District Council and South Taranaki District Council.

## 8.13 IMPROVEMENT PLAN

Actions identified in this Section for improving management of the asset are as follows:

**Table 29 - Risk Management Improvement Plan**

Sub Section	Task	Due Date
8.7	<p><b>Infiltration of Groundwater</b></p> <p>Continue addressing ground water infiltration into the wastewater reticulation to ensure continued an efficient performance of critical asset</p>	On-going
8.7	<p><b>Trade Waste Implementation</b></p> <p>Continue to Implement the Trade Waste Bylaw to ensure all non-domestic wastes are identified and captured under the necessary conditions to avoid critical asset failure</p>	On-going

## **9.0**

# **Investment Funding Strategy**

## **9.0: INVESTMENT FUNDING STRATEGY**

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## 9.1 OVERVIEW

Our Investment Funding Strategy (IFS) incorporates our *Funding Impact Statement* and sets out how the Stratford District Council plans to finance its overall operations to meet its objectives now and in the future. A key objective of the strategy is the future-proofing of delivery of the Stormwater Activities.

This IFS provides the long term financial forecasting for all Stormwater Activities and projects described in this SAMP. The IFS presents the funding sources determined for each of these to ensure a sustainable long-term approach to planning and asset management.

The historical cost for the Stormwater Activity by asset group is described in detail in the *Lifecycle Management* Section. This section presents the Council's Capital Investment Strategy for the Stormwater Activity for the next ten years and the financial standards and policies used in developing the strategy.

## 9.2 FINANCIAL STANDARDS

All prospective Financial Statements (financial statements) within this plan comply with the requirements of FRS 42 issued by the New Zealand Accounting Standards Board of the External Reporting Board (XRB), and the New Zealand equivalent of International Reporting Standard for Public Benefit Entities (NZ IFRS PEB), with Council designating itself as a Tier 2 public benefit entity for the purposes of compliance with these standards.

## 9.3 FUNDING AND FINANCIAL POLICIES

The Local Government Act 2002 in Section 102 requires that the Stratford District Council '*must, in order to provide predictability and certainty about sources and levels of funding, adopt the funding and financial policies listed*' below:

- A *Revenue and Financing Policy*; and
- A *Liability Management Policy*; and
- An *Investment Policy*; and
- A policy on *Development Contributions (CD) or Financial Contributions (FC)*; and
- A policy on the *Remission and Postponement of Rates on Maori freehold land*.

The Council may also adopt either or both the *Rates Remission Policy* and a *Rates Postponement Policy*.

The Council has adopted all the relevant funding and financial policies described below. These policies guide the funding and financial decisions relating to the management of the Council's Stormwater Assets.

### 9.3.1 REVENUE AND FINANCING POLICY

The *Revenue and Financing Policy* sets out Stratford District Council's policies in respect of the funding for capital and operating expenditure. The current policy was reviewed in December 2017. The funding sources are detailed in the LTP 2021-2031 and include general and targeted rates, borrowing, grants and subsidies, etc.

### 9.3.2 TREASURY MANAGEMENT POLICY

The Council's Treasury Management Policy incorporates the *Liability Management Policy* and the *Investment Policy* requirements of the LGA. It guides the Council to prudently manage its revenue, expenditure, assets, liabilities, reserves and investments, in the interest of the Council and district ratepayers.

## 9.3.3 DEVELOPMENT AND FINANCIAL POLICY

The Council's *Development and Financial Contribution Policy* is consistent with the purpose as set out in Section 106 of the LGA. The Council does not require *Development Contributions*, however, the *Financial Contributions Policy* meet the requirement as set out in Section 108 (9) of the *Resource Management Act (RMA) 1991*.

## 9.4 FUNDING OUR INVESTMENT STRATEGY

The Council's Investment Strategy covers how the Stratford District Council plans to deliver on the services it offers whilst achieving value for money, with a key focus on future-proofing Council's assets.

Capital projects and activities carried out to maintain the Stormwater service, including Renewal or Replacement projects and Level of Service Improvements, for the next 10 years will be funded as per the Revenue and Financing Policy, through one or a combination of the following sources:

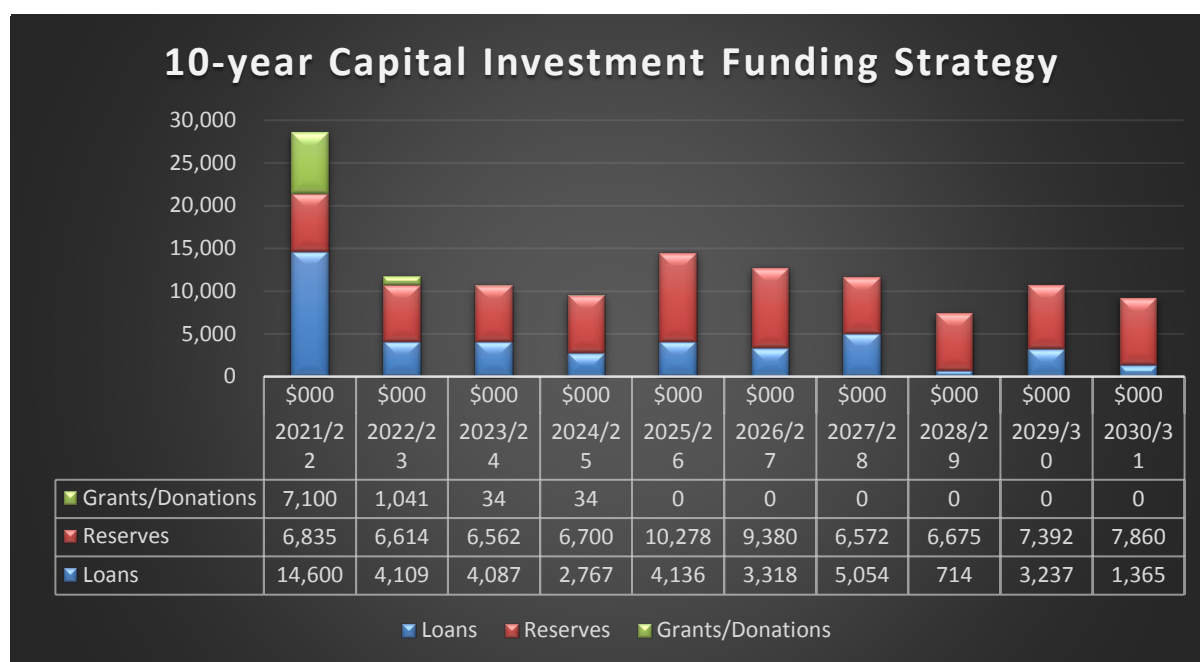
- Loans;
- Reserves; and/or
- Subsidies/ Grants by other Partners.

The Council expects that:

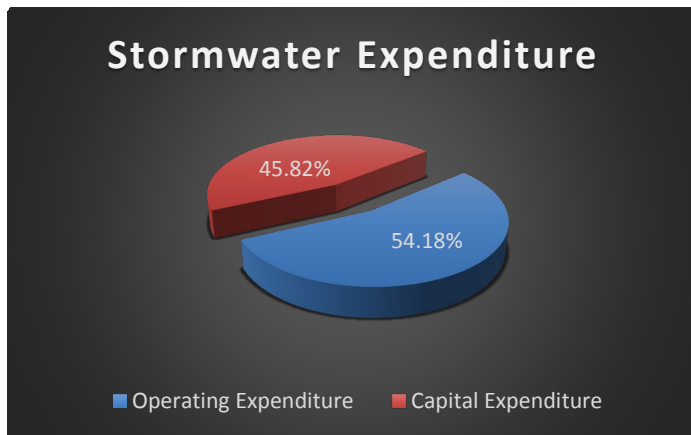
- All Level of Service Improvement projects for all the Three-Waters Activities will be funded 100% from Loans;
- Renewal or Replacement projects will be equally funded from Loans and Reserves.
- While the cost of capital projects driven by growth and led by a private Developer will be borne by the Developer, any Council-led projects in support of growth will be accounted for within the particular project budget rather than by activity budgets.

The Council is very pro-active in seeking alternate funding sources. Where appropriate, the Council submits funding requests to the *TSB Community Trust (TSB)* and the *Taranaki Electricity Trust (TET)*. The Council also applies to the *Ministry of Business, Innovation and Employment (MBIE)* for tourism grants and initiatives.

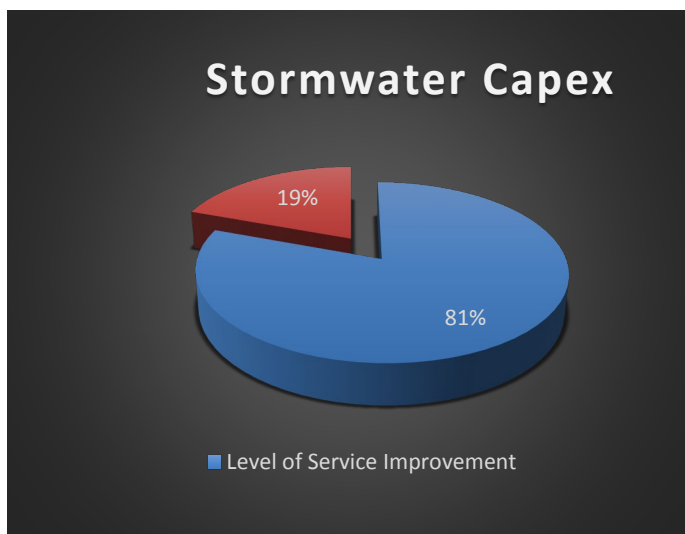
A summary of Council's Capital Investment Funding Strategy is shown in Figures 23 to 25. Tables 31 and 32 provide the financial projections for the stormwater activity.



**Figure 23 – All Assets Capital Investment Funding Strategy**



**Figure 24- Stormwater Total Expenditure - Capital vs Operating Expenditure**



**Figure 25 - Stormwater Capital Investment Split - Level of Service vs Replacement**

## 9.5 RELIABILITY OF OUR INVESTMENT STRATEGY

The Council provides an assessment of the reliability of its Investment Funding Strategy below – overall, the forecast is considered a reliable estimate of the financial investment in the Stormwater Activity:

- The Council's funding source is largely from rates. Rates will be confirmed for the 2021-2031 period via the appropriate processes for inclusion in the LTP 2021-2031. Once adopted, the rates in the LTP 2021-2031 will constitute a reliable funding source for the delivery of the Stormwater services;
- The Council's is confident in its ability to raise funds within our financial strategy limits, and is reasonably certain that it would secure loans at an affordable interest rates throughout this period; and
- The Council does not rely on *Fees and Charges* or *Development Contributions* to deliver Stormwater services. Any new demand for new assets to be vested in Council or services will generally be funded by the direct beneficiary of the assets/service.



## 9.6 FINANCIAL STATEMENTS AND PROJECTIONS

**Table 30 – All Asset Capital Expenditure Projection**

	Forecast	Projection								
	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
<b><u>Roading</u></b>										
Level of Service Improvement	350	619	1,221	929	7,028	5,554	417	306	630	324
Replacements	5,413	4,983	4,920	4,983	4,977	5,085	5,436	5,446	5,983	6,452
<b><u>Stormwater</u></b>										
Level of Service Improvement	252	292	533	275	283	291	300	310	321	331
Replacements	53	55	56	167	59	61	63	65	67	122
<b><u>Water Supply</u></b>										
Level of Service Improvement	1,780	1,904	369	673	390	401	4,289	37	38	0
Replacements	695	812	510	414	443	496	452	486	502	498
<b><u>Solid Waste</u></b>										
Level of Service Improvement	0	0	0	0	0	0	0	0	0	0
Replacements	0	10	0	11	0	11	0	12	14	12
<b><u>Wastewater (Sewerage)</u></b>										
Level of Service Improvement	800	362	380	273	281	288	238	184	178	839
Replacements	213	252	258	200	228	211	218	262	271	305
<b><u>Parks &amp; Reserves</u></b>										
Level of Service Improvement	97	110	99	69	0	0	0	0	0	0
Replacements	47	0	0	0	0	0	0	0	0	0
<b><u>Property</u></b>										
Meet Additional Demand	1,200	1,025	1,049	0	0	0	0	0	0	0
Level of Service Improvement	17,335	1,112	609	607	442	171	64	63	2,454	68
Replacements	114	6	59	114	7	7	7	7	17	8
<b><u>Administration</u></b>										
Replacements	186	222	621	788	276	121	142	210	153	266
<b><u>TOTAL PROJECTS (excl GST)</u></b>										
	<b>28,535</b>	<b>11,764</b>	<b>10,683</b>	<b>9,501</b>	<b>14,414</b>	<b>12,698</b>	<b>11,626</b>	<b>7,389</b>	<b>10,629</b>	<b>9,225</b>
<b><u>FUNDING</u></b>										
Loans	14,600	4,109	4,087	2,767	4,136	3,318	5,054	714	3,237	1,365
Section sales	0	0	0	0	0	0	0	0	0	0
Cash from Investments	0	0	0	0	0	0	0	0	0	0
Reserves	6,835	6,614	6,562	6,700	10,278	9,380	6,572	6,675	7,392	7,860
Grants/Donations	7,100	1,041	34	34	0	0	0	0	0	0
Rates	0	0	0	0	0	0	0	0	0	0
NZTA Financial Assistance	0	0	0	0	0	0	0	0	0	0
<b><u>TOTAL (excl GST)</u></b>										
	<b>28,535</b>	<b>11,764</b>	<b>10,682</b>	<b>9,501</b>	<b>14,414</b>	<b>12,698</b>	<b>11,626</b>	<b>7,389</b>	<b>10,629</b>	<b>9,225</b>

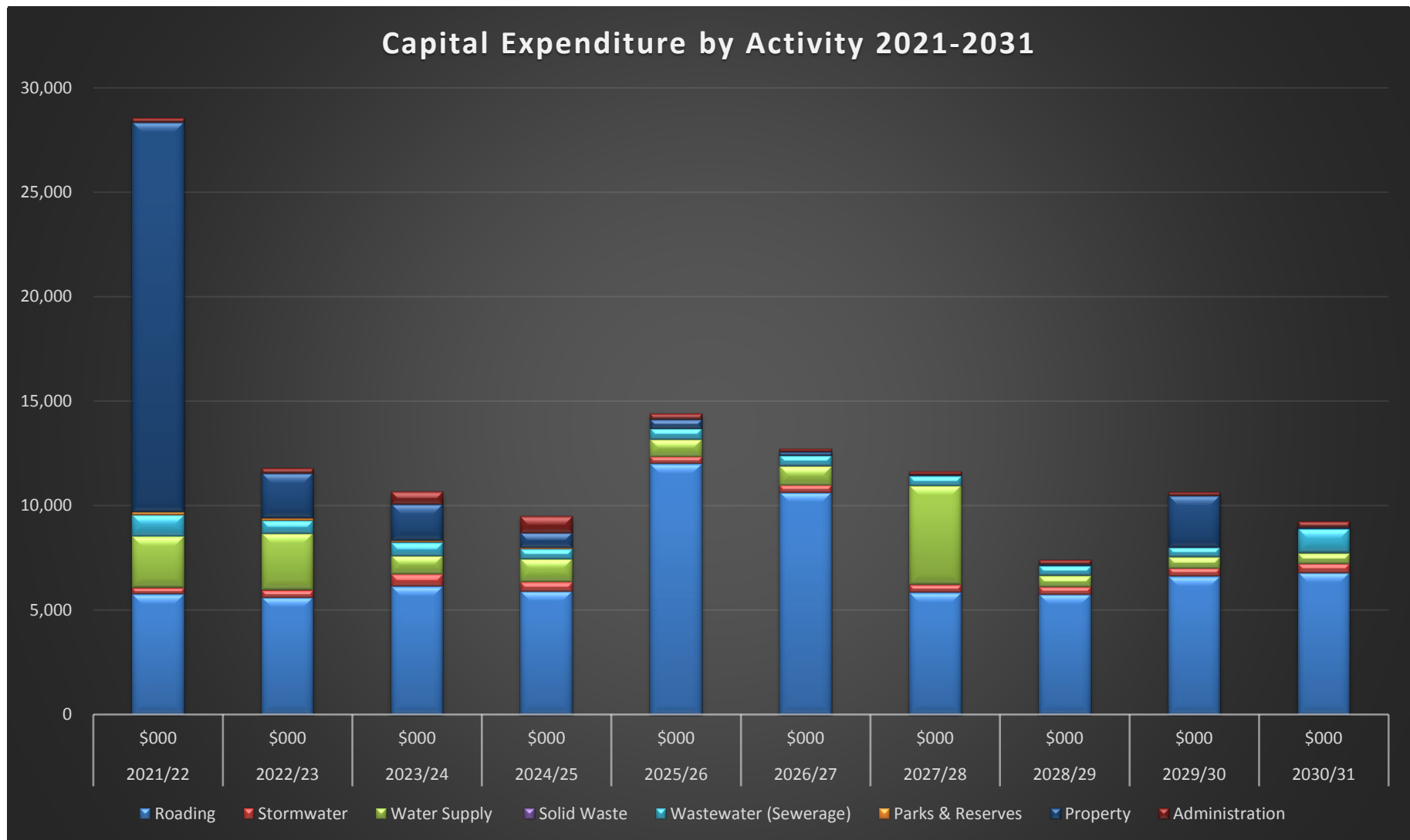


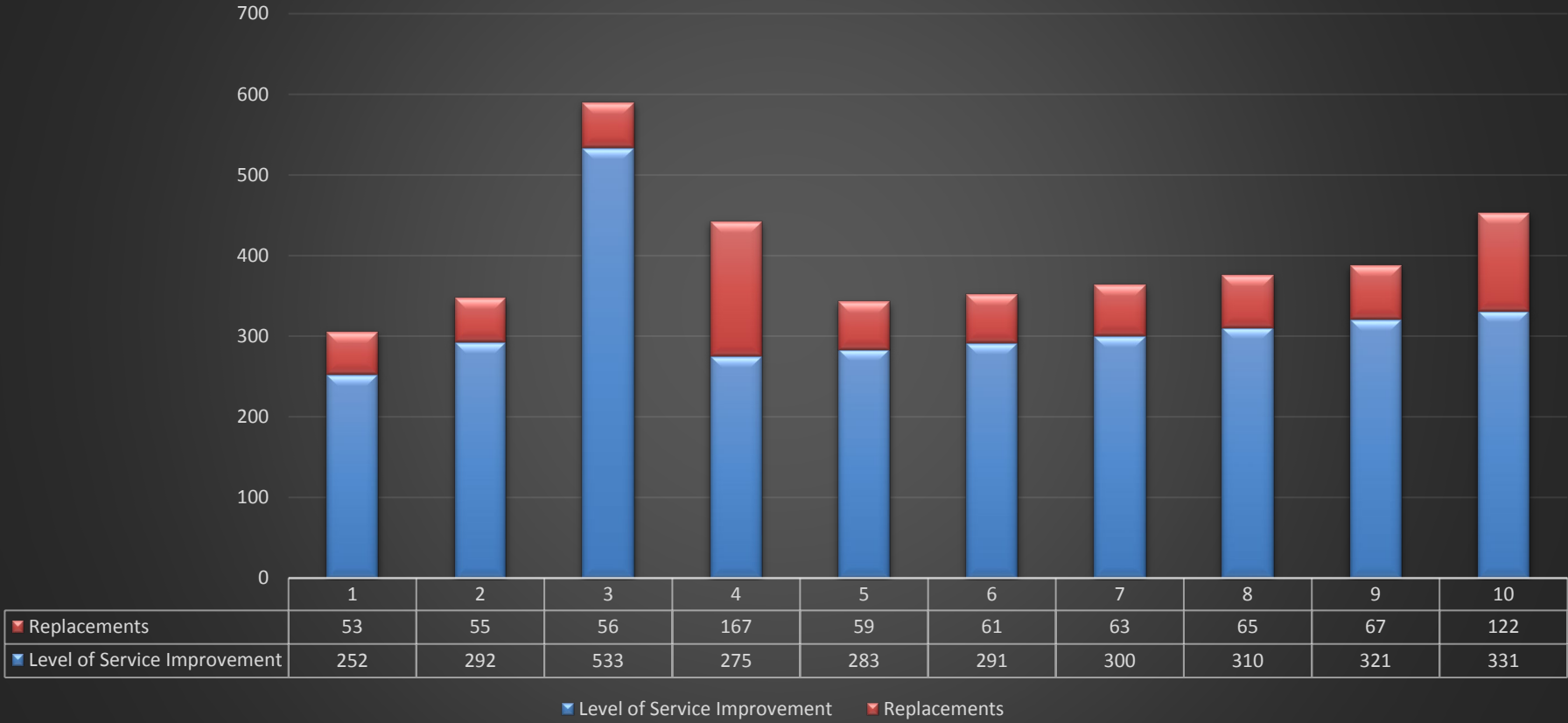
Figure 26 - Capital Expenditure by Activity - All Assets

# Investment Funding Strategy

**Table 31 – Stormwater Activity Expenditure and Funding Projection**

Budget 2020/21 \$000	STORMWATER	Forecast	Projection								
		2021/22 \$000	2022/23 \$000	2023/24 \$000	2024/25 \$000	2025/26 \$000	2026/27 \$000	2027/28 \$000	2028/29 \$000	2029/30 \$000	2030/31 \$000
328	Operating Expenditure	363	373	394	436	451	469	515	532	551	597
0	Revenue	0	0	0	0	0	0	0	0	0	0
<b>328</b>	<b>Net Cost of Service</b>	<b>363</b>	<b>373</b>	<b>394</b>	<b>436</b>	<b>451</b>	<b>469</b>	<b>515</b>	<b>532</b>	<b>551</b>	<b>597</b>
<b><u>EXPENDITURE</u></b>											
61	Operating Costs	63	59	61	62	64	66	68	69	71	73
18	Interest	22	27	35	49	54	59	77	83	89	95
141	Depreciation	146	151	157	182	187	193	218	224	230	264
107	Allocated Overheads	132	136	140	143	146	151	153	156	161	164
<b>328</b>	<b>Total Operating Expenditure</b>	<b>363</b>	<b>373</b>	<b>394</b>	<b>436</b>	<b>451</b>	<b>469</b>	<b>515</b>	<b>532</b>	<b>551</b>	<b>597</b>
27	Principal Loan Repayments	41	50	64	78	86	94	102	110	119	127
292	Capital Expenditure	305	347	590	442	343	352	364	376	388	453
<b>647</b>	<b>Total Expenditure</b>	<b>709</b>	<b>770</b>	<b>1,048</b>	<b>956</b>	<b>880</b>	<b>915</b>	<b>981</b>	<b>1,018</b>	<b>1,058</b>	<b>1,176</b>
<b><u>FUNDED BY:</u></b>											
<b>0</b>	<b>Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0	General Rates	(0)	(0)	0	0	(0)	(0)	(0)	0	0	(0)
326	UAGC	356	367	387	429	444	462	508	526	545	591
0	Targeted Rates	0	0	0	0	0	0	0	0	0	0
85	Transfer from Reserves	94	105	121	245	146	155	165	176	186	249
0	Depreciation funded from Reserves	0	0	0	0	0	0	0	0	0	0
234	Loan Funding - Capital	252	292	533	275	283	291	300	310	321	331
2	Grants/Other Funding - Capital	0	0	0	0	0	0	0	0	0	0
1	Other Funding	7	7	6	7	7	7	7	7	6	5
<b>647</b>	<b>Total Funding</b>	<b>709</b>	<b>770</b>	<b>1,048</b>	<b>956</b>	<b>880</b>	<b>915</b>	<b>981</b>	<b>1,018</b>	<b>1,058</b>	<b>1,176</b>

## Annual Stormwater Budget - LoS vs Replacements 2021-2031



**Figure 27 - Annual Stormwater Budget - LoS vs Replacements 2021-2031**

**10.0**  
**Asset Management**  
**Practices and Improvement Plan**

**10.0: ASSET MANAGEMENT PRACTICES AND IMPROVEMENT PLAN**

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## 10.1 OVERVIEW

Asset management improvement planning is a process. It enables Council to improve the way it manages infrastructure assets and the services they provide.

The Asset Management Practices and Improvement Plan section identifies the maturity of Stratford District Council asset management practices, improvements made since the last Asset Management Plan review and a plan for future asset management improvements resulting from areas for improvement identified in earlier Sections of this plan

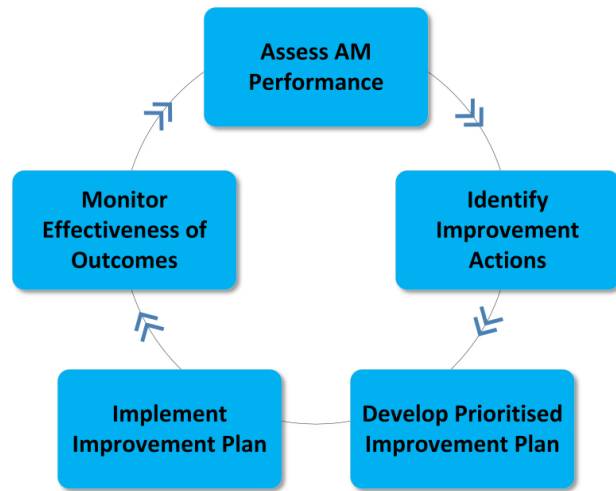


Figure 28 - Asset Management Improvement Process

## 10.2 ASSET MANAGEMENT

### 10.2.1 ASSET MANAGEMENT POLICY

The Stratford District Council developed and adopted its inaugural Asset Management Policy 2016 and completed a review in 2020<sup>3</sup>. The Policy establishes the first level of Council's asset management framework for managing infrastructure assets in a structured, coordinated, and financially sustainable manner.

The objective of this Policy is to:

- Provide for a consistent approach to asset management planning within Council and ensure plans reflect the strategic direction of Council.
- Demonstrate to the community that Council recognises the critical importance of managing the District's assets and related activities in an effective and sustainable manner in order to deliver appropriate Levels of Service to current and future generations.
- Confirm a coordinated process for each asset/activity area that links their contribution to the Community Outcomes with specific Levels of Service performance requirements and desired improvement priorities and strategies.

The Council's Asset Management Policy can be viewed on the Stratford District Council website.

### 10.2.2 ASSET MANAGEMENT GOALS AND OBJECTIVES

The Council's Asset Management goals and objectives are guided by the Asset Management Policy to drive best practice. The Asset Management goals and objectives for Stratford District Council are to:

- Provide for good quality infrastructure and local public services that are efficient, effective and appropriate for current and future generations.
- Meet the foreseeable needs of the community.
- Ensure that assets are planned for, created, replaced and disposed of in accordance with Council priorities as determined in the Long Term Plan.
- Ensure all legal delegations are met.
- Ensure customer expectations are properly managed.

<sup>3</sup> D20/4330

# Asset Management Practices and Improvement Plan

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- Provide technical and professional advice that enables elected members to make sound well informed decisions concerning the management of assets.
- Assets are managed to meet agreed customer levels of service.
- Assets are managed and delivered in accordance with the strategies stated in the Asset Management Plans.
- Ensure data collection systems are in place to collect, store, maintain and use for prudent management of Council owned assets.

The Council's overarching principles for sound asset management are:

- Asset management goals and objectives will be aligned with corporate objectives and community outcomes.
- Capital, operation and maintenance, and renewal/replacement works will be aligned with asset management objectives.
- Sustainable and suitable development will be considered in the options for asset development and service delivery.
- Optimal replacement/lifecycle asset management strategies will be developed.
- Asset replacement strategies will be established through the use of optimised lifecycle management and costing principles.
- Funding allocation for the appropriate level of maintenance in order for assets to deliver required Levels of Service.
- Growth and demand forecasting will be integrated as part of all asset management planning to meet current and future needs of the community.
- Ensure the design, construction and maintenance of assets, so far as reasonably practical, are without risk to the health or safety of any person.

## **10.2.3 ASSET MANAGEMENT PLAN DEVELOPMENT**

Planning processes tend to be circular with built in reviews. The AMP and LTP need to have regular review cycles so that they remain current and deal with issues at the time. An important function of the review cycle is to monitor performance against the goal levels of service and KPIs that were set some years before.

The AMPs are reviewed every three years in line with the 10 year long term planning cycle but work programmes can change annually. These changes can be brought about by outside pressure, weather events, budget constraints and new projects becoming apparent.

The ability to become responsive each year is through the annual planning process. The AMP details goals, levels of service, goals, KPIs and targets which contribute to Stratford's organisational vision for the district and community.

The review process considers the overall impact of the planned programme to deliver the defined levels of service through the on-going development of the AMP. This review/AMP development process moderates competing priorities within the context of community affordability and may result in some projects being deferred or budgets being re-prioritised. Figure 27 below shows a graphical display of the AMP development process.

## **10.2.4 ASSET MANAGEMENT MATURITY**

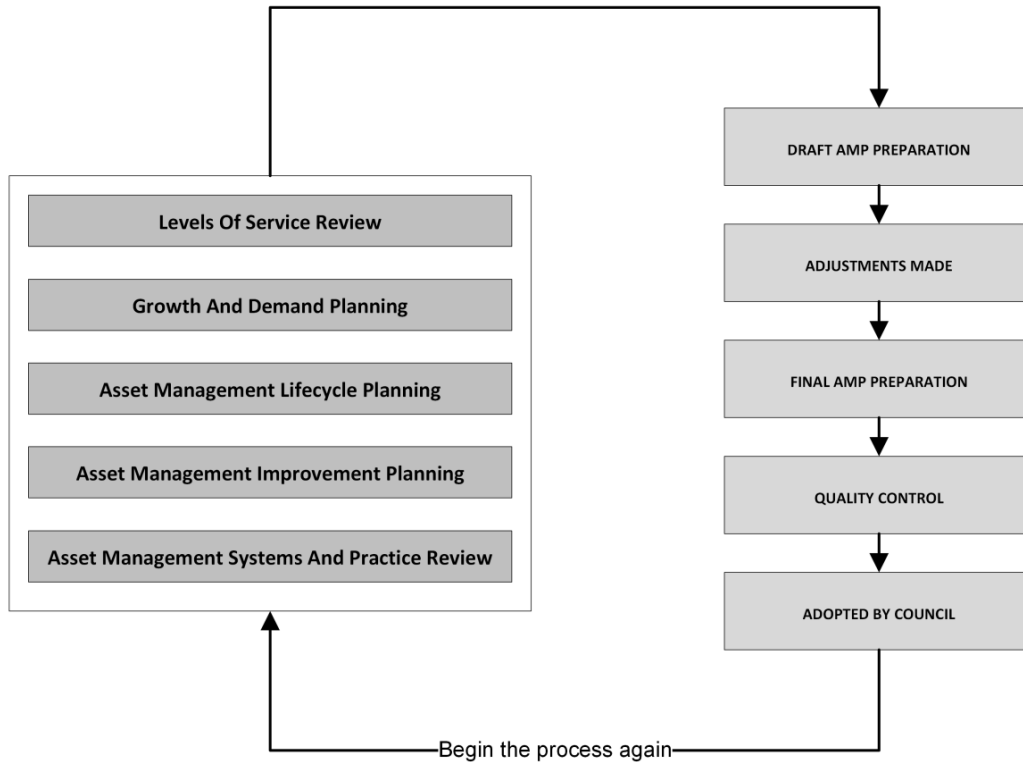
We have assessed that our asset management system maturity is predominantly at the Core level. It is largely based on the long-term knowledge of the asset management team. It contains asset data that has been collected over time and held in asset management information systems.

Through continual improvement and development of asset management practices and processes it is our intention that the asset management plans progressively improve.



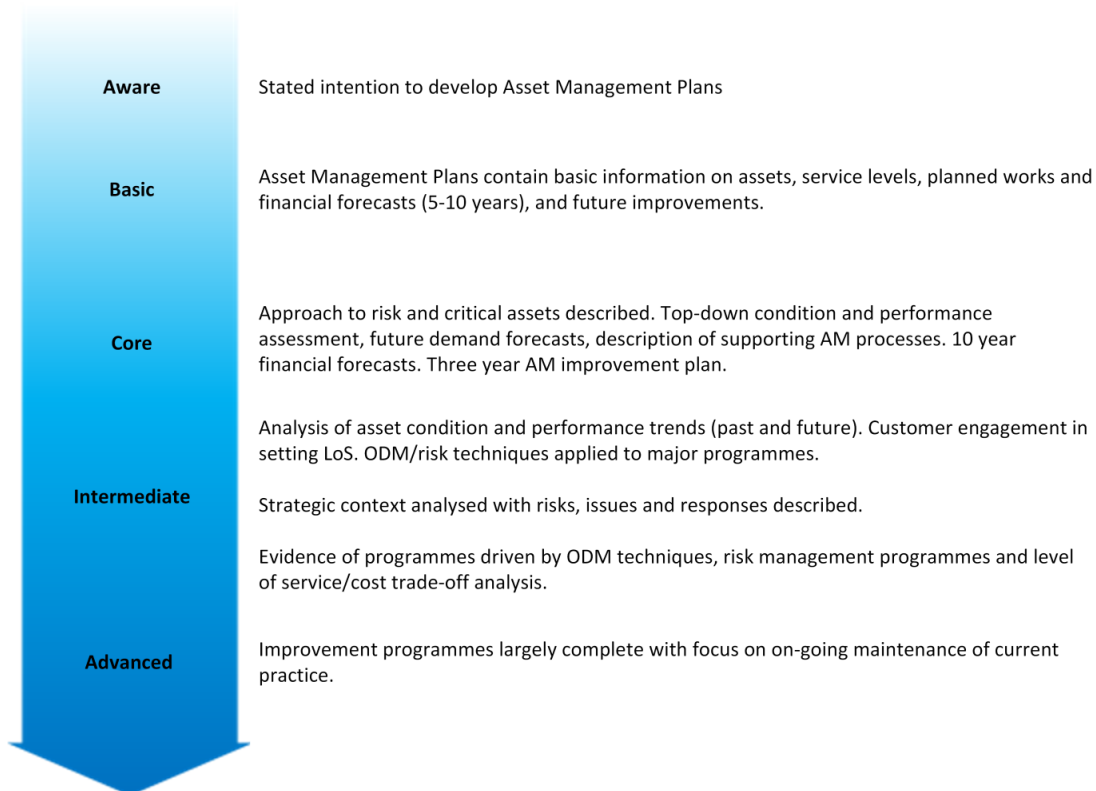
# Asset Management Practices and Improvement Plan

Our target is to develop our asset management practices and processes to an Intermediate level of maturity where appropriate. The Council in the process of assessing our asset management maturity level to identify areas for improvement. The Council is considering options for undertaking a formal assessment of our asset management maturity. The five levels of asset management plan maturity are shown in Figure 28 and are Aware, Basic; Core; Intermediate and Advanced.



**Figure 29 - Asset Management Plan Development Process**


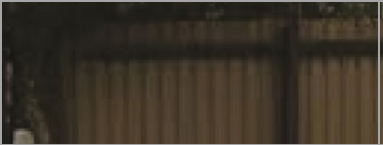


# Asset Management Practices and Improvement Plan



**Figure 30 - Asset Management System Maturity Index**

## 10.3 IMPROVEMENTS MADE AND FUTURE IMPROVEMENTS

Table 32 Improvements Made and Future Improvements

Asset Management Practice Area	Improvement/s Made	Date in Place	Future Improvements	Section Identified	Responsibility	Due Date
Asset Information	<b>Improve condition data accuracy and reliability</b> Council's knowledge of the extent, location and condition of the stormwater reticulation system is currently not fully understood. This lack of knowledge hasn't allowed Council to accurately prepare a renewal/replacement program or in some cases, understand how Council performance against Levels of service is/is not attained. Therefore, improving condition data information is required	2021		3.7	Services Asset Manager	Ongoing
Future Growth and Demand			Further assessment needed to assess the impacts of growth demands on the adequacy of the existing stormwater reticulation systems.	4.3.1	Services Asset Manager Director - Assets	Ongoing
Levels of Service and Performance Management	Department of Internal Affairs (DIA) Mandatory Performance Measures in place.	2015-2017	Reviewed annually to ensure they are still relative	5	Services Asset Manager Director - Assets	Ongoing
Lifecycle Management			Maximise AssetFinda capabilities for predictive modelling purposes	7.3	Services Asset Manager	Ongoing
Risk Assessment			<b>Infiltration of Groundwater</b> Continue addressing ground water infiltration into the wastewater reticulation to ensure	8.7	Services Asset Manager	On-going

Asset Management Practice Area	Improvement/s Made	Date in Place	Future Improvements	Section Identified	Responsibility	Due Date
			continued an efficient performance of critical asset		Director - Assets	
			<p><b>Trade Waste Implementation</b></p> <p>Continue to Implement the Trade Waste Bylaw to ensure all non-domestic wastes are identified and captured under the necessary conditions to avoid critical asset failure</p>	8.7	<p>Services Asset Manager</p> <p>Director - Assets</p>	On-going

# APPENDICES

- Appendix 1**      **Stormwater Risk Assessment**
- Appendix 2**      **Stormwater Operational Documents**

## Appendix 1 - Stormwater Risk Assessment

### COMPLIANCE AND LEGISLATION RISKS

1. Compliance and Legislation Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
Legislation Changes	IF changes to legislation or case law occur and are not implemented by staff, THEN council may be acting illegally and in breach of legislation	1 Low  Rare/ Important	<ul style="list-style-type: none"> <li>Staff will implement the changes</li> <li>Regular review and update Legislative Compliance Register.</li> <li>Staff training and attending relevant industry conferences.</li> <li>Regular policy review to ensure policies and procedures are in line with legislation changes.</li> <li>Ensure maintenance contractor and staff are up to date with legislative requirements through regular updates of legislative compliance register</li> <li>Subscribe to regular email updates from local government and relevant industry bodies, Council list server to ensure staff are notified of legislative changes.</li> </ul>	1 Low  Rare/ Important
Statutory Reporting Commitment	IF Council does not meet statutory commitments (eg for reporting to the national monitoring system) THEN it may be acting illegally and receive attention from Ministry which could result in financial penalty and council functions being removed, or elected members being replaced.	3 Moderate  Unlikely/ Serious	<ul style="list-style-type: none"> <li>Quality assurance.</li> <li>Resourcing levels maintained.</li> <li>Schedule of dates and commitments is regularly maintained and updated by Quality Assurance officer.</li> <li>Regular review and update of Legislative Compliance Register.</li> </ul>	1 Low  Rare/ Serious
Bylaws and Policies <b>TOP TEN RISK</b>	IF Council fails to keep Policies and Bylaws up to date, THEN the Policies and Bylaws may become unenforceable and irrelevant, and council could be acting illegally, or the policy is not fit for purpose.	8 High  Unlikely/ Major	<ul style="list-style-type: none"> <li>Quality assurance,</li> <li>Resourcing levels maintained, Regular Policy Schedule review by CEO.</li> <li>Regular review of Bylaw timetable maintained in Content Manager.</li> </ul>	3 Moderate  Unlikely/ Serious

## DATA AND INFORMATION RISKS

2. Data and Information Risk Assessment				
Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
Systems Down - Natural Disaster/Pandemic <b>TOP TEN RISK</b>	IF there is a natural disaster THEN systems may be down temporarily, reduction in worker productivity, unable to respond to customers, data unavailable, potential permanent loss of data.	8 High Unlikely/ Major	<ul style="list-style-type: none"> <li>Backups done daily and stored off-site.</li> <li>Most critical data is in the cloud, data centre is overseas so workers can access system remotely from anywhere.</li> <li>Civil Defence will make hardware available for emergency response.</li> </ul>	3 Moderate Unlikely/ Serious
Server Failure <b>TOP TEN RISK</b>	IF the server failed THEN systems down, data unavailable, potential data loss	12 Very High Possible/ Major	<ul style="list-style-type: none"> <li>Restore from backup, backups stored off-site.</li> <li>Fail-over for Melbourne data centre replicates to Sydney data centre.</li> </ul>	3 Moderate Unlikely/ Serious
Records Handling	IF hard copy protected records are handled in a way that could cause damage, degradation or disorganisation, THEN this could lead to loss of protected records, non-compliance with legislation and potential financial penalties.	1 Low Rare/ Important	<ul style="list-style-type: none"> <li>Access to archives is limited to trained staff.</li> <li>Ensure the Information Management Specialist is fully trained in all areas of protected records management.</li> <li>Maintain a register of archived records, and a process by which records will be archived.</li> <li>Storage area must be restricted and temperature controlled.</li> </ul>	1 Low Rare/ Important
Unapproved online platforms used	IF unapproved online platforms are used for Council business, THEN Council sensitive information and individual private details could be hacked and made available publically.	4 High Possible/ Serious	<ul style="list-style-type: none"> <li>All Council information should only be stored on platforms that are approved by IT and gone through proper procedures and checks by IT.</li> </ul>	1 Low Rare/ Serious

## FINANCIAL RISKS

### 3. Financial Risk Assessment

Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
Accessing Funding	IF incorrect assessment is made to determine required maintenance funding, all funding options are not sought, or insufficient funding is made available THEN Council may miss out on funding and Council has to fully fund projects.	3 Moderate Possible/ Important	<ul style="list-style-type: none"> <li>Ensure funding assessments are carried out by sufficiently experienced personnel and strong cases are made for funding.</li> <li>A system should be established to regularly monitor all available funding for council projects.</li> </ul>	1 Low Rare/ Important
Internal Financial Controls	IF internal financial controls are compromised and ineffective, THEN possible fraud, budget blowout, delayed service	4 High Possible/ Serious	<ul style="list-style-type: none"> <li>Good quality controls.</li> <li>Implement annual external and internal audit recommendations.</li> <li>Adhere to Procurement and Delegations Policy.</li> <li>Communications of internal controls to all staff.</li> <li>Recommend internal audit programme every year by independent contractor.</li> </ul>	1 Low Rare/ Serious
Procurement contracts <b>TOP TEN RISK</b>	IF procurement contracts entered into are not cost-effective and do not comply with Council's Procurement Policies THEN council projects could go over budget and council procurement could be subject to industry, media, legal scrutiny.	6 High Likely/ Serious	<ul style="list-style-type: none"> <li>Ensure procurement policy and procurement manual are appropriate, comply with legislation and good practice, and followed by all staff and significant contracts are reviewed by an independent professional.</li> </ul>	1 Low Rare/ Serious
Significant Population Reduction	IF there is a significant population reduction, resulting in loss of ratepayer base and reduction in property values - THEN this could result in higher rates for others and significant cost reductions may be required.	3 Moderate Unlikely/ Serious	<ul style="list-style-type: none"> <li>Ensure variable costs are clearly identifiable, and therefore able to be isolated and adjusted if ratepayer base reduced.</li> <li>Council actions to align with council mission and vision to make Stratford a great place to live.</li> </ul>	3 Moderate Unlikely/ Serious
New Regulations require Significant Investment	IF new environmental regulations or legislation imposed on councils requires a significant increase in capital expenditure, THEN ability to finance investment could be compromised and rates increases could breach limits.	3 Moderate Possible/ Important	<ul style="list-style-type: none"> <li>Attempt to keep debt and expenditure low and achieve cost efficiencies regularly so that council can weather any necessary investment in order to be compliant with changing legislative environment.</li> </ul>	1 Low Rare/ Serious
Theft by Contractors	IF contractors have unrestricted access to council property and/or information, THEN there is an	1 Low Rare/	<ul style="list-style-type: none"> <li>All contractors must go through a pre-qualification</li> </ul>	1 Low



### 3. Financial Risk Assessment

Risk Subject	Risk Description	Risk Score Raw	Control Description	Residual Risk Score
	opportunity for theft and consequently loss of Council assets.	Serious	<p>process.</p> <ul style="list-style-type: none"> <li>• Visitors to Council buildings must sign in.</li> <li>• Access to the building has now been restricted with the use of fobs.</li> <li>• Protected records are stored in a safe or locked storage room.</li> </ul>	Rare/ Serious
Inadequate financial provision to fund asset replacement	IF there is inadequate financial provision in reserves to fund the replacement of assets, THEN the Council may have to borrow more than expected, or asset replacement may need to be delayed which may affect service level performance.	3 Moderate  Possible/ Important	<ul style="list-style-type: none"> <li>• Ensure annual depreciation is based on accurate fixed asset values (replacement cost) and accurate useful lives.</li> <li>• Assets should not, unless necessary, be replaced before the end of their useful life.</li> </ul>	1 Low  Rare/ Important
Bribery and Corruption	IF elected members or staff act in a way that is, or is perceived to be, influenced by Bribery or Corruption, THEN the Council's reputation could be damaged, there is potential for legal action against Council, increased scrutiny by the Office of the Auditor General. There is also the risk that Council could have lost financially, or in some other way, by entering into an unethical contract.	3 Moderate  Unlikely/ Serious	<ul style="list-style-type: none"> <li>• Ensure HR Policy, Procurement Policy, Anti-Fraud and Corruption Policy and Elected Members' Code of Conduct cover these areas sufficiently and that guidance is given to all staff and elected members at least annually on conflicts of interest, and Policies are widely distributed within Council and made available to all staff, particularly new staff.</li> <li>• The Fraud Policy includes a process for reporting any suspected instances of bribery and corruption - ensure this is widely available and all staff are aware of reporting process.</li> </ul>	1 Low  Rare/ Serious
Management Override of Internal Controls	IF a Manager uses their unique position to override internal controls, THEN the financial statements may be incorrect and potential fraud may result.	4 High  Possible/ Serious	<ul style="list-style-type: none"> <li>• Audit and Risk Committee oversight. Internal and External audits annually.</li> <li>• Fraud Policy awareness training.</li> <li>• Regular review of policies to ensure in line with best practice.</li> <li>• SLT to undergo ethics training.</li> <li>• Full reference checking of at least one recent, direct manager (particularly for financial and management roles).</li> <li>• Zero tolerance for any bullying type behaviour.</li> </ul>	3 Moderate  Unlikely/ Serious

## HEALTH AND SAFETY WELLBEING RISKS

4. Health and Safety Wellbeing Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Public Events	If health and safety accidents or incidents occur during events then increased costs can occur to the events, reputation is damaged	4 High Possible/ Serious	<ul style="list-style-type: none"> <li>Health and Safety plans are established well in advance to an event being planned</li> <li>Physical hazards and risks are eliminated Hazard Identification records are kept</li> <li>Events do not proceed without correct Health and Safety sign off</li> <li>Good communication to all staff</li> </ul>	2 Moderate Unlikely/ Important
Lone Worker <b>TOP TEN RISK</b>	If a staff member is seriously injured or killed during field inspections/site visits, then possible health and safety breaches, death or serious injury.	12 Very High Possible/ Major	<ul style="list-style-type: none"> <li>Complete quality assurance.</li> <li>Ongoing training/awareness of HSE requirements and responsibilities</li> <li>Better use of council data/knowledge base on dangerous or insanitary sites before staff member deploys to site</li> <li>Use of GPS tracking, mobile phone tracking.</li> <li>Compliance officers to wear body cameras when on duty.</li> </ul>	1 Low Rare/ Important
Council Vehicle accident	If a staff member has an accident in a council vehicle, then this could result in possible death or serious injury and damage to motor vehicle asset.	4 High Possible/ Serious	<ul style="list-style-type: none"> <li>All staff must have a full drivers licence and all staff are aware of procedures if there is an accident.</li> <li>Staff driver training to be provided to regular drivers.</li> <li>GPS and mobile phone tracking.</li> </ul>	3 Moderate Unlikely/ Serious
Staff under Stress	If staff are affected by personal issues or by work pressures and experiencing high levels of stress, then work performance may decline and/or fatigue, illness, unsafe work practices may result.	5 High Almost Certain/ Important	<ul style="list-style-type: none"> <li>Managers are responsible for being aware of the wellbeing of their direct reports</li> <li>There are various options available for relieving the pressure of staff who are overworked including increasing staff or reallocating work</li> <li>Ensure access to EAP service is widely known and communicated to all staff</li> <li>Ensure all staff have a backup option available so they can take annual leave for at least a week at a time</li> </ul>	3 Moderate Possible/ Important
Exposure to Hazardous Substances	IF staff are affected by exposure to hazardous substances eg chemicals, liquids, fumes and other toxic substances THEN there are possible risks to staff health and wellbeing.	4 High Possible/ Serious	<ul style="list-style-type: none"> <li>Staff are up to date with relevant immunisations.</li> <li>Training is mandatory for all staff working with hazardous substances.</li> </ul>	3 Moderate Unlikely/ Serious

#### 4. Health and Safety Wellbeing Risk Assessment

Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
			<ul style="list-style-type: none"> <li>• Use appropriate PPE gear at all times in the vicinity of the hazardous substances.</li> <li>• Regular health checks for staff.</li> <li>• Regular testing of hazardous substances and chemicals LABELLING and STORAGE be carried out RANDOMLY.</li> <li>• The Stratford Water Treatment Plant has site licences for the storage of chemicals, these must be kept up to date.</li> <li>• Fire extinguishers are on site, all signage is current and covers off on all of the chemicals held on site, labels are all correct and current. We currently have 5 authorised handlers. Ixom also do site audits when their representative is in the immediate area.</li> </ul>	
Workplace Bullying or Harassment	IF Bullying and harassment in the workplace occurs THEN it can have an impact on the health and wellbeing of staff subject to the bullying and other staff witnessing the behaviour. This may impact on staff productivity and the ability of Council to attract good quality candidates.	4 High  Possible/ Serious	<ul style="list-style-type: none"> <li>• Top down culture against bullying and harassment of any kind, policy is followed through by management, staff are aware of the reporting process.</li> <li>• The reporting process to deal with bullying and harassment is fair, transparent, confidential and dealt with in a timely manner.</li> </ul>	3 Moderate  Unlikely/ Serious
Asbestos Related Work	IF council buildings are contaminated with asbestos, THEN there is the possibility of asbestos exposure to staff and the public and increased risk of asbestosis and other lung and pleural disorders.	2 Moderate  Unlikely/ Important	<ul style="list-style-type: none"> <li>• Asbestos protocols need to be developed in line with the asbestos regulations.</li> <li>• Contractor needs to be made aware of Asbestos disposal guidelines.</li> </ul>	2 Moderate  Unlikely/ Important
Muscular discomfort - Ergonomics	IF muscular pain or discomfort or eye strain occurs as a result of the work environment and setting, THEN this will impact on staff health and wellbeing and long term comfort at work.	2 Moderate  Likely/ Minor	<ul style="list-style-type: none"> <li>• Apply ACC Habit At Work guidelines.</li> <li>• Workstation assessments should be carried out to reduce the likelihood of onset of long term discomfort and pain conditions.</li> </ul>	1 Low  Possible/ Minor
Armed Robbery	IF there is an armed robbery at any of council's services centres, THEN there is the potential for	1 Low	<ul style="list-style-type: none"> <li>• Establish emergency procedures, including use of panic buttons.</li> </ul>	1 Low

#### 4. Health and Safety Wellbeing Risk Assessment

Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
	death or serious harm.	Rare/ Serious	<ul style="list-style-type: none"> <li>Security cameras in place.</li> <li>Ensure staff are trained to deal with potential threat.</li> <li>Design / limit access to building so that threats are minimised.</li> </ul>	Rare/ Serious
Employee Substance Abuse <b>TOP TEN RISK</b>	IF staff are affected by drugs or alcohol while at work, THEN there is an increased risk of an accident or injury, property damage, and reduced work performance.	8 High  Unlikely/ Major	<ul style="list-style-type: none"> <li>Ensure staff are aware of drug and alcohol policy.</li> <li>Initial drug testing done prior to employment to filter out regular users.</li> <li>Utilise EAP.</li> </ul>	2 Moderate  Unlikely/ Important
Fatigue Management	IF Fatigue affects an employee, as a result of working extraordinary hours, THEN the employee may have limited functionality which could result in personal injury or injury to others. It could also lead to stress and long term mental illness if it is reoccurring and could mean Council is in breach of the Health and Safety Act.	3 Moderate  Possible/ Important	<ul style="list-style-type: none"> <li>Ensure employees take regular, quality rest breaks during the working day, in line with the Employment Relations Act (HR Policy requires this).</li> <li>Ensure all staff know their responsibilities in terms of managing fatigue.</li> <li>Ensure shift workers rostered times are manageable.</li> <li>The Vehicle Use Policy has limits on driving a Council vehicle after exceeding max number of work hours.</li> <li>Contractor fatigue management to be reported and monitored through regular contractor meetings.</li> </ul>	1 Low  Rare/ Minor

### OPERATIONAL RISKS

#### 5. Operational Risk Assessment

Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Contractor - Damage to Property	IF maintenance contractor damages council or private property while carrying out contracted work, THEN council could be liable for damages and additional expenditure.	4 High  Possible/ Serious	<ul style="list-style-type: none"> <li>Stringent Operational procedures:</li> <li>Daily reporting of compliance.</li> <li>Regular liaison with contractor and regulators to monitor performance to ensure compliance.</li> </ul>	3 Moderate  Possible/ Important

### 5. Operational Risk Assessment

Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
			<ul style="list-style-type: none"> <li>Contractor pre-approval process.</li> <li>Council has material damage insurance policy.</li> </ul>	
Other Contractors in Network Corridor	IF work by others in Network Corridor results in damage to components of the 3 waters infrastructure THEN services to the public may cease or become unreliable or compromised.	3 Moderate Possible/ Important	<ul style="list-style-type: none"> <li>Co-ordination between services before major projects begin.</li> <li>Ensure all works have Corridor Access Requests.</li> </ul>	1 Low Rare/ Important
Attracting Qualified Staff <b>TOP TEN RISK</b>	IF Council is unable to attract suitably qualified personnel, THEN services may become under threat and may cease.	6 High Likely/ Serious	<ul style="list-style-type: none"> <li>Internal training and succession planning programs.</li> <li>Ensure market wages are offered for all high demand positions.</li> <li>Recruit off shore option should be available for high-demand positions.</li> <li>Make greater use of consultants if necessary and/or shared services with neighbouring Councils.</li> <li>Make Stratford District Council a great place to work - measure staff engagement and respond to any issues expediently.</li> </ul>	2 Moderate Unlikely/ Important
Maintenance Contractor fails to deliver <b>TOP TEN RISK</b>	If a maintenance contractor fails to deliver contractual service necessitating termination of contract and re-tendering, then assets may become under threat, unreliable, or unable to meet community needs.	8 High Unlikely/ Major	<ul style="list-style-type: none"> <li>Careful assessment of tender to ensure contract price viable for contractor to deliver level of service</li> <li>Regular liaison with contractor to monitor performance and ensure compliance</li> <li>Contractor pre-approval process must not be bypassed</li> </ul>	3 Moderate Unlikely/ Serious
Key Person risk	If a key person in the organisation could not work for a significant period of time then this could affect Council's ability to perform core functions and duties.	3 Moderate Possible/ Important	<ul style="list-style-type: none"> <li>Ensure PROMAPP is up to date with all staff day to day processes</li> <li>If known absence ahead of time ensure an appropriate training plan in place</li> <li>Make use of local consultants where appropriate</li> <li>Connect with colleagues from neighbouring three councils to share resource if needed</li> <li></li> </ul>	1 Low Possible/ Minor
Natural Disaster or Fire - Response preparedness	IF a Natural Disaster or Fire causes significant damage to infrastructure and buildings THEN community welfare may be severely	12 Very High	<ul style="list-style-type: none"> <li>Civil Defence Emergency Management plans are in place.</li> </ul>	12 Very High

### 5. Operational Risk Assessment

Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
<b>TOP TEN RISK</b>	compromised, putting peoples lives at risk, and staff may be unable to access systems to carry out their day to day duties and functions.	Possible/ Major	<ul style="list-style-type: none"> <li>Procedures following an emergency event are widely known by a number of staff due to Civil Defence</li> <li>Foundational training being rolled out to majority of council staff.</li> <li>Business Continuity Plans need to be in place and practiced regularly for all activities - Directors responsible for having a plan in place for each of their departments to ensure core functions can continue to be delivered.</li> </ul>	Possible/ Major
Disease Outbreak/ Pandemic	If there is a human disease outbreak in the district, then this could impact staff and contractors staff available to deliver service	5 High  Rare/ Catastrophic	<ul style="list-style-type: none"> <li>Health and Safety Advisor to keep aware of any public health notifications of disease outbreaks</li> <li>Ensure there is a plan to respond to any notifications</li> <li>Civil Defence covers infectious human disease pandemics and will take responsibility for local management</li> </ul>	1 Low  Rare/ Serious
Biosecurity threat risk	IF there is a biosecurity threat to animals, or plant life THEN this could affect the economic wellbeing of the district and the ability of council to financially meet community needs.	4 High  Possible/ Serious	<ul style="list-style-type: none"> <li>Ensure council takes a proactive approach to working with Biosecurity NZ, MPI, TRC and the community where a threat is identified.</li> </ul>	2 Moderate  Unlikely/ Important
Critical Asset Failure <b>TOP TEN RISK</b>	IF a critical asset (water treatment plants, stormwater, wastewater, reticulation, roading) failed, THEN unexpected financial burden may arise and there could be significant disadvantage and risk to the community.	12 Very High  Possible/ Major	<ul style="list-style-type: none"> <li>Conduct 2 yearly Asset Criticality Review.</li> <li>Ensure there are established Civil Defence Emergency Management response procedures in relation to fixing critical assets in an emergency event.</li> <li>Management practices and staff training, retention to ensure appropriate skill level in critical asset maintenance.</li> </ul>	4 High  Possible/ Serious
Heavy/Extreme Rainfall incidents	IF the Stratford District experiences heavy rainfall continually over a period THEN roads may flood, restricting accessibility, landslips and mudslides may restrict road access and cause property damage, productive land areas may flood reducing functions, Stormwater, Wastewater and Water Supply assets may fail from overburdening, and overflows from Wastewater	4 Moderate  Likely/ Important	<ul style="list-style-type: none"> <li>Asset Management Plans and Incident Control Response Plans to document critical asset areas and response plan in the event of heavy rainfall incidents.</li> </ul>	2 Moderate  Likely/ Minor

5. Operational Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
	system may result in untreated water entering the Patea River.			
Government Policy Impacting on Local Government <b>TOP TEN RISK</b>	If Government Policy significantly changes the services Council delivers or the way they are delivered, then this could put financial pressure on the district to fund investment in changes, or it may mean previous investment has become redundant.	12 Very High  Possible/ Major	<ul style="list-style-type: none"> <li>Where a policy change may have a significant impact on the Council then we must ensure that the Council makes a submission challenging the change and suggesting alternative options.</li> <li>Council officers and elected members need to keep up to date with policy, and anticipate potential impacts of legislative changes and respond strategically. This could include joint collaboration with business and other councils, accessing alternative funding sources, or obtaining legal or professional advice</li> </ul>	12 Very High  Possible/ Major
Consents	The Council does not undertake the work in accordance with the resource consent conditions. Council can be fined by the Regional Council for breach of conditions.	3 Moderate  Possible/ Important	<ul style="list-style-type: none"> <li>Not negotiable - Consent conditions must be abided by otherwise the consent will be breached</li> <li>Council needs to submit to the Regional Council a methodology about how they are going to undertake the works.</li> </ul>	2 Moderate  Unlikely/ Important

## REPUTATIONAL AND CONDUCT RISKS

6. Reputational and Conduct Risk Assessment				
Risk Subject	Risk Descriptions	Risk Score Raw	Control Description	Residual Risk Score
Online Passwords	IF online passwords are shared or used inappropriately, THEN there is the risk that staff can access or hack Council owned systems and release sensitive information.	3 Moderate  Possible/ Important	<ul style="list-style-type: none"> <li>Ensure that where a staff member leaves and they have access to logins accessible online that the passwords are changed and access ceases.</li> <li>Limit use of online accounts.</li> </ul>	2 Moderate  Unlikely/ Important
Contractor Damage or Breach	If Council and/or Council contractors are found to be liable for public/environmental damage, or any actions that are unsafe or non-compliant with legislation and applicable policies and standards,	4 High  Possible/ Serious	<ul style="list-style-type: none"> <li>Appropriate procedures and guidelines are in place to monitor contractor actions and our own including health and safety audits, contractor meetings/KPI's</li> <li>The Council requires all physical works contractors to</li> </ul>	3 Moderate  Unlikely/ Serious

	then fines, possible injury, long-term damage, reputational damage could result.		<p>go through a thorough health and safety pre-qualification process and become approved before commencing any physical work</p> <ul style="list-style-type: none"> <li>• All relevant staff are kept up to date with pre-approved contractors register</li> <li>• Mini audits and random checks should be built into contracts</li> <li>• Contractor public liability insurance required for all major contracts.</li> </ul>	
Council employees/ contractors abuse members of the public	If Council employees, during the course of their Council duties abuse members of the public,, then the Council may suffer significant reputational damage and potentially be taken to court.	4 High Possible/ Serious	<ul style="list-style-type: none"> <li>• All staff in a public facing role, particularly where they must deal with children, must be police vetted before they commence work.</li> <li>• Exception is where the role is urgent and requires immediate start - in these situations the employee should not be left alone at any time until a satisfactory police report has been received</li> </ul>	3 Moderate  Unlikely/ Serious



## Appendix 2 - Stormwater Operational Documents

Consents	Commencement Date	Expiry Date	CM Reference
10901-1.0 - Discharge stormwater Aquatic Centre Portia Street	DRAFT		
Policies			
Asset Management Procurement Policy	26/05/2020 11/06/2019	2023/2024 2022/2023	D20/4330 D18/29563(v3)
Bylaws			
Nil			
Strategies			
Infrastructure Strategy 2021-2051	1/02/2021	2050/2051	D21/2700
Contracts			
Three Water Maintenance Contract (1434)	1/07/2019	30/06/2022	D19/14719